

# BENCH DRILLING

## CATALOGUE

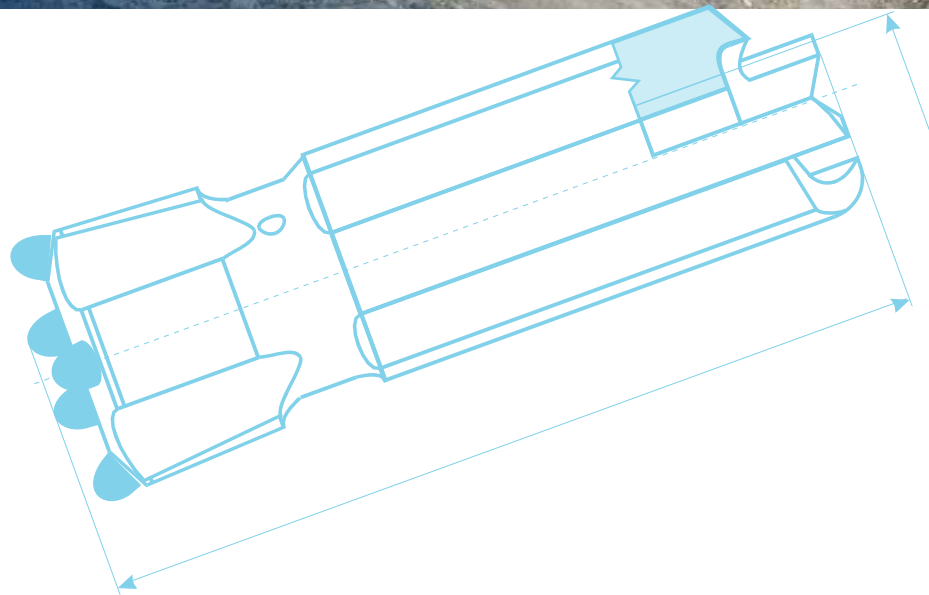




**FRD FURUKAWA** has expertise in manufacturing of mining, tunnelling & geotech tools. Using raw materials only from certified suppliers in combination with high-tech innovative production facilities, we can guarantee high quality of fully carburised drill steels. We offer a wide range of products with carbide sinters and have the possibility to quickly turn around on prototype tooling and urgent requirements. To sum up we are a dynamic company with an aim to become leaders in technology and product innovation.

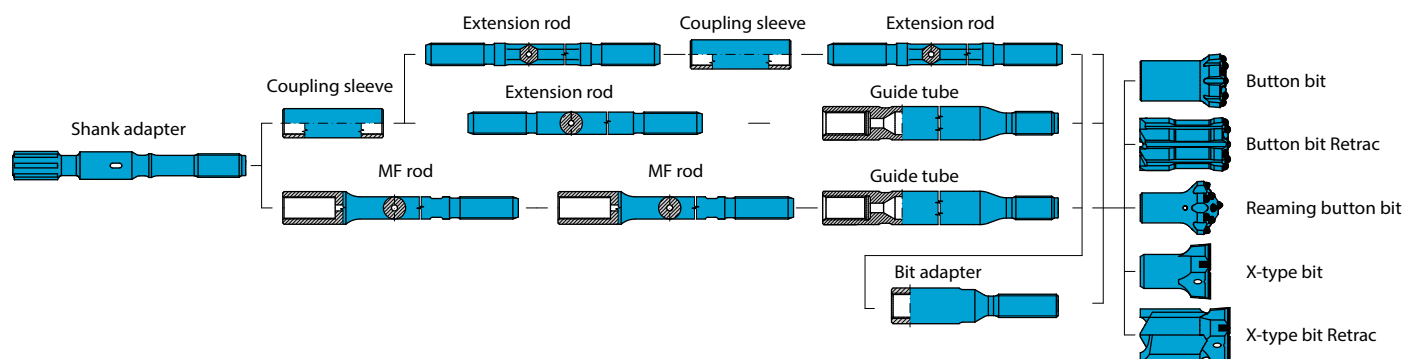




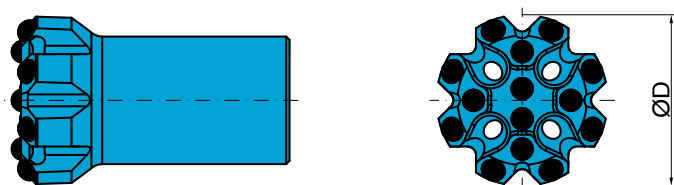


## Bits, Rods, Couplings, Bit Adapters

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## Button bit – DROP CENTER



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	4x8	8x10	5x9	1,8	FRD-B50064T3805R
64	2 ½	-	4x8	8x10	5x9	1,8	FRD-B50064T3805S
70	2 ¾	-	4x8	8x11	5x10	2,2	FRD-B50070T3805R
70	2 ¾	-	4x8	8x11	5x10	2,2	FRD-B50070T3805S
76	3	-	4x8	8x12	5x11	2,5	FRD-B50076T3805R
76	3	-	4x8	8x12	5x11	2,5	FRD-B50076T3805S
89	3 ½	-	4x9	8x13	5x12	3,4	FRD-B50089T3805R
89	3 ½	-	4x9	8x13	5x12	3,4	FRD-B50089T3805S
102	4	-	4x9	8x13	6x13	4,7	FRD-B50102T3805R
102	4	-	4x9	8x13	6x13	4,7	FRD-B50102T3805S

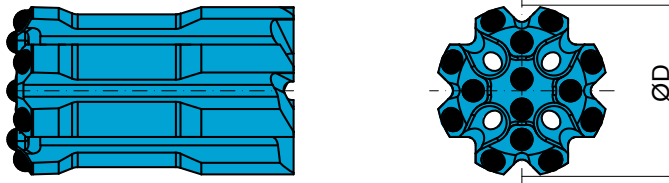
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.

# T38 – Bits

## Button bit – DROP CENTER – RETRAC

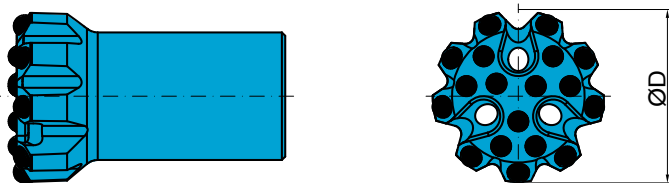


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	4x8	8x10	5x9	2,2	FRD-B51064T3805R
64	2 ½	-	4x8	8x10	5x9	2,2	FRD-B51064T3805S
70	2 ¾	-	4x8	8x11	5x10	2,8	FRD-B51070T3805R
70	2 ¾	-	4x8	8x11	5x10	2,8	FRD-B51070T3805S
76	3	-	4x8	8x12	5x11	3,6	FRD-B51076T3805R
76	3	-	4x8	8x12	5x11	3,6	FRD-B51076T3805S
89	3 ½	-	4x9	8x13	5x12	5,5	FRD-B51089T3805R
89	3 ½	-	4x9	8x13	5x12	5,5	FRD-B51089T3805S
102	4	-	4x9	8x13	6x13	7,3	FRD-B51102T3805R
102	4	-	4x9	8x13	6x13	7,3	FRD-B51102T3805S

R – spherical

S – ballistic

## Button bit – FLAT FACE



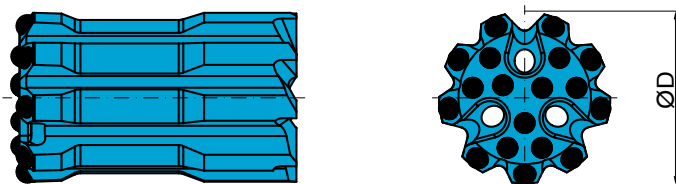
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	3x8	9x10	8x8	1,9	FRD-B52064T3805R
64	2 ½	-	3x8	9x10	8x8	1,9	FRD-B52064T3805S
76	3	-	3x9	9x12	8x10	2,5	FRD-B52076T3805R
76	3	-	3x9	9x12	8x10	2,5	FRD-B52076T3805S
89	3 ½	-	3x10	9x13	9x11	3,5	FRD-B52089T3805R
89	3 ½	-	3x10	9x13	9x11	3,5	FRD-B52089T3805S
102	4	-	3x10	9x13	9x12	4,9	FRD-B52102T3805R
102	4	-	3x10	9x13	9x12	4,9	FRD-B52102T3805S

R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.

## Button bit – FLAT FACE – RETRAC

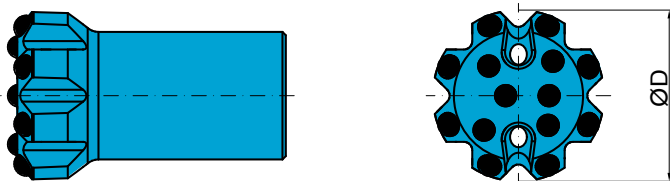


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	3x8	9x10	8x8	2,4	FRD-B53064T3805R
64	2 ½	-	3x8	9x10	8x8	2,4	FRD-B53064T3805S
76	3	-	3x9	9x12	8x10	3,7	FRD-B53076T3805R
76	3	-	3x9	9x12	8x10	3,7	FRD-B53076T3805S
89	3 ½	-	3x10	9x13	9x11	5,6	FRD-B53089T3805R
89	3 ½	-	3x10	9x13	9x11	5,6	FRD-B53089T3805S
102	4	-	3x10	9x13	9x12	7,4	FRD-B53102T3805R
102	4	-	3x10	9x13	9x12	7,4	FRD-B53102T3805S

R – spherical

S – ballistic

## Button bit – FLAT FACE – Heavy Duty



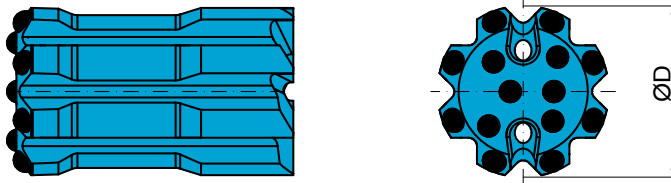
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	2x9	8x11	4x10	1,9	FRD-B52064T3815R
70	2 ¾	-	2x9	8x12	4x11	2,3	FRD-B52070T3815R
76	3	-	2x10	8x13	4x12	2,5	FRD-B52076T3815R
89	3 ½	-	2x11	8x14	5x13	3,6	FRD-B52089T3815R
102	4	-	2x11	8x15	6x14	5,0	FRD-B52102T3815R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# T38 – Bits

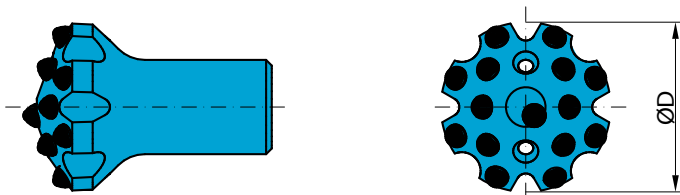
## Button bit – FLAT FACE – Heavy Duty - RETRAC



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	-	2x9	8x11	4x10	2,4	FRD-B53064T3815R
70	2 ¾	-	2x9	8x12	4x11	3,1	FRD-B53070T3815R
76	3	-	2x10	8x13	4x12	3,7	FRD-B53076T3815R
89	3 ½	-	2x11	8x14	5x13	5,5	FRD-B53089T3815R
102	4	-	2x11	8x15	6x14	7,4	FRD-B53102T3815R

R – spherical

## Button bit



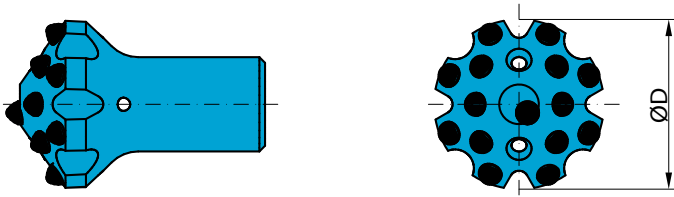
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
70	2 ¾	-	2x8	8x11	5x10	2,3	FRD-B54070T3805R
76	3	-	2x9	8x12	6x11	2,5	FRD-B54076T3805R
89	3 ½	-	2x9	8x13	6x12	3,6	FRD-B54089T3805R
102	4	-	2x10	8x13	7x12	5,0	FRD-B54102T3805R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# T38 – Bits

## Reaming button bit



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
115	4 ½	1x7	3x7	9x13	8x12	6,5	FRD-B54115T3815R
127	5	1x7,5	3x7,5	9x14	9x13	7,9	FRD-B54127T3815R

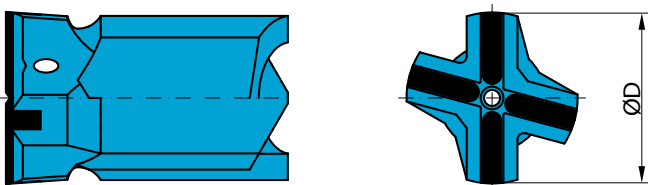
R – spherical

## Cross X-type bit



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
64	2 ½	2x7	1x8	-	-	1,9	FRD-B48064T380B2
76	3	2x8	1x10	-	-	2,5	FRD-B48076T380B2
89	3 ½	2x9	1x10	-	-	3,6	FRD-B48089T380B2

## Cross X-type bit – RETRAC



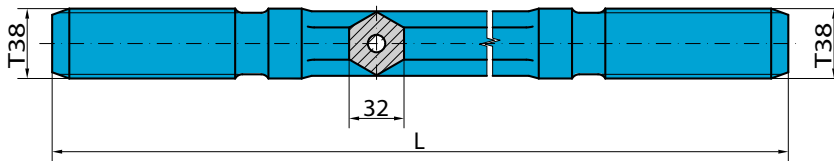
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	2x7	1x8	-	-	3,7	FRD-B49076T380B2
89	3 ½	2x8	1x10	-	-	5,5	FRD-B49089T380B2
102	4	2x9	1x10	-	-	7,4	FRD-B49102T380B2

\*Otras medidas y configuraciones bajo requerimiento.



# T38 – Rods

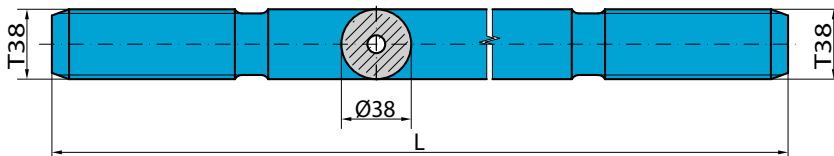
## Hex rods



Hex		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
32	1 ¼	T38/T38	915	3	-	5,9	FRD-2122209
32	1 ¼	T38/T38	1220	4	-	7,9	FRD-21222122
32	1 ¼	T38/T38	1525	5	-	9,8	FRD-21222152
32	1 ¼	T38/T38	1830	6	-	11,8	FRD-21222183
32	1 ¼	T38/T38	2165	7	-	13,5	FRD-21222216
32	1 ¼	T38/T38	2435	8	-	15,6	FRD-21222243
32	1 ¼	T38/T38	3050	10	-	19,5	FRD-2122230
32	1 ¼	T38/T38	3660	12	-	23,4	FRD-2122236
32	1 ¼	T38/T38	4265	14	-	27,3	FRD-21222427
32	1 ¼	T38/T38	4915	16	-	31,4	FRD-21222491
32	1 ¼	T38/T38	5490	18	-	35,1	FRD-21222549
32	1 ¼	T38/T38	6100	20	-	39,0	FRD-21222610

Flushing hole  $\phi$  16 mm

## Extension rods



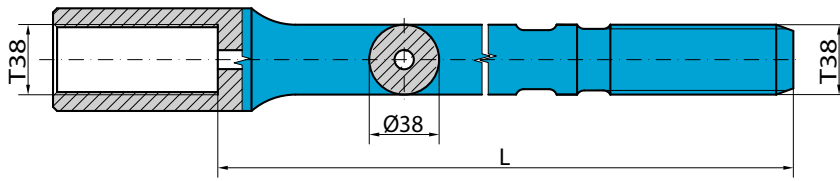
Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
38	1 ½	T38/T38	915	3	-	6,6	FRD-2322209
38	1 ½	T38/T38	1220	4	-	8,8	FRD-2322212
38	1 ½	T38/T38	1525	5	-	11,0	FRD-23222152
38	1 ½	T38/T38	1830	6	-	13,2	FRD-2322218
38	1 ½	T38/T38	2165	7	-	15,7	FRD-23222216
38	1 ½	T38/T38	2435	8	-	17,6	FRD-23222243
38	1 ½	T38/T38	3050	10	-	22,1	FRD-2322230
38	1 ½	T38/T38	3660	12	-	26,5	FRD-2322236
38	1 ½	T38/T38	4265	14	-	30,8	FRD-23222427
38	1 ½	T38/T38	4915	16	-	35,5	FRD-23222491
38	1 ½	T38/T38	5490	18	-	39,7	FRD-23222549
38	1 ½	T38/T38	6100	20	-	46,0	FRD-23222610

Flushing hole  $\phi$  14,5 mm

\*Otras medidas y configuraciones bajo requerimiento.

# T38 – Rods

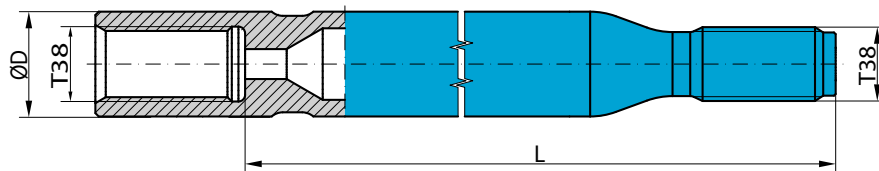
## Speed rods / M-F rods



Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
38	1 ½	T38/T38	915	3	-	7,6	FRD-2622309
38	1 ½	T38/T38	1220	4	-	10,0	FRD-2622312
38	1 ½	T38/T38	1525	5	-	12,5	FRD-26223152
38	1 ½	T38/T38	1830	6	-	15,0	FRD-2622318
38	1 ½	T38/T38	2165	7	-	17,7	FRD-26223216
38	1 ½	T38/T38	2435	8	-	19,9	FRD-26223243
38	1 ½	T38/T38	3050	10	-	24,8	FRD-2622330
38	1 ½	T38/T38	3660	12	-	29,8	FRD-2622336
38	1 ½	T38/T38	4265	14	-	34,6	FRD-2622342
38	1 ½	T38/T38	4915	16	-	39,9	FRD-26223491
38	1 ½	T38/T38	5490	18	-	44,5	FRD-26223549
38	1 ½	T38/T38	6100	20	-	49,5	FRD-26223610

Flushing hole  $\phi$  14,5 mm, Female end  $\phi$  55 mm

## Guide tube rods

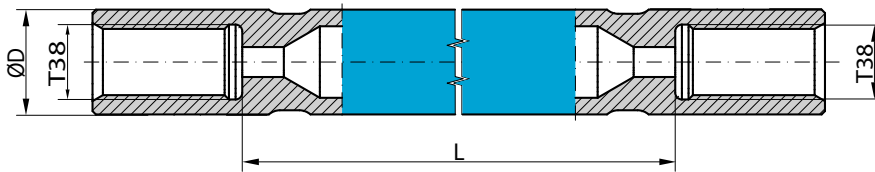


Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
56	2 ¼	T38/T38	1525	5	-	14,0	FRD-1256T38T38152
56	2 ¼	T38/T38	1830	6	-	17,4	FRD-1256T38T38183
56	2 ¼	T38/T38	3050	10	-	28,3	FRD-1256T38T38305
56	2 ¼	T38/T38	3660	12	-	32,8	FRD-1256T38T38366
64	2 ½	T38/T38	3660	12	-	51,0	FRD-1264T38T38366

\*Otras medidas y configuraciones bajo requerimiento.

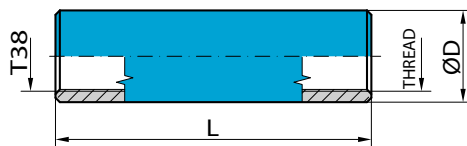
# T38 – Rods, Couplings

## Guide tube rods



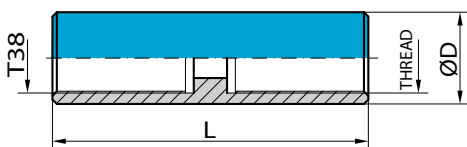
Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
56	2 ¼	T38/T38	1525	5	-	14,3	FRD-1356T38T38152
56	2 ¼	T38/T38	1830	6	-	17,7	FRD-1356T38T38183
56	2 ¼	T38/T38	3050	10	-	28,6	FRD-1356T38T38305
56	2 ¼	T38/T38	3660	12	-	33,1	FRD-1356T38T38366
64	2 ½	T38/T38	3660	12	-	51,3	FRD-1364T38T38366

## Coupling sleeve



Diameter		Threads	Length		Weight	Catalogue N°
mm	inch		mm	inch	kg	
55	2 ¼	T38/T38	180	7 3/32	2,0	FRD-3922200

## Full bridge

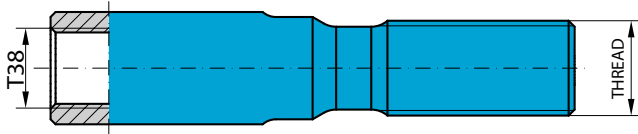


Diameter		Threads	Length		Weight	Catalogue N°
mm	inch		mm	inch	kg	
55	2 ¼	T38/R32	185	7	2,3	FRD-3947201
55	2 ¼	T38/T38	210	8 ¼	2,6	FRD-3922201

\*Otras medidas y configuraciones bajo requerimiento.

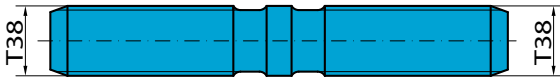
# T38 – Bit adapters

## M-F adapters



Threads female/male	Length		Weight kg	Catalogue N°
	mm	inch		
T38/R32	240	9 ½	2,4	FRD-39472061
T38/T45	275	10 ¾	3,2	FRD-3922306

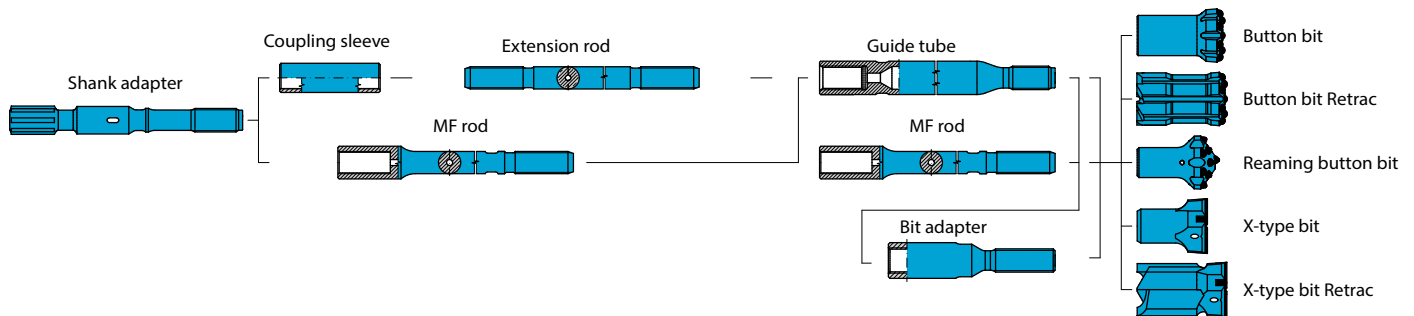
## M-M adapters



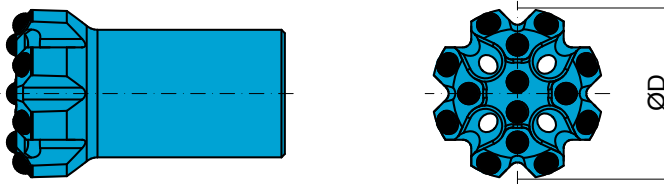
Threads male/male	Length		Weight kg	Catalogue N°
	mm	inch		
T38/T38	220	8 ¾	1,6	FRD-3838T38T3800

\*Otras medidas y configuraciones bajo requerimiento.

# T45 – Bits



## Button bit – DROP CENTER



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
70	2 ¾	-	4x8	8x11	5x10	2,4	FRD-B50070T4505R
70	2 ¾	-	4x8	8x11	5x10	2,4	FRD-B50070T4505S
76	3	-	4x8	8x12	5x11	2,8	FRD-B50076T4505R
76	3	-	4x8	8x12	5x11	2,8	FRD-B50076T4505S
89	3 ½	-	4x9	8x13	5x12	3,2	FRD-B50089T4505R
89	3 ½	-	4x9	8x13	5x12	3,2	FRD-B50089T4505S
102	4	-	4x9	8x14	6x13	4,5	FRD-B50102T4505R
102	4	-	4x9	8x14	6x13	4,5	FRD-B50102T4505S
115	4 ½	-	4x9	8x15	6x14	6,2	FRD-B50115T4505R
115	4 ½	-	4x9	8x15	6x14	6,2	FRD-B50115T4505S
127	5	-	4x10	8x15	8x14	7,3	FRD-B50127T4505R
127	5	-	4x10	8x14	8x14	7,3	FRD-B50127T4505S

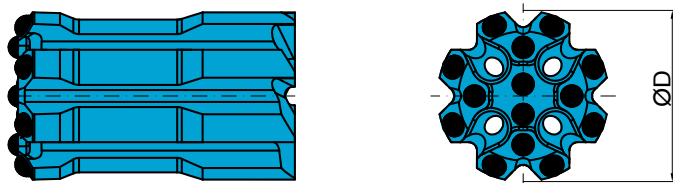
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.



## Button bit – DROP CENTER – RETRAC

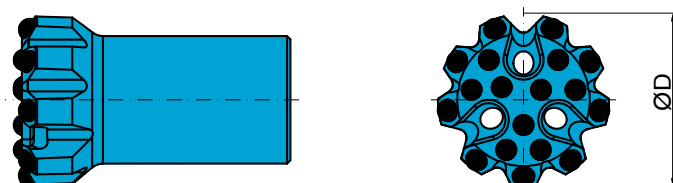


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
70	2 ¾	-	4x8	8x11	5x10	2,6	FRD-B51070T4505R
70	2 ¾	-	4x8	8x11	5x10	2,6	FRD-B51070T4505S
76	3	-	4x8	8x12	5x11	3,4	FRD-B51076T4505R
76	3	-	4x8	8x12	5x11	3,4	FRD-B51076T4505S
89	3 ½	-	4x9	8x13	5x12	5,2	FRD-B51089T4505R
89	3 ½	-	4x9	8x13	5x12	5,2	FRD-B51089T4505S
102	4	-	4x9	8x14	6x13	7,0	FRD-B51102T4505R
102	4	-	4x9	8x14	6x13	7,0	FRD-B51102T4505S
115	4 ½	-	4x9	8x15	6x14	9,3	FRD-B51115T4505R
115	4 ½	-	4x9	8x15	6x14	9,3	FRD-B51115T4505S
127	5	-	4x10	8x15	8x14	11,5	FRD-B51127T4505R
127	5	-	4x10	8x15	8x14	11,5	FRD-B51127T4505S

R – spherical

S – ballistic

## Button bit – FLAT FACE



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	-	3x9	9x12	8x10	2,8	FRD-B52076T4505R
76	3	-	3x9	9x12	8x10	2,8	FRD-B52076T4505S
80	3 5/32	-	3x9	9x12	8x10	3,0	FRD-B52080T4505R
80	3 5/32	-	3x9	9x12	8x10	3,0	FRD-B52080T4505S
89	3 ½	-	3x10	9x13	9x11	3,3	FRD-B52089T4505R
89	3 ½	-	3x10	9x13	9x11	3,3	FRD-B52089T4505S
102	4	-	3x10	9x14	9x12	4,6	FRD-B52102T4505R
102	4	-	3x10	9x14	9x12	4,6	FRD-B52102T4505S
115	4 ½	-	3x10	9x15	10x13	6,5	FRD-B52115T4505R
115	4 ½	-	3x10	9x15	10x13	6,5	FRD-B52115T4505S

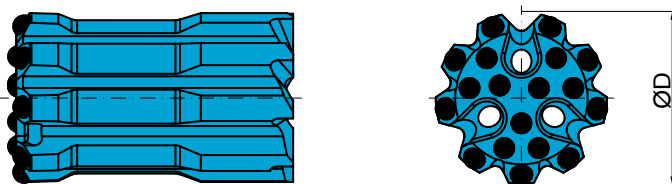
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.

## T45 – Bits

### Button bit – FLAT FACE – RETRAC

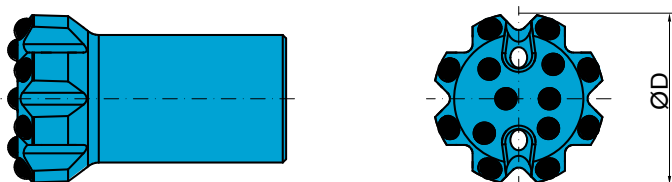


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	-	3x9	9x12	8x10	3,5	FRD-B53076T4505R
76	3	-	3x9	9x12	8x10	3,5	FRD-B53076T4505S
80	3 <sup>5</sup> / <sub>32</sub>	-	3x9	9x12	8x10	4,2	FRD-B53080T4505R
80	3 <sup>5</sup> / <sub>32</sub>	-	3x9	9x12	8x10	4,2	FRD-B53080T4505S
89	3 ½	-	3x10	9x13	9x11	5,4	FRD-B53089T4505R
89	3 ½	-	3x10	9x13	9x11	5,4	FRD-B53089T4505S
102	4	-	3x10	9x14	9x12	7,2	FRD-B53102T4505R
102	4	-	3x10	9x14	9x12	7,2	FRD-B53102T4505S
115	4 ½	-	3x10	9x15	10x13	8,4	FRD-B53115T4505R
115	4 ½	-	3x10	9x15	10x13	8,4	FRD-B53115T4505S

R – spherical

S – ballistic

### Button bit – FLAT FACE – Heavy Duty



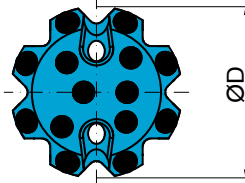
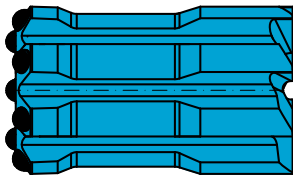
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
70	2 ¾	-	2x9	8x12	4x11	2,4	FRD-B52070T4515R
76	3	-	2x10	8x13	4x12	2,8	FRD-B52076T4515R
80	3 <sup>5</sup> / <sub>32</sub>	-	2x11	8x13	5x12	3,0	FRD-B52080T4515R
89	3 ½	-	2x11	8x14	5x13	3,3	FRD-B52089T4515R
102	4	-	2x11	8x15	6x14	4,6	FRD-B52102T4515R
115	4 ½	-	2x12	8x16	7x15	6,5	FRD-B52115T4515R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# T45 – Bits

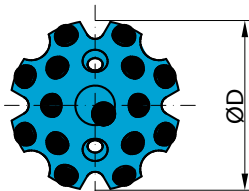
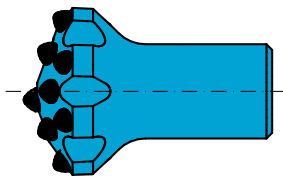
## Button bit – FLAT FACE – RETRAC – Heavy Duty



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
70	2 ¾	-	2x9	8x12	4x11	3,2	FRD-B53070T4515R
76	3	-	2x10	8x13	4x12	3,5	FRD-B53076T4515R
80	3 5/32	-	2x11	8x13	5x12	4,2	FRD-B53080T4515R
89	3 ½	-	2x11	8x14	5x13	5,4	FRD-B53089T4515R
102	4	-	2x11	8x15	6x14	7,2	FRD-B53102T4515R
115	4 ½	-	2x12	8x15	7x14	8,4	FRD-B53115T4515R

R – spherical

## Button bit



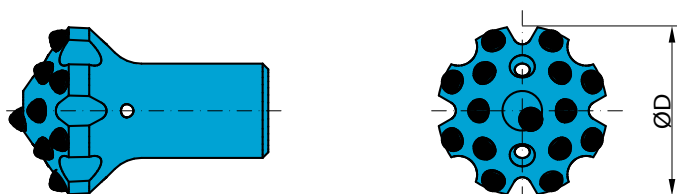
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	-	2x10	8x12	6x11	2,8	FRD-B54076T4505R
89	3 ½	-	2x10	8x13	6x12	3,4	FRD-B54089T4505R
102	4	-	2x11	8x13	7x12	4,7	FRD-B54102T4505R
115	4 ½	-	2x12	8x14	8x13	6,6	FRD-B54115T4505R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# T45 – Bits

## Reaming button bit



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
115	4 ½	1x8	3x8	9x13	8x12	6,6	FRD-B54115T4515R
127	5	1x9	3x9	9x14	9x13	8,1	FRD-B54127T4515R
152	6	1x10	3x10	9x14	11x13	11,2	FRD-B54152T4515R

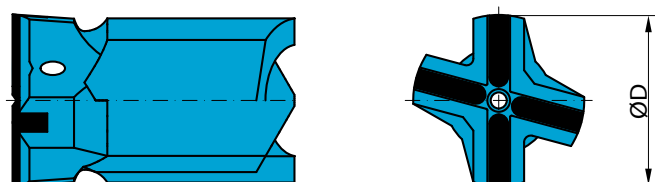
R – spherical

## Cross X-type bit



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue no.
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	2x9	1x10	-	-	2,7	FRD-B48076T450B2
89	3 ½	2x10	1x10	-	-	3,3	FRD-B48089T450B2
102	4	2x10	1x11	-	-	4,7	FRD-B48102T450B2

## Cross X-type bit – RETRAC

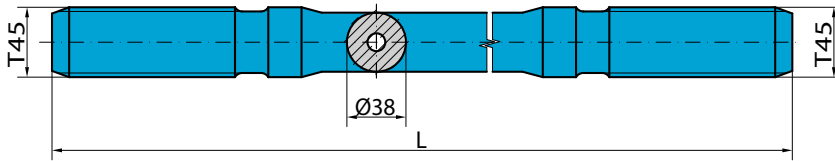


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
76	3	2x9	1x10	-	-	3,5	FRD-B49076T450B2
89	3 ½	2x10	1x10	-	-	4,7	FRD-B49089T450B2
102	4	2x10	1x11	-	-	6,8	FRD-B49102T450B2

\*Otras medidas y configuraciones bajo requerimiento.

# T45 – Rods

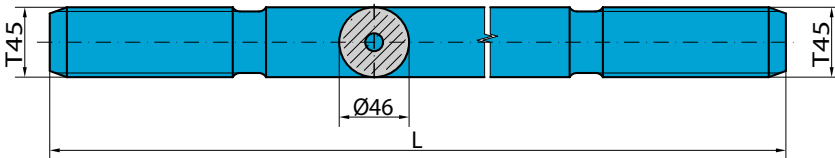
## Extension rods diameter 38mm



Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
38	1 ½	T45/T45	915	3	-	7,8	FRD-2332309
38	1 ½	T45/T45	1220	4	-	10,3	FRD-23323122
38	1 ½	T45/T45	1525	5	-	12,7	FRD-23323152
38	1 ½	T45/T45	1830	6	-	15,2	FRD-23323183
38	1 ½	T45/T45	2165	7	-	17,9	FRD-23323216
38	1 ½	T45/T45	2435	8	-	20,1	FRD-23323243
38	1 ½	T45/T45	3050	10	-	25,0	FRD-2332330
38	1 ½	T45/T45	3660	12	-	30,0	FRD-2332336
38	1 ½	T45/T45	4265	14	-	34,9	FRD-23323427
38	1 ½	T45/T45	4915	16	-	40,1	FRD-23323491
38	1 ½	T45/T45	5490	18	-	44,8	FRD-23323549
38	1 ½	T45/T45	6100	20	-	49,7	FRD-233233610

Flushing hole  $\phi$  14,5 mm

## Extension rods diameter 46mm



Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
46	1 ¾	T45/T45	915	3	-	8,7	FRD-1832309
46	1 ¾	T45/T45	1220	4	-	11,6	FRD-18323122
46	1 ¾	T45/T45	1525	5	-	14,5	FRD-18323152
46	1 ¾	T45/T45	1830	6	-	17,4	FRD-1832318
46	1 ¾	T45/T45	2165	7	-	20,6	FRD-18323216
46	1 ¾	T45/T45	2435	8	-	23,1	FRD-18323243
46	1 ¾	T45/T45	3050	10	-	29,0	FRD-18323305
46	1 ¾	T45/T45	3660	12	-	34,8	FRD-1832336
46	1 ¾	T45/T45	4265	14	-	40,5	FRD-18323427
46	1 ¾	T45/T45	4915	16	-	46,7	FRD-18323491
46	1 ¾	T45/T45	6100	20	-	58,0	FRD-18323610
46	1 ¾	T45/T45	7200	24	-	68,4	FRD-18323720

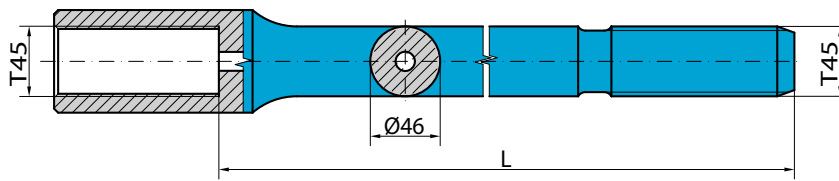
Flushing hole  $\phi$  17 mm

\*Otras medidas y configuraciones bajo requerimiento.



# T45 – Rods

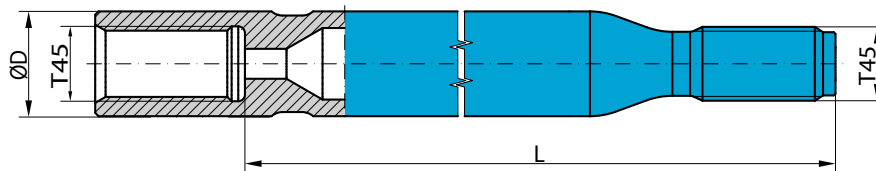
## Speed rods / M-F rods



Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
46	1 ¾	T45/T45	1525	5	-	18,3	FRD-26626152
46	1 ¾	T45/T45	1830	6	-	21,7	FRD-26626181
46	1 ¾	T45/T45	2165	7	-	25,4	FRD-26626216
46	1 ¾	T45/T45	2435	8	-	28,5	FRD-26626243
46	1 ¾	T45/T45	3050	10	-	35,3	FRD-2662630
46	1 ¾	T45/T45	3660	12	-	42,1	FRD-2662636
46	1 ¾	T45/T45	4265	14	-	48,8	FRD-2662642
46	1 ¾	T45/T45	4915	16	-	56,1	FRD-26626491
46	1 ¾	T45/T45	6100	20	-	69,3	FRD-26626610
46	1 ¾	T45/T45	7200	24	-	81,6	FRD-26626720

Flushing hole  $\phi$  17 mm, Female end  $\phi$  67 mm

## Guide tube rods

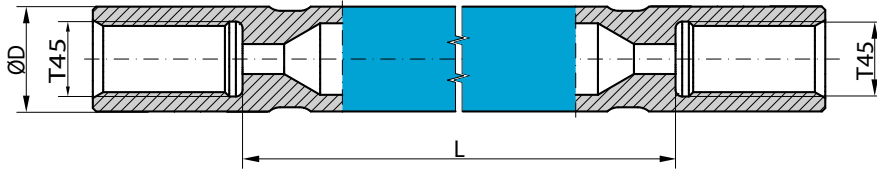


Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
64	2 ½	T45/T45	1830	6	-	27,8	FRD-1263T45T45183
64	2 ½	T45/T45	3660	12	-	51,7	FRD-1263T45T45366
64	2 ½	T45/T45	4265	14	-	59,6	FRD-1263T45T45426
76	3	T45/T45	3660	12	-	73,9	FRD-1276T45T45366
76	3	T45/T45	4265	14	-	85,3	FRD-1276T45T45426

\*Otras medidas y configuraciones bajo requerimiento.

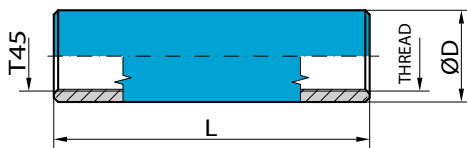
# T45 – Rod, Couplings

## Guide tube rods



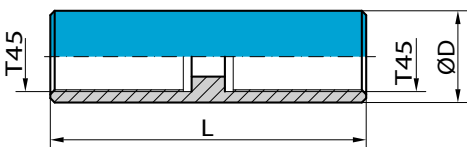
Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
64	2 ½	T45/T45	1830	6	-	28,4	FRD-1363T45T45183
64	2 ½	T45/T45	3660	12	-	52,3	FRD-1363T45T45366
64	2 ½	T45/T45	4265	14	-	60,2	FRD-1363T45T45426
76	3	T45/T45	3660	12	-	74,5	FRD-1376T45T45366
76	3	T45/T45	4265	14	-	86,0	FRD-1376T45T45426

## Coupling sleeve



Diameter		Threads	Length		Weight kg	Catalogue N°
mm	inch		mm	inch		
64	2 ½	T45/T38	180	7 ¾	2,9	FRD-3922300
64	2 ½	T45/T45	180	7 ¾	2,5	FRD-3932300

## Full bridge

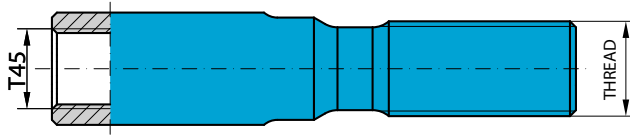


Diameter		Threads	Length		Weight kg	Catalogue N°
mm	inch		mm	inch		
64	2 ½	T45/T45	210	8 ¼	3,0	FRD-3932301

\*Otras medidas y configuraciones bajo requerimiento.

# T45 – Bit adapters

## M-F adapters



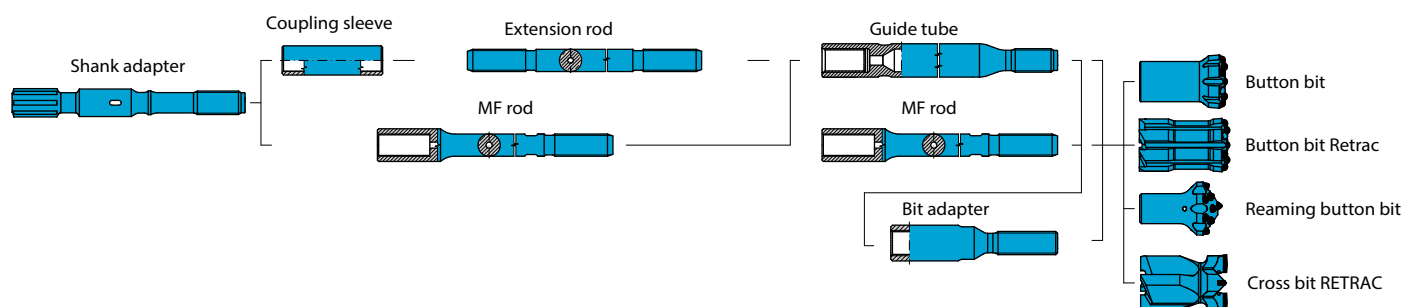
Threads	Length		Weight	Catalogue N°	
	female/male	mm			inch
T45/T38		235	10 $\frac{3}{8}$	3,2	FRD-3932206
T45/T51		275	10 $\frac{7}{8}$	3,8	FRD-39523065

## M-M adapters

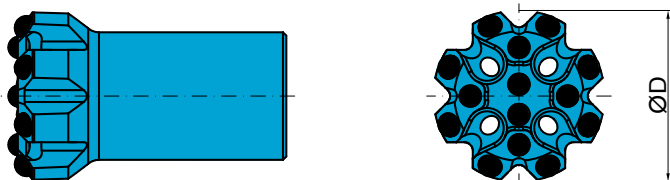


Threads	Length		Weight	Catalogue N°	
	male/male	mm			inch
T45/T45		220	8 $\frac{3}{4}$	2,4	FRD-3845T45T4500

\*Otras medidas y configuraciones bajo requerimiento.



## Button bit – DROP CENTER



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
89	3 ½	-	4x9	8x13	5x12	3,5	FRD-B50089T5105R
89	3 ½	-	4x9	8x13	5x12	3,5	FRD-B50089T5105S
102	4	-	4x10	8x14	6x13	5,0	FRD-B50102T5105R
102	4	-	4x10	8x14	6x13	5,0	FRD-B50102T5105S
115	4 ½	-	4x11	8x15	6x14	7,3	FRD-B50115T5105R
115	4 ½	-	4x11	8x15	6x14	7,3	FRD-B50115T5105S
127	5	-	4x11	8x16	8x15	7,8	FRD-B50127T5105R
127	5	-	4x11	8x16	8x15	7,8	FRD-B50127T5105S
152	6	-	4x12	8x16	8x15	12,2	FRD-B50152T5105R
152	6	-	4x12	8x16	8x15	12,2	FRD-B50152T5105S

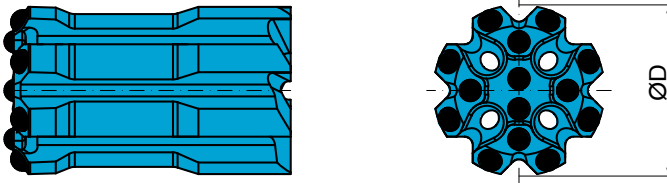
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.

# T51 – Bits

## Button bit – DROP CENTER – RETRAC

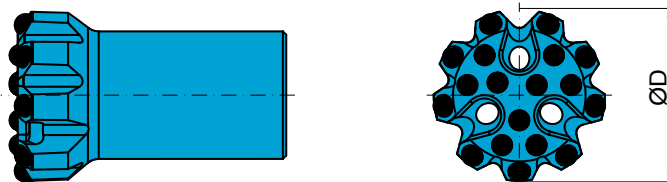


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
89	3 ½	-	4x9	8x13	5x12	5,2	FRD-B51089T5105R
89	3 ½	-	4x9	8x13	5x12	5,2	FRD-B51089T5105S
102	4	-	4x10	8x14	6x13	7,0	FRD-B51102T5105R
102	4	-	4x10	8x14	6x13	7,0	FRD-B51102T5105S
115	4 ½	-	4x11	8x15	6x14	9,4	FRD-B51115T5105R
115	4 ½	-	4x11	8x15	6x14	9,4	FRD-B51115T5105S
127	5	-	4x11	8x16	8x15	11,8	FRD-B51127T5105R
127	5	-	4x11	8x16	8x15	11,8	FRD-B51127T5105S
152	6	-	4x12	8x16	8x15	19,0	FRD-B51152T5105R
152	6	-	4x12	8x16	8x15	19,0	FRD-B51152T5105S

R – spherical

S – ballistic

## Button bit – FLAT FACE



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
80	3 5/32	-	3x10	9x12	8x10	3,1	FRD-B52080T5105R
80	3 5/32	-	3x10	9x12	8x10	3,1	FRD-B52080T5105S
89	3 ½	-	3x11	9x13	8x11	3,6	FRD-B52089T5105R
89	3 ½	-	3x11	9x13	8x11	3,6	FRD-B52089T5105S
102	4	-	3x12	9x14	9x12	4,6	FRD-B52102T5105R
102	4	-	3x12	9x14	9x12	4,6	FRD-B52102T5105S
115	4 ½	-	3x12	9x15	10x13	6,7	FRD-B52115T5105R
115	4 ½	-	3x12	9x15	10x13	6,7	FRD-B52115T5105S
127	5	-	3x13	9x16	10x14	8,4	FRD-B52127T5105R
127	5	-	3x13	9x16	10x14	8,4	FRD-B52127T5105S
152	6	-	3x14	9x16	10x14	12,1	FRD-B52152T5105R
152	6	-	3x14	9x16	10x14	12,1	FRD-B52152T5105S

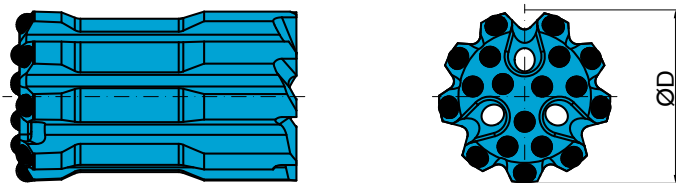
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.



## Button bit – FLAT FACE – RETRAC

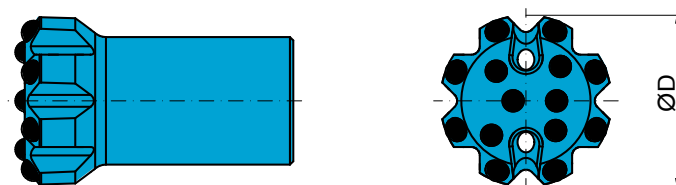


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
80	3 5/32	-	3x10	9x12	8x10	4,0	FRD-B53080T5105R
80	3 5/32	-	3x10	9x12	8x10	4,0	FRD-B53080T5105S
89	3 1/2	-	3x11	9x13	9x11	4,9	FRD-B53089T5105R
89	3 1/2	-	3x11	9x13	9x11	4,9	FRD-B53089T5105S
102	4	-	3x12	9x14	9x12	6,8	FRD-B53102T5105R
102	4	-	3x12	9x14	9x12	6,8	FRD-B53102T5105S
115	4 1/2	-	3x12	9x15	10x13	8,8	FRD-B53115T5105R
115	4 1/2	-	3x12	9x15	10x13	8,8	FRD-B53115T5105S
127	5	-	3x13	9x16	10x14	12,0	FRD-B53127T5105R
127	5	-	3x13	9x16	10x14	12,0	FRD-B53127T5105S
152	6	-	3x14	9x16	10x14	19,2	FRD-B53152T5105R
152	6	-	3x14	9x16	10x14	19,2	FRD-B53152T5105S

R – spherical

S – ballistic

## Button bit – FLAT FACE – Heavy Duty



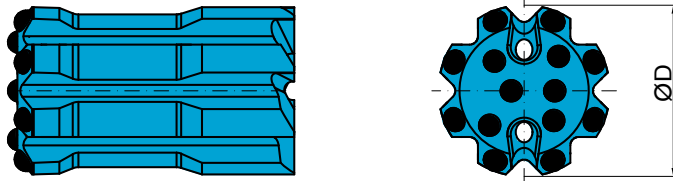
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
80	3 5/32	-	2x12	8x13	5x12	3,1	FRD-B52080T5115R
89	3 1/2	-	2x13	8x14	5x13	3,6	FRD-B52089T5115R
102	4	-	2x13	8x15	6x14	4,6	FRD-B52102T5115R
115	4 1/2	-	2x14	8x16	7x15	6,7	FRD-B52115T5115R
127	5	-	2x14	8x17	8x16	8,4	FRD-B52127T5115R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# T51 – Bits

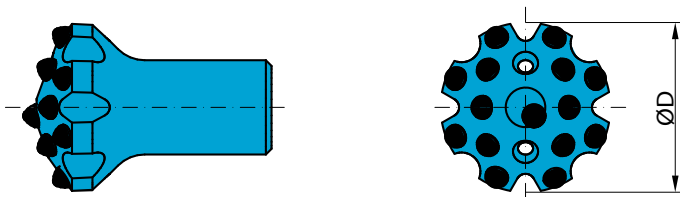
## Button bit – FLAT FACE – RETRAC – Heavy Duty



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
80	3 5/32	-	2x12	8x13	5x12	4,0	FRD-B53080T5115R
89	3 1/2	-	2x13	8x14	5x13	4,9	FRD-B53089T5115R
102	4	-	2x13	8x15	6x14	6,8	FRD-B53102T5115R
115	4 1/2	-	2x14	8x16	7x15	8,8	FRD-B53115T5115R
127	5	-	2x14	8x17	8x16	12,0	FRD-B53127T5115R

R – spherical

## Button bit

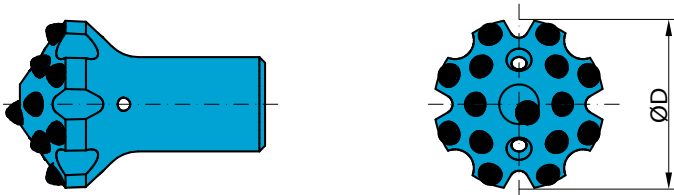


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
89	3 1/2	-	2x12	8x13	6x12	3,6	FRD-B54089T5105R
102	4	-	2x13	8x13	7x13	4,6	FRD-B54102T5105R
115	4 1/2	-	2x13	8x14	8x13	6,7	FRD-B54115T5105R
127	5	-	2x14	8x15	8x14	8,4	FRD-B54127T5105R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

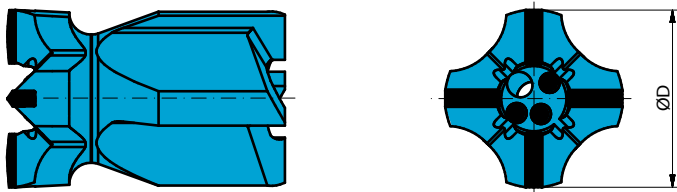
## Reaming button bit



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
115	4 ½	1x9	3x9	9x13	8x12	6,7	FRD-B54115T5115R
127	5	1x10	3x10	9x14	9x13	8,4	FRD-B54127T5115R
152	6	1x11	3x11	9x15	11x14	12,1	FRD-B54152T5115R

R – spherical

## Cross bit – RETRAC

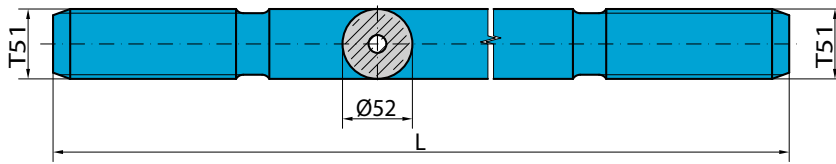


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
102	4	–	1x16	-	3x13	5,8	FRD-B47102T511B2
115	4 ½	–	1x16	-	3x13	7,3	FRD-B47115T511B2
127	5	–	1x16	-	3x14	9,8	FRD-B47127T511B2
140	5 ½	–	1x16	-	3x14	12,7	FRD-B47140T511B2
152	6	–	1x16	-	3x14	15,3	FRD-B47152T511B2

\*Otras medidas y configuraciones bajo requerimiento.

# T51 – Rods

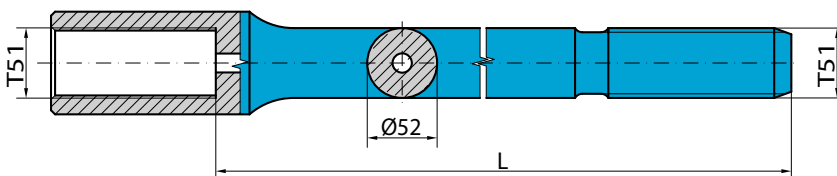
## Extension rods



Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
52	2	T51/T51	915	3	-	11,3	FRD-2805009
52	2	T51/T51	1220	4	-	15,6	FRD-28050122
52	2	T51/T51	1525	5	-	19,8	FRD-28050152
52	2	T51/T51	1830	6	-	24,0	FRD-28050183
52	2	T51/T51	2165	7	-	28,7	FRD-28050216
52	2	T51/T51	2435	8	-	32,4	FRD-28050243
52	2	T51/T51	3050	10	-	40,9	FRD-2805030
52	2	T51/T51	3660	12	-	49,4	FRD-2805036
52	2	T51/T51	4265	14	-	57,7	FRD-28050427
52	2	T51/T51	4915	16	-	66,7	FRD-28050491
52	2	T51/T51	6100	20	-	83,1	FRD-28050610
52	2	T51/T51	7200	24	-	98,4	FRD-28050720

Flushing hole  $\phi$  21,5 mm

## Speed rods / M-F rods



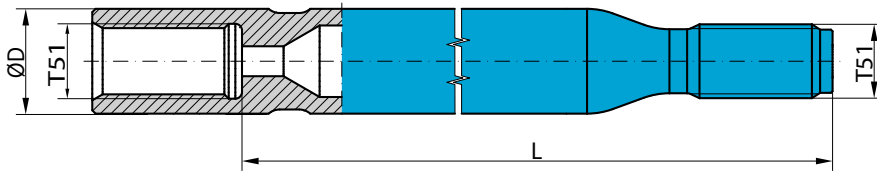
Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
52	2	T51/T51	1525	5	-	23,5	FRD-26929152
52	2	T51/T51	1830	6	-	27,5	FRD-26929183
52	2	T51/T51	2165	7	-	32,4	FRD-26929216
52	2	T51/T51	2435	8	-	36,1	FRD-26929243
52	2	T51/T51	3050	10	-	44,6	FRD-26929305
52	2	T51/T51	3660	12	-	53,1	FRD-26929366
52	2	T51/T51	4265	14	-	61,5	FRD-26929427
52	2	T51/T51	4915	16	-	70,5	FRD-26929491
52	2	T51/T51	6100	20	-	86,9	FRD-26929610
52	2	T51/T51	7200	24	-	102,1	FRD-26929720

Flushing hole  $\phi$  21,5 mm, Female end  $\phi$  74 mm

\*Otras medidas y configuraciones bajo requerimiento.

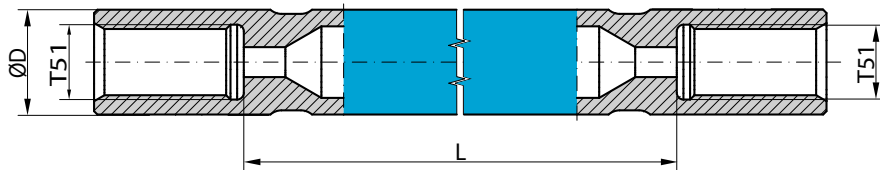
# T51 – Rods

## Guide tube rods



Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
76	3	T51/T51	1830	6	-	39,9	FRD-1276T51T51183
76	3	T51/T51	3660	12	-	74,5	FRD-1276T51T51366
76	3	T51/T51	4265	14	-	86,0	FRD-1276T51T51426
87	3 ½	T51/T51	3660	12	-	97,7	FRD-1287T51T51366
87	3 ½	T51/T51	4265	14	-	112,9	FRD-1287T51T51426

## Guide tube rods

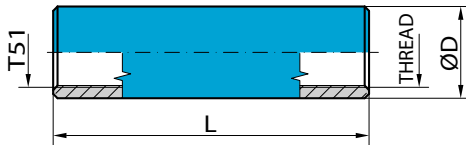


Diameter		Threads	Length			Weight kg	Catalogue N°
mm	inch		mm	ft	inch		
76	3	T51/T51	1830	6	-	41,5	FRD-1376T51T51183
76	3	T51/T51	3660	12	-	76,1	FRD-1376T51T51366
76	3	T51/T51	4265	14	-	87,6	FRD-1376T51T51426
87	3 ½	T51/T51	3660	12	-	99,3	FRD-1387T51T51366
87	3 ½	T51/T51	4265	14	-	114,5	FRD-1387T51T51426

\*Otras medidas y configuraciones bajo requerimiento.

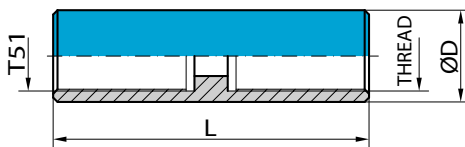
# T51 – Couplings

## Coupling sleeve



Diameter		Threads	Length		Weight	Catalogue N°
mm	inch		mm	inch	kg	
72	2 ¾	T51/T51	210	8 ⅝	4,0	FRD-3952532
74	3	T51/T45	195	7 ⅞	4,2	FRD-3952300
74	3	T51/T51	210	8 ⅝	4,7	FRD-3952500

## Full bridge

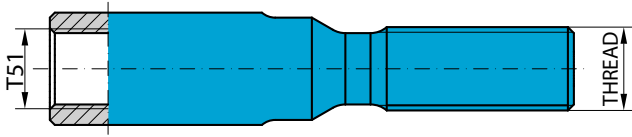


Diameter		Threads	Length		Weight	Catalogue N°
mm	inch		mm	inch	kg	
76	3	T51/T45	225	8 ⅞	5,6	FRD-3952301
76	3	T51/T51	240	9 ½	5,7	FRD-3952501

\*Otras medidas y configuraciones bajo requerimiento.

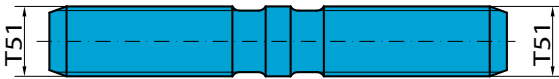
# T51 – Bit adapters

## M-F adapters



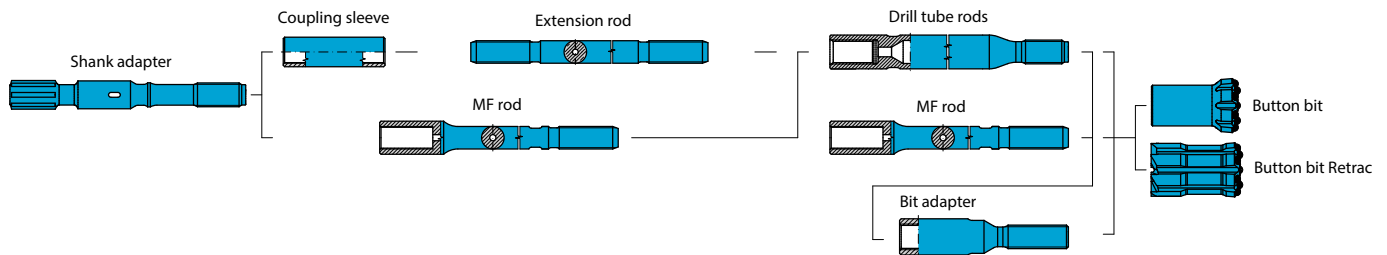
Threads female/male	Length		Weight kg	Catalogue N°
	mm	inch		
T51/T45	300	11 ¾	5,0	FRD-3952306
T51/GT60	300	11 ¾	7,5	FRD-3954606

## M-M adapters

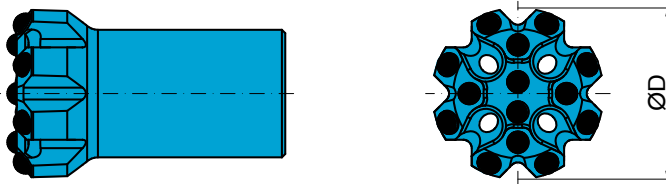


Threads male/male	Length		Weight kg	Catalogue N°
	mm	inch		
T51/T51	250	9 ⅞	3,2	FRD-3851T51T5100

\*Otras medidas y configuraciones bajo requerimiento.



## Button bit – DROP CENTER



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
92	3 5/8	-	4x11	8x14	5x13	4,3	FRD-B50092G6005R
92	3 5/8	-	4x11	8x14	5x13	4,3	FRD-B50092G6005S
96	3 3/4	-	4x11	8x14	6x13	4,8	FRD-B50096G6005R
96	3 3/4	-	4x11	8x14	6x13	4,8	FRD-B50096G6005S
102	4	-	4x12	8x14	6x13	5,2	FRD-B50102G6005R
102	4	-	4x12	8x14	6x13	5,2	FRD-B50102G6005S
115	4 1/2	-	4x12	8x15	6x14	7,5	FRD-B50115G6005R
115	4 1/2	-	4x12	8x15	6x14	7,5	FRD-B50115G6005S
127	5	-	4x13	8x16	8x15	8,7	FRD-B50127G6005R
127	5	-	4x13	8x16	8x15	8,7	FRD-B50127G6005S
140	5 1/2	-	4x13	8x16	8x15	10,4	FRD-B50140G6005R
140	5 1/2	-	4x13	8x16	8x15	10,4	FRD-B50140G6005S

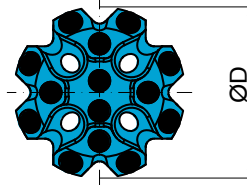
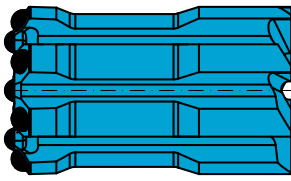
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.



## Button bit – DROP CENTER – RETRAC

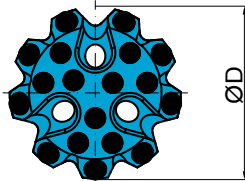
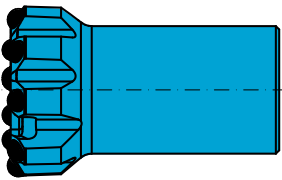


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
92	3 5/8	-	4x11	8x13	5x12	6,0	FRD-B51092G6005R
92	3 5/8	-	4x11	8x13	5x12	6,0	FRD-B51092G6005S
96	3 3/4	-	4x11	8x14	6x13	6,9	FRD-B51096G6005R
96	3 3/4	-	4x11	8x14	6x13	6,9	FRD-B51096G6005S
102	4	-	4x12	8x14	6x13	7,8	FRD-B51102G6005R
102	4	-	4x12	8x14	6x13	7,8	FRD-B51102G6005S
115	4 1/2	-	4x12	8x15	6x14	10,8	FRD-B51115G6005R
115	4 1/2	-	4x12	8x15	6x14	10,8	FRD-B51115G6005S
127	5	-	4x13	8x16	8x15	13,7	FRD-B51127G6005R
127	5	-	4x13	8x16	8x15	13,7	FRD-B51127G6005S
140	5 1/2	-	4x13	8x16	8x15	17,7	FRD-B51140G6005R
140	5 1/2	-	4x13	8x16	8x15	17,7	FRD-B51140G6005S

R – spherical

S – ballistic

## Button bit – FLAT FACE



Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
102	4	-	3x14	9x14	9x12	5,5	FRD-B52102G6005R
102	4	-	3x14	9x14	9x12	5,5	FRD-B52102G6005S
115	4 1/2	-	3x14	9x15	10x13	7,7	FRD-B52115G6005R
115	4 1/2	-	3x14	9x15	10x13	7,7	FRD-B52115G6005S
127	5	-	3x14	9x16	10x14	9,0	FRD-B52127G6005R
127	5	-	3x14	9x16	10x14	9,0	FRD-B52127G6005S
140	5 1/2	-	3x14	9x16	10x15	11,5	FRD-B52140G6005R
140	5 1/2	-	3x14	9x16	10x15	11,5	FRD-B52140G6005S
152	6	-	3x14	9x16	10x15	13,1	FRD-B52152G6005R
152	6	-	3x14	9x16	10x15	13,1	FRD-B52152G6005S

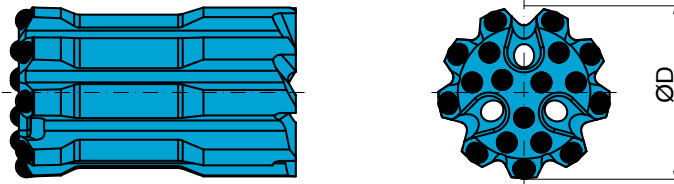
R – spherical

S – ballistic

\*Otras medidas y configuraciones bajo requerimiento.

# GT60 – Bits

## Button bit – FLAT FACE – RETRAC

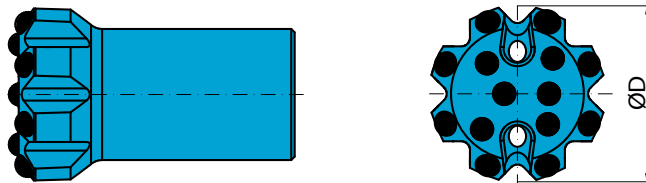


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
102	4	-	3x14	9x14	9x12	8,0	FRD-B53102G6005R
102	4	-	3x14	9x14	9x12	8,0	FRD-B53102G6005S
115	4 ½	-	3x14	9x15	10x13	11,1	FRD-B53115G6005R
115	4 ½	-	3x14	9x15	10x13	11,1	FRD-B53115G6005S
127	5	-	3x14	9x16	10x14	14,7	FRD-B53127G6005R
127	5	-	3x14	9x16	10x14	14,7	FRD-B53127G6005S
140	5 ½	-	3x14	9x16	10x15	18,6	FRD-B53140G6005R
140	5 ½	-	3x14	9x16	10x15	18,6	FRD-B53140G6005S
152	6	-	3x14	9x16	10x15	20,7	FRD-B53152G6005R
152	6	-	3x14	9x16	10x15	20,7	FRD-B53152G6005S

R – spherical

S – ballistic

## Button bit – FLAT FACE – Heavy Duty

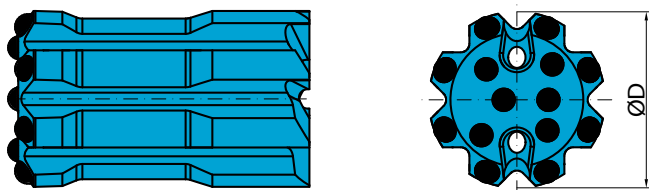


Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
102	4	-	2x15	8x15	6x14	5,5	FRD-B52102G6015R
115	4 ½	-	2x16	8x16	7x15	7,7	FRD-B52115G6015R
127	5	-	2x16	8x17	8x15	9,0	FRD-B52127G6015R
140	5 ½	-	2x17	8x17	9x16	11,5	FRD-B52140G6015R
152	6	-	2x17	8x17	9x16	13,1	FRD-B52152G6015R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

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



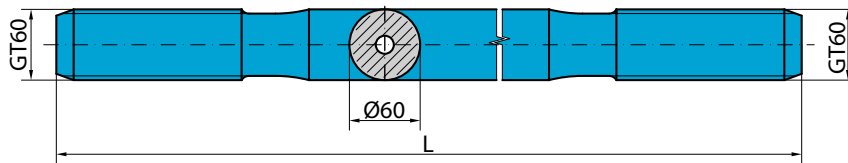
Diameter		Flushing holes		Buttons (mm)		Weight	Catalogue N°
mm	inch	Side No x Size	Front No x Size	Gauge No x Size	Front No x Size	kg	
102	4	-	2x15	8x15	6x14	8,0	FRD-B53102G6015R
115	4 ½	-	2x16	8x16	7x15	11,1	FRD-B53115G6015R
127	5	-	2x16	8x17	8x15	14,7	FRD-B53127G6015R
140	5 ½	-	2x17	8x17	9x16	18,6	FRD-B53140G6015R
152	6	-	2x17	8x17	9x16	20,7	FRD-B53152G6015R

R – spherical

\*Otras medidas y configuraciones bajo requerimiento.

# GT60 – Rods

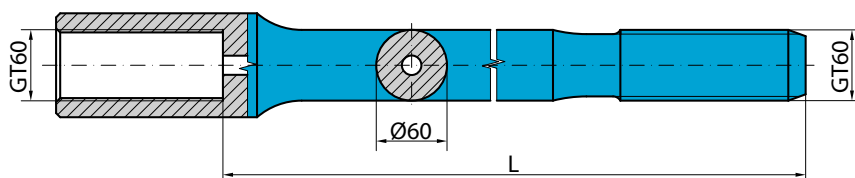
## Extension rods



Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
60	2 3/8	GT60/GT60	1830	6	-	32,5	FRD-10R60G60G60183
60	2 3/8	GT60/GT60	2165	7	-	36,9	FRD-10R60G60G60216
60	2 3/8	GT60/GT60	2435	8	-	42,1	FRD-10R60G60G60243
60	2 3/8	GT60/GT60	3050	10	-	53,8	FRD-10R60G60G60305
60	2 3/8	GT60/GT60	3660	12	-	65,1	FRD-10R60G60G60366
60	2 3/8	GT60/GT60	4265	14	-	75,8	FRD-10R60G60G60426
60	2 3/8	GT60/GT60	4915	16	-	89,3	FRD-10R60G60G60491
60	2 3/8	GT60/GT60	5470	18	-	99,8	FRD-10R60G60G60547
60	2 3/8	GT60/GT60	6100	20	-	112,0	FRD-10R60G60G60610

Flushing hole  $\phi$  22,6 mm

## Speed rods / M-F rods

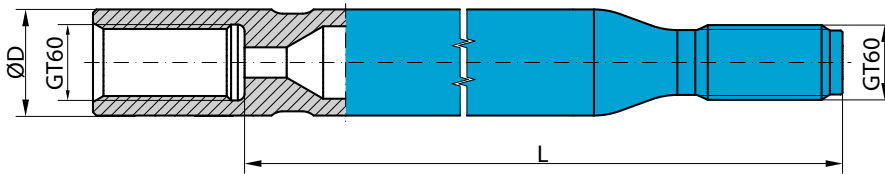


Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
60	2 3/8	GT60/GT60	1830	6	-	38,6	FRD-11R60G60G60183
60	2 3/8	GT60/GT60	2165	7	-	44,9	FRD-11R60G60G60216
60	2 3/8	GT60/GT60	2435	8	-	50,1	FRD-11R60G60G60243
60	2 3/8	GT60/GT60	3050	10	-	61,8	FRD-11R60G60G60305
60	2 3/8	GT60/GT60	3660	12	-	73,4	FRD-11R60G60G60366
60	2 3/8	GT60/GT60	4265	14	-	85,0	FRD-11R60G60G60426
60	2 3/8	GT60/GT60	4915	16	-	97,3	FRD-11R60G60G60491
60	2 3/8	GT60/GT60	5470	18	-	108,0	FRD-11R60G60G60547
60	2 3/8	GT60/GT60	6100	20	-	120,0	FRD-11R60G60G60610

Flushing hole  $\phi$  22,6 mm, Female end  $\phi$  87 mm

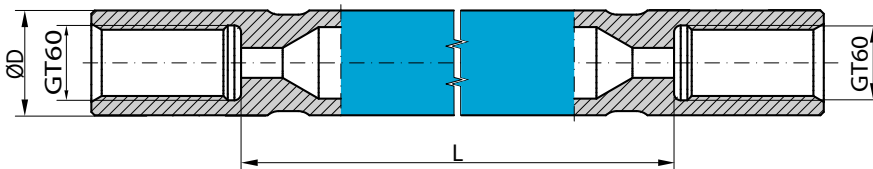
\*Otras medidas y configuraciones bajo requerimiento.

## Drill tube rods



Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
87	3 ½	GT60/GT60	3660	12	-	97,2	FRD-1287G60G60366
87	3 ½	GT60/GT60	4265	14	-	112,4	FRD-1287G60G60426

## Drill tube rods

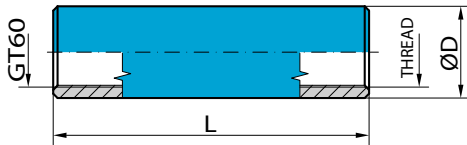


Diameter		Threads	Length			Weight	Catalogue N°
mm	inch		mm	ft	inch	kg	
87	3 ½	GT60/GT60	3660	12	-	100,0	FRD-1387G60G60366
87	3 ½	GT60/GT60	4265	14	-	115,0	FRD-1387G60G60426

\*Otras medidas y configuraciones bajo requerimiento.

# GT60 – Couplings

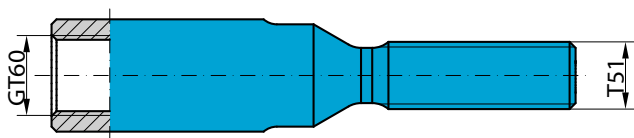
## Coupling sleeve



Diameter		Threads	Length		Weight	Catalogue N°
mm	inch		mm	inch	kg	
85	3 3/8	GT60/T51	285	11 1/4	7,6	FRD-3985G60T5100
85	3 3/8	GT60/GT60	320	12 5/8	7,9	FRD-3985G60G6000

\*Otras medidas y configuraciones bajo requerimiento.

## M-F adapters



Threads	Length		Weight	Catalogue N°	
	female/male	mm			inch
GT60/T51		300	11 ¾	6,2	FRD-3985G60T5103

## M-M adapters



Threads	Length		Weight	Catalogue N°	
	male/male	mm			inch
GT60/GT60		340	13 ⅜	6,4	FRD-3860G60G6000

\*Otras medidas y configuraciones bajo requerimiento.





# DRILLING TOOLS



**FRD**  
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