



ROCK DRILLING TOOLS

2022



PRODUCT CATALOGUE

2022



Small hole drilling tools

- ▶ Plug hole rods
- ▶ Integral drill steel
- ▶ Tapered rods and bits

| | |
|--------------|------------|
| _____ | bits 4° 46 |
| _____ | bits 7° |
| _____ | bits 11° |
| _____ | bits 12° |
| _____ | rods 4° 46 |
| _____ | rods 7° |
| _____ | rods 11° |
| _____ | rods 12° |
| _____ | |
| ▶ Shank rods | |
| _____ | R23 |
| _____ | R25 |
| _____ | R28 |
| _____ | R32 |



Tunneling and drifting

- ▶ Drifting rods

| | |
|-------|---------|
| _____ | R32-R25 |
| _____ | R32-R28 |
| _____ | R38-R32 |
| _____ | T38-R32 |
| _____ | R38-R35 |
| _____ | T38-R35 |

- ▶ Button bits

| | |
|-------|-----|
| _____ | R25 |
| _____ | R28 |
| _____ | R32 |
| _____ | R35 |

- ▶ Couplings



Extension drilling

- ▶ Extension rods

| | |
|-------|------|
| _____ | R25 |
| _____ | R32 |
| _____ | T38 |
| _____ | T45 |
| _____ | T51 |
| _____ | T60 |
| _____ | MT60 |

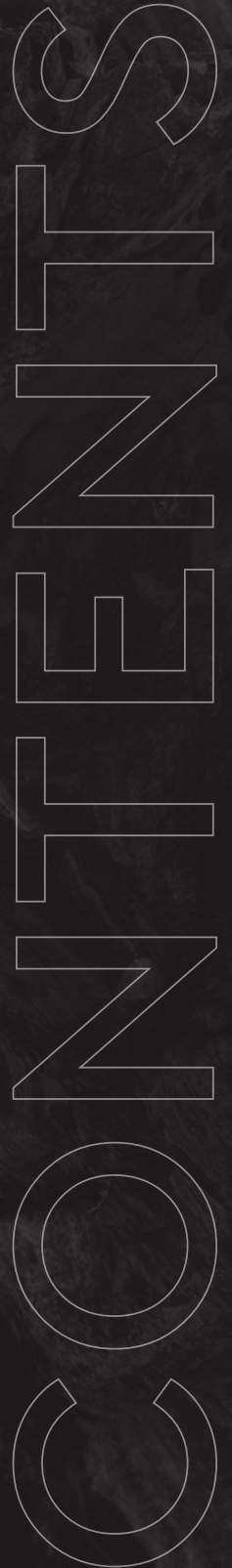
- ▶ Button bits

| | |
|-------|------|
| _____ | R25 |
| _____ | R28 |
| _____ | R32 |
| _____ | T38 |
| _____ | T45 |
| _____ | T51 |
| _____ | MT60 |

- ▶ Couplings

Shank adaptors

Technical information Button bits



History of Monark

The company has its roots back to 1945 when a small plant was founded in Ockelbo, Sweden. One year later the company started with production of Integral drill Steel - which still is one of our high-volume products. Today Monark operates as a family owned company with production in both Sweden and Norway. We serve the global market with high quality Scandinavian made Rock Drilling tools.

In 1948 the production of stone working tools (REBIT) started up at the same plant. Monark integral drill steel factory was founded in Oslo in 1956 and moved to the current location in 1958. Both locations have had significant investments and changes over the years - some of them highlighted below.

Sweden

- 1945 – Founded in Ockelbo, Sweden
- 1977 – Company name changed to REBIT
- 1980 – Company sold to Fagersta AB under Secoroc
- 1993 – Fagersta moves all integral drill rod manufacturing to Ockelbo
- 1996 – Factory moves to current location
- 2006 – Large investment in automated robotic production
- 2018 – Company name change to Epiroc
- 2019 – Became a Monark company

Norway

- 1956 – Founded in Oslo, Norway
- 1971 – Sold to Boart Longyear
- 1990 – Investment in several new machines in production
- 2005 – Sold to current owners
- 2007 – Changes name back to the original name Monark
- 2010 – Starts building a new production hall for button bits
- 2019 – build new production hall for carburization of rods
- 2019 – Acquire Epiroc Ockelbo.

Our two factories have had different paths over the years.

The Swedish location became a part of the SECOROC Organization, Atlas Copco, then Epiroc.

Monark came in 2019 and acquired the factory from Epiroc.

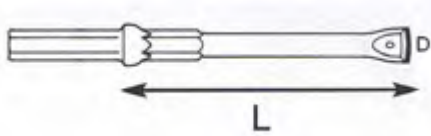
The Norwegian factory became a part of Boart Longyear in 1971 and was under this ownership until 2005 when the factory was sold to the current owners.

Today the company produces about 500 000 drill rods annually and 100 000 button bits.

Small hole drilling tools

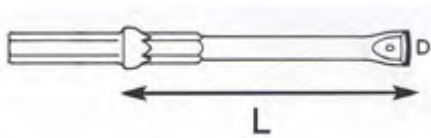
Plug hole rods

SHANK 19mm x 108mm



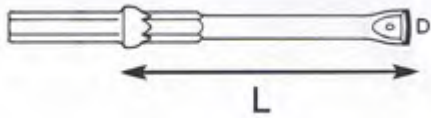
| Length | Diameter | Weight | Part number |
|--------|----------|--------|--------------|
| 200mm | 17mm | 0,8kg | 0721 2017-20 |
| 250mm | 17mm | 0,9kg | 0721 2517-20 |
| 300mm | 17mm | 1,0kg | 0721 3017-20 |
| 200mm | 20mm | 0,8kg | 0721 2020-20 |
| 250mm | 20mm | 0,9kg | 0721 2520-20 |
| 300mm | 20mm | 1,0kg | 0721 3020-20 |
| 200mm | 22mm | 0,8kg | 0721 2022-20 |
| 250mm | 22mm | 0,9kg | 0721 2522-20 |
| 300mm | 22mm | 1,0kg | 0721 3022-20 |
| 250mm | 23mm | 0,9kg | 0721 2523-20 |

SHANK 19mm x 82,5mm



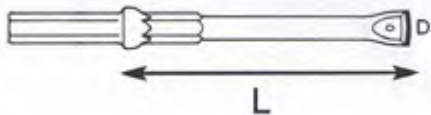
| Length | Diameter | Weight | Part number |
|--------|----------|--------|--------------|
| 200mm | 17mm | 0,8kg | 0722 2017-20 |
| 250mm | 17mm | 0,9kg | 0722 2517-20 |
| 300mm | 17mm | 1,0kg | 0722 3017-20 |
| 200mm | 20mm | 0,8kg | 0722 2020-20 |
| 250mm | 20mm | 0,9kg | 0722 2520-20 |
| 300mm | 20mm | 1,0kg | 0722 3020-20 |
| 200mm | 22mm | 0,8kg | 0722 2022-20 |
| 250mm | 22mm | 0,9kg | 0722 2522-20 |
| 300mm | 22mm | 1,0ka | 0722 3022-20 |

SHANK 22mm x 108mm



| Length | Diameter | Weight | Part number |
|--------|----------|--------|--------------|
| 200mm | 17mm | 0,8kg | 0711 2017-20 |
| 250mm | 17mm | 0,9kg | 0711 2517-20 |
| 300mm | 17mm | 1,0kg | 0711 3017-20 |
| 400mm | 17mm | 1,2kg | 0711 4017-20 |
| 200mm | 20mm | 0,8kg | 0711 2020-20 |
| 250mm | 20mm | 0,9kg | 0711 2520-20 |
| 300mm | 20mm | 1,0kg | 0711 3020-20 |
| 400mm | 20mm | 1,2kg | 0711 4020-20 |
| 200mm | 22mm | 0,8kg | 0711 2022-20 |
| 250mm | 22mm | 0,9kg | 0711 2522-20 |
| 300mm | 22mm | 1,0kg | 0711 3022-20 |
| 400mm | 22mm | 1,2kg | 0711 4022-20 |

SHANK 22mm x 82.5mm



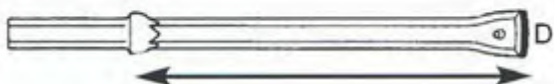
| Length | Diameter | Weight | Part number |
|--------|----------|--------|--------------|
| 200mm | 17mm | 0,8kg | 0712 2017-20 |
| 250mm | 17mm | 0,9kg | 0712 2517-20 |
| 300mm | 17mm | 1,0kg | 0712 3017-20 |
| 400mm | 17mm | 1,2kg | 0712 4017-20 |
| 200mm | 20mm | 0,8kg | 0712 2020-20 |
| 250mm | 20mm | 0,9kg | 0712 2520-20 |
| 300mm | 20mm | 1,0kg | 0712 3020-20 |
| 400mm | 20mm | 1,2kg | 0712 4020-20 |
| 200mm | 22mm | 0,8kg | 0712 2022-20 |
| 250mm | 22mm | 0,9kg | 0712 2522-20 |
| 300mm | 22mm | 1,0kg | 0712 3022-20 |
| 400mm | 22mm | 1,2kg | 0712 4022-20 |

SHANK 19mm x 108mm



| Series | Length | Diameter | Weight | Part number |
|--------|--------|----------|--------|--------------|
| 21 | 400mm | 29mm | 1,65kg | 0724 0429-20 |
| 21 | 800mm | 28mm | 2,85kg | 0724 0828-20 |
| 21 | 1200mm | 27mm | 3,65kg | 0724 1227-20 |
| 21 | 1600mm | 27mm | 4,05kg | 0724 1627-20 |
| 22 | 2400mm | 26mm | 5,85kg | 0724 2426-20 |
| 22 | 3200mm | 25mm | 7,65kg | 0724 3225-20 |
| 22 | 4000mm | 24mm | 9,45kg | 0724 4024-20 |

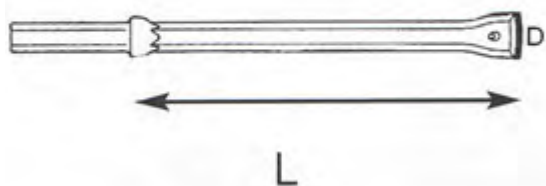
SHANK 22mm x 108mm HEX 19mm body



| Series | Length | Diameter | Weight | Part number |
|--------|--------|----------|--------|--------------|
| | 400mm | 29mm | 1,65kg | 0728 0429-20 |
| | 800mm | 28mm | 2,85kg | 0728 0828-20 |
| | 1200mm | 27mm | 3,15kg | 0728 1227-20 |
| | 1600mm | 27mm | 4,05kg | 0728 1627-20 |
| | 2400mm | 26mm | 5,85kg | 0728 2426-20 |
| | 3200mm | 25mm | 7,65kg | 0728 3225-20 |
| | 4000mm | 24mm | 9,45kg | 0728 4024-20 |
| | 400mm | 26mm | 1,35kg | 0728 0426-20 |
| | 800mm | 25mm | 2,25kg | 0728 0825-20 |
| | 1200mm | 24mm | 3,15kg | 0728 1224-20 |

Hex 22

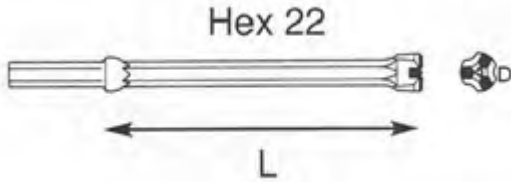
Hex 22



| Series | Length | Diameter | Weight | Part number |
|--------|--------|----------|--------|--------------|
| 11 | 800mm | 34mm | 3,0kg | 0714 0834-11 |
| 11 | 1600mm | 33mm | 5,4kg | 0714 1633-11 |
| 11 | 2400mm | 32mm | 7,8kg | 0714 2432-11 |
| 11 | 3200mm | 31mm | 10,2kg | 0714 3231-11 |
| 11 | 4000mm | 30mm | 12,6kg | 0714 4030-11 |
| 11 | 4800mm | 29mm | 15,0kg | 0714 4829-11 |
| 11 | 5600mm | 28mm | 17,4kg | 0714 5628-11 |
| 11 | 6400mm | 27mm | 19,8kg | 0714 6427-11 |
| 11 | 7200mm | 26mm | 22,2kg | 0714 7226-11 |
| 12 | 800mm | 40mm | 3,0kg | 0714 0840-11 |
| 12 | 1600mm | 39mm | 5,4kg | 0714 1639-11 |
| 12 | 2400mm | 38mm | 7,8kg | 0714 2438-11 |
| 12 | 3200mm | 37mm | 10,2kg | 0714 3237-11 |
| 12 | 4000mm | 36mm | 12,6kg | 0714 4036-11 |
| 12 | 4800mm | 35mm | 15,0kg | 0714 4835-11 |
| 12 | 5600mm | 34mm | 17,4kg | 0714 5634-11 |
| 12 | 6400mm | 33mm | 19,8kg | 0714 6433-11 |
| 12 | 7200mm | 32mm | 22,2kg | 0714 7232-11 |
| 12 | 8000mm | 31mm | 24,6kg | 0714 8031-11 |
| 12 | 8800mm | 30mm | 27,0kg | 0714 8830-11 |
| 12 | 9600mm | 29mm | 29,4kg | 0714 9629-11 |
| 13 | 400mm | 34mm | 1,8kg | 0714 0434-11 |
| 13 | 800mm | 33mm | 3,0kg | 0714 0833-11 |
| 13 | 1200mm | 32mm | 4,2kg | 0714 1232-11 |
| 13 | 1600mm | 31mm | 5,4kg | 0714 1631-11 |
| 13 | 2000mm | 30mm | 6,6kg | 0714 2030-11 |

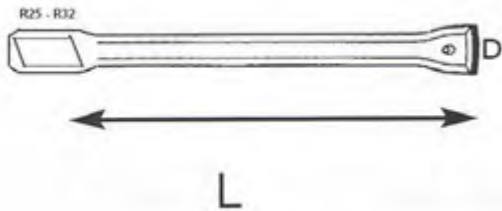
| Series | Length | Diameter | Weight | Part number |
|--------|--------|----------|--------|--------------|
| 17 | 600mm | 41mm | 2,4kg | 0714 0641-11 |
| 17 | 1200mm | 40mm | 4,2kg | 0714 1240-11 |
| 17 | 1800mm | 39mm | 6,0kg | 0714 1839-11 |
| 17 | 2400mm | 38mm | 7,8kg | 0714 2438-11 |

3-wing and threaded integral drill steel



| Length | Diameter | Weight | Part number |
|--------|----------|--------|--------------|
| 2400mm | 38mm | 7,8kg | 0761 2438-10 |
| 3200mm | 38mm | 10,2kg | 0761 3238-10 |
| 4000mm | 38mm | 12,6kg | 0761 4038-10 |
| 4800mm | 35mm | 15,0kg | 0761 4035-10 |

Threaded integral drill steel



| Length mm | Length ft | Diameter | Thread | Hex | Part number |
|-----------|-----------|-----------|--------|-----|----------------|
| 1950mm | 6,39ft | 23 - 34mm | R28 | H19 | H19R28 1950 23 |
| 1950mm | 6,39ft | 27 - 45mm | R28 | H22 | H22R28 1950 34 |
| 1950mm | 6,39ft | 27 - 45mm | R32 | H22 | H22R32 1950 34 |

Tapered rods and bits

Tapered bits

Tapered bits 4° 46



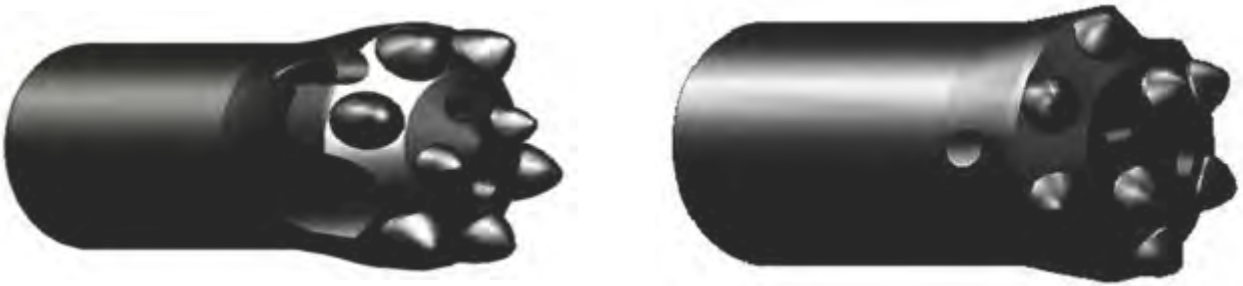
| Dia mm | Gauge carbide | Face carbide | Face flushing | Side flushing | Part number |
|--------|---------------|--------------|---------------|---------------|-------------|
| 33 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 446D33-8 |
| 33 | 5 X 7MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 446D33-7 |
| 35 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 446D35-8 |
| 38 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 446D38-8 |
| 41 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 446D41-8 |
| 41 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 446D41-7 |

Tapered bits 7°



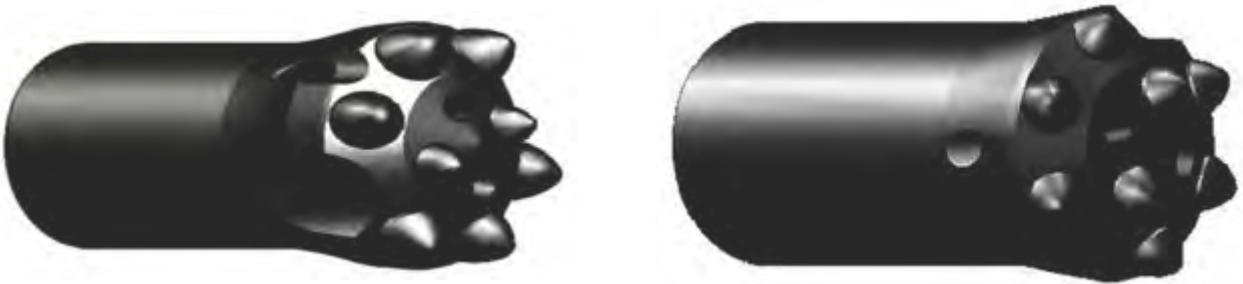
| Dia mm | Gauge carbide | Face carbide | Face flushing | Side flushing | Part number |
|--------|---------------|--------------|---------------|---------------|-------------|
| 33 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 7D33-8 |
| 33 | 5 X 7MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 7D33-7 |
| 35 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 7D35-8 |
| 38 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 7D38-8 |
| 41 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 7D41-8 |
| 41 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 7D41-7 |

Tapered bits 11°



| Dia mm | Gauge carbide | Face carbide | Face flushing | Side flushing | Part number |
|--------|---------------|--------------|---------------|---------------|-------------|
| 33 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 11D33-8 |
| 33 | 5 X 7MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 11D33-7 |
| 35 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 11D35-8 |
| 38 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 11D38-8 |
| 38 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 11D38-7 |
| 41 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 11D41-8 |
| 41 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 11D41-7 |

Tapered bits 12°

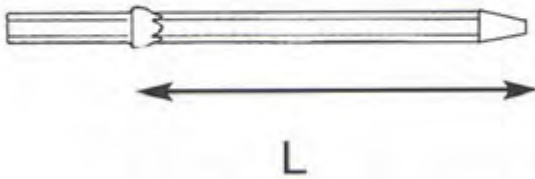


| Dia mm | Gauge carbide | Face carbide | Face flushing | Side flushing | Part number |
|--------|---------------|--------------|---------------|---------------|-------------|
| 32 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 12D32-8 |
| 32 | 5 X 7MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 12D32-7 |
| 33 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 12D33-8 |
| 33 | 5 X 7MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 12D33-7 |
| 35 | 6 X 7MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 12D35-8 |
| 38 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 12D38-8 |
| 38 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 12D38-7 |
| 41 | 6 X 9MM | 2 X 7MM | 2 X 5MM | 1 X 5MM | 12D41-8 |
| 41 | 5 X 9MM | 2 X 7MM | 1 X 5MM | 2 X 5MM | 12D41-7 |
| 45 | 6 X 9MM | 2 X 8MM | 2 X 5MM | 1 X 5MM | 12D45-8 |
| 45 | 5 X 9MM | 2 X 8MM | 1 X 5MM | 2 X 5MM | 12D45-7 |

Tapered rods

Tapered rods 22x108mm 4° 46

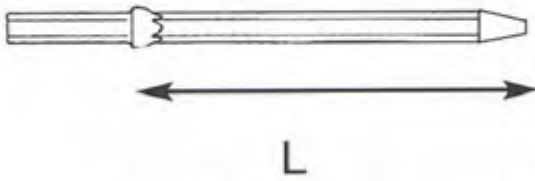
Hex 22



| Length mm | Length ft | Degrees | Weight | Part number |
|-----------|-----------|---------|--------|-----------------|
| 400mm | 1,31ft | 4,46° | 1,7kg | 0714 0400-4,46° |
| 610mm | 2,00ft | 4,46° | 2,3kg | 0714 0610-4,46° |
| 800mm | 2,62ft | 4,46° | 2,9kg | 0714 0800-4,46° |
| 1220mm | 4,00ft | 4,46° | 4,1kg | 0714 1220-4,46° |
| 1600mm | 5,24ft | 4,46° | 5,3kg | 0714 1600-4,46° |
| 1830mm | 6,00ft | 4,46° | 5,9kg | 0714 1830-4,46° |
| 1980mm | 6,49ft | 4,46° | 6,3kg | 0714 1980-4,46° |
| 2440mm | 8,00ft | 4,46° | 7,7kg | 0714 2440-4,46° |
| 3050mm | 10,00ft | 4,46° | 9,6kg | 0714 3050-4,46° |
| 3200mm | 10,49ft | 4,46° | 10,1kg | 0714 3200-4,46° |
| 3660mm | 12,00ft | 4,46° | 11,5kg | 0714 3660-4,46° |
| 4000mm | 13,12ft | 4,46° | 12,5kg | 0714 4000-4,46° |
| 4800mm | 15,74ft | 4,46° | 14,9kg | 0714 4800-4,46° |
| 5485mm | 18,00ft | 4,46° | 17,4kg | 0714 5485-4,46° |
| 5600mm | 18,37ft | 4,46° | 17,8kg | 0714 5600-4,46° |
| 6400mm | 21,00ft | 4,46° | 19,7kg | 0714 6400-4,46° |
| 7200mm | 23,62ft | 4,46° | 22,1kg | 0714 7200-4,46° |
| 7315mm | 24,00ft | 4,46° | 22,4kg | 0714 7315-4,46° |

Tapered rods 22x108mm 7°

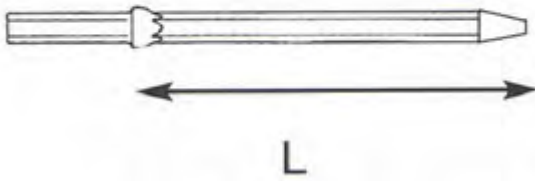
Hex 22



| Length mm | Length ft | Degrees | Weight | Part number |
|-----------|-----------|---------|--------|--------------|
| 400mm | 1,31ft | 7° | 1,7kg | 0714 0400-7° |
| 610mm | 2,00ft | 7° | 2,3kg | 0714 0610-7° |
| 800mm | 2,62ft | 7° | 2,9kg | 0714 0800-7° |
| 1220mm | 4,00ft | 7° | 4,1kg | 0714 1220-7° |
| 1600mm | 5,24ft | 7° | 5,3kg | 0714 1600-7° |
| 1830mm | 6,00ft | 7° | 5,9kg | 0714 1830-7° |
| 1980mm | 6,49ft | 7° | 6,3kg | 0714 1980-7° |
| 2440mm | 8,00ft | 7° | 7,7kg | 0714 2440-7° |
| 3050mm | 10,00ft | 7° | 9,6kg | 0714 3050-7° |
| 3200mm | 10,49ft | 7° | 10,1kg | 0714 3200-7° |
| 3660mm | 12,00ft | 7° | 11,5kg | 0714 3660-7° |
| 4000mm | 13,12ft | 7° | 12,5kg | 0714 4000-7° |
| 4800mm | 15,74ft | 7° | 14,9kg | 0714 4800-7° |
| 5485mm | 18,00ft | 7° | 17,4kg | 0714 5485-7° |
| 5600mm | 18,37ft | 7° | 17,8kg | 0714 5600-7° |
| 6400mm | 21,00ft | 7° | 19,7kg | 0714 6400-7° |
| 7200mm | 23,62ft | 7° | 22,1kg | 0714 7200-7° |
| 7315mm | 24,00ft | 7° | 22,4kg | 0714 7315-7° |

Tapered rods 22x108mm 11°

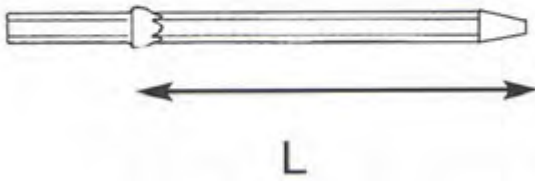
Hex 22



| Length mm | Length ft | Degrees | Weight | Part number |
|-----------|-----------|---------|--------|---------------|
| 400mm | 1,31ft | 11° | 1,7kg | 0714 0400-11° |
| 610mm | 2,00ft | 11° | 2,3kg | 0714 0610-11° |
| 800mm | 2,62ft | 11° | 2,9kg | 0714 0800-11° |
| 915mm | 3,00ft | 11° | 3,45kg | 0714 0915-11° |
| 1220mm | 4,00ft | 11° | 4,1kg | 0714 1220-11° |
| 1600mm | 5,24ft | 11° | 5,3kg | 0714 1600-11° |
| 1830mm | 6,00ft | 11° | 5,9kg | 0714 1830-11° |
| 1980mm | 6,49ft | 11° | 6,3kg | 0714 1980-11° |
| 2440mm | 8,00ft | 11° | 7,7kg | 0714 2440-11° |
| 3050mm | 10,00ft | 11° | 9,6kg | 0714 3050-11° |
| 3200mm | 10,49ft | 11° | 10,1kg | 0714 3200-11° |
| 3660mm | 12,00ft | 11° | 11,5kg | 0714 3660-11° |
| 4000mm | 13,12ft | 11° | 12,5kg | 0714 4000-11° |
| 4800mm | 15,74ft | 11° | 14,9kg | 0714 4800-11° |
| 5485mm | 18,00ft | 11° | 17,4kg | 0714 5485-11° |
| 5600mm | 18,37ft | 11° | 17,8kg | 0714 5600-11° |
| 6400mm | 21,00ft | 11° | 19,7kg | 0714 6400-11° |
| 7200mm | 23,62ft | 11° | 22,1kg | 0714 7200-11° |
| 7315mm | 24,00ft | 11° | 22,4kg | 0714 7315-11° |

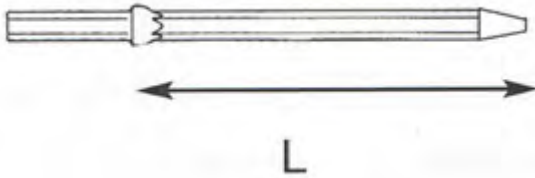
Tapered rods 22x108mm 12°

Hex 22



| Length mm | Length ft | Degrees | Weight | Part number |
|-----------|-----------|---------|--------|---------------|
| 400mm | 1,31ft | 12° | 1,7kg | 0714 0400-12° |
| 610mm | 2,00ft | 12° | 2,3kg | 0714 0610-12° |
| 800mm | 2,62ft | 12° | 2,9kg | 0714 0800-12° |
| 915mm | 3,00ft | 12° | 3,45kg | 0714 0915-12° |
| 1220mm | 4,00ft | 12° | 4,1kg | 0714 1220-12° |
| 1600mm | 5,24ft | 12° | 5,3kg | 0714 1600-12° |
| 1830mm | 6,00ft | 12° | 5,9kg | 0714 1830-12° |
| 1980mm | 6,49ft | 12° | 6,3kg | 0714 1980-12° |
| 2440mm | 8,00ft | 12° | 7,7kg | 0714 2440-12° |
| 3050mm | 10,00ft | 12° | 9,6kg | 0714 3050-12° |
| 3200mm | 10,49ft | 12° | 10,1kg | 0714 3200-12° |
| 3660mm | 12,00ft | 12° | 11,5kg | 0714 3660-12° |
| 4000mm | 13,12ft | 12° | 12,5kg | 0714 4000-12° |
| 4800mm | 15,74ft | 12° | 14,9kg | 0714 4800-12° |
| 5485mm | 18,00ft | 12° | 17,4kg | 0714 5485-12° |
| 5600mm | 18,37ft | 12° | 17,8kg | 0714 5600-12° |
| 6400mm | 21,00ft | 12° | 19,7kg | 0714 6400-12° |
| 7200mm | 23,62ft | 12° | 22,1kg | 0714 7200-12° |
| 7315mm | 24,00ft | 12° | 22,4kg | 0714 7315-12° |

Tapered rods 25x108mm 7°

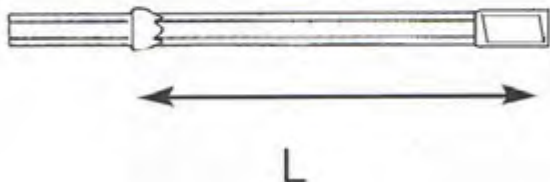


| Length mm | Length ft | Degrees | Weight | Part number |
|-----------|-----------|---------|--------|--------------|
| 1600mm | 5,24ft | 7° | 6,8kg | 0734 1600-7* |
| 1800mm | 5,90ft | 7° | 7,7kg | 0734 1800-7* |
| 2000mm | 6,56ft | 7° | 8,5kg | 0734 2000-7* |
| 2200mm | 7,21ft | 7° | 9,4kg | 0734 2200-7* |
| 2400mm | 7,87ft | 7° | 10,3kg | 0734 2400-7* |
| 2500mm | 8,20ft | 7° | 10,7kg | 0734 2400-7* |
| 3200mm | 10,49ft | 7° | 13,7kg | 0734 3200-7* |

Shank rods

Shank rods R23

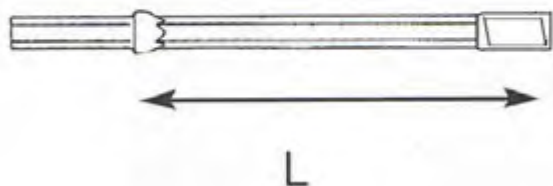
Hex 22



| Length mm | Length ft | Thread | Weight | Part number |
|-----------|-----------|--------|--------|---------------|
| 250mm | 0,80ft | R23 | 1,4kg | 0714 0250 R23 |
| 400mm | 1,31ft | R23 | 1,8kg | 0714 0400 R23 |
| 800mm | 2,62ft | R23 | 3,0kg | 0714 0800 R23 |
| 1600mm | 5,24ft | R23 | 5,4kg | 0714 1600 R23 |
| 1830mm | 6,00ft | R23 | 6,3kg | 0714 1830 R23 |
| 1980mm | 6,49ft | R23 | 6,7kg | 0714 1980 R23 |
| 2400mm | 7,87ft | R23 | 7,8kg | 0714 2400 R23 |
| 2440mm | 8,00ft | R23 | 8,1kg | 0714 2440 R23 |
| 3050mm | 10,00ft | R23 | 9,9kg | 0714 3050 R23 |
| 3200mm | 10,49ft | R23 | 10,5kg | 0714 3200 R23 |
| 3600mm | 11,81ft | R23 | 11,6kg | 0714 3600 R23 |
| 4000mm | 13,12ft | R23 | 12,6kg | 0714 4000 R23 |

Shank rods R25

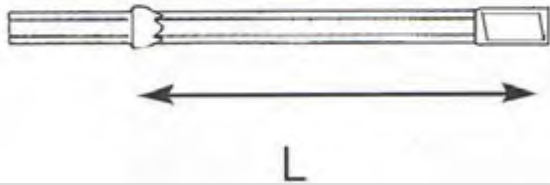
Hex 22



| Length mm | Length ft | Thread | Weight | Part number |
|-----------|-----------|--------|--------|---------------|
| 250mm | 0,80ft | R25 | 1,4kg | 0714 0250 R25 |
| 400mm | 1,31ft | R25 | 1,8kg | 0714 0400 R25 |
| 800mm | 2,62ft | R25 | 3,0kg | 0714 0800 R25 |
| 1220mm | 4,00ft | R25 | 4,2kg | 0714 1220 R25 |
| 1600mm | 5,24ft | R25 | 5,4kg | 0714 1600 R25 |
| 1830mm | 6,00ft | R25 | 6,3kg | 0714 1830 R25 |
| 1980mm | 6,49ft | R25 | 6,7kg | 0714 1980 R25 |
| 2400mm | 7,87ft | R25 | 7,8kg | 0714 2400 R25 |
| 2440mm | 8,00ft | R25 | 8,1kg | 0714 2440 R25 |
| 3050mm | 10,00ft | R25 | 9,9kg | 0714 3050 R25 |
| 3200mm | 10,49ft | R25 | 10,5kg | 0714 3200 R25 |
| 3600mm | 11,81ft | R25 | 11,6kg | 0714 3600 R25 |
| 4000mm | 13,12ft | R25 | 12,6kg | 0714 4000 R25 |

Shank rods R28

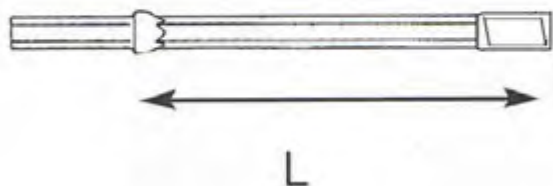
Hex 22



| Length mm | Length ft | Thread | Weight | Part number |
|-----------|-----------|--------|--------|---------------|
| 250mm | 0,80ft | R28 | 1,4kg | 0714 0250 R28 |
| 400mm | 1,31ft | R28 | 1,8kg | 0714 0400 R28 |
| 800mm | 2,62ft | R28 | 3,0kg | 0714 0800 R28 |
| 1600mm | 5,24ft | R28 | 5,4kg | 0714 1600 R28 |
| 1830mm | 6,00ft | R28 | 6,3kg | 0714 1830 R28 |
| 1980mm | 6,49ft | R28 | 6,7kg | 0714 1980 R28 |
| 2400mm | 7,87ft | R28 | 7,8kg | 0714 2400 R28 |
| 2440mm | 8,00ft | R28 | 8,1kg | 0714 2440 R28 |
| 3050mm | 10,00ft | R28 | 9,9kg | 0714 3050 R28 |
| 3200mm | 10,49ft | R28 | 10,5kg | 0714 3200 R28 |
| 3600mm | 11,81ft | R28 | 11,6kg | 0714 3600 R28 |
| 4000mm | 13,12ft | R28 | 12,6kg | 0714 4000 R28 |

Shank rods R32

Hex 22



| Length mm | Length ft | Thread | Weight | Part number |
|-----------|-----------|--------|--------|---------------|
| 250mm | 0,80ft | R32 | 1,4kg | 0714 0250 R32 |
| 400mm | 1,31ft | R32 | 1,8kg | 0714 0400 R32 |
| 800mm | 2,62ft | R32 | 3,0kg | 0714 0800 R32 |
| 1600mm | 5,24ft | R32 | 5,4kg | 0714 1600 R32 |
| 1830mm | 6,00ft | R32 | 6,3kg | 0714 1830 R32 |
| 1980mm | 6,49ft | R32 | 6,7kg | 0714 1980 R32 |
| 2400mm | 7,87ft | R32 | 7,8kg | 0714 2400 R32 |
| 2440mm | 8,00ft | R32 | 8,1kg | 0714 2440 R32 |
| 3050mm | 10,00ft | R32 | 9,9kg | 0714 3050 R32 |
| 3200mm | 10,49ft | R32 | 10,5kg | 0714 3200 R32 |
| 3600mm | 11,81ft | R32 | 11,6kg | 0714 3600 R32 |
| 4000mm | 13,12ft | R32 | 12,6kg | 0714 4000 R32 |

Tunneling and drifting

Drifting rods

R32-R25 HEX 25 BODY



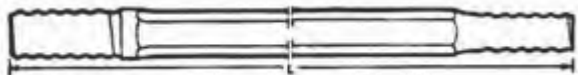
| Eff. Length | Part number |
|-------------|-----------------|
| 2020mm | DR3225-2020-H25 |
| 2480mm | DR3225-2480-H25 |
| 2900mm | DR3225-2900-H25 |
| 3090mm | DR3225-3090-H25 |
| 3700mm | DR3225-3700-H25 |
| 4300mm | DR3225-4300-H25 |
| 5525mm | DR3225-5525-H25 |

R32-R28 HEX 28 BODY



| Eff. Length | Part number |
|-------------|-----------------|
| 2480mm | DR3228-2480-H28 |
| 2785mm | DR3228-2785-H28 |
| 3090mm | DR3228-3090-H28 |
| 3700mm | DR3228-3700-H28 |
| 4300mm | DR3228-4300-H28 |
| 5525mm | DR3228-5525-H28 |

R38-R32 HEX 32mm



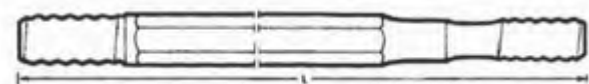
| Eff. Length | Part number |
|-------------|-----------------|
| 3090mm | DR3832-3090-H32 |
| 3700mm | DR3832-3700-H32 |
| 4300mm | DR3832-4300-H32 |
| 4915mm | DR3832-4915-H32 |
| 5525mm | DR3832-5525-H32 |

T38-R32 HEX 32mm



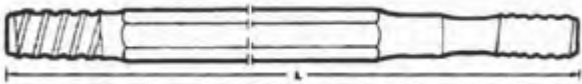
| Eff. Length | Part number |
|-------------|------------------|
| 3090mm | DRT3832-3090-H32 |
| 3700mm | DRT3832-3700-H32 |
| 4300mm | DRT3832-4300-H32 |
| 4915mm | DRT3832-4915-H32 |
| 5525mm | DRT3832-5525-H32 |

R38-R32 HEX 35mm



| Eff. Length | Part number |
|-------------|-----------------|
| 3090mm | DR3832-3090-H35 |
| 3700mm | DR3832-3700-H35 |
| 4300mm | DR3832-4300-H35 |
| 4915mm | DR3832-4915-H35 |
| 5525mm | DR3832-5525-H35 |

T38-R32 HEX 35mm



| Eff. Length | Part number |
|-------------|------------------|
| 3090mm | DRT3832-3090-H35 |
| 3700mm | DRT3832-3700-H35 |
| 4300mm | DRT3832-4300-H35 |
| 4915mm | DRT3832-4915-H35 |
| 5525mm | DRT3832-5525-H35 |

T38F-R32M HEX 35mm



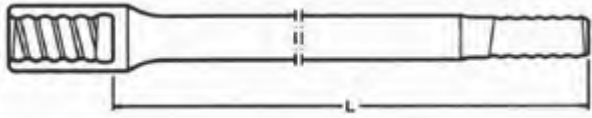
| Eff. Length | Part number |
|-------------|-----------------|
| 3100mm | MF3832-3100-H35 |
| 3700mm | MF3832-3700-H35 |
| 4305mm | MF3832-4305-H35 |
| 4915mm | MF3832-4915-H35 |
| 5525mm | MF3832-5525-H35 |

T38-R32 ROUND 39mm



| Eff. Length | Part number |
|-------------|-----------------|
| 3100mm | DRT3832-3100-39 |
| 3700mm | DRT3832-3700-39 |
| 4305mm | DRT3832-4305-39 |
| 4915mm | DRT3832-4915-39 |
| 5525mm | DRT3832-5525-39 |
| 6440mm | DRT3832-6440-39 |

T38F-R32M ROUND 39mm



| Eff. Length | Part number |
|-------------|----------------|
| 3100mm | MF3832-3100-39 |
| 3700mm | MF3832-3700-39 |
| 4305mm | MF3832-4305-39 |
| 4915mm | MF3832-4915-39 |
| 5525mm | MF3832-5525-39 |
| 6440mm | MF3832-6440-39 |

R38-R35 HEX 35mm



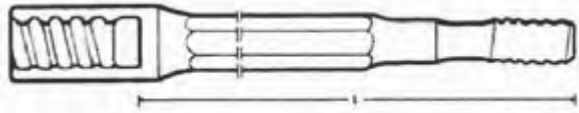
| Eff. Length | Part number |
|-------------|-----------------|
| 3700mm | DR3832-3700-H35 |
| 4305mm | DR3832-4305-H35 |
| 4915mm | DR3832-4915-H35 |
| 5525mm | DR3832-5525-H35 |
| 6440mm | DR3832-6440-H35 |

T38-R35 HEX 35mm



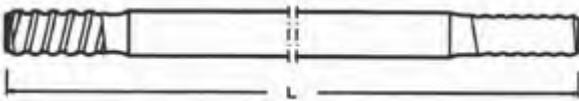
| Eff. Length | Part number |
|-------------|------------------|
| 3700mm | DRT3832-3700-H35 |
| 4305mm | DRT3832-4305-H35 |
| 4915mm | DRT3832-4915-H35 |
| 5525mm | DRT3832-5525-H35 |
| 6440mm | DRT3832-6440-H35 |

T38F-R35M HEX 35mm



| Eff. Length | Part number |
|-------------|-----------------|
| 3700mm | MF3832-3700-H35 |
| 4305mm | MF3832-4305-H35 |
| 4915mm | MF3832-4915-H35 |
| 5525mm | MF3832-5525-H35 |
| 6440mm | MF3832-6440-H35 |

T38-R35 ROUND 39mm



| Eff. Length | Part number |
|-------------|----------------|
| 4305mm | DR3832-4305-39 |
| 4915mm | DR3832-4915-39 |
| 5525mm | DR3832-5525-39 |
| 6440mm | DR3832-6440-39 |

T38F-R35M ROUND 39mm



| Eff. Length | Part number |
|-------------|----------------|
| 3700mm | MF3832-3700-39 |
| 4305mm | MF3832-4305-39 |
| 4915mm | MF3832-4915-39 |
| 5525mm | MF3832-5525-39 |
| 6440mm | MF3832-6440-39 |

Button bits

R25

Button bits R25 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 33 | 5 x 7mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R33NF |
| 35 | 5 x 8mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R35NF |
| 37 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R37NF |
| 38 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R38NF |
| 41 | 5 x 9mm | 2 x 8mm | 2 x 5mm | 1 x 5mm | 35 | 25R41NF |
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 25R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 5mm | 35 | 25R48NF |

Button bits R25 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 33 | 6 x 7mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R33NF8 |
| 35 | 6 x 7mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R35NF8 |
| 37 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R37NF8 |
| 38 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R38NF8 |
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 25R41NF8 |
| 45 | 6 x 9mm | 2 x 8mm | 1 x 6mm | 2 x 6mm | 35 | 25R45NF8 |
| 48 | 6 x 10mm | 2 x 9mm | 1 x 6mm | 2 x 6mm | 35 | 25R48NF8 |

Button bits R25 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 38 | 6 x 8mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 25R38NG |
| 45 | 6 x 9mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 25R45NG |
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 25R48NG |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 25R51NG |

R28

Button bits R28 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 37 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 28R37NF |
| 38 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 28R38NF |
| 41 | 5 x 9mm | 2 x 8mm | 2 x 5mm | 1 x 5mm | 35 | 28R41NF |
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 28R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 28R48NF |

Button bits R28 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 37 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 28R37NF8 |
| 38 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 28R38NF8 |
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 28R41NF8 |
| 45 | 6 x 9mm | 2 x 8mm | 1 x 6mm | 2 x 6mm | 35 | 28R45NF8 |
| 48 | 6 x 10mm | 2 x 9mm | 1 x 6mm | 2 x 6mm | 35 | 28R48NF8 |

Button bits R28 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 38 | 6 x 8mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 28R38NG |
| 45 | 6 x 9mm | 3 x 8mm | 1 x 5mm | 3 x 5mm | 35 | 28R45NG |
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 28R48NG |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 28R51NG |

Button bits R28 RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 6 x 9mm | 3 x 8mm | - | 3 x 5mm | 35 | 28R45RD |

R32

Button bits R32 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R48NF |
| 51 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R51NF |

Button bits R32 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 32R41NF8 |
| 43 | 6 x 9mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 32R43NF8 |

Button bits R32 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 6 x 9mm | 3 x 8mm | 1 x 5mm | 3 x 5mm | 35 | 32R45NG |

Button bits R32 ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 32R48ND |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 32R51ND |
| 64 | 6 x 11mm | 3 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R64ND |

Button bits R32 57NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 57 | 6 x 10mm | 3 x 9mm | 1 x 8mm | 1 x 8mm | 35 | 32R57NF |

Button bits R32 RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 48 | 6 x 10mm | 3 x 9mm | - | 3 x 5mm | 35 | 32R48RD |
| 51 | 6 x 10mm | 3 x 9mm | - | 3 x 5mm | 35 | 32R51RD |
| 64 | 6 x 11mm | 3 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R64RD |

Button bits R32 64NF



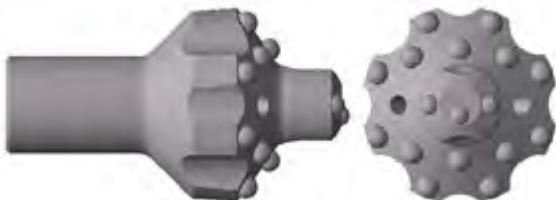
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 64 | 8 x 10mm | 4 x 10mm | 1 x 7mm | 2 x 9mm | 35 | 32R64NF |

Button bits R32 76NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 6 x 12mm | 4 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R76NF |

Button bits R32 REA



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 32R89REA |
| 102 | 14 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 32R102REA |
| 115 | 14 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 32R115REA |
| 127 | 14 x 14mm | 3 x 10mm | - | 2 x 10mm | 35 | 32R127REA |

Button bits R32 DOM



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 12mm | 6 x 12mm | - | 2 x 10mm | 35 | 32R89DOM |
| 102 | 8 x 12mm | 8 x 12mm | - | 2 x 10mm | 35 | 32R102DOM |

R35

Button bits R35 ND



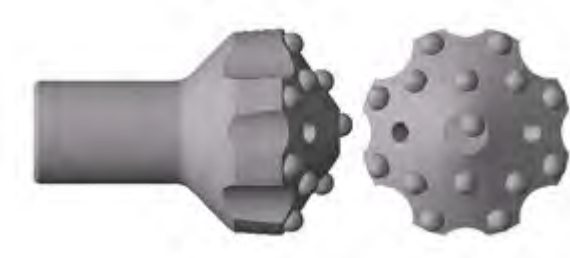
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 35R48ND |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 35R51ND |
| 64 | 6 x 11mm | 3 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 35R64ND |

Button bits R35 REA



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 35R89REA |
| 102 | 14 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 35R102REA |
| 115 | 14 x 12mm | 3 x 10mm | - | 2 x 10mm | 35 | 35R115REA |
| 127 | 14 x 14mm | 3 x 10mm | - | 2 x 10mm | 35 | 35R127REA |

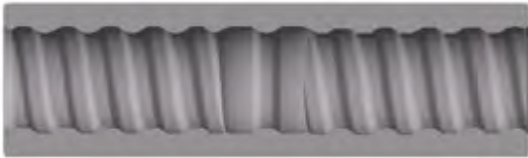
Button bits R35 DOM



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 12mm | 6 x 12mm | - | 2 x 10mm | 35 | 35R89DOM |
| 102 | 8 x 12mm | 8 x 12mm | - | 2 x 10mm | 35 | 35R102DOM |

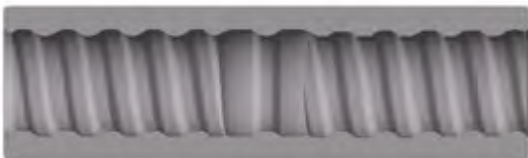
Couplings

Couplings R32



| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 45 mm | 159 mm | R32 SB CPL | CPLR32-45 |
| 55 mm | 175 mm | R32 SB CPL | CPLR32-55 |

Couplings R38



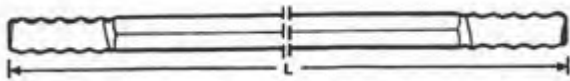
| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 55 mm | 175 mm | R38 SB CPL | CPLR38-55 |
| 55 mm | 190 mm | R38 SB CPL | CPLT38-55 |

Extension drilling

Extension rods

R25

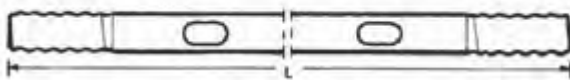
R25 HEX 25mm



| Eff. Length | Part number |
|-------------|--------------|
| 610mm | H25 R25 610 |
| 915mm | H25 R25 915 |
| 1220mm | H25 R25 1220 |
| 1525mm | H25 R25 1525 |
| 1830mm | H25 R25 1830 |
| 2430mm | H25 R25 2430 |
| 3050mm | H25 R25 3050 |
| 3660mm | H25 R25 3660 |

R32

R32 Round 32mm



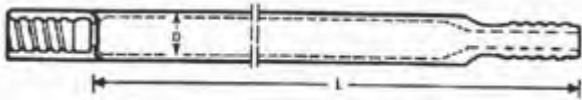
| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | EX3232-1220-32 |
| 1525mm | EX3232-1525-32 |
| 1830mm | EX3232-1830-32 |
| 2430mm | EX3232-2430-32 |
| 3050mm | EX3232-3050-32 |
| 3660mm | EX3232-3660-32 |

MF R32 Round 32mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF3232-1220-32 |
| 1525mm | MF3232-1525-32 |
| 1830mm | MF3232-1830-32 |
| 2430mm | MF3232-2430-32 |
| 3050mm | MF3232-3050-32 |
| 3660mm | MF3232-3660-32 |
| 4270mm | MF3232-4270-32 |

MF Guide rods R32 Round 44mm



| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | MF3232-3050-44 |
| 3660mm | MF3232-3660-44 |
| 4270mm | MF3232-4270-44 |

T38

T38 HEX 32mm



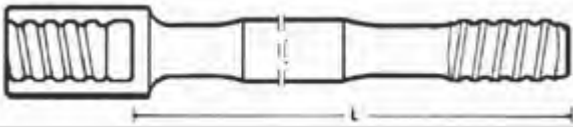
| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | EX3838-3050-32 |
| 3660mm | EX3838-3660-32 |
| 4270mm | EX3838-4270-32 |

T38 Round 39mm



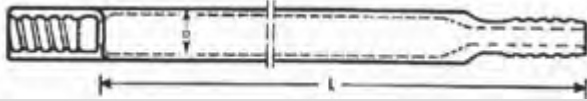
| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | EX3838-1220-39 |
| 1525mm | EX3838-1525-39 |
| 1830mm | EX3838-1830-39 |
| 2430mm | EX3838-2430-39 |
| 3050mm | EX3838-3050-39 |
| 3660mm | EX3838-3660-39 |
| 4270mm | EX3838-4270-39 |
| 4905mm | EX3838-4905-39 |

MF T38 Round 39mm



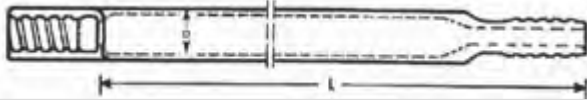
| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF3838-1220-39 |
| 1525mm | MF3838-1525-39 |
| 1830mm | MF3838-1830-39 |
| 2430mm | MF3838-2430-39 |
| 3050mm | MF3838-3050-39 |
| 3660mm | MF3838-3660-39 |
| 4270mm | MF3838-4270-39 |
| 4905mm | MF3838-4905-39 |

MF Guide rods T38 Round 55mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF3838-1220-55 |
| 1525mm | MF3838-1525-55 |
| 1830mm | MF3838-1830-55 |
| 2430mm | MF3838-2430-55 |
| 3050mm | MF3838-3050-55 |

MF Guide rods T38 Round 64mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF4545-1220-64 |
| 1525mm | MF4545-1525-64 |
| 1830mm | MF4545-1830-64 |
| 2430mm | MF4545-2430-64 |
| 3050mm | MF4545-3050-64 |

T45

T45 HEX 38mm



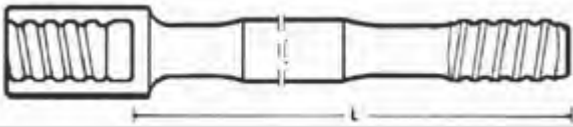
| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | EX4545-3050-38 |
| 3660mm | EX4545-3660-38 |
| 4270mm | EX4545-4270-38 |

T45 Round 45mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | EX4545-1220-45 |
| 1525mm | EX4545-1525-45 |
| 1830mm | EX4545-1830-45 |
| 2430mm | EX4545-2430-45 |
| 3050mm | EX4545-3050-45 |
| 3660mm | EX4545-3660-45 |
| 4270mm | EX4545-4270-45 |
| 4905mm | EX4545-4905-45 |

MF T45 Round 45mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF4545-1220-45 |
| 1525mm | MF4545-1525-45 |
| 1830mm | MF4545-1830-45 |
| 2430mm | MF4545-2430-45 |
| 3050mm | MF4545-3050-45 |
| 3660mm | MF4545-3660-45 |
| 4270mm | MF4545-4270-45 |
| 4905mm | MF4545-4905-45 |

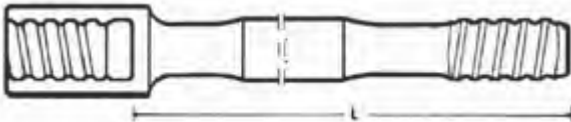
T51

T51 Round 51mm



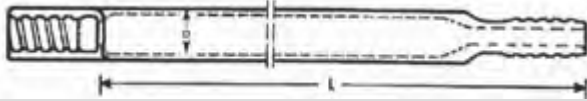
| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | EX5151-1220-51 |
| 1525mm | EX5151-1525-51 |
| 1830mm | EX5151-1830-51 |
| 2430mm | EX5151-2430-51 |
| 3050mm | EX5151-3050-51 |
| 3660mm | EX5151-3660-51 |
| 4270mm | EX5151-4270-51 |
| 4905mm | EX5151-4905-51 |

MF T51 Round 51mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF5151-1220-51 |
| 1525mm | MF5151-1525-51 |
| 1830mm | MF5151-1830-51 |
| 2430mm | MF5151-2430-51 |
| 3050mm | MF5151-3050-51 |
| 3660mm | MF5151-3660-51 |
| 4270mm | MF5151-4270-51 |
| 4905mm | MF5151-4905-51 |

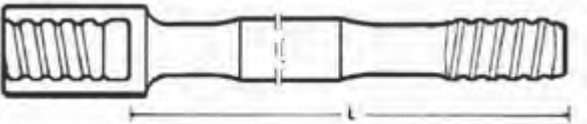
MF Guide rods T51 Round 76mm



| Eff. Length | Part number |
|-------------|----------------|
| 1220mm | MF5151-1220-76 |
| 1525mm | MF5151-1525-76 |
| 1830mm | MF5151-1830-76 |
| 2430mm | MF5151-2430-76 |
| 3050mm | MF5151-3050-76 |

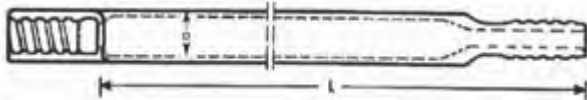
T60

MF T60 Round 60mm



| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | MF6060-3050-60 |
| 3660mm | MF6060-3660-60 |
| 4270mm | MF6060-4270-60 |
| 4905mm | MF6060-4905-60 |

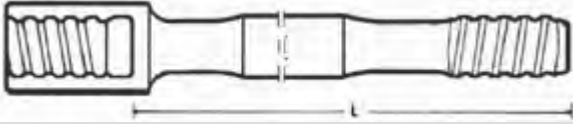
MF Guide rods T60 Round



| Eff. Length | Part number |
|-------------|---------------|
| 3660mm | MF6060-3660-G |
| 4270mm | MF6060-4270-G |

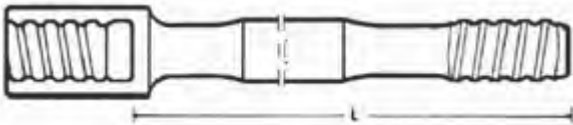
MT60

MF MT60 Round 82mm



| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | MT6060-3050-82 |
| 3660mm | MT6060-3660-82 |
| 4270mm | MT6060-4270-82 |
| 4905mm | MT6060-4905-82 |

MF MT60 Round 85mm



| Eff. Length | Part number |
|-------------|----------------|
| 3050mm | MT6060-3050-85 |
| 3660mm | MT6060-3660-85 |
| 4270mm | MT6060-4270-85 |
| 4905mm | MT6060-4905-85 |

MF Guide rods MT60 Round 87mm



| Eff. Length | Part number |
|-------------|---------------|
| 4265mm | MT6060-4270-G |

Button bits

R25

Button bits R25 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 33 | 5 x 7mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R33NF |
| 35 | 5 x 8mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R35NF |
| 37 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R37NF |
| 38 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 25R38NF |
| 41 | 5 x 9mm | 2 x 8mm | 2 x 5mm | 1 x 5mm | 35 | 25R41NF |
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 25R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 5mm | 35 | 25R48NF |

Button bits R25 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 33 | 6 x 7mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R33NF8 |
| 35 | 6 x 7mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R35NF8 |
| 37 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R37NF8 |
| 38 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 25R38NF8 |
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 25R41NF8 |
| 45 | 6 x 9mm | 2 x 8mm | 1 x 6mm | 2 x 6mm | 35 | 25R45NF8 |
| 48 | 6 x 10mm | 2 x 9mm | 1 x 6mm | 2 x 6mm | 35 | 25R48NF8 |

Button bits R25 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 38 | 6 x 8mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 25R38NG |
| 45 | 6 x 9mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 25R45NG |
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 25R48NG |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 25R51NG |

R28

Button bits R28 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 37 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 28R37NF |
| 38 | 5 x 9mm | 2 x 7mm | 2 x 5mm | 1 x 5mm | 35 | 28R38NF |
| 41 | 5 x 9mm | 2 x 8mm | 2 x 5mm | 1 x 5mm | 35 | 28R41NF |
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 28R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 28R48NF |

Button bits R28 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 37 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 28R37NF8 |
| 38 | 6 x 8mm | 2 x 7mm | 1 x 5mm | 2 x 5mm | 35 | 28R38NF8 |
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 28R41NF8 |
| 45 | 6 x 9mm | 2 x 8mm | 1 x 6mm | 2 x 6mm | 35 | 28R45NF8 |
| 48 | 6 x 10mm | 2 x 9mm | 1 x 6mm | 2 x 6mm | 35 | 28R48NF8 |

Button bits R28 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 38 | 6 x 8mm | 3 x 7mm | 1 x 5mm | 3 x 5mm | 35 | 28R38NG |
| 45 | 6 x 9mm | 3 x 8mm | 1 x 5mm | 3 x 5mm | 35 | 28R45NG |
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 28R48NG |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 28R51NG |

Button bits R28 RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 6 x 9mm | 3 x 8mm | - | 3 x 5mm | 35 | 28R45RD |

R32

Button bits R32 NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R45NF |
| 48 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R48NF |
| 51 | 5 x 10mm | 2 x 9mm | 2 x 6mm | 1 x 6mm | 35 | 32R51NF |

Button bits R32 NF8



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 41 | 6 x 8mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 32R41NF8 |
| 43 | 6 x 9mm | 2 x 8mm | 1 x 5mm | 2 x 5mm | 35 | 32R43NF8 |

Button bits R32 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 45 | 6 x 9mm | 3 x 8mm | 1 x 5mm | 3 x 5mm | 35 | 32R45NG |

Button bits R32 ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 48 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 32R48ND |
| 51 | 6 x 10mm | 3 x 9mm | 1 x 6mm | 3 x 5mm | 35 | 32R51ND |
| 64 | 6 x 11mm | 3 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R64ND |

Button bits R32 57NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 57 | 6 x 10mm | 3 x 9mm | 1 x 8mm | 1 x 8mm | 35 | 32R57NF |

Button bits R32 RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 48 | 6 x 10mm | 3 x 9mm | - | 3 x 5mm | 35 | 32R48RD |
| 51 | 6 x 10mm | 3 x 9mm | - | 3 x 5mm | 35 | 32R51RD |
| 64 | 6 x 11mm | 3 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R64RD |

Button bits R32 64NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 64 | 8 x 10mm | 4 x 10mm | 1 x 7mm | 2 x 9mm | 35 | 32R64NF |

Button bits R32 76NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 6 x 12mm | 4 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 32R76NF |

T38

Button bits T38 RG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 54 | 6 x 10mm | 3 x 9mm | - | 3 x 6mm | 35 | 38T54RG |

Button bits T38 64NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 64 | 8 x 10mm | 4 x 10mm | 1 x 7mm | 2 x 9mm | 35 | 38T64NF |

Button bits T38 76NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 6 x 12mm | 4 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 38T76NF |

Button bits T38 64-76ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|-------------------|---------------|---------------|-------------|-------------|
| 64 | 8 x 10mm | 4 x 10mm, 1 x 8mm | - | 4 x 8mm | 35 | 38T64ND |
| 70 | 8 x 11mm | 5 x 10mm | - | 4 x 7mm | 35 | 38T70ND |
| 76 | 8 x 12mm | 5 x 11mm | - | 4 x 8mm | 35 | 38T76ND |

Button bits T38 64-70RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|-------------------|---------------|---------------|-------------|-------------|
| 64 | 8 x 10mm | 4 x 10mm, 1 x 8mm | - | 4 x 8mm | 35 | 38T64RD |
| 70 | 8 x 11mm | 5 x 10mm | - | 4 x 7mm | 35 | 38T70RD |

Button bits T38 76RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 8 x 12mm | 5 x 11mm | - | 4 x 8mm | 35 | 38T76RD |

Button bits T38 83RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 83 | 8 x 13mm | 5 x 11mm | - | 4 x 8mm | 35 | 38T83RD |

Button bits T38 89-102ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 38T89ND |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 38T102ND |

Button bits T38 89-102RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 38T89RD |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 38T102RD |

Button bits T38 102NF



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 38T102NF |

Button bits T38 NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 38T102NG |

T45

Button bits T45 66-76ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|-------------------|---------------|---------------|-------------|-------------|
| 66 | 8 x 10mm | 4 x 10mm, 1 x 8mm | - | 4 x 8mm | 35 | 45T66ND |
| 70 | 8 x 11mm | 5 x 10mm | - | 4 x 7mm | 35 | 45T70ND |
| 76 | 8 x 12mm | 5 x 11mm | - | 4 x 8mm | 35 | 45T76ND |

Button bits T45 76NF



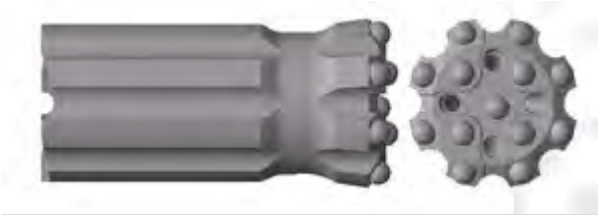
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 6 x 12mm | 4 x 10mm | 1 x 7mm | 3 x 8mm | 35 | 45T76NF |

Button bits T45 66-70RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|-------------------|---------------|---------------|-------------|-------------|
| 66 | 8 x 10mm | 4 x 10mm, 1 x 8mm | - | 4 x 8mm | 35 | 45T66RD |
| 70 | 8 x 11mm | 5 x 10mm | - | 4 x 7mm | 35 | 45T70RD |

Button bits T45 76RD



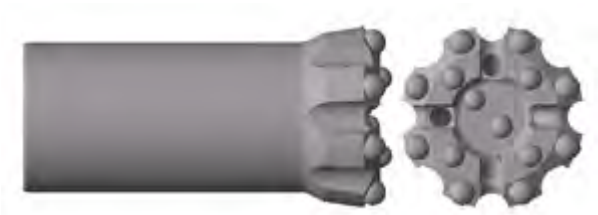
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 76 | 8 x 12mm | 5 x 11mm | - | 4 x 8mm | 35 | 45T76RD |

Button bits T45 83RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 83 | 8 x 13mm | 5 x 11mm | - | 4 x 8mm | 35 | 45T83RD |

Button bits T45 89-102ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 45T89ND |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 45T102ND |

Button bits T45 89-102RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 45T89RD |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 45T102RD |

Button bits T45 102NF



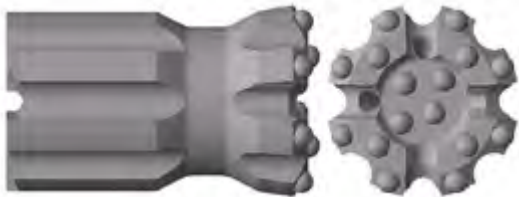
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 45T102NF |

Button bits T45 102NG



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 45T102NG |

Button bits T45 115RD



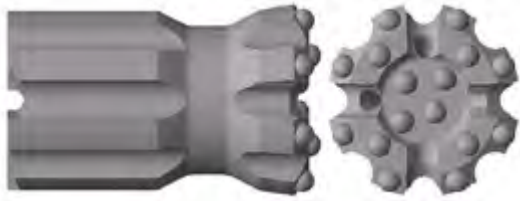
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14mm | 4 x 14mm | - | 4 x 11mm | 35 | 45T115RD |

Button bits T45 115ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14mm | 4 x 14mm | - | 4 x 11mm | 35 | 45T115ND |

Button bits T45 127RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14nn | 9 x 14mm | - | 5 x 11mm | 35 | 45T127RD |

Button bits T45 127ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14nn | 9 x 14mm | - | 5 x 11mm | 35 | 45T127ND |

T51

Button bits T51 83RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 83 | 8 x 13mm | 5 x 11mm | - | 4 x 8mm | 35 | 51T83RD |

Button bits T51 89-102ND



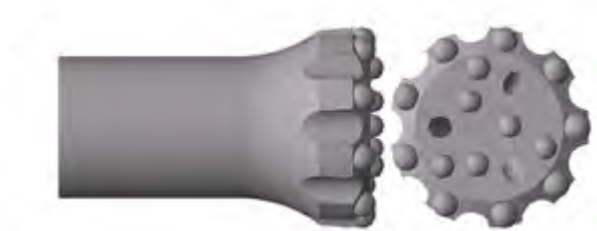
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 51T89ND |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 51T102ND |

Button bits T51 89-102RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 89 | 8 x 13mm | 6 x 11mm | - | 4 x 8mm | 35 | 51T89RD |
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 51T102RD |

Button bits T51 102NF



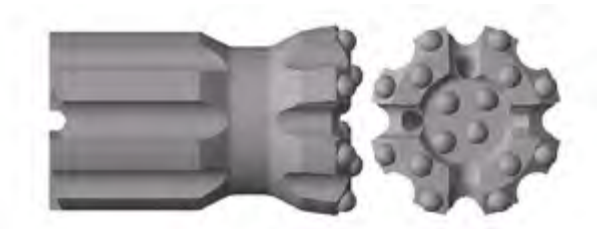
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 51T102NF |

Button bits T51 102NG



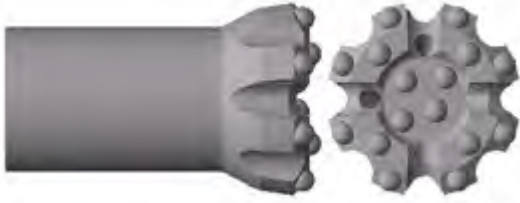
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 9 x 14mm | 6 x 12mm | - | 3 x 12mm | 40 | 51T102NG |

Button bits T51 115RD



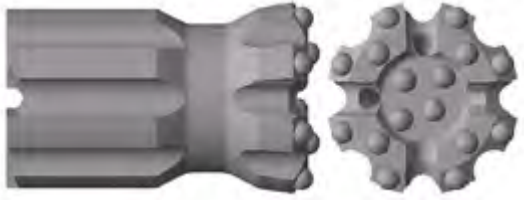
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14mm | 4 x 14mm | - | 4 x 11mm | 35 | 51T115RD |

Button bits T51 115ND



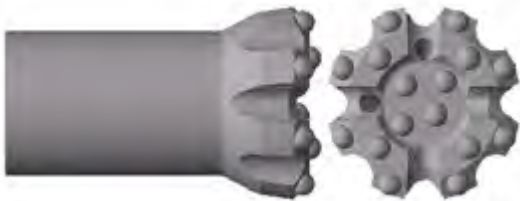
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14nn | 4 x 14mm | - | 4 x 11mm | 35 | 51T115ND |

Button bits T51 127RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14nn | 9 x 14mm | - | 5 x 11mm | 35 | 51T127RD |

Button bits T51 127ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14nn | 9 x 14mm | - | 5 x 11mm | 35 | 51T127ND |

MT60

Button bits MT60 102ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 60MT102ND |

Button bits MT60 102RD



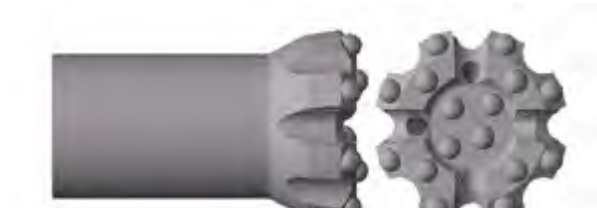
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 102 | 8 x 14mm | 6 x 12mm | - | 4 x 9mm | 35 | 60MT102RD |

Button bits MT60 115RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14mm | 4 x 14mm | - | 4 x 11mm | 35 | 60MT115RD |

Button bits MT60 115ND



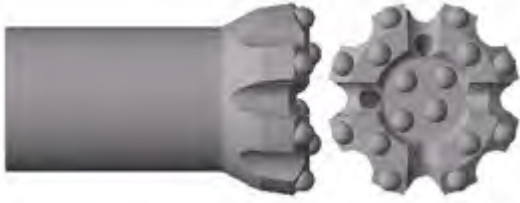
| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 115 | 8 x 14mm | 4 x 14mm | - | 4 x 11mm | 35 | 60MT115ND |

Button bits MT60 127RD



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14mm | 9 x 14mm | - | 5 x 11mm | 35 | 60MT127RD |

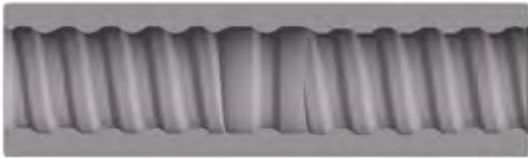
Button bits MT60 127ND



| Dia mm | Gauge carbide | Front carbide | Side flushing | Face flushing | Gauge angle | Part number |
|--------|---------------|---------------|---------------|---------------|-------------|-------------|
| 127 | 10 x 14nn | 9 x 14mm | - | 5 x 11mm | 35 | 60MT127ND |

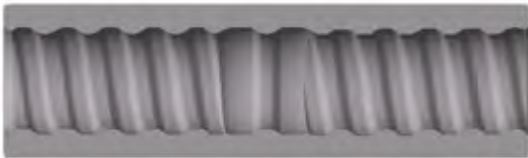
Couplings

Couplings R25



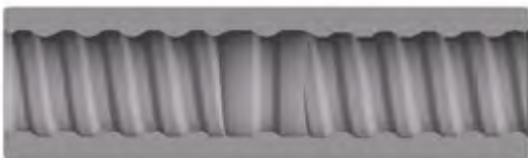
| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 35 mm | 149 mm | R25 SB CPL | CPLR25-35 |

Couplings R32



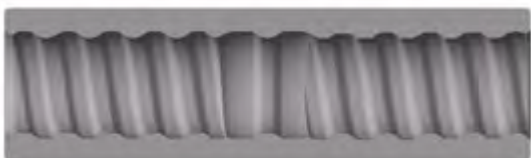
| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 45 mm | 159 mm | R32 SB CPL | CPLR32-45 |

Couplings T38



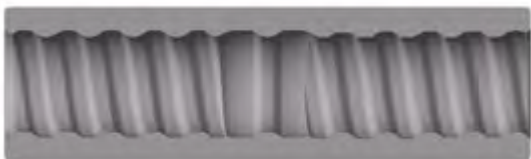
| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 55 mm | 190 mm | T38 SB CPL | CPLT38-55 |

Couplings T45



| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 63 mm | 207 mm | T45 SB CPL | CPLT45-63 |

Couplings T51



| Diameter | Length | Description | Part number |
|----------|--------|-------------|-------------|
| 72 mm | 234 mm | T51 SB CPL | CPLT51-72 |

Shank adaptors

Atlas Copco

| Thread | Description | Length mm |
|--------|------------------------------------|-----------|
| T38 | A/C BBE57,MONT H100 | 537 mm |
| T45 | A/C BBE57,MONT H100 | 537 mm |
| R32 | A/COPCO COP125,130,131 | 405 mm |
| T38 | A/COPCO COP125,130,131 | 381 mm |
| T38 | A/COPCO COP131EB | 381 mm |
| R28 | A/COPCO 1028HB | 400 mm |
| R32 | A/COPCO 1028HB | 400 mm |
| R38 | A/C COP1038 HD,1038 HL | 485 mm |
| T38 | A/C COP1038 HD,COP1238 | 485 mm |
| T38 | A/COPCO COP1038HL,1238 | 500 mm |
| T45 | A/COPCO COP1038HL,1238 | 500 mm |
| R32 | A/COPCO COP1038HL,1238 | 575 mm |
| T38 | A/COPCO COP1038HL,1238 | 575 mm |
| T45 | A/COPCO COP1038HL,1238 | 575 mm |
| T45 | A/COPCO COP1038HL,1238 | 590 mm |
| R32 | A/COPCO COP1038(COLLAR) | 575 mm |
| T38 | A/COPCO COP1038(COLLAR) | 575 mm |
| R32 | A/C COP1036HB,1038HB,1238 (COLLAR) | 575 mm |
| R38 | A/C COP1036HB,1038HB,1238 (COLLAR) | 575 mm |
| T38 | A/C COP1036HB,1038HB,1238 (COLLAR) | 575 mm |
| T45 | A/C COP1036HB,1038HB,1238 (COLLAR) | 575 mm |
| R28 | A/C COP1132 | 410 mm |
| R32 | A/C COP1132 | 410 mm |
| T35 | A/C COP1132 | 410 mm |
| R32 | A/C COP1132 | 500 mm |
| T35 | A/C COP1132 | 500 mm |
| R32F | A/C COP1132 (Female) | 280 mm |
| R32F | A/C COP1432, COP1532 FEMALE | 341 mm |
| R38F | A/C COP1432. COP1532 FEMALE | 341 mm |

| Thread | Description | Length mm |
|--------|---|-----------|
| R32 | ATLAS COPCO COP1435 | 500 mm |
| T35 | ATLAS COPCO COP1435 | 500 mm |
| R32 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 435 mm |
| T35 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 435 mm |
| R38 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 435 mm |
| T38 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 435 mm |
| R32 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 525 mm |
| T35 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 525 mm |
| R38 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 525 mm |
| T38 | A/COPCO COP1440, COP1550, COP1638, COP1838, COP2238 | 525 mm |
| R32 | A/COPCO COP1440,COP1550,1838HD (D=52mm) | 525 mm |
| T35 | A/COPCO COP1440,COP1550,1838HD (D=52mm) | 525 mm |
| T38 | A/COPCO COP1440,COP1550,1838HD (D=52mm) | 525 mm |
| T45 | A/COPCO COP1440,COP1550,1838HD (D=52mm) | 525 mm |
| T51 | A/COPCO COP1440,COP1550,1838HD (D=52mm) | 525 mm |
| T38 | A/COPCO COP1838MUX | 730 mm |
| T45 | A/COPCO COP1838MUX | 730 mm |
| T38 | A/COPCO COP 1838EX | 730 mm |
| T45 | A/COPCO COP 1838EX | 730 mm |
| T51 | A/COPCO COP 1838EX | 730 mm |
| T45 | A/COPCO COP 1850,1840HE,2150HE | 565 mm |
| T51 | A/COPCO COP 1850,1840HE,2150HE | 565 mm |
| T51 | A/COPCO COP 1850,1840HE,2150HE | 770 mm |
| T51 | A/COPCO COP 2150/2550 (STRAIGHT SPLINE) | 770 mm |
| T38 | COP 1240/1640/1840/1850/2150/2550HEX | 770 mm |
| T45 | COP 1240/1640/1840/1850/2150/2550HEX | 770 mm |
| T51 | COP 1240/1640/1840/1850/2150/2550HEX | 770 mm |
| T51 | A/COPCO COP 2160/2560 EXTRACTOR | 770 mm |
| MT60 | A/COPCO COP 2160/2560 EXTRACTOR | 770 mm |
| T38 | A/COPCO COP 3038 | 435 mm |
| T45 | A/COPCO COP 3038 | 435 mm |
| T38 | A/COPCO COP 3038HE (Helical) | 435 mm |

Boart Longyear

| Thread | Description | Length mm |
|--------|---------------------|-----------|
| R32F | BOART HD65 (female) | 324 mm |
| R32 | BOART HD65 | 445 mm |
| R32 | BOART HD125,HD150 | 495 mm |
| R38 | BOART HD125,HD150 | 495 mm |
| T38 | BOART HD125,HD150 | 495 mm |

Cannon

| Thread | Description | Length mm |
|--------|---|-----------|
| T38F | CANNON CH38 (JOYJH-2)(55mm Body,female) | 390 mm |
| T45 | CANNON CH38 (JOYJH-2)(55mm Body,) | 525 mm |
| T38 | CANNON CH38 (JOYJH-2) (38mm Body) | 444 mm |

Joy

| Thread | Description | Length mm |
|--------|-----------------|-----------|
| T38 | JOY VCR260 /360 | 432 mm |

Doofor

| Thread | Description | Length mm |
|--------|-------------------|-----------|
| R25 | DOOFOR DF425/430S | 400 mm |
| R28 | DOOFOR DF425/430S | 400 mm |
| R32 | DOOFOR DF528 | 424 mm |
| R32 | DOOFOR DF528HD | 470 mm |
| R38 | DOOFOR DF528HD | 470 mm |
| P38 | DOOFOR DF528HD | 470 mm |
| R32 | DOOFOR DF545 | 515 mm |
| R38 | DOOFOR DF545 | 515 mm |
| T38 | DOOFOR DF545 | 515 mm |
| R32 | DOOFOR DF545HD | 515 mm |
| R38 | DOOFOR DF545HD | 515 mm |
| T38 | DOOFOR DF545HD | 515 mm |
| T45 | DOOFOR DF545HD | 515 mm |
| R32 | DOOFOR DF545EXT | 582 mm |
| R38 | DOOFOR DF545EXT | 582 mm |
| T38 | DOOFOR DF545EXT | 582 mm |

Furukawa

| Thread | Description | Length mm |
|--------|---------------------------|-----------|
| R38 | FURUKAWA PD200(H/D CHUCK) | 381 mm |
| T38 | FURUKAWA PD200(H/D CHUCK) | 381 mm |
| T45 | FURUKAWA PD200(H/D CHUCK) | 381 mm |
| T38 | FURUKAWA HD90 | 512 mm |
| R38 | FURUKAWA HD150 | 520 mm |
| T38 | FURUKAWA HD150 | 520 mm |
| T38 | FURUKAWA HD180 | 455 mm |
| R38 | FURUKAWA HD190 | 480 mm |
| T38 | FURUKAWA HD190 | 480 mm |
| T38 | FURUKAWA HD210 | 430 mm |
| T38 | FURUKAWA HD260,HD300 | 655 mm |
| T45 | FURUKAWA HD260,HD300 | 655 mm |
| T38 | FURUKAWA HD500 (6 SPLINE) | 625 mm |
| T45 | FURUKAWA HD500 (6 SPLINE) | 625 mm |
| T38 | FURUKAWA HD609 | 615 mm |
| T45 | FURUKAWA HD609 | 615 mm |
| T38 | FURUKAWA HD609 | 690 mm |
| T45 | FURUKAWA HD609 | 690 mm |
| T38 | FURUKAWA HD609QED | 860 mm |
| T45 | FURUKAWA HD609QED | 860 mm |
| T45 | FURUKAWA HD612 | 710 mm |
| T51 | FURUKAWA HD612 | 710 mm |
| T45 | FURUKAWA HD612QED | 900 mm |
| T51 | FURUKAWA HD612QED | 900 mm |
| T51 | FURUKAWA HD615 | 880 mm |
| T51 | FURUKAWA HD615QED | 880 mm |
| T45 | FURUKAWA HD709 | 620 mm |
| T45 | FURUKAWA HD709QED | 800 mm |
| T45 | FURUKAWA HD712 | 590 mm |
| T51 | FURUKAWA HD712 | 590 mm |
| T45 | FURUKAWA HD712 | 790 mm |
| --- | --- | --- |

I. Rand

| Thread | Description | Length mm |
|--------|----------------------|-----------|
| R32 | I/RAND YD90M | 330 mm |
| T38 | I/RAND YH65.70,75,80 | 496 mm |
| T45 | I/RAND YH65.70,75,80 | 496 mm |
| T38 | I/RAND YH65.70,75,80 | 700 mm |
| T45 | I/RAND YH65.70,75,80 | 700 mm |
| T38 | I/RAND YH65RP,80RP | 700 mm |
| T45 | I/RAND YH65RP,80RP | 700 mm |
| T45 | I/RAND YH80A | 500 mm |
| T45 | I/RAND YH 95,100 | 622 mm |
| T51 | I/RAND YH 95,100 | 622 mm |
| T45 | I/RAND YH110VRP | 900 mm |
| T51 | I/RAND YH110VRP | 900 mm |

Montabert

| Thread | Description | Length mm |
|--------|--|-----------|
| R32F | MONTABERT HC20 (D=45mm) FEMALE | 187 mm |
| R32 | MONTABERT HC20 (D=45mm) | 287 mm |
| R32 | MONTABERT HC25 (D=45mm) | 287 mm |
| T35 | MONTABERT HC25 (D=45mm) | 287 mm |
| R38 | MONTABERT HC25 (D=45mm) | 287 mm |
| T38 | MONTABERT HC25 (D=45mm) | 287 mm |
| R32 | MONTABERT HC25 (D=45mm) FEMALE | 202 mm |
| R32 | MONTABERT HC40/HC50 (D=38mm) | 438 mm |
| T35 | MONTABERT HC40/HC50 (D=38mm) | 438 mm |
| R38 | MONTABERT HC40/HC50 (D=38mm) | 438 mm |
| T38 | MONTABERT HC40/HC50 (D=38mm) | 438 mm |
| R32 | MONTABERT HC40 FEMALE (D=45mm) | 270 mm |
| R38 | MONTABERT HC80, HC90, HC105 (D=38mm) | 440 mm |
| T38 | MONTABERT HC80, HC90, HC105 (D=38mm) | 440 mm |
| R38 | MONTABERT HC80, HC90, HC105 (D=38mm) | 508 mm |
| T38 | MONTABERT HC80, HC90, HC105 (D=38mm) | 508 mm |
| R38 | MONTABERT HC80, HC109, HC110, HC120 , (D=45mm) | 490 mm |

| Thread | Description | Length mm |
|--------|---|-----------|
| T45 | MONTABERT HC80, HC109, HC110, HC120 , (D=45mm) | 530 mm |
| T35 | MONTABERT HC80R, HC105R, HC107R, HC108R | 670 mm |
| T38 | HC109R, HC110R, HC120R (D=45mm) | 670 mm |
| T45 | HC109R, HC110R, HC120R (D=45mm) | 670 mm |
| T45 | HC109R, HC110R, HC120R (D=45mm) | 770 mm |
| T45 | MONTABERT HC120R, HC150R, HC155R, HC158R (D=51mm) | 670 mm |
| T51 | MONTABERT HC120R, HC150R, HC155R, HC158R (D=51mm) | 670 mm |
| T45 | MONTABERT HC120R, HC150R, HC155R, HC158R (D=51mm) | 770 mm |
| T51 | MONTABERT HC120R, HC150R, HC155R, HC158R (D=51mm) | 770 mm |
| T45 | MONTABERT HC160,170 | 807 mm |
| T51 | MONTABERT HC160,170 | 807 mm |
| MT60 | MONTABERT HC160,170 | 807 mm |
| T51 | MONTABERT HC200A | 840 mm |
| T60 | MONTABERT HC200A | 840 mm |
| MT60 | MONTABERT HC200A | 840 mm |

Sandvik Tamrock

| Thread | Description | Length mm |
|--------|-----------------------------------|-----------|
| R32 | TAMROCK HL300S FEMALE | 245 mm |
| R32 | TAMROCK HL300 | 400 mm |
| R32 | TAMROCK L400,L410,L500,L510 | 381 mm |
| R38 | TAMROCK HLR438,L550 | 381 mm |
| T38 | TAMROCK HLR438,L550 | 381 mm |
| R38 | TAMROCK HL438TS,HL538 | 450 mm |
| T38 | TAMROCK HL438TS,HL538 | 450 mm |
| R32 | TAMROCK HL438TS,HL538 | 495 mm |
| R38 | TAMROCK HL438TS,HL538 | 495 mm |
| T38 | TAMROCK HL438TS,HL538 | 495 mm |
| R32 | TAMROCK HL500 S, HL510 S (D=38mm) | 450 mm |
| R38 | TAMROCK HL500 S, HL510 S (D=38mm) | 450 mm |
| T38 | TAMROCK HL500 S, HL510 S (D=38mm) | 450 mm |
| T38 | TAMROCK HL500 S, HL510 S (D=38mm) | 550 mm |
| R32 | TAMROCK HL500, HL510 (D=45mm) | 550 mm |

| Thread | Description | Length mm |
|--------|--|-----------|
| T35 | TAMROCK HL550 SUPER,560 SUPER | 500 mm |
| R38 | TAMROCK HL550 SUPER,560 SUPER | 500 mm |
| T38 | TAMROCK HL550 SUPER,560 SUPER | 500 mm |
| T45 | TAMROCK HL550 SUPER,560 SUPER | 500 mm |
| R25 | TAMROCK HLX1 | 255 mm |
| R28 | TAMROCK HLX1 | 255 mm |
| R32 | TAMROCK RD314 (FEMALE) | 205 mm |
| T38 | TAMROCK RD520/RD525 | 525 mm |
| T35 | TAMROCK RD520/RD525 | 600 mm |
| T38 | TAMROCK RD520/RD525 | 600 mm |
| T35 | TAMROCK RD520/RD525 | 745 mm |
| T38 | TAMROCK RD520/RD525 | 745 mm |
| R32 | TAMROCK HLX5/HFX5T | 500 mm |
| T35 | TAMROCK HLX5/HFX5T | 500 mm |
| R38 | TAMROCK HLX5/HFX5T | 500 mm |
| T38 | TAMROCK HLX5/HFX5T | 500 mm |
| T45 | TAMROCK HLX5/HFX5T | 500 mm |
| R32 | TAMROCK HLX5/HFX5T | 575 mm |
| T35 | TAMROCK HLX5/HFX5T | 575 mm |
| T38 | TAMROCK HLX5/HFX5T | 575 mm |
| T45 | TAMROCK HLX5/HFX5T | 575 mm |
| T38 | TAMROCK HL600 (D=45mm) | 525 mm |
| T45 | TAMROCK HL600 (D=45mm) | 525 mm |
| T38 | TAMROCK HL600 (D=45mm) | 600 mm |
| T45 | TAMROCK HL600 (D=45mm) | 600 mm |
| T45 | TAMROCK HL600 (D=52mm) | 650 mm |
| T51 | TAMROCK HL600 (D=52mm) | 650 mm |
| T38 | TAMROCK HL700/HL710/HL800T/HF810T/HL650 (D=45mm) | 600 mm |
| T45 | TAMROCK HL700/HL710/HL800T/HF810T/HL650 (D=45mm) | 600 mm |
| T51 | TAMROCK HL700/HL710/HL800T/HF810T/HL650 (D=45mm) | 600 mm |
| T38 | TAMROCK HL700,HL710,HL800,HF810,HL650,HL810 (D=52mm) | 600 mm |
| T45 | TAMROCK HL700,HL710,HL800,HF810,HL650,HL810 (D=52mm) | 600 mm |

| Thread | Description | Length mm |
|--------|---|-----------|
| T51 | TAMROCK HL1000, HL1010, HL1010S (D=52mm) | 670 mm |
| T51 | TAMROCK HL1000, HL1010 (D=60mm) | 670 mm |
| T60 | TAMROCK HL1000, HL1010 (D=60mm) | 670 mm |
| MT60 | TAMROCK HL1000, HL1010 (D=60mm) | 670 mm |
| T58 | TAMROCK HL1000 (80mm), HL1010, (SHOULDER DRIVE) | 635 mm |
| T68 | TAMROCK HL1000 (80mm), HL1010, (SHOULDER DRIVE) | 635 mm |
| T51 | TAMROCK HL1000 EXTRACTOR (D=52mm) | 840 mm |
| T51 | TAMROCK HL1500 (D=60mm) | 760 mm |
| T60 | TAMROCK HL1500 (D=60mm) | 760 mm |
| MT60 | TAMROCK HL1500 (D=60mm) | 760 mm |
| T58 | TAMROCK HL1500 (D=80mm) (SHOULDER DRIVE) | 635 mm |
| T68 | TAMROCK HL1500 (D=80mm) (SHOULDER DRIVE) | 635 mm |
| T51 | TAMROCK HL1500PE,1000PE,1560T(D=65mm) | 760 mm |
| T60 | TAMROCK HL1500PE,1000PE,1560T(D=65mm) | 760 mm |
| MT60 | TAMROCK HL1500PE,1000PE,1560T(D=65mm) | 760 mm |

Contact

Monark AS

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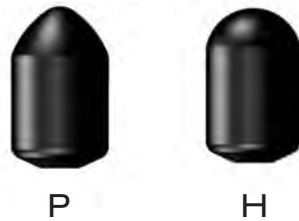
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Technical information button bits

At Monark we produce a wide range of button bits; here are a few pointers to help you choose the right product.

The button bits have either parabolic (P) or hemispherical (H) inserts.



Button bits have dropcenter (D) or they are flat faced (F), some have flushing holes (front and/or gauge) and some have retract function.

Our part numbers explained:

Tapered button bits:

11D38-7 P

Threaded button bits:

32R48RD H

11D = 11 Degrees

32R = R32 threads

38 /48= mm diameter

7 = 7 inserts

P/H = Parabolic or hemispherical inserts

R = Retrac

D = Dropcenter

N = Normal body

F = Flat faced



Retrac



Normal



D





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ROCK DRILLING TOOLS

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