



**FMS GRUP**

**KAYA DELGİ EKİPMANLARI**

ÜRÜN KATALOĞU





# İÇİNDEKİLER

VERALTI

|                       |                        |
|-----------------------|------------------------|
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## HAKKIMIZDA

**FMS GRUP** kaya delgi operasyonlarında yıllardır sahada edinmiş olduđu tecrübeyi ekipman tedariki alanında değerlendirip çeşitlendirmiş sektördeki yenilikleri sürekli olarak takip eden dinamik ve genç bir oluşumdur.

Birçok farklı ve zorlu formasyonlarda karşılaşılan sorunlar için doğru ürün önerebilecek tecrübeli ekibimizle yalnızca ekipman tedarikinde değil, sahada da birebir uygulamalarla sizleri yalnız bırakmıyoruz.

Kaya delgi sektöründeki yenilikleri takip edip kendimizi güncel tutmak adına sürekli olarak yurt içi ve yurt dışında aldığımız eğitimleri sektörün lider firmalarıyla çalışmanın vermiş olduđu tecrübemizle harmanlayıp sizlere doğrudan aktarıyoruz.

Mesaî saati kavramından uzak 7 gün 24 saat açık olan iletişim kanallarımız ile Türkiye'nin neresinde olursanız olun sizlere maksimum verim ve uygun fiyatlar ile hizmet vermekten keyif alıyoruz.

Kısacası, sizler durmayın diye biz koşuyoruz....

# DAYANIKLILIK PERFORMANS GÜÇ











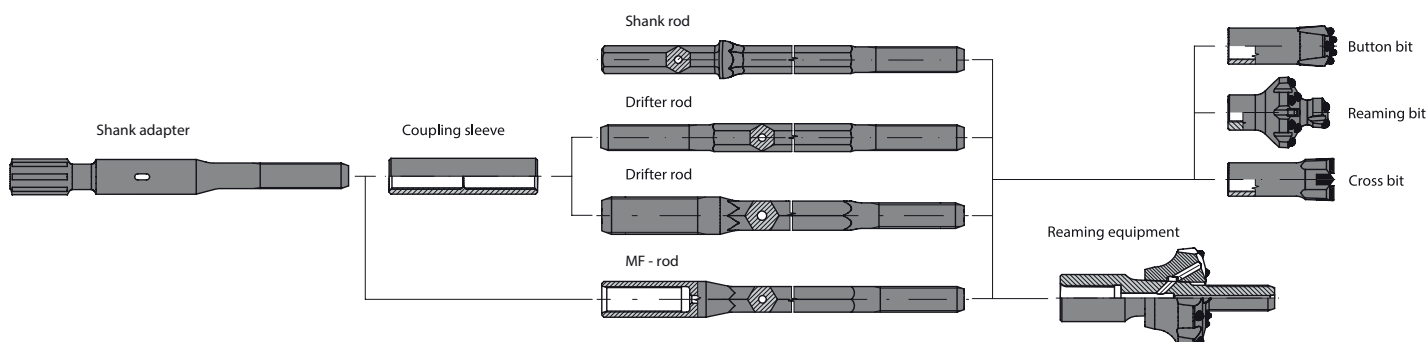
# FMS

UNDERGROUND

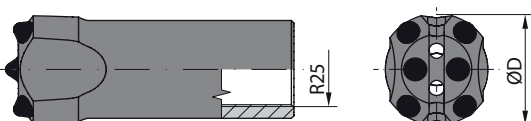




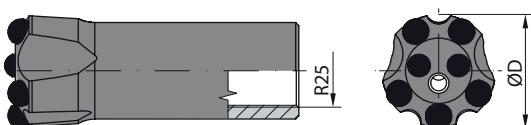
# R-25 Bits



Button bit



Button bit

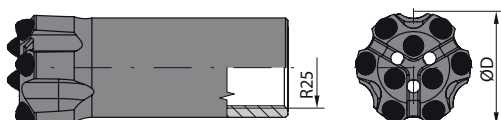


| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 33       | 1 19/64 | -                   | 2 x 5     | 4 x 7        | 2 x 7     | 0,3    | 154969 |
| 33       | 1 19/64 | -                   | 2 x 5     | 4 x 7        | 2 x 7     | 0,3    | 128153 |
| 35       | 1 3/8   | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,4    | 147945 |
| 35       | 1 3/8   | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,4    | 148335 |
| 37       | 1 29/64 | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,5    | 100704 |
| 37       | 1 29/64 | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,5    | 121227 |
| 38       | 1 1/2   | -                   | 2 x 5     | 4 x 9        | 2 x 7     | 0,5    | 179662 |
| 38       | 1 1/2   | -                   | 2 x 5     | 4 x 9        | 2 x 7     | 0,5    | 156826 |
| 41       | 1 5/8   | -                   | 2 x 6     | 4 x 9        | 2 x 8     | 0,6    | 101334 |
| 41       | 1 5/8   | -                   | 2 x 6     | 4 x 9        | 2 x 8     | 0,6    | 162445 |
| 43       | 1 11/16 | -                   | 2 x 6     | 4 x 10       | 2 x 8     | 0,6    | 152624 |
| 43       | 1 11/16 | -                   | 2 x 6     | 4 x 10       | 2 x 8     | 0,6    | 185123 |
| 45       | 1 3/4   | -                   | 2 x 6     | 4 x 10       | 2 x 9     | 0,7    | 165365 |
| 45       | 1 3/4   | -                   | 2 x 6     | 4 x 10       | 2 x 9     | 0,7    | 142175 |
| 33       | 1 19/64 | 1 x 5               | 1 x 5     | 5 x 7        | 2 x 7     | 0,3    | 101878 |
| 33       | 1 16/64 | 1 x 5               | 1 x 5     | 5 x 7        | 2 x 7     | 0,3    | 142455 |
| 35       | 1 3/8   | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,4    | 166741 |
| 35       | 1 3/8   | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,4    | 108256 |
| 37       | 1 29/64 | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,5    | 178152 |
| 37       | 1 28/64 | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,5    | 182400 |
| 38       | 1 1/2   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 7     | 0,5    | 111443 |
| 38       | 1 1/2   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 7     | 0,5    | 190299 |
| 41       | 1 5/8   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 8     | 0,6    | 114009 |
| 41       | 1 5/8   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 8     | 0,6    | 107126 |
| 43       | 1 11/16 | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,6    | 132793 |
| 43       | 1 11/16 | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,6    | 138604 |
| 45       | 1 3/4   | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,7    | 132129 |
| 45       | 1 3/4   | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,7    | 130251 |

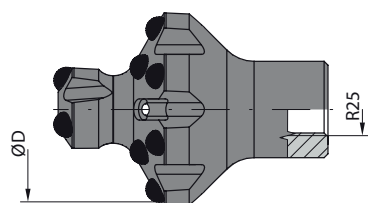
# R-25 Bits



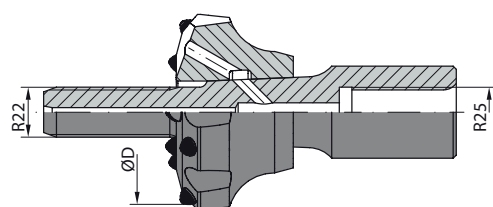
Button bit



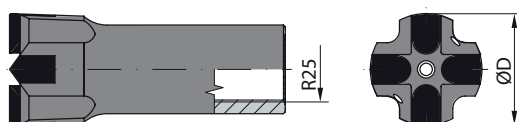
Reaming bit,



Reaming equipment,



Cross bit,



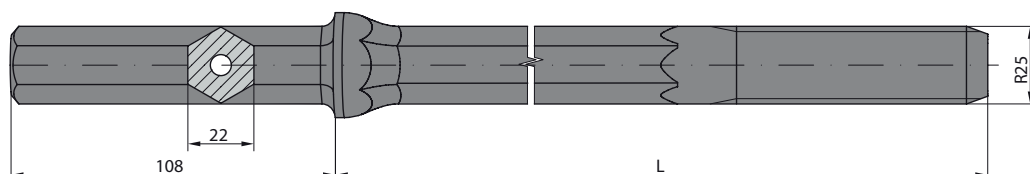
| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 35       | 1 3/8   | -                   | 3 x 5     | 6 x 7        | 3 x 7     | 0,4    | 161051 |
| 35       | 1 3/8   | -                   | 3 x 5     | 6 x 7        | 3 x 7     | 0,4    | 144366 |
| 37       | 1 29/64 | 1 x 5               | 3 x 5     | 6 x 7        | 3 x 7     | 0,5    | 126776 |
| 37       | 1 29/64 | 1 x 5               | 3 x 5     | 6 x 7        | 3 x 7     | 0,5    | 137558 |
| 38       | 1 1/2   | 1 x 5               | 3 x 5     | 6 x 7        | 3 x 7     | 0,6    | 151251 |
| 38       | 1 1/2   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,6    | 146415 |
| 41       | 1 5/8   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,6    | 170742 |
| 41       | 1 5/8   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,6    | 150713 |
| 43       | 1 11/16 | 1 x 5               | 3 x 6     | 6 x 9        | 3 x 8     | 0,7    | 155971 |
| 43       | 1 11/16 | 1 x 5               | 3 x 6     | 6 x 9        | 3 x 8     | 0,7    | 102018 |
| 45       | 1 3/4   | 1 x 5               | 3 x 6     | 6 x 10       | 3 x 8     | 0,8    | 162165 |
| 45       | 1 3/4   | 1 x 5               | 3 x 6     | 6 x 10       | 3 x 8     | 0,8    | 107149 |
| 48       | 1 7/8   | 1 x 5               | 3 x 6     | 6 x 10       | 3 x 9     | 0,8    | 168472 |
| 48       | 1 7/8   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,8    | 137359 |
| 51       | 2       | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 193128 |
| 51       | 2       | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 104441 |
| 64       | 2 1/2   | -                   | 4 x 5     | 8 x 9        | 7 x 8     | 1,7    | 151131 |
| 64       | 2 1/2   | -                   | 4 x 5     | 8 x 9        | 7 x 8     | 1,7    | 124174 |
| 76       | 3       | -                   | 4 x 5     | 8 x 10       | 7 x 9     | 2,1    | 114561 |
| 76       | 3       | -                   | 4 x 5     | 8 x 10       | 7 x 9     | 2,1    | 152574 |
| 89       | 3 1/2   | -                   | 4 x 5     | 8 x 12       | 7 x 10    | 2,5    | 142964 |
| 89       | 3 1/2   | -                   | 4 x 5     | 8 x 12       | 7 x 10    | 2,5    | 165318 |
| 102      | 4       | -                   | 4 x 5     | 8 x 13       | 7 x 13    | 2,9    | 186772 |
| 102      | 4       | -                   | 4 x 5     | 8 x 13       | 7 x 13    | 2,9    | 116150 |
| 64       | 2 1/2   | -                   | 2 x 5     | 8 x 9        | 4 x 8     | 2,1    | 199773 |
| 64       | 2 1/2   | -                   | 2 x 5     | 8 x 9        | 4 x 8     | 2,1    | 197447 |
| 76       | 3       | -                   | 2 x 5     | 8 x 10       | 4 x 10    | 2,5    | 150489 |
| 76       | 3       | -                   | 2 x 5     | 8 x 10       | 4 x 10    | 2,5    | 126651 |
| 89       | 3 1/2   | -                   | 2 x 5     | 8 x 10       | 6 x 10    | 3,0    | 131849 |
| 89       | 3 1/2   | -                   | 2 x 5     | 8 x 10       | 6 x 10    | 3,0    | 173887 |
| 105      | 4 5/32  | -                   | 2 x 5     | 8 x 12       | 4 x 12    | 3,5    | 195011 |
| 105      | 4 5/32  | -                   | 2 x 5     | 8 x 12       | 4 x 12    | 3,5    | 117412 |
| 35       | 1 3/8   | 2 x 5               | 1 x 4,5   | -            | -         | 0,4    | 162925 |
| 38       | 1 1/2   | 2 x 5               | 1 x 4,5   | -            | -         | 0,5    | 134580 |
| 41       | 1 5/8   | 2 x 5               | 1 x 4,5   | -            | -         | 0,6    | 189218 |
| 43       | 1 11/16 | 2 x 5               | 1 x 4,5   | -            | -         | 0,6    | 116573 |
| 45       | 1 3/4   | 2 x 5               | 1 x 4,5   | -            | -         | 0,7    | 193140 |
| 48       | 1 7/8   | 2 x 5               | 1 x 5     | -            | -         | 0,7    | 195177 |
| 51       | 2       | 2 x 5               | 1 x 5     | -            | -         | 0,8    | 184502 |



## R-25 Rods



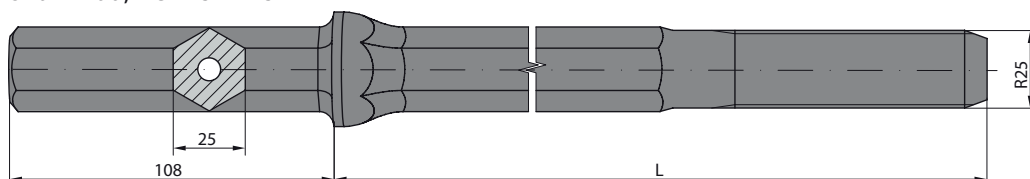
Shank rod, Hex 22 - R25



Flushing hole Ø6,7mm for flushing tube Ø4,5-5,0mm

| Hex |      | Thread | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|--------|-------------------|----|------|--------|--------|
| mm  | inch |        | mm                | ft | inch | kg     | No     |
| 22  | 7/8  | R25    | 610               | 2  | -    | 2,3    | 231785 |
| 22  | 7/8  | R25    | 760               | 2  | 6    | 2,7    | 216079 |
| 22  | 7/8  | R25    | 1000              | 3  | 3 ½  | 3,5    | 207919 |
| 22  | 7/8  | R25    | 1200              | 3  | 11   | 4,1    | 211660 |
| 22  | 7/8  | R25    | 1600              | 5  | 3    | 5,3    | 200260 |
| 22  | 7/8  | R25    | 1830              | 6  | -    | 6,0    | 236634 |
| 22  | 7/8  | R25    | 2400              | 7  | 10 ½ | 7,7    | 200563 |
| 22  | 7/8  | R25    | 3200              | 10 | 6    | 10,2   | 201637 |
| 22  | 7/8  | R25    | 3660              | 12 | -    | 11,6   | 207992 |
| 22  | 7/8  | R25    | 4000              | 13 | 1 ½  | 12,6   | 206244 |

Shank rod, Hex 25 - R25



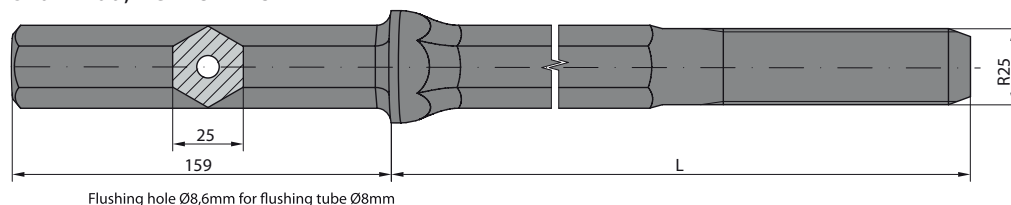
Flushing hole Ø8,6mm for flushing tube Ø8mm

| Hex |      | Thread | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|--------|-------------------|----|------|--------|--------|
| mm  | inch |        | mm                | ft | inch | kg     | No     |
| 25  | 1    | R25    | 610               | 2  | -    | 2,9    | 273136 |
| 25  | 1    | R25    | 760               | 2  | 6    | 3,5    | 265280 |
| 25  | 1    | R25    | 1000              | 3  | 3 ½  | 4,4    | 224522 |
| 25  | 1    | R25    | 1200              | 3  | 11   | 5,1    | 267176 |
| 25  | 1    | R25    | 1600              | 5  | 3    | 6,7    | 266665 |
| 25  | 1    | R25    | 1830              | 6  | -    | 7,6    | 228277 |
| 25  | 1    | R25    | 2400              | 7  | 10 ½ | 9,8    | 237061 |
| 25  | 1    | R25    | 3200              | 10 | 6    | 12,9   | 298352 |
| 25  | 1    | R25    | 3660              | 12 | -    | 14,3   | 257226 |
| 25  | 1    | R25    | 4000              | 13 | 1 ½  | 16,2   | 278937 |

# R-25 Rods

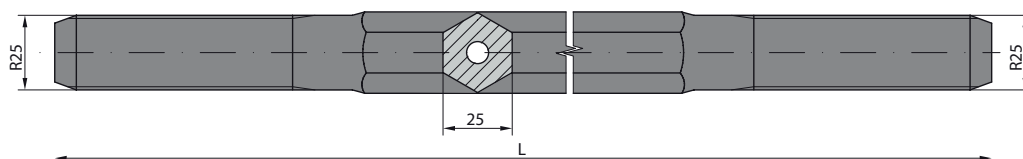


Shank rod, Hex 25 - R25



| Hex |      | Thread | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|--------|-------------------|----|------|--------|--------|
| mm  | inch |        | mm                | ft | inch | kg     | No     |
| 25  | 1    | R25    | 610               | 2  | -    | 3,1    | 266424 |
| 25  | 1    | R25    | 760               | 2  | 6    | 3,7    | 295760 |
| 25  | 1    | R25    | 1000              | 3  | 3 ½  | 4,6    | 286136 |
| 25  | 1    | R25    | 1200              | 3  | 11   | 5,3    | 264689 |
| 25  | 1    | R25    | 1600              | 5  | 3    | 6,9    | 220186 |
| 25  | 1    | R25    | 1830              | 6  | -    | 7,8    | 281553 |
| 25  | 1    | R25    | 2400              | 7  | 10 ½ | 10,0   | 210099 |
| 25  | 1    | R25    | 3200              | 10 | 6    | 13,1   | 201299 |
| 25  | 1    | R25    | 3660              | 12 | -    | 14,5   | 217902 |
| 25  | 1    | R25    | 4000              | 13 | 1 ½  | 16,4   | 285234 |
|     |      |        |                   |    |      |        |        |

Drifter rod, R25 - Hex 25 - R25



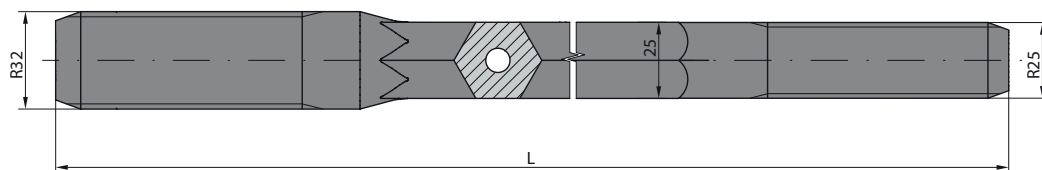
| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 25  | 1    | R25/R25 | 610               | 2  | -    | 2,0    | 236381 |
| 25  | 1    | R25/R25 | 915               | 3  | -    | 3,2    | 255387 |
| 25  | 1    | R25/R25 | 1220              | 4  | -    | 4,3    | 204641 |
| 25  | 1    | R25/R25 | 1525              | 5  | -    | 5,4    | 264354 |
| 25  | 1    | R25/R25 | 1830              | 6  | -    | 6,5    | 255096 |
| 25  | 1    | R25/R25 | 2435              | 8  | -    | 8,7    | 216682 |
| 25  | 1    | R25/R25 | 3050              | 10 | -    | 10,8   | 276626 |
| 25  | 1    | R25/R25 | 3660              | 12 | -    | 13,8   | 202421 |



# R-25 Rods

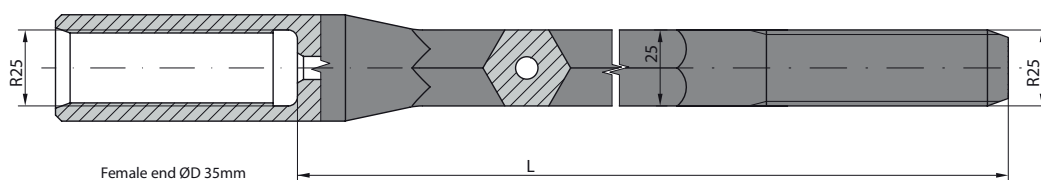


Drifter rod, R32 - Hex 25 - R25



| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 25  | 1    | R32/R25 | 610               | 2  | -    | 2,5    | 279343 |
| 25  | 1    | R32/R25 | 915               | 3  | -    | 3,7    | 240032 |
| 25  | 1    | R32/R25 | 1220              | 4  | -    | 4,8    | 228790 |
| 25  | 1    | R32/R25 | 1525              | 5  | -    | 6,0    | 264615 |
| 25  | 1    | R32/R25 | 1830              | 6  | -    | 7,2    | 218814 |
| 25  | 1    | R32/R25 | 2435              | 8  | -    | 9,5    | 251794 |
| 25  | 1    | R32/R25 | 3050              | 10 | -    | 11,9   | 231107 |
| 25  | 1    | R32/R25 | 3660              | 12 | -    | 14,3   | 269907 |
| 25  | 1    | R32/R25 | 4000              | 13 | 1 ½  | 15,6   | 291203 |

MF- rod, R25 - Hex 25 - R25

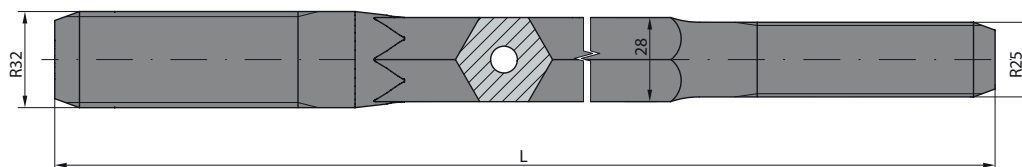


| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 25  | 1    | R25/R25 | 610               | 2  | -    | 2,8    | 265081 |
| 25  | 1    | R25/R25 | 915               | 3  | -    | 4,0    | 209245 |
| 25  | 1    | R25/R25 | 1220              | 4  | -    | 5,1    | 295788 |
| 25  | 1    | R25/R25 | 1525              | 5  | -    | 6,3    | 248778 |
| 25  | 1    | R25/R25 | 1830              | 6  | -    | 7,5    | 280106 |
| 25  | 1    | R25/R25 | 2435              | 8  | -    | 9,9    | 267994 |
| 25  | 1    | R25/R25 | 3050              | 10 | -    | 12,2   | 245417 |
| 25  | 1    | R25/R25 | 3660              | 12 | -    | 14,6   | 217327 |

# R-25 Rods

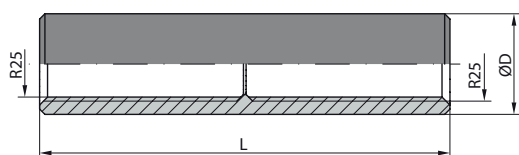


Drifter rod, R32 - Hex 28 - R25



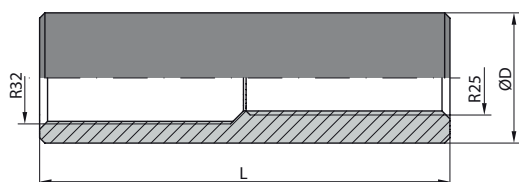
| Hex |       | Thread  | Dimensions Lenght |    |       | Weight | Model  |
|-----|-------|---------|-------------------|----|-------|--------|--------|
| mm  | inch  |         | mm                | ft | inch  | kg     | No     |
| 28  | 1 1/8 | R32/R25 | 610               | 2  | -     | 3,0    | 234722 |
| 28  | 1 1/8 | R32/R25 | 915               | 3  | -     | 4,5    | 211944 |
| 28  | 1 1/8 | R32/R25 | 1220              | 4  | -     | 6,1    | 295312 |
| 28  | 1 1/8 | R32/R25 | 1525              | 5  | -     | 7,6    | 263103 |
| 28  | 1 1/8 | R32/R25 | 1830              | 6  | -     | 9,1    | 284949 |
| 28  | 1 1/8 | R32/R25 | 2435              | 8  | -     | 12,2   | 280971 |
| 28  | 1 1/8 | R32/R25 | 3050              | 10 | -     | 15,3   | 293279 |
| 28  | 1 1/8 | R32/R25 | 3660              | 12 | -     | 18,4   | 211579 |
| 28  | 1 1/8 | R32/R25 | 4000              | 13 | 1 1/2 | 20,1   | 205125 |

Coupling sleeve R25



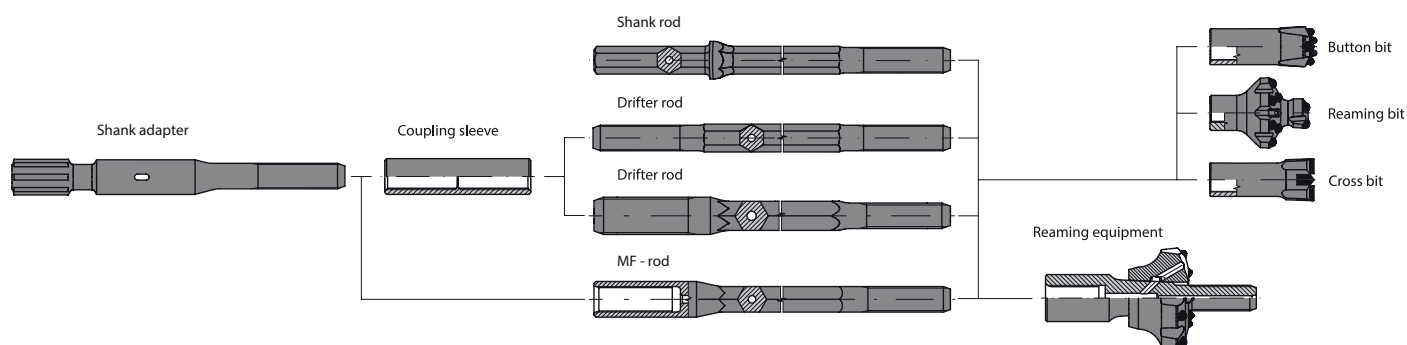
| Diameter |        | Thread  | Lenght |         | Weight | Model  |
|----------|--------|---------|--------|---------|--------|--------|
| mm       | inch   |         | mm     | inch    | kg     | No     |
| 34       | 1 5/16 | R25/R25 | 140    | 5 29/32 | 0,7    | 382288 |

Coupling sleeve R32 - R25

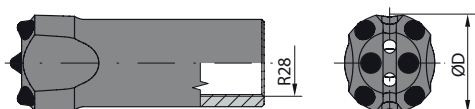


| Diameter |         | Thread  | Lenght |         | Weight | Model  |
|----------|---------|---------|--------|---------|--------|--------|
| mm       | inch    |         | mm     | inch    | kg     | No     |
| 44       | 1 47/64 | R32/R25 | 150    | 5 29/32 | 1,2    | 320934 |

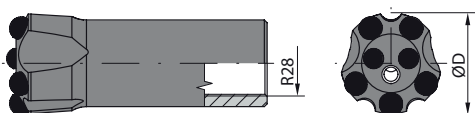
# R-28 Bits



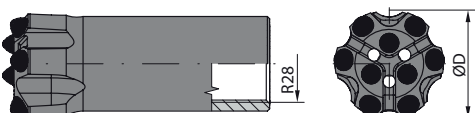
Button bit,



Button bit,



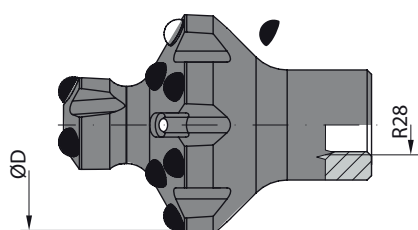
Button bit, Type D49



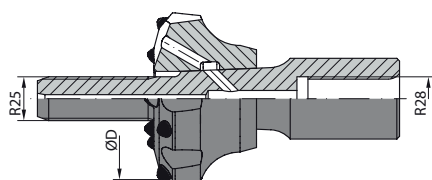
| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 37       | 1 29/64 | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,5    | 172114 |
| 37       | 1 29/64 | -                   | 2 x 5     | 4 x 8        | 2 x 7     | 0,5    | 163371 |
| 38       | 1 1/2   | -                   | 2 x 5     | 4 x 9        | 2 x 7     | 0,5    | 138649 |
| 38       | 1 1/2   | -                   | 2 x 5     | 4 x 9        | 2 x 7     | 0,5    | 159141 |
| 41       | 1 5/8   | -                   | 2 x 6     | 4 x 9        | 2 x 8     | 0,6    | 151822 |
| 41       | 1 5/8   | -                   | 2 x 6     | 4 x 9        | 2 x 8     | 0,6    | 175783 |
| 43       | 1 11/16 | -                   | 2 x 6     | 4 x 10       | 2 x 8     | 0,6    | 164668 |
| 43       | 1 11/16 | -                   | 2 x 6     | 4 x 10       | 2 x 8     | 0,6    | 192149 |
| 45       | 1 3/4   | -                   | 2 x 6     | 4 x 10       | 2 x 9     | 0,7    | 109545 |
| 45       | 1 3/4   | -                   | 2 x 6     | 4 x 10       | 2 x 9     | 0,7    | 172503 |
| 37       | 1 29/64 | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,5    | 187876 |
| 37       | 1 29/64 | 1 x 6               | 1 x 5     | 5 x 8        | 2 x 7     | 0,5    | 184016 |
| 38       | 1 1/2   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 7     | 0,5    | 179713 |
| 38       | 1 1/2   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 7     | 0,5    | 131880 |
| 41       | 1 5/8   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 8     | 0,6    | 184195 |
| 41       | 1 5/8   | 1 x 6               | 1 x 5     | 5 x 9        | 2 x 8     | 0,6    | 184226 |
| 43       | 1 11/16 | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,6    | 180251 |
| 43       | 1 11/16 | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,6    | 126859 |
| 45       | 1 3/4   | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,7    | 167512 |
| 45       | 1 3/4   | 1 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,7    | 128345 |
| 37       | 1 29/64 | 1 x 5               | 3 x 5     | 6 x 7        | 3 x 7     | 0,5    | 160594 |
| 37       | 1 29/64 | 1 x 5               | 3 x 5     | 6 x 7        | 3 x 7     | 0,5    | 194091 |
| 38       | 1 1/2   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,5    | 190532 |
| 38       | 1 1/2   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,5    | 169380 |
| 41       | 1 5/8   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,6    | 189168 |
| 41       | 1 5/8   | 1 x 5               | 3 x 5     | 6 x 8        | 3 x 7     | 0,6    | 184027 |
| 43       | 1 11/16 | 1 x 5               | 3 x 5     | 6 x 9        | 3 x 8     | 0,6    | 138829 |
| 43       | 1 11/16 | 1 x 5               | 3 x 5     | 6 x 9        | 3 x 8     | 0,6    | 174950 |
| 45       | 1 3/4   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 8     | 0,7    | 133897 |
| 45       | 1 3/4   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 8     | 0,7    | 176997 |
| 48       | 1 7/8   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,8    | 101134 |
| 48       | 1 7/8   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,8    | 132817 |
| 51       | 2       | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 150973 |
| 51       | 2       | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 189827 |



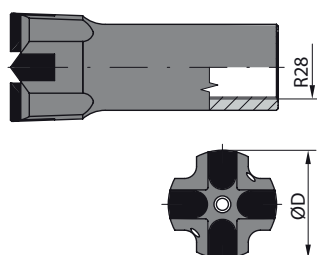
Reaming bit,



Reaming equipment,



Cross bit, Type D42

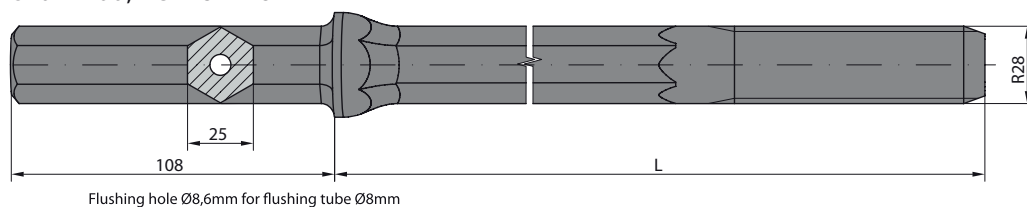


| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | kg  | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|-----|--------|
|          |         | Side                | Front     | Gauge        | Front     |     |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size |     | No     |
| 64       | 2 ½     | -                   | 4 x 5     | 8 x 9        | 7 x 8     | 1,7 | 103366 |
| 64       | 2 ½     | -                   | 4 x 5     | 8 x 9        | 7 x 8     | 1,7 | 186490 |
| 76       | 3       | -                   | 4 x 5     | 8 x 10       | 7 x 9     | 2,2 | 107731 |
| 76       | 3       | -                   | 4 x 5     | 8 x 10       | 7 x 9     | 2,2 | 151477 |
| 89       | 3 ½     | -                   | 4 x 5     | 8 x 12       | 7 x 10    | 2,6 | 140831 |
| 89       | 3 ½     | -                   | 4 x 5     | 8 x 12       | 7 x 10    | 2,6 | 136580 |
| 102      | 4       | -                   | 4 x 5     | 8 x 13       | 7 x 13    | 3,1 | 189290 |
| 102      | 4       | -                   | 4 x 5     | 8 x 13       | 7 x 13    | 3,1 | 144425 |
| 115      | 4 ½     | -                   | 4 x 6     | 8 x 14       | 7 x 13    | 3,9 | 194931 |
| 115      | 4 ½     | -                   | 4 x 6     | 8 x 14       | 7 x 13    | 3,9 | 103739 |
| 127      | 5       | -                   | 4 x 6     | 8 x 15       | 7 x 14    | 4,5 | 128880 |
| 127      | 5       | -                   | 4 x 6     | 8 x 15       | 7 x 14    | 4,5 | 183996 |
| 64       | 2 ½     | -                   | 2 x 5     | 8 x 9        | 2 x 7     | 2,3 | 132914 |
| 64       | 2 ½     | -                   | 2 x 5     | 8 x 9        | 2 x 7     | 2,3 | 104811 |
| 76       | 3       | -                   | 2 x 5     | 8 x 10       | 2 x 8     | 2,8 | 163687 |
| 76       | 3       | -                   | 2 x 5     | 8 x 10       | 2 x 8     | 2,8 | 113244 |
| 89       | 3 ½     | -                   | 2 x 5     | 8 x 10       | 2 x 8     | 3,6 | 137130 |
| 89       | 3 ½     | -                   | 2 x 5     | 8 x 10       | 2 x 8     | 3,6 | 104157 |
| 102      | 4       | -                   | 2 x 5     | 8 x 12       | 2 x 9     | 4,2 | 182629 |
| 102      | 4       | -                   | 2 x 5     | 8 x 12       | 2 x 9     | 4,2 | 197039 |
| 115      | 4 ½     | -                   | 2 x 5     | 8 x 12       | 3 x 7     | 5,7 | 139089 |
| 115      | 4 ½     | -                   | 2 x 5     | 8 x 12       | 3 x 7     | 5,7 | 180193 |
| 127      | 5       | -                   | 2 x 5     | 8 x 12       | 3 x 7     | 6,2 | 136995 |
| 127      | 5       | -                   | 2 x 5     | 8 x 12       | 3 x 7     | 6,2 | 151455 |
| 38       | 1 ½     | 2 x 5               | 2 x 5     | -            | -         | 0,5 | 169142 |
| 41       | 1 ⅝     | 2 x 5               | 2 x 5     | -            | -         | 0,6 | 103971 |
| 43       | 1 11/16 | 2 x 5               | 2 x 5     | -            | -         | 0,6 | 133888 |
| 45       | 1 ¾     | 2 x 5               | 2 x 5     | -            | -         | 0,7 | 143574 |
| 48       | 1 7/8   | 2 x 5               | 2 x 5     | -            | -         | 0,7 | 129560 |
| 51       | 2       | 2 x 5               | 2 x 5     | -            | -         | 0,8 | 147825 |

# R-28 Rods

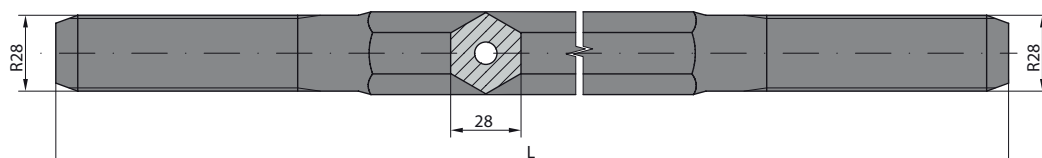


Shank rod, Hex 25- R28



| Hex |      | Thread | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|--------|-------------------|----|------|--------|--------|
| mm  | inch |        | mm                | ft | inch | kg     | No     |
| 25  | 1    | R28    | 610               | 2  | -    | 2,8    | 249285 |
| 25  | 1    | R28    | 760               | 2  | 6    | 3,4    | 234635 |
| 25  | 1    | R28    | 1000              | 3  | 3 ½  | 4,3    | 296915 |
| 25  | 1    | R28    | 1220              | 4  | -    | 5,2    | 275792 |
| 25  | 1    | R28    | 1600              | 5  | 3    | 6,6    | 241124 |
| 25  | 1    | R28    | 1830              | 6  | -    | 7,5    | 225099 |
| 25  | 1    | R28    | 2435              | 8  | -    | 9,9    | 250919 |
| 25  | 1    | R28    | 3050              | 10 | -    | 12,3   | 292270 |

Drifter rod, R28 - Hex 28 - R28

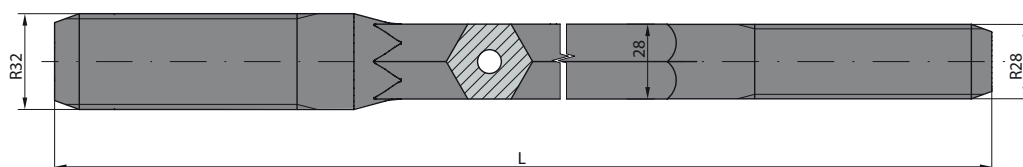


| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 28  | 1 ⅛  | R28/R28 | 1220              | 4  | -    | 6,0    | 250300 |
| 28  | 1 ⅛  | R28/R28 | 1525              | 5  | -    | 7,5    | 260810 |
| 28  | 1 ⅛  | R28/R28 | 1830              | 6  | -    | 9,0    | 217856 |
| 28  | 1 ⅛  | R28/R28 | 2435              | 8  | -    | 12,1   | 258898 |
| 28  | 1 ⅛  | R28/R28 | 3050              | 10 | -    | 15,2   | 223233 |
| 28  | 1 ⅛  | R28/R28 | 3660              | 12 | -    | 18,3   | 271096 |
| 28  | 1 ⅛  | R28/R28 | 4305              | 14 | 1 ½  | 21,5   | 253109 |

# R-28 Rods

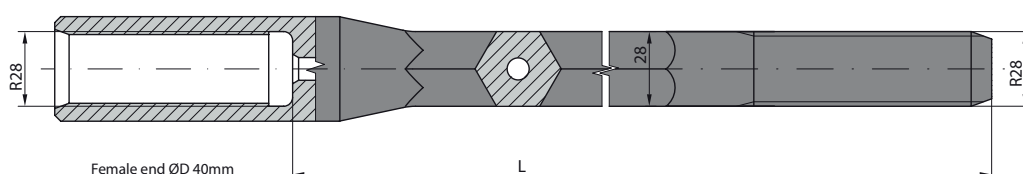


Drifter rod, R32 - Hex 28 - R28



| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 28  | 1 ⅞  | R32/R28 | 1220              | 4  | -    | 6,3    | 223492 |
| 28  | 1 ⅞  | R32/R28 | 1525              | 5  | -    | 7,8    | 246982 |
| 28  | 1 ⅞  | R32/R28 | 1830              | 6  | -    | 9,3    | 272033 |
| 28  | 1 ⅞  | R32/R28 | 2435              | 8  | -    | 12,4   | 290330 |
| 28  | 1 ⅞  | R32/R28 | 3050              | 10 | -    | 15,5   | 270359 |
| 28  | 1 ⅞  | R32/R28 | 3660              | 12 | -    | 18,6   | 238786 |
| 28  | 1 ⅞  | R32/R28 | 4305              | 14 | 1 ½  | 21,8   | 206175 |

MF- rod, R28 - Hex 28 - R28



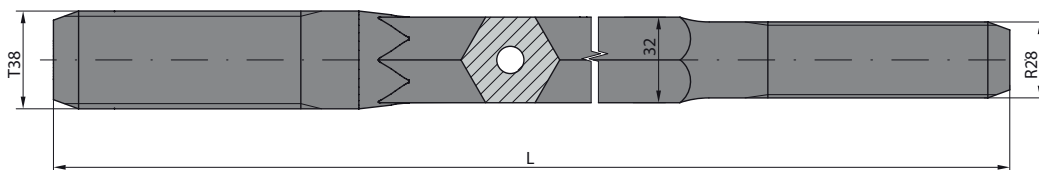
| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 28  | 1 ⅞  | R28/R28 | 1220              | 4  | -    | 6,6    | 209926 |
| 28  | 1 ⅞  | R28/R28 | 1525              | 5  | -    | 8,1    | 249913 |
| 28  | 1 ⅞  | R28/R28 | 1830              | 6  | -    | 9,6    | 210686 |
| 28  | 1 ⅞  | R28/R28 | 2435              | 8  | -    | 12,7   | 286902 |
| 28  | 1 ⅞  | R28/R28 | 3050              | 10 | -    | 15,8   | 284444 |
| 28  | 1 ⅞  | R28/R28 | 3660              | 12 | -    | 18,9   | 232227 |
| 28  | 1 ⅞  | R28/R28 | 4305              | 14 | 1 ½  | 22,1   | 221866 |



# R-28 Rods, Couplings Sleeve

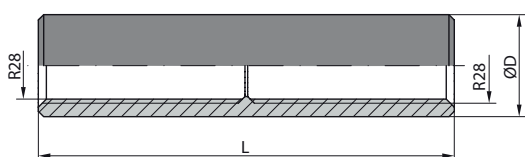


Drifter rod, T38 - Hex 32 - R28



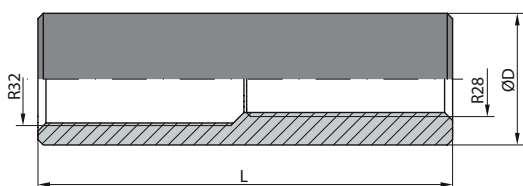
| Hex |      | Thread  | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 32  | 1 ¼  | T38/R28 | 1830              | 6  | -    | 11,7   | 280807 |
| 32  | 1 ¼  | T38/R28 | 2435              | 8  | -    | 15,5   | 244534 |
| 32  | 1 ¼  | T38/R28 | 3050              | 10 | -    | 19,5   | 286012 |
| 32  | 1 ¼  | T38/R28 | 3660              | 12 | -    | 23,4   | 281391 |
| 32  | 1 ¼  | T38/R28 | 4305              | 14 | 1 ½  | 27,5   | 215666 |

Coupling sleeve R28



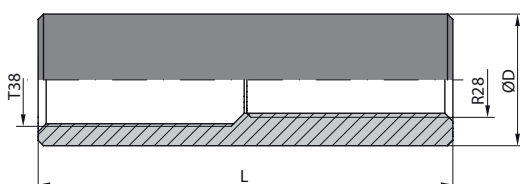
| Diameter |      | Thread  | Lenght |         | Weight | Model  |
|----------|------|---------|--------|---------|--------|--------|
| mm       | inch |         | mm     | inch    | kg     | No     |
| 38       | 1 ½  | R28/R28 | 150    | 5 29/32 | 0,8    | 317279 |

Coupling sleeve R32 - R28



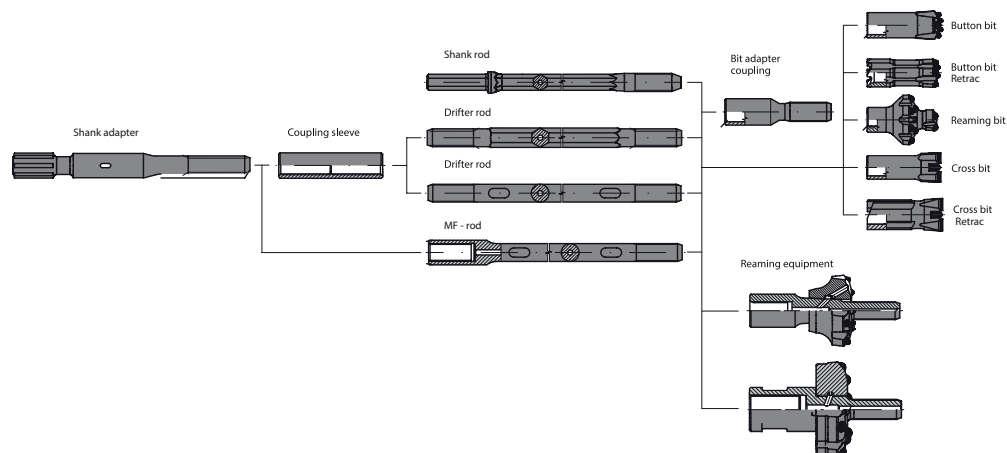
| Diameter |         | Thread  | Lenght |         | Weight | Model  |
|----------|---------|---------|--------|---------|--------|--------|
| mm       | inch    |         | mm     | inch    | kg     | No     |
| 44       | 1 47/64 | R32/R28 | 150    | 5 29/32 | 1,2    | 331639 |

Coupling sleeve T38 - R28

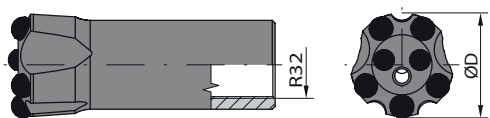


| Diameter |        | Thread  | Lenght |      | Weight | Model  |
|----------|--------|---------|--------|------|--------|--------|
| mm       | inch   |         | mm     | inch | kg     | No     |
| 55       | 2 5/32 | T38/R28 | 165    | 6 ½  | 2,3    | 301707 |

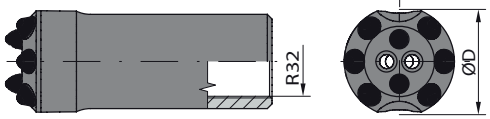
# R-32 Bits



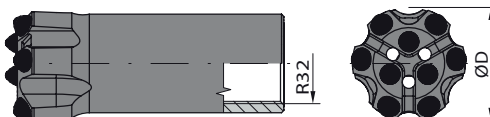
Button bit,



Button bit,



Button bit,

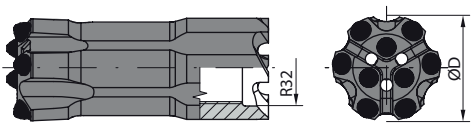


| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 43       | 1 11/16 | 2 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,7    | 188249 |
| 43       | 1 11/16 | 2 x 6               | 1 x 5     | 5 x 10       | 2 x 8     | 0,7    | 165491 |
| 45       | 1 3/4   | 2 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,8    | 125532 |
| 45       | 1 3/4   | 2 x 6               | 1 x 5     | 5 x 10       | 2 x 9     | 0,8    | 183148 |
| 48       | 1 7/8   | 2 x 7               | 1 x 6     | 5 x 11       | 2 x 9     | 0,9    | 145869 |
| 48       | 1 7/8   | 2 x 7               | 1 x 6     | 5 x 11       | 2 x 9     | 0,9    | 111491 |
| 51       | 2       | 2 x 7               | 1 x 6     | 5 x 12       | 2 x 10    | 1,0    | 112934 |
| 51       | 2       | 2 x 7               | 1 x 6     | 5 x 12       | 2 x 10    | 1,0    | 144518 |
| 43       | 1 11/16 | -                   | 2 x 6     | 6 x 9        | 2 x 9     | 0,7    | 122763 |
| 43       | 1 11/16 | -                   | 2 x 6     | 6 x 9        | 2 x 9     | 0,7    | 193198 |
| 45       | 1 3/4   | -                   | 2 x 6     | 6 x 10       | 2 x 9     | 0,8    | 103845 |
| 45       | 1 3/4   | -                   | 2 x 6     | 6 x 10       | 2 x 9     | 0,8    | 198948 |
| 48       | 1 7/8   | -                   | 2 x 7     | 6 x 10       | 2 x 9     | 0,8    | 171168 |
| 48       | 1 7/8   | -                   | 2 x 7     | 6 x 10       | 2 x 9     | 0,8    | 166434 |
| 51       | 2       | -                   | 2 x 7     | 6 x 11       | 2 x 9     | 0,9    | 148304 |
| 51       | 2       | -                   | 2 x 7     | 6 x 11       | 2 x 9     | 0,9    | 195179 |
| 54       | 2 1/8   | -                   | 2 x 7     | 6 x 11       | 2 x 10    | 1,1    | 154049 |
| 54       | 2 1/8   | -                   | 2 x 7     | 6 x 11       | 2 x 10    | 1,1    | 132987 |
| 45       | 1 3/4   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 8     | 0,8    | 168796 |
| 45       | 1 3/4   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 8     | 0,8    | 148983 |
| 48       | 1 7/8   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,8    | 119550 |
| 48       | 1 7/8   | 1 x 5               | 3 x 5     | 6 x 10       | 3 x 9     | 0,8    | 179101 |
| 51       | 2       | 1 x 6               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 114602 |
| 51       | 2       | 1 x 6               | 3 x 5     | 6 x 10       | 3 x 9     | 0,9    | 154377 |
| 54       | 2 1/8   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 9     | 1,1    | 169575 |
| 54       | 2 1/8   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 9     | 1,1    | 137456 |
| 57       | 2 1/4   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 10    | 1,2    | 104399 |
| 57       | 2 1/4   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 10    | 1,2    | 134700 |
| 61       | 2 13/32 | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 10    | 1,3    | 177565 |
| 61       | 2 13/32 | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 10    | 1,3    | 102113 |
| 64       | 2 1/2   | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 11    | 1,3    | 194290 |
| 64       | 2 1/2   | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 11    | 1,3    | 166923 |

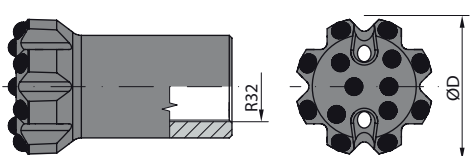
# R-32 Bits



Button bit, Retrac,

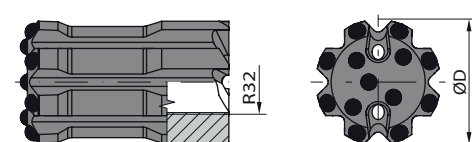


Button bit,

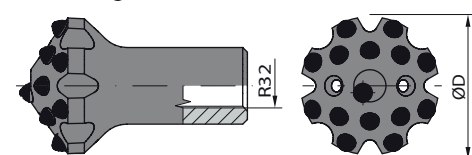


| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 51       | 2       | 1 x 6               | 3 x 5     | 6 x 10       | 3 x 9     | 1,3    | 141647 |
| 51       | 2       | 1 x 6               | 3 x 5     | 6 x 10       | 3 x 9     | 1,3    | 164717 |
| 54       | 2 1/8   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 9     | 1,5    | 138219 |
| 54       | 2 1/8   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 9     | 1,5    | 103537 |
| 57       | 2 1/4   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 10    | 1,7    | 137103 |
| 57       | 2 1/4   | 1 x 6               | 3 x 6     | 6 x 11       | 3 x 10    | 1,7    | 124681 |
| 61       | 1 13/32 | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 10    | 2,0    | 116220 |
| 61       | 1 13/32 | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 10    | 2,0    | 109155 |
| 64       | 2 1/2   | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 11    | 2,3    | 136010 |
| 64       | 2 1/2   | 1 x 6               | 3 x 6     | 6 x 12       | 3 x 11    | 2,3    | 103238 |
| 64       | 2 1/2   | -                   | 2 x 8     | 8 x 11       | 4 x 10    | 1,6    | 102532 |
| 70       | 2 3/4   | -                   | 2 x 8     | 8 x 12       | 4 x 11    | 1,8    | 149813 |
| 76       | 3       | -                   | 2 x 8     | 8 x 12       | 4 x 12    | 2,4    | 107916 |
| 89       | 3 1/2   | -                   | 2 x 8     | 8 x 13       | 5 x 12    | 3,5    | 123860 |
| 102      | 4       | -                   | 2 x 9     | 8 x 14       | 6 x 13    | 4,2    | 146348 |

Button bit

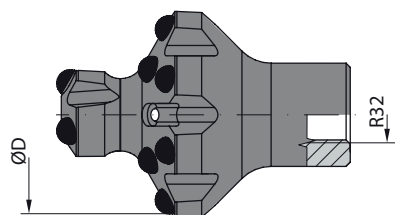


Reaming bit

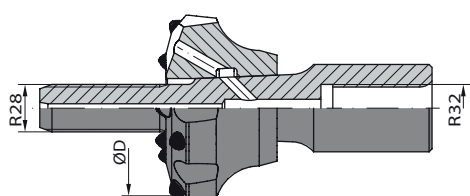


| Diameter |       | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|-------|---------------------|-----------|--------------|-----------|--------|--------|
|          |       | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch  | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64       | 2 1/2 | -                   | 2 x 8     | 8 x 11       | 4 x 10    | 2,4    | 100637 |
| 70       | 2 3/4 | -                   | 2 x 8     | 8 x 12       | 4 x 11    | 2,9    | 168233 |
| 76       | 3     | -                   | 2 x 8     | 8 x 12       | 4 x 12    | 3,7    | 152858 |
| 89       | 3 1/2 | -                   | 2 x 8     | 8 x 13       | 5 x 12    | 5,4    | 102344 |
| 102      | 4     | -                   | 2 x 9     | 8 x 14       | 6 x 13    | 7,2    | 168402 |
| 76       | 3     | -                   | 2 x 8     | 8 x 12       | 7 x 11    | 2,5    | 191192 |
| 76       | 3     | -                   | 2 x 8     | 8 x 12       | 7 x 11    | 2,5    | 189400 |
| 89       | 3 1/2 | -                   | 2 x 8     | 8 x 12       | 7 x 12    | 3,6    | 124380 |
| 89       | 3 1/2 | -                   | 2 x 8     | 8 x 12       | 7 x 12    | 3,6    | 146061 |
| 102      | 4     | -                   | 2 x 9     | 8 x 13       | 9 x 13    | 4,8    | 124701 |
| 102      | 4     | -                   | 2 x 9     | 8 x 13       | 9 x 13    | 4,8    | 138351 |

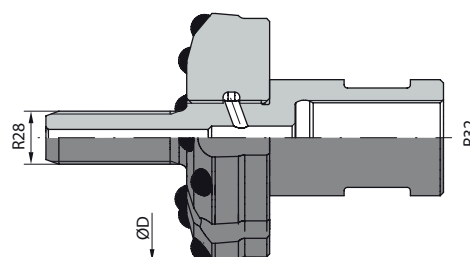
Reaming bit,



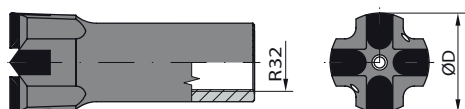
Reaming equipment



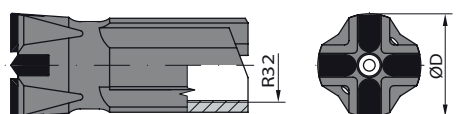
Reaming equipment



Cross bit



Cross bit, Retrac



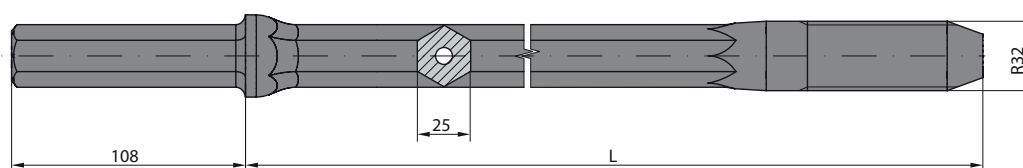
| Diameter |         | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|---------|---------------------|-----------|--------------|-----------|--------|--------|
|          |         | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch    | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 76       | 3       | -                   | 4 x 6     | 8 x 10       | 7 x 9     | 1,3    | 138351 |
| 76       | 3       | -                   | 4 x 6     | 8 x 10       | 7 x 9     | 1,3    | 186604 |
| 89       | 3 ½     | -                   | 4 x 6     | 8 x 12       | 7 x 10    | 1,5    | 150678 |
| 89       | 3 ½     | -                   | 4 x 6     | 8 x 12       | 7 x 10    | 1,5    | 104531 |
| 102      | 4       | -                   | 4 x 7     | 8 x 13       | 7 x 13    | 1,7    | 174024 |
| 102      | 4       | -                   | 4 x 7     | 8 x 13       | 7 x 13    | 1,7    | 126811 |
| 115      | 4 ½     | -                   | 4 x 7     | 8 x 14       | 7 x 13    | 2,0    | 174793 |
| 115      | 4 ½     | -                   | 4 x 7     | 8 x 14       | 7 x 13    | 2,0    | 122719 |
| 64       | 2 ½     | -                   | 2 x 6     | 8 x 9        | 4 x 8     | 2,3    | 117744 |
| 64       | 2 ½     | -                   | 2 x 6     | 8 x 9        | 4 x 8     | 2,3    | 144162 |
| 76       | 3       | -                   | 2 x 6     | 8 x 10       | 4 x 10    | 2,8    | 128101 |
| 76       | 3       | -                   | 2 x 6     | 8 x 10       | 4 x 10    | 2,8    | 166880 |
| 89       | 3 ½     | -                   | 2 x 6     | 8 x 10       | 6 x 10    | 3,6    | 173403 |
| 89       | 3 ½     | -                   | 2 x 6     | 8 x 10       | 6 x 10    | 3,6    | 134739 |
| 102      | 4       | -                   | 2 x 6     | 8 x 12       | 4 x 12    | 4,3    | 156923 |
| 102      | 4       | -                   | 2 x 6     | 8 x 12       | 4 x 12    | 4,3    | 110479 |
| 115      | 4 ½     | -                   | 2 x 6     | 8 x 12       | 6 x 12    | 5,8    | 122822 |
| 115      | 4 ½     | -                   | 2 x 6     | 8 x 12       | 6 x 12    | 5,8    | 105311 |
| 115      | 4 ½     | -                   | 2 x 6     | 8 x 12       | 6 x 12    | 4,8    | 145917 |
| 115      | 4 ½     | -                   | 2 x 6     | 8 x 12       | 6 x 12    | 4,8    | 177036 |
| 127      | 5       | -                   | 2 x 7     | 8 x 13       | 8 x 12    | 5,4    | 177769 |
| 127      | 5       | -                   | 2 x 7     | 8 x 13       | 8 x 12    | 5,4    | 133536 |
| 43       | 1 11/16 | 2 x 6               | 1 x 5     | -            | -         | 0,7    | 183220 |
| 45       | 1 ¾     | 2 x 6               | 1 x 5     | -            | -         | 0,7    | 181636 |
| 48       | 1 7/8   | 2 x 6               | 1 x 6     | -            | -         | 0,8    | 118856 |
| 51       | 2       | 2 x 6               | 1 x 6     | -            | -         | 0,8    | 116532 |
| 54       | 2 1/8   | 2 x 6               | 1 x 6     | -            | -         | 0,9    | 186188 |
| 45       | 1 ¾     | 2 x 6               | 1 x 5     | -            | -         | 1,1    | 130860 |
| 48       | 1 7/8   | 2 x 6               | 1 x 6     | -            | -         | 1,2    | 190213 |
| 51       | 2       | 2 x 6               | 1 x 6     | -            | -         | 1,3    | 190338 |
| 54       | 2 1/8   | 2 x 6               | 1 x 6     | -            | -         | 1,5    | 139367 |
| 57       | 2 ¼     | 2 x 6               | 1 x 6     | -            | -         | 1,7    | 107018 |
| 64       | 2 ½     | 2 x 6               | 1 x 6     | -            | -         | 2,6    | 194589 |
| 76       | 3       | 2 x 6               | 1 x 6     | -            | -         | 3,8    | 102586 |



# R-32 Rods



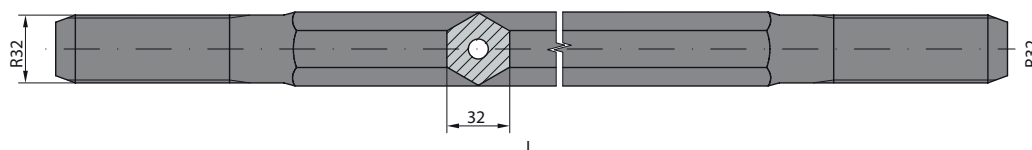
Shank rod, Hex 25 - R32



Flushing hole Ø8,6mm for flushing tube Ø8mm

| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 25  | 1    | R32     | 610               | 2  | -    | 3,0    | 270425 |
| 25  | 1    | R32     | 760               | 2  | 6    | 3,5    | 228873 |
| 25  | 1    | R32     | 1000              | 3  | 3 ½  | 4,5    | 242124 |
| 25  | 1    | R32     | 1220              | 4  | -    | 5,3    | 275934 |
| 25  | 1    | R32     | 1600              | 5  | 3    | 6,8    | 290785 |
| 25  | 1    | R32     | 1830              | 6  | -    | 7,7    | 269433 |
| 25  | 1    | R32     | 2435              | 8  | -    | 10,0   | 215583 |
| 25  | 1    | R32     | 3050              | 10 | -    | 12,3   | 214007 |
| 25  | 1    | R32     | 3660              | 12 | -    | 14,8   | 247246 |

Drifter rod, R32 - Hex 32 - R32

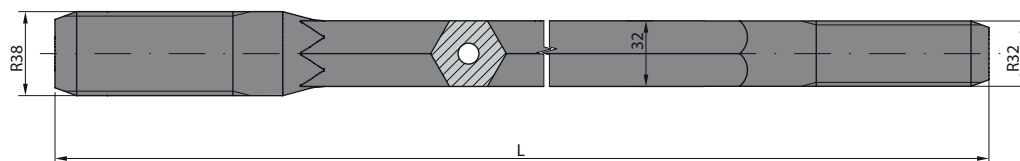


| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 32  | 1 ¼  | R32/R32 | 915               | 3  | -    | 5,6    | 259959 |
| 32  | 1 ¼  | R32/R32 | 1000              | 3  | 3 ½  | 6,2    | 293057 |
| 32  | 1 ¼  | R32/R32 | 1220              | 4  | -    | 7,6    | 285420 |
| 32  | 1 ¼  | R32/R32 | 1525              | 5  | -    | 9,5    | 247692 |
| 32  | 1 ¼  | R32/R32 | 1830              | 6  | -    | 11,5   | 287528 |
| 32  | 1 ¼  | R32/R32 | 2435              | 8  | -    | 15,3   | 200600 |
| 32  | 1 ¼  | R32/R32 | 3050              | 10 | -    | 19,3   | 298710 |
| 32  | 1 ¼  | R32/R32 | 3660              | 12 | -    | 23,2   | 220922 |
| 32  | 1 ¼  | R32/R32 | 4305              | 14 | 1 ½  | 27,3   | 264041 |
| 32  | 1 ¼  | R32/R32 | 4915              | 16 | -    | 31,2   | 282838 |
| 32  | 1 ¼  | R32/R32 | 5490              | 18 | -    | 34,8   | 250986 |

## R-32 Rods

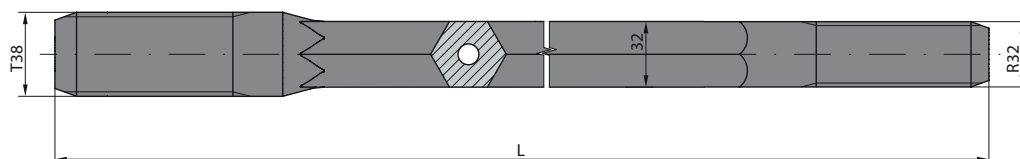


Drifter rod, R38 - Hex 32 - R32



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch |        |        |
| 32  | 1 ¼  | R38/R32 | 915               | 3  | -    | 5,8    | 262030 |
| 32  | 1 ¼  | R38/R32 | 1000              | 3  | 3 ½  | 6,4    | 229197 |
| 32  | 1 ¼  | R38/R32 | 1220              | 4  | -    | 7,8    | 244602 |
| 32  | 1 ¼  | R38/R32 | 1525              | 5  | -    | 9,7    | 209652 |
| 32  | 1 ¼  | R38/R32 | 1830              | 6  | -    | 11,7   | 207373 |
| 32  | 1 ¼  | R38/R32 | 2435              | 8  | -    | 15,5   | 254266 |
| 32  | 1 ¼  | R38/R32 | 3050              | 10 | -    | 19,5   | 248238 |
| 32  | 1 ¼  | R38/R32 | 3660              | 12 | -    | 23,4   | 209949 |
| 32  | 1 ¼  | R38/R32 | 4305              | 14 | 1 ½  | 27,5   | 209019 |
| 32  | 1 ¼  | R38/R32 | 4915              | 16 | -    | 31,4   | 289472 |
| 32  | 1 ¼  | R38/R32 | 5490              | 18 | -    | 35,0   | 265122 |

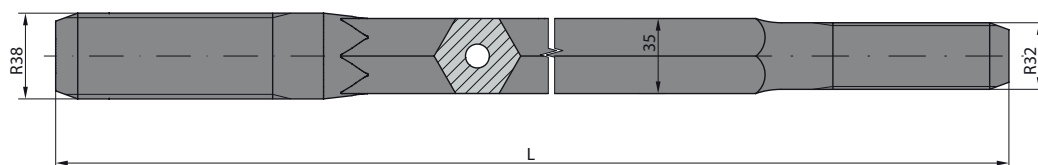
Drifter rod, T38 - Hex 32 - R32



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch |        |        |
| 32  | 1 ¼  | T38/R32 | 915               | 3  | -    | 5,8    | 262998 |
| 32  | 1 ¼  | T38/R32 | 1000              | 3  | 3 ½  | 6,4    | 255292 |
| 32  | 1 ¼  | T38/R32 | 1220              | 4  | -    | 7,8    | 252475 |
| 32  | 1 ¼  | T38/R32 | 1525              | 5  | -    | 9,7    | 229491 |
| 32  | 1 ¼  | T38/R32 | 1830              | 6  | -    | 11,7   | 285060 |
| 32  | 1 ¼  | T38/R32 | 2435              | 8  | -    | 15,5   | 256055 |
| 32  | 1 ¼  | T38/R32 | 3050              | 10 | -    | 19,5   | 270132 |
| 32  | 1 ¼  | T38/R32 | 3660              | 12 | -    | 23,4   | 263452 |
| 32  | 1 ¼  | T38/R32 | 4305              | 14 | 1 ½  | 27,5   | 238941 |
| 32  | 1 ¼  | T38/R32 | 4915              | 16 | -    | 31,4   | 230467 |
| 32  | 1 ¼  | T38/R32 | 5490              | 18 | -    | 35,0   | 261090 |

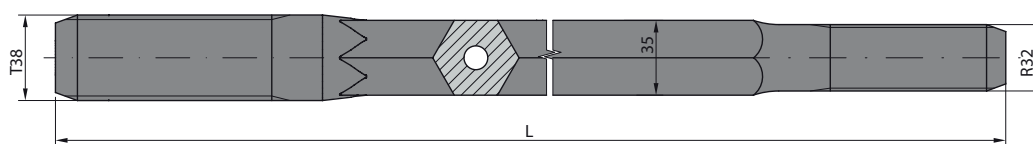
## R-32 Rods

Drifter rod, R38 - Hex 35 - R32



| Hex |       | Threads | Dimensions Lenght |    |       | Weight | Model  |
|-----|-------|---------|-------------------|----|-------|--------|--------|
| mm  | inch  |         | mm                | ft | inch  | kg     | No     |
| 35  | 1 3/8 | R38/R32 | 915               | 3  | -     | 7,2    | 218440 |
| 35  | 1 3/8 | R38/R32 | 1000              | 3  | 3 1/2 | 7,9    | 289180 |
| 35  | 1 3/8 | R38/R32 | 1220              | 4  | -     | 9,6    | 273982 |
| 35  | 1 3/8 | R38/R32 | 1525              | 5  | -     | 12,0   | 290026 |
| 35  | 1 3/8 | R38/R32 | 1830              | 6  | -     | 14,4   | 288344 |
| 35  | 1 3/8 | R38/R32 | 2435              | 8  | -     | 19,2   | 284443 |
| 35  | 1 3/8 | R38/R32 | 3050              | 10 | -     | 24,0   | 259280 |
| 35  | 1 3/8 | R38/R32 | 3660              | 12 | -     | 28,8   | 227111 |
| 35  | 1 3/8 | R38/R32 | 4305              | 14 | -     | 33,9   | 214493 |
| 35  | 1 3/8 | R38/R32 | 4915              | 16 | 1 1/2 | 38,7   | 227265 |
| 35  | 1 3/8 | R38/R32 | 5490              | 18 | -     | 43,3   | 282038 |

Drifter rod, T38 - Hex 35 - R32

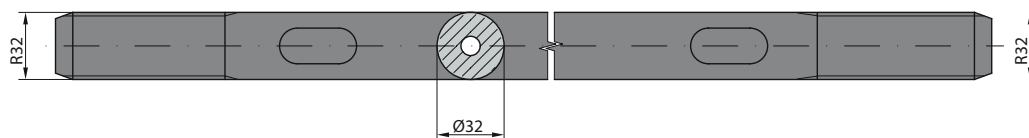


| Hex |       | Threads | Dimensions Lenght |    |       | Weight | Model  |
|-----|-------|---------|-------------------|----|-------|--------|--------|
| mm  | inch  |         | mm                | ft | inch  | kg     | No     |
| 35  | 1 3/8 | T38/R32 | 915               | 3  | -     | 7,2    | 242397 |
| 35  | 1 3/8 | T38/R32 | 1000              | 3  | 3 1/2 | 7,9    | 209625 |
| 35  | 1 3/8 | T38/R32 | 1220              | 4  | -     | 9,6    | 232174 |
| 35  | 1 3/8 | T38/R32 | 1525              | 5  | -     | 12,0   | 255361 |
| 35  | 1 3/8 | T38/R32 | 1830              | 6  | -     | 14,4   | 215357 |
| 35  | 1 3/8 | T38/R32 | 2435              | 8  | -     | 19,2   | 252200 |
| 35  | 1 3/8 | T38/R32 | 3050              | 10 | -     | 24,0   | 290187 |
| 35  | 1 3/8 | T38/R32 | 3660              | 12 | -     | 28,8   | 262206 |
| 35  | 1 3/8 | T38/R32 | 4305              | 14 | 1 1/2 | 33,9   | 244858 |
| 35  | 1 3/8 | T38/R32 | 4915              | 16 | -     | 38,7   | 223809 |
| 35  | 1 3/8 | T38/R32 | 5490              | 18 | -     | 43,3   | 272327 |

# R-32 Rods

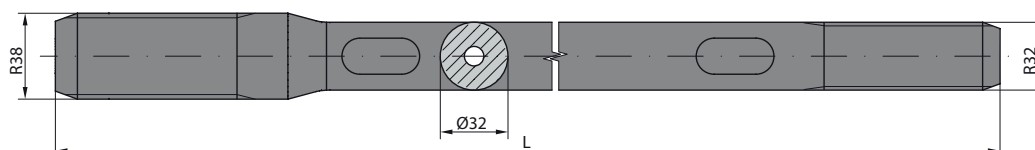


Drifter rod, R32 - Round 32 - R32



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 32  | 1 ¼  | R32/R32 | 915               | 3  | -    | 5,2    | 297386 |
| 32  | 1 ¼  | R32/R32 | 1000              | 3  | 3 ½  | 5,7    | 229993 |
| 32  | 1 ¼  | R32/R32 | 1220              | 4  | -    | 7,0    | 219460 |
| 32  | 1 ¼  | R32/R32 | 1525              | 5  | -    | 8,8    | 244186 |
| 32  | 1 ¼  | R32/R32 | 1830              | 6  | -    | 10,5   | 299805 |
| 32  | 1 ¼  | R32/R32 | 2435              | 8  | -    | 14,1   | 297451 |
| 32  | 1 ¼  | R32/R32 | 3050              | 10 | -    | 17,7   | 288112 |
| 32  | 1 ¼  | R32/R32 | 3660              | 12 | -    | 21,3   | 228981 |
| 32  | 1 ¼  | R32/R32 | 4305              | 14 | 1 ½  | 25,1   | 243886 |
| 32  | 1 ¼  | R32/R32 | 4915              | 16 | -    | 28,7   | 235102 |
| 32  | 1 ¼  | R32/R32 | 5490              | 18 | -    | 32,0   | 272072 |

Drifter rod, R38 - Round 32 - R32



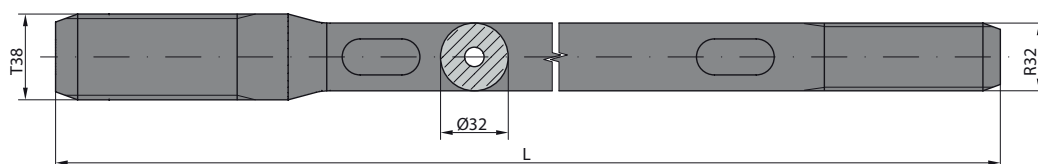
| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     |        |
| 32  | 1 ¼  | T38/R32 | 915               | 3  | -    | 5,3    | 287080 |
| 32  | 1 ¼  | T38/R32 | 1000              | 3  | 3 ½  | 5,8    | 277581 |
| 32  | 1 ¼  | T38/R32 | 1220              | 4  | -    | 7,1    | 288902 |
| 32  | 1 ¼  | T38/R32 | 1525              | 5  | -    | 8,9    | 228198 |
| 32  | 1 ¼  | T38/R32 | 1830              | 6  | -    | 10,6   | 224266 |
| 32  | 1 ¼  | T38/R32 | 2435              | 8  | -    | 14,2   | 223518 |
| 32  | 1 ¼  | T38/R32 | 3050              | 10 | -    | 17,8   | 260596 |
| 32  | 1 ¼  | T38/R32 | 3660              | 12 | -    | 21,4   | 269199 |
| 32  | 1 ¼  | T38/R32 | 4305              | 14 | 1 ½  | 25,2   | 276994 |
| 32  | 1 ¼  | T38/R32 | 4915              | 16 | -    | 28,8   | 289464 |
| 32  | 1 ¼  | T38/R32 | 5490              | 18 | -    | 32,1   | 286161 |



# R-32 Rods

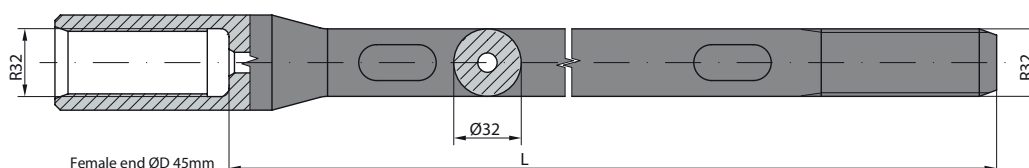


Drifter rod, T38 - Round 32 - R32



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 32  | 1 ¼  | T38/R32 | 915               | 3  | -    | 5,3    | 297987 |
| 32  | 1 ¼  | T38/R32 | 1000              | 3  | 3 ½  | 5,8    | 206736 |
| 32  | 1 ¼  | T38/R32 | 1220              | 4  | -    | 7,1    | 295614 |
| 32  | 1 ¼  | T38/R32 | 1525              | 5  | -    | 8,9    | 213405 |
| 32  | 1 ¼  | T38/R32 | 1830              | 6  | -    | 10,6   | 209048 |
| 32  | 1 ¼  | T38/R32 | 2435              | 8  | -    | 14,2   | 276755 |
| 32  | 1 ¼  | T38/R32 | 3050              | 10 | -    | 17,8   | 238797 |
| 32  | 1 ¼  | T38/R32 | 3660              | 12 | -    | 21,4   | 269245 |
| 32  | 1 ¼  | T38/R32 | 4305              | 14 | -    | 25,2   | 285777 |
| 32  | 1 ¼  | T38/R32 | 4915              | 16 | 1 ½  | 28,8   | 256986 |
| 32  | 1 ¼  | T38/R32 | 5490              | 18 | -    | 32,1   | 285637 |

MF - rod, R32 - Round 32 - R32



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 32  | 1 ¼  | R32/R32 | 915               | 3  | -    | 5,4    | 297316 |
| 32  | 1 ¼  | R32/R32 | 1000              | 3  | 3 ½  | 5,9    | 214855 |
| 32  | 1 ¼  | R32/R32 | 1220              | 4  | -    | 7,2    | 215545 |
| 32  | 1 ¼  | R32/R32 | 1525              | 5  | -    | 9,0    | 299884 |
| 32  | 1 ¼  | R32/R32 | 1830              | 6  | -    | 10,7   | 222473 |
| 32  | 1 ¼  | R32/R32 | 2435              | 8  | -    | 14,3   | 239906 |
| 32  | 1 ¼  | R32/R32 | 3050              | 10 | -    | 17,9   | 234329 |
| 32  | 1 ¼  | R32/R32 | 3660              | 12 | -    | 21,5   | 222562 |
| 32  | 1 ¼  | R32/R32 | 4305              | 14 | 1 ½  | 25,3   | 248300 |
| 32  | 1 ¼  | R32/R32 | 4915              | 16 | -    | 28,9   | 236448 |
| 32  | 1 ¼  | R32/R32 | 5490              | 18 | -    | 32,2   | 206340 |

# R-28 Rods, Couplings sleeve, Bit adapter

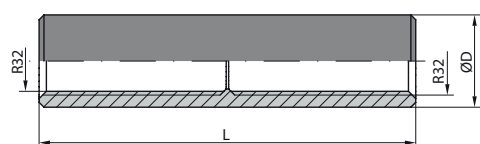


MF - rod, T38 - Hex 35 - R32



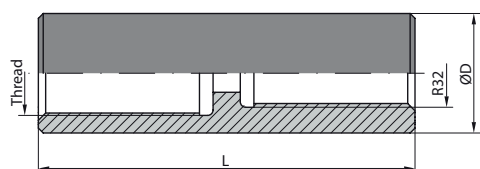
| Hex   |       | Threads | Dimensions Lenght |    |       | Weight | Model  |
|-------|-------|---------|-------------------|----|-------|--------|--------|
| mm    | inch  |         | mm                | ft | inch  | kg     | No     |
| 35    | 1 3/8 | T38/R32 | 915               | 3  | -     | 7,4    | 286729 |
| 35    | 1 3/8 | T38/R32 | 1000              | 3  | 3 1/2 | 8,1    | 265222 |
| 35    | 1 3/8 | T38/R32 | 1220              | 4  | -     | 9,8    | 234769 |
| 35    | 1 3/8 | T38/R32 | 1525              | 5  | -     | 12,2   | 209627 |
| 35    | 1 3/8 | T38/R32 | 1830              | 6  | -     | 14,7   | 244446 |
| 35    | 1 3/8 | T38/R32 | 2435              | 8  | -     | 19,4   | 286462 |
| 35    | 1 3/8 | T38/R32 | 3050              | 10 | -     | 24,3   | 297868 |
| 35    | 1 3/8 | T38/R32 | 3660              | 12 | -     | 29,1   | 219856 |
| 35    | 1 3/8 | T38/R32 | 4305              | 14 | 1 1/2 | 34,2   | 280460 |
| 39,05 | 1 3/8 | T38/R32 | 4915              | 16 | -     | 39,0   | 243574 |

Coupling sleeve R32



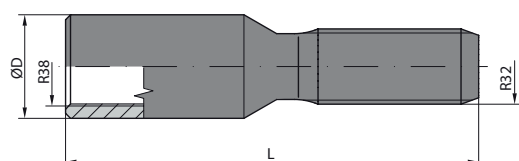
| Diameter |         | Threads | Lenght |         | Weight | Model  |
|----------|---------|---------|--------|---------|--------|--------|
| mm       | inch    |         | mm     | inch    | kg     | No     |
| 44       | 1 47/64 | R32/R32 | 150    | 5 29/32 | 0,9    | 367831 |

Coupling sleeve



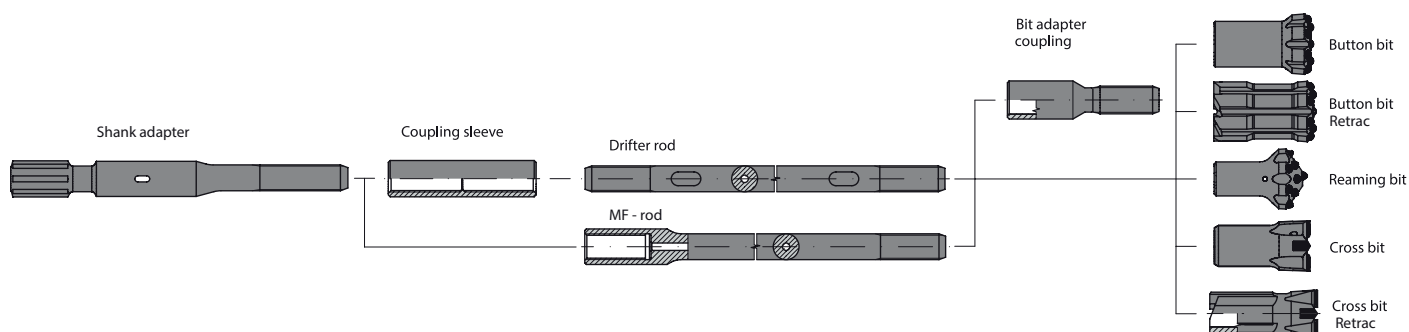
| Diameter |        | Threads | Lenght |        | Weight | Model  |
|----------|--------|---------|--------|--------|--------|--------|
| mm       | inch   |         | mm     | inch   | kg     | No     |
| 55       | 2 5/32 | R38/R32 | 170    | 6 3/4  | 2,1    | 309587 |
| 55       | 2 5/32 | T38/R32 | 185    | 7 9/32 | 2,3    | 373059 |
| 62       | 2 1/2  | T45/R32 | 185    | 7 9/32 | 3,3    | 302896 |

Bit adapter coupling

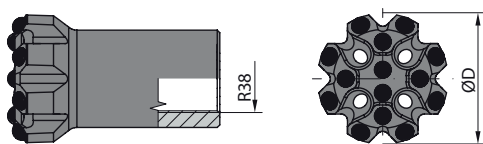


| Diameter |        | Threads | Lenght |      | Weight | Model  |
|----------|--------|---------|--------|------|--------|--------|
| mm       | inch   |         | mm     | inch | kg     | No     |
| 55       | 2 5/32 | R38/R32 | 230    | 9    | 2,4    | 309355 |

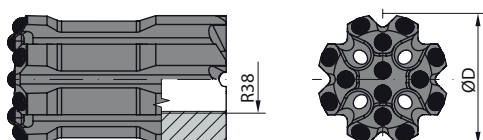
# R-38 Bits



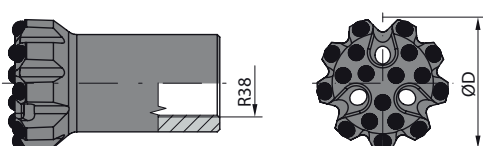
Button bit, Drop center



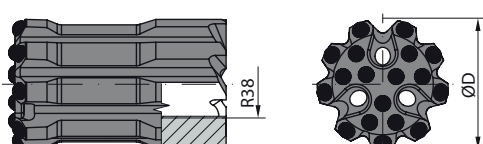
Button bit, Drop center, Retrac



Button bit, Flat face

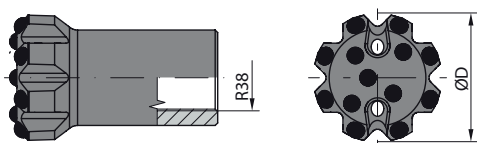


Button bit, Flat face, Retrac

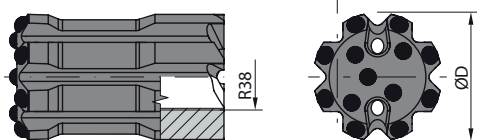


| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64       | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 1,7    | 105459 |
| 64       | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 1,7    | 141573 |
| 70       | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 1,8    | 115913 |
| 70       | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 1,8    | 167214 |
| 76       | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,4    | 105384 |
| 76       | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,4    | 168552 |
| 89       | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 3,5    | 172937 |
| 89       | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 3,5    | 120455 |
| 102      | 4    | -                   | 4 x 9     | 8 x 14       | 6 x 13    | 4,2    | 140603 |
| 102      | 4    | -                   | 4 x 9     | 8 x 14       | 6 x 13    | 4,2    | 167081 |
| 64       | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 2,2    | 185258 |
| 64       | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 2,2    | 183733 |
| 70       | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 3,0    | 160487 |
| 70       | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 3,0    | 194749 |
| 76       | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,6    | 188114 |
| 76       | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,6    | 189692 |
| 89       | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,1    | 112163 |
| 89       | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,1    | 138989 |
| 102      | 4    | -                   | 4 x 9     | 8 x 14       | 6 x 13    | 7,2    | 150787 |
| 102      | 4    | -                   | 4 x 9     | 8 x 14       | 6 x 13    | 7,2    | 149608 |
| 76       | 3    | -                   | 3 x 9     | 9 x 11       | 8 x 10    | 2,4    | 121362 |
| 76       | 3    | -                   | 3 x 9     | 9 x 11       | 8 x 10    | 2,4    | 142274 |
| 89       | 3 ½  | -                   | 3 x 9     | 9 x 12       | 9 x 11    | 3,5    | 145640 |
| 89       | 3 ½  | -                   | 3 x 9     | 9 x 12       | 9 x 11    | 3,5    | 196742 |
| 102      | 4    | -                   | 3 x 9     | 9 x 13       | 9 x 12    | 4,2    | 111219 |
| 102      | 4    | -                   | 3 x 9     | 9 x 13       | 9 x 12    | 4,2    | 124063 |
| 76       | 3    | -                   | 3 x 9     | 9 x 11       | 8 x 10    | 3,6    | 151185 |
| 76       | 3    | -                   | 3 x 9     | 9 x 11       | 8 x 10    | 3,6    | 183407 |
| 89       | 3 ½  | -                   | 3 x 9     | 9 x 12       | 9 x 11    | 5,1    | 108666 |
| 89       | 3 ½  | -                   | 3 x 9     | 9 x 12       | 9 x 11    | 5,1    | 173273 |
| 102      | 4    | -                   | 3 x 9     | 9 x 13       | 9 x 12    | 7,2    | 100214 |
| 102      | 4    | -                   | 3 x 9     | 9 x 13       | 9 x 12    | 7,2    | 106344 |

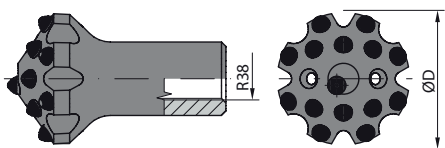
Button bit, Heavy Duty



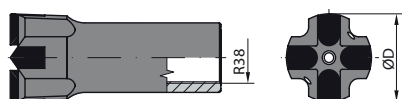
Button bit, Retractor, Heavy Duty



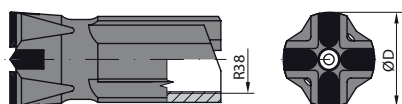
Reaming bit,



Cross bit



Cross bit, Retractor, Type D52

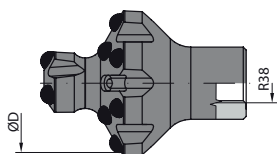


| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64       | 2 ½  | -                   | 2 x 8     | 8 x 11       | 4 x 10    | 1,7    | 190384 |
| 70       | 2 ¾  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 1,8    | 106960 |
| 76       | 3    | -                   | 2 x 10    | 8 x 12       | 4 x 12    | 2,4    | 157166 |
| 89       | 3 ½  | -                   | 2 x 11    | 8 x 13       | 5 x 12    | 3,5    | 103514 |
| 102      | 4    | -                   | 2 x 11    | 8 x 14       | 6 x 13    | 4,2    | 175601 |
| 64       | 2 ½  | -                   | 2 x 8     | 8 x 11       | 4 x 10    | 2,2    | 120047 |
| 70       | 2 ¾  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 3,0    | 128235 |
| 76       | 3    | -                   | 2 x 10    | 8 x 12       | 4 x 12    | 3,6    | 161359 |
| 89       | 3 ½  | -                   | 2 x 11    | 8 x 13       | 5 x 12    | 5,1    | 185034 |
| 102      | 4    | -                   | 2 x 11    | 8 x 14       | 6 x 13    | 7,2    | 109755 |
| 76       | 3    | -                   | 2 x 9     | 8 x 12       | 7 x 11    | 2,6    | 140824 |
| 76       | 3    | -                   | 2 x 9     | 8 x 12       | 7 x 11    | 2,6    | 171394 |
| 89       | 3 ½  | -                   | 2 x 9     | 8 x 12       | 7 x 12    | 3,7    | 127481 |
| 89       | 3 ½  | -                   | 2 x 9     | 8 x 12       | 7 x 12    | 3,7    | 182693 |
| 102      | 4    | -                   | 2 x 10    | 8 x 13       | 9 x 13    | 4,9    | 137281 |
| 102      | 4    | -                   | 2 x 10    | 8 x 13       | 9 x 13    | 4,9    | 155121 |
| 115      | 4 ½  | -                   | 2 x 11    | 8 x 14       | 9 x 13    | 6,5    | 170836 |
| 115      | 4 ½  | -                   | 2 x 11    | 8 x 14       | 9 x 13    | 6,5    | 133487 |
| 127      | 5    | -                   | 2 x 11    | 8 x 15       | 9 x 14    | 7,9    | 177804 |
| 127      | 5    | -                   | 2 x 11    | 8 x 15       | 9 x 14    | 7,9    | 108970 |
| 64       | 2 ½  | 2 x 7               | 1 x 8     | -            | -         | 1,8    | 183667 |
| 76       | 3    | 2 x 8               | 1 x 10    | -            | -         | 2,4    | 130796 |
| 89       | 3 ½  | 2 x 9               | 1 x 10    | -            | -         | 3,5    | 189826 |
| 76       | 1 ¾  | 2 x 8               | 1 x 10    | -            | -         | 3,6    | 122880 |
| 89       | 1 ⅞  | 2 x 9               | 1 x 10    | -            | -         | 5,1    | 151322 |
| 102      | 2    | 2 x 9               | 1 x 11    | -            | -         | 7,2    | 169434 |

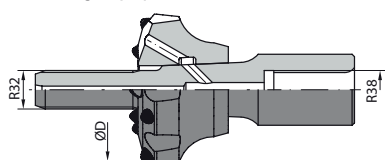
# R-28 Bits, Rods



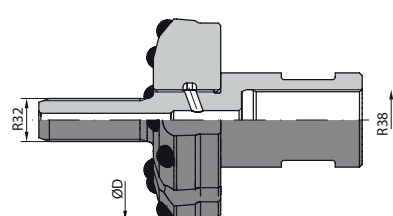
Reaming bit



Reaming equipment

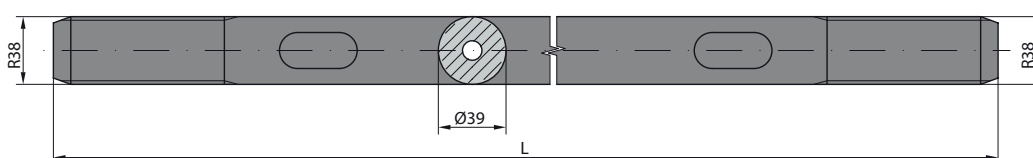


Reaming equipment



| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 89       | 3 ½  | -                   | 4 x 6     | 8 x 12       | 7 x 10    | 2,7    | 184720 |
| 89       | 3 ½  | -                   | 4 x 6     | 8 x 12       | 7 x 10    | 2,7    | 157948 |
| 102      | 4    | -                   | 4 x 7     | 8 x 13       | 7 x 13    | 3,2    | 112326 |
| 102      | 4    | -                   | 4 x 7     | 8 x 13       | 7 x 13    | 3,2    | 168670 |
| 115      | 4 ½  | -                   | 4 x 7     | 8 x 14       | 7 x 13    | 4,0    | 134192 |
| 115      | 4 ½  | -                   | 4 x 7     | 8 x 14       | 7 x 13    | 4,0    | 197275 |
| 89       | 3 ½  | -                   | 2 x 6     | 8 x 10       | 6 x 10    | 3,8    | 199973 |
| 89       | 3 ½  | -                   | 2 x 6     | 8 x 10       | 6 x 10    | 3,8    | 191702 |
| 102      | 4    | -                   | 2 x 7     | 8 x 12       | 4 x 12    | 4,5    | 131399 |
| 102      | 4    | -                   | 2 x 7     | 8 x 12       | 4 x 12    | 4,5    | 100285 |
| 115      | 4 ½  | -                   | 2 x 7     | 8 x 12       | 6 x 12    | 5,1    | 137704 |
| 115      | 4 ½  | -                   | 2 x 7     | 8 x 12       | 6 x 12    | 5,1    | 110552 |
| 115      | 4 ½  | -                   | 2 x 7     | 8 x 12       | 6 x 12    | 5,1    | 135197 |
| 115      | 4 ½  | -                   | 2 x 7     | 8 x 12       | 6 x 12    | 5,1    | 154212 |
| 127      | 5    | -                   | 2 x 8     | 8 x 13       | 8 x 13    | 5,7    | 111100 |
| 127      | 5    | -                   | 2 x 8     | 8 x 13       | 8 x 13    | 5,7    | 150124 |

Drifter rod, R38 - Round 39 - R38



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 39  | 1 ½  | R38/R38 | 915               | 3  | -    | 7,2    | 215491 |
| 39  | 1 ½  | R38/R38 | 1000              | 3  | 3 ½  | 7,9    | 222293 |
| 39  | 1 ½  | R38/R38 | 1220              | 4  | -    | 9,8    | 225731 |
| 39  | 1 ½  | R38/R38 | 1525              | 5  | -    | 12,2   | 201416 |
| 39  | 1 ½  | R38/R38 | 1830              | 6  | -    | 14,7   | 216257 |
| 39  | 1 ½  | R38/R38 | 2435              | 8  | -    | 19,6   | 283905 |
| 39  | 1 ½  | R38/R38 | 3050              | 10 | -    | 24,5   | 204022 |
| 39  | 1 ½  | R38/R38 | 3660              | 12 | -    | 29,5   | 291655 |
| 39  | 1 ½  | R38/R38 | 4305              | 14 | 1 ½  | 34,7   | 238131 |
| 39  | 1 ½  | R38/R38 | 4915              | 16 | -    | 39,6   | 283075 |
| 39  | 1 ½  | R38/R38 | 5490              | 18 | -    | 44,4   | 231944 |



# R-38 Rods

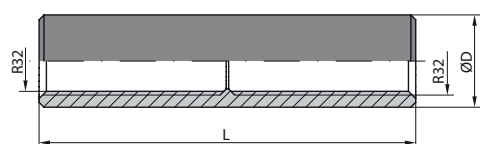


MF - rod, T38 - Hex 35 - R32



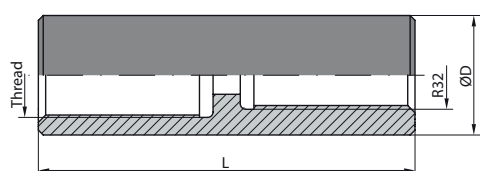
| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     | No     |
| 39  | 1 ½  | R38/R38 | 915               | 3  | -    | 7,9    | 218956 |
| 39  | 1 ½  | R38/R38 | 1000              | 3  | 3 ½  | 8,6    | 246348 |
| 39  | 1 ½  | R38/R38 | 1220              | 4  | -    | 10,4   | 256160 |
| 39  | 1 ½  | R38/R38 | 1525              | 5  | -    | 12,8   | 214961 |
| 39  | 1 ½  | R38/R38 | 1830              | 6  | -    | 15,3   | 255699 |
| 39  | 1 ½  | R38/R38 | 2435              | 8  | -    | 20,2   | 273397 |
| 39  | 1 ½  | R38/R38 | 3050              | 10 | -    | 25,1   | 228157 |
| 39  | 1 ½  | R38/R38 | 3660              | 12 | -    | 30,1   | 232110 |
| 39  | 1 ½  | R38/R38 | 4305              | 14 | 1 ½  | 35,3   | 273153 |
| 39  | 1 ½  | R38/R38 | 4915              | 16 | -    | 40,2   | 274389 |
| 39  | 1 ½  | R38/R38 | 5490              | 18 | -    | 44,9   | 269893 |

Coupling sleeve R32



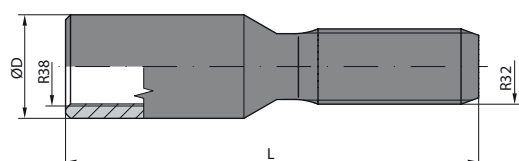
| Diameter |        | Threads | Lenght |        | Weight | Model  |
|----------|--------|---------|--------|--------|--------|--------|
| mm       | inch   |         | mm     | inch   | kg     | No     |
| 55       | 2 5/32 | R38/R38 | 160    | 6 5/16 | 1,6    | 384430 |

Coupling sleeve



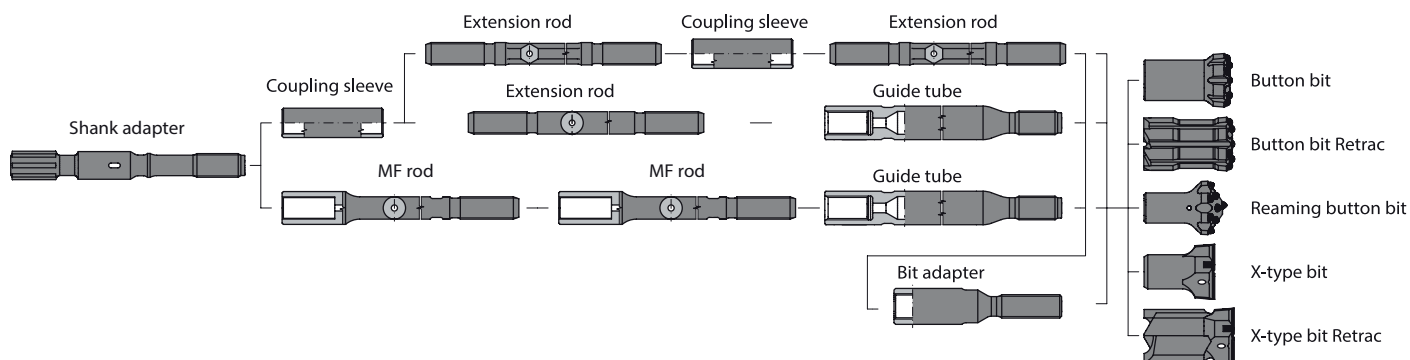
| Diameter |        | Threads | Lenght |      | Weight | Model  |
|----------|--------|---------|--------|------|--------|--------|
| mm       | inch   |         | mm     | inch | kg     | No     |
| 55       | 2 5/32 | T38/R38 | 190    | 7 ½  | 2,2    | 389567 |
| 62       | 2 ½    | T45/R38 | 190    | 7 ½  | 3,2    | 343781 |

Bit adapter coupling

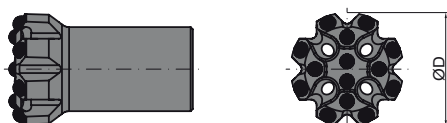


| Diameter |        | Threads | Lenght |      | Weight | Model  |
|----------|--------|---------|--------|------|--------|--------|
| mm       | inch   |         | mm     | inch | kg     | No     |
| 55       | 2 5/32 | T38/R38 | 200    | 7 ⅞  | 2,8    | 338273 |

# T38 Bits



Button bit – DROP CENTER



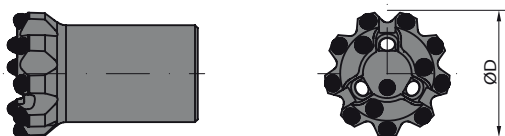
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64                               | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 1,8    | 130304 |
| 64                               | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 1,8    | 194458 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,2    | 153106 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,2    | 136118 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,5    | 147531 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,5    | 113439 |
| 89                               | 3 ½  | -                   | 4 x 8     | 8 x 13       | 5 x 12    | 3,4    | 114175 |
| 89                               | 3 ½  | -                   | 4 x 8     | 8 x 13       | 5 x 12    | 3,4    | 105491 |
| 102                              | 4    | -                   | 4 x 8     | 8 x 13       | 6 x 13    | 4,7    | 110634 |
| 102                              | 4    | -                   | 4 x 8     | 8 x 13       | 6 x 13    | 4,7    | 105634 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – DROP CENTER – RETRAC



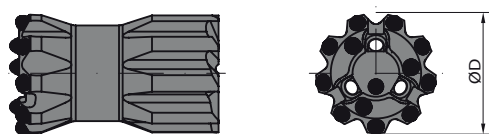
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64                               | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 2,2    | 126797 |
| 64                               | 2 ½  | -                   | 4 x 8     | 8 x 10       | 5 x 9     | 2,2    | 188831 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,8    | 153025 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,8    | 141166 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,6    | 135616 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,6    | 145959 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,5    | 124214 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,5    | 148070 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 13       | 6 x 13    | 7,3    | 127955 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 13       | 6 x 13    | 7,3    | 128057 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – DROP CENTER



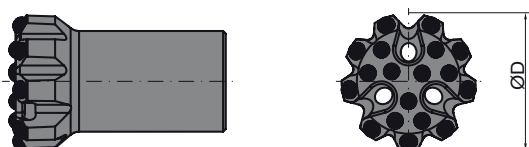
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 4 x 9     | 1,8    | 134220 |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 4 x 9     | 1,8    | 165954 |
| 70                               | 2 ¾  | -                   | 3 x 8     | 9 x 11       | 4 x 10    | 2,1    | 135454 |
| 70                               | 2 ¾  | -                   | 3 x 8     | 9 x 11       | 4 x 10    | 2,1    | 108223 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 2,4    | 170956 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 2,4    | 157378 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 3,3    | 187054 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 3,3    | 107706 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 3,3    | 125047 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 3,3    | 182128 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – DROP CENTER – RETRAC



| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 4 x 9     | 2,1    | 171499 |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 4 x 9     | 2,1    | 153863 |
| 70                               | 2 ¾  | -                   | 3 x 8     | 9 x 11       | 4 x 10    | 2,6    | 135213 |
| 70                               | 2 ¾  | -                   | 3 x 8     | 9 x 11       | 4 x 10    | 2,6    | 195607 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 3,4    | 162040 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 3,4    | 115413 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 4,9    | 183868 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 4,9    | 116687 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 6,7    | 102095 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 6,7    | 135612 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit - FLAT FACE

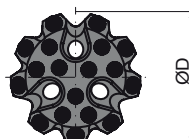
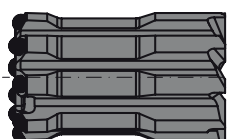


| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight |        |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 64       | 2 ½  | -                   | 3 x 8     | 9 x 10       | 8 x 8     | 1,9    | 143653 |
| 64       | 2 ½  | -                   | 3 x 8     | 9 x 10       | 8 x 8     | 1,9    | 141335 |
| 76       | 3    | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 2,5    | 180922 |
| 76       | 3    | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 2,5    | 177443 |
| 89       | 3 ½  | -                   | 3 x 10    | 9 x 13       | 8 x 11    | 3,5    | 179191 |
| 89       | 3 ½  | -                   | 3 x 10    | 9 x 13       | 8 x 11    | 3,5    | 103221 |
| 102      | 4    | -                   | 3 x 10    | 9 x 14       | 8 x 12    | 4,9    | 138287 |
| 102      | 4    | -                   | 3 x 10    | 9 x 14       | 8 x 12    | 4,9    | 117760 |

# T38 Bits

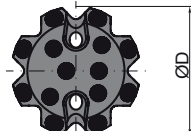
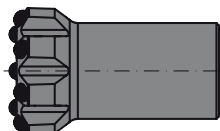


Button bit – FLAT FACE – RETRAC



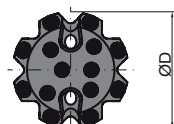
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 8 x 8     | 2,4    | 168863 |
| 64                               | 2 ½  | -                   | 3 x 8     | 9 x 10       | 8 x 8     | 2,4    | 100886 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,7    | 175436 |
| 76                               | 3    | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,7    | 115583 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 5,6    | 118186 |
| 89                               | 3 ½  | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 5,6    | 142399 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 7,4    | 105370 |
| 102                              | 4    | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 7,4    | 148306 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – FLAT FACE – Heavy Duty



| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64            | 2 ½  | -                   | 2 x 9     | 8 x 11       | 4 x 10    | 1,9    | 199471 |
| 70            | 2 ¾  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 2,3    | 189285 |
| 76            | 3    | -                   | 2 x 10    | 8 x 13       | 4 x 12    | 2,5    | 191972 |
| 89            | 3 ½  | -                   | 2 x 11    | 8 x 14       | 5 x 13    | 3,6    | 100610 |
| 102           | 4    | -                   | 2 x 11    | 8 x 15       | 6 x 14    | 5,0    | 141195 |
| R - Spherical |      |                     |           |              |           |        |        |

Button bit – FLAT FACE – Heavy Duty - RETRAC



| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64            | 2 ½  | -                   | 2 x 9     | 8 x 11       | 4 x 10    | 2,4    | 126156 |
| 70            | 2 ¾  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 3,1    | 147473 |
| 76            | 3    | -                   | 2 x 10    | 8 x 13       | 4 x 12    | 3,7    | 117571 |
| 89            | 3 ½  | -                   | 2 x 11    | 8 x 14       | 5 x 13    | 5,5    | 140054 |
| 102           | 4    | -                   | 2 x 11    | 8 x 15       | 6 x 14    | 7,4    | 155649 |
| R - Spherical |      |                     |           |              |           |        |        |



# BENCH & PRODUCTION DRILLING

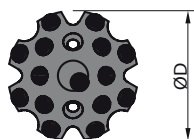
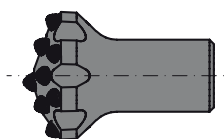
## G Ü C Ü KEŞFEDİN

Fms Grup üst düzey kalitede ürettiği, yüksek performanslı kaya delgi ekipmanlarını kullanarak işinize değer katın. Hızlı aşınan ve sizi yarı yolda bırakan ürünlerin aksine Fms Grup Delgi ekipmanlarında kullanılan ham maddeler saf İsveç çeliğidir. Ham madde kalitesinin yanı sıra uygun maliyetler ile elde edilen kaya delgi ekipmanlarının performansları sayesinde iş akışınızı hızlandırır ve sarf maliyetlerini minimuma düşürür. Şimdi FMS'nin gücünü keşfedin



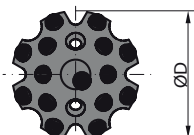
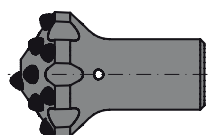


Button bit



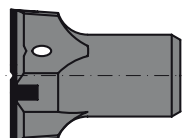
| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 70            | 2 ¾  | -                   | 2 x 8     | 8 x 11       | 5 x 10    | 2,3    | 188012 |
| 76            | 3    | -                   | 2 x 9     | 8 x 12       | 6 x 11    | 2,5    | 133378 |
| 89            | 3 ½  | -                   | 2 x 9     | 8 x 13       | 6 x 12    | 3,6    | 163981 |
| 102           | 4    | -                   | 2 x 10    | 8 x 13       | 7 x 12    | 5,0    | 115073 |
| R - Spherical |      |                     |           |              |           |        |        |

Reaming button bit



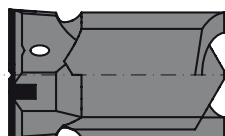
| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 115           | 4 ½  | 1 x 7               | 3 x 7     | 9 x 13       | 8 x 12    | 6,5    | 170905 |
| 127           | 5    | 1 x 7,5             | 3 x 7,5   | 9 x 14       | 9 x 13    | 7,9    | 141821 |
| R - Spherical |      |                     |           |              |           |        |        |

Cross X-type bit



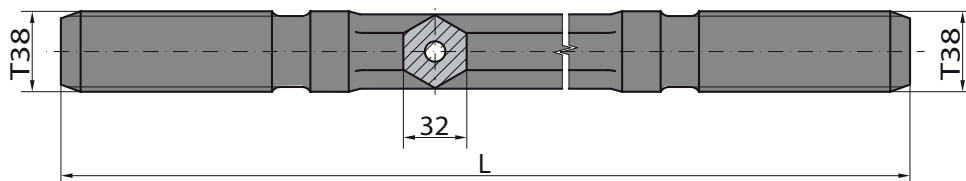
| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 64       | 2 ½  | 2 x 7               | 1 x 8     | -            | -         | 1,9    | 136881 |
| 76       | 3    | 2 x 8               | 1 x 10    | -            | -         | 2,5    | 192517 |
| 89       | 3 ½  | 2 x 9               | 1 x 10    | -            | -         | 3,6    | 198117 |

Cross X-type bit – RETRAC



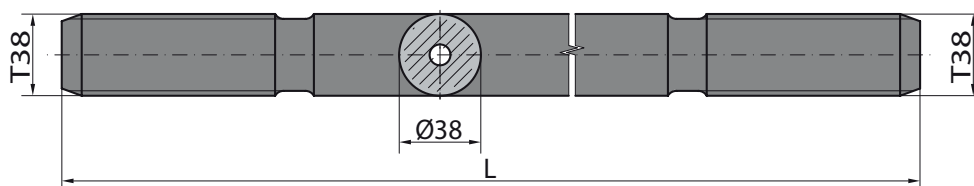
| Diameter |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------|------|---------------------|-----------|--------------|-----------|--------|--------|
|          |      | Side                | Front     | Gauge        | Front     |        |        |
| mm       | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 76       | 3    | 2 x 7               | 1 x 8     | -            | -         | 3,7    | 181357 |
| 89       | 3 ½  | 2 x 8               | 1 x 10    | -            | -         | 5,5    | 167182 |
| 102      | 4    | 2 x 9               | 1 x 10    | -            | -         | 7,4    | 175383 |

## Hex rods



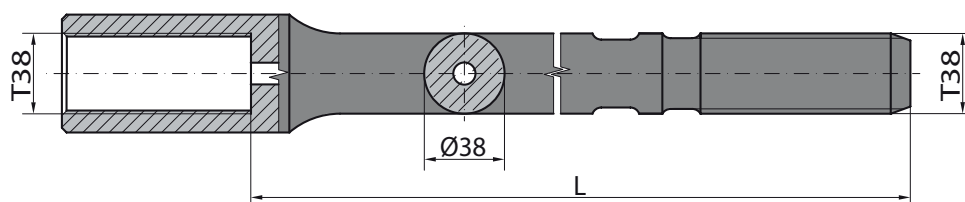
| Hex                        |      | Threads | Dimensions Lenght |    |      | Weight | Model No |
|----------------------------|------|---------|-------------------|----|------|--------|----------|
| mm                         | inch |         | mm                | ft | inch | kg     |          |
| 32                         | 1 ¼  | T38/T38 | 915               | 3  | -    | 6,2    | 229157   |
| 32                         | 1 ¼  | T38/T38 | 1220              | 4  | -    | 7,9    | 240875   |
| 32                         | 1 ¼  | T38/T38 | 1525              | 5  | -    | 9,8    | 204773   |
| 32                         | 1 ¼  | T38/T38 | 1830              | 6  | -    | 11,8   | 292688   |
| 32                         | 1 ¼  | T38/T38 | 2165              | 7  | -    | 13,9   | 242228   |
| 32                         | 1 ¼  | T38/T38 | 2435              | 8  | -    | 15,6   | 258528   |
| 32                         | 1 ¼  | T38/T38 | 3050              | 10 | -    | 19,5   | 275826   |
| 32                         | 1 ¼  | T38/T38 | 3660              | 12 | -    | 23,4   | 266263   |
| 32                         | 1 ¼  | T38/T38 | 4265              | 14 | -    | 27,3   | 210383   |
| 32                         | 1 ¼  | T38/T38 | 4915              | 16 | -    | 31,4   | 268684   |
| 32                         | 1 ¼  | T38/T38 | 5490              | 18 | -    | 35,1   | 234473   |
| 32                         | 1 ¼  | T38/T38 | 6100              | 20 | -    | 39,0   | 233208   |
| Flushing hole $\phi$ 16 mm |      |         |                   |    |      |        |          |

## Extension rods



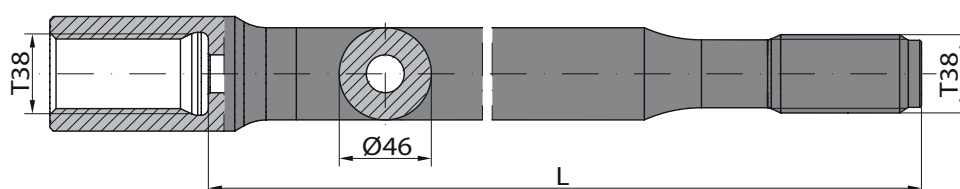
| Hex                          |      | Threads | Dimensions Lenght |    |      | Weight | Model No |
|------------------------------|------|---------|-------------------|----|------|--------|----------|
| mm                           | inch |         | mm                | ft | inch | kg     |          |
| 38                           | 1 ½  | T38/T38 | 915               | 3  | -    | 7,2    | 232415   |
| 38                           | 1 ½  | T38/T38 | 1220              | 4  | -    | 9,6    | 292069   |
| 38                           | 1 ½  | T38/T38 | 1525              | 5  | -    | 12,0   | 294524   |
| 38                           | 1 ½  | T38/T38 | 1830              | 6  | -    | 14,4   | 263920   |
| 38                           | 1 ½  | T38/T38 | 2165              | 7  | -    |        | 292296   |
| 38                           | 1 ½  | T38/T38 | 2435              | 8  | -    | 19,2   | 285151   |
| 38                           | 1 ½  | T38/T38 | 3050              | 10 | -    | 24,0   | 246974   |
| 38                           | 1 ½  | T38/T38 | 3660              | 12 | -    | 28,8   | 219644   |
| 38                           | 1 ½  | T38/T38 | 4265              | 14 | -    | 33,9   | 216588   |
| 38                           | 1 ½  | T38/T38 | 4915              | 16 | -    | 38,7   | 227899   |
| 38                           | 1 ½  | T38/T38 | 5490              | 18 | -    | 43,3   | 255597   |
| 38                           | 1 ½  | T38/T38 | 6100              | 20 | -    | 48,9   | 207217   |
| Flushing hole $\phi$ 14,5 mm |      |         |                   |    |      |        |          |

## Speed rods / M-F rods



| Hex                                                   |      | Threads | Dimensions Lenght |    |      | Weight | Model No |
|-------------------------------------------------------|------|---------|-------------------|----|------|--------|----------|
| mm                                                    | inch |         | mm                | ft | inch | kg     |          |
| 38                                                    | 1 ½  | T38/T38 | 915               | 3  | -    | 8,5    | 271355   |
| 38                                                    | 1 ½  | T38/T38 | 1220              | 4  | -    | 10,9   | 239335   |
| 38                                                    | 1 ½  | T38/T38 | 1525              | 5  | -    | 13,4   | 238762   |
| 38                                                    | 1 ½  | T38/T38 | 1830              | 6  | -    | 15,9   | 256249   |
| 38                                                    | 1 ½  | T38/T38 | 2165              | 7  | -    | 18,6   | 287642   |
| 38                                                    | 1 ½  | T38/T38 | 2435              | 8  | -    | 20,7   | 233508   |
| 38                                                    | 1 ½  | T38/T38 | 3050              | 10 | -    | 25,7   | 262941   |
| 38                                                    | 1 ½  | T38/T38 | 3660              | 12 | -    | 30,6   | 278651   |
| 38                                                    | 1 ½  | T38/T38 | 4265              | 14 | -    | 35,5   | 269524   |
| 38                                                    | 1 ½  | T38/T38 | 4915              | 16 | -    | 40,8   | 241340   |
| 38                                                    | 1 ½  | T38/T38 | 5490              | 18 | -    | 45,4   | 298536   |
| 38                                                    | 1 ½  | T38/T38 | 6100              | 20 | -    | 50,4   | 251855   |
| Flushing hole $\phi$ 14,5 mm, Female end $\phi$ 56 mm |      |         |                   |    |      |        |          |

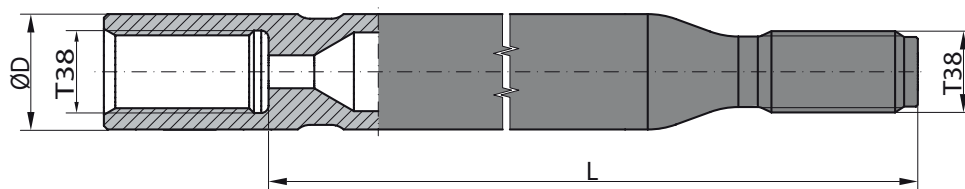
## Guide rods / M-F rods



| Hex                                                 |      | Threads | Dimensions Lenght |    |      | Weight | Model No |
|-----------------------------------------------------|------|---------|-------------------|----|------|--------|----------|
| mm                                                  | inch |         | mm                | ft | inch | kg     |          |
| 46                                                  | 1 ¾  | T38/T38 | 3050              | 10 | -    | 34,4   | 293697   |
| 46                                                  | 1 ¾  | T38/T38 | 3660              | 12 | -    | 41,2   | 216831   |
| 46                                                  | 1 ¾  | T38/T38 | 4265              | 14 | -    | 48,0   | 222189   |
| Flushing hole $\phi$ 17 mm, Female end $\phi$ 56 mm |      |         |                   |    |      |        |          |

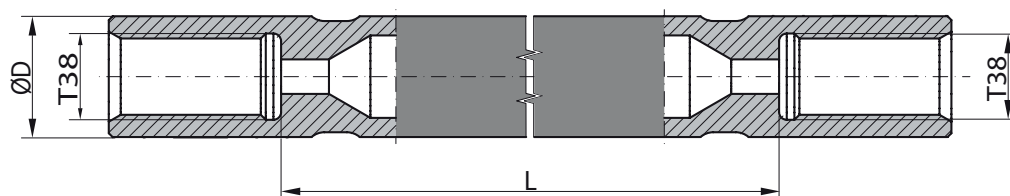


## Guide tube rods



| Diameter |      | Threads | Lenght |    |      | Weight | Model No |
|----------|------|---------|--------|----|------|--------|----------|
| mm       | inch |         | mm     | ft | inch | kg     |          |
| 56       | 2 ¼  | T38/T38 | 1525   | 5  | -    | 18,7   | 268507   |
| 56       | 2 ¼  | T38/T38 | 1830   | 6  | -    | 22,2   | 250236   |
| 56       | 2 ¼  | T38/T38 | 3050   | 10 | -    | 36,0   | 243878   |
| 56       | 2 ¼  | T38/T38 | 3660   | 12 | -    | 42,9   | 276359   |
| 56       | 2 ¼  | T38/T38 | 3660   | 12 | -    | 49,4   | 220308   |

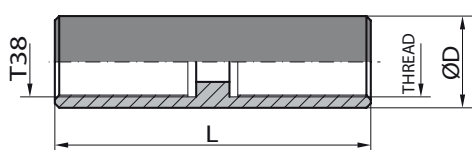
## Guide tube rods



| Diameter |      | Threads | Lenght |    |      | Weight | Model No |
|----------|------|---------|--------|----|------|--------|----------|
| mm       | inch |         | mm     | ft | inch | kg     |          |
| 56       | 2 ¼  | T38/T38 | 1525   | 5  | -    | 19,5   | 210778   |
| 56       | 2 ¼  | T38/T38 | 1830   | 6  | -    | 23,0   | 215689   |
| 56       | 2 ¼  | T38/T38 | 3050   | 10 | -    | 36,8   | 250833   |
| 56       | 2 ¼  | T38/T38 | 3660   | 12 | -    | 43,7   | 258597   |
| 56       | 2 ¼  | T38/T38 | 3660   | 12 | -    | 52,4   | 247212   |

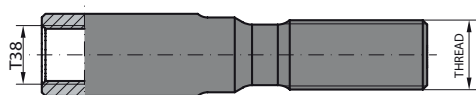


## Full bridge



| Diameter |      | Threads | Lenght |      | Weight | Model No |
|----------|------|---------|--------|------|--------|----------|
| mm       | inch |         | mm     | inch | kg     |          |
| 55       | 2 ¼  | T38/R32 | 185    | 7    | 2,3    | 338273   |
| 55       | 2 ¼  | T38/T38 | 210    | 8 ¼  | 2,6    | 327187   |

## M-F adapters

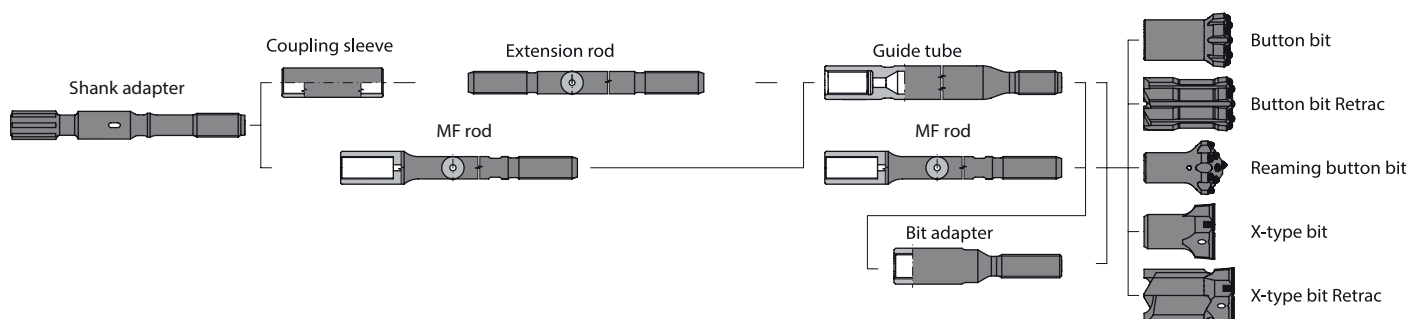


| Threads     | Lenght |      | Weight | Model  |
|-------------|--------|------|--------|--------|
| female/male | mm     | inch | kg     |        |
| T38/R32     | 240    | 9 ½  | 2,4    | 389755 |
| T38/T45     | 275    | 10 ¾ | 3,2    | 399626 |

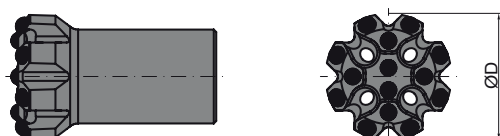
## M-M adapters



| Threads     | Lenght |      | Weight | Model  |
|-------------|--------|------|--------|--------|
| female/male | mm     | inch | kg     |        |
| T38/T38     | 220    | 8 ¾  | 1,6    | 359351 |



Button bit – DROP CENTER



| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,4    | 179442 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,4    | 101686 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,8    | 192460 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 2,8    | 140639 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 3,2    | 115071 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 3,2    | 160936 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 14       | 5 x 13    | 4,5    | 184119 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 14       | 5 x 13    | 4,5    | 142985 |
| 115                              | 4 ½  | -                   | 4 x 9     | 8 x 15       | 6 x 14    | 6,2    | 125686 |
| 115                              | 4 ½  | -                   | 4 x 9     | 8 x 15       | 6 x 14    | 6,2    | 137352 |
| 127                              | 5    | -                   | 4 x 10    | 8 x 15       | 6 x 14    | 7,3    | 178622 |
| 127                              | 5    | -                   | 4 x 10    | 8 x 14       | 6 x 14    | 7,3    | 110041 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – DROP CENTER – RETRAC

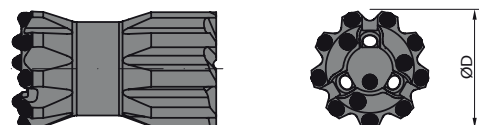


| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,6    | 150800 |
| 70                               | 2 ¾  | -                   | 4 x 8     | 8 x 11       | 5 x 10    | 2,6    | 122674 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,4    | 148366 |
| 76                               | 3    | -                   | 4 x 8     | 8 x 12       | 5 x 11    | 3,4    | 139032 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,2    | 102411 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12    | 5,2    | 129604 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 14       | 5 x 13    | 7,0    | 161506 |
| 102                              | 4    | -                   | 4 x 9     | 8 x 14       | 5 x 13    | 7,0    | 107453 |
| 115                              | 4 ½  | -                   | 4 x 9     | 8 x 15       | 6 x 14    | 9,3    | 150414 |
| 115                              | 4 ½  | -                   | 4 x 9     | 8 x 15       | 6 x 14    | 9,3    | 154979 |
| 127                              | 5    | -                   | 4 x 10    | 8 x 15       | 8 x 14    | 11,5   | 109634 |
| 127                              | 5    | -                   | 4 x 10    | 8 x 15       | 8 x 14    | 11,5   | 136242 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

Button bit – DROP CENTER



Button bit – DROP CENTER – RETRAC



Button bit – FLAT FACE

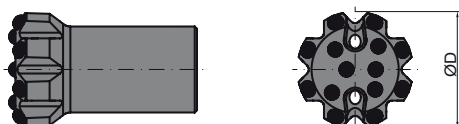


| Diameter                         |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |        | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 70                               | 2 ¾    | -                   | 3 x 9     | 9 x 11       | 4 x 10    | 2,3    | 103642 |
| 70                               | 2 ¾    | -                   | 3 x 9     | 9 x 11       | 4 x 10    | 2,3    | 111535 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 2,7    | 100259 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 2,7    | 180704 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 3,2    | 161748 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 3,2    | 187100 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 4,3    | 166454 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 4,3    | 191798 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 5 x 13    | 6,0    | 165889 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 5 x 13    | 6,0    | 137857 |
| 127                              | 5      | -                   | 3 x 10    | 9 x 16       | 5 x 14    | 7,1    | 103683 |
| 127                              | 5      | -                   | 3 x 10    | 9 x 16       | 5 x 14    | 7,1    | 189410 |
| 70                               | 2 ¾    | -                   | 3 x 9     | 9 x 11       | 4 x 10    | 2,8    | 106451 |
| 70                               | 2 ¾    | -                   | 3 x 9     | 9 x 11       | 4 x 10    | 2,8    | 199520 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 3,4    | 136911 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 4 x 10    | 3,4    | 112404 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 5,3    | 161354 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 4 x 11    | 5,3    | 175240 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 6,9    | 192642 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 5 x 12    | 6,9    | 112644 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 5 x 13    | 8,8    | 187600 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 5 x 13    | 8,8    | 177644 |
| 127                              | 5      | -                   | 3 x 10    | 9 x 16       | 5 x 14    | 10,2   | 182307 |
| 127                              | 5      | -                   | 3 x 10    | 9 x 16       | 5 x 14    | 10,2   | 136292 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 2,8    | 179649 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 2,8    | 159227 |
| 80                               | 3 5/32 | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,0    | 185268 |
| 80                               | 3 5/32 | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,0    | 104622 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 3,3    | 142283 |
| 89                               | 3 ½    | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 3,3    | 133579 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 4,6    | 170933 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 4,6    | 158922 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 10 x 13   | 6,5    | 184668 |
| 115                              | 4 ½    | -                   | 3 x 10    | 9 x 15       | 10 x 13   | 6,5    | 143434 |
| R - Spherical S - Semi Ballistic |        |                     |           |              |           |        |        |

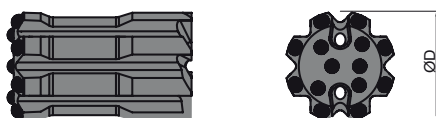
Button bit – FLAT FACE – RETRAC



Button bit – FLAT FACE – Heavy Duty



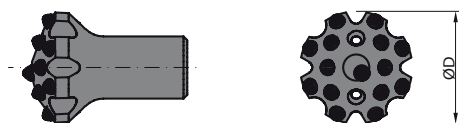
Button bit – FLAT FACE  
– RETRAC – Heavy Duty



Button bit – DROP CENTER – RETRAC



Button bit



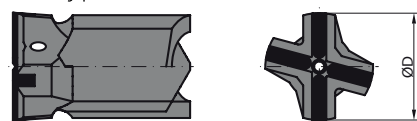
Reaming button bit



Cross X-type bit

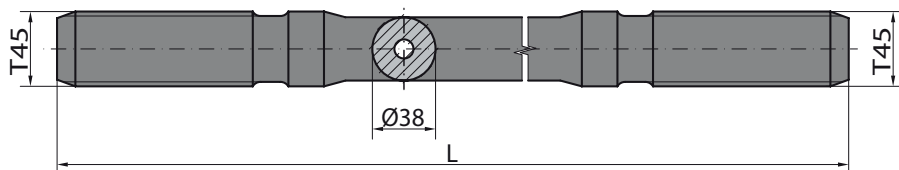


Cross X-type bit – RETRAC



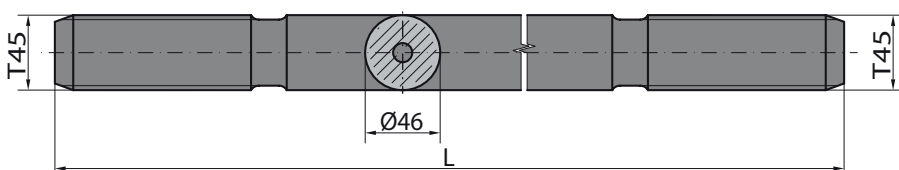
| Diameter                         |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |        | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     | No     |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,5    | 167194 |
| 76                               | 3      | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 3,5    | 172478 |
| 80                               | 3 5/32 | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 4,2    | 123380 |
| 80                               | 3 5/32 | -                   | 3 x 9     | 9 x 12       | 8 x 10    | 4,2    | 177879 |
| 89                               | 3 1/2  | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 5,4    | 171553 |
| 89                               | 3 1/2  | -                   | 3 x 10    | 9 x 13       | 9 x 11    | 5,4    | 152300 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 7,2    | 121843 |
| 102                              | 4      | -                   | 3 x 10    | 9 x 14       | 9 x 12    | 7,2    | 138454 |
| 115                              | 4 1/2  | -                   | 3 x 10    | 9 x 15       | 9 x 13    | 8,4    | 144052 |
| 115                              | 4 1/2  | -                   | 3 x 10    | 9 x 15       | 9 x 13    | 8,4    | 101207 |
| 70                               | 2 3/4  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 2,4    | 143193 |
| 76                               | 3      | -                   | 2 x 10    | 8 x 13       | 4 x 12    | 2,8    | 147722 |
| 80                               | 3 5/32 | -                   | 2 x 11    | 8 x 13       | 5 x 12    | 3,0    | 131262 |
| 89                               | 3 1/2  | -                   | 2 x 11    | 8 x 14       | 5 x 13    | 3,3    | 105065 |
| 102                              | 4      | -                   | 2 x 11    | 8 x 15       | 6 x 14    | 4,6    | 195946 |
| 115                              | 4 1/2  | -                   | 2 x 12    | 8 x 16       | 7 x 15    | 6,5    | 132144 |
| 70                               | 2 3/4  | -                   | 2 x 9     | 8 x 12       | 4 x 11    | 3,2    | 152313 |
| 76                               | 3      | -                   | 2 x 10    | 8 x 13       | 4 x 12    | 3,5    | 154269 |
| 80                               | 3 5/32 | -                   | 2 x 11    | 8 x 13       | 5 x 12    | 4,2    | 129273 |
| 89                               | 3 1/2  | -                   | 2 x 11    | 8 x 14       | 5 x 13    | 5,4    | 196822 |
| 102                              | 4      | -                   | 2 x 11    | 8 x 15       | 6 x 14    | 7,2    | 132176 |
| 115                              | 4 1/2  | -                   | 2 x 12    | 8 x 15       | 7 x 14    | 8,4    | 197530 |
| 70                               | 2 3/4  | 2 x 10              | 1 x 10    | 6 x 14       | 4 x 9     | 3,1    | 198976 |
| 76                               | 3      | 2 x 10              | 1 x 10    | 6 x 14       | 4 x 9     | 3,7    | 166733 |
| 76                               | 3      | -                   | 2 x 10    | 8 x 12       | 6 x 11    | 2,8    | 166928 |
| 89                               | 3 1/2  | -                   | 2 x 10    | 8 x 13       | 6 x 12    | 3,4    | 149634 |
| 102                              | 4      | -                   | 2 x 11    | 8 x 13       | 7 x 12    | 4,7    | 110451 |
| 115                              | 4 1/2  | -                   | 2 x 12    | 8 x 14       | 8 x 13    | 6,6    | 172950 |
| 115                              | 4 1/2  | 1 x 8               | 3 x 8     | 9 x 13       | 8 x 12    | 6,6    | 134279 |
| 127                              | 5      | 1 x 9               | 3 x 9     | 9 x 14       | 9 x 13    | 8,1    | 116242 |
| 152                              | 6      | 1 x 10              | 3 x 10    | 9 x 15       | 11 x 14   | 11,2   | 117186 |
| 76                               | 3      | 2 x 9               | 1 x 10    | -            | -         | 2,7    | 135283 |
| 89                               | 3 1/2  | 2 x 10              | 1 x 10    | -            | -         | 3,3    | 109274 |
| 102                              | 4      | 2 x 10              | 1 x 11    | -            | -         | 4,7    | 112957 |
| 76                               | 3      | 2 x 9               | 1 x 10    | -            | -         | 3,5    | 152710 |
| 89                               | 3 1/2  | 2 x 10              | 1 x 10    | -            | -         | 4,7    | 193905 |
| 102                              | 4      | 2 x 10              | 1 x 11    | -            | -         | 6,8    | 171348 |
| R - Spherical S - Semi Ballistic |        |                     |           |              |           |        |        |

## Extension rods diameter 38mm



| Hex                          |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                           | inch |         | mm                | ft | inch | kg     | No     |
| 38                           | 1 ½  | T45/T45 | 915               | 3  | -    | 8,1    | 209726 |
| 38                           | 1 ½  | T45/T45 | 1220              | 4  | -    | 10,7   | 288082 |
| 38                           | 1 ½  | T45/T45 | 1525              | 5  | -    | 13,4   | 264057 |
| 38                           | 1 ½  | T45/T45 | 1830              | 6  | -    | 16,1   | 256279 |
| 38                           | 1 ½  | T45/T45 | 2165              | 7  | -    | 19,0   | 206844 |
| 38                           | 1 ½  | T45/T45 | 2435              | 8  | -    | 21,3   | 283300 |
| 38                           | 1 ½  | T45/T45 | 3050              | 10 | -    | 26,7   | 227988 |
| 38                           | 1 ½  | T45/T45 | 3660              | 12 | -    | 32,0   | 224087 |
| 38                           | 1 ½  | T45/T45 | 4265              | 14 | -    | 37,3   | 269189 |
| 38                           | 1 ½  | T45/T45 | 4915              | 16 | -    | 43,0   | 299774 |
| 38                           | 1 ½  | T45/T45 | 5490              | 18 | -    | 48,0   | 236874 |
| 38                           | 1 ½  | T45/T45 | 6100              | 20 | -    | 53,3   | 229170 |
| Flushing hole $\phi$ 14.5 mm |      |         |                   |    |      |        |        |

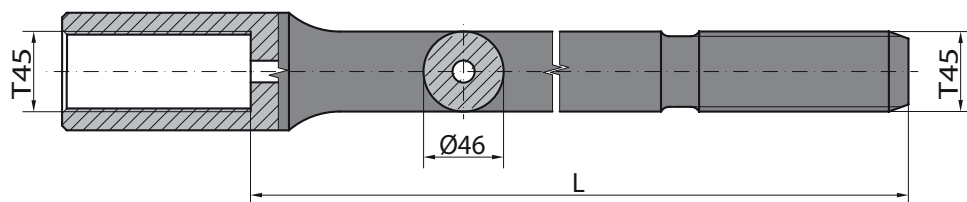
## Extension rods diameter 46mm



| Hex                        |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|----------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                         | inch |         | mm                | ft | inch | kg     | No     |
| 46                         | 1 ¾  | T45/T45 | 915               | 3  | -    | 9,6    | 215082 |
| 46                         | 1 ¾  | T45/T45 | 1220              | 4  | -    | 13,0   | 286167 |
| 46                         | 1 ¾  | T45/T45 | 1525              | 5  | -    | 16,4   | 298337 |
| 46                         | 1 ¾  | T45/T45 | 1830              | 6  | -    | 19,8   | 292416 |
| 46                         | 1 ¾  | T45/T45 | 2165              | 7  | -    | 23,5   | 284389 |
| 46                         | 1 ¾  | T45/T45 | 2435              | 8  | -    | 26,5   | 268045 |
| 46                         | 1 ¾  | T45/T45 | 3050              | 10 | -    | 33,4   | 222069 |
| 46                         | 1 ¾  | T45/T45 | 3660              | 12 | -    | 40,2   | 222787 |
| 46                         | 1 ¾  | T45/T45 | 4265              | 14 | -    | 46,9   | 299587 |
| 46                         | 1 ¾  | T45/T45 | 4915              | 16 | -    | 54,2   | 208626 |
| 46                         | 1 ¾  | T45/T45 | 6100              | 20 | -    | 67,4   | 215469 |
| 46                         | 1 ¾  | T45/T45 | 7200              | 24 | -    | 79,7   | 261742 |
| Flushing hole $\phi$ 17 mm |      |         |                   |    |      |        |        |

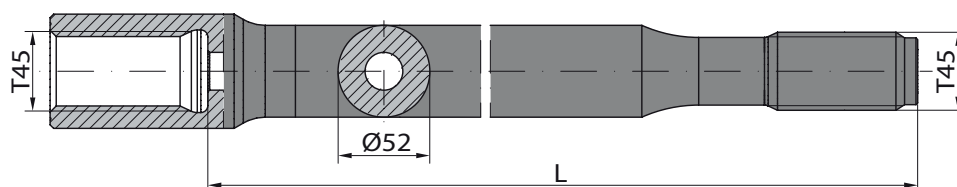


## Speed rods / M-F rods



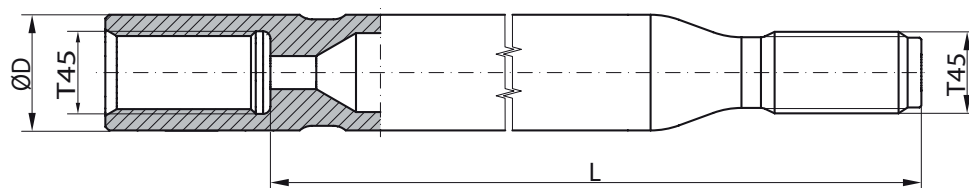
| Hex                                                 |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----------------------------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                                                  | inch |         | mm                | ft | inch | kg     | No     |
| 46                                                  | 1 ¾  | T45/T45 | 1525              | 5  | -    | 18,3   | 234123 |
| 46                                                  | 1 ¾  | T45/T45 | 1830              | 6  | -    | 21,7   | 211004 |
| 46                                                  | 1 ¾  | T45/T45 | 2165              | 7  | -    | 25,4   | 280760 |
| 46                                                  | 1 ¾  | T45/T45 | 2435              | 8  | -    | 28,5   | 245801 |
| 46                                                  | 1 ¾  | T45/T45 | 3050              | 10 | -    | 35,3   | 268373 |
| 46                                                  | 1 ¾  | T45/T45 | 3660              | 12 | -    | 42,1   | 298744 |
| 46                                                  | 1 ¾  | T45/T45 | 4265              | 14 | -    | 48,8   | 243758 |
| 46                                                  | 1 ¾  | T45/T45 | 4915              | 16 | -    | 56,1   | 230323 |
| 46                                                  | 1 ¾  | T45/T45 | 6100              | 20 | -    | 69,3   | 280720 |
| 46                                                  | 1 ¾  | T45/T45 | 7200              | 24 | -    | 81,6   | 241374 |
| Flushing hole $\phi$ 17 mm, Female end $\phi$ 67 mm |      |         |                   |    |      |        |        |

## Guide rods / M-F rods



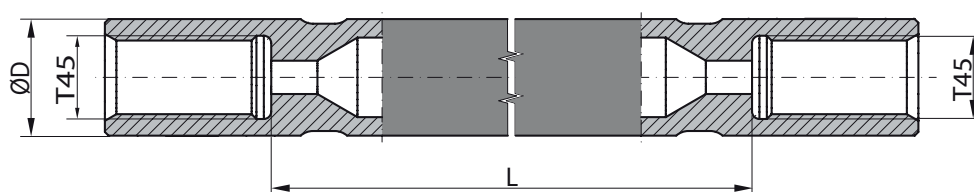
| Hex                                                   |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-------------------------------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                                                    | inch |         | mm                | ft | inch | kg     | No     |
| 52                                                    | 2    | T45/T45 | 3050              | 10 | -    | 43,3   | 220349 |
| 52                                                    | 2    | T45/T45 | 3660              | 12 | -    | 51,7   | 238076 |
| 52                                                    | 2    | T45/T45 | 4365              | 14 | -    | 60,1   | 243670 |
| Flushing hole $\phi$ 21,5 mm, Female end $\phi$ 67 mm |      |         |                   |    |      |        |        |

## Guide tube rods



| Hex                                                   |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-------------------------------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                                                    | inch |         | mm                | ft | inch | kg     | No     |
| 63                                                    | 2 ½  | T45/T45 | 1830              | 6  | -    | 25,9   | 284458 |
| 63                                                    | 2 ½  | T45/T45 | 3660              | 12 | -    | 49,7   | 229388 |
| 64                                                    | 2 ½  | T45/T45 | 4265              | 14 | -    | 57,6   | 297399 |
| 76                                                    | 3    | T45/T45 | 3660              | 12 | -    | 72,2   | 209141 |
| 76                                                    | 3    | T45/T45 | 4265              | 14 | -    | 83,6   | 288507 |
| Flushing hole $\phi$ 14,5 mm, Female end $\phi$ 56 mm |      |         |                   |    |      |        |        |

## Guide tube rods

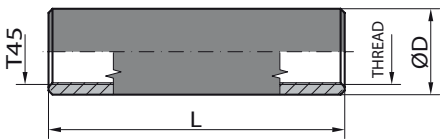


| Hex                                                 |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----------------------------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                                                  | inch |         | mm                | ft | inch | kg     | No     |
| 63                                                  | 2 ½  | T45/T45 | 1830              | 6  | -    | 26,9   | 200233 |
| 63                                                  | 2 ½  | T45/T45 | 3660              | 12 | -    | 50,7   | 239796 |
| 63                                                  | 2 ½  | T45/T45 | 4265              | 14 | -    | 58,6   | 295921 |
| 76                                                  | 3    | T45/T45 | 3660              | 12 | -    | 74,9   | 208571 |
| 76                                                  | 3    | T45/T45 | 4265              | 14 | -    | 86,3   | 298905 |
| Flushing hole $\phi$ 17 mm, Female end $\phi$ 56 mm |      |         |                   |    |      |        |        |

# T45 Couplings, Bit adapters

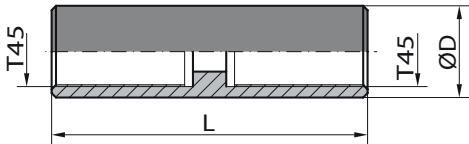


## Coupling sleeve



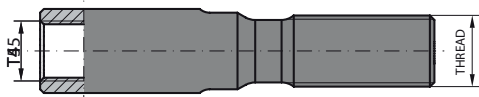
| Diameter |      | Threads | Lenght |        | Weight | Model  |
|----------|------|---------|--------|--------|--------|--------|
| mm       | inch |         | mm     | inch   | kg     | No     |
| 64       | 2 ½  | T45/T38 | 180    | 7 3/32 | 2,9    | 371393 |
| 64       | 2 ½  | T45/T38 | 180    | 7 3/32 | 2,5    | 365379 |

## Full bridge



| Diameter |      | Threads | Lenght |      | Weight | Model  |
|----------|------|---------|--------|------|--------|--------|
| mm       | inch |         | mm     | inch | kg     | No     |
| 64       | 2 ½  | T45/T45 | 210    | 8 ¼  | 3,0    | 390662 |

## M-F adapters



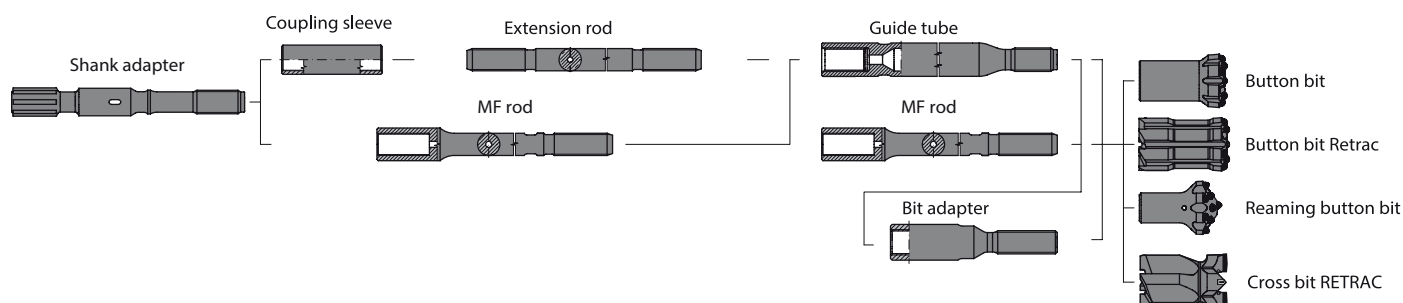
| Threads     | Lenght |        | Weight | Model  |
|-------------|--------|--------|--------|--------|
| female/male | mm     | inch   | kg     | No     |
| T45/T38     | 235    | 10 ¾   | 3,2    | 343107 |
| T45/T51     | 275    | 10 7/8 | 3,8    | 393917 |

## M-M adapters

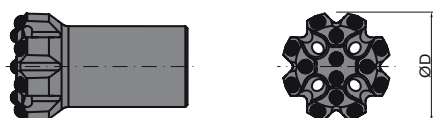


| Threads     | Lenght |      | Weight | Model |
|-------------|--------|------|--------|-------|
| female/male | mm     | inch | kg     | No    |
| T45/T45     | 220    | 8 ¾  | 2,4    |       |

# T51 Bits



Button bit – DROP CENTER



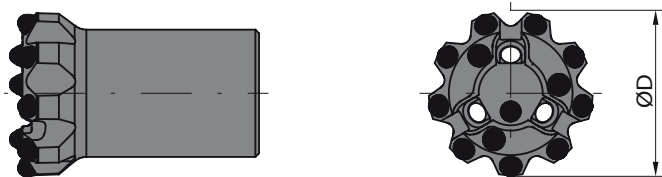
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |            | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|------------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front      |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size  | kg     |        |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12     | 3,5    | 176532 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12     | 3,5    | 105559 |
| 102                              | 4    | -                   | 4 x 10    | 8 x 14       | 6 x 13     | 5,0    | 108579 |
| 102                              | 4    | -                   | 4 x 10    | 8 x 14       | 6 x 13     | 5,0    | 188053 |
| 115                              | 4 ½  | -                   | 4 x 11    | 8 x 15       | 6 x 14     | 7,3    | 118443 |
| 115                              | 4 ½  | -                   | 4 x 11    | 8 x 15       | 6 x 14     | 7,3    | 180393 |
| 127                              | 5    | -                   | 4 x 11    | 8 x 16       | 8 x 15     | 7,8    | 181088 |
| 127                              | 5    | -                   | 4 x 11    | 8 x 16       | 8 x 15     | 7,8    | 148516 |
| 152                              | 6    | -                   | 4 x 12    | 8 x 17       | 4x15, 4x16 | 12,2   | 177757 |
| 152                              | 6    | -                   | 4 x 12    | 8 x 17       | 4x15, 4x16 | 12,2   | 186021 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |            |        |        |

Button bit – DROP CENTER – RETRAC



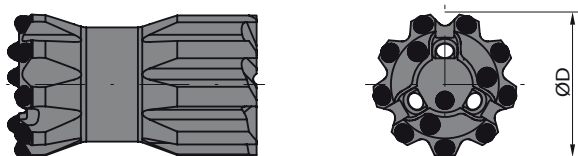
| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |            | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|------------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front      |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size  | kg     |        |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12     | 5,2    | 135879 |
| 89                               | 3 ½  | -                   | 4 x 9     | 8 x 13       | 5 x 12     | 5,2    | 123669 |
| 102                              | 4    | -                   | 4 x 10    | 8 x 14       | 6 x 13     | 7,0    | 113539 |
| 102                              | 4    | -                   | 4 x 10    | 8 x 14       | 6 x 13     | 7,0    | 161629 |
| 115                              | 4 ½  | -                   | 4 x 11    | 8 x 15       | 6 x 14     | 9,4    | 199189 |
| 115                              | 4 ½  | -                   | 4 x 11    | 8 x 15       | 6 x 14     | 9,4    | 113119 |
| 127                              | 5    | -                   | 4 x 11    | 8 x 16       | 8 x 15     | 11,8   | 180808 |
| 127                              | 5    | -                   | 4 x 11    | 8 x 16       | 8 x 15     | 11,8   | 143554 |
| 152                              | 6    | -                   | 4 x 12    | 8 x 17       | 4x15, 4x16 | 19,0   | 179573 |
| 152                              | 6    | -                   | 4 x 12    | 8 x 17       | 4x15, 4x16 | 19,0   | 141074 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |            |        |        |

## Button bit – DROP CENTER



| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 89                               | 3 ½  | -                   | 3 x 11    | 9 x 13       | 4 x 11    | 3,5    | 102718 |
| 89                               | 3 ½  | -                   | 3 x 11    | 9 x 13       | 4 x 11    | 3,5    | 139071 |
| 102                              | 4    | -                   | 3 x 12    | 9 x 14       | 5 x 12    | 4,5    | 142333 |
| 102                              | 4    | -                   | 3 x 12    | 9 x 14       | 5 x 12    | 4,5    | 164131 |
| 115                              | 4 ½  | -                   | 3 x 12    | 9 x 15       | 5 x 13    | 6,5    | 106803 |
| 115                              | 4 ½  | -                   | 3 x 12    | 9 x 15       | 5 x 13    | 6,5    | 173601 |
| 127                              | 5    | -                   | 3 x 13    | 9 x 16       | 5 x 14    | 8,1    | 187469 |
| 127                              | 5    | -                   | 3 x 13    | 9 x 16       | 5 x 14    | 8,1    | 104568 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

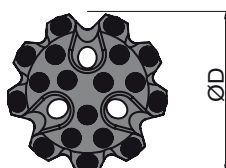
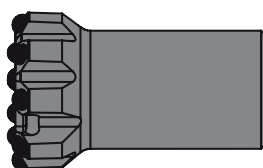
## Button bit – DROP CENTER – RETRAC



| Diameter                         |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |      | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 89                               | 3 ½  | -                   | 3 x 11    | 9 x 13       | 4 x 11    | 6,6    | 181552 |
| 89                               | 3 ½  | -                   | 3 x 11    | 9 x 13       | 4 x 11    | 6,6    | 140019 |
| 102                              | 4    | -                   | 3 x 12    | 9 x 14       | 5 x 12    | 9,1    | 111462 |
| 102                              | 4    | -                   | 3 x 12    | 9 x 14       | 5 x 12    | 9,1    | 157892 |
| 115                              | 4 ½  | -                   | 3 x 12    | 9 x 15       | 5 x 13    | 10,2   | 145201 |
| 115                              | 4 ½  | -                   | 3 x 12    | 9 x 15       | 5 x 13    | 10,2   | 108845 |
| 127                              | 5    | -                   | 3 x 13    | 9 x 16       | 5 x 14    | 13,8   | 195972 |
| 127                              | 5    | -                   | 3 x 13    | 9 x 16       | 5 x 14    | 13,8   | 160109 |
| R - Spherical S - Semi Ballistic |      |                     |           |              |           |        |        |

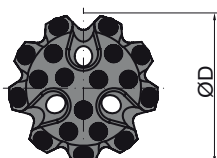
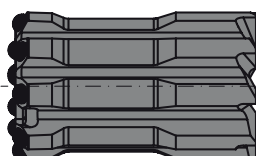


## Button bit – FLAT FACE



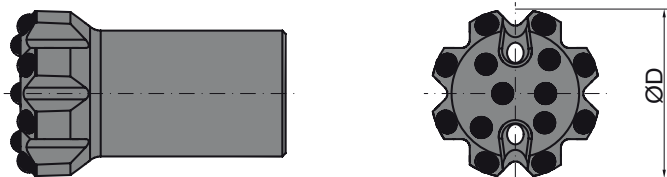
| Diameter                         |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |        | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 80                               | 3 5/32 | -                   | 3 x 10    | 9 x 12       | 8 x 10    | 3,1    | 124233 |
| 80                               | 3 5/32 | -                   | 3 x 10    | 9 x 12       | 8 x 10    | 3,1    | 120748 |
| 89                               | 3 1/2  | -                   | 3 x 11    | 9 x 13       | 8 x 11    | 3,6    | 149965 |
| 89                               | 3 1/2  | -                   | 3 x 11    | 9 x 13       | 8 x 11    | 3,6    | 163511 |
| 102                              | 4      | -                   | 3 x 12    | 9 x 14       | 9 x 12    | 4,6    | 184364 |
| 102                              | 4      | -                   | 3 x 12    | 9 x 14       | 9 x 12    | 4,6    | 147880 |
| 115                              | 4 1/2  | -                   | 3 x 12    | 9 x 15       | 10 x 13   | 6,7    | 155496 |
| 115                              | 4 1/2  | -                   | 3 x 12    | 9 x 15       | 10 x 13   | 6,7    | 178373 |
| 127                              | 5      | -                   | 3 x 13    | 9 x 16       | 10 x 14   | 8,4    | 107491 |
| 127                              | 5      | -                   | 3 x 13    | 9 x 16       | 10 x 14   | 8,4    | 125774 |
| 152                              | 6      | -                   | 3 x 14    | 9 x 16       | 10 x 14   | 12,1   | 116986 |
| 152                              | 6      | -                   | 3 x 14    | 9 x 16       | 10 x 14   | 12,1   | 161900 |
| R - Spherical S - Semi Ballistic |        |                     |           |              |           |        |        |

## Button bit – FLAT FACE – RETRAC



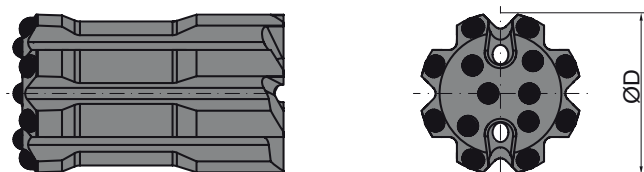
| Diameter                         |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|----------------------------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|                                  |        | Side                | Front     | Gauge        | Front     |        |        |
| mm                               | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 80                               | 3 5/32 | -                   | 3 x 10    | 9 x 12       | 8 x 10    | 4,0    | 170021 |
| 80                               | 3 5/32 | -                   | 3 x 10    | 9 x 12       | 8 x 10    | 4,0    | 185136 |
| 89                               | 3 1/2  | -                   | 3 x 11    | 9 x 13       | 8 x 11    | 4,9    | 189470 |
| 89                               | 3 1/2  | -                   | 3 x 11    | 9 x 13       | 8 x 11    | 4,9    | 110222 |
| 102                              | 4      | -                   | 3 x 12    | 9 x 14       | 9 x 12    | 6,8    | 178488 |
| 102                              | 4      | -                   | 3 x 12    | 9 x 14       | 9 x 12    | 6,8    | 128016 |
| 115                              | 4 1/2  | -                   | 3 x 12    | 9 x 15       | 10 x 13   | 8,8    | 105837 |
| 115                              | 4 1/2  | -                   | 3 x 12    | 9 x 15       | 10 x 13   | 8,8    | 192388 |
| 127                              | 5      | -                   | 3 x 13    | 9 x 16       | 10 x 14   | 12,0   | 198696 |
| 127                              | 5      | -                   | 3 x 13    | 9 x 16       | 10 x 14   | 12,0   | 172470 |
| 152                              | 6      | -                   | 3 x 14    | 9 x 16       | 10 x 14   | 19,2   | 123097 |
| 152                              | 6      | -                   | 3 x 14    | 9 x 16       | 10 x 14   | 19,2   | 129019 |
| R - Spherical S - Semi Ballistic |        |                     |           |              |           |        |        |

## Button bit – FLAT FACE – Heavy Duty



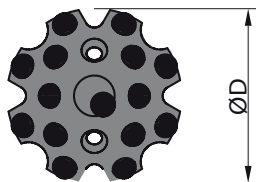
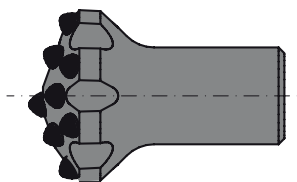
| Diameter      |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|               |        | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 80            | 3 5/32 | -                   | 2 x 12    | 8 x 13       | 5 x 12    | 3,1    | 128323 |
| 89            | 3 1/2  | -                   | 2 x 13    | 8 x 14       | 5 x 13    | 3,6    | 131073 |
| 102           | 4      | -                   | 2 x 13    | 8 x 15       | 6 x 14    | 4,6    | 120582 |
| 115           | 4 1/2  | -                   | 2 x 14    | 8 x 16       | 7 x 15    | 6,7    | 140231 |
| 127           | 5      | -                   | 2 x 14    | 8 x 17       | 8 x 16    | 8,4    | 195146 |
| R - Spherical |        |                     |           |              |           |        |        |

## Button bit – FLAT FACE – RETRAC – Heavy Duty



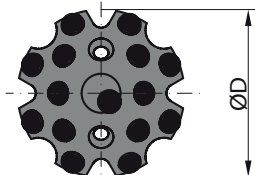
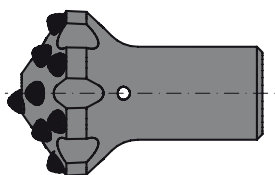
| Diameter      |        | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|--------|---------------------|-----------|--------------|-----------|--------|--------|
|               |        | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch   | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 80            | 3 5/32 | -                   | 2 x 12    | 8 x 13       | 5 x 12    | 4,0    | 186051 |
| 89            | 3 1/2  | -                   | 2 x 13    | 8 x 14       | 5 x 13    | 4,9    | 137437 |
| 102           | 4      | -                   | 2 x 13    | 8 x 15       | 6 x 14    | 6,8    | 158952 |
| 115           | 4 1/2  | -                   | 2 x 14    | 8 x 16       | 7 x 15    | 8,8    | 193820 |
| 127           | 5      | -                   | 2 x 14    | 8 x 17       | 8 x 16    | 12,0   | 123674 |
| R - Spherical |        |                     |           |              |           |        |        |

## Button bit



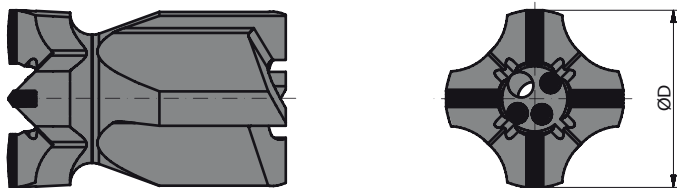
| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 89            | 3 ½  | -                   | 2 x 13    | 8 x 13       | 6 x 12    | 3,6    | 198390 |
| 102           | 4    | -                   | 2 x 13    | 8 x 13       | 7 x 13    | 4,6    | 194012 |
| 115           | 4 ½  | -                   | 2 x 14    | 8 x 14       | 8 x 13    | 6,7    | 149884 |
| 127           | 5    | -                   | 2 x 14    | 8 x 15       | 8 x 14    | 8,4    | 129141 |
| R - Spherical |      |                     |           |              |           |        |        |

## Reaming button bit



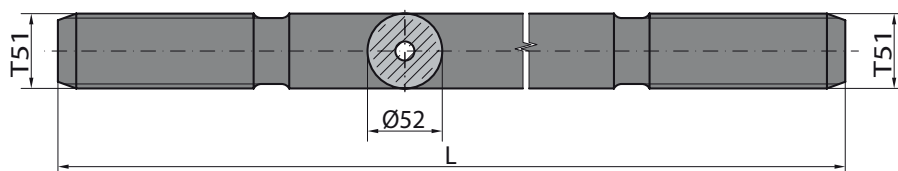
| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 115           | 4 ½  | 1 x 9               | 3 x 9     | 9 x 13       | 8 x 12    | 6,7    | 133236 |
| 127           | 5    | 1 x 10              | 3 x 10    | 9 x 14       | 9 x 13    | 8,4    | 128350 |
| 152           | 6    | 1 x 11              | 3 x 11    | 9 x 15       | 11 x 14   | 12,1   | 118693 |
| R - Spherical |      |                     |           |              |           |        |        |

## Cross bit – RETRAC



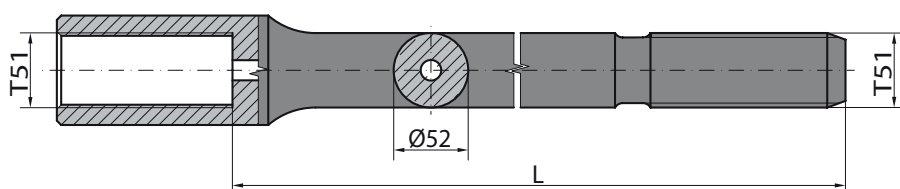
| Diameter      |      | Flushing Holes (mm) |           | Buttons (mm) |           | Weight | Model  |
|---------------|------|---------------------|-----------|--------------|-----------|--------|--------|
|               |      | Side                | Front     | Gauge        | Front     |        |        |
| mm            | inch | No x Size           | No x Size | No x Size    | No x Size | kg     |        |
| 102           | 4    | -                   | 1 x 16    | -            | 3 x 13    | 5,8    | 185594 |
| 115           | 4 ½  | -                   | 1 x 16    | -            | 3 x 13    | 7,3    | 178210 |
| 127           | 5    | -                   | 1 x 16    | -            | 3 x 14    | 9,8    | 107073 |
| 140           | 5 ½  | -                   | 1 x 16    | -            | 3 x 14    | 12,7   | 142580 |
| 152           | 6    | -                   | 1 x 16    | -            | 3 x 14    | 15,3   | 111873 |
| R - Spherical |      |                     |           |              |           |        |        |

## Extension rods



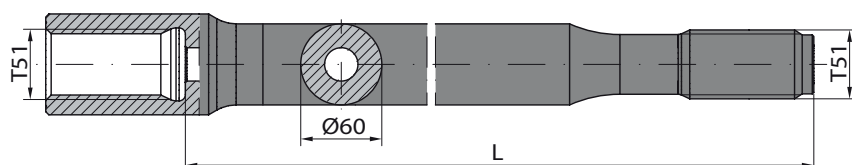
| Hex                          |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|------------------------------|------|---------|-------------------|----|------|--------|--------|
|                              |      |         | mm                | ft | inch |        |        |
| mm                           | inch |         |                   |    |      | kg     |        |
| 52                           | 2    | T51/T51 | 915               | 3  | -    | 11,8   | 259800 |
| 52                           | 2    | T51/T51 | 1220              | 4  | -    | 16,1   | 210529 |
| 52                           | 2    | T51/T51 | 1525              | 5  | -    | 20,3   | 224810 |
| 52                           | 2    | T51/T51 | 1830              | 6  | -    | 24,5   | 288837 |
| 52                           | 2    | T51/T51 | 2165              | 7  | -    | 29,2   | 247725 |
| 52                           | 2    | T51/T51 | 2435              | 8  | -    | 32,9   | 293470 |
| 52                           | 2    | T51/T51 | 3050              | 10 | -    | 41,4   | 286400 |
| 52                           | 2    | T51/T51 | 3660              | 12 | -    | 49,9   | 294373 |
| 52                           | 2    | T51/T51 | 4265              | 14 | -    | 58,2   | 293324 |
| 52                           | 2    | T51/T51 | 4915              | 16 | -    | 67,2   | 252388 |
| 52                           | 2    | T51/T51 | 6100              | 20 | -    | 83,7   | 273931 |
| 52                           | 2    | T51/T51 | 7200              | 24 | -    | 98,9   | 281220 |
| Flushing hole $\phi$ 21.5 mm |      |         |                   |    |      |        |        |

## Speed rods / M-F rods



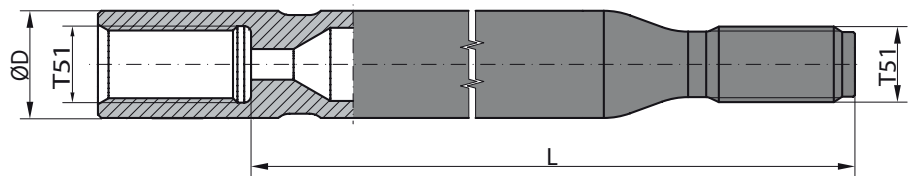
| Hex                                                   |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-------------------------------------------------------|------|---------|-------------------|----|------|--------|--------|
| mm                                                    | inch |         | mm                | ft | inch | kg     |        |
| 52                                                    | 2    | T51/T51 | 1525              | 5  | -    | 23,5   | 221655 |
| 52                                                    | 2    | T51/T51 | 1830              | 6  | -    | 27,5   | 239257 |
| 52                                                    | 2    | T51/T51 | 2165              | 7  | -    | 32,4   | 230886 |
| 52                                                    | 2    | T51/T51 | 2435              | 8  | -    | 36,1   | 292156 |
| 52                                                    | 2    | T51/T51 | 3050              | 10 | -    | 44,6   | 274865 |
| 52                                                    | 2    | T51/T51 | 3660              | 12 | -    | 53,1   | 255602 |
| 52                                                    | 2    | T51/T51 | 4265              | 14 | -    | 61,5   | 299621 |
| 52                                                    | 2    | T51/T51 | 4915              | 16 | -    | 70,5   | 252394 |
| 52                                                    | 2    | T51/T51 | 6100              | 20 | -    | 86,9   | 256732 |
| 52                                                    | 2    | T51/T51 | 7200              | 24 | -    | 102,1  | 207625 |
| Flushing hole $\phi$ 21,5 mm, Female end $\phi$ 74 mm |      |         |                   |    |      |        |        |

## Guide rods / M-F rods



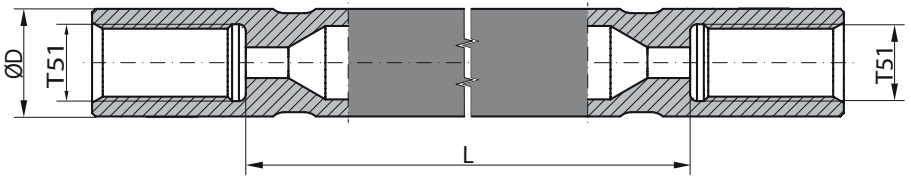
| Hex                                                   |       | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-------------------------------------------------------|-------|---------|-------------------|----|------|--------|--------|
| mm                                                    | inch  |         | mm                | ft | inch | kg     |        |
| 60                                                    | 2 3/8 | T51/T51 | 3660              | 12 | -    | 70,7   | 238943 |
| 60                                                    | 2 3/8 | T51/T51 | 4265              | 14 | -    | 82,3   | 289005 |
| Flushing hole $\phi$ 22,6 mm, Female end $\phi$ 74 mm |       |         |                   |    |      |        |        |

## Guide tube rods



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     |        |
| 76  | 3    | T51/T51 | 1830              | 6  | -    | 37,2   | 250676 |
| 76  | 3    | T51/T51 | 3660              | 12 | -    | 71,8   | 228052 |
| 76  | 3    | T51/T51 | 4265              | 14 | -    | 83,2   | 225579 |
| 87  | 3 ½  | T51/T51 | 3660              | 12 | -    | 95,7   | 230775 |
| 87  | 3 ½  | T51/T51 | 4265              | 14 | -    | 110,9  | 230629 |

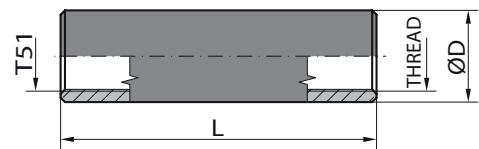
## Guide tube rods



| Hex |      | Threads | Dimensions Lenght |    |      | Weight | Model  |
|-----|------|---------|-------------------|----|------|--------|--------|
| mm  | inch |         | mm                | ft | inch | kg     |        |
| 76  | 3    | T51/T51 | 1830              | 6  | -    | 39,4   | 258530 |
| 76  | 3    | T51/T51 | 3660              | 12 | -    | 74,0   | 269055 |
| 76  | 3    | T51/T51 | 4265              | 14 | -    | 85,4   | 201322 |
| 87  | 3 ½  | T51/T51 | 3660              | 12 | -    | 100,7  | 242629 |
| 87  | 3 ½  | T51/T51 | 4265              | 14 | -    | 115,9  | 259174 |

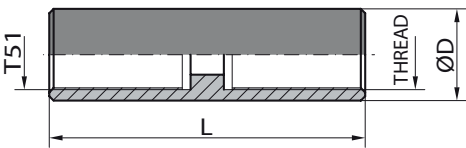


Coupling sleeve



| Diameter |      | Threads | Lenght |         | Weight | Model  |
|----------|------|---------|--------|---------|--------|--------|
| mm       | inch |         | mm     | inch    | kg     |        |
| 72       | 2 ¾  | T51/T51 | 210    | 8 9/32  | 4,0    | 305742 |
| 74       | 3    | T51/T51 | 195    | 7 11/16 | 4,2    | 323607 |
| 74       | 3    | T51/T51 | 210    | 8 9/32  | 4,7    | 382686 |

Full bridge



| Diameter |      | Threads | Lenght |       | Weight | Model  |
|----------|------|---------|--------|-------|--------|--------|
| mm       | inch |         | mm     | inch  | kg     |        |
| 76       | 3    | T51/T45 | 225    | 8 7/8 | 5,6    | 338175 |
| 76       | 3    | T51/T51 | 240    | 9 ½   | 5,7    | 397073 |









# ÜSTÜN KALİTELİ ŞANKLAR

FMS Grup geniş ürün yelpazesinde ihtiyacınız olabilecek tüm şankları sürekli olarak stoklarında barındırır. Şanklardaki yüksek kalite çelik tabancanın üretmiş olduğu darbe ve rotasyonu verim kaybı yaşamadan takım dizgisine iletmeyi uzun ömür garantisiyle sunar....









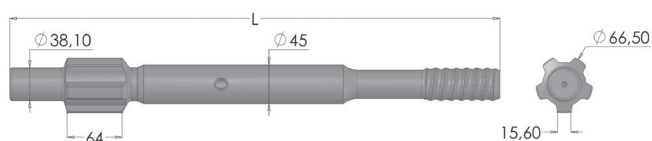




| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|

## BOART HD 125, HE 125, HD 150, HE 150

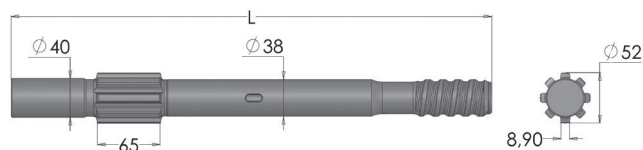
1.01



|     |     |        |
|-----|-----|--------|
| R32 | 495 | 411818 |
| R38 | 495 | 411796 |
| T38 | 495 | 411803 |

## BÖHLER HS 448

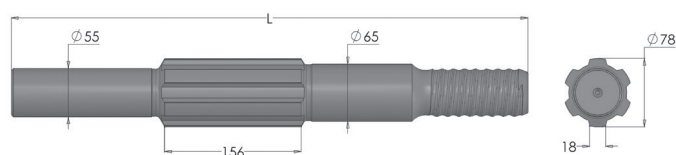
2.01



|     |     |        |
|-----|-----|--------|
| R32 | 500 | 417871 |
| R38 | 500 | 417872 |
| T38 | 500 | 417873 |

## CASAGRANDE C6

3.01



|         |     |        |
|---------|-----|--------|
| *A55 RE | 590 | 417994 |
| *R55 LI | 590 | 417993 |
| *A64 RE | 590 | 417823 |
| *R64 LI | 590 | 417822 |
| *C64 LI | 590 | 417991 |
| *C64 RE | 590 | 417992 |

A 55 / R 55 = H 55

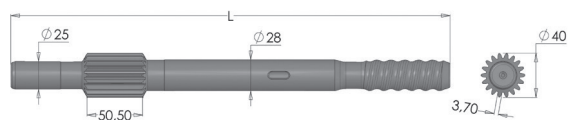
A 64 / R 64 = H 64

RE = Right hand thread / Rechtsgewinde

LI = left hand thread / Linksgewinde

## DOOFOR DF 415, DF 425, DF 430S

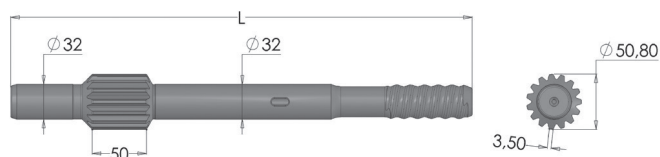
4.01



|     |     |        |
|-----|-----|--------|
| R25 | 400 | 411978 |
| R28 | 400 | 411966 |

## DOOFOR DF 528, DF 530L, DF 530S, DF 538L, DF 538S

4.02



|     |     |        |
|-----|-----|--------|
| R32 | 425 | 411922 |
|-----|-----|--------|

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|

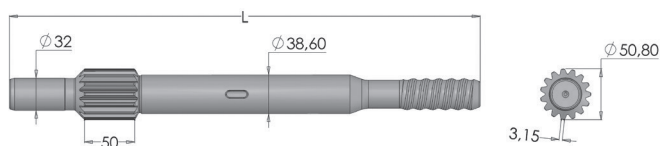
**DOOFOR** DF 528, DF 530L, DF 530S, DF 538L, DF 538S

**4.03**

R32

470

428145



**DOOFOR** DF 540L *FEMALE*

**4.04**

R32

430

428190

R38

430

428191

T38

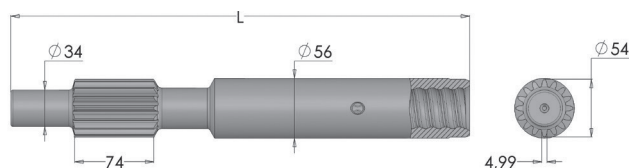
430

428202

TI40

430

428200



**DOOFOR** DF 540L

**4.05**

R32

580

428222

R38

580

428198

T38

580

428193

TI40

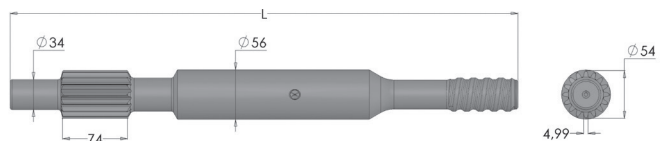
580

428199

R51

580

428194



**DOOFOR** DF 540L, 550, 560L BLT

**4.06**

R32

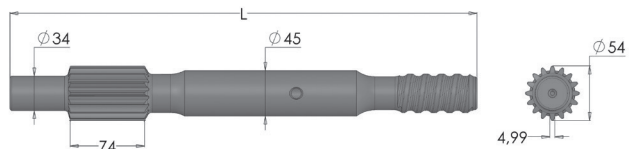
465

428153

T38

465

428147



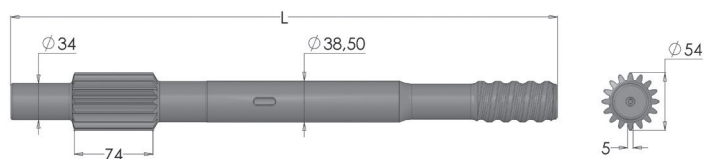
**DOOFOR** DF 545, DF 550

**4.07**

T38

515

421914



**DOOFOR** DF 545HD, DF 560L

**4.08**

R32

515

428167

T38

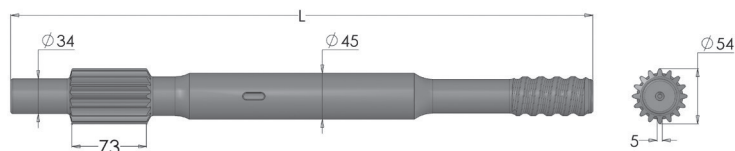
570

428134

T45

570

421937



**DOOFOR** DF 800HD

**4.09**

T45

560

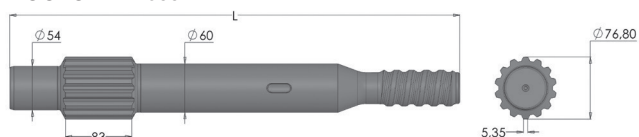
428176

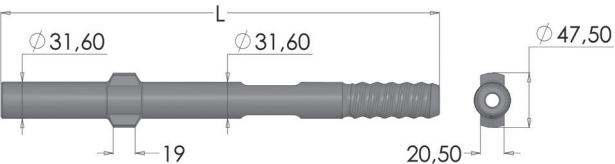
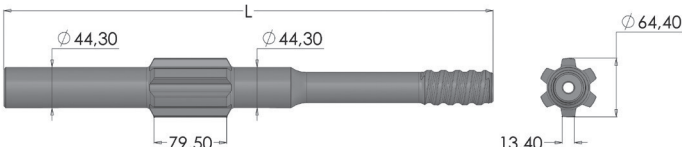
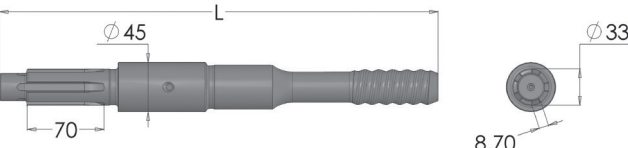
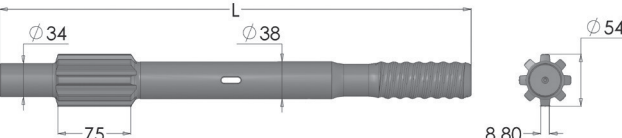
T51

560

42

8177

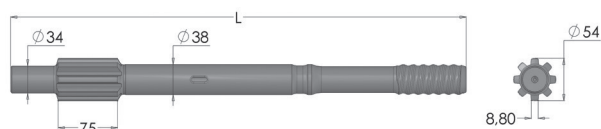


| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                 | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>EPIROC</b> BBC 42, 43, 44, 45, 100                                               | 5.01                                                | 10                                                     | R25                                 | 380                                          | 433394                                           |
| <b>GARDNER DENVER</b> 93 / <b>INGERSOLL-RAND</b> 350                                |                                                     | 10                                                     | R32                                 | 380                                          | 433397                                           |
| <b>ISO</b> 1719 / <b>JOY</b> 400 RR / <b>MONTABERT</b> TA 35, LC 50 (R)             |                                                     |                                                        |                                     |                                              |                                                  |
|    |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                                             |                                                     | 10                                                     |                                     |                                              | 434107                                           |
| <b>EPIROC</b> BBC 51, 52, 54, 120                                                   | 5.02                                                | 10                                                     | R32                                 | 380                                          | 431090                                           |
| <b>MONTABERT</b> H 40, 50, 60, 70 (Leyner)                                          |                                                     | 10                                                     | R38                                 | 390                                          | 437800                                           |
|                                                                                     |                                                     | 10                                                     | T38                                 | 390                                          | 431789                                           |
|   |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                                             |                                                     | 10                                                     |                                     |                                              | 434107                                           |
| <b>EPIROC</b> BBE 56U2, 57, 5701                                                    | 5.03                                                | 14                                                     | T38                                 | 537                                          | 431484                                           |
| <b>FURUKAWA</b> HD 260 / <b>INGERSOLL-RAND</b> YH 60                                |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT</b> H 100 / <b>TOKYO RIUKI</b> HD 260                                  |                                                     | 14                                                     | T45                                 | 550                                          | 431335                                           |
|  |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                                             |                                                     | 14                                                     |                                     |                                              | 433354                                           |
| <b>EPIROC</b> COP 1028                                                              | 5.04                                                |                                                        | R28                                 | 400                                          | 431801                                           |
|                                                                                     |                                                     |                                                        | R32                                 | 400                                          | 431823                                           |
|                                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
|  |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 1036, 1038, 1238                                                  | 5.05                                                |                                                        | R32                                 | 485                                          | 437971                                           |
| <b>SECOMA</b> HYDRASTAR 200, 300, 350, X2                                           |                                                     |                                                        | R38                                 | 485                                          | 437815                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 485                                          | 431085                                           |
|                                                                                     |                                                     |                                                        | R32                                 | 500                                          | 431764                                           |
|                                                                                     |                                                     |                                                        | R38                                 | 500                                          | 431779                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 500                                          | 437827                                           |
|  |                                                     |                                                        |                                     |                                              |                                                  |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|

**EPIROC COP 1036, 1038, 1238**

**5.06**



R32

575

431781

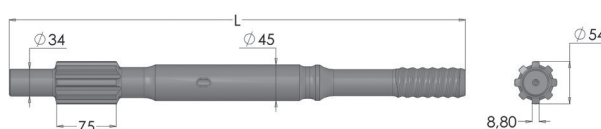
T38

575

431782

**EPIROC COP 1036, 1038, 1238**

**5.07**



R32

575

438946

R38

575

437852

T38

575

437982

T45

575

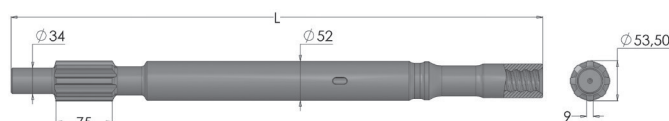
437892

**EPIROC COP 1036, 1038, 1238 FEMALE**

**5.08**

SDA = Self-Drilling Anchor

IRIA = Integrated Rotary Injection Adapter



R32

710

438088

R38

710

438087

TI30

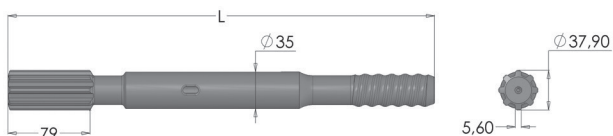
710

438099

For bolting purposes only

**EPIROC COP 1132, RR11**

**5.09**



R28

410

438061

R32

410

431882

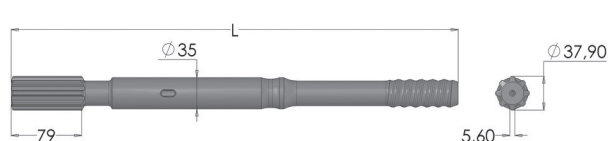
T35

410

438149

**EPIROC COP 1132, RR11**

**5.10**



R32

500

431949

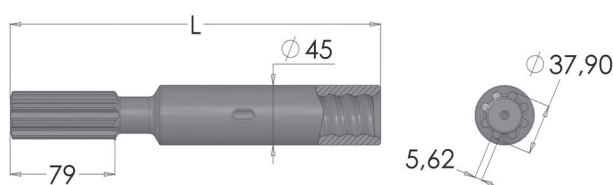
T35

500

438150

**EPIROC COP 1132, RR11 FEMALE**

**5.11**



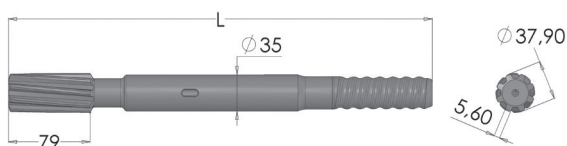
R32

280

431862

**EPIROC COP 1140, 1435, SC14, RR14**

**5.12**



R32

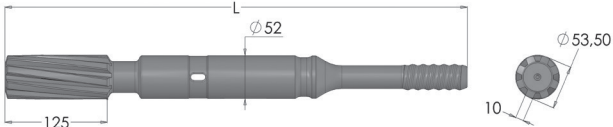
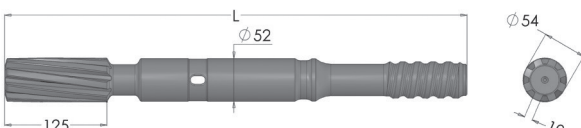
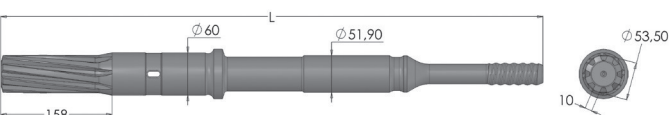
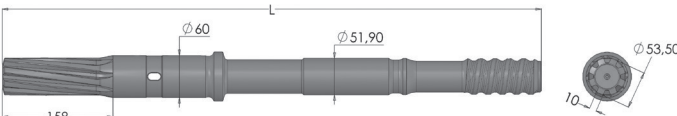
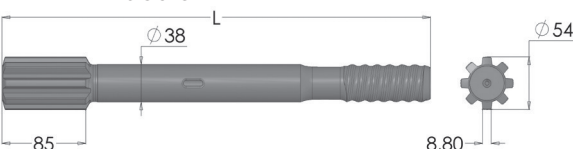
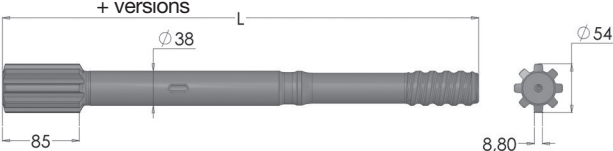
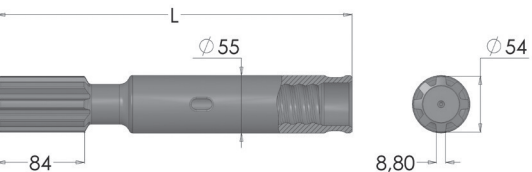
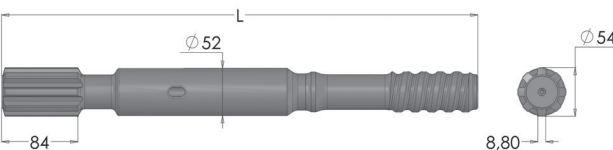
410

438066

R32

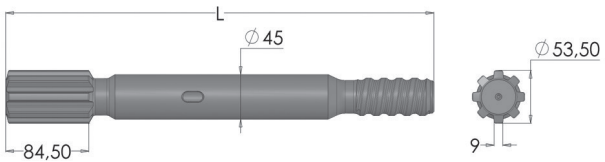
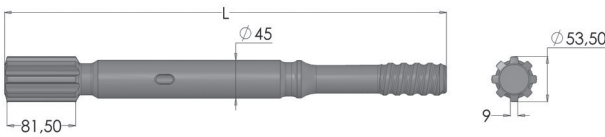
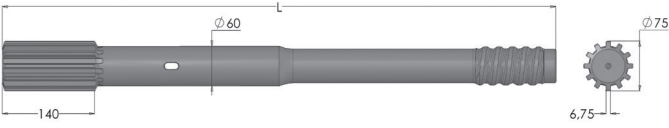
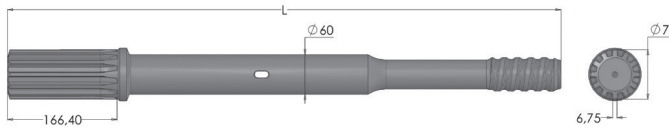
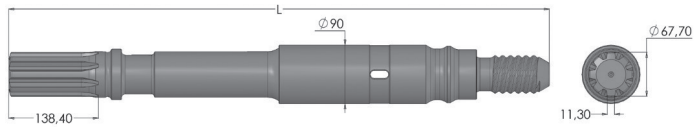
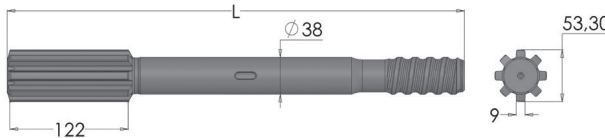
500

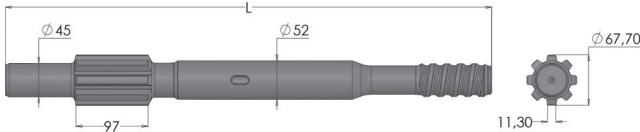
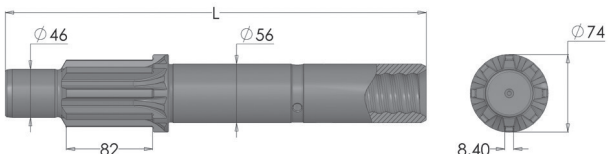
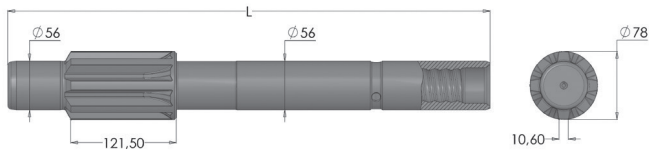
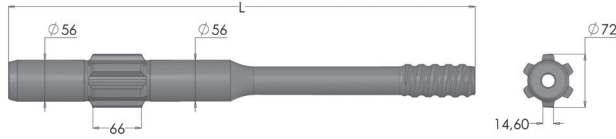
438067

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                                                                      | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>EPIROC COP 1240, 1640, SC16, SC19, SC25HF</b><br>                                    | <b>5.13</b>                                         |                                                        | R32                                 | 565                                          | 448000                                           |
|                                                                                                                                                                          |                                                     |                                                        | T35                                 | 565                                          | 448034                                           |
|                                                                                                                                                                          |                                                     |                                                        | T38                                 | 565                                          | 448001                                           |
| <b>EPIROC COP 1240, 1640, 1840, 1850, 2150, 2550 and + versions</b><br>                 | <b>5.14</b>                                         |                                                        | T45                                 | 565                                          | 448864                                           |
|                                                                                                                                                                          |                                                     |                                                        | XT45                                | 565                                          | 448035                                           |
|                                                                                                                                                                          |                                                     |                                                        | T51                                 | 565                                          | 448849                                           |
|                                                                                                                                                                          |                                                     |                                                        | XT51                                | 565                                          | 448036                                           |
| <b>EPIROC COP 1240EX, 1640EX, SC19X, SC25X-HF</b><br>                                   | <b>5.15</b>                                         |                                                        | R32                                 | 770                                          | 448002                                           |
|                                                                                                                                                                          |                                                     |                                                        | T38                                 | 770                                          | 448003                                           |
| <b>EPIROC COP 1240EX, 1640EX, 1840EX, 1850EX, 2150EX, 2550EX, SC19X, SC25X-HF</b><br> | <b>5.16</b>                                         |                                                        | T45                                 | 770                                          | 448865                                           |
|                                                                                                                                                                          |                                                     |                                                        | T51                                 | 770                                          | 448866                                           |
|                                                                                                                                                                          |                                                     |                                                        | XT51                                | 770                                          | 448031                                           |
| <b>EPIROC COP 1432, 1440, 1532, 1550, 1638, 1838, 2238 and + versions</b><br>         | <b>5.17</b>                                         |                                                        | R32                                 | 435                                          | 447899                                           |
|                                                                                                                                                                          |                                                     |                                                        | R38                                 | 435                                          | 447879                                           |
|                                                                                                                                                                          |                                                     |                                                        | T38                                 | 435                                          | 447894                                           |
| <b>EPIROC COP 1432, 1440, 1532, 1550, 1638, 1838, 2238 and + versions</b><br>         | <b>5.18</b>                                         |                                                        | R32                                 | 525                                          | 447886                                           |
|                                                                                                                                                                          |                                                     |                                                        | R38                                 | 525                                          | 448897                                           |
|                                                                                                                                                                          |                                                     |                                                        | T35                                 | 525                                          | 448028                                           |
|                                                                                                                                                                          |                                                     |                                                        | T38                                 | 525                                          | 448943                                           |
| <b>EPIROC COP 1432, 1532 FEMALE</b><br>                                               | <b>5.19</b>                                         |                                                        | R32                                 | 340                                          | 448889                                           |
|                                                                                                                                                                          |                                                     |                                                        | R38                                 | 340                                          | 448898                                           |
| <b>EPIROC COP 1440, 1550, 1838</b><br>                                                | <b>5.20</b>                                         |                                                        | R32                                 | 525                                          | 448940                                           |
|                                                                                                                                                                          |                                                     |                                                        | T35                                 | 525                                          | 441951                                           |
|                                                                                                                                                                          |                                                     |                                                        | T38                                 | 525                                          | 448846                                           |
|                                                                                                                                                                          |                                                     |                                                        | T45                                 | 525                                          | 447916                                           |
|                                                                                                                                                                          |                                                     |                                                        | T51                                 | 525                                          | 447917                                           |

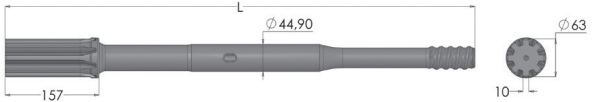
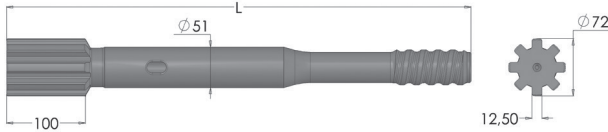
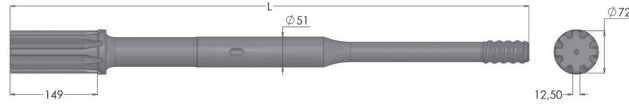
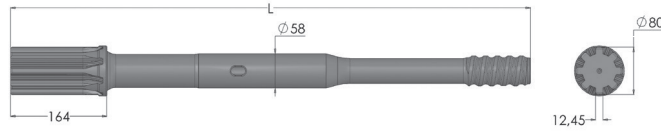
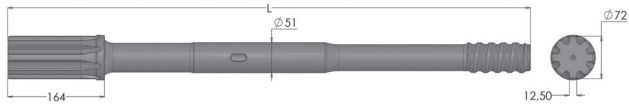
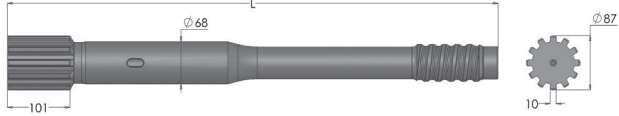
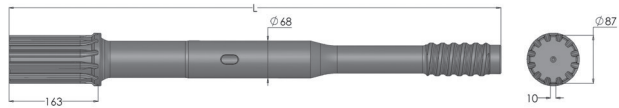


| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                          | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>EPIROC</b> COP 1440, 1550, 1838 <i>FEMALE</i><br>SDA = Self-Drilling Anchor                                               | <b>5.21</b>                                         |                                                        | R32                                 | 640                                          | A41889                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| For bolting purposes only                                                                                                    |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 1440, 1550, 1838 <i>FEMALE</i><br>SDA = Self-Drilling Anchor<br>IRIA = Integrated Rotary Injection Adapter | <b>5.22</b>                                         |                                                        | R32                                 | 640                                          | 441918                                           |
|                                                                                                                              |                                                     |                                                        | R38                                 | 650                                          | 441917                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| For bolting purposes only                                                                                                    |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 1838MUX / HUX and + versions                                                                               | <b>5.23</b>                                         |                                                        | T38                                 | 730                                          | 448038                                           |
|                                                                                                                              |                                                     |                                                        | T45                                 | 730                                          | 448037                                           |
|                                                                                                                              |                                                     |                                                        | XT45                                | 730                                          | 448096                                           |
|                                                                                                                              |                                                     |                                                        | T51                                 | 730                                          | 448039                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 2160, 2560                                                                                                 | <b>5.24</b>                                         |                                                        | T38                                 | 770                                          | 441989                                           |
|                                                                                                                              |                                                     |                                                        | T45                                 | 770                                          | 441873                                           |
|                                                                                                                              |                                                     |                                                        | T51                                 | 770                                          | 441874                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 2160EX, 2560EX                                                                                             | <b>5.25</b>                                         |                                                        | T45                                 | 770                                          | 441883                                           |
|                                                                                                                              |                                                     |                                                        | T51                                 | 770                                          | 441884                                           |
|                                                                                                                              |                                                     |                                                        | XT51                                | 770                                          | 448032                                           |
|                                                                                                                              |                                                     |                                                        | GT60                                | 770                                          | 448012                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 2550UX, 2550UX+                                                                                            | <b>5.26</b>                                         |                                                        | T45                                 | 770                                          | 448165                                           |
|                                                                                                                              |                                                     |                                                        | T51                                 | 770                                          | 448161                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EPIROC</b> COP 2560EX, 2560EX+, SC25-HE                                                                                   | <b>5.27</b>                                         |                                                        | T45                                 | 770                                          | 448089                                           |
|                                                                                                                              |                                                     |                                                        | T51                                 | 770                                          | 448091                                           |
|                                                                                                                              |                                                     |                                                        | XT51                                | 770                                          | 448092                                           |
|                                                                                                                              |                                                     |                                                        | T-WiZ60                             | 770                                          | 448094                                           |
|                                                                                                                              |                                                     |                                                        |                                     |                                              |                                                  |

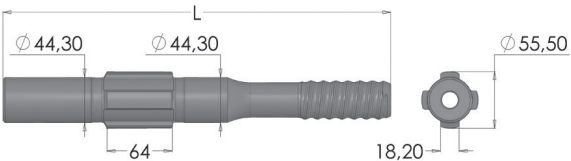
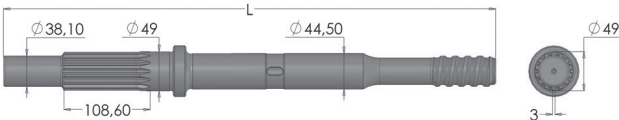
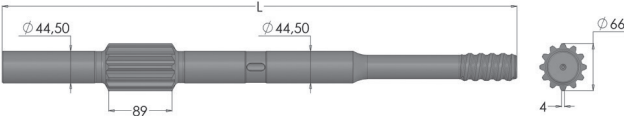
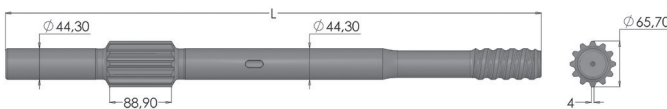
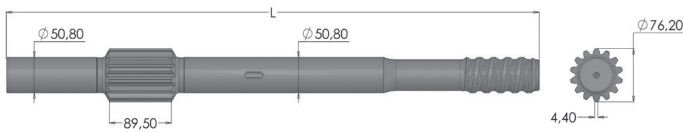
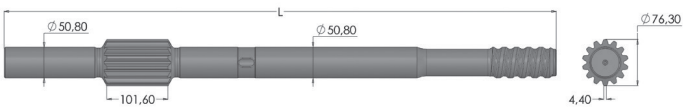
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                               | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>EPIROC COP 3038</b><br>       | <b>5.28</b>                                         |                                                        | R38                                 | 435                                          | 448049                                           |
|                                                                                                                   |                                                     |                                                        | T38                                 | 435                                          | 448050                                           |
|                                                                                                                   |                                                     |                                                        | T45                                 | 450                                          | 448048                                           |
| <b>EPIROC COP 3038</b><br>       | <b>5.29</b>                                         |                                                        | R32                                 | 525                                          | 448051                                           |
|                                                                                                                   |                                                     |                                                        | T38                                 | 525                                          | 448052                                           |
| <b>EPIROC COP 3038 ME</b><br>  | <b>5.30</b>                                         |                                                        | T51                                 | 840                                          | 448117                                           |
|                                                                                                                   |                                                     |                                                        | GT60                                | 840                                          | 448173                                           |
|                                                                                                                   |                                                     |                                                        | T-WiZ60                             | 840                                          | 448151                                           |
| <b>EPIROC COP 3060 MEX</b><br> | <b>5.31</b>                                         |                                                        | T51                                 | 840                                          | 448071                                           |
|                                                                                                                   |                                                     |                                                        | GT60                                | 840                                          | 448174                                           |
|                                                                                                                   |                                                     |                                                        | T-WiZ60                             | 840                                          | 448142                                           |
| <b>EPIROC COP 4050 MUX</b><br> | <b>5.32</b>                                         |                                                        | ST58                                | 835                                          | 448016                                           |
|                                                                                                                   |                                                     |                                                        | ST68                                | 835                                          | 448018                                           |
| <b>EPIROC COP MD20</b><br>     | <b>5.33</b>                                         |                                                        | R38                                 | 470                                          | 448140                                           |
|                                                                                                                   |                                                     |                                                        | T38                                 | 470                                          | 448131                                           |
|                                                                                                                   |                                                     |                                                        | R38                                 | 560                                          | 448252                                           |
|                                                                                                                   |                                                     |                                                        | T38                                 | 560                                          | 448207                                           |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                                                             | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>EPIROC RD14S, RD18S, RD22S</b><br>                                          | <b>5.34</b>                                         |                                                        | T38                                 | 655                                          | 448219                                           |
|                                                                                                                                                                 |                                                     |                                                        | T45                                 | 655                                          | 448189                                           |
|                                                                                                                                                                 |                                                     |                                                        | T51                                 | 655                                          | 448164                                           |
|                                                                                                                                                                 |                                                     |                                                        |                                     |                                              |                                                  |
| <b>EURODRILL HD 1002 FEMALE</b><br>                                            | <b>6.01</b>                                         |                                                        | R32                                 | 410                                          | 448119                                           |
|                                                                                                                                                                 |                                                     |                                                        | R38                                 | 430                                          | 448120                                           |
|                                                                                                                                                                 |                                                     |                                                        | TI30                                | 380                                          | 441733                                           |
|                                                                                                                                                                 |                                                     |                                                        | TI40                                | 400                                          | 441734                                           |
| <b>EURODRILL HD 2002, 2004 FEMALE</b><br>                                    | <b>6.02</b>                                         |                                                        | R32                                 | 555                                          | 448121                                           |
|                                                                                                                                                                 |                                                     |                                                        | R38                                 | 555                                          | 448122                                           |
| <b>FURUKAWA HD 300</b><br>                                                   | <b>7.01</b>                                         | 16                                                     | R38                                 | 655                                          | 441765                                           |
|                                                                                                                                                                 |                                                     | 16                                                     | T38                                 | 655                                          | 441827                                           |
|                                                                                                                                                                 |                                                     | 16                                                     | T45                                 | 655                                          | 441828                                           |
|                                                                                                                                                                 |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                                                                                                                         |                                                     | 16                                                     |                                     |                                              | 413355                                           |
| <b>FURUKAWA HD 500</b><br><b>EVERDIGM ED 100</b><br><b>SOOSAN ED 100</b><br> | <b>7.02</b>                                         | 16                                                     | T38                                 | 635                                          | 448033                                           |
|                                                                                                                                                                 |                                                     | 16                                                     | T45                                 | 635                                          | 441905                                           |
|                                                                                                                                                                 |                                                     | 16                                                     | T51                                 | 635                                          | 448974                                           |
|                                                                                                                                                                 |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                                                                                                                         |                                                     | 16                                                     |                                     |                                              | 413355                                           |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador         | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-----------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>FURUKAWA HD 609</b>                                                      | <b>7.03</b>                                         |                                                        | R38                                 | 620                                          | 441860                                           |
|                                                                             |                                                     |                                                        | T38                                 | 620                                          | 441829                                           |
|                                                                             |                                                     |                                                        | T45                                 | 620                                          | 441830                                           |
| <b>FURUKAWA HD 609</b><br><b>JUN JIN JET 7</b><br><b>SOOSAN SP3G, TD 45</b> | <b>7.04</b>                                         |                                                        | T38                                 | 690                                          | 441853                                           |
|                                                                             |                                                     |                                                        | T45                                 | 690                                          | 441854                                           |
| <b>FURUKAWA HD 612</b><br><b>SOOSAN SP 6, TD 51</b>                         | <b>7.05</b>                                         |                                                        | T45                                 | 670                                          | 441844                                           |
|                                                                             |                                                     |                                                        | T51                                 | 670                                          | 441851                                           |
| <b>FURUKAWA HD 612 QED</b>                                                  | <b>7.06</b>                                         |                                                        | T45                                 | 845                                          | 441841                                           |
|                                                                             |                                                     |                                                        | T51                                 | 845                                          | 441831                                           |
| <b>FURUKAWA HD 615</b>                                                      | <b>7.07</b>                                         |                                                        | T51                                 | 700                                          | 441842                                           |
|                                                                             |                                                     |                                                        | T51                                 | 880                                          | 448942                                           |
| <b>FURUKAWA HD 709</b><br><b>EVERDIGM ED 150</b><br><b>JUN JIN JET 8</b>    | <b>7.08</b>                                         |                                                        | T38                                 | 620                                          | 441898                                           |
|                                                                             |                                                     |                                                        | T45                                 | 620                                          | 441897                                           |

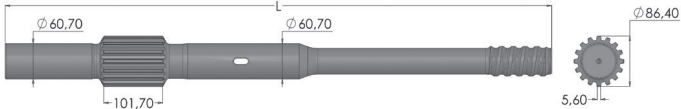
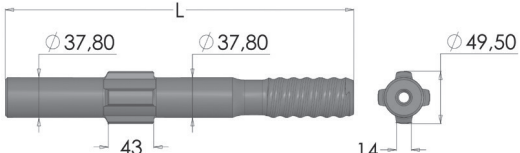
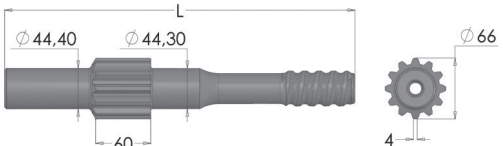
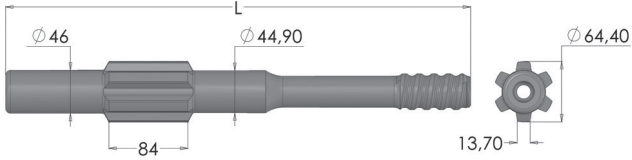
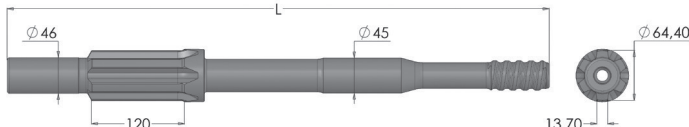
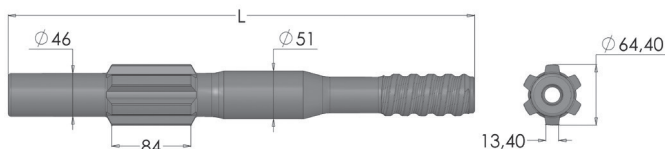
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                              | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>FURUKAWA HD 709 QED</b><br>                  | <b>7.09</b>                                         |                                                        | T38                                 | 785                                          | 441943                                           |
|                                                                                                                                  |                                                     |                                                        | T45                                 | 785                                          | 441955                                           |
|                                                                                                                                  |                                                     |                                                        | T45                                 | 815                                          | 441931                                           |
| <b>FURUKAWA HD 712<br/>JUN JIN JET 9</b><br>    | <b>7.10</b>                                         |                                                        | T45                                 | 590                                          | 441858                                           |
|                                                                                                                                  |                                                     |                                                        | T51                                 | 590                                          | 441859                                           |
|                                                                                                                                  |                                                     |                                                        | T45                                 | 790                                          | 441876                                           |
|                                                                                                                                  |                                                     |                                                        | XT45                                | 790                                          | 448105                                           |
|                                                                                                                                  |                                                     |                                                        | T51                                 | 790                                          | 441896                                           |
| <b>FURUKAWA HD 712 QED</b><br>                 | <b>7.11</b>                                         |                                                        | T45                                 | 885                                          | 441913                                           |
|                                                                                                                                  |                                                     |                                                        | T51                                 | 885                                          | 441912                                           |
|                                                                                                                                  |                                                     |                                                        | XT51                                | 885                                          | 448044                                           |
| <b>FURUKAWA HD 715<br/>JUN JIN JET 11</b><br> | <b>7.12</b>                                         |                                                        | T51                                 | 790                                          | 441865                                           |
|                                                                                                                                  |                                                     |                                                        | XT51                                | 790                                          | 448074                                           |
| <b>FURUKAWA HD 715 QED</b><br>                | <b>7.13</b>                                         |                                                        | T51                                 | 885                                          | 441932                                           |
|                                                                                                                                  |                                                     |                                                        | XT51                                | 885                                          | 448041                                           |
| <b>FURUKAWA HD 822 QED, HD 826 QED</b><br>    | <b>7.14</b>                                         |                                                        | T51                                 | 885                                          | 448065                                           |
|                                                                                                                                  |                                                     |                                                        | XT51                                | 885                                          | 448068                                           |
| <b>FURUKAWA HD 836</b><br>                    | <b>7.15</b>                                         |                                                        | GT60                                | 793                                          | 448169                                           |
| <b>FURUKAWA HD 836 QED</b><br>                | <b>7.16</b>                                         |                                                        | GT60                                | 900                                          | 448179                                           |
| <b>FURUKAWA PD 200R</b><br>                   | <b>7.17</b>                                         | 14                                                     | T38                                 | 484                                          | 447940                                           |
|                                                                                                                                  |                                                     | 14                                                     | T45                                 | 484                                          | 441834                                           |
| Seal / Dichtung / Joint / Empaquetadura                                                                                          |                                                     | 14                                                     |                                     |                                              | 413354                                           |



| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                                                                                                                                                        | Illustration<br>Bild<br>Illustration<br>Ilustración                                                | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>GARDNER DENVER PR 123 - CATERPILLAR</b><br><b>BOART SECAN S 36 IR</b><br><b>FURUKAWA HD 200, M 120, PD 200</b><br><b>INGERSOLL-RAND URD 475 A, 550, VL 120, VL 140, F16</b><br><b>SANDVIK TAM 750</b><br><b>TOKYO RIUKI HD 200, H 120 / TOYO PR 220</b> | <b>8.01</b><br>   | 14                                                     | R32                                 | 380                                          | 451760                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | R38                                 | 380                                          | 451337                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | T38                                 | 380                                          | 451761                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | T45                                 | 380                                          | 451759                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | R32                                 | 446                                          | 451341                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | R38                                 | 446                                          | 451338                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     | T38                                 | 446                                          | 451339                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 16                                                     | T45                                 | 446                                          | 451331                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 14                                                     |                                     |                                              | 453354                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    | 16                                                     |                                     |                                              | 453355                                           |
| Seal / Dichtung / Joint / Empaquetadura                                                                                                                                                                                                                    |                                                                                                    |                                                        |                                     |                                              |                                                  |
| <b>GARDNER DENVER HPR 1 - CATERPILLAR</b>                                                                                                                                                                                                                  | <b>8.02</b><br> |                                                        | T38                                 | 620                                          | 457850                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T45                                 | 620                                          | 457860                                           |
| <b>GARDNER DENVER HPR 1 H - CATERPILLAR</b>                                                                                                                                                                                                                | <b>8.03</b><br> |                                                        | R38                                 | 725                                          | 457922                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T38                                 | 725                                          | 457953                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T45                                 | 725                                          | 457923                                           |
| <b>GARDNER DENVER HPR 4519 - CATERPILLAR</b>                                                                                                                                                                                                               | <b>8.04</b><br> |                                                        | T38                                 | 770                                          | 451861                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T45                                 | 770                                          | 451866                                           |
| <b>GARDNER DENVER HPR 5123 - CATERPILLAR</b>                                                                                                                                                                                                               | <b>8.05</b><br> |                                                        | T45                                 | 770                                          | 458996                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T51                                 | 770                                          | 458991                                           |
| <b>GARDNER DENVER HPR 2 H, HPR 5128 - CATERPILLAR</b>                                                                                                                                                                                                      | <b>8.06</b><br> |                                                        | T45                                 | 915                                          | 458863                                           |
|                                                                                                                                                                                                                                                            |                                                                                                    |                                                        | T51                                 | 915                                          | 457924                                           |

# GARDNER DENVER - CATERPILLAR INGERSOLL-RAND



| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador   | Illustration<br>Bild<br>Illustration<br>Ilustración                                                | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>GARDNER DENVER HPR 6030 - CATERPILLAR</b>                          | <b>8.07</b><br>   |                                                        | T51                                 | 1041                                         | 451900                                           |
|                                                                       |                                                                                                    |                                                        | ST58                                | 1041                                         | 451901                                           |
|                                                                       |                                                                                                    |                                                        | GT60                                | 1041                                         | 458072                                           |
|                                                                       |                                                                                                    |                                                        |                                     |                                              |                                                  |
| <b>INGERSOLL-RAND YD 90 M<br/>MITSUI TR 200 / TOKYO RIUKI YD 90 M</b> | <b>9.01</b><br>   | 10                                                     | R32                                 | 330                                          | 457837                                           |
|                                                                       |                                                                                                    | 10                                                     | R38                                 | 330                                          | 458830                                           |
|                                                                       |                                                                                                    | 10                                                     | T38                                 | 330                                          | 457863                                           |
|                                                                       |                                                                                                    |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                               |                                                                                                    | 10                                                     |                                     |                                              | 454107                                           |
| <b>INGERSOLL-RAND EVL 130, VL 140</b>                                 | <b>9.02</b><br> | 14                                                     | T38                                 | 349                                          | 451849                                           |
|                                                                       |                                                                                                    | 14                                                     | T45                                 | 349                                          | 458880                                           |
|                                                                       |                                                                                                    |                                                        |                                     |                                              |                                                  |
|                                                                       |                                                                                                    | 14                                                     | T38                                 | 381                                          | 458881                                           |
|                                                                       |                                                                                                    | 14                                                     | T45                                 | 381                                          | 458882                                           |
| Seal / Dichtung / Joint / Empaquetadura                               |                                                                                                    | 14                                                     |                                     |                                              | 453354                                           |
| <b>INGERSOLL-RAND YH 65, YH 70, YH 80<br/>YAMAMOTO YH 70</b>          | <b>9.03</b><br> | 19                                                     | T38                                 | 495                                          | 457943                                           |
|                                                                       |                                                                                                    | 19                                                     | T45                                 | 495                                          | 457954                                           |
|                                                                       |                                                                                                    |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                               |                                                                                                    | 19                                                     |                                     |                                              | 454163                                           |
| <b>INGERSOLL-RAND YH 65 RP, YH 70 RP, YH 80 RP</b>                    | <b>9.04</b><br> | 19                                                     | T38                                 | 700                                          | 458809                                           |
|                                                                       |                                                                                                    | 19                                                     | T45                                 | 700                                          | 458810                                           |
| Seal / Dichtung / Joint / Empaquetadura                               |                                                                                                    | 19                                                     |                                     |                                              | 454163                                           |
| <b>INGERSOLL-RAND YH 80 A</b>                                         | <b>9.05</b><br> | 19                                                     | T45                                 | 495                                          | 458925                                           |
|                                                                       |                                                                                                    | 19                                                     | T51                                 | 495                                          | 458922                                           |
| Seal / Dichtung / Joint / Empaquetadura                               |                                                                                                    | 19                                                     |                                     |                                              | 454163                                           |

Drifter

Bohrhammer  
Marteau perforateur  
Martillo perforador

Illustration  
Bild  
Illustration  
Ilustración

Tube  
Spülröhr  
Trou d'injection  
Tubo  
Ø [mm]

Thread  
Gewinde  
Filet  
Rosca

Length  
Länge  
Longueur  
Largo  
[mm]

Part No.  
Artikel Nr.  
N° de réf.  
Cat. N°

INGERSOLL-RAND YH 95 RP, YH 100 RP

9.06

23

T45

840

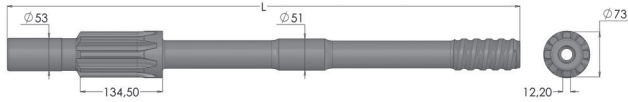
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23

T51

840

457956



Seal / Dichtung / Joint / Empaquetadura

23

454168

INGERSOLL-RAND YH 110 V, YH 135

9.07

T45

728

458027

T51

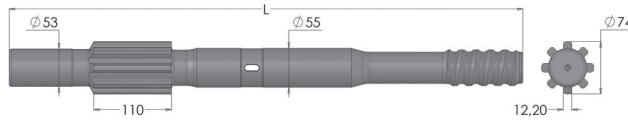
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458921

T51

890

458125



JOHN HENRY HB 101, HB 102  
KRUPP HB 101

10.01

T38

690

451754

T45

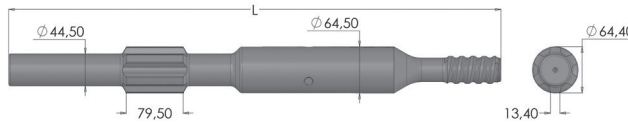
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451755

T51

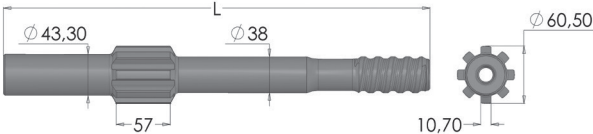
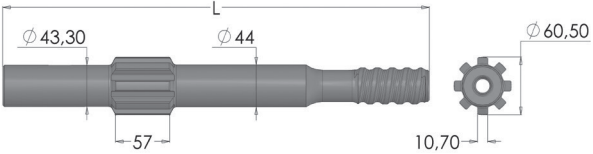
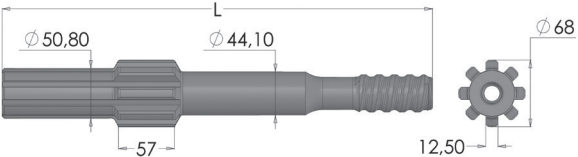
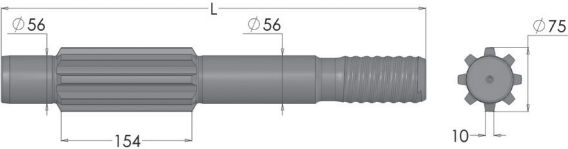
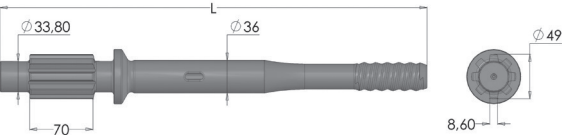
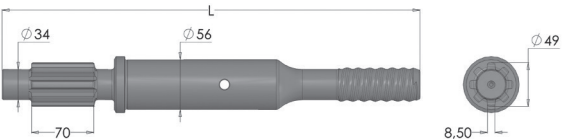
711

451756



HER KOŞULDA  
ÜSTÜN PERFORMANS

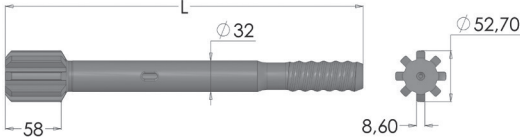
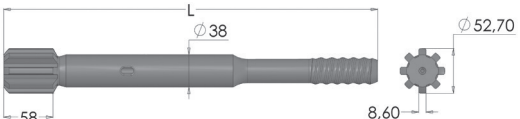
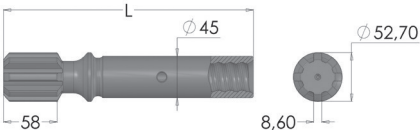
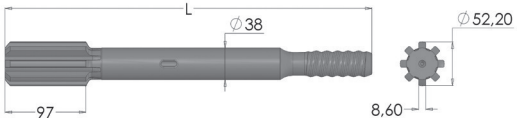


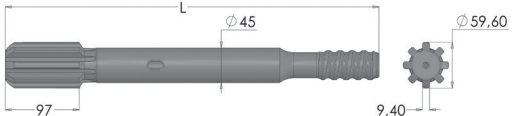
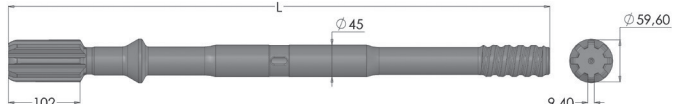
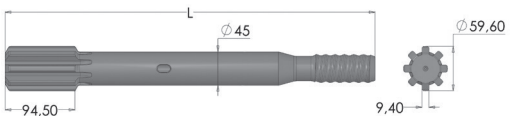
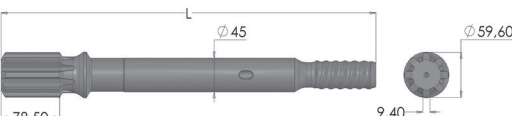
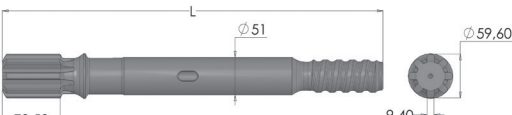
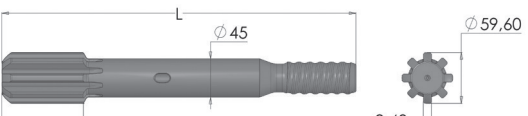
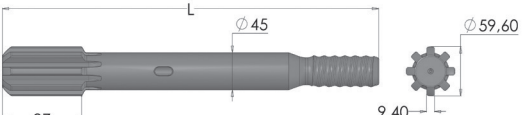
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador            | Illustration<br>Bild<br>Illustration<br>Ilustración                                                 | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>JOY</b> VCR 260, 360                                                        | <b>11.01</b><br>   | 16                                                     | R38                                 | 450                                          | 461813                                           |
|                                                                                |                                                                                                     | 16                                                     | T38                                 | 450                                          | 467844                                           |
| Seal / Dichtung / Joint / Empaquetadura                                        |                                                                                                     | 16                                                     |                                     |                                              | 463355                                           |
| <b>JOY</b> VCR 260, 360                                                        | <b>11.02</b><br>   | 16                                                     | R38                                 | 450                                          | 461767                                           |
| <b>SANDVIK</b> HL 844                                                          |                                                                                                     | 16                                                     | T38                                 | 450                                          | 467848                                           |
|                                                                                |                                                                                                     | 16                                                     | T45                                 | 450                                          | 467920                                           |
| Seal / Dichtung / Joint / Empaquetadura                                        |                                                                                                     | 16                                                     |                                     |                                              | 463355                                           |
| <b>JOY</b> VCR 361                                                             | <b>11.03</b><br> | 19                                                     | T38                                 | 440                                          | 468918                                           |
|                                                                                |                                                                                                     | 19                                                     | T45                                 | 440                                          | 467930                                           |
| Seal / Dichtung / Joint / Empaquetadura                                        |                                                                                                     | 19                                                     |                                     |                                              | 464163                                           |
| <b>KLEMM</b> 4026, 4053<br>R55 / A55 = H55                                     | <b>12.01</b><br> |                                                        | *R55 LI                             | 500                                          | 461811                                           |
|                                                                                |                                                                                                     |                                                        | *A55 RE                             | 500                                          | 461812                                           |
| R55 / A55 = H55                                                                |                                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>KRUPP</b> HB 5A FLEXI SHAFT<br>Integrierter Spülkopf / Integrated flushhead | <b>13.01</b><br> |                                                        | R32                                 | 473                                          | 461924                                           |
| <b>KRUPP</b> HB 5A<br>Externer Spülkopf / External flushhead                   |                                                                                                     | <b>13.02</b>                                           | R38                                 | 470                                          | 461910                                           |
|                                                                                |                  |                                                        |                                     |                                              |                                                  |



| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>MONTABERT HC 20 FEMALE</b>                                       | <b>14.01</b>                                        |                                                        | R32                                 | 187                                          | 461929                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 20 FEMALE</b>                                       | <b>14.02</b>                                        |                                                        | HEX22                               | 199                                          | 468114                                           |
|                                                                     |                                                     |                                                        | HEX25                               | 199                                          | 468144                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 20</b>                                              | <b>14.03</b>                                        |                                                        | R32                                 | 287                                          | 461933                                           |
|                                                                     |                                                     |                                                        | T38                                 | 300                                          | 461986                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 25 FEMALE</b>                                       | <b>14.04</b>                                        |                                                        | R28                                 | 202                                          | 468020                                           |
|                                                                     |                                                     |                                                        | R32                                 | 202                                          | 461930                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 25 FEMALE</b>                                       | <b>14.05</b>                                        |                                                        | HEX25                               | 218                                          | 468109                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 25</b>                                              | <b>14.06</b>                                        |                                                        | R32                                 | 340                                          | 461957                                           |
|                                                                     |                                                     |                                                        | R38                                 | 350                                          | 461964                                           |
|                                                                     |                                                     |                                                        | T38                                 | 350                                          | 468132                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 28 FEMALE</b>                                       | <b>14.07</b>                                        |                                                        | R32                                 | 272                                          | 468076                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 28</b>                                              | <b>14.08</b>                                        |                                                        | T35                                 | 385                                          | 468148                                           |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |

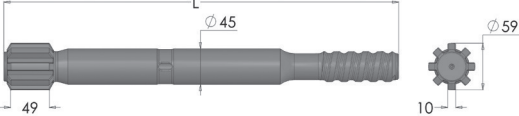
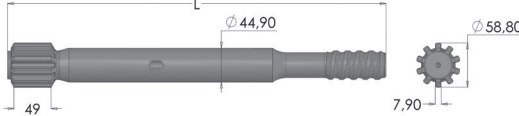
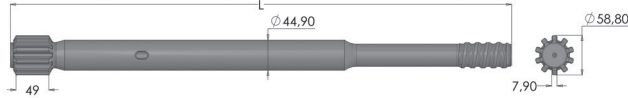
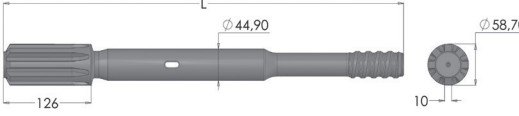
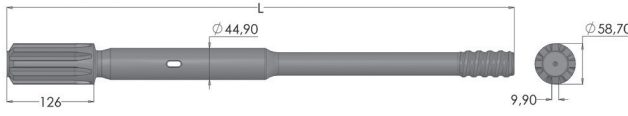
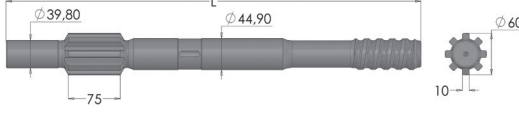
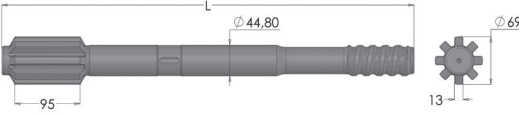


| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                 | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| MONTABERT HC 40                                                                     | 14.09                                               |                                                        | R32                                 | 372                                          | A47938                                           |
|    |                                                     |                                                        |                                     |                                              |                                                  |
| MONTABERT HC 40, HC 50                                                              | 14.10                                               |                                                        | R32                                 | 372                                          | 468977                                           |
|    |                                                     |                                                        |                                     |                                              |                                                  |
|                                                                                     |                                                     |                                                        | R38                                 | 380                                          | 468817                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 381                                          | 467984                                           |
|                                                                                     |                                                     |                                                        | R32                                 | 440                                          | 467986                                           |
|                                                                                     |                                                     |                                                        | R38                                 | 440                                          | 468848                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 447                                          | 467985                                           |
| MONTABERT HC 40, HC 50 FEMALE                                                       | 14.11                                               |                                                        | R32                                 | 270                                          | 467941                                           |
|  |                                                     |                                                        |                                     |                                              |                                                  |
| MONTABERT HC 80, HC 90, HC 105, HC 108, HC 109, HC 120                              | 14.12                                               |                                                        | R32                                 | 440                                          | 461895                                           |
|  |                                                     |                                                        |                                     |                                              |                                                  |
|                                                                                     |                                                     |                                                        | R38                                 | 440                                          | 461797                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 440                                          | 461824                                           |
|                                                                                     |                                                     |                                                        | R32                                 | 500                                          | 461983                                           |
|                                                                                     |                                                     |                                                        | R38                                 | 500                                          | 461815                                           |
|                                                                                     |                                                     |                                                        | T38                                 | 500                                          | 46N1787                                          |

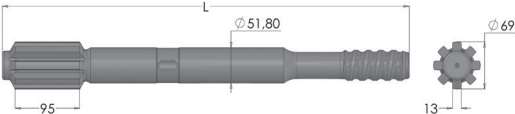
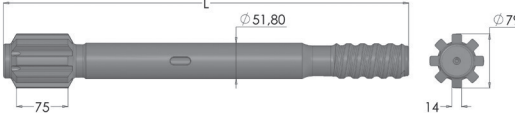
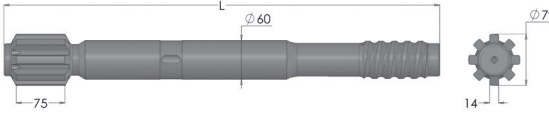
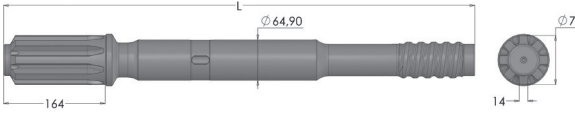
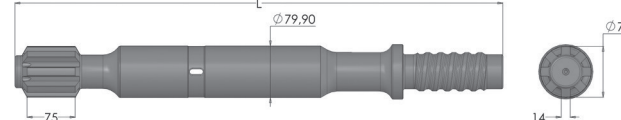
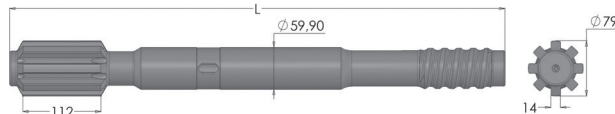
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador      | Illustration<br>Bild<br>Illustration<br>Ilustración                                                 | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>MONTABERT</b> HC 80, HC 108, HC 109, HC 120, HC 150                   | <b>14.13</b><br>   |                                                        | T38                                 | 490                                          | 471819                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 490                                          | 471814                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 540                                          | 471881                                           |
| <b>MONTABERT</b> HC 80 RP, HC 105 RP, HC 107 RP,<br>HC 108 RP, HC 109 RP | <b>14.14</b><br>   |                                                        | T38                                 | 670                                          | 478837                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 670                                          | 471825                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 771                                          | 478953                                           |
| <b>MONTABERT</b> HC 95, HC 95 SA                                         | <b>14.15</b><br>  |                                                        | R38                                 | 438                                          | 471958                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 438                                          | 471963                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 453                                          | 471965                                           |
|                                                                          |                                                                                                     |                                                        | R38                                 | 500                                          | 471990                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 500                                          | 471991                                           |
| <b>MONTABERT</b> HC 95 R, HC 95 LM                                       | <b>14.16</b><br> |                                                        | R32                                 | 503                                          | 478987                                           |
|                                                                          |                                                                                                     |                                                        | R38                                 | 503                                          | 471967                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 503                                          | 471959                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 518                                          | 471960                                           |
|                                                                          |                                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT</b> HC 95 R, HC 95 LQw                                      | <b>14.17</b><br> |                                                        | T45                                 | 518                                          | 471961                                           |
|                                                                          |                                                                                                     |                                                        | T51                                 | 530                                          | 471962                                           |
| <b>MONTABERT</b> HC 110 CA / CS                                          | <b>14.18</b><br> |                                                        | R38                                 | 415                                          | 471954                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 415                                          | 471927                                           |
|                                                                          |                                                                                                     |                                                        | T45                                 | 425                                          | 471928                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 530                                          | 471976                                           |
|                                                                          |                                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT</b> HC 110 MT                                               | <b>14.19</b><br> |                                                        | R38                                 | 460                                          | 471984                                           |
|                                                                          |                                                                                                     |                                                        | T38                                 | 460                                          | 471985                                           |

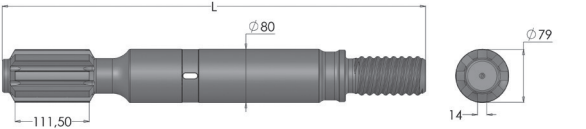
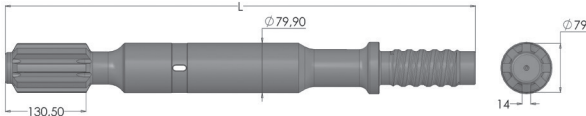
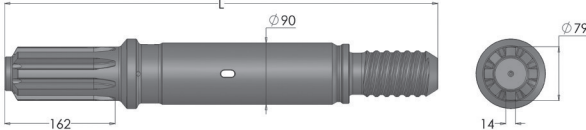
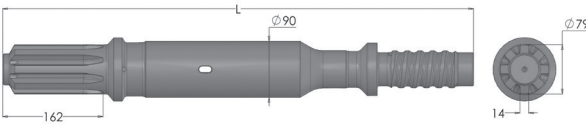
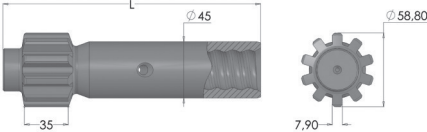
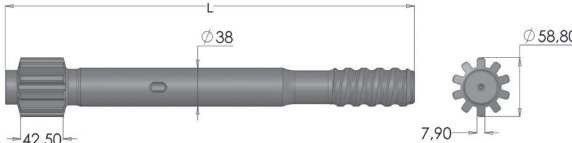
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>MONTABERT HC 112 LH</b>                                          | <b>14.20</b>                                        |                                                        | T51<br>GT60                         | 726<br>726                                   | 471982<br>471940                                 |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 120 RP, HC 150 RP, HC 155 RP, HC 158 RP</b>         | <b>14.21</b>                                        |                                                        | T45<br>T51<br>T45<br>T51            | 670<br>670<br>771<br>771                     | 478862<br>471826<br>478954<br>478955             |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 160, HC 170</b>                                     | <b>14.22</b>                                        |                                                        | T45<br>T45<br>T51<br>GT60           | 757<br>810<br>810<br>810                     | 478026<br>478994<br>478995<br>471975             |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MONTABERT HC 200 A</b>                                           | <b>14.23</b>                                        |                                                        | T51<br>GT60<br>T51                  | 840<br>840<br>980                            | 478979<br>478015<br>478978                       |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MORATH HBL 21 FEMALE</b>                                         | <b>15.01</b>                                        |                                                        | R32<br>R38<br>Ti30<br>Ti40          | 375<br>375<br>375<br>375                     | 471992<br>471993<br>471996<br>471997             |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |
| <b>MORATH HBL 70 / 110 FEMALE</b>                                   | <b>15.02</b>                                        |                                                        | R32<br>R38<br>Ti30<br>Ti40          | 445<br>445<br>445<br>445                     | 471994<br>471995<br>471998<br>471999             |
|                                                                     |                                                     |                                                        |                                     |                                              |                                                  |

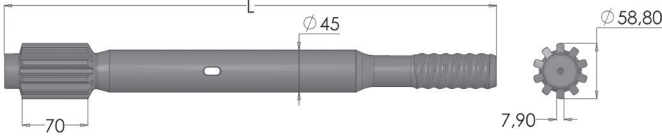
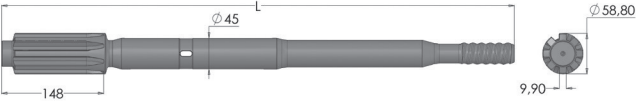
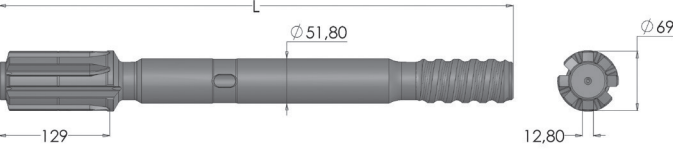
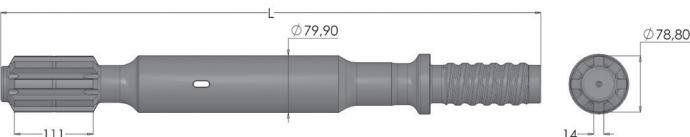
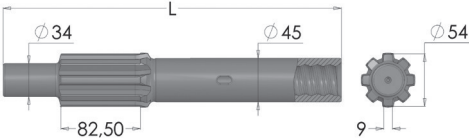
| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador  | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|----------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>SANDVIK</b> HLR 438 L, HLR 438 T                                  | <b>16.01</b>                                        | 13                                                     | R32                                 | 380                                          | 471766                                           |
| <b>SIG</b> HBM 100                                                   |                                                     | 13                                                     | R38                                 | 380                                          | 477847                                           |
|                                                                      |                                                     | 13                                                     | T38                                 | 380                                          | 477845                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| Seal / Dichtung / Joint / Empaquetadura                              |                                                     | 13                                                     |                                     |                                              | 474106                                           |
| <b>SANDVIK</b> HLX 1, RD 106                                         | <b>16.02</b>                                        |                                                        | R22                                 | 265                                          | 478025                                           |
|                                                                      |                                                     |                                                        | R25                                 | 265                                          | 478024                                           |
|                                                                      |                                                     |                                                        | R28                                 | 265                                          | 478220                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 300                                                | <b>16.03</b>                                        |                                                        | R32                                 | 400                                          | 477947                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 300 S FEMALE                                       | <b>16.04</b>                                        |                                                        | R32                                 | 245                                          | 477912                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HLR 438 LS, HL 500-38, HL 510-38, HL 538 BL, HL 550 S | <b>16.05</b>                                        |                                                        | R32                                 | 550                                          | 477945                                           |
|                                                                      |                                                     |                                                        | R38                                 | 550                                          | 477895                                           |
|                                                                      |                                                     |                                                        | T38                                 | 550                                          | 477881                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 500-45, HL 510-45                                  | <b>16.06</b>                                        |                                                        | T38                                 | 550                                          | 471838                                           |
|                                                                      |                                                     |                                                        | T45                                 | 550                                          | 478807                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 500 S-38, HL 510 S-38, HL 510 B, HL 510 LH         | <b>16.07</b>                                        |                                                        | R32                                 | 450                                          | 477909                                           |
|                                                                      |                                                     |                                                        | T35                                 | 450                                          | 477902                                           |
|                                                                      |                                                     |                                                        | R38                                 | 450                                          | 477914                                           |
|                                                                      |                                                     |                                                        | T38                                 | 450                                          | 477910                                           |
|                                                                      |                                                     |                                                        | R38                                 | 500                                          | 478821                                           |
|                                                                      |                                                     |                                                        |                                     |                                              |                                                  |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                      | Illustration<br>Bild<br>Illustration<br>Ilustración                                 | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>SANDVIK</b> HL 510 S-45, HL 550 SUPER M92,<br>HL 560 SUPER                            |    | 16.08                                                  | R32                                 | 500                                          | 471837                                           |
|                                                                                          |                                                                                     |                                                        | R38                                 | 500                                          | 477977                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 500                                          | 477976                                           |
| <b>SANDVIK</b> HLX 5, HLX 5 T, HFX 5 T<br>10 Splines, 10 Flügel                          |    | 16.09                                                  | R32                                 | 500                                          | 478959                                           |
|                                                                                          |                                                                                     |                                                        | R38                                 | 500                                          | 478960                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 500                                          | 478952                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 500                                          | 478973                                           |
|                                                                                          |                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                                          |                                                                                     |                                                        | R38                                 | 575                                          | 478064                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 575                                          | 478988                                           |
| <b>SANDVIK</b> HLX 5, HLX 5 T, HFX 5 T<br>10 Splines, 10 Flügel                          |  | 16.10                                                  | T45                                 | 575                                          | 478984                                           |
|                                                                                          |                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                                          |                                                                                     |                                                        | T38                                 | 600                                          | 478983                                           |
|                                                                                          |                                                                                     |                                                        | R32                                 | 750                                          | 478143                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 750                                          | 471890                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 750                                          | 471891                                           |
|                                                                                          |                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HLX 5 PE-45<br>8 Splines, 8 Flügel                                        |  | 16.11                                                  | R32                                 | 575                                          | 471887                                           |
|                                                                                          |                                                                                     |                                                        | T35                                 | 575                                          | 478082                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 575                                          | 471888                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 575                                          | 478158                                           |
| <b>SANDVIK</b> HLX 5 PE-45<br>8 Splines, 8 Flügel                                        |  | 16.12                                                  | R32                                 | 735                                          | 478021                                           |
|                                                                                          |                                                                                     |                                                        | R38                                 | 735                                          | 478030                                           |
|                                                                                          |                                                                                     |                                                        | T38                                 | 735                                          | 478006                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 735                                          | 478042                                           |
| <b>SANDVIK</b> HL 600-45                                                                 |  | 16.13                                                  | T38                                 | 600                                          | 477882                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 600                                          | 477893                                           |
| <b>SANDVIK</b> HL 650-45, HL 700-45, HL 700 T-45, HL 710-45,<br>HL 800 T-45, HL 810 T-45 |  | 16.14                                                  | T38                                 | 600                                          | 478877                                           |
|                                                                                          |                                                                                     |                                                        | T45                                 | 600                                          | 478876                                           |



| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                                                                                                                      | Illustration<br>Bild<br>Illustration<br>Ilustración                                 | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>SANDVIK</b> HL 650-52, HL 700-52, HL 700 PE-52,<br>HL 700 S-52, HL 710-52, HL 710 PE-52,<br>HL 710 S-52, HL 710 SPE-52,<br>HL 800 T-52, HL 800 PE-52, HL 810 T-52,<br>HF 810 T-52<br><b>DOOFOR</b> DF 600 S, DF 700 S |    |                                                        | R32                                 | 600                                          | 488180                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T35                                 | 600                                          | 488159                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T38                                 | 600                                          | 488956                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T45                                 | 600                                          | 488899                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | XT45                                | 600                                          | 488075                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T51                                 | 600                                          | 488900                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | XT51                                | 600                                          | 488013                                           |
| <b>SANDVIK</b> HL 1000-52, HL 1000 S-52, HL 1010-52,<br>HL 1010 S-52                                                                                                                                                     |    |                                                        | T45                                 | 590                                          | 487896                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T51                                 | 590                                          | 487878                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T45                                 | 670                                          | 487913                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T51                                 | 670                                          | 487926                                           |
| <b>SANDVIK</b> HL 1000-60, HL 1010-60                                                                                                                                                                                    |  |                                                        | T51                                 | 670                                          | 488162                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | ST58                                | 670                                          | 487931                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | GT60                                | 670                                          | 488007                                           |
| <b>SANDVIK</b> HL 1000 PE-65, HL 1010 PE-65,<br>HL 1060 T / PE-65, HL 1500 T / PE-65,<br>HL 1560 T / PE-65, HF 1560, HF 1560 PE,<br>RD 1635 CF                                                                           |  |                                                        | T51                                 | 760                                          | 488011                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | ST58                                | 760                                          | 481870                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | GT60                                | 760                                          | 488009                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | T-WiZ60                             | 760                                          | 488130                                           |
| <b>SANDVIK</b> HL 1000 T-80, HL 1010 T-80                                                                                                                                                                                |  |                                                        | GT60                                | 760                                          | 488022                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 1500-60, HL 1500 T-60                                                                                                                                                                                  |  |                                                        | ST58                                | 710                                          | 488916                                           |
|                                                                                                                                                                                                                          |                                                                                     |                                                        | GT60                                | 760                                          | 488008                                           |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador                                                        | Illustration<br>Bild<br>Illustration<br>Ilustración | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>SANDVIK</b> HL 1500-80, HL 1560 T-80, HL 1060 T-80, HF 1560                                                             | <b>16.21</b>                                        |                                                        | ST58                                | 635                                          | 488043                                           |
|                                                                                                                            |                                                     |                                                        | ST68                                | 635                                          | 488152                                           |
|                                           |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 1500-80, HL 1560 T-80, HL 1060 T-80, HF 1560                                                             | <b>16.22</b>                                        |                                                        | GT60                                | 760                                          | 488063                                           |
|                                                                                                                            |                                                     |                                                        | XT51                                | 860                                          | 488070                                           |
|                                           |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 1500 T / PE-90, HL 1500 ST / PE-90, HL 1560 T / PE-90, HL 1560 ST / PE-90, RD 1635 CF PE, Shoulder drive | <b>16.23</b>                                        |                                                        | ST58                                | 635                                          | 488135                                           |
|                                                                                                                            |                                                     |                                                        | ST68                                | 635                                          | 488136                                           |
|                                         |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> HL 1500 T / PE-90, HL 1500 ST / PE-90, HL 1560 T / PE-90, HL 1560 ST / PE-90, RD 1635 CF PE, Shoulder drive | <b>16.24</b>                                        |                                                        | GT60                                | 760                                          | 488062                                           |
|                                                                                                                            |                                                     |                                                        |                                     |                                              |                                                  |
|                                         |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> RD 308, RD 314, RD 414, HLX 3 (F), <i>FEMALE</i>                                                            | <b>16.25</b>                                        |                                                        | R32                                 | 205                                          | 488060                                           |
|                                         |                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> RD 308, RD 314, RD 414, HLX 3                                                                               | <b>16.26</b>                                        |                                                        | R32                                 | 410                                          | 488187                                           |
|                                                                                                                            |                                                     |                                                        | T38                                 | 410                                          | 488186                                           |
|                                         |                                                     |                                                        |                                     |                                              |                                                  |

| Drifter<br>Bohrhammer<br>Marteau perforateur<br>Martillo perforador       | Illustration<br>Bild<br>Illustration<br>Ilustración                                                 | Tube<br>Spülrohr<br>Trou d'injection<br>Tubo<br>Ø [mm] | Thread<br>Gewinde<br>Filet<br>Rosca | Length<br>Länge<br>Longueur<br>Largo<br>[mm] | Part No.<br>Artikel Nr.<br>N° de réf.<br>Cat. N° |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------------------|
| <b>SANDVIK</b> RD 520, RD 525<br>10 Splines, 10 Flügel                    | <b>16.27</b><br>   |                                                        | R38                                 | 525                                          | 488059                                           |
|                                                                           |                                                                                                     |                                                        | T38                                 | 525                                          | 488047                                           |
|                                                                           |                                                                                                     |                                                        | T45                                 | 525                                          | 488163                                           |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                           |                                                                                                     |                                                        | R32                                 | 600                                          | 488077                                           |
|                                                                           |                                                                                                     |                                                        | T38                                 | 600                                          | 488055                                           |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                           |                                                                                                     |                                                        | R32                                 | 745                                          | 488111                                           |
|                                                                           |                                                                                                     |                                                        | T38                                 | 745                                          | 488056                                           |
|                                                                           |                                                                                                     |                                                        | T45                                 | 745                                          | 488253                                           |
| <b>SANDVIK</b> RD 520 PE-45, RD 525 PE-45<br>8 Splines, 8 Flügel          | <b>16.28</b><br>   |                                                        | R32                                 | 600                                          | 488080                                           |
|                                                                           |                                                                                                     |                                                        | T38                                 | 600                                          | 488100                                           |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                           |                                                                                                     |                                                        | R32                                 | 745                                          | 488058                                           |
|                                                                           |                                                                                                     |                                                        | T35                                 | 745                                          | 488046                                           |
|                                                                           |                                                                                                     |                                                        | T38                                 | 745                                          | 488054                                           |
|                                                                           |                                                                                                     |                                                        | T45                                 | 745                                          | 488254                                           |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>SANDVIK</b> RD 900, RD 900 PE, RD 900 PE/RP                            | <b>16.29</b><br> |                                                        | T45                                 | 600                                          | 488242                                           |
|                                                                           |                                                                                                     |                                                        | T51                                 | 600                                          | 488224                                           |
| <b>SANDVIK</b> RD 1635CF-80                                               | <b>16.30</b><br> |                                                        | GT60                                | 760                                          | 488139                                           |
|                                                                           |                                                                                                     |                                                        |                                     |                                              |                                                  |
| <b>SECOMA</b> HYDRASTAR 200 FEMALE<br><b>INGERSOLL-RAND</b> HYDRASTAR 200 | <b>17.01</b><br> |                                                        | R32                                 | 351                                          | 487927                                           |





**FMS**

**HARD ROCK TOOLS**

TIME TO CHANGE YOUR HABITS





**FMS**

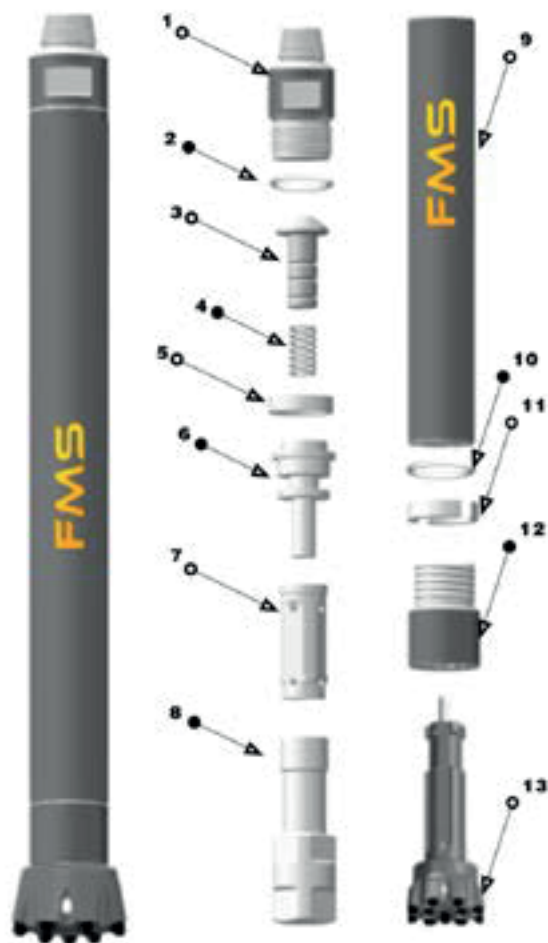
# HAMMER PARTS

Bits, Coupling & More ...





# DHH35 DTH HAMMER



| Description          | Weight (Kg) | Model  |
|----------------------|-------------|--------|
| 1-Top Sub            | 4.2         | 484120 |
| 2- O-ring            | 0.01        | 469138 |
| 3-Check Valve        | 0.2         | 424264 |
| 4-Spring             | 0.02        | 434472 |
| 5-Compression Buffer | 0.02        | 464049 |
| 6-Air Distributor    | 1.4         | 473072 |
| 7-Internal Cylinder  | 1.6         | 432986 |
| 8-Piston             | 5.4         | 498654 |
| 9-External Cylinder  | 9.5         | 439631 |
| 10- O-ring           | 0.01        | 468561 |
| 11-Stop Ring         | 0.2         | 430911 |
| 12-Drive Chuck       | 1.95        | 498909 |
| 13-Drill Bit         | 5           | 404471 |

|                        |         |                           |                |                            |         |        |
|------------------------|---------|---------------------------|----------------|----------------------------|---------|--------|
| Length (Excluding bit) | 930mm   | Hole Range                | φ90—φ110       | Recommended rotation speed | 28r/min |        |
| External Diameter      | 24.50Kg | Connection Thread         | API 2 3/8" Reg |                            |         |        |
| Description            | φ81mm   | Working air pressure      | 0.5—2.5Mpa     | Air Consumption            | 10bar   | 80L/s  |
| Description            | IR3.5"  | Impact frequency at 17Bar | 28Hz           |                            | 18bar   | 160L/s |
|                        | Cop34   |                           |                |                            | 24bar   | 210L/s |

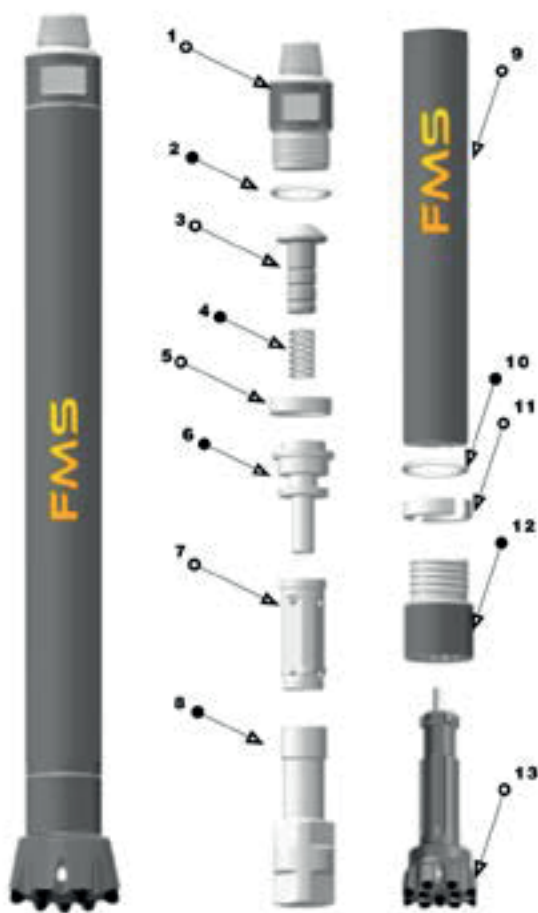
According to requirement of client, top sub can be made as the design with double spanners and protected with tungsten carbide inserts; Quantity of air guide holes on the check valve can be increased to enhance flushing of rock cuttings.

## BITS FOR 3" DTH HAMMER

| Drill Bit                                                                                                      | Bit Diameter | Flushing | Gauge   | Front   | Weight | Model  |
|----------------------------------------------------------------------------------------------------------------|--------------|----------|---------|---------|--------|--------|
|                                                                                                                | (mm)         | Holes    | Buttons | Buttons | (Kg)   |        |
|  <p><b>Cop32</b></p>          | 85           | 2        | 6×φ14   | 4×φ12   | 4.2    | 189475 |
|                                                                                                                | 90           | 2        | 6×φ14   | 5×φ12   | 4.5    | 167858 |
|                                                                                                                | 95           | 2        | 7×φ14   | 5×φ12   | 4.7    | 171180 |
|                                                                                                                | 100          | 2        | 8×φ14   | 6×φ12   | 5      | 184682 |
|                                                                                                                | 105          | 2        | 8×φ14   | 6×φ13   | 5.3    | 130047 |
|  <p><b>BR3</b></p>           | 85           | 2        | 6×φ14   | 4×φ12   | 3.8    | 123445 |
|                                                                                                                | 90           | 2        | 6×φ14   | 5×φ12   | 4      | 116545 |
|                                                                                                                | 95           | 2        | 7×φ14   | 5×φ12   | 4.3    | 143780 |
|                                                                                                                | 100          | 2        | 8×φ14   | 6×φ12   | 4.8    | 136715 |
|                                                                                                                | 105          | 2        | 8×φ14   | 6×φ13   | 5.2    | 118358 |
|  <p><b>DHD3.5 Cop34</b></p> | 85           | 2        | 6×φ14   | 4×φ12   | 4.2    | 195655 |
|                                                                                                                | 90           | 2        | 6×φ14   | 5×φ12   | 4.5    | 111318 |
|                                                                                                                | 95           | 2        | 7×φ14   | 5×φ12   | 4.8    | 131792 |
|                                                                                                                | 100          | 2        | 8×φ14   | 6×φ12   | 5      | 141198 |
|                                                                                                                | 105          | 2        | 8×φ14   | 6×φ13   | 5.5    | 145104 |
|  <p><b>XL3</b></p>          | 85           | 2        | 6×φ14   | 4×φ12   | 4.5    | 171839 |
|                                                                                                                | 90           | 2        | 6×φ14   | 5×φ12   | 4.7    | 189498 |
|                                                                                                                | 95           | 2        | 7×φ14   | 5×φ12   | 4.9    | 136908 |
|                                                                                                                | 100          | 2        | 8×φ14   | 6×φ12   | 5      | 120112 |
|                                                                                                                | 105          | 2        | 8×φ14   | 6×φ13   | 5.5    | 115835 |

Optional:FF--Flat face; CC---Concave;CV---Convex

## DHH45 DTH HAMMER



| Description          | Weight (Kg) | Model  |
|----------------------|-------------|--------|
| 1-Top Sub            | 8.7         | 415808 |
| 2- O-ring            | 0.01        | 493559 |
| 3-Check Valve        | 0.42        | 485277 |
| 4-Spring             | 0.04        | 435377 |
| 5-Compression Buffer | 0.04        | 460166 |
| 6-Air Distributor    | 2.2         | 409994 |
| 7-Internal Cylinder  | 2.3         | 423197 |
| 8-Piston             | 8.8         | 490396 |
| 9-External Cylinder  | 14.8        | 476476 |
| 10- O-ring           | 0.01        | 454418 |
| 11-Stop Ring         | 0.2         | 410959 |
| 12-Drive Chuck       | 3.42        | 433157 |
| 13-Drill Bit         | 8.3         | 482926 |

|                           |         |                              |                |                               |            |        |
|---------------------------|---------|------------------------------|----------------|-------------------------------|------------|--------|
| Length<br>(Excluding bit) | 1030mm  | Hole<br>Range                | φ110—φ135      | Recommended<br>rotation speed | 25-40r/min |        |
| Weight (Excluding<br>bit) | 39.20Kg | Connection<br>Thread         | API 2 3/8” Reg |                               |            |        |
| External Diameter         | φ99mm   | Working air<br>pressure      | 0.5—2.5Mpa     | Air Consumption               | 10bar      | 100L/s |
| Bit Shank                 | Cop44   | Impact frequency<br>at 17Bar | 27Hz           |                               | 18bar      | 180L/s |
|                           | DHD340  |                              |                |                               | 24bar      | 250L/s |

According to requirement of client, top sub can be made as the design with double spanners and protected with tungsten carbide inserts; Quantity of air guide holes on the check valve can be increased to enhance flushing of rock cuttings.

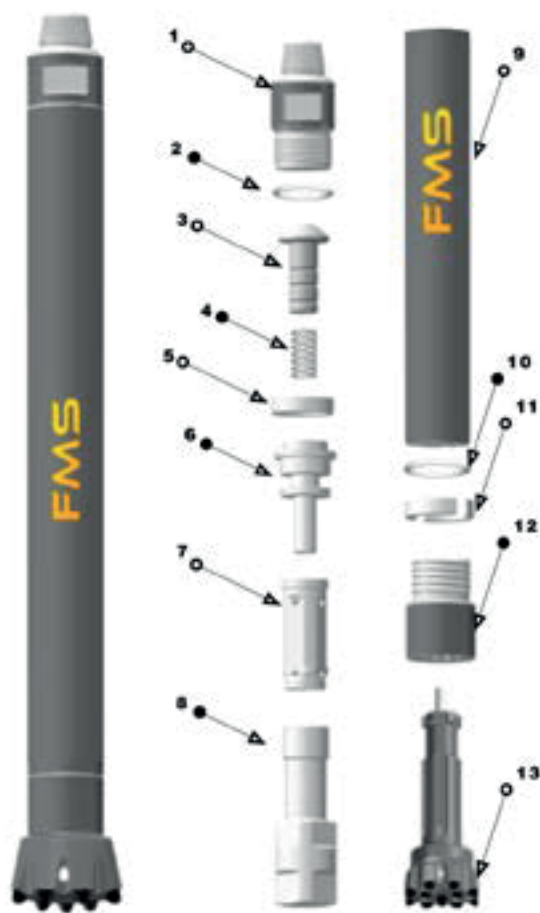
## DTH BITS FOR 4" DTH HAMMER

| Drill Bit                                                                                          | Bit Diameter | Flushing | Gauge   | Front   | Weight | Model  |
|----------------------------------------------------------------------------------------------------|--------------|----------|---------|---------|--------|--------|
|                                                                                                    | (mm)         | Holes    | Buttons | Buttons | (Kg)   |        |
| <br>DHD340A Cop44 | 105          | 2        | 6×φ14   | 5×φ13   | 8.5    | 186635 |
|                                                                                                    | 110          | 2        | 7×φ14   | 6×φ13   | 8.8    | 121082 |
|                                                                                                    | 115          | 2        | 8×φ14   | 7×φ13   | 9      | 177155 |
|                                                                                                    | 120          | 2        | 8×φ14   | 8×φ13   | 9.8    | 192080 |
|                                                                                                    | 127          | 3        | 9×φ14   | 9×φ14   | 11     | 127320 |
| <br>SD4          | 105          | 2        | 6×φ14   | 5×φ13   | 9      | 152571 |
|                                                                                                    | 110          | 2        | 7×φ14   | 6×φ13   | 9.5    | 119602 |
|                                                                                                    | 115          | 2        | 8×φ14   | 7×φ13   | 9.8    | 164718 |
|                                                                                                    | 120          | 2        | 8×φ14   | 8×φ13   | 11.5   | 101546 |
|                                                                                                    | 127          | 3        | 9×φ14   | 9×φ14   | 12.3   | 188542 |
| <br>QL40        | 105          | 2        | 6×φ14   | 5×φ13   | 9      | 115286 |
|                                                                                                    | 110          | 2        | 7×φ14   | 6×φ13   | 9.2    | 123964 |
|                                                                                                    | 115          | 2        | 8×φ14   | 7×φ13   | 9.5    | 141762 |
|                                                                                                    | 120          | 2        | 8×φ14   | 8×φ13   | 10.3   | 135802 |
|                                                                                                    | 127          | 3        | 9×φ14   | 9×φ14   | 11.5   | 191584 |
| <br>Mission40   | 105          | 2        | 6×φ14   | 5×φ13   | 6      | 192989 |
|                                                                                                    | 110          | 2        | 7×φ14   | 6×φ13   | 6.2    | 139605 |
|                                                                                                    | 115          | 2        | 8×φ14   | 7×φ13   | 6.6    | 199131 |
|                                                                                                    | 120          | 2        | 8×φ14   | 8×φ13   | 7      | 100109 |
|                                                                                                    | 127          | 3        | 9×φ14   | 9×φ14   | 7.4    | 160680 |

Optional:FF--Flat face; CC---Concave;CV---Convex



## DHH55 DTH HAMMER



| Description          | Weight (Kg) | Model  |
|----------------------|-------------|--------|
| 1-Top Sub            | 13.2        | 479528 |
| 2- O-ring            | 0.01        | 465369 |
| 3-Check Valve        | 0.8         | 407196 |
| 4-Spring             | 0.04        | 491132 |
| 5-Compression Buffer | 0.06        | 472003 |
| 6-Air Distributor    | 3.8         | 430255 |
| 7-Internal Cylinder  | 4           | 416418 |
| 8-Piston             | 17.5        | 416490 |
| 9-External Cylinder  | 25          | 483502 |
| 10- O-ring           | 0.01        | 440725 |
| 11-Stop Ring         | 0.3         | 449634 |
| 12-Drive Chuck       | 6.4         | 431546 |
| 13-Drill Bit         | 16          | 404330 |

|                           |         |                              |                             |                               |            |        |
|---------------------------|---------|------------------------------|-----------------------------|-------------------------------|------------|--------|
| Length<br>(Excluding bit) | 1170mm  | Hole<br>Range                | Φ135—Φ155                   | Recommended<br>rotation speed | 20-30r/min |        |
| Weight (Excluding<br>bit) | 71.5Kg  | Connection<br>Thread         | API 2 3/8" or 3<br>1/2" Reg |                               |            |        |
| External Diameter         | φ125mm  | Working air<br>pressure      | 0.5—2.5Mpa                  | Air Consumption               | 10bar      | 145L/s |
| Bit Shank                 | Cop54   | Impact frequency<br>at 17Bar | 25Hz                        |                               | 18bar      | 280L/s |
|                           | DHD350R |                              |                             |                               | 24bar      | 390L/s |

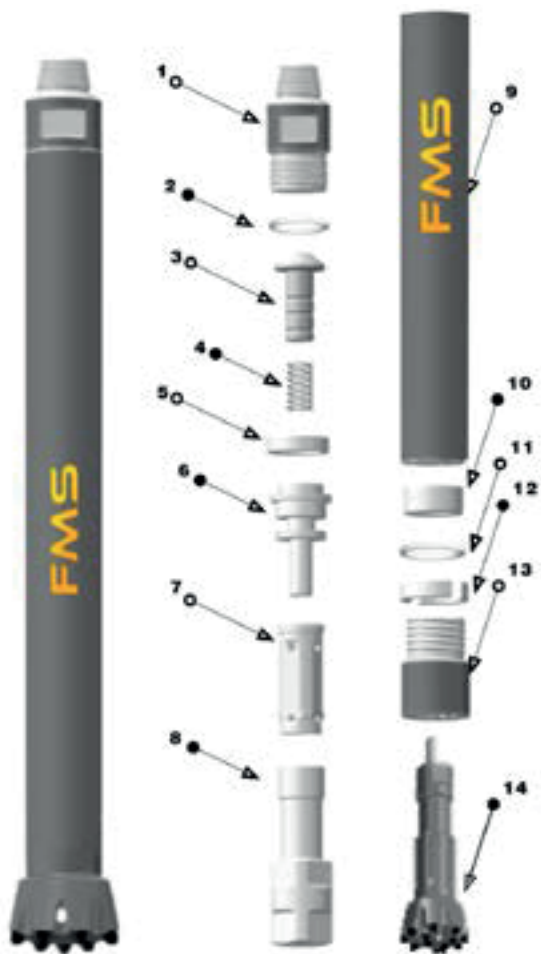
According to requirement of client, top sub can be made as the design with double spanners and protected with tungsten carbide inserts; Quantity of air guide holes on the check valve can be increased to enhance flushing of rock cuttings.

## DTH BITS FOR 5" DTH HAMMER

| Drill Bit                                                                                                 | Bit Diameter | Flushing | Gauge   | Front   | Weight | Model  |
|-----------------------------------------------------------------------------------------------------------|--------------|----------|---------|---------|--------|--------|
|                                                                                                           | (mm)         | Holes    | Buttons | Buttons | (Kg)   |        |
| <br><b>DHD350R Cop54</b> | 133          | 2        | 7×φ16   | 6×φ14   | 16     | 176544 |
|                                                                                                           | 140          | 2        | 8×φ16   | 7×φ14   | 16.5   | 118336 |
|                                                                                                           | 146          | 2        | 8×φ16   | 8×φ14   | 17     | 144210 |
|                                                                                                           | 152          | 2        | 8×φ16   | 7×φ16   | 17.5   | 139446 |
|                                                                                                           | 165          | 2        | 8×φ16   | 8×φ16   | 18.5   | 140189 |
| <br><b>SD5</b>          | 133          | 2        | 7×φ16   | 6×φ14   | 15.5   | 155782 |
|                                                                                                           | 140          | 2        | 8×φ16   | 7×φ14   | 16     | 111234 |
|                                                                                                           | 146          | 2        | 8×φ16   | 8×φ14   | 16.5   | 180497 |
|                                                                                                           | 152          | 2        | 8×φ16   | 7×φ16   | 17     | 155292 |
|                                                                                                           | 165          | 2        | 8×φ16   | 8×φ16   | 18     | 120628 |
| <br><b>QL50</b>        | 133          | 2        | 7×φ16   | 6×φ14   | 15.5   | 159913 |
|                                                                                                           | 140          | 2        | 8×φ16   | 7×φ14   | 16     | 134371 |
|                                                                                                           | 146          | 2        | 8×φ16   | 8×φ14   | 16.5   | 127834 |
|                                                                                                           | 152          | 2        | 8×φ16   | 7×φ16   | 17     | 160951 |
|                                                                                                           | 165          | 2        | 8×φ16   | 8×φ16   | 18     | 185427 |
| <br><b>Mission50</b>   | 133          | 2        | 7×φ16   | 6×φ14   | 12.5   | 172545 |
|                                                                                                           | 140          | 2        | 8×φ16   | 7×φ14   | 13.5   | 141356 |
|                                                                                                           | 146          | 2        | 8×φ16   | 8×φ14   | 14     | 152830 |
|                                                                                                           | 152          | 2        | 8×φ16   | 7×φ16   | 14.4   | 194083 |
|                                                                                                           | 165          | 2        | 8×φ16   | 8×φ16   | 15     | 143647 |

Optional:FF--Flat face; CC---Concave;CV---Convex

## DHH65 DTH HAMMER



| Description          | Weight (Kg) | Model  |
|----------------------|-------------|--------|
| 1-Top Sub            | 17          | 491012 |
| 2- O-ring            | 0.02        | 469808 |
| 3-Breakout Ring      | 0.8         | 428785 |
| 4-Check Valve        | 0.04        | 452256 |
| 5-Spring             | 0.08        | 469977 |
| 6-Compression Buffer | 5.2         | 454082 |
| 7-Air Distributor    | 5.2         | 468553 |
| 8-Internal Cylinder  | 23.6        | 497191 |
| 09-Piston            | 36.8        | 448989 |
| 10-External Cylinder | 2.4         | 467418 |
| 11- O-ring           | 0.02        | 440866 |
| 12-Stop Ring         | 0.6         | 474018 |
| 13-Breakout Ring     | 6           | 495989 |
| 14-Drive Chuck       | 26          | 415871 |

|                           |         |                              |                |                               |            |        |
|---------------------------|---------|------------------------------|----------------|-------------------------------|------------|--------|
| Length<br>(Excluding bit) | 1248mm  | Hole<br>Range                | Φ155—φ190      | Recommended<br>rotation speed | 15-25r/min |        |
| Weight (Excluding<br>bit) | 98.00Kg | Connection<br>Thread         | API 3 1/2" Reg |                               |            |        |
| External Diameter         | φ142mm  | Working air<br>pressure      | 0.5—2.5Mpa     | Air Consumption               | 10bar      | 175L/s |
| Bit Shank                 | Cop64   | Impact frequency<br>at 17Bar | 23Hz           |                               | 18bar      | 340L/s |
|                           | DHD360  |                              |                |                               | 24bar      | 475L/s |

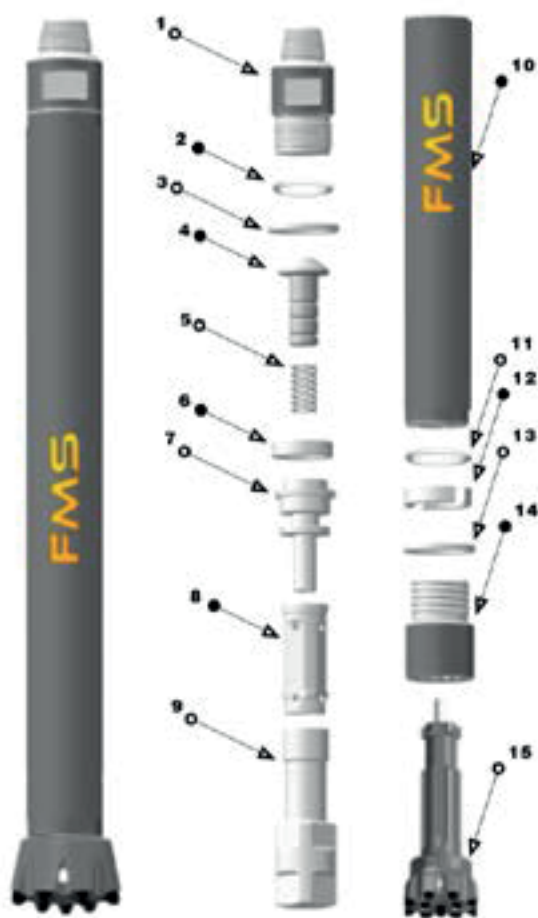
According to requirement of client, top sub can be made as the design with double spanners and protected with tungsten carbide inserts; Quantity of air guide holes on the check valve can be increased to enhance flushing of rock cuttings.

## DTH BITS FOR 6" DTH HAMMER

| Drill Bit                                                                                         | Bit Diameter | Flushing | Gauge   | Front   | Weight | Model  |
|---------------------------------------------------------------------------------------------------|--------------|----------|---------|---------|--------|--------|
|                                                                                                   | (mm)         | Holes    | Buttons | Buttons | (Kg)   |        |
| <br>DHD360 Cop64 | 152          | 2        | 8×φ16   | 8×φ16   | 22     | 143768 |
|                                                                                                   | 165          | 2        | 8×φ18   | 8×φ16   | 24     | 159821 |
|                                                                                                   | 178          | 2        | 8×φ18   | 8×φ16   | 26     | 120188 |
|                                                                                                   | 190          | 3        | 9×φ18   | 9×φ16   | 28     | 169738 |
|                                                                                                   | 203          | 2        | 10×φ18  | 10×φ16  | 29.5   | 129904 |
| <br>SD6         | 152          | 2        | 8×φ16   | 8×φ16   | 26     | 107558 |
|                                                                                                   | 165          | 2        | 8×φ18   | 8×φ16   | 27     | 198746 |
|                                                                                                   | 178          | 2        | 8×φ18   | 8×φ16   | 29     | 183646 |
|                                                                                                   | 190          | 3        | 9×φ18   | 9×φ16   | 32     | 160006 |
|                                                                                                   | 203          | 2        | 10×φ18  | 10×φ16  | 34     | 129482 |
| <br>QL60       | 152          | 2        | 8×φ16   | 8×φ16   | 24     | 141129 |
|                                                                                                   | 165          | 2        | 8×φ18   | 8×φ16   | 25     | 161286 |
|                                                                                                   | 178          | 2        | 8×φ18   | 8×φ16   | 27     | 142172 |
|                                                                                                   | 190          | 3        | 9×φ18   | 9×φ16   | 29     | 142228 |
|                                                                                                   | 203          | 2        | 10×φ18  | 10×φ16  | 33     | 107892 |
| <br>Mission60  | 152          | 2        | 8×φ16   | 8×φ16   | 22     | 110613 |
|                                                                                                   | 165          | 2        | 8×φ18   | 8×φ16   | 23     | 168987 |
|                                                                                                   | 178          | 2        | 8×φ18   | 8×φ16   | 24     | 171654 |
|                                                                                                   | 190          | 3        | 9×φ18   | 9×φ16   | 25     | 165774 |
|                                                                                                   | 203          | 2        | 10×φ18  | 10×φ16  | 28     | 141908 |

Optional:FF--Flat face; CC---Concave;CV---Convex

## DHH85 DTH HAMMER



| Description          | Weight (Kg) | Model  |
|----------------------|-------------|--------|
| 1-Top Sub            | 42          | 415871 |
| 2- O-ring            | 0.02        | 406036 |
| 3-Breakout Ring      | 0.2         | 493140 |
| 4-Check Valve        | 1.2         | 493141 |
| 5-Spring             | 0.1         | 491666 |
| 6-Compression Buffer | 0.42        | 436421 |
| 7-Air Distributor    | 13.4        | 488835 |
| 8-Internal Cylinder  | 8.2         | 458384 |
| 09-Piston            | 41.8        | 494731 |
| 10-External Cylinder | 62.8        | 405675 |
| 11- O-ring           | 0.02        | 401585 |
| 12-Stop Ring         | 1.4         | 479617 |
| 13-Breakout Ring     | 0.2         | 439685 |
| 14-Drive Chuck       | 17          | 446162 |
| 15-Drill Bit         | 40          | 466456 |

|                           |        |                              |                |                               |         |        |
|---------------------------|--------|------------------------------|----------------|-------------------------------|---------|--------|
| Length<br>(Excluding bit) | 1487mm | Hole<br>Range                | Φ195—Φ254      | Recommended<br>rotation speed | 14r/min |        |
| Weight (Excluding<br>bit) | 188Kg  | Connection<br>Thread         | API 4 1/2" Reg |                               |         |        |
| External Diameter         | Φ180mm | Working air<br>pressure      | 0.5—2.5Mpa     | Air Consumption               | 10bar   | 190L/s |
| Bit Shank                 | Cop84  | Impact frequency<br>at 17Bar | 20Hz           |                               | 18bar   | 370L/s |
|                           | DHD380 |                              |                |                               | 24bar   |        |

According to requirement of client, top sub can be made as the design with double spanners and protected with tungsten carbide inserts; Quantity of air guide holes on the check valve can be increased to enhance flushing of rock cuttings.



## DTH BITS FOR 8" DTH HAMMER

| Drill Bit                                                                                         | Bit Diameter | Flushing | Gauge   | Front   | Weight | Model  |
|---------------------------------------------------------------------------------------------------|--------------|----------|---------|---------|--------|--------|
|                                                                                                   | (mm)         | Holes    | Buttons | Buttons | (Kg)   |        |
| <br>DHD380 Cop84 | 195          | 3        | 9×φ18   | 9×φ18   | 34     | 100979 |
|                                                                                                   | 203          | 2        | 10×φ18  | 10×φ18  | 36     | 181708 |
|                                                                                                   | 216          | 3        | 12×φ18  | 12×φ18  | 45     | 141877 |
|                                                                                                   | 254          | 3        | 12×φ18  | 20×φ18  | 58     | 108855 |
|                                                                                                   | 305          | 4        | 12×φ18  | 30×φ18  | 75     | 162912 |
| <br>SD8         | 195          | 3        | 9×φ18   | 9×φ18   | 33     | 153461 |
|                                                                                                   | 203          | 3        | 10×φ18  | 10×φ18  | 37     | 111413 |
|                                                                                                   | 216          | 4        | 12×φ18  | 12×φ18  | 42     | 195360 |
|                                                                                                   | 254          | 4        | 12×φ18  | 20×φ18  | 53     | 189457 |
|                                                                                                   | 305          | 4        | 12×φ18  | 30×φ18  | 80     | 162612 |
| <br>QL80       | 195          | 3        | 9×φ18   | 9×φ18   | 33     | 186122 |
|                                                                                                   | 203          | 3        | 10×φ18  | 10×φ18  | 37.5   | 104857 |
|                                                                                                   | 216          | 4        | 12×φ18  | 12×φ18  | 42     | 181634 |
|                                                                                                   | 254          | 4        | 12×φ18  | 20×φ18  | 54     | 129101 |
|                                                                                                   | 305          | 4        | 12×φ18  | 30×φ18  | 82     | 127310 |
| <br>Mission80  | 195          | 3        | 9×φ18   | 9×φ18   | 33     | 189681 |
|                                                                                                   | 203          | 3        | 10×φ18  | 10×φ18  | 37.5   | 152327 |
|                                                                                                   | 216          | 4        | 12×φ18  | 12×φ18  | 42     | 182523 |
|                                                                                                   | 254          | 4        | 12×φ18  | 20×φ18  | 54     | 165901 |
|                                                                                                   | 305          | 4        | 12×φ18  | 30×φ18  | 82     | 172947 |

Optional:FF--Flat face; CC---Concave;CV---Convex





# ROCK DRILLING

S E R I E S



## TK32 KIRICI TABANCA



| TK32 KIRICI TABANCA ÖZELLİKLERİ |            |
|---------------------------------|------------|
| AĞIRLIK                         | 30 kg      |
| UZUNLUK                         | 700mm      |
| Shank                           | 32x160     |
| Hava Tüketimi                   | 1.8 m3/min |
| DARBE ADEDİ (Dk.)               | 1110       |
| Hava Girişi                     | 19 mm 3/4" |

TK32 Zorlu gereksinimleri karşılamak için geliştirilmiş bu havalı kırıcı tabanca, orta ve sert malzemelerin kırımında kendini kanıtlamıştır.

Beton, asfalt, yol yüzeyi kesme, açık ve dökme taş ocakları, duvar, köprü kiriş ve ayakları, demir blokları, demir cevher potalarının temizliği, kömür ve sert madenlerde kendine kullanım alanı bulmaktadır.

Kolay bakımı, bol ve uygun fiyatlı yedek parçaları sayesinde, kullanım maliyetleri oldukça düşüktür.







Ostim OSB Mah. 1201 Cad.  
No:92 **Yenimahalle / ANKARA**

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