

Product catalogue

Tophammer equipment - 2022







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Epiroc

Epiroc Drilling Tools has the broadest range of tophammer drill strings and related equipment of any supplier in the world.

This means more choices for you. It means you can work with the strongest support network in the industry. It means that you can look to one reliable and time-tested source for all your equipment needs. Of course, you'd expect Epiroc Drilling Tools to have the most productive tophammer rock drilling equipment in the world. And we do. But maybe your situation calls for

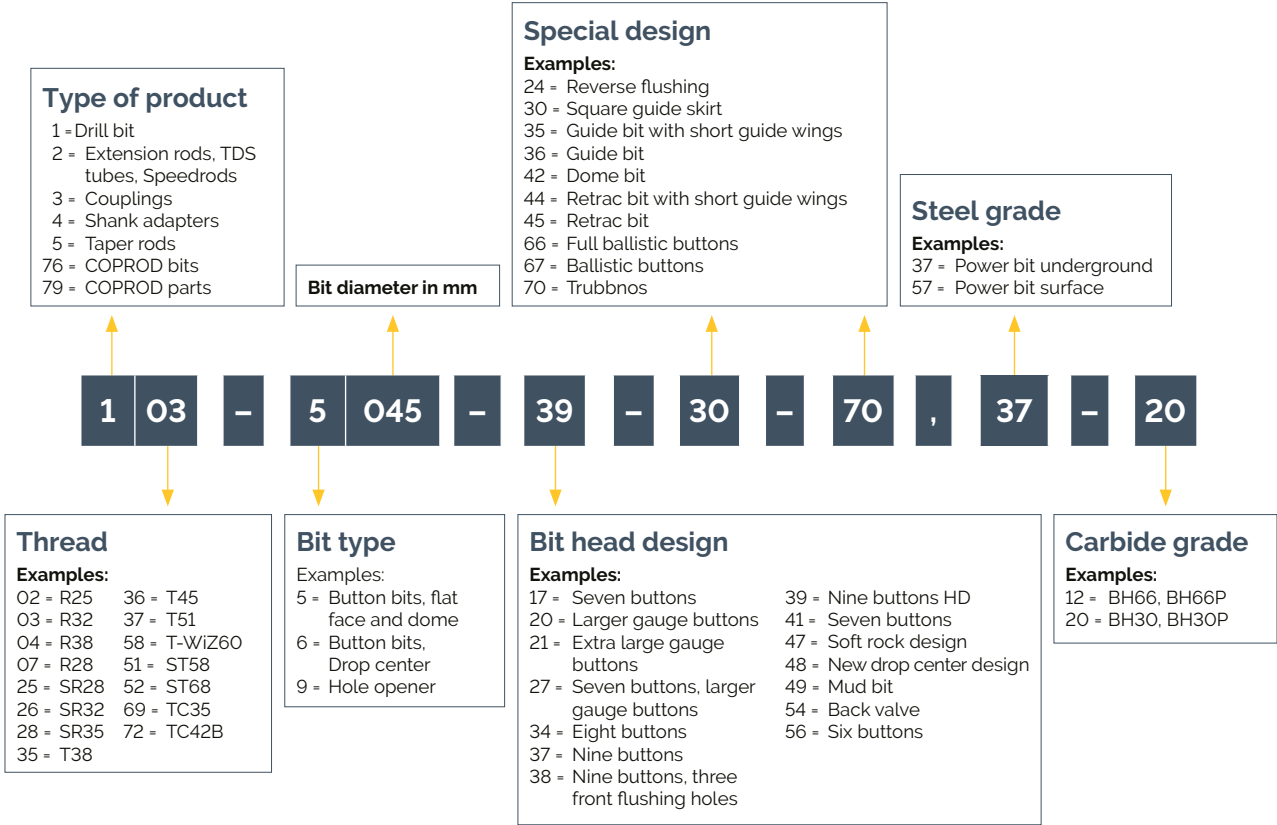
the utmost in reliability. Or perhaps your application requires technology that has been tested and proven through years of field use. Whatever your needs, check out our many choices before settling for less. Each one of our products are designed for optimum performance in tophammer drilling applications on a price vs. performance basis.



Product codes are a valuable tool to describe and identify the product. In the code we have described the product features with an alpha-numerical system. With the attached key you will be able to find the product you are looking for or an alternative product.

Threaded bits

Example: 103-5054-39-30-70,37-20

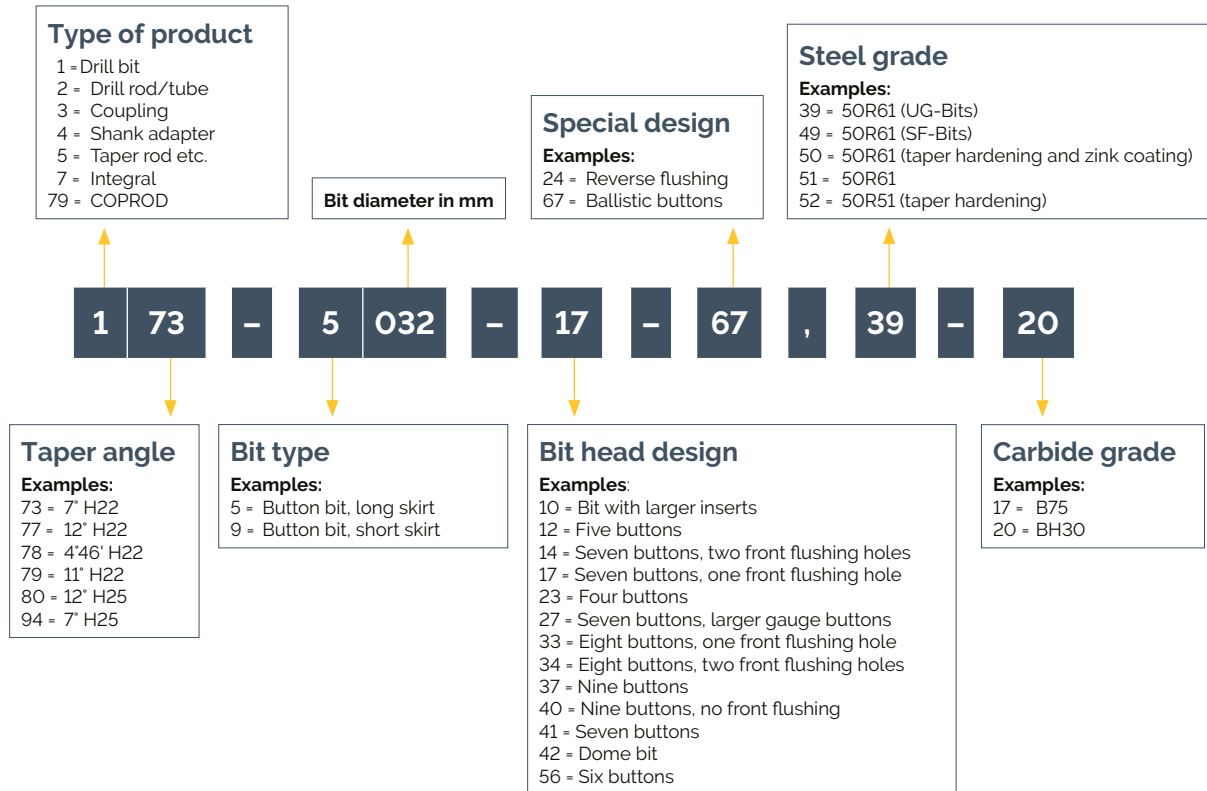


Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Guide to product codes

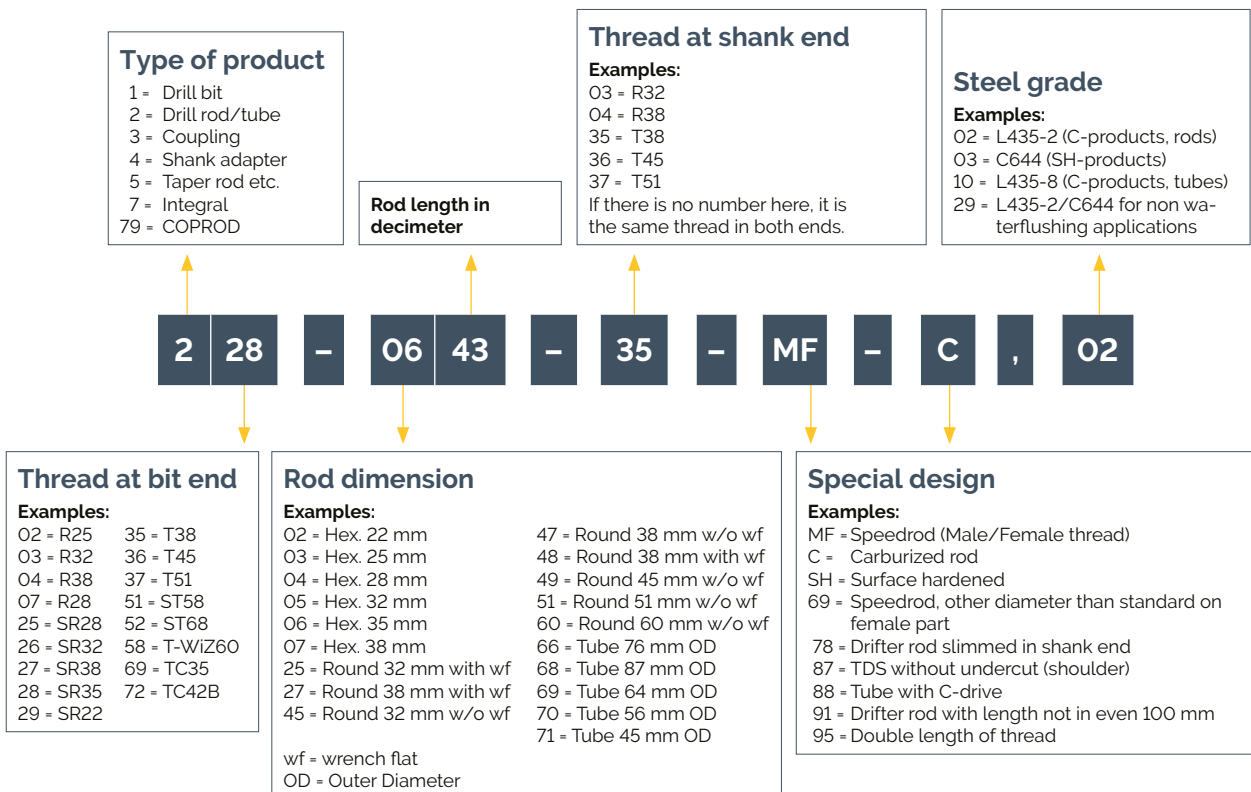
Tapered bits

Example: 173-5032-17-67,39-20



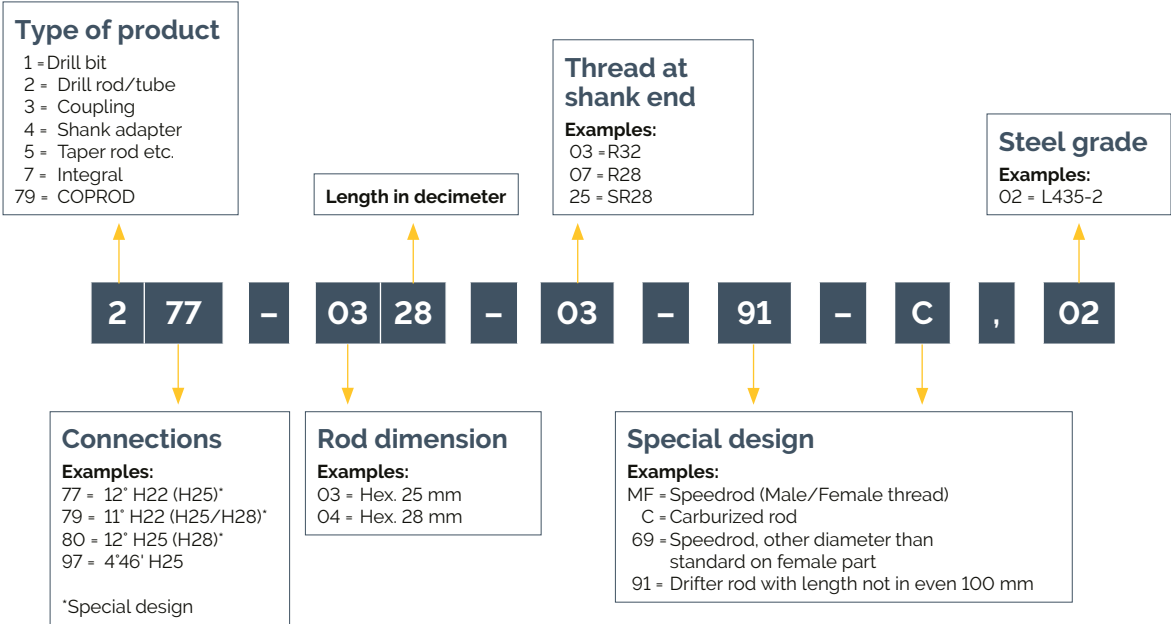
Rods and tubes

Example: 228-0643-35-MF-C,02



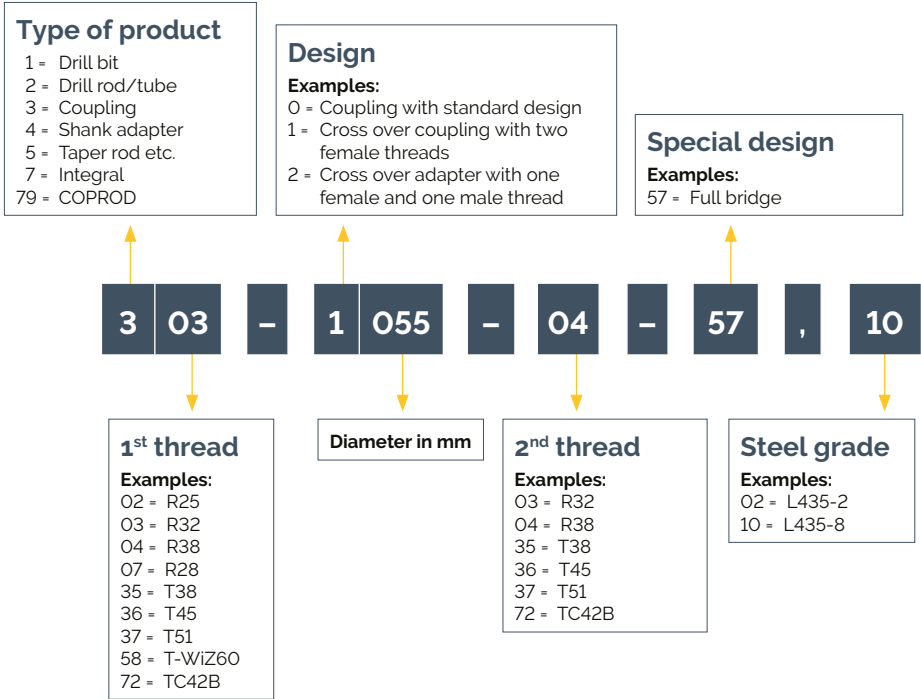
Tapered drifter rods

Example: 277-0328-03-91-C,02



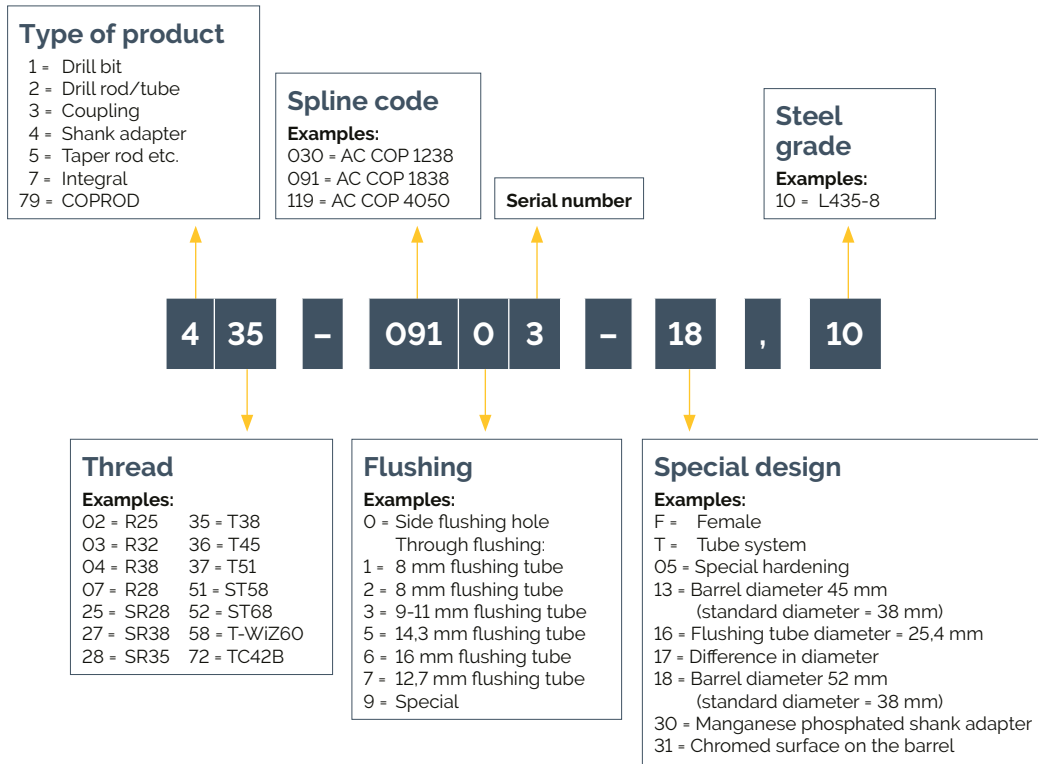
Couplings, cross over and bit adapters

Example: 303-1055-04-57,10



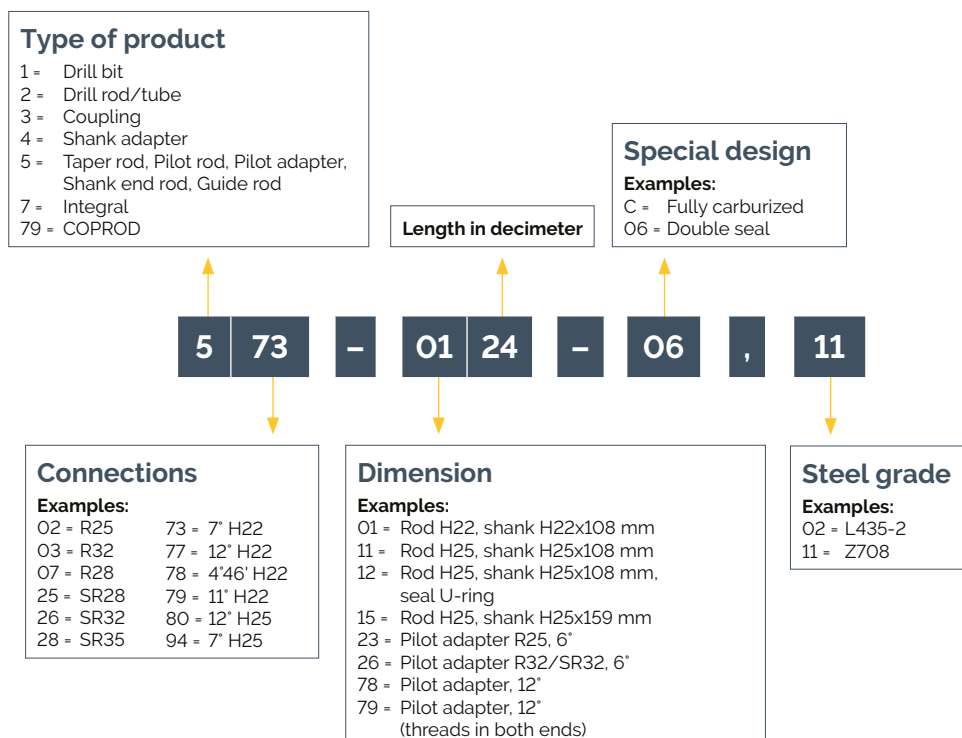
Shank adapters

Example: 435-09103-18,10



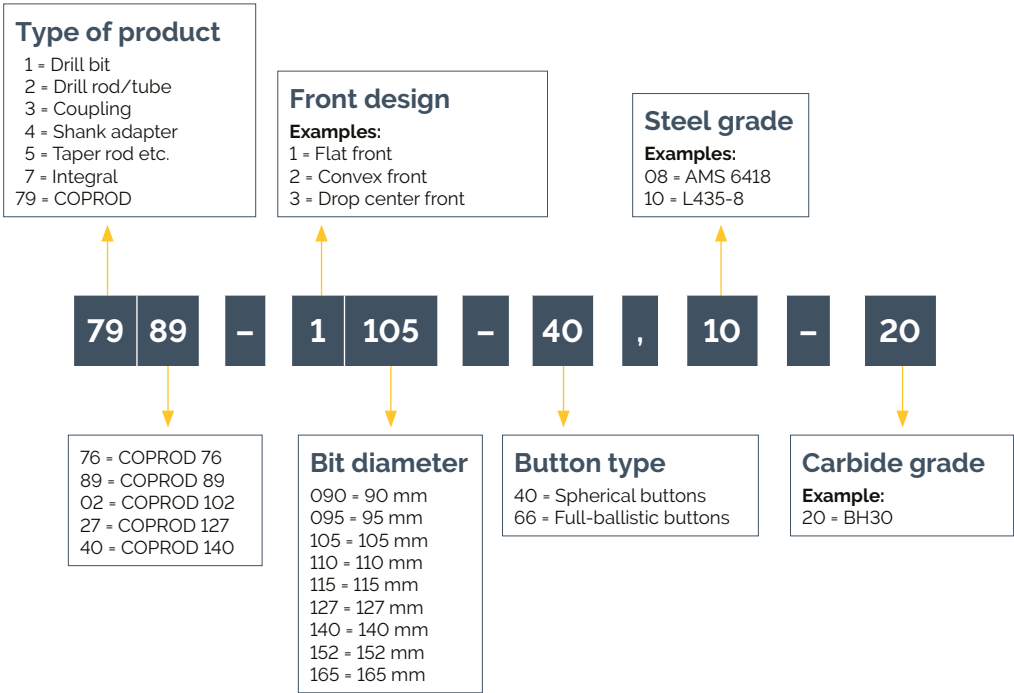
Tapered rods etc.

Example: 573-0124-06,11



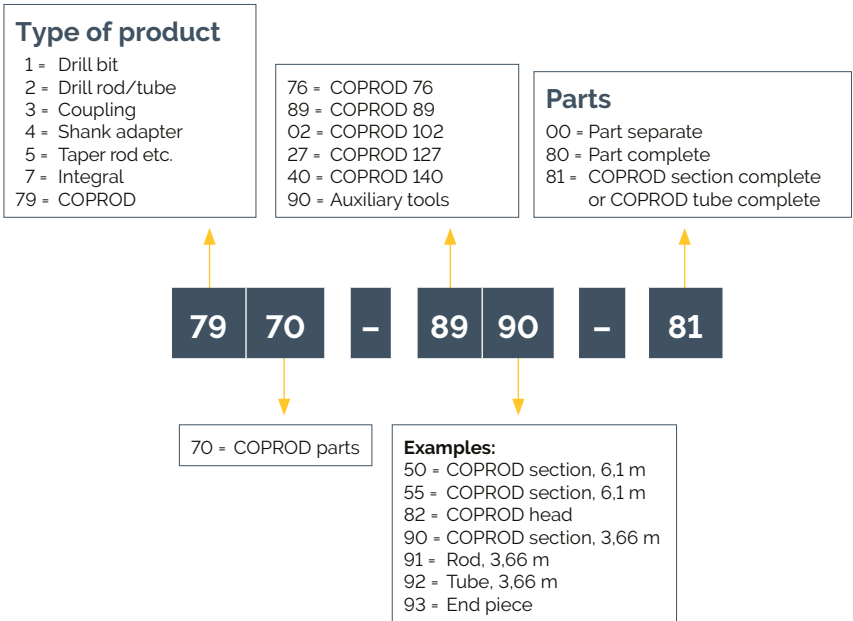
COPROD bits

Example: 7989-1105-40,10-20



COPROD parts

Example: 7970-8990-81



Tapered equipment

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Tapered equipment



Drill bit design



Model -12

For soft to medium hard rock formations. One front and two side flushing holes.



Model -14

For soft to medium hard rock. Two front and one side flushing hole.



Model -17

All-round drill bit for soft to medium hard rock. Front and side flushing. Diameters up to 34 mm.



Model -23

For soft and abrasive rock. Front and side flushing.



Model -27

All-round drill bit for medium hard to hard rock formations. Front and side flushing. Diameters from 35 mm.



Model -33

All-round bit with six gauge buttons for medium hard to hard rock formations. Front and side flushing. Inclined front buttons.



Model -34

All-round bit for soft to hard rock formations. Two front flushing holes for optimal speed and less hole deviation. Inclined front buttons.



Model -40

All-round bit for medium hard to hard rock. Side flushing only. Inclined front.



Model -56

All-round drill bit for medium hard to hard rock formations. Front and side flushing.

Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Diameter		Length		No. of buttons	Buttons x button diameter		Gauge buttons angle°	Front buttons angle°	Flushing hole		Weight approx. kg
		mm	inch	mm	inch		mm gauge	mm center			Side	Center	
Button bit – For 22 mm (7/8") hex. Rod 4'46' taper angle. Short Skirt													
90510678	178-9036-14-67,39-20	36	1 ³ / ₃₂ "	50	1 ³ / ₃₂ "	7	5x7	2x7	35°	-	1	2	0,2
Button bit – For 22 mm (7/8") hex. Rod 4'46' taper angle. Long skirt													
90512905	178-5033-41-67,51-20	33	1 ⁵ / ₁₆ "	71	2 ⁵ / ₃₂ "	7	5x8	2x7	40°	15°	1	1	0,3
90512919	178-5036-27-67,51-20	36	1 ³ / ₃₂ "	71	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,3
90512901	178-5041-34-67,51-20	41	1 ⁵ / ₈ "	71	2 ⁵ / ₃₂ "	7	5x7	2x7	35°	-	-	2	0,3
90512900	178-5043-14-67,51-20	43	1 ¹ / ₁₆ "	71	2 ⁵ / ₃₂ "	7	5x9	2x8	35°	-	2	1	0,4
Button bit – For 22 mm (7/8") hex. Rod 7' taper angle. Long skirt													
90512883	173-5030-17-67,39-20	30	1 ³ / ₁₆ "	80	3 ⁵ / ₃₂ "	7	5x6	2x7	35°	15°	2	1	0,2
90512799	173-5032-17-67,39-20	32	1 ¹ / ₄ "	80	3 ⁵ / ₃₂ "	7	5x7	2x7	35°	15°	1	1	0,3
90515546	173-5033-34-67,39-20	33	1 ⁵ / ₁₆ "	80	3 ⁵ / ₃₂ "	8	6x7	2x7	40°	15°	1	2	0,3
90515547	173-5033-40-67,39-20	33	1 ⁵ / ₁₆ "	80	3 ⁵ / ₃₂ "	9	6x7	3x7	40°	20°	3		0,4
90512922	173-5035-41-67,39-20	35	1 ³ / ₈ "	80	3 ⁵ / ₃₂ "	7	5x8	2x7	40°	15°	1	1	0,4
90515584	173-5037-41-67,39-20	37	1 ⁵ / ₃₂ "	80	3 ⁵ / ₃₂ "	7	5x9	2x7	40°	15°	1	1	0,4
90514506	173-5041-41-67,39-20	41	1 ⁵ / ₈ "	80	3 ⁵ / ₃₂ "	7	5x9	2x8	40°	15°	1	1	0,4
Button bit – For 22 mm (7/8") hex. Rod. 11' taper angle. Short skirt.													
90512816	179-9032-33-67,39-20	32	1 ¹ / ₄ "	55	2 ⁵ / ₃₂ "	8	6x7	2x7	39°	15°	1	1	0,2
90510189	179-9032-56-67,50-20	32	1 ¹ / ₄ "	50	1 ³ / ₃₂ "	6	4x7	2x7	35°	-	1	1	0,3
90516496	179-9034-12-67,51-20	34	1 ¹ / ₃₂ "	50	1 ³ / ₃₂ "	5	3x8	2x7	35°	-	2	1	0,2
90512881	179-9034-40-67,39-20	34	1 ¹ / ₃₂ "	50	1 ³ / ₃₂ "	9	x67	3x7	40°	20°	2		0,3
90029049	179-9034-56-67,51-20	34	1 ¹ / ₃₂ "	50	1 ³ / ₃₂ "	6	4x7	2x7	40°	-	1	1	0,2
90512818	179-9035-41-67-L,39-20'	35	1 ³ / ₈ "	55	2 ⁵ / ₃₂ "	7	5x8	2x7	40°	15°	1	1	0,3
90509968	179-9036-27-67,39-20	36	1 ³ / ₃₂ "	50	1 ³ / ₃₂ "	7	5x8	2x7	35°	-	1	1	0,3
90512965	179-9036-12-67,51-20	36	1 ³ / ₃₂ "	50	1 ³ / ₃₂ "	5	3x8	2x8	40°	-	2	1	0,2
90512968	179-9038-23-67,51-20	38	1 ¹ / ₂ "	50	1 ³ / ₃₂ "	4	3x9	1x9	40°	-	2	1	0,3
90509966	179-9038-27-67,39-20	38	1 ¹ / ₂ "	50	1 ³ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,3
90509962	179-9041-27-67,39-20	41	1 ⁵ / ₈ "	50	1 ³ / ₃₂ "	7	5x9	2x7	35°	-	2	1	0,3
90512898	179-9043-27-67,51-20	43	1 ¹ / ₁₆ "	50	1 ³ / ₃₂ "	7	5x9	2x9	35°	-	2	1	0,4
Button bit – For 22 mm (7/8") hex. Rod. 12' taper angle. Short skirt.													
90512895	177-9027-56-67,51-20	27	1 ¹ / ₁₆ "	50	1 ³ / ₃₂ "	6	4x8	2x6	40°	15°	1	1	0,2
90510695	177-9028-23-67,39-20	28	1 ¹ / ₈ "	50	1 ³ / ₃₂ "	4	3x7	1x7	20°	-	1	1	0,1
90516429	177-9028-56-67,51-20	28	1 ¹ / ₈ "	50	1 ³ / ₃₂ "	6	4x6	2x6	35°	-	1	1	0,2
90510181	177-9030-56-67,51-20	30	1 ³ / ₁₆ "	50	1 ³ / ₃₂ "	6	4x7	2x7	30°	-	1	1	0,2
90509650	177-9032-14-67,39-20	32	1 ¹ / ₄ "	55	2 ⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	2	0,3
90509841	177-9032-17-67,39-20	32	1 ¹ / ₄ "	55	2 ⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	1	0,2
90512817	177-9032-34-67,39-20	32	1 ¹ / ₄ "	55	2 ⁵ / ₃₂ "	8	6x7	2x7	39°	15°	1	2	0,3
90512648	177-9033-14-67,39-20	33	1 ⁵ / ₁₆ "	55	2 ⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	2	0,2
90509842	177-9033-17-67,39-20	33	1 ⁵ / ₁₆ "	55	2 ⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	1	0,2
90003511	177-9033-34-67,39-20	33	1 ⁵ / ₁₆ "	55	2 ⁵ / ₃₂ "	8	6x7	2x7	35°	-	1	2	0,2
90513909	177-9033-41-67,39-20	33	1 ⁵ / ₁₆ "	55	2 ⁵ / ₃₂ "	7	5x8	2x7	40°	15°	1	1	0,2
90509956	177-9034-27-67,39-20	34	1 ¹ / ₃₂ "	55	2 ⁵ / ₃₂ "	7	5x8	2x7	35°	-	1	1	0,2
90509535	177-9035-27-67,39-20	35	1 ³ / ₈ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,2
90512721	177-9036-27-67,39-20	36	1 ³ / ₃₂ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,3
90512710	177-9037-27-67,39-20	37	1 ⁵ / ₃₂ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	40°	-	1	1	0,3
90512658	177-9038-17-67,39-20	38	1 ¹ / ₂ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	40°	-	1	1	0,3
90510676	177-9038-23-67,39-20	38	1 ¹ / ₂ "	55	2 ⁵ / ₃₂ "	4	3x9	1x9	40°	-	1	1	0,2
90509554	177-9038-27,39-20	38	1 ¹ / ₂ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,2
90512669	177-9038-27-67,39-20	38	1 ¹ / ₂ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,2
90512318	177-9041-27-67,39-20	41	1 ⁵ / ₈ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,3
90512619	177-9045-27-67,39-20	45	1 ³ / ₄ "	55	2 ⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0,3

Tapered equipment

Tapered rod with bit



Drill bits

Product no.	Product code	Diameter		Length		No. of buttons	Buttons x button diameter		Gauge buttons angle*	Front buttons angle*	Flushing hole		Weight approx. kg
		mm	inch	mm	inch		mm gauge	mm center			Side	Center	
Button bit – For 22 mm (7/8") hex. Rod 12° taper angle. Long skirt													
90510640	177-5032-17-67,39-20	32	1¼"	71	2 ²⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	1	0.3
90512297	177-5033-17-67,39-20	33	1½"	71	2 ²⁵ / ₃₂ "	7	5x7	2x7	35°	-	1	1	0.3
90512825	177-5033-34-67,39-20	33	1½"	71	2 ²⁵ / ₃₂ "	8	6x7	2x7	40°	15°	1	2	0.3
90512707	177-5033-40-67,39-20	33	1½"	71	2 ²⁵ / ₃₂ "	9	6x7	3x7	40°	20°	3	-	0.3
90512826	177-5035-34-67,39-20	35	1½"	71	2 ²⁵ / ₃₂ "	8	6x8	2x7	45°	15°	1	2	0.3
90502644	177-5038-27,39-20	38	1½"	71	2 ²⁵ / ₃₂ "	7	5x9	2x7	35°	-	1	1	0.4

Forged collar tapered rods

Shank hex. 22 mm (7/8") x 108 mm (4 1/4"). Rod hex. 22 mm (7/8). Flushing hole diameter 6.7 mm



Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
4°46' taper angle				
90510626	578-0108,11	800	27½"	2.8
90510627	578-0116,11	1600	5'3"	5.3
90510628	578-0120,11	2 000	6'6¾"	6.5
90510629	578-0124,11	2 400	7'10½"	7.7
90510630	578-0132,11	3 200	10'6"	10.2
90513835	578-0135,11	3 500	11'5¾"	11.1
90510631	578-0140,11	4 000	13'1½"	12.7
7° taper angle				
90513772	573-0104,11	400	1'3¾"	1.6
90505067	573-0108,11	800	27½"	2.8
90504826	573-0116,11	1 600	5'3"	5.2
90504827	573-0118,11	1 830	6'	6.0
90504756	573-0120,11	2 000	6'6¾"	6.5
90504828	573-0124,11	2 435	8'	7.8
90515483	573-0124-C,02	2 435	8'	7.8
90504829	573-0131,11	3 050	10'	9.7
90504831	573-0132,11	3 200	10'6"	10.1
90516583	573-0132-C,02	3 200	10'6"	10.1
90514346	573-0136,11	3 600	12'	11.4
90513773	573-0140,11	4 000	13'1½"	12.6

Forged collar tapered rods

Shank hex. 22 mm (7/8") x 108 mm (4 1/4"). Rod hex. 22 mm (7/8). Flushing hole diameter 6.7 mm

Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
7° taper angle				
90516584	573-0140-C.02	4 000	13'1½"	12,7
90515495	573-0148.11	4 800	15'9"	15,1
90514493	573-0156.11	5 600	18'4½"	17,5
90514494	573-0164.11	6 400	21'	20,0
90514495	573-0172.11	7 200	23'7½"	22,4
90514496	573-0180.11	8 000	26'3"	24,9
11° taper angle				
90504864	579-0108.11	800	2'7½"	2,8
90504865	579-0112.11	1 220	4'	4,1
90504867	579-0115.11	1 525	5'	5,0
90510144	579-0116.11	1 600	5'3"	5,3
90504868	579-0118.11	1 830	6'	6,0
90504869	579-0120.11	2 000	6'6¾"	6,5
90504871	579-0124.11	2 435	8'	7,8
90505441	579-0124-C.02	2 435	8'	7,8
90510202	579-0132.11	3 200	10'6"	10,2
90510203	579-0137.11	3 655	11'11⅞"	11,6
90510245	579-0140.11	4 000	13'1½"	12,6
90510817	579-0148.11	4 800	15'9"	15,1
90510894	579-0156.11	5 600	18'4½"	17,6
90510895	579-0164.11	6 400	21'	20,0
90510896	579-0172.11	7 200	23'7½"	22,5
90510897	579-0180.11	8 000	26'3"	24,9
12° taper angle				
90504832	577-0106.11	610	2'	2,2
90504833	577-0108.11	800	2'7½"	2,8
90504835	577-0112.11	1 220	4'	4,1
90505433	577-0112-C.02	1 220	4'	4,1
90504837	577-0115.11	1 525	5'	5,0
90515271	577-0115-C.02	1 525	5'	5,0
90001398	577-0118.11	1 830	6'	6,0
90505434	577-0118-C.02	1 830	6'	6,0
90504839	577-0120.11	2 000	6'6¾"	6,5
90504841	577-0124.11	2 435	8'	7,8
90505436	577-0124-C.02	2 435	8'	7,8
90504843	577-0131.11	3 050	10'	9,7
90505437	577-0131-C.02	3 050	10'	9,7
90504844	577-0132.11	3 200	10'6"	10,2
90504845	577-0137.11	3 655	11'11⅞"	11,6
90505438	577-0137-C.02	3 655	11'11⅞"	11,6
90504846	577-0140.11	3 965	13'	12,5
90504847	577-0148.11	4 800	15'9"	15,1
90504848	577-0156.11	5 600	18'4½"	17,5
90504849	577-0164.11	6 400	21'	20,0
90504850	577-0172.11	7 200	23'7½"	22,4
90504851	577-0180.11	8 000	26'3"	24,9

Tapered equipment

Rubber collared rods

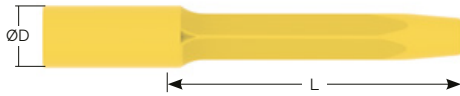
Shank hex. 22 mm (7/8") x 159 mm (6 1/4"). Rod hex. 22 mm (7/8). Flushing hole diameter 6 mm



Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
11° taper angle				
90514289	579-0207-07,05	700	2'3½"	2.7
90514290	579-0210-07,05	1 000	3'3¾"	3.6
90514433	579-0213-07,05	1 300	4' 3¾"	4.7
90514173	579-0216-07,05	1 600	5'3"	5.4
90514174	579-0218-07,05	1 800	5'10¾"	6.1
90514175	579-0224-07,05	2 400	7'10½"	8.0
90511440	579-0206-05,19	600	1'11¾"	2.5
90511754	579-0209-05,19 - CILBOND	900	2'11¾"	3.3
90511444	579-0210-05,19	1 000	3'3¾"	3.7
90511447	579-0212-05,19 - CILBOND	1 200	3'11¼"	4.3
90511448	579-0213-05,19 - CILBOND	1 300	4'3¾"	4.6
90511449	579-0214-05,19	1 400	4'7½"	4.9
90511451	579-0215-05,19 - CILBOND	1 500	4'11"	5.2
90511454	579-0216-05,19 - CILBOND	1 600	5'3"	5.5
90511455	579-0218-05,19 - CILBOND	1 800	5'10¾"	5.7
90512136	579-0220-05,19	2 000	6'6¾"	6.7
90511459	579-0222-05,19	2 200	7'2¾"	7.4
90511463	579-0224-05,19 - CILBOND	2 400	7'10½"	7.7
90511464	579-0226-05,19 - CILBOND	2 600	8'6¾"	8.6
90511465	579-0228-05,19 - CILBOND	2 800	9'2¼"	9.2
90511466	579-0230-05,19	3 000	9'10¾"	10.0
90511469	579-0232-05,19 - CILBOND	3 200	10'6"	10.5
90511471	579-0234-05,19	3 400	10'9¾"	10.8
90512338	579-0236-05,19	3 600	11'9¾"	11.5
90511472	579-0238-05,19	3 800	12'5¾"	12.3
90512292	579-0242-05,19	4 200	13'9¾"	13.6
90512010	579-0245-05,19	4 500	14'9¾"	14.5

Tapered drifter rods

Shank hex. 22 mm (7/8") x 159 mm (6 1/4"). Rod hex. 22 mm (7/8). Flushing hole diameter 6 mm



Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
11° taper angle				
90003703	279-0201-29-91-MF-C.02	140	5½"	0.6
90515243	279-0203-29-91-MF-C.02	340	1'1¾"	1.3
90516414	279-0206-29-MF-C.02	600	1'11¾"	2.1
12° taper angle				
90514449	277-0207-25-91-MF-C.02	675	2'2¾"	2.3
90514450	277-0212-25-91-MF-C.02	1 165	3'9¾"	3.8
90514451	277-0217-25-91-MF-C.02	1 665	5'5½"	5.3
90003722	277-0208-29-91-69-MF-C.02	820	2'8½"	3.0



Tapered equipment

Drill bits

Product no.	Product code	Diameter		Length		No. of buttons	Buttons x button diameter		Gauge buttons angle°	Front buttons angle°	Flushing hole		Weight approx. kg
		mm	inch	mm	inch		mm gauge	mm center			Side	Center	
Button bit – for 25 mm (1") hex. Rod 7° taper angle. Long skirt													
90512830	194-5041-27-39-20	41	1½"	71	2 ²⁵ / ₃₂ "	7	5x9	2x8	40°	-	1	1	0,4
90512831	194-5041-27-67,39-20	41	1½"	71	2 ²⁵ / ₃₂ "	7	5x9	2x8	40°	-	1	1	0,4
90512984	194-5041-37-67,39-20	41	1½"	71	2 ²⁵ / ₃₂ "	9	6x9	3x7	40°	-	1	3	0,4
90516567	194-5041-56-67,39-20	41	1½"	71	2 ²⁵ / ₃₂ "	6	4x9	2x8	35°	-	1	1	0,2
90512985	194-5043-37-67,39-20	43	1 ¹¹ / ₁₆ "	71	2 ²⁵ / ₃₂ "	9	6x9	3x7	40°	-	1	3	0,5
90516568	194-5043-56-67,39-20	43	1 ¹¹ / ₁₆ "	71	2 ²⁵ / ₃₂ "	6	4x9	2x8	35°	-	1	1	0,3
Button bit – for 25 mm (1") hex. Rod 12° taper angle. Long skirt													
90514202	180-5036-99-67,39-20	36	1 ¹³ / ₃₂ "	71	2 ²⁵ / ₃₂ "	7	5x9	2x7	35°	15°	1	1	0,3
90512064	180-5038-27-67,39-20	38	1½"	71	2 ²⁵ / ₃₂ "	7	5x9	2x7	40°	15°	1	1	0,4
90512486	180-5041-27-67,39-20	41	1½"	71	2 ²⁵ / ₃₂ "	7	5x9	2x7	40°	15°	1	1	0,4

Tapered rods

Shank hex. 25 mm (1") x 108 mm (4 1/4"). Rod hex. 25 mm (1"). Flushing hole diameter 8.6 mm



Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
7° taper angle				
90029209	594-1106-C,02	600	1'11½"	2,8
90029211	594-1112-C,02	1 220	4'	5,3
90029212	594-1115-C,02	1 500	4'11"	6,4
90029213	594-1116-C,02	1 600	5'3"	6,8
90029095	594-1118-C,02	1 830	6'	7,7
90029214	594-1120-C,02	2 000	6'6¾"	8,3
90029215	594-1122-C,02	2 200	7'2¾"	9,1
90029219	594-1124-C,02	2 400	7'10½"	9,9
90029220	594-1126-C,02	2 600	8'6¾"	10,7
90029221	594-1132-C,02	3 200	10'6"	13,0
90029222	594-1139-C,02	3 900	12'9½"	15,8
7° taper angle, without forged collar. L = total length				
90515874	594-5106.11	600	1'11½"	2,3
90515875	594-5110.11	1 000	3'3¾"	3,9
90515876	594-5114.11	1 400	4'7¾"	5,5
90515877	594-5118.11	1 800	5'10¾"	7,1



Tapered equipment

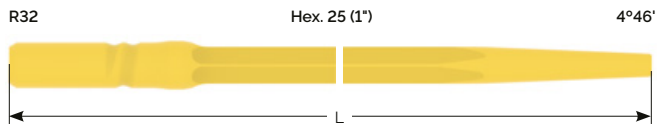
Forged collar rods

Shank hex. 25 mm (1") x 159 mm (6 1/4"). Rod hex. 25 mm (1"). Flushing hole diameter 8.6 mm



Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
12° taper angle				
90029227	579-1405-C.02	500	1'7 5/8"	2.7
90029228	579-1407-C.02	700	2'3 1/2"	3.5
90029229	579-1410-C.02	1 000	3'3 3/8"	4.7
90029230	579-1414-C.02	1 400	4'7 1/8"	6.2
90029231	579-1416-C.02	1 600	5'3"	6.8
90029232	579-1420-C.02	2 000	6'6 3/4"	8.5
90029233	579-1425-C.02	2 500	8'2 3/8"	10.4
90029234	579-1426-C.02	2 600	8'6 3/8"	10.9
90029235	579-1432-C.02	3 200	10'6"	13.2
90029236	579-1433-C.02	3 300	10'9 3/8"	13.6
90029237	579-1435-C.02	3 550	11'5 3/4"	14.6
90029238	579-1438-C.02	3 800	12'5 3/8"	15.6
90029569	579-1446-C.02	4 600	11'	18.7

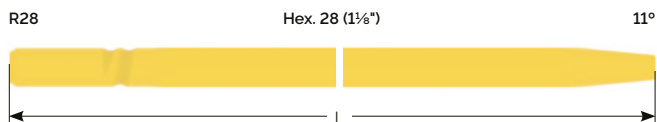
Tapered drifter rods



Fully carburized. Rod section 28.4 mm
Flushing hole diameter 8.6 mm

Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
90029168	297-0320-03-99-C.02	2 000	6'6 3/8"	7.7
90003622	297-0322-03-C.02	2 160	7'1"	8.3
90003539	297-0323-03-C.02	2 300	7'6 1/2"	8.9
90003623	297-0329-03-C.02	2 900	9'6 1/8"	11.2
90003540	297-0331-03-C.02	3 100	10'2"	12.0

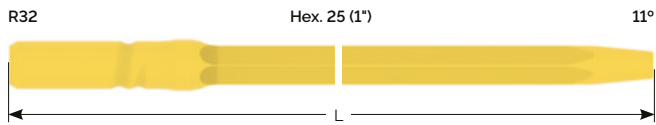
Tapered drifter rod



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 8.8 mm

Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
90516503	279-0421-07-C.02	2 100	6'10 3/8"	10

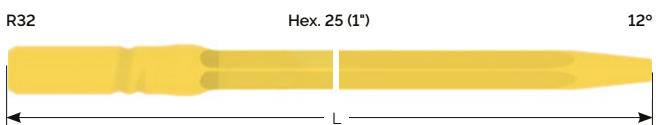
Tapered drifter rods



Fully carburized. Rod section 28.4 mm
Flushing hole diameter 8.6 mm

Product no.	Product code	Length		Weight approx.
		mm	foot/inch	kg
90003697	279-0322-03-C,02	2 200	7'2½"	8.6
90514410	279-0328-03-C,02	2 800	9'2½"	10.8

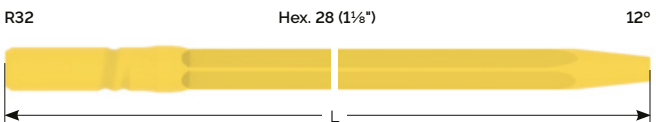
Tapered drifter rods



Fully carburized. Rod section 28.4 mm
Flushing hole diameter 8.6 mm

Product no.	Product code	Length		Weight approx.
		mm	foot/inch	kg
90003520	277-0324-03-C,02	2 400	7'10½"	9.3
90504668	277-0334-03-C,02	3 400	11'1½"	13.2
90003679	277-0337-03-C,02	3 700	12'1½"	14.2

Tapered drifter rod



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 8.8 mm

Product no.	Product code	Length		Weight approx.
		mm	foot/inch	kg
90510248	280-0426-03-C,02	2 600	8'6¾"	13.1

Tapered equipment

Dome bits for reaming – Taper angle 7°, 11°, 12°



Product no.	Product code	Taper angle	Diameter		No. of buttons	Buttons x button diameter		Gauge buttons angle*	Flushing hole		Weight approx. kg
			mm	inch		mm gauge	mm center		front	reverse	
90003661	173-5064-42-24.49-20	7°	64	2½"	10	9x11	1x11	35°	3	1	0.8
90003662	179-5064-42-24.49-20	11°	64	2½"	10	9x11	1x11	35°	3	1	0.8
90003663	177-5064-42-24.49-20	12°	64	2½"	10	9x11	1x11	35°	3	1	0.8

Drill bits – 6° taper angle



Product no.	Product code	Diameter		No. of buttons	Buttons x button diameter		Gauge buttons angle*	Weight approx. kg
		mm	inch		mm gauge	mm center		
90510459	175-5064.39-20	64	2½"	10	8x10	2x9	35°	0.8
90510460	175-5076.39-20	76	3"	10	8x11	2x11	35°	1.2

Pilot rods – 6° taper angle



Fully carburized
22 mm (7/8") hex. Shank length 108 mm (4¼"). D=26 mm (1½")
Flushing hole diameter 6,7 mm.

Product no.	Product code	Length		Weight approx. kg
		mm	foot/inch	
90000296	575-3108.11-17	800	27½"	3.3
90000297	575-3112.11-17	1 200	3'11¼"	3.7
90000298	575-3116.11-17	1 600	5'3"	4.1
90000300	575-3120.11-17	2 000	6'6¾"	4.5
90000301	575-3124.11-17	2 400	7'10½"	4.9

Pilot adapter – 6° taper angle (with insert)



Product no.	Product code	Thread diameter		Diameter		Pilot hole	Weight approx.
		mm	inch	mm	inch	mm	kg
90516256	502-2303.02-17	R25	1"	26	1½"	36	1.3

Cross over coupling



Central stop

Product no.	Product code	Thred	Length		Diameter		Weight approx.
			mm	inch	mm	inch	kg
90515746	302-1044-03.10	R25-R32	160	6 5/16"	44	1 23/32"	1.2

Couplings



Central stop

Product no.	Product code	Thread diameter		Diameter		Length		Weight approx.
		mm	inch	mm	inch	mm	inch	kg
90515728	302-0033.02	R25	1"	33	1 5/16"	150	5 7/8"	0.5
90515729	302-0035.02	R25	1"	34,5	1 3/8"	150	5 7/8"	0.8
90515731	303-0044.10	R32	1¼"	44	1 23/32"	150	5 7/8"	0.9
90515732	303-0044-57.10	R32	1¼"	44	1 23/32"	160	6 5/16"	1

Cross over adapter



Product no.	Product code	Thread		Length		Effective length		Diameter		Weight approx.
		female	male	mm	inch	mm	inch	mm	inch	kg
90516019	302-2045-03.10	R25	R32	195	7 1/16"	120	4 3/4"	45	1 3/4"	1.2

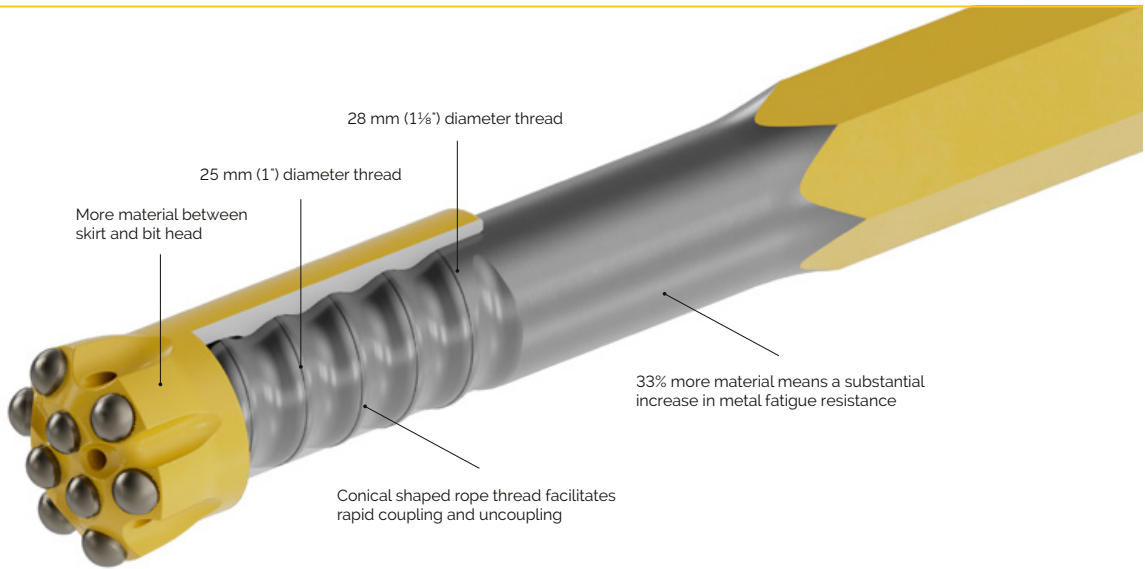
Construction drilling

SR28	26
R28	30
R32	32
SR32	36

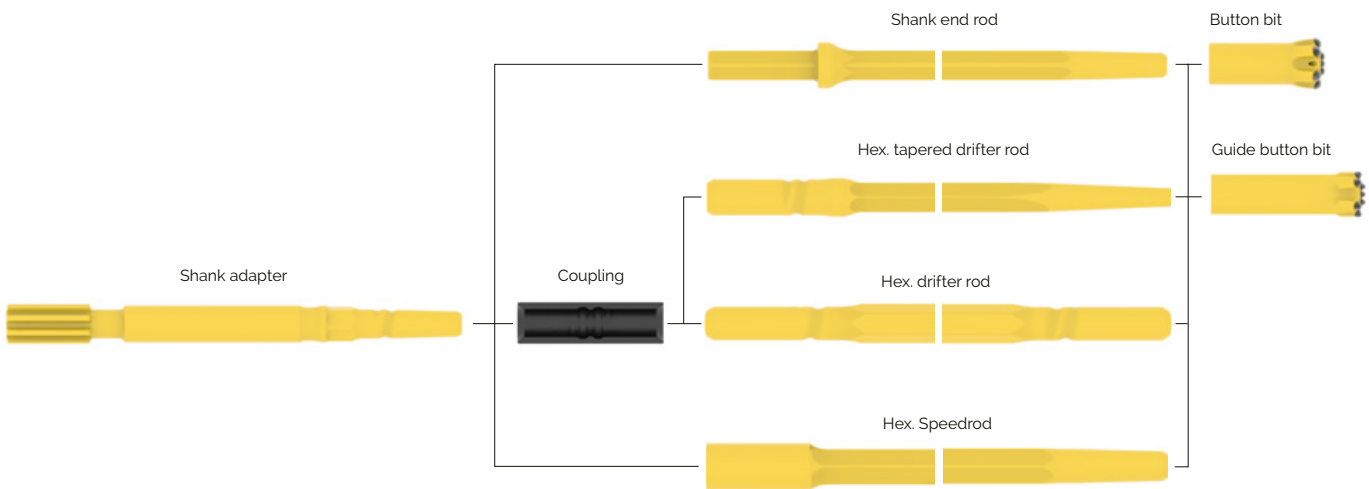




SR28 thread system



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90029167	125-5033-27-67-99,39-20	Flat Face	33	1 1/8"	No	7	5x8	2x7	35°	-	-	2	87004741
90514137	125-5033-41-67,39-20	Flat Face	33	1 1/8"	No	7	5x8	2x7	40°	-	1	1	87004037
90514102	125-5035-27-67,39-20	Flat Face	35	1 3/8"	No	7	5x9	2x7	25°	-	1	1	87003483
90003625	125-5037-99-67,39-20	Flat Face	37	1 1/2"	No	7	5x9	2x7	35°	-	1	1	87004741
90516334	125-5038-41-67,39-20	Flat Face	38	1 1/2"	No	7	5x9	2x8	40°	-	1	1	87004741
90516422	125-5045-37-67,39-20	Flat Face	45	1 3/4"	No	9	6x9	3x8	40°	-	3	-	87003481
Spherical													
90514117	125-5033-41,39-20	Flat Face	33	1 1/8"	No	7	5x8	2x7	40°	-	1	1	87004037
90514200	125-5033-17,39-20	Flat Face	33	1 1/8"	No	7	5x7	2x7	35°	-	1	1	87003484
90514322	125-5035-27,39-20	Flat Face	35	1 3/8"	No	7	5x9	2x7	25°	-	1	1	87003483
90514167	125-5037-99,39-20	Flat Face	37	1 1/2"	No	7	5x9	2x7	35°	-	1	1	87003483
90514282	125-5038-27,39-20	Flat Face	38	1 1/2"	No	7	5x9	2x7	30°	-	1	1	87003483
90029184	125-5040-27,39-20	Flat Face	40	1 1/2"	No	7	5x9	2x7	40°	-	1	1	87004741
90515379	125-5041-27,39-20	Flat Face	41	1 5/8"	No	7	5x9	2x8	40°	-	1	1	87005310
90515543	125-5042-27,39-20	Flat Face	42	1 5/8"	No	7	5x9	2x8	40°	-	1	1	87005310
90029307	125-5043-27,39-20	Flat Face	43	1 5/8"	No	7	5x9	2x9	35°	-	1	1	87005310
90514507	125-5045-27,39-20	Flat Face	45	1 3/4"	No	7	5x11	2x8	30°	-	1	2	87003480
90003626	125-5048-37,39-20	Flat Face	48	1 7/8"	No	9	6x10	3x9	40°	-	3	1	87003486
90514793	125-5051-27,39-20	Flat Face	51	2"	No	7	5x11	2x10	35°	-	1	2	87003485
90029897	125-5076-42-24,57-20	Dome bit	76	3"	No	9	6x12,7	3x12,7	45°	-	3	1	87003951
Trubbnos													
90030055	125-5041-39-70,37-20	PUG -Flat Face	41	1 5/8"	No	9	6x9	3x7	35°	-	3	3	87003495
90030012	125-5045-39-70,37-20	PUG -Flat Face	45	1 1/4"	No	9	6x10	3x9	35°	-	3	3	87003495
90030067	125-5048-39-70,37-20	PUG -Flat Face	48	1 5/8"	No	9	6x11	3x9	35°	-	3	3	87003495

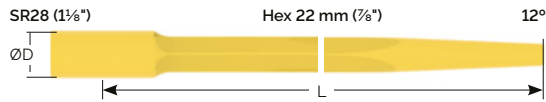
Shank end rods



Fully carburized.
Flushing hole diameter 8.6 mm.

Product no.	Product code	Shank hex. dimension		Shank hex. length		Rod hex. dimension		Flushing hole dia.	Carburized or surface hardened	Length		Seal product No.	Seal product code
		mm	inch	mm	foot/inch	mm	inch			mm	foot/inch		
90516367	525-1103-C.02	25	1"	108	4 1/4"	25	1"	8.6	C	265	10 3/8"	-	-
90516330	525-1237-C.02	25	1"	108	4 1/4"	25	1"	8.6	C	3 660	12'	90000378	9150-08

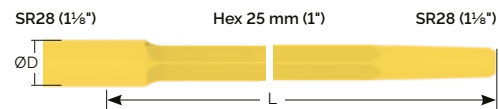
Tapered drifter speedrod



Fully carburized. D = 34 mm. Rod section 24.8 mm.
Flushing hole diameter 6.7 mm.

Product no.	Product code	Rod section	Rod hex. dimension		Flushing hole dia.	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90514449	277-0207-25-91-MF-C,02	24.8	22	7/8"	6.7	C	12°	675	2'2 3/4"
90514450	277-0212-25-91-MF-C,02	24.8	22	7/8"	6.7	C	12°	1 165	3'9 3/8"
90514451	277-0217-25-91-MF-C,02	24.8	22	7/8"	6.7	C	12°	1 665	5'5 1/2"

Speedrods



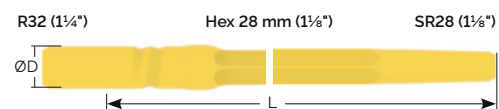
Fully carburized. D = 34 mm. Rod section 28.4 mm.
Flushing hole diameter 8.6 mm.



Fully carburized. D = 34 mm. Rod section 31.8 mm.
Flushing hole diameter 8.8 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515420	225-0407-69-MF-C,02	700	2'2 3/4"	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive
90029906	225-0311-69-MF-C,02	1 100	3'7 3/8"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90003641	225-0412-69-MF-C,02	1 200	4'	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive
90029907	225-0319-69-MF-C,02	1 900	6'2 3/4"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90003524	225-0420-69-MF-C,02	2 000	6'6 3/4"	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive
90003689	225-0324-69-MF-C,02	2 400	7'10 1/2"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90516350	225-0331-69-MF-C,02	3 050	10'1 1/4"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive

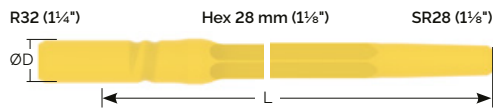
Drifter rods



Fully carburized. Rod section 31.8 mm.
Flushing hole diameter 8.8 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029908	225-0311-03-C,02	1 100	3'7 3/8"	R32	C	Hex25	28.4	8.6	-	No	Bottom drive
90029306	225-0419-03-C,02	1 875	6'1 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514162	225-0421-03-C,02	2 150	6'10 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514163	225-0423-03-C,02	2 300	7'6 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514370	225-0424-03-C,02	2 400	7'10 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514153	225-0426-03-C,02	2 600	8'6 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514103	225-0427-03-91-C,02	2 675	8'9 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514164	225-0428-03-C,02	2 800	9'2 1/4"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive

Drifter rods

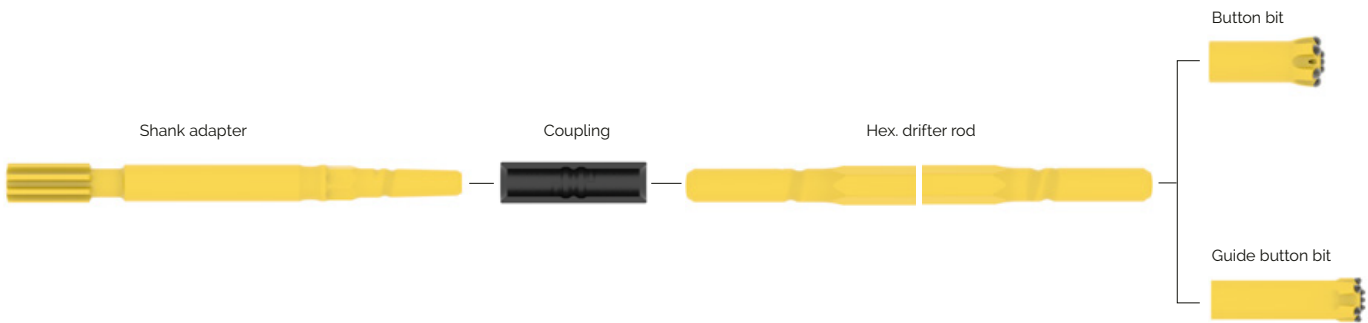


Fully carburized. Rod section 31.8 mm.
Flushing hole diameter 8.8 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514371	225-0430-03-91-C.02	2 950	9'8 1/2"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90029112	225-0431-35-C.02	3 090	10'1 1/8"	T38	C	Hex28	31,8	8,8	-	No	Bottom drive
90514168	225-0431-03-C.02	3 090	10'1 1/8"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90515496	225-0433-03-C.02	3 330	11'	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90514966	225-0437-03-C.02	3 700	12'1 1/8"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90514599	225-0455-03-C.02	5 530	18'1 1/4"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive



Drill string



Drill bits



5033-17



5xxx-27



5xxx-37-67

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90505178	107-5038-27-67,39-20	Flat Face	38	1 1/2"	No	7	5x9	2x7	40°	-	1	1	87003483
90505174	107-5041-27-67,39-20	Flat Face	41	1 5/8"	No	7	5x9	2x8	40°	-	1	1	87003499
Spherical													
90505296	107-5037-27,39-20	Flat Face	37	1 1/2"	No	7	5x9	2x7	30°	-	1	1	87003483
90505177	107-5038-27,39-20	Flat Face	38	1 1/2"	No	7	5x9	2x7	30°	-	1	1	87003483
90505173	107-5041-27,39-20	Flat Face	41	1 5/8"	No	7	5x9	2x8	35°	-	1	1	87003499
90505169	107-5043-27,39-20	Flat Face	43	1 3/8"	No	7	5x9	2x9	35°	-	2	1	87003499
90509467	107-5045-37,39-20	Flat Face	45	1 3/4"	No	9	6x9	3x8	35°	-	1	3	87003481
90030014	107-5045-39,37-20	PUG -Flat Face	45	1 1/4"	No	9	6x10	3x9	35°	-	3	3	87003495
Trubbnos													
90030066	107-5048-39-70,37-20	PUG -Flat Face	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Extension rod

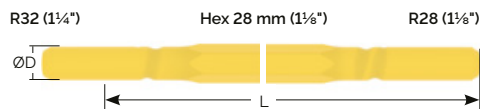
R28 (1 1/8") hex. rod



Fully carburized. Rod section 32 mm.
Flushing hole diameter 8.8 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90502190	207-0418-C.02	1 830	6'	R28	C	Hex28	31,8	8,8	-	No	Bottom drive

Drifter rods



Fully carburized. Rod section 31.8 mm.
Flushing hole diameter 8.8 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90500951	207-0424-03-C.02	2 475	7'10 1/2"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90505256	207-0424-03-91-C.02	2 475	7'10 1/2"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90509861	207-0428-03-91-C.02	2 800	9' 1/4"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90502394	207-0531-04-C.02	3 090	10'1 1/8"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90502731	207-0434-03-C.02	3 400	11'1 1/8"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90503041	207-0537-04-C.02	3 700	12'1 1/8"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90500445	207-0443-03-C.02	4 310	14'1 1/8"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive

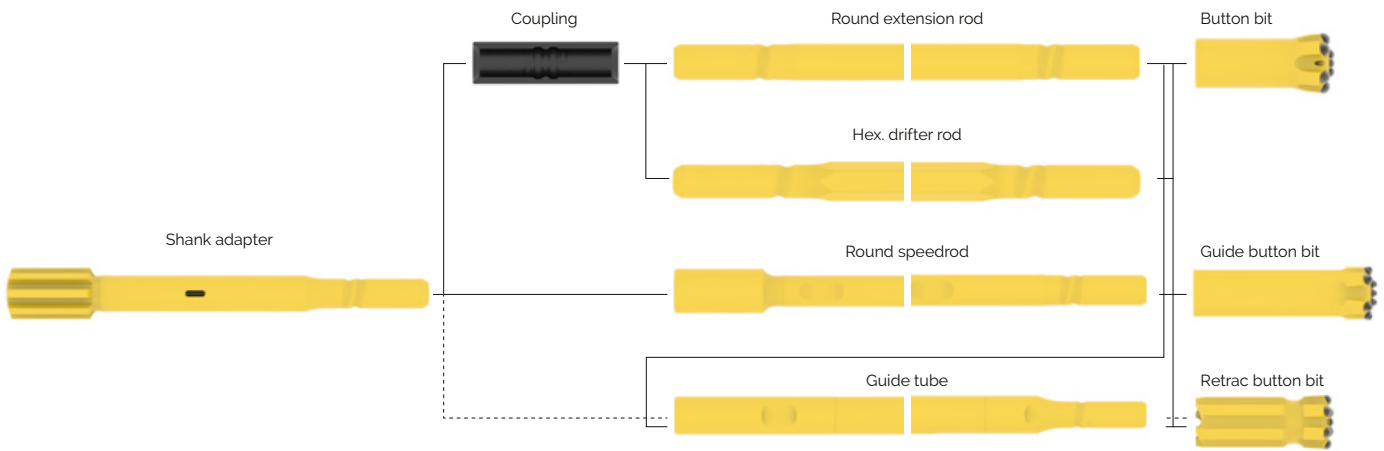
Coupling



Central stop

Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90515735	307-0040.10	R28-Rnd40 coupling	40	1 5/8"	150	5 7/8"	Standard	0,9

Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90003532	103-5051-37-67-99,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90029192	103-5051-39-67,56-20	Flat Face	51	2"	No	9	6x10	3x10	35°	-	-	3	87004314
90029845	103-5051-27-20-45-67,39-20	Flat Face	51	2"	Yes	7	5x12,7	2x10	30°	-	1	1	87005311
90509466	103-5051-37-67,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510836	103-5051-37-45-67,39-20	Flat Face	51	2"	Yes	9	6x10	3x9	40°	-	1	3	87003481
90514633	103-6051-45-67,39-20	Drop Center	51	2"	Yes	9	6x10	3x9	35°	-	-	3	87003487
90509481	103-5054-37-67,39-20	Flat Face	54	2½"	No	9	6x11	3x10	35°	-	1	3	87003486
90510795	103-5054-24-45-67,39-20	Flat Face	54	2½"	Yes	11	8x9	3x9	35°	-	1	1	87003493
90510454	103-5057-20-67,39-20	Flat Face	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90515503	103-5057-37-54-67,39-20	Flat Face	57	2¼"	No	9	6x11	3x9	35°	-	2	3	87003495
90510327	103-5064-67,49-20	Flat Face	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510414	103-6064-45-67,49-20	Drop Center	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
Full ballistic													
90029191	103-5051-34-66,56-20	Flat Face	51	2"	No	8	6x10	2x10	40°	-	-	2	87005314
90514136	103-5051-37-66,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90514440	103-5057-37-66,39-20	Flat Face	57	2¼"	No	9	6x10	3x10	40°	-	1	3	87003481
90514983	103-5064-37-66,49-20	Flat Face	64	2½"	No	9	6x11	3x11	40°	-	1	3	87003495
Spherical													
90504566	103-5051-27,39-20	Flat Face	51	2"	No	7	5x11	2x10	35°	-	2	1	87003485
90509465	103-5051-37,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510308	103-6051-45,39-20	Drop Center	51	2"	Yes	9	6x10	3x9	30°	-	-	3	87003487
90510450	103-5051,39-20	Flat Face	51	2"	No	7	5x11	2x11	35°	-	1	1	87003496
90030051	103-5051-39,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90510453	103-5057-20,39-20	Flat Face	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90514267	103-5057-37-45,49-20	Flat Face	57	2¼"	Yes	9	6x11	3x9	35°	-	-	3	87003495
90514414	103-5057-54,39-20	Flat Face	57	2¼"	No	9	6x11	3x9	16°	-	1	1	87004775
90510303	103-5064,49-20	Flat Face	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510328	103-6064,49-20	Drop Center	64	2½"	No	10	6x11	4x10	35°	-	-	3	87003487
90510364	103-6064-45,49-20	Drop Center	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
90510381	103-5064-45,49-20	Flat Face	64	2½"	Yes	12	8x10	4x10	40°	-	-	2	87003489
90510353	103-5076,49-20	Flat Face	76	3"	No	12	8x11	4x11	40°	-	-	2	87003493
90510504	103-6076-45,49-20	Drop Center	76	3"	Yes	13	8x11	5x11	35°	-	1	4	87003498
90029882	103-5089-42-24,57-20	Dome bit	89	3½"	No	15	8x12,7	7x12,7	35°	-	2	4	87003953
90029320	103-9102-45-A,49-20	Hole Opener	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	87003560
90029889	103-5102-42-24,57-20	Dome bit	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
90029913	103-9102-40,49-20	Hole Opener	102	4"	No	9	6x12,7	3x12,7	35°	-	1	3	87003560
90029896	103-5127-42-24,57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	2	3	87004775
Trubbnos													
90030049	103-5051-39-70,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90030060	103-5054-39-70,37-20	PUG -Flat Face	54	2½"	No	9	6x12	3x9	35°	-	3	3	87003495
90029883	103-5076-42-24-70,57-20	Dome bit	76	3"	No	9	6x12,7	3x12,7	35°	-	1	3	87003951
90029891	103-5089-42-24-70,57-20	Dome bit	89	3½"	No	15	8x12,7	5x12,7	35°	-	2	4	87003953
90029884	103-5102-42-24-70,57-20	Dome bit	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953

Extension rods

R32 (1¼") round rod



Fully carburized or surface hardened.
Flushing hole diameter 11.7 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90550062	203-2509-C,02	915	3'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90500360	203-2510-C,02	1 000	3'3¾"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90504948	203-0310-C,02	1 000	3'3¾"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90000138	203-2512-C,02	1 220	4'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90509485	203-2515-C,02	1 525	5'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000139	203-2518-C,02	1 830	6'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90514468	203-2522-C,02	2 200	7'2½"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000989	203-2524-C,02	2 435	7'10½"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000141	203-2531-SH,03	3 050	10'1¾"	R32	SH	Rnd32	32	11.7	-	Yes	Bottom drive
90000990	203-2531-C,02	3 050	10'1¾"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90515401	203-4531-SH,03	3 050	10'1¾"	R32	SH	Rnd32	32	11.7	-	No	Bottom drive
90000142	203-2537-SH,03	3 660	12'	R32	SH	Rnd32	32	11.7	-	Yes	Bottom drive
90509565	203-2537-C,02	3 660	12'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000993	203-2543-C,02	4 310	14'1¾"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive

Speedrods

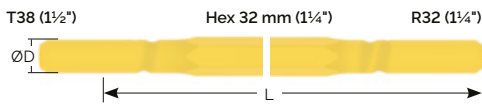
R32 (1¼") round speedrod



Fully carburized. D=46 mm and 43 mm.
Flushing hole diameter 11.7 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003602	203-4508-MF-C,02	800	2'7½"	R32	C	Rnd32	32	11.7	46	No	Bottom drive
90503329	203-2509-MF-C,02	915	3'	R32	C	Rnd32	32	11.7	46	Yes	Bottom drive
90500834	203-2512-MF-C,02	1 220	4'	R32	C	Rnd32	32	11.7	46	Yes	Bottom drive
90500627	203-2515-MF-C,02	1 525	5'	R32	C	Rnd32	32	11.7	46	Yes	Bottom drive
90500628	203-2518-MF-C,02	1 830	6'	R32	C	Rnd32	32	11.7	46	Yes	Bottom drive
90502259	203-2524-MF-C,02	2 400	7'10½"	R32	C	Rnd32	32	11.7	46	Yes	Bottom drive
90510130	203-2531-69-MF-C,02	3 050	10'1¾"	R32	C	Rnd32	32	11.7	43	Yes	Bottom drive
90515604	203-2531-MF,29	3 050	10'1¾"	R32	SH	Rnd32	32	11.7	46	Yes	Bottom drive
90515605	203-2537-MF,29	3 660	12'	R32	SH	Rnd32	32	11.7	46	Yes	Bottom drive
90515606	203-2543-MF,29	4 270	14'1¾"	R32	SH	Rnd32	32	11.7	46	Yes	Bottom drive

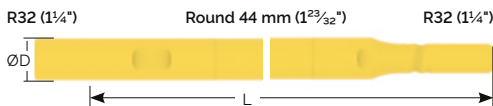
Drifter rods



Fully carburized.
Flushing hole diameter 9.6 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515439	203-0524-35-C.02	2 400	7'10½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90500107	203-0531-35-C.02	3 090	10'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90505189	203-0534-35-C.02	3 400	11'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90590043	203-0537-35-C.02	3 700	12'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive

Guide tubes



Fully carburized.
Flushing hole diameter 27.0 mm.

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90509957	203-2210-C.02	1 000	3'3¾"	R32	C	Rnd44	44	27	32	Yes	Shoulder drive
94502681	203-7112.10	1 220	4'	R32	C	Rnd45	45	10	32	Yes	Bottom drive
90509958	203-2218-C.02	1 833	6'	R32	C	Rnd44	44	27	32	Yes	Shoulder drive
94502659	203-7118.10	1 833	6'	R32	C	Rnd45	45	10	32	Yes	Bottom drive

Couplings



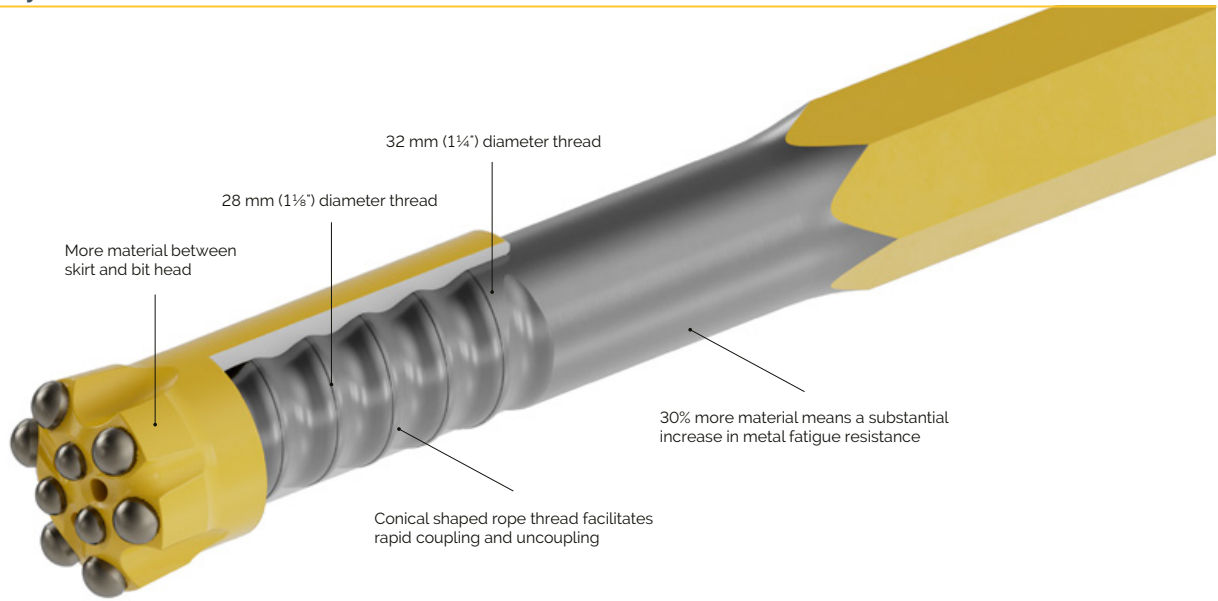
Central stop



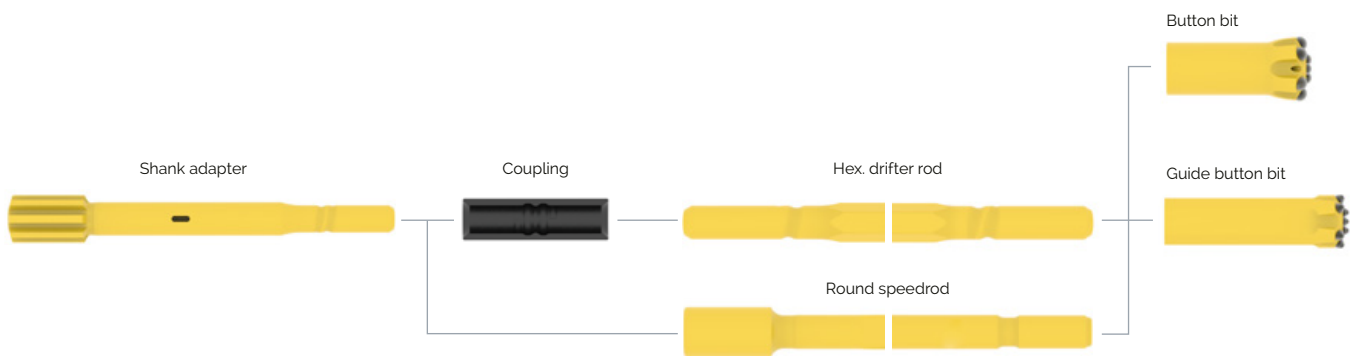
Full bridge stop

Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90515730	303-0042.10	R32-Rnd42 coupling	42	1½"	150	5¾"	Standard	0.8
90515731	303-0044.10	R32-Rnd44 coupling	40	1½"	150	5¾"	Standard	1.0
90515732	303-0044-57.10	R32-Rnd42 coupling-full bridge	40	1½"	150	5¾"	Full bridge	1.0
90515735	307-0040.10	R28-Rnd40 coupling	40	1½"	150	5¾"	Standard	0.9

SR32 thread system



Drill string



Drill bits

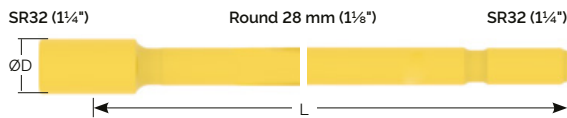


Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90514501	126-5038-27-67,39-20	Flat Face	38	1 1/2"	No	7	5x9	2x7	40°	-	1	1	87004741
90516483	126-5041-37-67,39-20	Flat Face	41	1 5/8"	No	9	6x9	3x7	40°	-	-	3	87003486
90515721	126-5048-37-67,39-20	Flat Face	48	1 7/8"	No	9	6x10	3x9	40°	-	1	3	87003486
Spherical													
90514503	126-6051.49-20	Drop Center	51	2"	No	9	6x10	3x9	35°	-	-	3	87003487
Trubbnos													
90030050	126-5041-39-70,37-20	PUG -Flat Face	41	1 5/8"	No	9	6x9	3x7	35°	-	3	3	87003495
90030058	126-5043-39-70,37-20	PUG -Flat Face	43	1 5/8"	No	9	6x9	3x8	35°	-	3	3	87003495
90030013	126-5045-39-70,37-20	PUG -Flat Face	45	1 3/4"	No	9	6x10	3x9	35°	-	3	3	87003495
90030063	126-5048-39-70,37-20	PUG -Flat Face	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495

Speedrods



Fully carburized. Rod section 38 mm.
Flushing hole diameter 11.7 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003686	226-4518-69-MF-C,02	1 830	6'	SR32	C	Rnd32	32	11.7	38	No	Bottom drive
90516482	226-4531-69-MF-C,02	3 050	10'1 5/8"	SR32	C	Rnd32	32	11.7	38	No	Bottom drive
90029300	226-4537-69-MF-C,02	3 700	12'1 5/8"	SR32	C	Rnd32	32	11.7	38	No	Bottom drive



Drifting, tunneling and bolting

Powerbit Underground	40
SR22	50
SR25	52
R25	54
SR28	58
R28	62
SR32	64
R32	66
SR35	72
SR38	78
R38	80
TC35	82
TC42B	84
Reaming equipment and hole openers	86



Powerbit Underground

The drill bit for drillers who want to push it to the limit. Drill more meters every day and between regrinds, while enjoying longer bit service life. It's simply a drill bit for drillers who won't settle for anything but the fastest, most productive underground drilling imaginable.

Is Powerbit Underground for you too?





Powerbit Underground is more than a new drill bit. It's a way to boost the return on your rig investment – through increased drilling efficiency and reliability.

Boosts modern rigs...

Even the most powerful rig won't do all the work by itself. You need a drill bit that matches the rig's performance, withstanding the immense forces to give you more drill meters per day. Only then will you experience true drilling productivity.

...and older rigs too

Powerbit Underground gives older rigs a power boost too. It has more flushing holes and a smarter hole configuration than previous generations of bits. It will therefore increase the efficiency of rigs with lower water pressure and less effective flushing.



Faster, more reliable drilling

Powerbit Underground drills up to 15 percent faster than previous Epiroc models, reducing the total cost of ownership considerably.

Even so, the true gain comes from what Powerbit Underground will do to your availability and productivity. How about 20 percent more drill meters before the first regrind and 15 percent more drill meters between regrinds?

With this innovative bit, you will experience a whole new “flow” at work. Enjoying the satisfaction of trouble-free, uninterrupted drilling that spells more money in your pocket. All thanks to the bit's extreme ruggedness.

Full utilization of your rig

Drill rigs get most of the attention in mining – and perhaps rightly so. After all, they do provide the necessary

brute force. But smart miners also realize how to best make use of their rig's full capacity.

Powerbit Underground allows you to complete more drill meters per day. Experience faster and more reliable drilling. Improve efficiency. Capitalize fully on your rig investment. All thanks to Powerbit Underground.



All is new

Powerbit Underground may look like just another drill bit. It's not. Everything about it is new. The steel it's made of. The shape and design of its buttons. Its hole configuration. One factor just as important for your drilling efficiency as the other. Add all these benefits together, and you have the perfect recipe for successful drilling.



The steel

We put our metallurgists to work with a simple request – invent the most durable steel we've ever used in a drill bit (and our history dates back to 1873...) They came up with 15 percent higher wear resistance and 10 percent higher fatigue strength.



The face

We put a lot of engineering into optimizing the bit's face, since it is key to a high penetration rate. More flushing holes and a smarter hole configuration to maximize flushing efficiency and we paid special attention to make sure cuttings are removed as fast as possible.



The buttons

The durability of the buttons is crucial to high drilling productivity. The Enduro Extra patented treatment, used on our spherical and Trubbnos buttons, makes them tougher and more wear resistant. For you, that means more drill meters between regrinds.



Trubbnos

The drillbit can be delivered with both spherical buttons and Trubbnos. Trubbnos is our new and innovative trapezoid-shaped buttons, which offer longer service life and improved penetration rate than semi-ballistic buttons. (Trubbnos, by the way, is Swedish for flat nose, an indication of the geometry of the new buttons.)

Unbeatable drill string

Every part of the drill string must perform optimally. That's why we pay equal attention to shank adapters, drill rods, couplings and drill bits. For you, it means that you can get a complete, unbeatable drill string from a single supplier – Epiroc.

The best shank adapters and drill rods

Shank adapters and drill rods from Epiroc have long been the equipment of choice for drillers looking for high quality and long service life. We put all our 100 years of rock drilling experience and know-how into making the best adapters and rods. A proven and tested combination of material choice, heat treatment and the unique T-WiZ threads gives you high uptime and effective drilling.

For any rock conditions

With Powerbit Underground, we can now add even more to the performance of your drill string. As tests show, these new bits work outstandingly well in any rock formation and outperform previous generations of bits. For greatly increased service life – use Powerbit Underground.

An unbeatable drill string...

No detail has been overlooked when creating the perfect drill string. Our shank adapters, drill rods and powerful bits are tough and wear resistant. And the pieces work perfectly together. For an unbeatable drill string, you need to look no further than Epiroc.

...key to tomorrow's automated drilling

A reliable drill string is key to automated rock drilling. As a leading rock drill and rig provider, Epiroc not only offers complete drill strings, but total rock drilling technology solutions. In us, drillers find the only true one-stop shop for tomorrow's fully automated, seamlessly integrated underground drilling solutions.



Drill bit

Higher penetration rate. Improved reliability. Longer service life. Powerbit Underground is without a doubt the jewel of the drilling string crown.

Drill rod

Must be stiff to drill straight holes, tough not to break if bent, have high fatigue strength and wear resistance to give long service life.



Coupling

Manufactured to close tolerances, especially in threads, to minimize energy loss in this critical component (3 percent energy lost in each thread on average).

Shank adapter

With one of the market's most comprehensive range of shank adapters produced for virtually all rock drill types, Epiroc knows how to deliver the necessary wear resistance, fatigue strength and resilience.

Easy selection

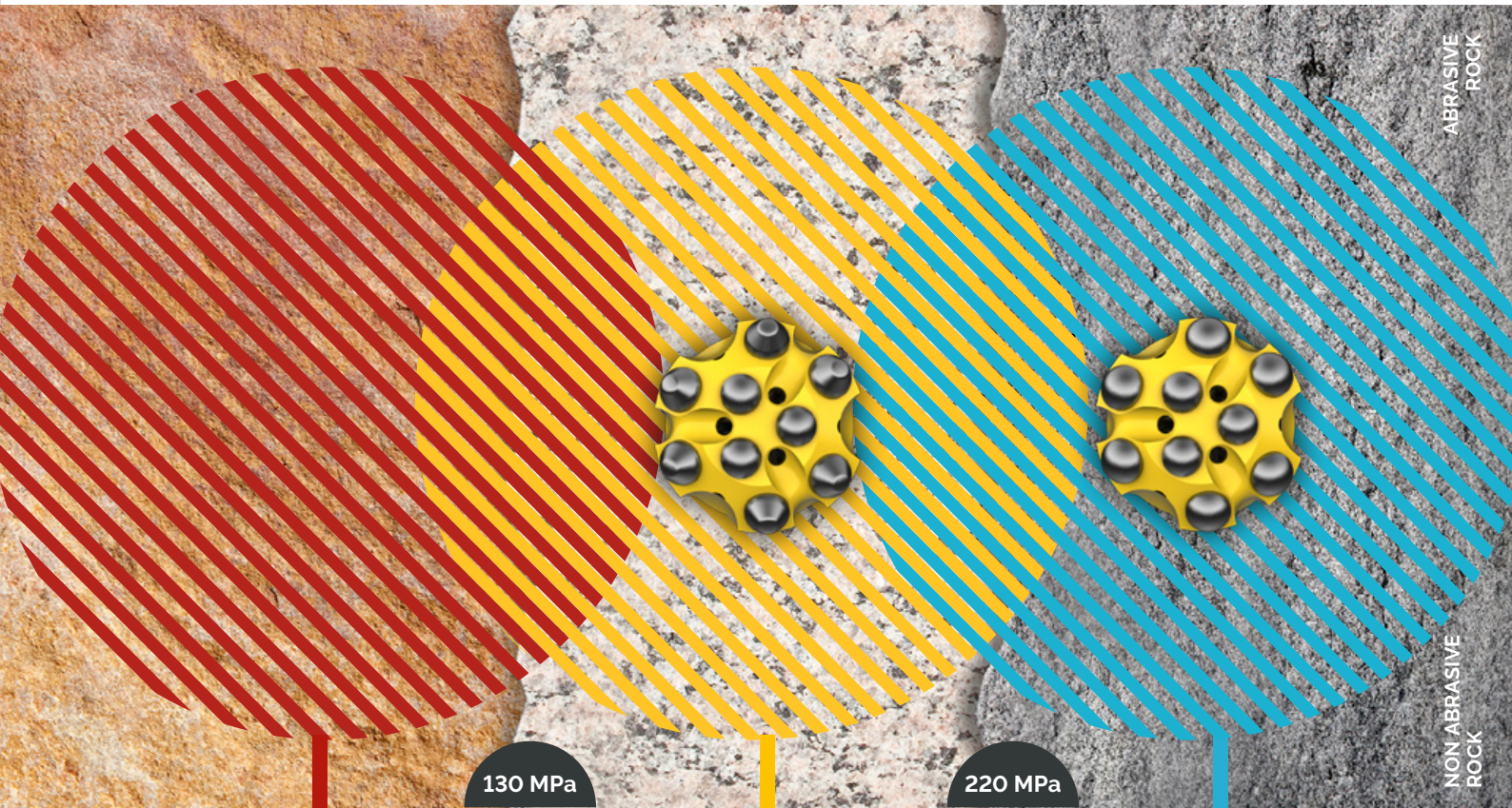


Selection guide

SOFT ROCK

MEDIUM HARD ROCK

HARD ROCK



SOFT ROCK
Will be released soon

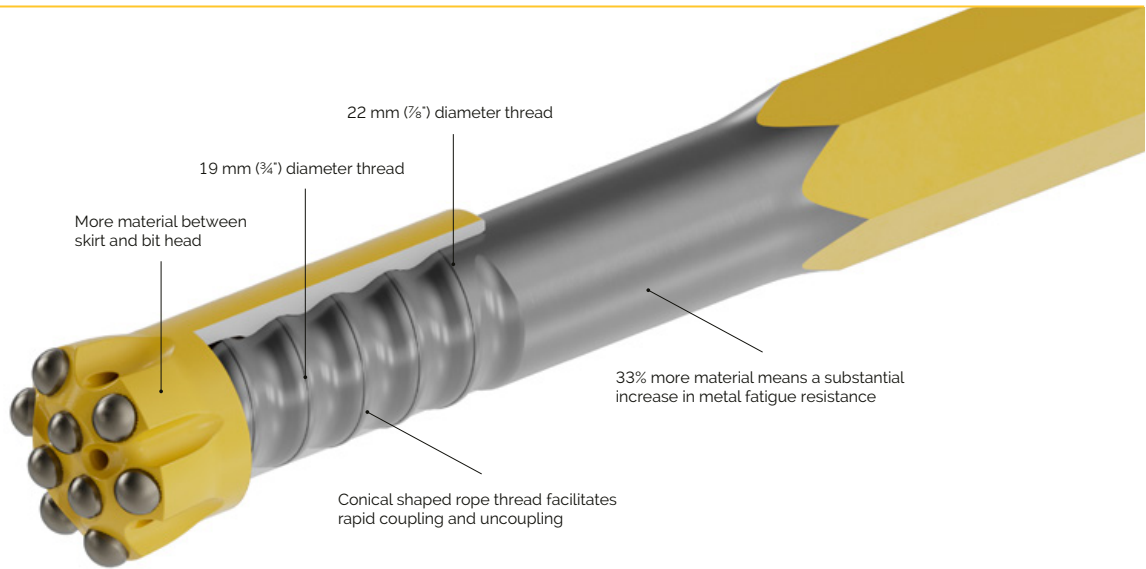
MEDIUM HARD ROCK
Trubbos buttons (gauge) and spherical buttons (center)

Ideal for abrasive, medium hard to hard rock. Larger Trubbos buttons and flushing grooves give the ideal balance between service life and penetration rate. Available with a short retract for straight holes in broken rock.

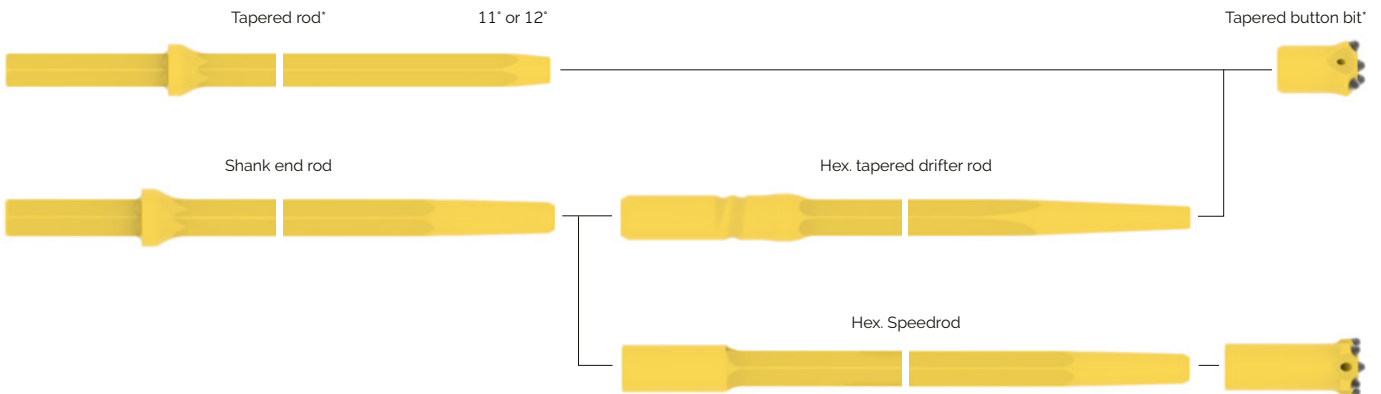
HARD ROCK
Spherical buttons

For tough conditions in hard and abrasive rock. Optimized face and body design and with large spherical buttons for long service life. Available with a short retract for straight holes in broken rock.

SR22 thread system



Drill string



Drill bit

Taperbits could be used with SR22 taper system



5xxx-34

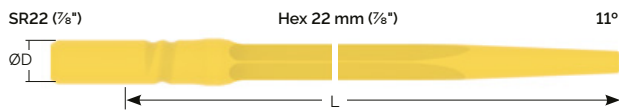
Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	

Ballistic bit

90029254	129-5033-34-67, 39-20	Flat Face	Std	33	1 1/8"	No	8	6x7	2x7	40°	-	4	2	87004513
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Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

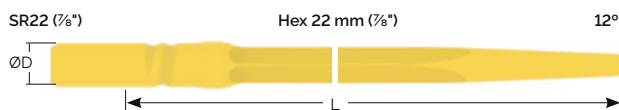
Speedrods



Fully carburized. D=30 mm. Rod section 24,8mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90515243	279-0203-29-91-MF-C,02	24,8	22	7/8"	6,7	C	11°	340	1'1 3/8"
90516414	279-0206-29-MF-C,02	24,8	22	7/8"	6,7	C	11°	600	1'11 3/8"

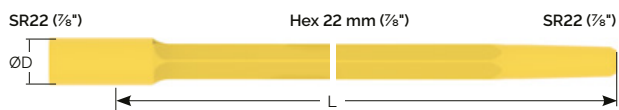
Speedrods



Fully carburized. D=30 mm. Rod section 24,8mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90003722	277-0208-29-91-69-MF-C,02	24,8	22	7/8"	6,7	C	12°	825	2'8 1/2"
90029390	277-0209-29-91-69-MF-C,02	24,8	22	7/8"	6,7	C	12°	860	2'9 3/8"

Speedrods



Fully carburized. D=30 mm. Rod section 24,8mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or Surface Hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515244	229-0203-69-91-MF-C,02	340	1'1 3/8"	SR22	C	Hex22	24,8	6,7	28,5	No	Bottom drive
90516402	229-0206-MF-C,02	600	1'11 3/8"	SR22	C	Hex22	24,8	6,7	30	No	Bottom drive
90029389	229-0208-69-MF-C,02	740	2'5 1/8"	SR22	C	Hex22	24,8	6,7	28,5	No	Bottom drive
90003721	229-0209-69-91-MF-C,02	860	2'9 3/8"	SR22	C	Hex22	24,8	6,7	28,5	No	Bottom drive
5697002202	229-0210-69-91-MF-C,02	1 000	3'3 3/8"	SR22	C	Hex22	24,8	6,7	28,5	No	Bottom drive
90516438	229-0212-MF-C,02	1 220	4'	SR22	C	Hex22	24,8	6,7	30	No	Bottom drive

Shank rods



Fully carburized.
Flushing hole diameter 6,7 mm.

Product No.	Product code	Shank hex. dimension		Shank hex. length		Rod hex. dimension		Flushing hole dia.	Carburized or surface hardened	Length		Seal product No.	Seal product code
		mm	inch	mm	Foot/inch	mm	inch			mm	(foot/inch)		
Shank end rods													
90003629	529-0103-91-C,02	22	7/8"	108	4 1/4"	22	7/8"	6,7	C	340	1'1 3/8"	-	-
90003631	529-0106-91-C,02	22	7/8"	108	4 1/4"	22	7/8"	6,7	C	552	1'9 3/8"	-	-
Shank hex. 22 mm (7/8") x 159 mm (6 1/4"). 22 mm thread													
90003645	529-0201-91-C,02	22	7/8"	159	6 3/4"	22	7/8"	6,7	C	100	3 15/16"	-	-
90003630	529-0203-91-C,02	22	7/8"	159	6 3/4"	22	7/8"	6,7	C	340	1'1 3/8"	-	-

Drill string



Drill bit



5xxx-27

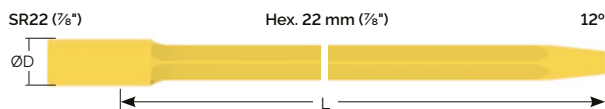
Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	

Ballistic bit

90029566	124-5038-34-67,39-20	Flat Face	Std	38	1½"	No	8	6x6	2x8	40°	-	2	2	87003492
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Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Tapered drifter rods



Fully carburized. D=30 mm. Rod section 24,8 mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or Surface Hardened	Taper angle	Length	
			mm	inch				mm	Foot/inch
90003722	277-0208-29-91-69-MF-C,02	24,8	22	7/8"	6,7	C	12°	825	2'8½"
90029390	277-0209-29-91-69-MF-C,02	24,8	22	7/8"	6,7	C	12°	860	2'9¾"

Speedrods



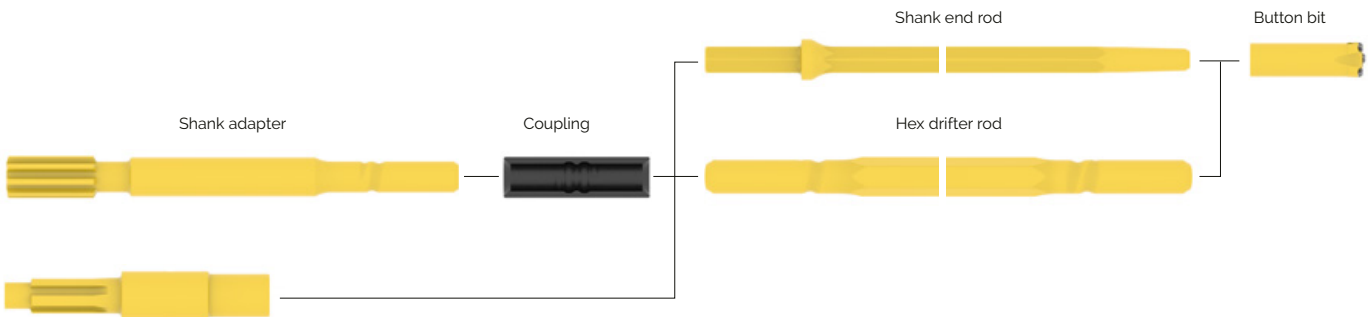
Fully carburized. D=34 mm. Rod section 28,4 mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029031	224-0307-69-91-MF-C,02	734	2'4¾"	SR25	C	Hex25	28,4	8,6	31	No	Bottom drive
90029032	224-0309-69-91-MF-C,02	930	3¾"	SR25	C	Hex25	28,4	8,6	31	No	Bottom drive
90029465	224-0309--69-91-860-MF-C,02	860	2'9¾"	SR25	C	Hex25	28,4	8,6	31	No	Bottom drive

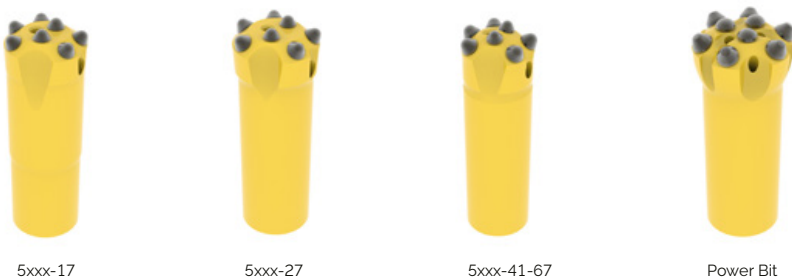


TEGERA®

Drill string



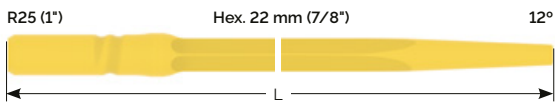
Drill bits



Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic buttons														
90510274	102-5033-17-67,39-20	Flat Face	Std	33	1½"	No	7	5x7	2x7	35°	-	1	1	87003484
90514118	102-5033-41-67,39-20	Flat Face	Std	33	1½"	No	7	5x8	2x7	40°	15°	1	1	87004037
90509723	102-5035-27-67,39-20	Flat Face	Std	35	1¾"	No	7	5x9	2x7	25°	-	1	1	87003483
90513900	102-5037-99-67,39-20	Flat Face	Std	37	1½"	No	7	5x9	2x7	40°	20°	1	1	87004741
90505180	102-5038-27-67,39-20	Flat Face	Std	38	1½"	No	7	5x9	2x7	40°	-	1	1	87003483
90505176	102-5041-27-67,39-20	Flat Face	Std	41	1¾"	No	7	5x9	2x8	40°	-	1	1	87003499
Spherical buttons														
90510448	102-5033-17,39-20	Flat Face	Std	33	1½"	No	7	5x7	2x7	35°	-	1	1	87003484
90505181	102-5035-27,39-20	Flat Face	Std	35	1¾"	No	7	5x9	2x7	25°	10°	1	1	87003483
90505295	102-5037-27,39-20	Flat Face	Std	37	1½"	No	7	5x9	2x7	30°	-	1	1	87003483
90513899	102-5037-99,39-20	Flat Face	Std	37	1½"	No	7	5x9	2x7	35°	15°	1	1	87004741
90505179	102-5038-27,39-20	Flat Face	Std	38	1½"	No	7	5x9	2x7	30°	-	1	1	87003483
90505175	102-5041-27,39-20	Flat Face	Std	41	1¾"	No	7	5x9	2x8	35°	-	1	1	87003499
90505145	102-5045-27,39-20	Flat Face	Std	45	1¾"	No	7	5x11	2x8	30°	-	2	1	87003480
90513912	102-5048-27,39-20	Flat Face	Std	48	1¾"	No	7	5x11	2x9	35°	10°	2	1	87003499
90505353	102-5051-27,39-20	Flat Face	Std	51	2"	No	7	5x11	2x10	35°	-	1	2	87003485
Full ballistic bit														
90515669	102-5038-34-66,39-20	Flat Face	Std	38	1½"	No	8	6x8	2x8	35°	-	2	0	87005314

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

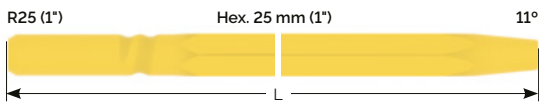
Drifter rod



Fully carburized. Rod section 24,8mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	Foot/inch
90029801	277-0222-02-C.02	24,8	22	7/8"	6,7	C	12°	2 160	7'1"

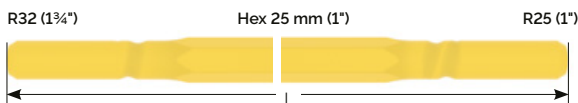
Tapered drifter rod



Fully carburized. Rod section 24,8mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	Foot/inch
90003635	279-0305-02-C.02	28,4	25	1"	8,6	C	11°	500	1' 7 1/16"

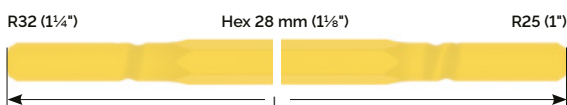
Drifter rods



Fully carburized. Rod section 28,4mm
Flushing hole diameter 8,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90503413	202-0321-03-C.02	2 100	6'10 1/2"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90580096	202-0322-03-C.02	2 200	7'2 1/2"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90503115	202-0324-03-C.02	2 400	7'10 1/2"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90510804	202-0325-03-91-C.02	2 470	8'1 1/4"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90504963	202-0326-03-C.02	2 600	8'6 3/8"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90505259	202-0327-03-91-C.02	2 675	8'9 3/8"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90505346	202-0328-03-C.02	2 800	9'2 1/4"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90509925	202-0329-03-C.02	2 900	9'6 1/8"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90539158	202-0331-03-C.02	3 090	10'1 1/8"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90515601	202-0333-03-C.02	3 330	11'	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90002721	202-0337-03-C.02	3 700	12'1 1/8"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90590088	202-0340-03-C.02	4 000	13'1 1/2"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive
90504186	202-0348-03-C.02	4 750	15'7"	R32	C	Hex25	28,4	8,6	-	No	Bottom drive

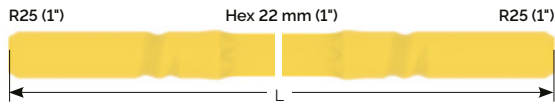
Drifter Rods



Fully carburized. Rod section 31,8mm
Flushing hole diameter 8,8 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003603	202-0410-03-C.02	1 000	3'3 3/8"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive
90513759	202-0428-03-C.02	2 800	9'2 1/4"	R32	C	Hex28	31,8	8,8	-	No	Bottom drive

Extension rods



Light equipment, fully carburized. Rod section 24,8mm
Flushing hole diameter 6.7 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90000524	202-0212-C.02	1 220	4'	R25	C	Hex22	24,8	6,7	-	No	Bottom drive
90548008	202-0206-C.02	610	2'	R25	C	Hex22	24,8	6,7	-	No	Bottom drive

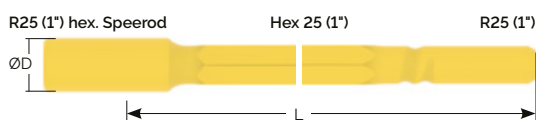
Extension rods



Fully carburized or surface hardened. Rod section 28,5mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90548035	202-0309-C.02	915	3'	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90509525	202-0310-C.02	1 000	3'3¼"	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90000131	202-0312-C.02	1 220	4'	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90000535	202-0315-C.02	1 525	5'	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90000132	202-0318-C.02	1 830	6'	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90548093	202-0324-C.02	2 400	7'10½"	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90003687	202-0328-C.02	2 800	9'2¼"	R25	C	Hex25	28,4	8,6	-	No	Bottom drive
90000981	202-0331-C.02	3 050	10'1½"	R25	C	Hex25	28,4	8,6	-	No	Bottom drive

Speedrods



Fully carburized. D=35 mm Rod section 28,5 mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90505035	202-0306-MF-C.02	610	2'	R25	C	Hex25	28,4	8,6	35	No	Bottom drive
90505036	202-0312-MF-C.02	1 220	4'	R25	C	Hex25	28,4	8,6	35	No	Bottom drive
90515510	202-0318-MF-C.02	1 830	6'	R25	C	Hex25	28,4	8,6	35	No	Bottom drive

Couplings



Central stop

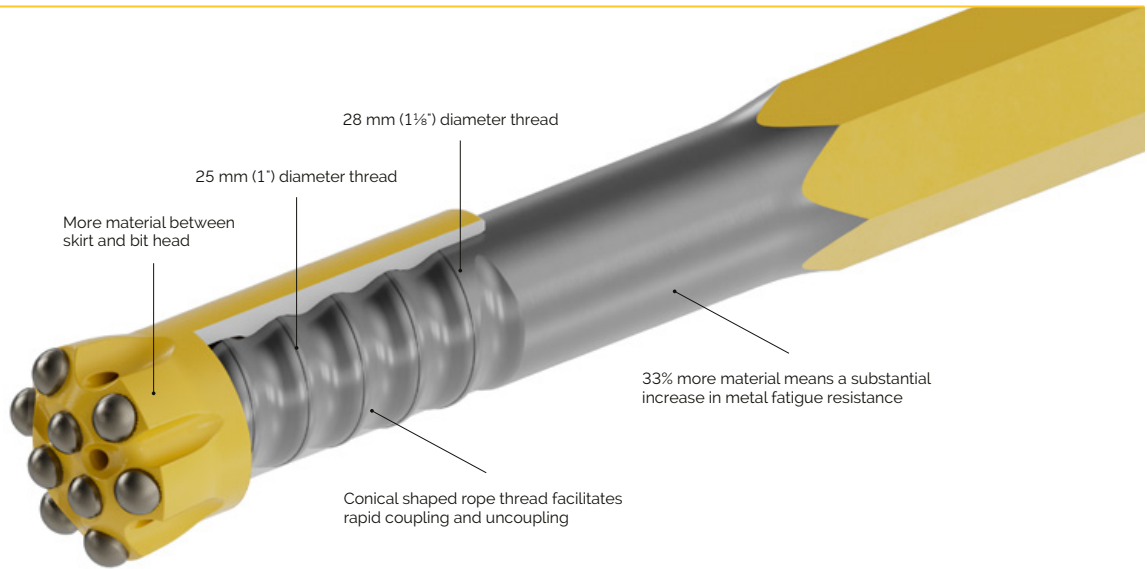


Cross-Over Coupling

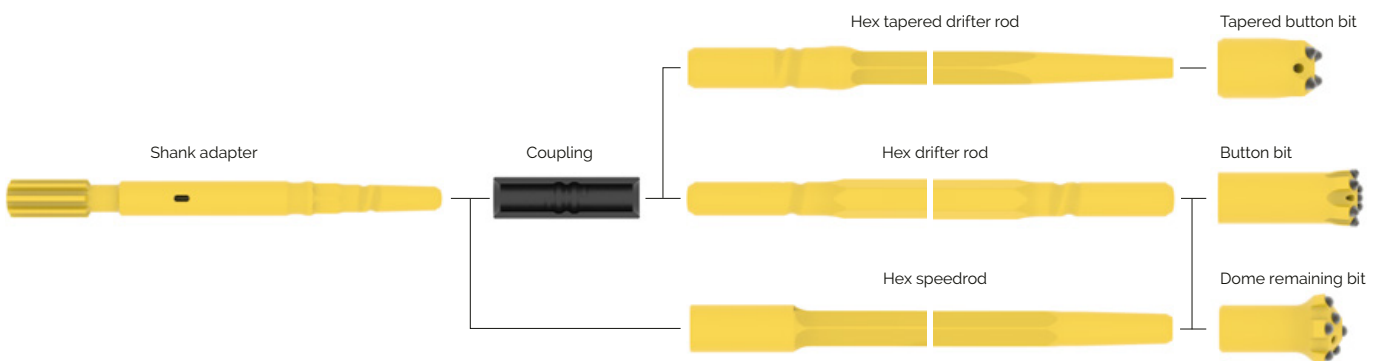
Product No	Product code	Diameter		Length	
		mm	foot/inch	mm	inch
90515728	302-0033.02	33	1"	150	5¾"
90515746	302-1044-03.10	44	1'1½"	160	6½"



SR28 thread system



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical buttons														
90003626	125-5048-37,39-20	Flat Face	Std	33	1 1/8"	No	9	6x10	3x9	40°	-	3	1	87003486
90029184	125-5040-27,39-20	Flat Face	Std	33	1 1/8"	No	7	5x9	2x7	40°	-	1	1	87004741
90029307	125-5043-27,39-20	Flat Face	Std	35	1 3/8"	No	7	5x9	2x9	35°	-	1	1	87005310
90514117	125-5033-41,39-20	Flat Face	Std	37	1 1/2"	No	7	5x8	2x7	40°	-	1	1	87004037
90514167	125-5037-99,39-20	Flat Face	Std	38	1 1/2"	No	7	5x9	2x7	35°	-	1	1	87003483
90514200	125-5033-17,39-20	Flat Face	Std	40	1 1/2"	No	7	5x7	2x7	35°	-	1	1	87003484
90514282	125-5038-27,39-20	Flat Face	Std	41	1 5/8"	No	7	5x9	2x7	30°	-	1	1	87003483
90514322	125-5035-27,39-20	Flat Face	Std	41	1 5/8"	No	7	5x9	2x7	25°	-	1	1	87003483
90514507	125-5045-27,39-20	Flat Face	Std	41	1 5/8"	No	7	5x11	2x8	30°	-	1	2	87003480
90514793	125-5051-27,39-20	Flat Face	Std	42	1 5/8"	No	7	5x11	2x10	35°	-	1	2	87003485
90515379	125-5041-27,39-20	Flat Face	Std	42	1 5/8"	No	7	5x9	2x8	40°	-	1	1	87005310
90515543	125-5042-27,39-20	Flat Face	Std	45	1 3/4"	No	7	5x9	2x8	40°	-	1	1	87005310
Trubbnos buttons														
90030055	125-5041-39-70,37-20	PUG -Flat Face	Std	41	1 5/8"	No	9	6x9	3x7	35°	-	3	3	87003495
5697001941	125-5044-39-70,37-20	PUG -Flat Face	Std	44	1 1/2"	No	9	6x9	3x8	35°	-	3	3	
90030012	125-5045-39-70,37-20	PUG -Flat Face	Std	45	1 1/4"	No	9	6x10	3x9	35°	-	3	3	87003495
90030067	125-5048-39-70,37-20	PUG -Flat Face	Std	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495
Ballistic buttons														
90029167	125-5033-27-67-99,39-20	Flat Face	Std	33	1 1/8"	No	7	5x8	2x7	35°	-	-	2	87004741
90514137	125-5033-41-67,39-20	Flat Face	Std	33	1 1/8"	No	7	5x8	2x7	40°	-	1	1	87004037
90514102	125-5035-27-67,39-20	Flat Face	Std	35	1 3/8"	No	7	5x9	2x7	25°	-	1	1	87003483
90003625	125-5037-99-67,39-20	Flat Face	Std	37	1 1/2"	No	7	5x9	2x7	35°	-	1	1	87004741
90516334	125-5038-41-67,39-20	Flat Face	Std	38	1 1/2"	No	7	5x9	2x8	40°	-	1	1	87004741
90516422	125-5045-37-67,39-20	Flat Face	Std	45	1 3/4"	No	9	6x9	3x8	40°	-	3	-	87003481

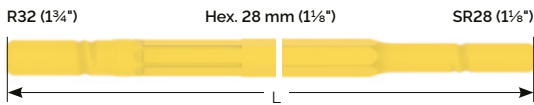
Tapered drifter rods



Fully carburized. D=30 mm. Rod section 24,8 mm
Flushing hole diameter 6,7 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or Surface Hardened	Taper angle	Length	
			mm	inch				mm	Foot/inch
90514449	277-0207-25-91-MF-C,02	24,8	22	7/8"	6,7	C	12°	675	2'2 3/8"
90514450	277-0212-25-91-MF-C,02	24,8	22	7/8"	6,7	C	12°	1 165	3'9 7/8"
90514451	277-0217-25-91-MF-C,02	24,8	22	7/8"	6,7	C	12°	1 665	5'5 1/2"

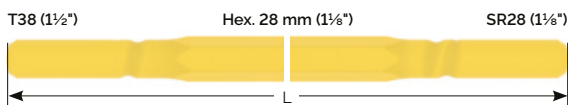
Drifter rods



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 8.8 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029306	225-0419-03-C.02	1 875	6'1 3/16"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514162	225-0421-03-C.02	2 100	6'10 9/16"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514163	225-0423-03-C.02	2 300	7'6 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514370	225-0424-03-C.02	2 400	7'10 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514153	225-0426-03-C.02	2 600	8'6 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514103	225-0427-03-91-C.02	2 675	8'9 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514164	225-0428-03-C.02	2 800	9'2 1/4"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514371	225-0430-03-91-C.02	2 950	9'8 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514168	225-0431-03-C.02	3 090	10'1 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90515496	225-0433-03-C.02	3 330	11'	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514966	225-0437-03-C.02	3 700	12'1 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90003601	225-0443-03-C.02	4 310	14'1 3/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90514599	225-0455-03-C.02	5 530	18'1 3/4"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive

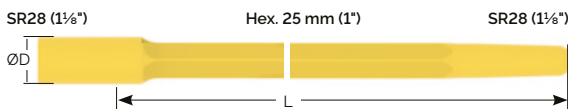
Drifter rod



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 8.8 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029112	225-0431-35-C.02	3 090	10'1 3/8"	T38	C	Hex28	31.8	8.8	-	No	Bottom drive

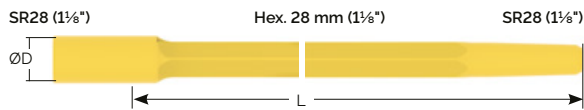
Speedrods



Fully carburized. D=34 mm. Rod section 28.4 mm
Flushing hole diameter 8.5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029906	225-0311-69-MF-C.02	1 100	3'7 3/16"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90029907	225-0319-69-MF-C.02	1 900	6'2 3/4"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90003689	225-0324-69-MF-C.02	2 400	7'10 1/2"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive
90516350	225-0331-69-MF-C.02	3 050	10'1 3/8"	SR28	C	Hex25	28.4	8.6	34	No	Bottom drive

Speedrods



Fully carburized. D=39 mm. Rod section 31.8 mm
Flushing hole diameter 8.8 mm.

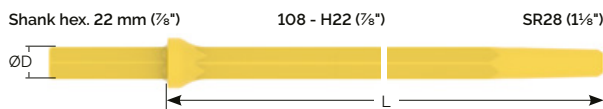
Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515420	225-0407-69-MF-C,02	675	2'2 3/8"	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive
90003641	225-0412-69-MF-C,02	1 220	4'	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive
90003524	225-0420-69-MF-C,02	2 000	6'6 3/4"	SR28	C	Hex28	31.8	8.8	34	No	Bottom drive

Couplings



Product No	Product code	Thread diameter		Diameter		Length	
		mm	foot/inch	mm	inch	mm	inch
90515731	303-0044.10	R32	1 1/4"	44	1 3/32"	150	5 7/8"
90515746	302-1044-03.10	R32	1 1/4"	44	1 3/32"	160	6 1/2"
90515748	303-1055-04.10	R32-R38	1 1/4" - 1 1/2"	56	2 3/32"	170	6 3/4"
90515749	303-1055-36.10	R32-T38	1 1/4" - 1 1/2"	56	2 3/32"	170	6 3/4"

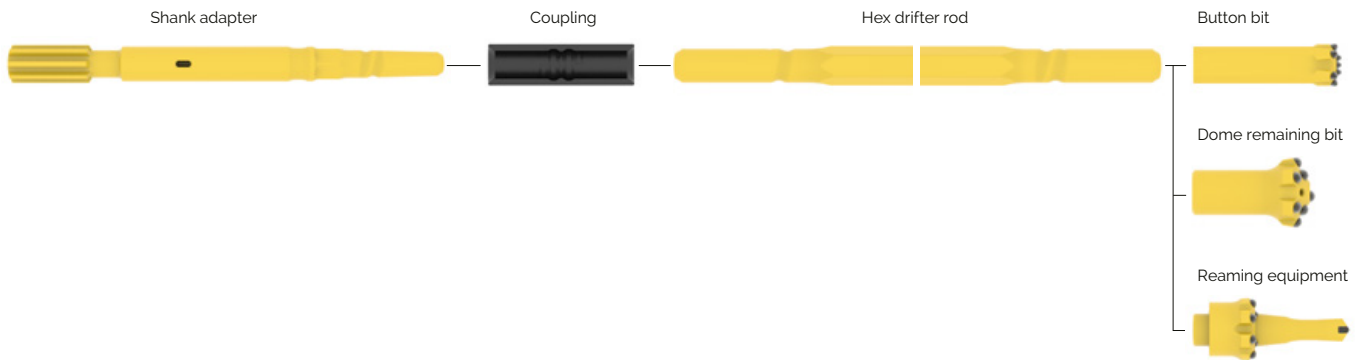
Shank end rods



Fully carburized.
Flushing hole diameter 6.7 mm.

Product No.	Product code	Shank hex. dimension		Shank hex. length		Rod hex. dimension		Flushing hole dia.	Carburized or surface hardened	Length		Seal product No.	Seal product code
		mm	inch	mm	Foot/inch	mm	inch			mm	(foot/inch)		
90003719	525-0103-C,02	22	7/8"	108	4 1/4"	22	7/8"	6.7	C	265	10 3/8"	90002047	9159-06
90516367	525-1103-C,02	25	1"	108	4 1/4"	25	1"	8.6	C	265	10 3/8"	90000378	9150-08
90516330	525-1237-C,02	25	1"	108	4 1/4"	25	1"	8.6	C	3 660	12'	90000378	9150-08

Drill string



Drill bits



5xxx-27



5xxx-37

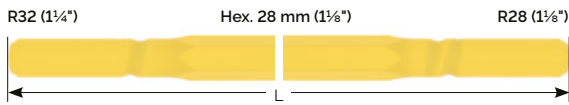


Power Bit

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic and trubbnos buttons														
90505178	107-5038-27-67,39-20	Flat Face	Std	38	1 1/2"	No	7	5x9	2x7	40°	-	1	1	87003483
90505174	107-5041-27-67,39-20	Flat Face	Std	41	1 5/8"	No	7	6x10	3x9	40°	-	1	1	87003499
90030066	107-5048-39-70,37-20	PUG -Flat Face	Std	48	1 7/8"	No	9	6x10	3x9	35°	-	3	3	87003495
Spherical buttons														
90505296	107-5037-27,39-20	Flat Face	Std	37	1 1/2"	No	7	5x9	2x7	30°	-	1	1	87003483
90505177	107-5038-27,39-20	Flat Face	Std	38	1 1/2"	No	7	5x9	2x7	30°	-	1	1	87003483
90505173	107-5041-27,39-20	Flat Face	Std	41	1 5/8"	No	7	5x9	2x8	35°	-	1	1	87003499
90505169	107-5043-27,39-20	Flat Face	Std	43	1 5/8"	No	7	5x9	2x9	35°	-	2	1	87003499
90509467	107-5045-37,39-20	Flat Face	Std	45	1 3/4"	No	9	6x9	3x8	35°	-	1	3	87003481
90030014	107-5045-39,37-20	PUG -Flat Face	Std	45	1 3/4"	No	9	6x10	3x9	35°	-	3	3	87003495

Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

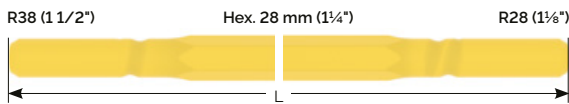
Drifter rods



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 8.8 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90500951	207-0424-03-C,02	2 400	7'10 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90505256	207-0424-03-91-C,02	2 400	7'10 1/2"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90509861	207-0428-03-91-C,02	2 750	9'1 1/4"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90502731	207-0434-03-C,02	3 400	11'1 1/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive
90500445	207-0443-03-C,02	4 310	14'1 1/8"	R32	C	Hex28	31.8	8.8	-	No	Bottom drive

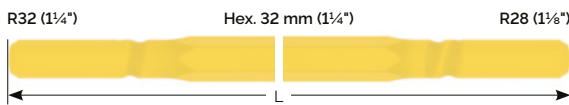
Drifter rods



Fully carburized. Rod section 35.8 mm
Flushing hole diameter 9.6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90502394	207-0531-04-C,02	3 090	10'1 1/2"	R38	C	Hex32	35.8	9.6	-	No	Bottom drive
90503041	207-0537-04-C,02	3 700	12'1 1/8"	R38	C	Hex32	35.8	9.6	-	No	Bottom drive

Drifter rod



Fully carburized. Rod section 31.8 mm
Flushing hole diameter 9.6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
5697000418	207-0564-03-C,02	6 400	21'	R32	C	Hex 32	35.8	9.5	-	No	Bottom drive

Couplings



Full bridge stop



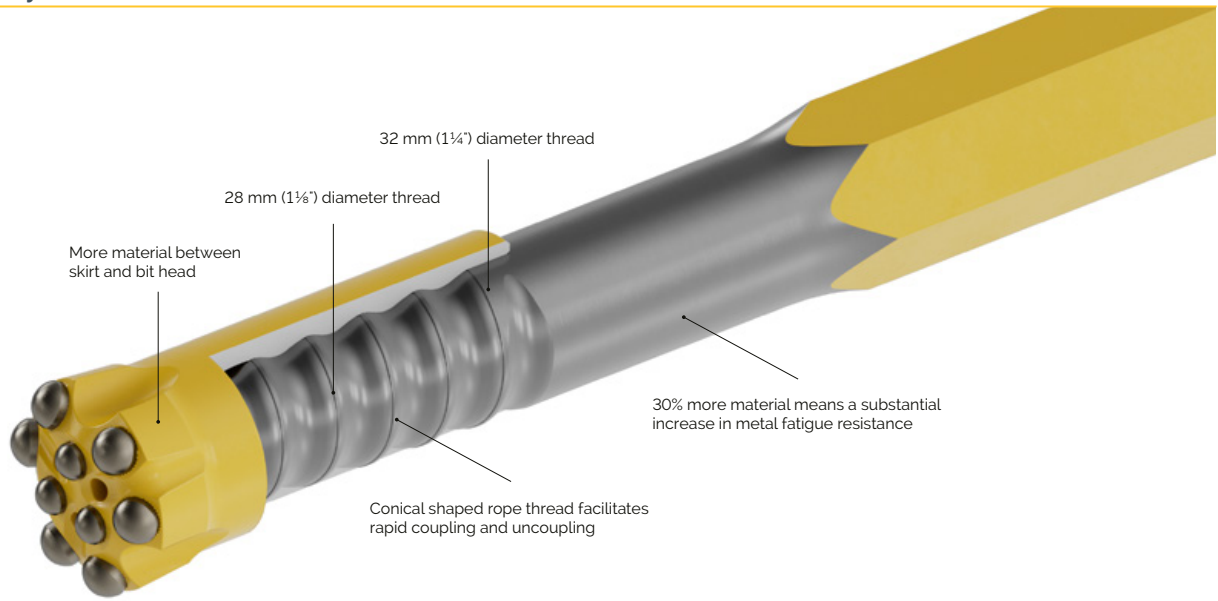
Cross-Over Coupling



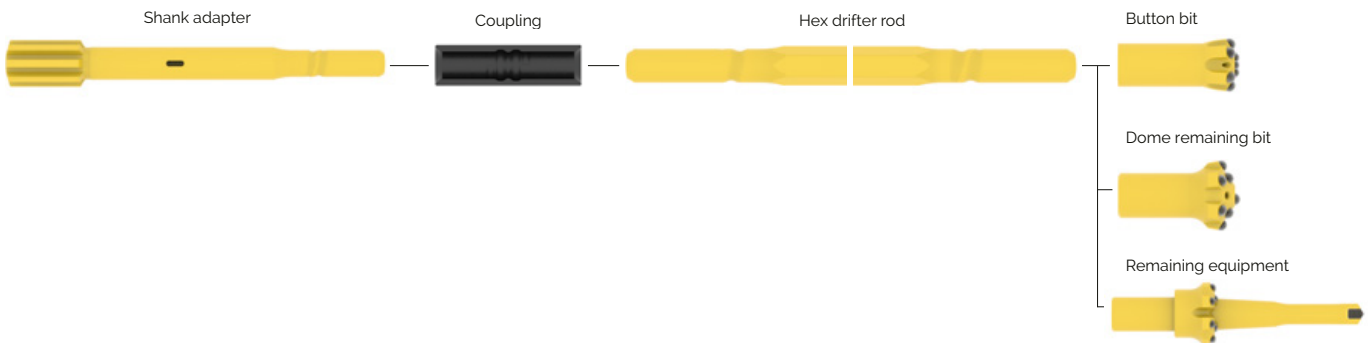
Central stop

Product No.	Product code	Thread diameter		Diameter		Length	
		mm	foot/inch	mm	inch	mm	inch
90515731	303-0044,10	R32	1 1/4"	44	1 23/32"	150	5 7/8"
90515732	302-1044-57,10	R32	1 1/4"	44	1 23/32"	150	5 7/8"
90515733	303-0055-.10	R38	1 1/2"	55	2 1/2"	170	6 3/4"
90515734	304-0055-67,10	R38	1 1/2"	55	2 1/2"	180	7 1/8"
90515735	307-0040,10	R38	1 1/2"	44	1 23/32"	150	5 7/8"

SR32 thread system



Drill string



Drill bits

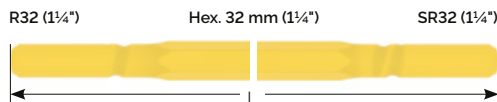


Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic and Trubbnos buttons														
90514501	126-5038-27-67,39-20	Flat Face	Std	38	1½"	No	7	5x9	2x7	40°	-	1	1	87004741
90516483	126-5041-37-67,39-20	Flat Face	Std	41	1½"	No	9	6x9	3x7	40°	-	-	3	87003486
90030050	126-5041-39-70,37-20	PUG -Flat Face	Std	41	1½"	No	9	6x9	3x7	35°	-	3	3	87003495
90030058	126-5043-39-70,37-20	PUG -Flat Face	Std	43	1½"	No	9	6x9	3x8	35°	-	3	3	87003495
90030013	126-5045-39-70,37-20	PUG -Flat Face	Std	45	1¾"	No	9	6x10	3x9	35°	-	3	3	87003495
90515721	126-5048-37-67,39-20	Flat Face	Std	48	1¾"	No	9	6x10	3x9	40°	-	1	3	87003486
90030063	126-5048-39-70,37-20	PUG -Flat Face	Std	48	1¾"	No	9	6x11	3x9	35°	-	3	3	87003495
Spherical buttons														
90514503	126-6051.49-20	Drop Center	Std	51	2"	No	9	6x10	3x9	35°	-	-	3	87003487

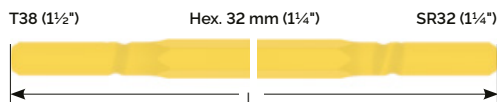
Drifter rod



Fully carburized. Rod section 36,8 mm
Flushing hole diameter 9,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029441	226-0527-03-C.02	2 670	8'9½"	R32	C	Hex32	35,8	9,6	-	No	Bottom drive

Drifter rods



Fully carburized. Rod section 36,8 mm
Flushing hole diameter 9,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003647	226-0522-35-C.02	2 200	7'2½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90514504	226-0531-35-C.02	3 090	10'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive

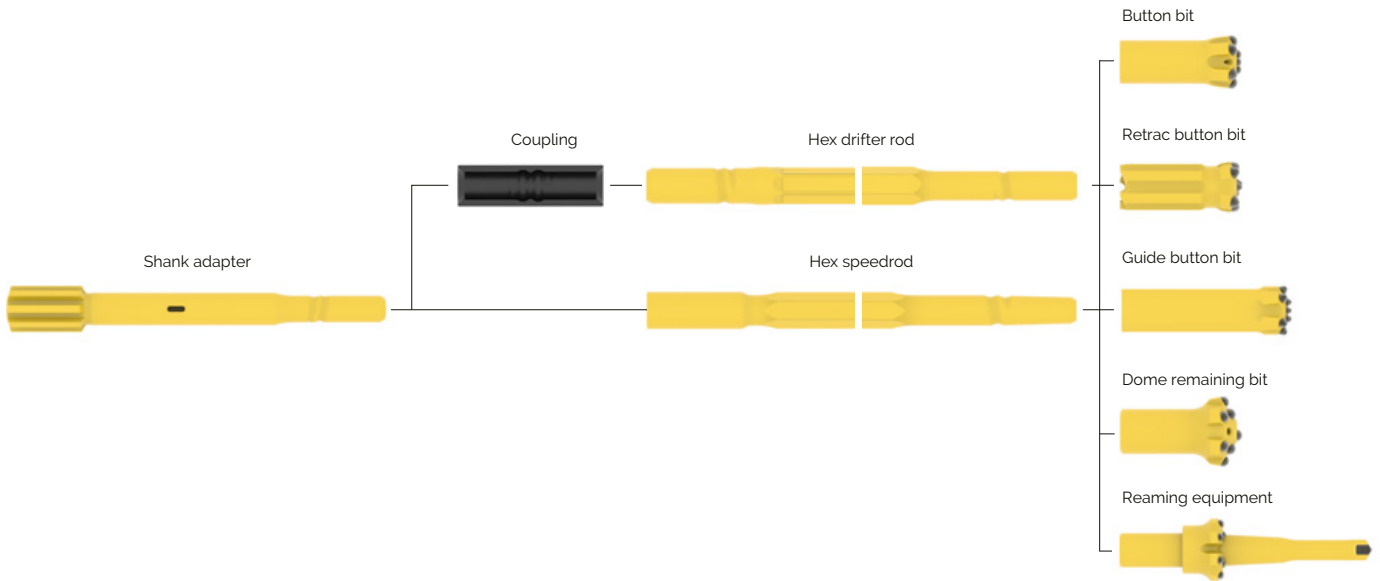
Couplings



Product No.	Product code	Short description	Diameter (D)		Length		Feature
			mm	inch	mm	inch	
90515736	335-0052.10	T38-RND52 coupling	52	2"	190	7½"	High frequency drifters
90515737	335-0055.10	T38-RND55 coupling	55	2½"	190	7½"	Standard
90515738	335-0055-57.10	T38-RND52 coupling-full bridge	55	2½"	180	7½"	Full bridge
90515750	304-1055-35.10	R38-RND55 cross over coupling	55	2½½"	180	7½"	R38 - T38

*Recommended for high frequency drifters. *Flushing hole diameter.

Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Full ballistic buttons														
90029189	103-5045-34-66,56-20	Flat Face	Std	45	1¾"	No	8	6x9	2x9	40°	-	-	2	87003492
90514111	103-5045-37-66,39-20	Flat Face	Std	45	1¾"	No	9	6x9	3x8	40°	-	1	3	87003481
90029166	103-5048-37-66-99,39-20	Flat Face	Std	48	1⅞"	No	9	6x9	3x9	40°	-	-	3	87003481
90514135	103-5048-37-66,39-20	Flat Face	Std	48	1⅞"	No	9	6x16	3x14	40°	-	1	3	87003481
90029191	103-5051-34-66,56-20	Flat Face	Std	51	2"	No	8	6x10	2x10	40°	-	-	2	87005314
90514136	103-5051-37-66,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90514440	103-5057-37-66,39-20	Flat Face	Std	57	2¼"	No	9	6x10	3x10	40°	-	1	3	87003481
90514983	103-5064-37-66,49-20	Flat Face	Std	64	2½"	No	9	6x11	3x11	40°	-	1	3	87003495
Ballistic buttons														
90505172	103-5041-27-67,39-20	Flat Face	Std	41	1⅝"	No	7	5x9	2x8	40°	-	1	1	87003499
90510744	103-5041-34-67,39-20	Flat Face	Std	41	1⅝"	No	8	6x8	2x8	40°	-	2	2	87003492
90029544	103-5043-39-67,56-12	Flat Face	Std	43	1⅝"	No	9	6x10	3x8	35°	-	3	3	87003495
90510769	103-5043-37-67,39-20	Flat Face	Std	43	1⅝"	No	9	6x8	3x8	40°	-	1	3	87003486
90029358	103-5045-39-67,56-20	Flat Face	Std	45	1¾"	No	9	6x10	3x8	35°	-	3	3	87003488
90029629	103-5045-39-67,56-12	Flat Face	Std	45	1¾"	No	9	6x10	3x8	35°	-	3	3	87003488
90509460	103-5045-37-67,39-20	Flat Face	Std	45	1¾"	No	9	6x9	3x8	40°	-	1	3	87003481
90512011	103-5045-27-67,39-20	Flat Face	Std	45	1¾"	No	7	5x11	2x8	30°	-	3	1	87003480
90509464	103-5048-37-67,39-20	Flat Face	Std	48	1⅞"	No	9	6x10	3x9	40°	-	1	3	87003486
90003532	103-5051-37-67-99,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90029192	103-5051-39-67,56-20	Flat Face	Std	51	2"	No	9	6x10	3x10	35°	-	-	3	87004314
90029845	103-5051-27-20-45-67,39-20	Flat Face	Std	51	2"	Yes	7	5x12,7	2x10	30°	-	1	1	87005311
90509466	103-5051-37-67,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510836	103-5051-37-45-67,39-20	Flat Face	Std	51	2"	Yes	9	6x10	3x9	40°	-	1	3	87003481
90509481	103-5054-37-67,39-20	Flat Face	Std	54	2⅞"	No	9	6x11	3x10	35°	-	1	3	87003486
90510795	103-5054-24-45-67,39-20	Flat Face	Std	54	2⅞"	Yes	11	8x9	3x9	35°	-	1	1	87003493
90510454	103-5057-20-67,39-20	Flat Face	Std	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90515503	103-5057-37-54-67,39-20	Flat Face	Std	57	2¼"	No	9	6x11	3x9	35°	-	2	3	87003495
90510327	103-5064-67,49-20	Flat Face	Std	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
Ballistic buttons														
90510414	103-6064-45-67,49-20	Drop Center	Std	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
Spherical and Trubbnos buttons.														
90030057	103-5043-39-70,37-20	PUG -Flat Face	Std	43	1⅝"	No	9	6x9	3x8	35°	-	3	3	87003495
90030056	103-5043-39,37-20	PUG -Flat Face	Std	43	1⅝"	No	9	6x9	3x8	35°	-	3	3	87003495
90029940	103-5045-39-70,37-20	PUG -Flat Face	Std	45	1¾"	No	9	6x10	3x9	35°	-	3	3	87003495
90030011	103-5045-39,37-20	PUG -Flat Face	Std	45	1½"	No	9	6x10	3x9	35°	-	3	3	87003495
90030041	103-5048-39-70,37-20	PUG -Flat Face	Std	48	1⅞"	No	9	6x11	3x9	35°	-	3	3	87003495
90030069	103-5048-39,37-20	PUG -Flat Face	Std	48	1⅞"	No	9	6x11	3x9	35°	-	3	3	87003495
90030049	103-5051-39-70,37-20	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90030051	103-5051-39,37-20	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90030060	103-5054-39-70,37-20	PUG -Flat Face	Std	54	2⅞"	No	9	6x12	3x9	35°	-	3	3	87003495
90030061	103-5057-39-70,37-20	PUG -Flat Face	Std	57	2¼"	No	9	6x12	3x9	35°	-	3	3	87003495

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical buttons														
90505171	103-5041-27,39-20	Flat Face	Std	41	1½"	No	7	5x9	2x8	35°	-	1	1	87003499
90505164	103-5043-27,39-20	Flat Face	Std	43	1½"	No	7	5x9	2x9	35°	-	2	1	87003499
90029325	103-5045-39,56-20	Flat Face	Std	45	1¾"	No	9	6x10	3x8	35°	-	3	3	87003488
90504373	103-5045-27,39-20	Flat Face	Std	45	1¾"	No	7	5x11	2x8	30°	-	2	1	87003480
90504401	103-5045-39,39-20	Flat Face	Std	45	1¾"	No	9	6x10	3x8	30°	-	1	3	87003488
90509461	103-5048-37,39-20	Flat Face	Std	48	1¾"	No	9	6x10	3x8	35°	-	1	3	87003486
90504566	103-5051-27,39-20	Flat Face	Std	51	2"	No	7	5x11	2x10	35°	-	2	1	87003485
90509465	103-5051-37,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510450	103-5051,39-20	Flat Face	Std	51	2"	No	7	5x11	2x11	35°	-	1	1	87003496
90510453	103-5057-20,39-20	Flat Face	Std	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90514267	103-5057-37-45,49-20	Flat Face	Std	57	2¼"	Yes	9	6x11	3x9	35°	-	-	3	87003495
90514414	103-5057-54,39-20	Flat Face	Std	57	2¼"	No	9	6x11	3x9	16°	-	1	1	87004775
90510303	103-5064,49-20	Flat Face	Std	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510381	103-5064-45,49-20	Flat Face	Std	64	2½"	Yes	12	8x10	4x10	40°	-	-	2	87003489
90510353	103-5076,49-20	Flat Face	Std	76	3"	No	12	8x11	4x11	40°	-	-	2	87003493
Spherical buttons														
90510308	103-6051-45,39-20	Drop Center	Std	51	2"	Yes	9	6x10	3x9	30°	-	-	3	87003487
90510328	103-6064,49-20	Drop Center	Std	64	2½"	No	10	6x11	4x10	35°	-	-	3	87003487
90510364	103-6064-45,49-20	Drop Center	Std	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
90510504	103-6076-45,49-20	Drop Center	Std	76	3"	Yes	13	8x11	5x11	35°	-	1	4	87003498
Spherical buttons														
90029883	103-5076-42-24-70,57-20	Dome bit	Std	89	3½"	No	15	8x12,7	7x12,7	35°	-	2	4	87003953
90029891	103-5089-42-24-70,57-20	Dome bit	Std	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
90029884	103-5102-42-24-70,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	2	3	87004775
Trubbnos buttons														
90029883	103-5076-42-24-70,57-20	Dome bit	Std	76	3"	No	9	6x12,7	3x12,7	35°	-	1	3	87003951
90029891	103-5089-42-24-70,57-20	Dome bit	Std	89	3½"	No	15	8x12,7	5x12,7	35°	-	2	4	87003953
90029884	103-5102-42-24-70,57-20	Dome bit	Std	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
Spherical buttons														
90029320	103-9102-45-A,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	87003560
90029913	103-9102-40,49-20	Hole Opener	Std	102	4"	No	9	6x12,7	3x12,7	35°	-	1	3	87003560

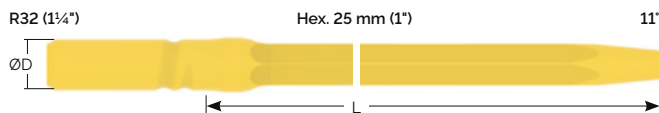
Tapered drifter rods



Fully carburized. Rod section 28,4 mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90029168	297-0320-03-99-C.02	28,4	25	1"	8,6	C	4'46"	2 000	6'6½"
90003622	297-0322-03-C.02	28,4	25	1"	8,6	C	4'46"	2 160	7'1"
90003539	297-0323-03-C.02	28,4	25	1"	8,6	C	4'46"	2 300	7'6"
90003623	297-0329-03-C.02	28,4	25	1"	8,6	C	4'46"	2 900	9'6½"
90003540	297-0331-03-C.02	28,4	25	1"	8,6	C	4'46"	3 100	10'2"

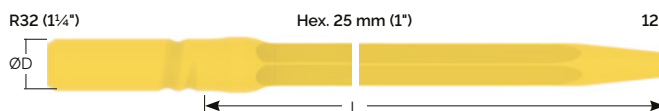
Tapered drifter rods



Fully carburized. Rod section 28,4 mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90003697	279-0322-03-C.02	28,4	25	1"	8,6	C	11"	2 200	7'2½"
90514410	279-0328-03-C.02	28,4	25	1"	8,6	C	11"	2 800	9'2¼"

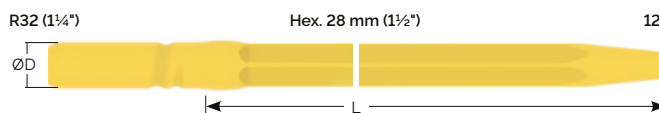
Tapered drifter rods



Fully carburized. Rod section 28,4 mm
Flushing hole diameter 8,6 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90003520	277-0324-03-C.02	28,4	25	1"	8,6	C	12"	2 400	7'10¼"
90504668	277-0334-03-C.02	28,4	25	1"	8,6	C	12"	3 400	11'1½"
90003679	277-0337-03-C.02	28,4	25	1"	8,6	C	12"	3 700	12'1½"

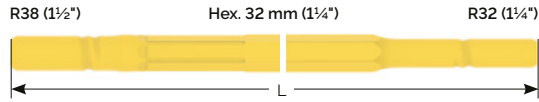
Tapered drifter rods



Fully carburized. Rod section 31,8 mm
Flushing hole diameter 8,8 mm.

Product No.	Product code	Rod section	Rod hex. dimension		Flushing hole diameter	Carburized or surface hardened	Taper angle	Length	
			mm	inch				mm	foot/inch
90510248	280-0426-03-C.02	28,4	28	1"	8,8	C	12"	2 600	8'6½"

Drifter rods



Double thread, fully carburized. Rod section 35,8 mm
Flushing hole diameter 9,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90590025	203-0524-04-C.02	2 400	7'10½"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90509478	203-0527-04-C.02	2 700	8'10¼"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90003070	203-0531-04-C.02	3 090	14'1½"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90002720	203-0537-04-C.02	3 700	12'1½"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90002693	203-0543-04-C.02	4 310	14'1½"	R38	C	Hex32	35,8	9,6	-	No	Bottom drive
90500425	203-0546-04-C.02	4 600	15'	R38	C	Hex32	35,8	9,6	-	No	Bottom drive

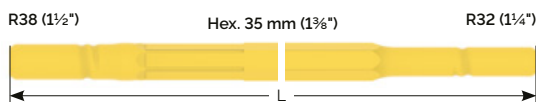
Drifter rods



Fully carburized. Rod section 35,8 mm
Flushing hole diameter 9,6 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515439	203-0524-35-C.02	2 400	7'10½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90500107	203-0531-35-C.02	3 090	10'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90505189	203-0534-35-C.02	3 400	11'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90590043	203-0537-35-C.02	3 700	12'1½"	T38	C	Hex32	35,8	9,6	-	No	Bottom drive

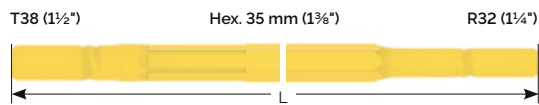
Drifter rods



Fully carburized. Rod section 39,6 mm
Flushing hole diameter 9,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90502129	203-0631-04-C.02	3 090	10'1½"	R38	C	Hex35	39,6	9,5	-	No	Bottom drive
90501015	203-0637-04-C.02	3 700	12'1½"	R38	C	Hex35	39,6	9,5	-	No	Bottom drive
90002966	203-0643-04-C.02	4 310	14'1½"	R38	C	Hex35	39,6	9,5	-	No	Bottom drive
90002964	203-0649-04-C.02	4 920	16'1¾"	R38	C	Hex35	39,6	9,5	-	No	Bottom drive

Drifter rods



Fully carburized. Rod section 39,6 mm
Flushing hole diameter 9,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515430	203-0624-35-C,02	2 400	7'10½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90029574	203-0627-35-C,02	2 700	8'10¼"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90504392	203-0631-35-C,02	3 090	10'1½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90502308	203-0637-35-C,02	3 700	12'1½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90500862	203-0643-35-C,02	4 310	14'1½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90504966	203-0645-35-C,02	4 500	14'9½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90502235	203-0649-35-C,02	4 920	16'1¾"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90502616	203-0655-35-C,02	5 530	18'1¾"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90503854	203-0661-35-C,02	6 095	20'½"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90504967	203-0664-35-C,02	6 400	21'	T38	C	Hex35	39,6	9,5	-	No	Bottom drive

Drifter Speedrod



Fully carburized. D = 57 mm. Rod section 39,6 mm
Flushing hole diameter 9,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514406	203-0637-33-69-MF-C,02	3 700	12'1½"	T35	C	Hex35	39,6	9,5	48	No	Bottom drive

Couplings



Full bridge stop



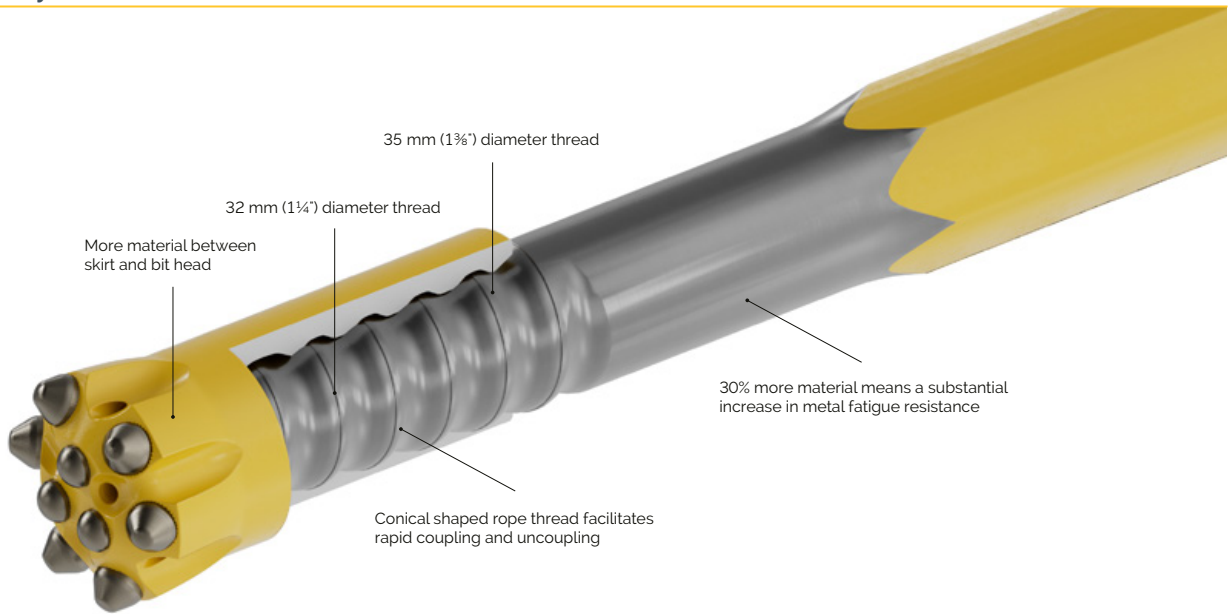
Central stop



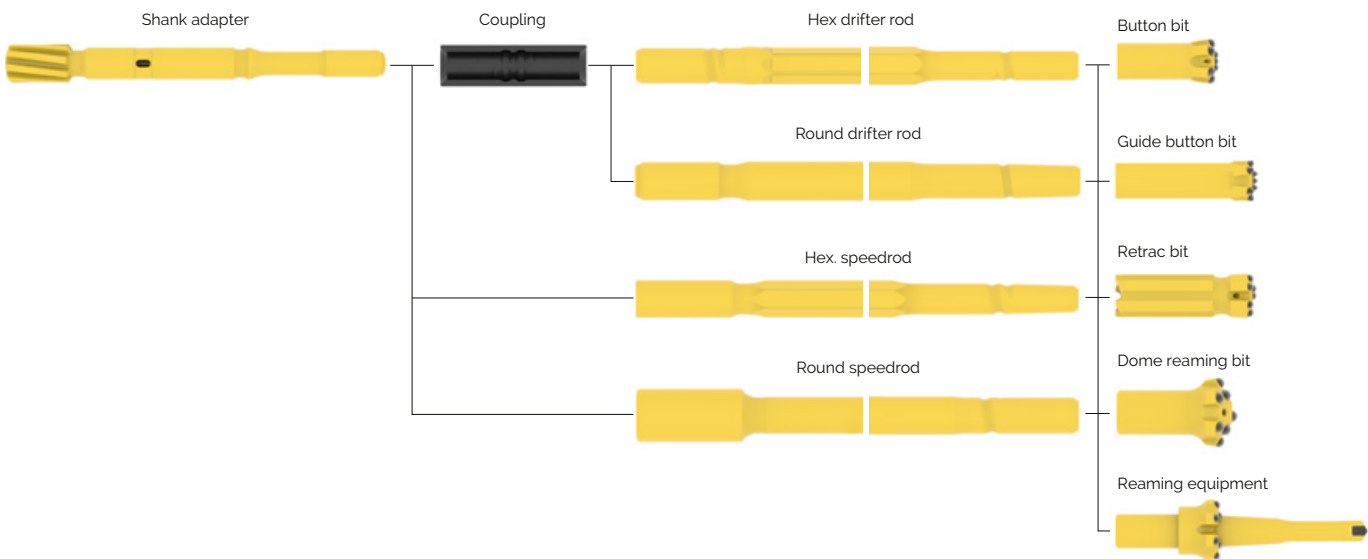
Cross-Over Coupling

Product No.	Product code	Short description	Diameter (D)		Length		Feature
			mm	inch	mm	inch	
90515735	307-0040,10	R38-RND44 coupling	44	1 ²³ / ₃₂ "	150	5½"	Standard
90515736	335-0052,10	T38-RND52 coupling	52	2"	190	7½"	High frequency drifters
90515733	304-0055,10	R38-RND55 coupling	55	2 ½"	170	6¾"	Standard
90515734	304-0055-57,10	R38-RND55 coupling-full bridge	55	2 ½"	180	7½"	Full bridge
90515737	335-0055,10	T38-RND55 coupling	55	2 ½"	190	7½"	Standard
90515738	335-0055-57,10	T38-RND52 coupling-full bridge	55	2 ½"	180	7½"	Full bridge

SR35 thread system



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic buttons														
90515576	128-5043-27-67,39-20	Flat Face	Std	43	1 3/8"	No	7	5x9	2x9	35°	-	2	1	87003499
90516547	128-5043-39-67,39-20	Flat Face	Std	43	1 3/8"	No	9	6x9	3x8	35°	-	1	3	87003495
90029368	128-5045-39-67-S,39-20	Flat Face	Std	45	1 3/4"	No	9	6x10	3x8	35°	-	1	3	87003488
90513839	128-5045-37-67,39-20	Flat Face	Std	45	1 3/4"	No	9	6x9	3x8	40°	-	1	3	87003481
90513846	128-5045-37-30-67,39-20	Flat Face	Std	45	1 3/4"	No	9	6x9	3x8	40°	-	1	3	87003481
90514720	128-5045-39-67,39-20	Flat Face	Std	45	1 3/4"	No	9	6x10	3x8	35°	-	-	3	87003488
90003607	128-5048-39-67,39-20	Flat Face	Std	48	1 7/8"	No	9	6x11	3x8	35°	-	-	3	87004635
90514709	128-5048-37-67,39-12	Flat Face	Std	48	1 7/8"	No	9	6x10	3x9	40°	-	1	3	87003486
90513842	128-5051-37-67,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90514595	128-5051-24-45-67,39-20	Flat Face	Std	51	2"	Yes	11	8x9	3x9	35°	-	1	1	87003493
90514220	128-5054-24-45-67,39-20	Flat Face	Std	54	2 1/8"	Yes	11	8x9	3x9	35°	-	1	1	87004464
90513870	128-5064-67,49-20	Flat Face	Std	64	2 1/2"	No	12	8x10	4x10	40°	-	-	2	87003489
Ballistic buttons														
90516569	128-6054-45-67,39-20	Drop Center	Std	54	2 1/8"	Yes	10	6x10	4x9	40°	-	1	3	87004754
90515626	128-6064-45-67,49-20	Drop Center	Std	64	2 1/2"	Yes	10	6x11	4x10	35°	-	1	3	87003487
Trubbnos buttons														
90030052	128-5041-39-70,37-20	PUG -Flat Face	Std	41	1 5/8"	No	9	6x9	3x7	35°	-	3	3	
90030054	128-5043-39-70,37-20	PUG -Flat Face	Std	43	1 3/8"	No	9	6x9	3x8	35°	-	3	3	87003495
90030015	128-5045-39-30-70,37-20	PUG -Flat Face	Std	45	1 1/4"	No	9	6x9	3x8	40°	-	3	3	87003495
90029939	128-5045-39-70,37-20	PUG -Flat Face	Std	45	1 1/4"	No	9	6x10	3x9	35°	-	3	3	87003495
90030037	128-5048-39-70,37-06	PUG -Flat Face	Std	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495
90030038	128-5048-39-70,37-20	PUG -Flat Face	Std	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495
90030046	128-5051-39-70,37-20	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
5697002477	128-5051-39-30-70,37-20	PUG -Flat Face		51	2"	No	9	6x11	3x9	35°	-	-	3	
90030059	128-5054-39-70,37-20	PUG -Flat Face	Std	54	2 1/8"	No	9	6x12	3x9	35°	-	3	3	87003495
Spherical buttons														
90030016	128-5045-39,37-20	PUG -Flat Face	Std	45	1 1/4"	No	9	6x10	3x9	35°	-	3	3	87003495
90030040	128-5048-39,37-20	PUG -Flat Face	Std	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495
90030044	128-5051-39,37-20	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90030047	128-5051-39,37-06	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
Spherical buttons														
90513844	128-5043-27,39-20	Flat Face	Std	43	1 3/8"	No	7	5x9	2x9	35°	-	2	1	87003499
90029303	128-5045-39-S,39-20	Flat Face	Std	45	1 3/4"	No	9	6x10	3x8	30°	-	1	3	87003488
90029302	128-5048-39-S,39-20	Flat Face	Std	48	1 7/8"	No	9	6x11	3x8	35°	-	1	3	87004754
90514150	128-5048-39,39-20	Flat Face	Std	48	1 7/8"	No	9	6x11	3x8	35°	-	-	3	87004754
90029905	128-5051-24-45,39-20	Flat Face	Std	51	2"	Yes	11	8x9	3x9	35°	-	-	1	87004464
90514610	128-5051-39,39-06	Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	1	3	87003486
Trubbnos buttons														
5697001857	128-5064-70,57-20	Flat Face		64	2 1/2"	No	13	8x10	5x9	35°	-	-	4	
Spherical buttons														
90516250	128-6064,49-06	Drop Center	Std	64	2 1/2"	No	10	6x11	4x9	35°	-	-	3	87003734
Trubbnos buttons														
90029892	128-5076-42-24-70,57-20	Dome bit	Std	76	3"	No	10	9x12,7	1x12,7	35°	-	-	3	87003951
90029881	128-5089-42-24-70,57-20	Dome bit	Std	89	3 1/2"	No	15	14x12,7	1x12,7	35°	-	1	2	87003953
90029808	128-5102-42-24-70,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
Spherical buttons														
90029890	128-5089-42-24,57-20	Dome bit	Std	89	3 1/2"	No	15	14x12,7	1x12,7	35°	-	2	2	87003953
90029807	128-5102-42-24,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
90029893	128-5127-42-24,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
Spherical buttons														
90029626	128-9102-45-A,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	-
90029942	128-9102-40,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x10	35°	-	-	4	-

Drifter rods

R38 (1¹/₂") Hex. 35 mm (1³/₈") SR35 (1³/₈")



Fully carburized. Rod section 39,6 mm
Flushing hole diameter 9,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90513854	228-0631-04-C.02	3 090	10'1 ³ / ₈ "	R38	C	Hex35	39,6	9,5	-	No	Bottom drive

Drifter rods

T38 (1¹/₂") Hex. 35 mm (1³/₈") SR35 (1³/₈")



Fully carburized. Rod section 39,6 mm
Flushing hole diameter 9,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
5697001868	228-0620-35-C.02	2 000	6'6 ³ / ₄ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90029007	228-0624-35-C.02	2 400	7'10 ¹ / ₂ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90514159	228-0627-35-91-C.02	2 670	8'9 ¹ / ₈ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90029617	228-0631-35-C.02	3 090	10'1 ³ / ₈ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90514160	228-0632-35-91-C.02	3 150	10'4"	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90513856	228-0637-35-C.02	3 700	12'1 ¹ / ₈ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90513858	228-0643-35-C.02	4 310	14'1 ¹ / ₈ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90513860	228-0649-35-C.02	4 920	16'1 ³ / ₄ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90513861	228-0655-35-C.02	5 530	18'1 ³ / ₄ "	T38	C	Hex35	39,6	9,5	-	No	Bottom drive
90514140	228-0664-35-C.02	6 400	21'	T38	C	Hex35	39,6	9,5	-	No	Bottom drive

Drifter rods

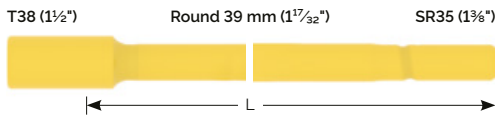
T38 (1¹/₂") Round 39 (1⁷/₃₂") SR35 (1³/₈")



Fully carburized. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003570	228-4743-35-C.02	4 310	14'1 ¹ / ₈ "	T38	C	Rnd39	39	14,5	57	No	Bottom drive
90003571	228-4749-35-C.02	4 920	16'1 ³ / ₄ "	T38	C	Rnd39	39	14,5	57	No	Bottom drive
90003572	228-4755-35-C.02	5 530	18'1 ³ / ₄ "	T38	C	Rnd39	39	14,5	57	No	Bottom drive
90003573	228-4761-35-C.02	6 095	20'3 ¹ / ₈ "	T38	C	Rnd39	39	14,5	57	No	Bottom drive
90003574	228-4764-35-C.02	6 400	21'	T38	C	Rnd39	39	14,5	57	No	Bottom drive

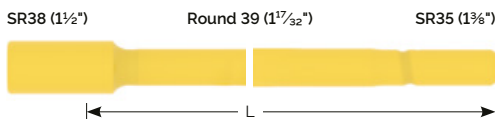
Speed rod



Fully carburized. D = 57 mm. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003575	228-4755-35-MF-C,02	5 530	18'1 3/4'	T38	C	Rnd39	39	14,5	57	No	Bottom drive

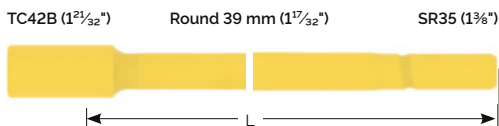
Speedrods



Fully carburized. D= 48 mm. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003565	228-4743-27-69-MF-C,02	4 310	14'1 1/2"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90003566	228-4749-27-69-MF-C,02	4 920	16'1 3/4"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90003567	228-4761-27-69-MF-C,02	6 095	20' 1/2"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90003568	228-4755-27-69-MF-C,02	5 530	18'1 3/4"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90003569	228-4764-27-69-MF-C,02	6 400	21'	SR38	C	Rnd39	39	14,5	48	No	Bottom drive

Speed rod



Fully carburized. D= 57 mm.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029842	228-4761-72-MF-C,02	6 095	20' 1/2"	TC42B	C	Rnd39	39	14,5	57	No	Bottom drive



Couplings



Full bridge stop



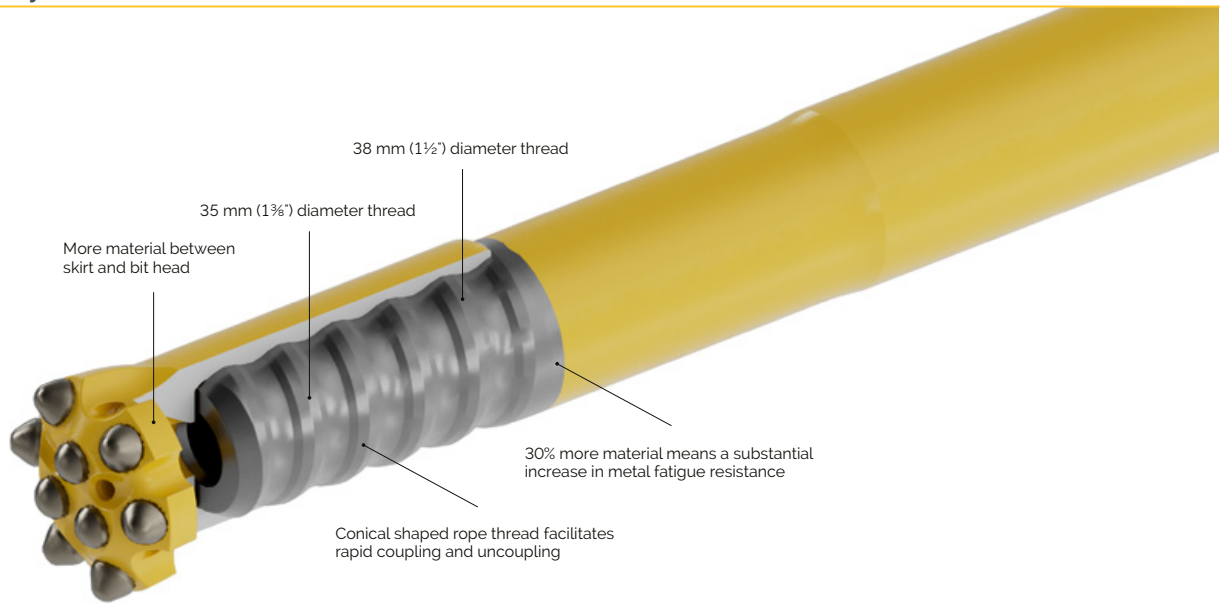
Central stop



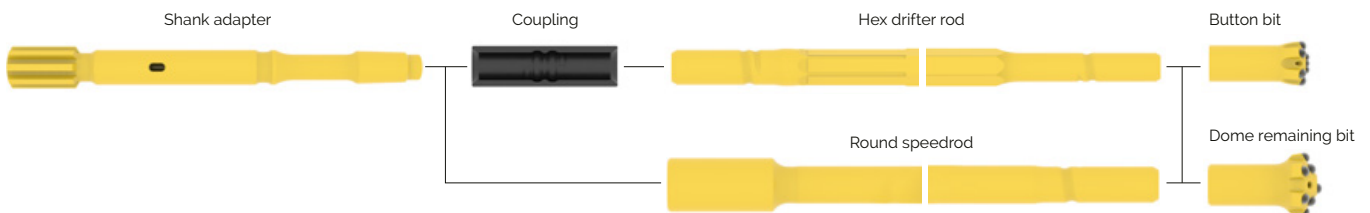
Cross-Over Coupling

Product No.	Product code	Short description	Diameter (D)		Length		Feature
			mm	inch	mm	inch	
90515735	307-0044.10	R38-RND44 coupling	44	1 23/32"	150	5 7/8"	Standard
90515736	335-0052.10	T38-RND52 coupling	52	2"	190	7 1/2"	Full bridge
90515733	304-0055.10	R38-RND55 coupling	55	2 1/6"	170	6 3/4"	Standard
90515734	304-0055-57.10	R38-RND55 coupling-full bridge	55	2 1/6"	180	7 1/8"	Full bridge
90515737	335-0055.10	T38-RND55 coupling	55	2 1/6"	190	7 1/2"	Standard
90515738	335-0055-57.10	T38-RND52 coupling-full bridge	55	2 1/6"	180	7 1/8"	Full bridge
90515750	304-1055-35.10	RND55 cross over coupling	55	2 5/32"	180	7 1/8"	R38 - T38
90029837	335-1057-72.10	RND57 cross over coupling	57	2 1/4"	175	6 7/8"	TC42B - T38

SR38 thread system



Drill string



Drill bits



5054-37

Power Bit

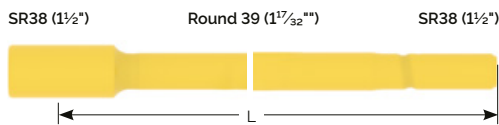
Dome Bit

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Trubbnos buttons														
5697000983	127-5048-39-70,37-20	Power Face	Std	48	1¾"	Std	9	6x11	3x9	35°	-	3	3	87003495
5697001651	127-6057-44-70,37-20	Power Face	Std	57	2¼"	Yes	10	6x11	4x9	35°	-	3	3	87003495
5697001730	127-6064-21-44-70,57-20	Power Face	Std	64	2½"	Yes	10	6x12.7	3x10; 1x8	35°	-	3	3	87003495

Speedrods



Fully carburized. D = 48 mm. Without wrench flat. Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
5697001656	227-4718-69-MF-C.02	1 830	6'	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90029563	227-4724-69-MF-C.02	2 400	7'10½"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90514774	227-4731-69-MF-C.02	3 050	10'1¾"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive
90516624	227-4749-69-MF-C.02	4 920	16'1¾"	SR38	C	Rnd39	39	14,5	48	No	Bottom drive

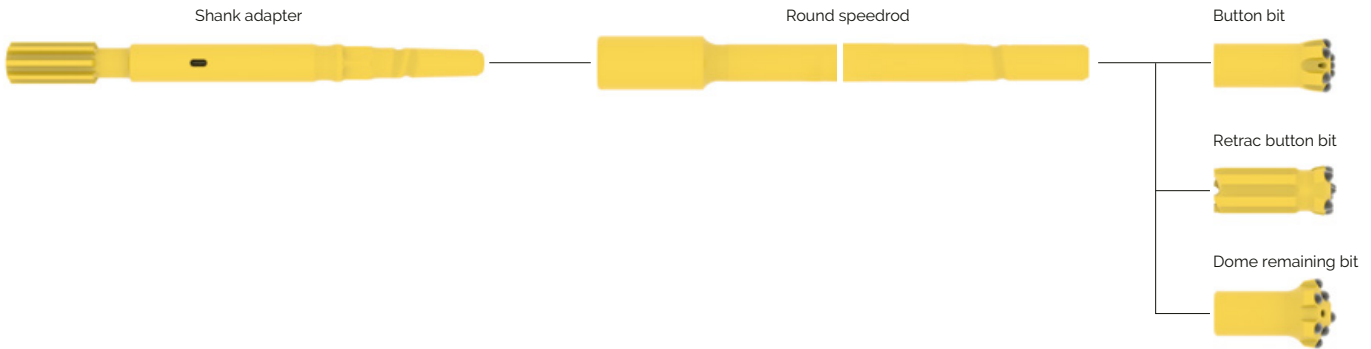
Couplings



Product No.	Product code	Short description	Diameter (D)		Length		Feature
			mm	inch	mm	inch	
90515736	335-0052,10	T38-RND52 coupling	52	2"	190	7½"	High frequency drifters
90515737	335-0055,10	T38-RND55 coupling	55	2½"	190	7½"	Standard
90515738	335-0055-57,10	T38-RND52 coupling-full bridge	55	2½"	180	7½"	Full bridge
90003541	327-1055-35,10	Cross over coupling T38 - SR38	170	6¾"	55	2½"	T39 - SR 38
90515750	304-1055-35,10	Cross over coupling T38 - R38	180	7½"	55	2½"	R38 - T38



Drill string



Drill bit



5xxx-37-67

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	

Spherical buttons

90510304	104-5064,49-20	Flat Face	Std	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510318	104-5076,49-20	Flat Face	Std	76	3"	No	12	8x11	4x11	40°	-	-	2	87003493

Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation

Couplings



Full bridge stop



Central stop

Product No.	Product code	Short description	Diameter (D)		Length		Feature
			mm	inch	mm	inch	
90515733	304-0055,10	R38-Rnd55 coupling	55	2½"	170	6¾"	Standard
90515734	304-0055-57,10	R38-Rnd55 coupling-full bridge	55	2½"	180	7½"	Full bridge

Extension rod

R38 (1½") round rod

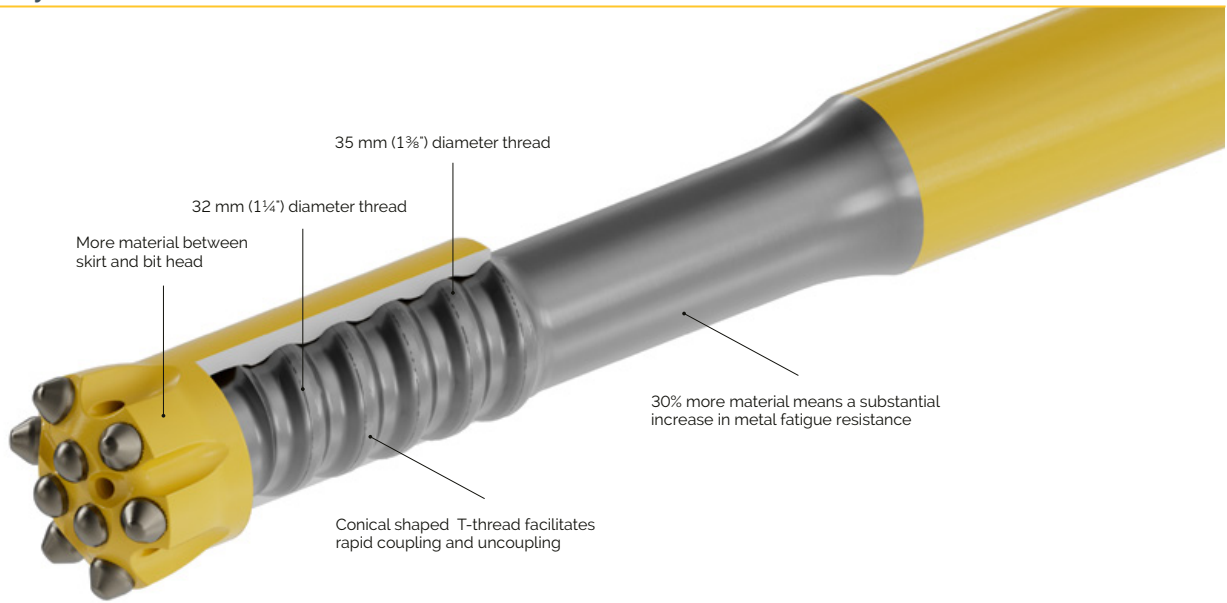


Fully carburized or surface hardened.
Flushing hole diameter 14,5 mm.

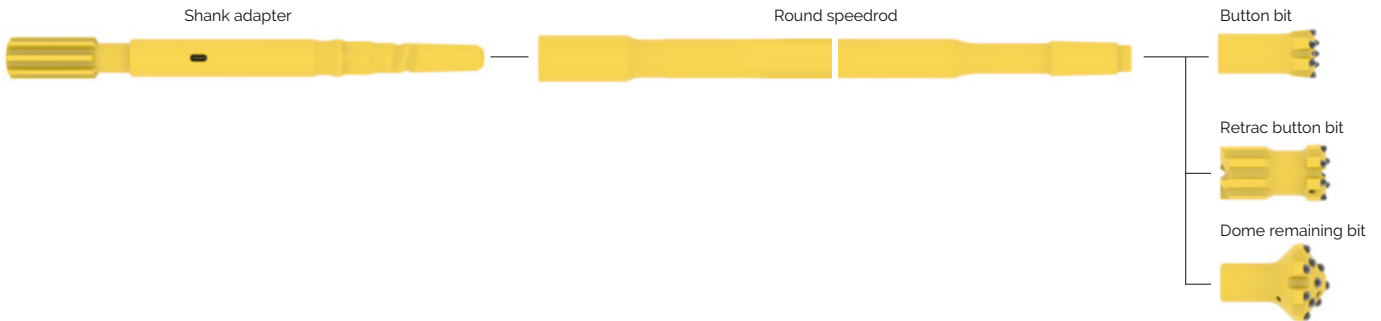
Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90501079	204-2724-SH.03	2 435	8'	R38	SH	Rnd38	38	14,5	57	Yes	Bottom drive



TC35 thread system



Drill string



Drill bits

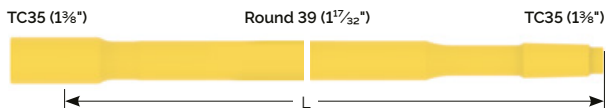


Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic buttons														
90516336	169-5048-37-67,39-20	Flat Face	Std	48	1 7/8"	No	9	6x10	3x9	40°	-	3	1	87003486
90003692	169-5051-37-67,39-20	Flat Face	Std	51	2"	No	9	6x10	3x9	40°	-	3	1	87003486
Flat Front Bit - Spherical buttons														
90029029	169-5051-39-99,39-20	Flat Face	Std	51	2"	No	9	6x11	3x9	45°	-	3	3	87003486
PUG Flat Face - Spherical buttons														
90030045	169-5051-39,37-20	PUG -Flat Face	Std	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
Ballistic buttons														
90516337	169-6051-45-67,49-20	Drop Center	Std	51	2"	Yes	9	6x10	3x9	35°	-	3	-	87003487
90516423	169-6054-45-67,49-20	Drop Center	Std	54	2 1/8"	Yes	9	6x11	3x9	40°	-	3	-	87003487
90516564	169-6054-67,39-20	Drop Center	Std	54	2 1/8"	No	9	6x10	3x9	40°	-	3	-	87004754
90516536	169-6057-45-67,39-20	Drop Center	Std	57	2 1/4"	Yes	9	6x11	3x9	40°	-	3	0	87003734
90516424	169-6064-48-45-67,49-20	Drop Center	Std	64	2 1/2"	Yes	13	8x10	4x10	35°	-	4	-	87003831
90029059	169-6076-44-67,49-20	Drop Center	Std	76	3"	Yes	13	8x11	5x11	35°	-	-	4	87003985
Spherical buttons														
90029770	169-6051-45,39-20	Drop Center	Std	51	2"	Yes	9	6x10	3x9	35°	-	-	3	87003734
90029771	169-6054-45,39-20	Drop Center	Std	54	2 1/8"	Yes	9	6x11	3x9	40°	-	-	3	87003734
90029298	169-6057-45,39-20	Drop Center	Std	57	2 1/4"	Yes	9	6x11	3x9	40°	-	-	3	87003487
Spherical buttons														
90003723	169-5102-42-24,49-20	Dome bit	Std	102	4"	No	17	8x14,6	9x12,8	25°	-	-	2	87004573
Spherical buttons														
90029572	169-9127-51,49-20	Hole Opener	Std	127	5"	No	17	8x14,5	9x12,7	25°	-	-	3	-

Speedrods



Fully carburized. D = 46 mm. Without wrench flat. Flushing hole diameter 14.5 mm.

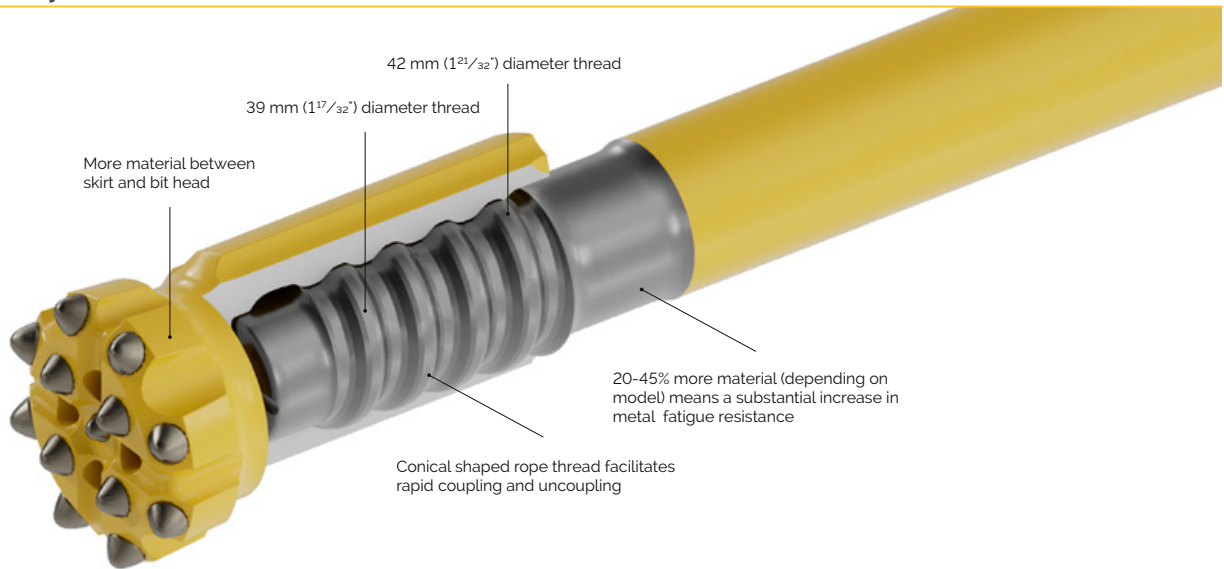
Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003595	269-4712-MF-C,02	1 220	4'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003647	269-4715-MF-C,02	1 525	5'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003576	269-4718-MF-C,02	1 830	6'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003646	269-4724-MF-C,02	2 435	8'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003577	269-4731-MF-C,02	3 050	10'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003578	269-4737-MF-C,02	3 660	12'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003579	269-4743-MF-C,02	4 270	14'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive

Couplings

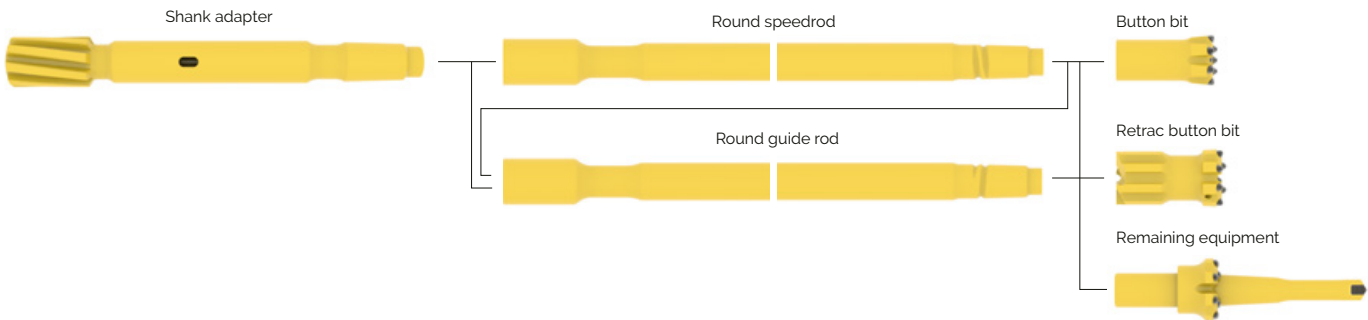


Product No.	Product code	Diameter (D)		Length	
		mm	inch	mm	inch
90003560	369-1050-03,10	48	1"	160	6 5/8"
90003562	369-1057-35,10	57	2 1/4"	170	6 3/4"

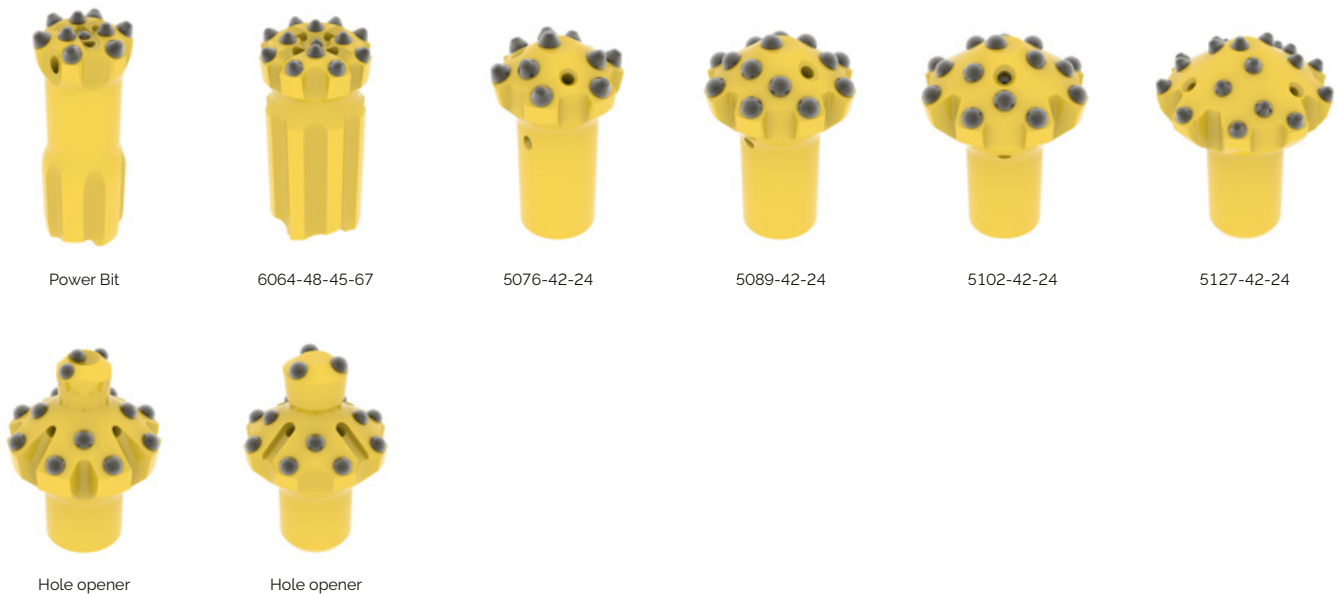
TC42B thread system



Drill string



Drill bits

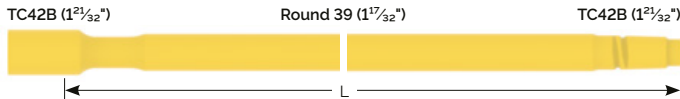


Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bit

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic button														
90029844	172-6064-48-45-67,57-20	Drop Center	Std	64	2½"	Yes	13	8x10	4x10	35°	-	-	4	87003985

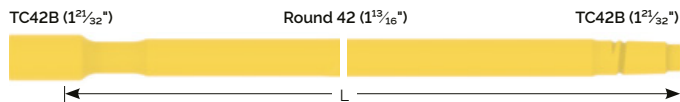
Speedrods



Fully carburized. D = 56 mm. Without wrench flat.
Flushing hole diameter 14,5 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029851	272-4724-MF-C,02	2 435	8'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive
90029838	272-4731-MF-C,02	3 050	10'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive
90029852	272-4737-MF-C,02	3 660	12'	TC42B	C	Rnd39	39	14,5	46	No	Bottom drive

Guide rods



Fully carburized. D = 56 mm.
Flushing hole diameter 17,0 mm.

Product No.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029846	272-4937-MF-C,02	3 660	12'	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029847	272-4949-MF-C,02	4 920	16' 1¾"	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029848	272-4955-MF-C,02	5 530	18' 1¾"	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029839	272-4961-MF-C,02	6 095	20' ½"	TC42B	C	Rnd42	42	17	56	No	Bottom drive
90029849	272-4964-MF-C,02	6 400	21'	TC42B	C	Rnd42	42	17	56	No	Bottom drive

Coupling



Cross-Over Coupling

Product No.	Product code	Diameter (D)		Length	
		mm	inch	mm	inch
90029837	335-1057-72,10	57	2¼"	175	6¾"

Drifting, tunneling and bolting

Reaming equipment and hole openers

Taper angle 7°, 11°, 12° – SR28 (1 1/8"), SR32 (1 1/4"), R32 (1 1/4"), SR35 (1 3/8"), TC35 (1 3/8"), SR38 (1 1/2")



-5076-42-24



-5089-42-24



-5102-42-24



-5127-42-24



Hole opener



Hole opener

Product No.	Product code	Bit type	Button size	Rod hex		Taper angle	Skirt type	Diameter		Length		Number of buttons	Buttons x button diameter (mm)		Buttons angle		Flushing hole	
				mm	inch			mm	inch	mm	inch		Gauge	Center	Gauge	Center	Side	Center
Spherical buttons																		
90003661	173-5064-42-24,49-20	Dome bit	Std	22	7/8"	7°	Short	64	2 1/2"	-	-	10	9x11	1x11	35°	-	3	1
90003662	179-5064-42-24,49-20	Dome bit	Std	22	7/8"	11°	Short	64	2 1/2"	-	-	10	9x11	1x11	35°	-	3	1
90003663	177-5064-42-24,49-20	Dome bit	Std	22	7/8"	12°	Short	64	2 1/2"	-	-	10	9x11	1x11	35°	-	3	1

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical buttons														
90029897	125-5076-42-24,57-20	Dome bit	Std	76	3"	No	9	6x12,7	3x12,7	45°	-	3	1	87003951
90029882	103-5089-42-24,57-20	Dome bit	Std	89	3 1/2"	No	15	8x12,7	7x12,7	35°	-	2	4	87003953
90029890	128-5089-42-24,57-20	Dome bit	Std	89	3 1/2"	No	15	14x12,7	1x12,7	35°	-	2	2	87003953
90029889	103-5102-42-24,57-20	Dome bit	Std	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
90029807	128-5102-42-24,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
5697001527	127-5102-42-24,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87004775
90029789	135-5102-42-24,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
90003723	169-5102-42-24,49-20	Dome bit	Std	102	4"	No	17	8x14,6	9x12,8	25°	-	-	2	87004573
90029896	103-5127-42-24,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	2	3	87004775
90029893	128-5127-42-24,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
90029784	135-5127-42-24,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
90029607	136-5127-42-24,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	-	3	87004775
90029894	151-5152-42-24,57-20	Dome bit	Std	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
90029895	152-5152-42-24,57-20	Dome bit	Std	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
90029606	136-5152-42-24,57-20	Dome bit	Std	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
90029766	137-5152-42-24,57-20	Dome bit	Std	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
Trubbnos buttons														
90029892	128-5076-42-24-70,57-20	Dome bit	Std	76	3"	No	10	9x12,7	1x12,7	35°	-	-	3	87003951
90029883	103-5076-42-24-70,57-20	Dome bit	Std	76	3"	No	9	6x12,7	3x12,7	35°	-	1	3	87003951
90029898	126-5076-42-24-70,57-20	Dome bit	Std	76	3"	No	9	6x12,7	2x12,7	35°	-	1	3	87003559
90029881	128-5089-42-24-70,57-20	Dome bit	Std	89	3 1/2"	No	15	14x12,7	1x12,7	35°	-	1	2	87003953
90029891	103-5089-42-24-70,57-20	Dome bit	Std	89	3 1/2"	No	15	8x12,7	5x12,7	35°	-	2	4	87003953
90029884	103-5102-42-24-70,57-20	Dome bit	Std	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
90029808	128-5102-42-24-70,57-20	Dome bit	Std	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
90029783	135-5127-42-24-70,57-20	Dome bit	Std	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
90029605	136-5152-42-70,57-20	Dome bit	Std	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775

Drill bits

Product No.	Product code	Front shape	Button size	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
				mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical buttons														
90029320	103-9102-45-A,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	87003560
90029626	128-9102-45-A,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	-
90029913	103-9102-40,49-20	Hole Opener	Std	102	4"	No	9	6x12,7	3x12,7	35°	-	1	3	87003560
90029942	128-9102-40,49-20	Hole Opener	Std	102	4"	No	15	12x12,7	3x10	35°	-	-	4	-
90029787	135-9127-51,57-20	Hole opener	Std	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
90029802	136-9127-51,57-20	Hole opener	Std	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
90029572	169-9127-51,49-20	Hole Opener	Std	127	5"	No	17	8x14,5	9x12,7	25°	-	-	3	-
90029791	152-9152-102,57-20	Hole opener	Std	152	6"	No	18	8x15,8	4x15,8, 6x15,8	25°	-	-	2	87003560
5697001591	151-9152-80,57-20	Hole Opener	Std	152	6"	No	17	14x15,8	3x15,8	35°	-	-	2	-
5697001641	152-9152-95,57-20	Hole Opener	Std	152	6"	No	17	14x15,8	3x15,8	35°	-	-	2	-
5697001653	151-9203-135,57-20	Hole Opener	Std	203	8"	No	23	20x15,8	3x12,7	30°	-	4	-	-



Drifting, tunneling and bolting

Reaming equipment

Hex. 22 mm (7/8"), R25 (1"), R28 (1 1/8"), R32 (1 1/4"), SR32 (1 1/4")

Drill bits

6° taper angle



Reaming button bits for R25 (1"), R32 (1 1/4") och SR32 (1 1/4") pilot adapters.

Product No.	Product code	Diameter		Taper angle	No. Of buttons	Buttons × button diameter (mm)		Gauge buttons angle*
		mm	inch			Center	Gauge	
90510459	175-5064.39-20	64	2 1/2"	6°	10	8x10	2x9	35°
90510460	175-5076.39-20	76	3"	6°	10	8x11	2x11	35°
90510461	175-5089.39-20	89	3 1/2"	6°	12	8x11	4x11	35°

Pilot rods

6° taper angle



22 mm (7/8") hex. Shank length 108 mm (4 1/4"). D = 26 mm (1 1/32").

Product No.	Product code	Taper angle	Length		Weight (kg)
			mm	foot/inch	
90000296	575-3108.11-17	6°	800	2'7 1/2"	3.3
90000297	575-3112.11-17	6°	1 200	3'11 1/2"	4.5
90000298	575-3116.11-17	6°	1 600	5' 3"	5.6
90000300	575-3120.11-17	6°	2 000	6'6 3/4"	7
90000301	575-3124.11-17	6°	2 400	7'10 1/2"	8.2

Pilot adapters

6° taper angle, with insert



For 64, 76 and 89 mm reaming button bits. Flushing hole diameter 6.0 mm.

Product No.	Product code	Thread		Taper angle	Diameter		Pilot hole	Remark
		mm	inch		mm	inch		
90516256	502-2303.02-17	R25	1"	6°	26	1 1/32"	36	With insert
90029914	525-2503.02-07	SR28	1 1/8"	6°	26	1 1/32"	36	With insert
90516259	507-2503.02-17	R28	1 1/8"	6°	26	1 1/32"	44	With insert
90516257	503-2603.02-17	R32	1 1/4"	6°	26	1 1/32"	36	With insert

Reaming equipment

R28 (1 1/8"), R32 (1 1/4"), SR32 (1 1/4"), SR35 (1 3/8"), SR38 (1 1/2"), TC42 (121/32")

Drill bits

12° taper angle



Reaming button bits for R28 (1 1/8"), R32/SR32 (1 1/4"), SR35 (1 3/8"), SR38 (1 1/2") and TC42 (121/32") pilot adapters.

Product No.	Product code	Diameter		Taper angle	No. Of buttons	Buttons × button diameter (mm)		Gauge buttons angle°
		mm	inch			Center	Gauge	
90510174	187-5089-20,39-20	89	3 1/2"	12°	12	8×12,7	4×10	35°
90510468	187-5102,39-20	102	4"	12°	12	8×11	4×11	35°
90510469	187-5102-20,39-20	102	4"	12°	12	8×12,7	4×12,7	35°
90510470	187-5127,39-20	127	5"	12°	20	12×12,7	8×12,7	35°

Pilot adapters

12° taper angle, with insert



For 89, 102 and 127 mm reaming button bits.
Flushing hole diameter 13,0 mm.

Product No.	Product code	Thread		Taper angle	Diameter		Pilot hole mm	Remark
		mm	inch		mm	inch		
90516254	507-7802,02-17	R28	1 1/8"	12°	36	1 13/32"	38-48	With insert
90516258	503-7802,02-17	R32	1 1/4"	12°	40	1 1/16"	41-48	With insert
90516262	528-7802,02-17	SR35	1 3/8"	12°	40	1 1/16"	45-51	With insert
90516263	528-7802-24,02-17	SR35	1 3/8"	12°	40	1 1/16"	45-51	With insert. Reverse flushing hole
90516264	535-7802,02-17	T38	1 1/2"	12°	40	1 1/16"	57	With insert

Pilot adapters

12° taper angle, with insert



For 89, 102 and 127 mm reaming button bits.
Flushing hole diameter 10,0 mm.

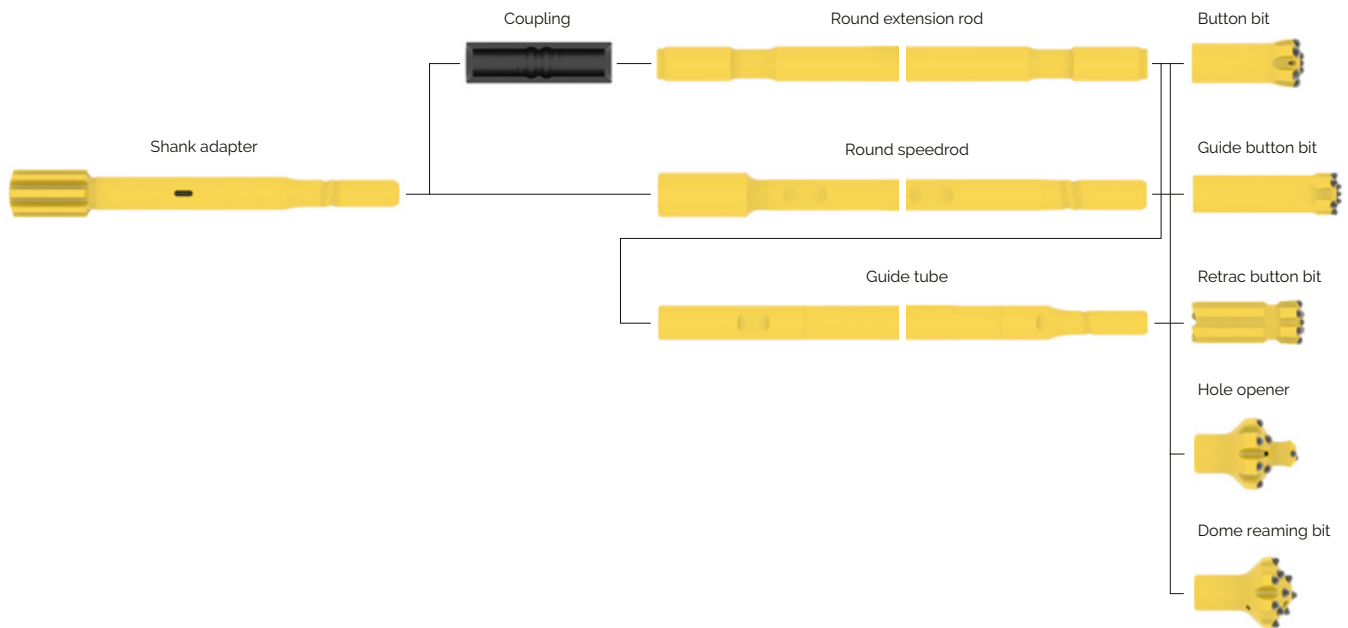
Product No.	Product code	Thread		Taper angle	Diameter		Pilot hole mm	Remark
		mm	inch		mm	inch		
90516265	503-7902,10	R32	1 1/4"	12°	-	-	41-48	Without insert
90516268	535-7902,10	T38	1 1/2"	12°	-	-	57	Without insert

Underground production and long hole drilling

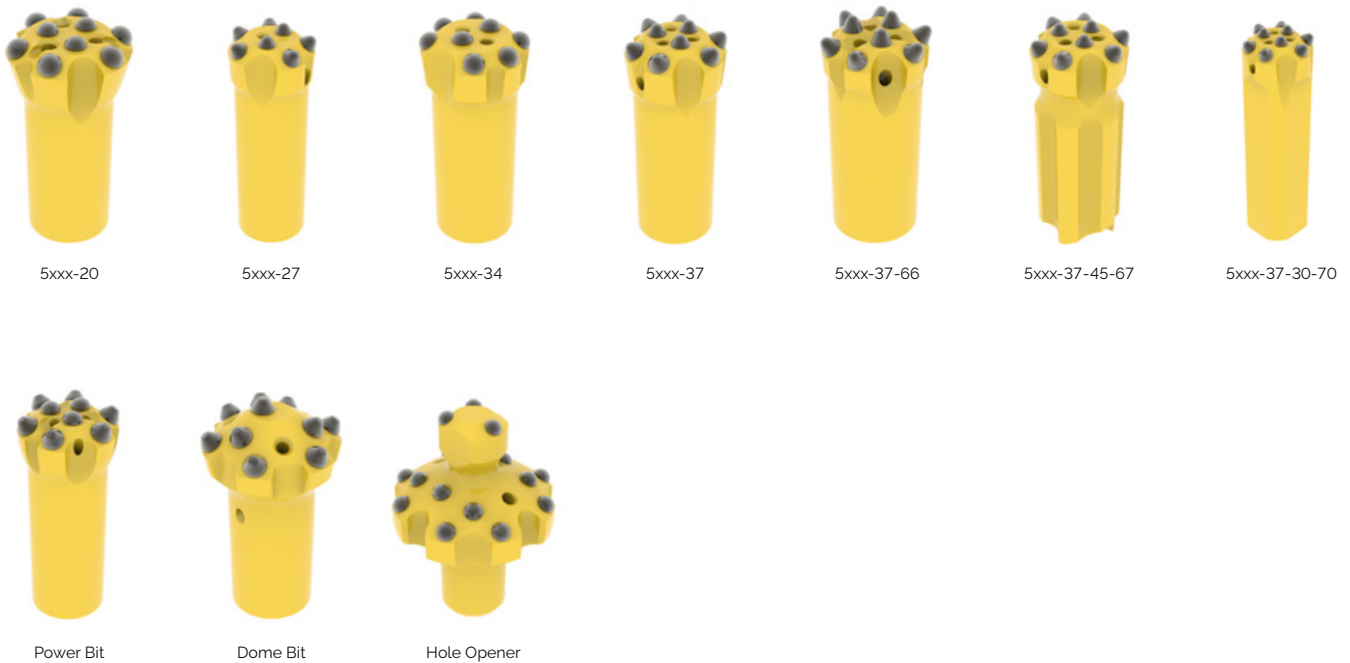
R32	92
TC35	96
T38	98
T45	102
T51	106
ET51	109
ST58	110
ST68	112



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90003532	103-5051-37-67-99,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90029192	103-5051-39-67,56-20	Flat Face	51	2"	No	9	6x10	3x10	35°	-	-	3	87004314
90029845	103-5051-27-20-45-67,39-20	Flat Face	51	2"	Yes	7	5x12,7	2x10	30°	-	1	1	87005311
90509466	103-5051-37-67,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510836	103-5051-37-45-67,39-20	Flat Face	51	2"	Yes	9	6x10	3x9	40°	-	1	3	87003481
90514633	103-6051-45-67,39-20	Drop Center	51	2"	Yes	9	6x10	3x9	35°	-	-	3	87003487
90509481	103-5054-37-67,39-20	Flat Face	54	2½"	No	9	6x11	3x10	35°	-	1	3	87003486
90510795	103-5054-24-45-67,39-20	Flat Face	54	2½"	Yes	11	8x9	3x9	35°	-	1	1	87003493
90510454	103-5057-20-67,39-20	Flat Face	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90515503	103-5057-37-54-67,39-20	Flat Face	57	2¼"	No	9	6x11	3x9	35°	-	2	3	87003495
90510327	103-5064-67,49-20	Flat Face	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510414	103-6064-45-67,49-20	Drop Center	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
Full ballistic													
90029191	103-5051-34-66,56-20	Flat Face	51	2"	No	8	6x10	2x10	40°	-	-	2	87005314
90514136	103-5051-37-66,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90514440	103-5057-37-66,39-20	Flat Face	57	2¼"	No	9	6x10	3x10	40°	-	1	3	87003481
90514983	103-5064-37-66,49-20	Flat Face	64	2½"	No	9	6x11	3x11	40°	-	1	3	87003495
Spherical													
90504566	103-5051-27,39-20	Flat Face	51	2"	No	7	5x11	2x10	35°	-	2	1	87003485
90509465	103-5051-37,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	1	3	87003481
90510308	103-6051-45,39-20	Drop Center	51	2"	Yes	9	6x10	3x9	30°	-	-	3	87003487
90510450	103-5051,39-20	Flat Face	51	2"	No	7	5x11	2x11	35°	-	1	1	87003496
90030051	103-5051-39,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90510453	103-5057-20,39-20	Flat Face	57	2¼"	No	9	6x11	3x10	35°	-	-	3	87003495
90514267	103-5057-37-45,49-20	Flat Face	57	2¼"	Yes	9	6x11	3x9	35°	-	-	3	87003495
90514414	103-5057-54,39-20	Flat Face	57	2¼"	No	9	6x11	3x9	16°	-	1	1	87004775
90510303	103-5064,49-20	Flat Face	64	2½"	No	12	8x10	4x10	40°	-	-	2	87003489
90510328	103-6064,49-20	Drop Center	64	2½"	No	10	6x11	4x10	35°	-	-	3	87003487
90510364	103-6064-45,49-20	Drop Center	64	2½"	Yes	10	6x11	4x10	35°	-	-	3	87003487
90510381	103-5064-45,49-20	Flat Face	64	2½"	Yes	12	8x10	4x10	40°	-	-	2	87003489
90510353	103-5076,49-20	Flat Face	76	3"	No	12	8x11	4x11	40°	-	-	2	87003493
90510504	103-6076-45,49-20	Drop Center	76	3"	Yes	13	8x11	5x11	35°	-	1	4	87003498
90029882	103-5089-42-24,57-20	Dome bit	89	3½"	No	15	8x12,7	7x12,7	35°	-	2	4	87003953
90029320	103-9102-45-A,49-20	Hole Opener	102	4"	No	15	12x12,7	3x12,7	35°	-	-	4	87003560
90029889	103-5102-42-24,57-20	Dome bit	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953
90029913	103-9102-40,49-20	Hole Opener	102	4"	No	9	6x12,7	3x12,7	35°	-	1	3	87003560
90029896	103-5127-42-24,57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	2	3	87004775
Trubbnos													
90030049	103-5051-39-70,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90030060	103-5054-39-70,37-20	PUG -Flat Face	54	2½"	No	9	6x12	3x9	35°	-	3	3	87003495
90029883	103-5076-42-24-70,57-20	Dome bit	76	3"	No	9	6x12,7	3x12,7	35°	-	1	3	87003951
90029891	103-5089-42-24-70,57-20	Dome bit	89	3½"	No	15	8x12,7	5x12,7	35°	-	2	4	87003953
90029884	103-5102-42-24-70,57-20	Dome bit	102	4"	No	17	8x12,7	9x12,7	35°	-	2	4	87003953

Drill bits

12° taper angle



Reaming button bits for R28 (1 3/8"), R32/SR32 (1 1/4"), SR35 (1 3/8") SR38 (1 1/2") and TC42 (1 1/2") pilot adapters.

Product no.	Product code	Diameter		No. of buttons	Buttons x button diameter (mm)		Gauge buttons angle°
		mm	inch		Gauge	Center	Side
90510174	187-5089-20.39-20	89	3 1/2"	12	8x12.7	4x10	35°
90510468	187-5102.39-20	102	4"	12	8x11	4x11	35°
90510469	187-5102-20.39-20	102	4"	12	8x12.7	4x12.7	35°
90510470	187-5127.39-20	127	5"	20	12x12.7	8x12.7	35°

Pilot adapters

12° taper angle, with insert



For 89, 102 and 127 mm reaming button bits. Flushing hole diameter 13.0 mm.

12° taper angle



For 89, 102 and 127 mm reaming button bits. Flushing hole diameter 10.0 mm.

Product no.	Product code	Thread		Diameter		Pilot hole	Weight approx.	Type
		mm	inch	mm	inch	mm	kg	
90516258	503-7802.02-17	R32	1 1/4"	40	1 5/8"	41-48	2.2	with Insert
90516265	503-7902.10	R32	1 1/4"	-	-	41-48	2.1	with Bit

Extension rods

R32 (1 1/4") round rod



Fully carburized or surface hardened. Flushing hole diameter 11.7 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90550062	203-2509-C.02	915	3'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90500360	203-2510-C.02	1 000	3'3 3/8"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90504948	203-0310-C.02	1 000	3'3 3/8"	R32	C	Hex25	28.4	8.6	-	No	Bottom drive
90000138	203-2512-C.02	1 220	4'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90509485	203-2515-C.02	1 525	5'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000139	203-2518-C.02	1 830	6'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90514468	203-2522-C.02	2 200	7'2 5/8"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000989	203-2524-C.02	2 400	7'10 1/2"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000141	203-2531-SH.03	3 050	10'1 5/8"	R32	SH	Rnd32	32	11.7	-	Yes	Bottom drive
90000990	203-2531-C.02	3 050	10'1 5/8"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90515401	203-4531-SH.03	3 050	10'1 5/8"	R32	SH	Rnd32	32	11.7	-	No	Bottom drive
90000142	203-2537-SH.03	3 660	12'	R32	SH	Rnd32	32	11.7	-	Yes	Bottom drive
90509565	203-2537-C.02	3 660	12'	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive
90000993	203-2543-C.02	4 310	14'1 5/8"	R32	C	Rnd32	32	11.7	-	Yes	Bottom drive

Speedrods

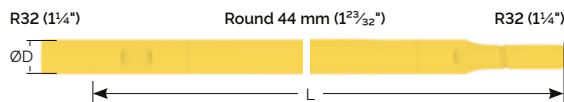
R32 (1¼") round speedrod



Fully carburized. D=46 mm.
Flushing hole diameter 11.7 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003602	203-4508-MF-C.02	800	2'7½"	R32	C	Rnd32	32	11,7	46	No	Bottom drive
90503329	203-2509-MF-C.02	915	3'	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90500834	203-2512-MF-C.02	1 220	4'	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90500627	203-2515-MF-C.02	1 525	5'	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90500628	203-2518-MF-C.02	1 830	6'	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90502259	203-2524-MF-C.02	2 400	7'10½"	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90510130	203-2531-90-MF-C.02	3 050	10'1½"	R32	C	Rnd32	32	11,7	46	Yes	Bottom drive
90515604	203-2531-MF.29	3 050	10'1½"	R32	SH	Rnd32	32	11,7	46	Yes	Bottom drive
90515605	203-2537-MF.29	3 660	12'	R32	SH	Rnd32	32	11,7	46	Yes	Bottom drive
90515606	203-2543-MF.29	4 310	14'1½"	R32	SH	Rnd32	32	11,7	46	Yes	Bottom drive

Guide tubes



Fully carburized.
Flushing hole diameter 27.0 mm.

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90509957	203-2210-C.02	1 000	3'3¾"	R32	C	Rnd44	44	44	44	44	Bottom drive
94502681	203-7112.10	1 220	4'	R32	C	Rnd45	45	45	45	45	Bottom drive
90509958	203-2218-C.02	1 830	6'	R32	C	Rnd44	44	44	44	44	Bottom drive
94502659	203-7118.10	1 830	6'	R32	C	Rnd45	45	45	45	45	Bottom drive

Couplings



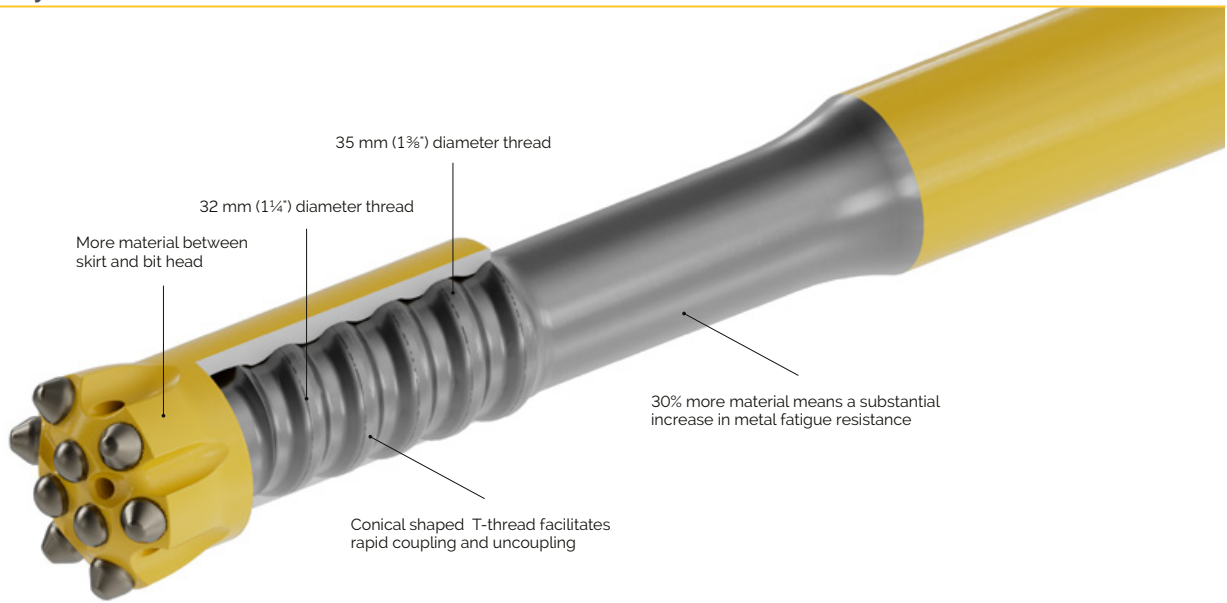
Central stop



Full bridge stop

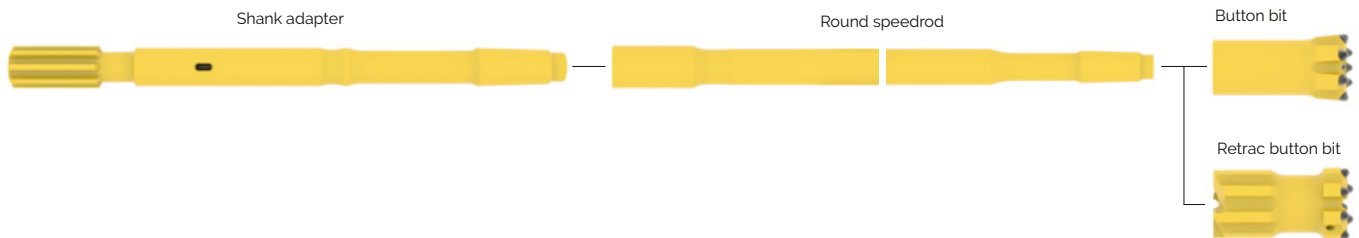
Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90515730	303-0042.10	R32-Rnd42 coupling	42	1¾"	150	5¾"	Standard	0,9
90515731	303-0044.10	R32-Rnd44 coupling	44	1¾"	150	5¾"	Standard	0,9
90515732	303-0044-57.10	R32-Rnd42 coupling-full bridge	44	1¾"	150	5¾"	Full bridge	1
90515735	307-0040.10	R28-Rnd40 coupling	44	1¾"	150	5¾"	Standard	0,9

TC35 thread system



Drill string

TC35 is based on the same technology as the Epiroc SR – with a conical trapezoidal thread. The TC35 system is used for cable bolting and production drilling with hole diameters from 48-64 mm.



Drill bits

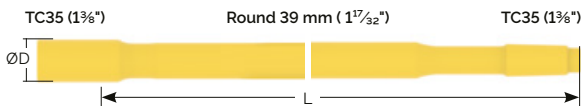


Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90516336	169-5048-37-67,39-20	Flat Face	48	1 7/8"	No	9	6x10	3x9	40°	-	3	1	87003486
90003692	169-5051-37-67,39-20	Flat Face	51	2"	No	9	6x10	3x9	40°	-	3	1	87003486
90516337	169-6051-45-67,49-20	Drop Center	51	2"	Yes	9	6x10	3x9	35°	-	3	-	87003487
90516423	169-6054-45-67,49-20	Drop Center	54	2 1/8"	Yes	9	6x11	3x9	40°	-	3	-	87003487
90516564	169-6054-67,39-20	Drop Center	54	2 1/8"	No	9	6x10	3x9	40°	-	3	-	87004754
90516536	169-6057-45-67,39-20	Drop Center	57	2 1/4"	Yes	9	6x11	3x9	40°	-	3	0	87003734
90516424	169-6064-48-45-67,49-20	Drop Center	64	2 1/2"	Yes	13	8x10	4x10	35°	-	4	-	87003831
90029059	169-6076-44-67,49-20	Drop Center	76	3"	Yes	13	8x11	5x11	35°	-	-	4	87003985
Spherical													
90029029	169-5051-39-99,39-20	Flat Face	51	2"	No	9	6x11	3x9	45°	-	3	3	87003486
90029770	169-6051-45,39-20	Drop Center	51	2"	Yes	9	6x10	3x9	35°	-	-	3	87003734
90030045	169-5051-39,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488
90029771	169-6054-45,39-20	Drop Center	54	2 1/8"	Yes	9	6x11	3x9	40°	-	-	3	87003734
90029298	169-6057-45,39-20	Drop Center	57	2 1/4"	Yes	9	6x11	3x9	40°	-	-	3	87003487
90003723	169-5102-42-24,49-20	Dome bit	102	4"	No	17	8x14,6	9x12,8	25°	-	-	2	87004573
90029572	169-9127-51,49-20	Hole Opener	127	5"	No	17	8x14,5	9x12,7	25°	-	-	3	-
Trubbons													
90030065	169-5048-39-70,37-20	PUG -Flat Face	48	1 7/8"	No	9	6x11	3x9	35°	-	3	3	87003495
5697000458	169-6051-44-70,37-20	PUG -Flat Face	51	2"	Yes	9	6x10	3x7	35°	-	3	3	87003487
90030048	169-5051-39-70,37-20	PUG -Flat Face	51	2"	No	9	6x11	3x9	35°	-	3	3	87003488

Speedrods

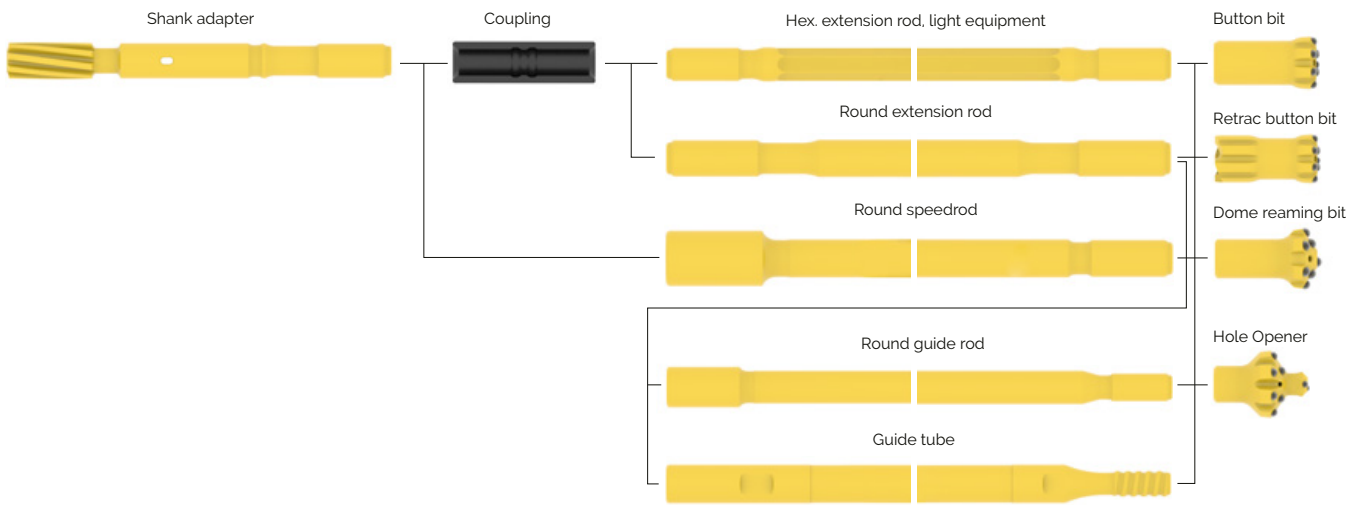


Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90003595	269-4712-MF-C.02	1 220	4'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003647	269-4715-MF-C.02	1 525	5'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003576	269-4718-MF-C.02	1 830	6'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003646	269-4724-MF-C.02	2 435	8'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003577	269-4731-MF-C.02	3 050	10'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003578	269-4737-MF-C.02	3 660	12'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive
90003579	269-4743-MF-C.02	4 270	14'	TC35	C	Rnd39	39	14,5	46	No	Bottom drive

Guide tubes

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90030025	269-7012.11	1,2	4'	TC35	C	Rnd56	56	14,5	56	56	Shoulder Drive
90030026	269-7015.10	1,5	5'	TC35	C	Rnd56	56	14,5	56	56	Shoulder Drive
90030027	269-7018.12	1,8	6'	TC35	C	Rnd56	56	14,5	56	56	Shoulder Drive

Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029467	135-6064-21-44.57-20	Power Face	64	2½"	Yes	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029693	135-5064.57-20	Flat Face	64	2½"	No	13	8x10	5x9	35°	-	-	4	87003953
90029712	135-6064-21.57-20	Power Face	64	2½"	No	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029753	135-5064-44.57-20	Flat Face	64	2½"	Yes	13	8x10	5x9	35°	-	-	4	87003953
90029690	135-6070-21-44.57-20	Power Face	70	2¾"	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029718	135-6070-21.57-20	Power Face	70	2¾"	No	13	8x11	5x10	35°	-	-	4	87003953
90029685	135-6076-21-44.57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003053
90029688	135-5076-44.57-20	Flat Face	76	3"	Yes	15	9x11	6x10	35°	-	-	3	87004433
90029689	135-5076.57-20	Flat Face	76	3"	No	15	9x11	6x10	35°	-	-	3	87004433
90029715	135-6076-21.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029681	135-6089-21-44.57-20	Power Face	89	3½"	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029684	135-5089.57-20	Flat Face	89	3½"	No	16	9x11	6x11	35°	-	-	3	87004434
90029716	135-6089-21.57-20	Power Face	89	3½"	No	13	8x12,7	5x12,7	35°	-	-	4	87004432
90029867	135-5089-44.57-20	Flat Face	89	3½"	Yes	16	9x11	6x11	35°	-	-	3	87004434
90029755	135-6102.57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029788	135-5102.57-20	Flat Face	102	4"	No	14	9x14,5	5x12,7	35°	-	-	3	87004775
90029789	135-5102-42-24.57-20	Dome bit	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
90029784	135-5127-42-24.57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
90029787	135-9127-51.57-20	Hole opener	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
Trubbnos													
90029466	135-6064-21-44-70.57-20	Power Face	64	2½"	Yes	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029694	135-5064-70.57-20	Flat Face	64	2½"	No	13	8x10	5x9	35°	-	-	4	87003953
90029713	135-6064-21-70.57-20	Power Face	64	2½"	No	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029691	135-6070-21-44-70.57-20	Power Face	70	2¾"	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029686	135-6076-44-70.57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	2	4	87003953
90029687	135-6076-21-44-70.57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029714	135-6076-70.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029717	135-6076-21-70.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029757	135-6076-44-70.57-12	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	-	4	87003953
90029682	135-6089-44-70.57-20	Power Face	89	3½"	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029719	135-6089-21-70.57-20	Power Face	89	3½"	No	13	8x12,7	5x12,7	35°	-	-	4	87004432
90029923	135-5089-47-70.57-20	MRB	89	3½"	No	14	8x12,7	4x12,7, 2x11	40°	20°	2	4	87004432
90029756	135-6102-70.57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029920	135-5102-47-70.57-20	MRB	102	4"	No	14	8x14,5	4x12,7, 2x11	40°	20°	2	4	87004432
90029783	135-5127-42-24-70.57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775

Extension rods

R/T38 (1½") round rod



Fully carburized or surface hardened.
Flushing hole diameter 14,5 mm.

T38 (1½") Hex. 32 mm (2¼") T38 (1½")



Light equipment, fully carburized. Rod section 35,8 mm.
Flushing hole diameter 9,6 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90002957	235-2718-C.02	1 830	6'	T38	C	Rnd38	38	14,5	-	Yes	Bottom drive
90001962	235-0531-C.02	3 050	10'	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90510050	235-0540-C.02	4 000	13'1½'	T38	C	Hex32	35,8	9,6	-	No	Bottom drive

Speedrods

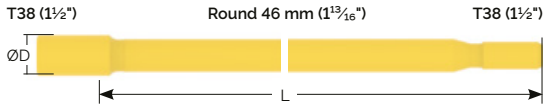
R/T38 (1½") round Speedrod



Fully carburized. D = 57 mm
Flushing hole diameter 14,5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90510857	235-4706-MF-C.02	600	1'11½"	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510718	235-4709-MF-C.02	915	3'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90502325	235-2712-MF-C.02	1 220	4'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510719	235-4712-MF-C.02	1 220	4'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510720	235-4715-MF-C.02	1 525	5'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510721	235-4718-MF-C.02	1 830	6'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90504397	235-2724-MF-C.02	2 400	7'10½"	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90500630	235-2731-MF-C.02	3 050	10'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510723	235-4731-MF-C.02	3 050	10'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515312	235-4731-MF.29	3 050	10'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90502628	235-2737-MF-C.02	3 660	12'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510724	235-4737-MF-C.02	3 660	12'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515315	235-4737-MF.29	3 660	12'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90510725	235-4743-MF-C.02	4 270	14'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515570	235-4743-MF.29	4 270	14'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90510726	235-4749-MF-C.02	4 880	16'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515571	235-4749-MF.29	4 880	16'	T38	SH	Rnd45	38	17	57	No	Bottom drive

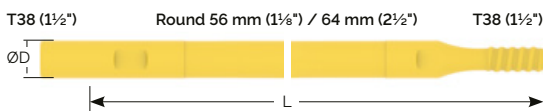
Guide rod



Fully carburized and surface hardened. D - 57 mm
Flushing hole diameter 17,0 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515575	235-4937-MF,29	1 220	4'	T38	C	Rnd56	56	43	64	Yes	Bottom drive

Guide tubes



Fully carburized

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
94502648	235-7012,10	1 220	4'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000051	235-7015,10	1 525	5'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000052	235-7018,10	1 830	6'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000053	235-7031,10	3 050	10'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000054	235-7037,10	3 660	12'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94502622	235-6937,10	3 660	12'	T38	C	Rnd64	64	46	46	Yes	Bottom drive

Couplings



Central stop

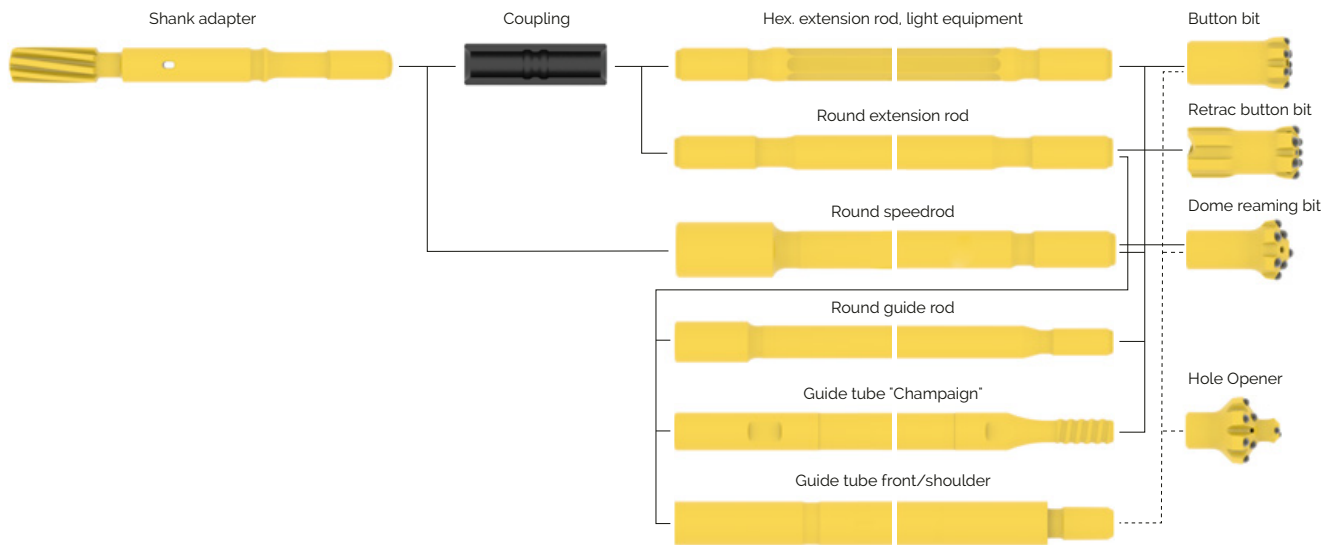


Full bridge stop

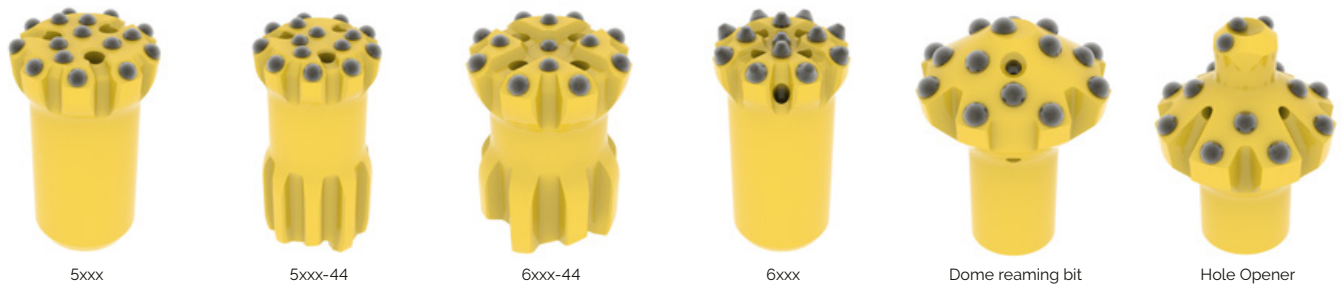
Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90515733	304-0055,10	R38-Rnd55 coupling	55	2 1/8"	170	6 3/4"	Standard	1.7
90515734	304-0055-57,10	R38-Rnd55 coupling-full bridge	55	2 1/8"	180	7 1/8"	Full bridge	2
90515736	335-0052,10	T38-Rnd52 coupling	52	2"	190	7 1/2"	High frequency drifters	1.7
90515737	335-0055,10	T38-Rnd55 coupling	55	2 1/8"	190	7 1/2"	Standard	1.9
90515738	335-0055-57,10	T38-Rnd52 coupling-full bridge	55	2 1/8"	180	7 1/8"	Full bridge	2

Drill string

The difference between a guide tube and a guide rod is the level of hole straightness needed at the quarry or mine. Where there are challenging rock formations with a higher liability of hole deviation, a guide tube is the best solution.



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029395	136-6070-21-44,57-20	Power Face	70	2 ³ / ₄ "	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029357	136-6076-21-44,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029370	136-5076-44,57-20	Flat Face	76	3"	Yes	15	9x11	6x10	35°	-	-	3	87004433
90029371	136-5076,57-20	Flat Face	76	3"	No	15	9x11	6x10	35°	-	-	3	87004433
90029377	136-6076-21,57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	2	4	87003953
90029360	136-6089-21,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029364	136-6089-21-44,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029366	136-5089-44,57-20	Flat Face	89	3 ¹ / ₂ "	Yes	16	9x11	7x11	35°	-	-	3	87004434
90029367	136-5089,57-20	Flat Face	89	3 ¹ / ₂ "	No	16	9x11	7x11	35°	-	-	3	87004434
90029403	136-5102-44,57-20	Flat Face	102	4"	Yes	16	9x14,5	7x12,7	35°	-	-	3	87004775
90029404	136-5102,57-20	Flat Face	102	4"	No	16	9x14,5	7x12,7	35°	-	-	3	87004775
90029408	136-6102-21,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029413	136-6102-21-44,57-20	Power Face	102	4"	Yes	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029601	136-6115,57-20	Power Face	115	4 ¹ / ₂ "	No	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029602	136-6115-44,57-20	Power Face	115	4 ¹ / ₂ "	Yes	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029604	136-6127-21,57-20	Power Face	127	5"	No	17	8x15,8	4x15,8, 5x11	35°	-	2	4	87003953
90029607	136-5127-42-24,57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	-	3	87004775
90029802	136-9127-51,57-20	Hole opener	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
90029606	136-5152-42-24,57-20	Dome bit	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
Trubbnos													
90029614	136-6066-21-44-70,57-20	Power Face	66	2 ⁵ / ₈ "	Yes	10	6x12,7	3x10, 1x8	35°	-	-	3	87003487
90029394	136-6070-21-44-70,57-20	Power Face	70	2 ³ / ₄ "	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029409	136-6070-21-70,57-20	Power Face	70	2 ³ / ₄ "	No	13	8x11	5x10	35°	-	-	4	87003953
90029351	136-6076-21-70,57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	2	4	87003953
90029352	136-6076-70,57-20	Power Face	76	3"	No	13	8x12	5x11	35°	-	2	4	87003953
90029354	136-6076-21-44-70,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029376	136-6076-44-70,57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	2	4	87003953
90029737	136-6076-21-44-70,57-12	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029833	136-6076-44-70-99,57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	-	4	87003953
90029835	136-6076-21-44-70-99,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	-	4	87003953
90029916	136-5076-47-70,57-20	MRB	76	3"	No	14	8x11	6x10	40°	20°	2	4	-
90029615	136-6083-44-70,57-20	Power Face	83	3 ³ / ₈ "	Yes	13	8x12	5x12	35°	-	-	4	87004432
90029361	136-6089-70,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12	5x12	35°	-	2	4	87004432
90029362	136-6089-21-44-70,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029363	136-6089-21-70,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029365	136-6089-44-70,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029840	136-6089-44-70-99,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12	5x12	35°	-	-	4	87004432
90029841	136-6089-21-44-70-99,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	-	4	87004432
90029927	136-5089-47-70,57-20	MRB	89	3 ¹ / ₂ "	No	14	8x12,7	4x12,7, 2x11	40°	20°	2	4	87004432
90029405	136-6102-21-70,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029407	136-6102-70,57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029411	136-6102-44-70,57-20	Power Face	102	4"	Yes	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029412	136-6102-21-44-70,57-20	Power Face	102	4"	Yes	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029925	136-5102-47-70,57-20	MRB	102	4"	No	14	8x14,5	4x12,7, 2x11	40°	20°	2	4	87004432
90029603	136-6115-70,57-20	Power Face	115	4 ¹ / ₂ "	No	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029605	136-5152-42-70,57-20	Dome bit	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775

Speedrods

T45 (1 3/4") round Speedrod



Fully carburized. D = 65 mm
Flushing hole diameter 17.0 mm.

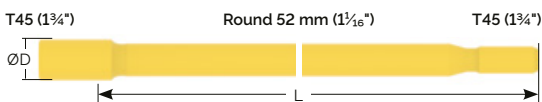
Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029899	236-4906-MF-C.02	600	1'11 5/8'	T45	C	Rnd45	45	17	65	No	Bottom drive
90503096	236-2912-MF-C.02	1 220	4'	T45	C	Rnd45	45	17	65	Yes	Bottom drive
90510730	236-4915-MF-C.02	1 525	5'	T45	C	Rnd45	45	17	65	No	Bottom drive
90510731	236-4918-MF-C.02	1 830	6'	T45	C	Rnd45	45	17	65	No	Bottom drive
90515313	236-4937-MF.29	3 660	12'	T45	SH	Rnd45	45	17	65	No	Bottom drive
90510734	236-4943-MF-C.02	4 270	14'	T45	C	Rnd45	45	17	65	No	Bottom drive
90515316	236-4943-MF.29	4 270	14'	T45	SH	Rnd45	45	17	65	No	Bottom drive
90515568	236-4948-MF.29	4 800	15'9"	T45	SH	Rnd45	45	17	65	No	Bottom drive

Rod adapter



Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515671	236-4902-C.10	200	7 7/8"	T45	C	Rnd45	45	17	65	No	Bottom drive

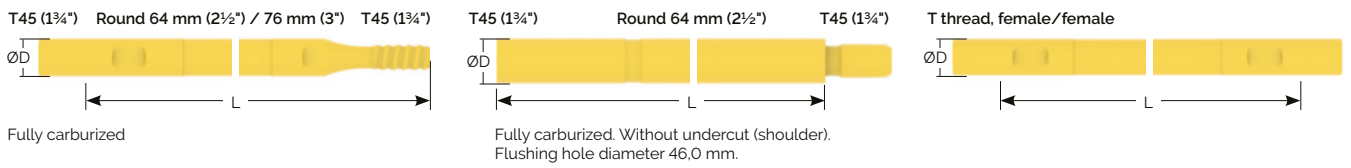
Guide rods



Fully carburized and surface hardened. D = 65 mm
Flushing hole diameter 21.5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90513771	236-5137-MF-C.02	3 660	12'	T45	C	Rnd51	52	21.5	64	No	Bottom drive
90514785	236-5143-MF-C.02	4 270	14'	T45	C	Rnd51	52	21.5	64	No	Bottom drive

Guide tubes

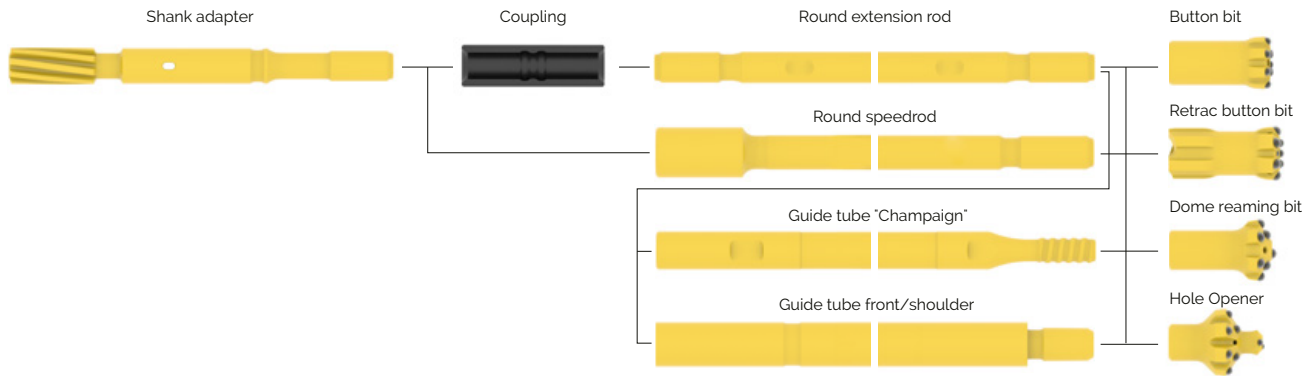


Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
94502687	236-6912.10	1 220	4'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94000047	236-6915.10	1 525	5'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
90003636	236-6915-87.10	1 525	5'	T45	C	Rnd64	64	46	64	No	Bottom drive
94502656	236-6618.10	1 830	6'	T45	C	Rnd76	76	50	76	Yes	Bottom drive
94000046	236-6918.10	1 830	6'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94502714	236-6918-87.10	1 830	6'	T45	C	Rnd64	64	46	64	No	Bottom drive
90510814	236-6918-36.10	1 830	6'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94000050	236-6937.10	3 660	12'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94502627	236-6637.10	3 660	12'	T45	C	Rnd76	76	50	76	Yes	Bottom drive



Drill string

The difference between a guide tube and a guide rod is the level of hole straightness needed at the quarry or mine. Where there are challenging rock formations with a higher liability of hole deviation, a guide tube is the best solution.



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029733	137-6076-21.57-20	Power Face	76	3"	No	13	8x12.7	5x11	35°	-	-	4	87003953
90029731	137-6083-44.57-20	Power Face	83	3 3/4"	Yes	13	12x11	1x9	35°	-	2	4	87004432
90029402	137-5089-44.57-20	Flat Face	89	3 1/2"	Yes	16	9x11	7x11	35°	-	-	3	87004434
90029415	137-6089-21-44.57-20	Power Face	89	3 1/2"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029417	137-5089.57-20	Flat Face	89	3 1/2"	No	16	9x11	7x11	35°	-	-	3	87004434
90029419	137-6089-21.57-20	Power Face	89	3 1/2"	No	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029057	137-6102-44.49-12	Drop Center	102	4"	Yes	14	8x12.7	6x12.7	35°	-	-	4	87003952
90029400	137-6102-21.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029423	137-6102-21-44.57-20	Power Face	102	4"	Yes	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029424	137-5102-44.57-20	Flat Face	102	4"	Yes	16	9x14.5	7x12.7	35°	-	-	3	87004775
90029425	137-5102.57-20	Flat Face	102	4"	No	16	9x14.5	7x12.7	35°	-	-	3	87004775
90029428	137-6115-21-44.57-20	Power Face	115	4 1/2"	Yes	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029429	137-5115-44.57-20	Flat Face	115	4 1/2"	Yes	16	9x14.5	7x14.5	35°	-	-	3	87004775
90029432	137-5115.57-20	Flat Face	115	4 1/2"	No	16	9x14.5	7x14.5	35°	-	-	3	87004775
90029438	137-6115-21.57-20	Power Face	115	4 1/2"	No	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029427	137-6127-21.57-20	Power Face	127	5"	No	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029437	137-6127-21-44.57-20	Power Face	127	5"	Yes	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029439	137-5127-44.57-20	Flat Face	127	5"	Yes	19	9x14.5	10x14.5	35°	-	-	3	87004775
90029444	137-5127.57-20	Flat Face	127	5"	No	19	9x14.5	10x14.5	35°	-	-	3	87004775
90029735	137-6140-21.57-20	Power Face	140	5 1/2"	No	19	10x15.8	9x14.5	35°	-	-	5	87004571
90029736	137-6152-21.57-20	Power Face	152	6"	No	19	10x15.8	9x14.5	35°	-	-	5	87004572
90029766	137-5152-42-24.57-20	Dome bit	152	6"	No	20	18x14.5	2x14.5	35°	-	-	3	87004775
Trubbnos													
90029414	137-6089-21-44-70.57-20	Power Face	89	3 1/2"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029416	137-6089-44-70.57-20	Power Face	89	3 1/2"	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029418	137-6089-21-70.57-20	Power Face	89	3 1/2"	No	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029420	137-6089-70.57-20	Power Face	89	3 1/2"	No	13	8x12	5x12	35°	-	2	4	87004432
90029917	137-5089-47-70.57-20	MRB	89	3 1/2"	No	14	8x12.7	4x12.7, 2x11	40°	20°	2	4	87004432
90029734	137-6092-44-70.57-20	Power Face	92	3 3/8"	Yes	13	8x12.7	5x12.7	35°	-	-	4	87003560
90029969	137-6095-44-70.57-20	Power Face	95	3 3/4"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87003560
90029398	137-6102-70.57-20	Power Face	102	4"	No	13	8x14.5	5x12.7	35°	-	2	4	87004435
90029399	137-6102-21-70.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029421	137-6102-44-70.57-20	Power Face	102	4"	Yes	13	8x14.5	5x12.7	35°	-	2	4	87004435
90029422	137-6102-21-44-70.57-20	Power Face	102	4"	Yes	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029918	137-5102-47-70.57-20	MRB	102	4"	No	14	8x14.5	4x12.7, 2x11	40°	20°	2	4	87004432
90029401	137-6115-21-44-70.57-20	Power Face	115	4 1/2"	Yes	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029426	137-6115-44-70.57-20	Power Face	115	4 1/2"	Yes	13	8x14.5	5x14.5	35°	-	2	4	87003952
90029434	137-6115-21-70.57-20	Power Face	115	4 1/2"	No	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029436	137-6115-70.57-20	Power Face	115	4 1/2"	No	13	8x14.5	5x14.5	35°	-	2	4	87003952
90029430	137-6127-70.57-20	Power Face	127	5"	No	17	8x14.5	4x14.5, 5x11	35°	-	2	4	87003953
90029431	137-6127-21-70.57-20	Power Face	127	5"	No	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029433	137-6127-21-44-70.57-20	Power Face	127	5"	Yes	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029435	137-6127-44-70.57-20	Power Face	127	5"	Yes	17	8x14.5	4x14.5, 5x11	35°	-	2	4	87003953

Speedrods

T51 (2") round Speedrod



Fully carburized. D = 72 mm
Flushing hole diameter 21.5 mm.

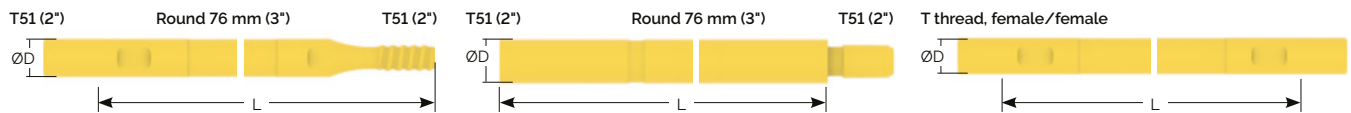
Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90510737	237-5115-MF-C,02	1 525	5'	T51	C	Rnd51	51	21.5	72	No	Bottom drive
90510738	237-5118-MF-C,02	1 830	6'	T51	C	Rnd51	51	21.5	72	No	Bottom drive
90515311	237-5137-MF,29	3 660	12'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90515314	237-5143-MF,29	4 270	14'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90029739	237-5149-MF,29	4 880	16'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90515557	237-5161-MF,29	6 095	20'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive

Rod adapter



Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514708	237-5102-C,10	200	7 7/8"	T51	C	Rnd51	51	21.5	-	No	Bottom drive

Guide tubes/Drill tubes

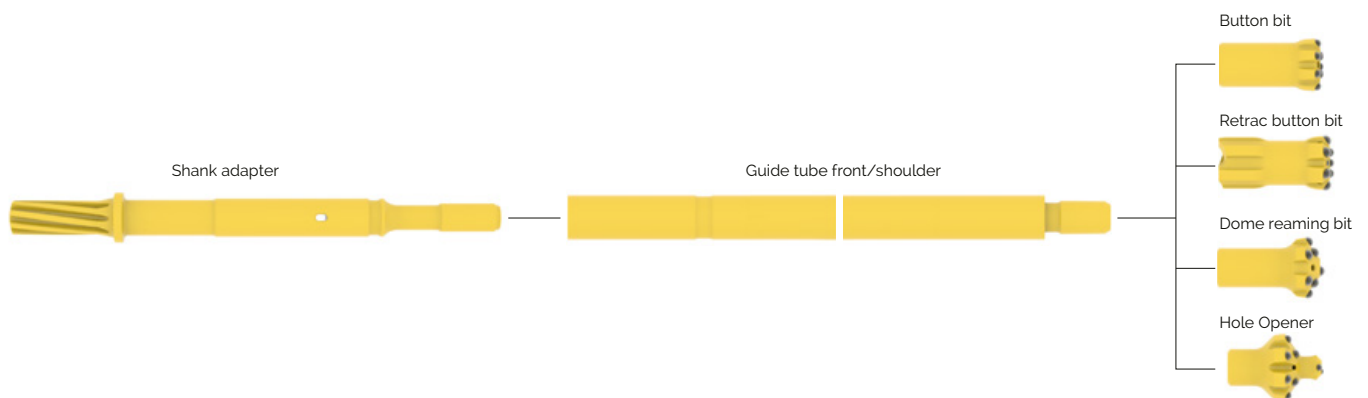


Fully carburized

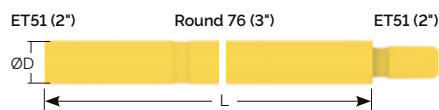
Fully carburized. Without undercut (shoulder).
Flushing hole diameter 50,0 mm.

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514203	237-6618-87,10	1 830	6'	T51	C	Rnd76	76	50	76	No	Bottom drive
94502624	237-6618,10	1 830	6'	T51	C	Rnd76	76	50	76	Yes	Bottom drive
90513888	237-6637-37,10	3 660	12'	T51	C	Rnd76	76	50	76	Yes	Bottom drive
94502641	237-6637,10	3 660	12'	T51	C	Rnd76	76	66	76	Yes	Bottom drive
94502707	237-6837,10	3 660	12'	T51	C	Rnd87	87	66	87	Yes	Bottom drive

Drill strings



Guide tubes

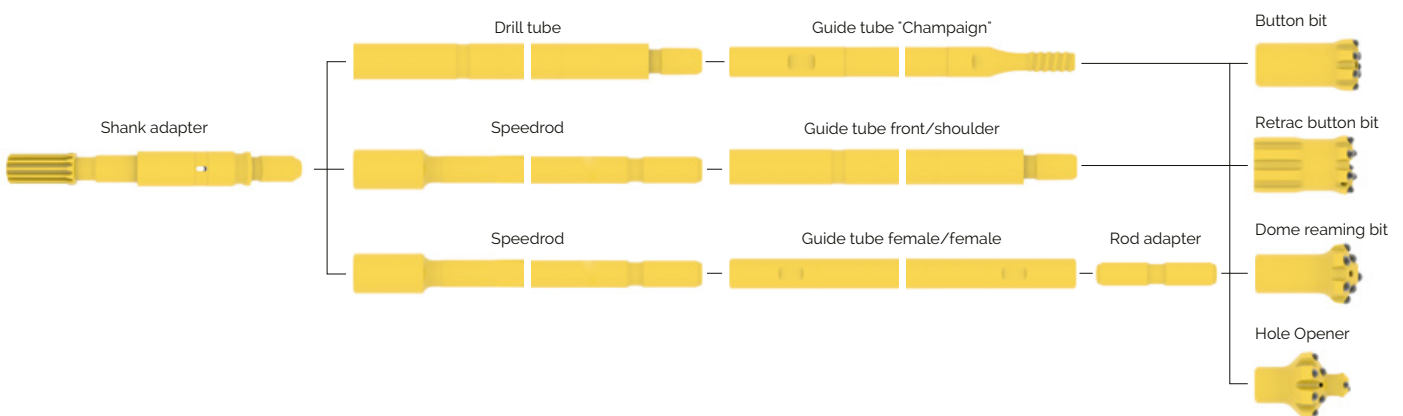


Fully carburized. Without undercut (shoulder).
Flushing hole diameter 50,0 mm.

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
5697001602	237-6612-88,10	1 190	4'	ET51	C	Rnd76	76	22	76	No	TDS Shoulder Drive
5697001603	237-6615-88,10	1 495	5'	ET51	C	Rnd76	76	22	76	No	TDS Shoulder Drive
5697000633	237-6618-88,10	1 800	6'	ET51	C	Rnd76	76	22	76	No	TDS Shoulder Drive
5697001604	237-6637-88,10	3 630	12'	ET51	C	Rnd76	76	22	76	No	TDS Shoulder Drive

You can use ET51 tubes together with your existing T51 and T-Wiz51 equipment and standard T thread

Drill string



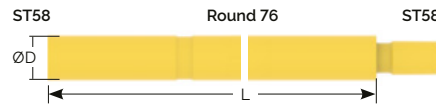
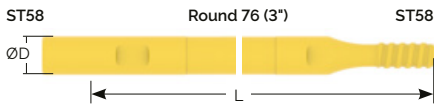
Drill bits



Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029709	151-6089-21,57-20	Power Face	89	3½"	No	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029953	151-6089-21-35,57-20	Power Face	89	3½"	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029710	151-6102-21,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029894	151-5152-42-24,57-20	Dome bit	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
5697001591	151-9152-80,57-20	Hole Opener	152	6"	No	17	14x15,8	3x15,8	35°	-	-	2	-
5697001653	151-9203-135,57-20	Hole Opener	203	8"	No	23	20x15,8	3x12,7	30°	-	4	-	-
Trubnos													
90029656	151-6089-21-35-70,57-20	Power Face	89	3½"	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029651	151-6102-35-70,57-20	Power Face	102	4"	Yes	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029658	151-6115-21-35-70,57-20	Power Face	115	4½"	Yes	13	8x15,8	5x14,5	35°	-	2	4	87003952

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

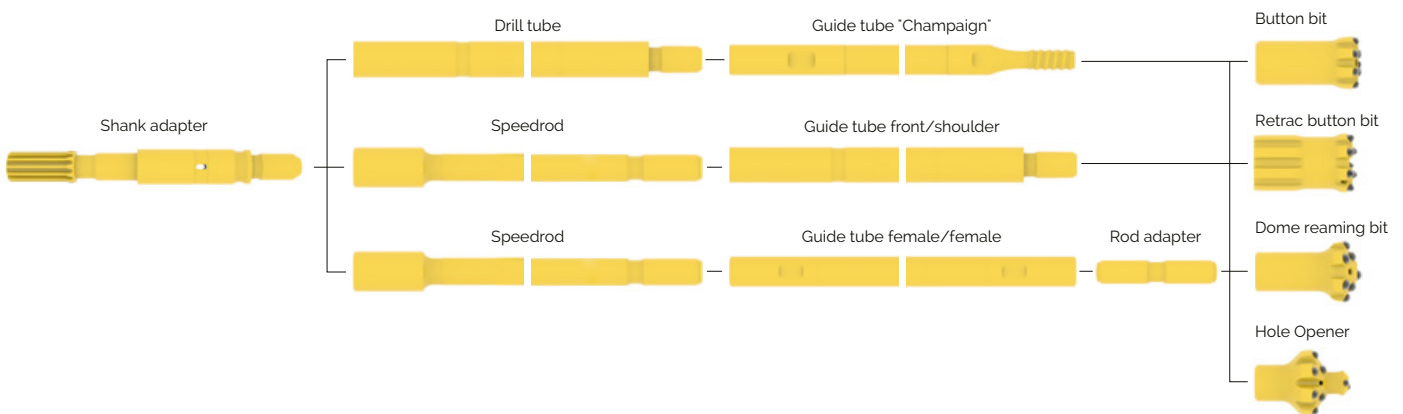
Drill tubes



Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
94000045	251-6612.10	1 220	4'	ST58	C	Rnd76	76	22.6	76	No	Buttom-contact
94502572	251-6615.10	1 525	5'	ST58	C	Rnd76	76	22.6	76	No	Buttom-contact
94000015	251-6618.10	1 830	6'	ST58	C	Rnd76	76	22.6	76	No	Buttom-contact
94502715	251-6618-88.10	1 830	6'	ST58	C	Rnd76	76	22.6	76	No	C-Drive



Drill string



Drill bits



Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029673	152-6115-21-35.57-20	Power Face	115	4½"	Yes	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029728	152-6127-21.57-20	Power Face	127	5"	No	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029732	152-6102-21.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029750	152-6152-21.57-20	Power Face	152	6"	No	19	10x15.8	5x14.5, 4x14.5	35°	-	-	5	87004572
90029791	152-9152-102.57-20	Hole opener	152	6"	No	18	8x15.8	4x15.8, 6x15.8	25°	-	-	2	87003560
90029868	152-5102-21-24.57-20	Flat Face	102	4"	No	13	8x15.8	5x12.7	35°	-	1	1	87004435
90029895	152-5152-42-24.57-20	Dome bit	152	6"	No	20	18x14.5	2x14.5	35°	-	-	3	87004775
5697001641	152-9152-95.57-20	Hole Opener	152	6"	No	17	14x15.8	3x15.8	35°	-	-	2	-
Trubbnos													
90029674	152-6115-35-70.57-20	Power Face	115	4½"	Yes	13	8x14.5	5x14.5	35°	-	2	4	87003952
90029678	152-6102-35-70.57-20	Power Face	102	4"	Yes	13	8x14.5	5x12.7	35°	-	2	4	87004435
90029725	152-6102-21-70.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029795	152-6102-43-70.57-20	Power Face	102	4"	Yes	18	10x12.7	6x12.7, 2x11	35°	-	-	4	87004512
90030123	152-6115-21-44-70.57-20	Power Face	115	4½"	Yes	14	8x15.8	6x14.5	35°	-	-	4	87003952

Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill tubes



Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514263	252-6812.10	1 220	4'	ST68	C	Rnd87	87	38	87	No	Bottom-contact
90510679	252-6815-84.10	1 525	5'	ST68	C	Rnd87	87	38	87	No	Shoulder drive
90514054	252-6715-88-84.10	1 525	5'	ST68	C	Rnd87	87	38	87	No	C-Drive
94502702	252-6715-88.10	1 525	5'	ST68	C	Rnd87	87	38	87	No	C-Drive
94502712	252-6815.10	1 525	5'	ST68	C	Rnd87	87	38	87	No	Bottom-contact
94502710	252-6818-88.10	1 830	6'	ST68	C	Rnd87	87	38	87	No	C-Drive
94502713	252-6818.10	1 830	6'	ST68	C	Rnd87	87	38	87	No	Bottom-contact



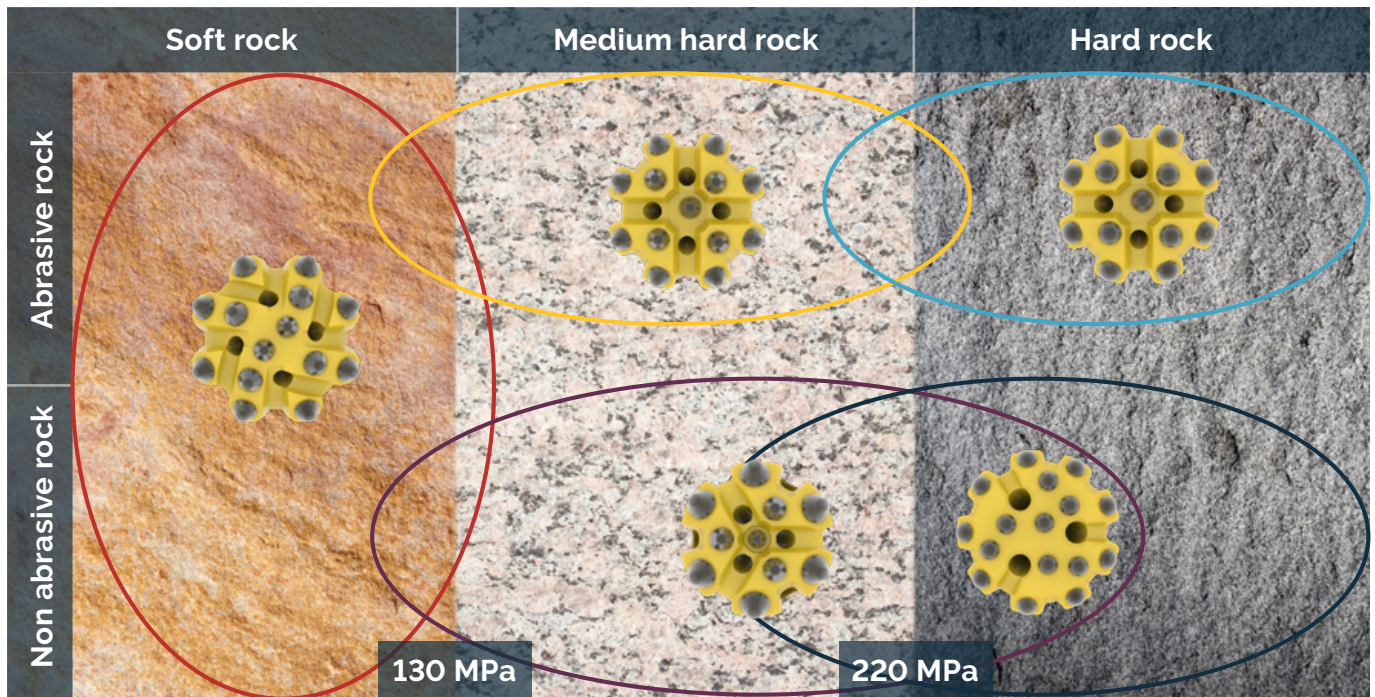




Bench drilling

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MRB bit-retrac

- Trubbnos buttons

The best choice for soft rock conditions. Trubbnos buttons and large vertical flushing grooves effectively remove larger chips, greatly increasing penetration rate. And more straightness by Retrac skirt.



Powerface bit

- Trubbnos buttons, heavy duty (HD)

Ideal for abrasive, medium hard to hard rock. Larger Trubbnos buttons and flushing grooves give the ideal balance between service life and penetration rate. Available with a short retrac for straight holes in broken rock.



Powerface bit

- Spherical buttons, standard or heavy duty (HD)

For tough conditions in hard and abrasive rock. Optimized face and body design and with standard or large spherical buttons for long service life. Available with a short retrac for straight holes in broken rock.



Powerface bit

- Trubbnos buttons

Designed for medium hard to hard rock. Trubbnos buttons provide better penetration rate than spherical buttons, and a longer service life than semi-ballistic ones. Available with a short retrac for straight holes in broken rock.



Flat face bit

- Spherical buttons, standard or heavy duty (HD)

Ideal for hard, medium abrasive rock. The flat face, with many spherical buttons, offer an optimized energy transfer. Available with a short retrac for straight holes in broken rock.

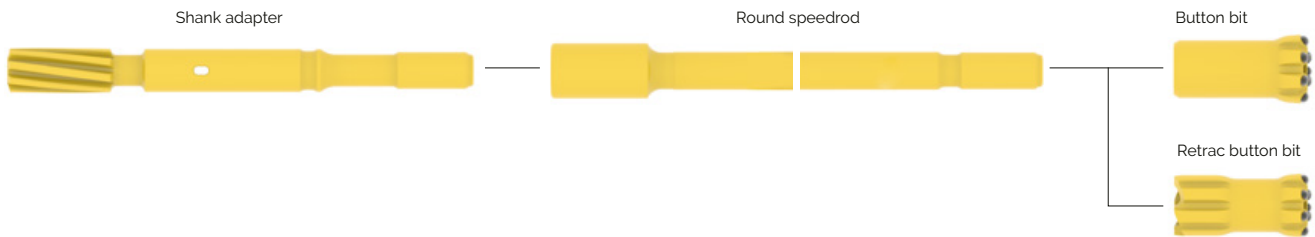


Dome bit

- Spherical or Trubbnos buttons

Can be used as an alternative to traditional reaming equipment in a pre-drilled hole and in all types of rock formations. Optimized face design for better removal of cuttings. Available with spherical or the effective Trubbnos buttons.

Drill string



Drill bits

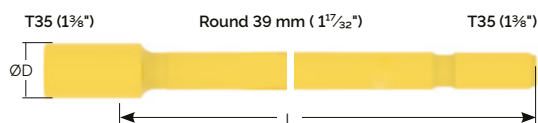


Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Ballistic													
90029204	133-5048-37-67.39-20	Flat Face	48	1 ⁷ / ₈ "	No	9	6x10	3x9	40°	-	1	3	87003486
Trubbnos													
90029827	133-5048-39-70.37-20	Flat Face	48	1 ⁷ / ₈ "	Yes	9	6x10	3x9	35°	-	3	3	87005313
90029823	133-6051-44-70.37-20	Power Face	51	2"	Yes	10	6x10	3x9, 1x7	35°	-	3	3	87003559
90029822	133-6054-44-70.37-20	Power Face	54	2 ¹ / ₈ "	Yes	10	6x11	3x9, 1x8	35°	-	3	3	87003559
90029786	133-6057-44-70.37-20	Power Face	57	2 ¹ / ₄ "	Yes	10	6x11	3x9, 1x8	35°	-	3	3	87003559
90029785	133-6064-21-44-70.57-20	Power Face	64	2 ¹ / ₂ "	Yes	10	6x12.7	3x10, 1x8	35°	-	3	3	87003487

Please note: that all button bits are manufactured over-sized 0.5-2.5 mm (it depends on the size of bit and buttons), meaning that for example a 45.0 mm bit is at least 45.5 mm as new, or the size of a 140.0 mm new bit can be 141.5 mm to 142.5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Speedrods

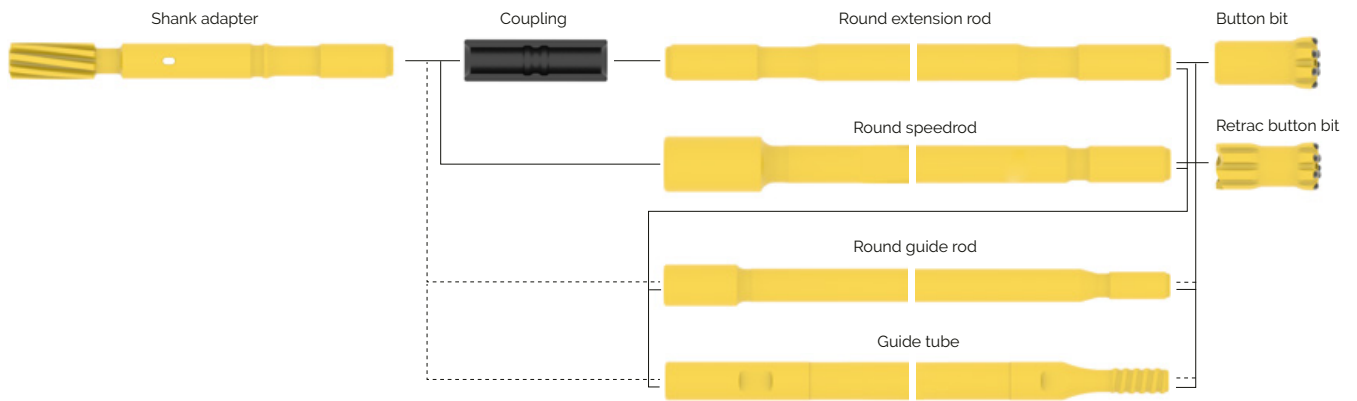


Fully carburized. D = 46 mm.
Flushing hole diameter 14.5 mm.

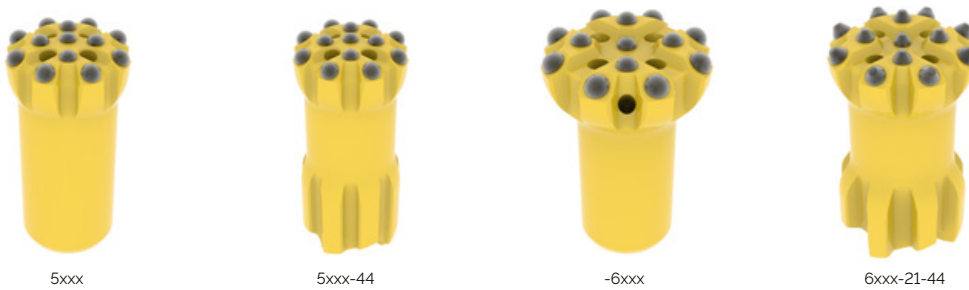
Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029245	233-4737-MF-C.02	3 660	12'	T35	C	Rnd39	39	14,5	46	No	Bottom drive
90029246	233-4743-MF-C.02	4 270	14'	T35	C	Rnd39	39	14,5	46	No	Bottom drive



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029467	135-6064-21-44.57-20	Power Face	64	2½"	Yes	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029693	135-5064.57-20	Flat Face	64	2½"	No	13	8x10	5x9	35°	-	-	4	87003953
90029712	135-6064-21.57-20	Power Face	64	2½"	No	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029753	135-5064-44.57-20	Flat Face	64	2½"	Yes	13	8x10	5x9	35°	-	-	4	87003953
90029690	135-6070-21-44.57-20	Power Face	70	2¾"	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029718	135-6070-21.57-20	Power Face	70	2¾"	No	13	8x11	5x10	35°	-	-	4	87003953
90029685	135-6076-21-44.57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003053
90029688	135-5076-44.57-20	Flat Face	76	3"	Yes	15	9x11	6x10	35°	-	-	3	87004433
90029689	135-5076.57-20	Flat Face	76	3"	No	15	9x11	6x10	35°	-	-	3	87004433
90029715	135-6076-21.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029681	135-6089-21-44.57-20	Power Face	89	3½"	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029684	135-5089.57-20	Flat Face	89	3½"	No	16	9x11	6x11	35°	-	-	3	87004434
90029716	135-6089-21.57-20	Power Face	89	3½"	No	13	8x12,7	5x12,7	35°	-	-	4	87004432
90029867	135-5089-44.57-20	Flat Face	89	3½"	Yes	16	9x11	6x11	35°	-	-	3	87004434
90029755	135-6102.57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029788	135-5102.57-20	Flat Face	102	4"	No	14	9x14,5	5x12,7	35°	-	-	3	87004775
90029789	135-5102-42-24.57-20	Dome bit	102	4"	No	17	16x12,7	1x12,7	35°	-	1	2	87003953
90029784	135-5127-42-24.57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775
90029787	135-9127-51.57-20	Hole opener	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
Trubbnos													
90029466	135-6064-21-44-70.57-20	Power Face	64	2½"	Yes	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029694	135-5064-70.57-20	Flat Face	64	2½"	No	13	8x10	5x9	35°	-	-	4	87003953
90029713	135-6064-21-70.57-20	Power Face	64	2½"	No	10	6x12,7	3x10, 1x8	35°	-	3	3	87003487
90029691	135-6070-21-44-70.57-20	Power Face	70	2¾"	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029686	135-6076-44-70.57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	2	4	87003953
90029687	135-6076-21-44-70.57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029714	135-6076-70.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029717	135-6076-21-70.57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	-	4	87003953
90029757	135-6076-44-70.57-12	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	-	4	87003953
90029682	135-6089-44-70.57-20	Power Face	89	3½"	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029719	135-6089-21-70.57-20	Power Face	89	3½"	No	13	8x12,7	5x12,7	35°	-	-	4	87004432
90029756	135-6102-70.57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029783	135-5127-42-24-70.57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	1	3	87004775

Extension rods

R/T38 (1½") round rod



Fully carburized or surface hardened.
Flushing hole diameter 14,5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90002957	235-2718-C.02	1 830	6'	T38	C	Rnd38	38	14,5	-	Yes	Bottom drive
90515289	235-4731-SH.03	3 050	10'	T38	SH	Rnd38	38	14,5	-	No	Bottom drive
90001962	235-0531-C.02	3 050	10'	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90002310	235-2731-SH.03	3 050	10'	T38	SH	Rnd38	38	14,5	-	Yes	Bottom drive
90515288	235-4737-SH.03	3 660	12'	T38	SH	Rnd38	38	14,5	-	No	Bottom drive
90002682	235-2737-SH.03	3 660	12'	T38	SH	Rnd38	38	14,5	-	Yes	Bottom drive
90503196	235-2740-SH.03	4 000	13'1½'	T38	SH	Rnd38	38	14,5	-	Yes	Bottom drive
90510050	235-0540-C.02	4 000	13'1½'	T38	C	Hex32	35,8	9,6	-	No	Bottom drive
90515291	235-4743-SH.03	4 270	14'	T38	SH	Rnd38	38	14,5	-	No	Bottom drive

Speedrods

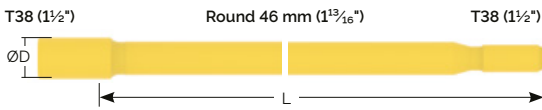
T38 (1½") round Speedrod



Fully carburized. D = 57 mm
Flushing hole diameter 14,5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90510857	235-4706-MF-C.02	600	1'11½"	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510718	235-4709-MF-C.02	915	3'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90502325	235-2712-MF-C.02	1 220	4'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510719	235-4712-MF-C.02	1 220	4'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510720	235-4715-MF-C.02	1 525	5'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90510721	235-4718-MF-C.02	1 830	6'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90504397	235-2724-MF-C.02	2 400	7'10½"	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90500630	235-2731-MF-C.02	3 050	10'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510723	235-4731-MF-C.02	3 050	10'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515312	235-4731-MF.29	3 050	10'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90502628	235-2737-MF-C.02	3 660	12'	T38	C	Rnd38	38	14,5	57	Yes	Bottom drive
90510724	235-4737-MF-C.02	3 660	12'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515315	235-4737-MF.29	3 660	12'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90510725	235-4743-MF-C.02	4 270	14'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515570	235-4743-MF.29	4 270	14'	T38	SH	Rnd38	38	14,5	57	No	Bottom drive
90510726	235-4749-MF-C.02	4 880	16'	T38	C	Rnd38	38	14,5	57	No	Bottom drive
90515571	235-4749-MF.29	4 880	16'	T38	SH	Rnd45	45	17	65	No	Bottom drive

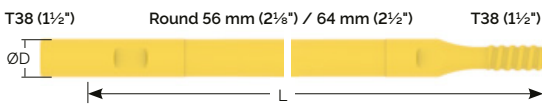
Guide rod



Fully carburized and surface hardened. D = 57 mm
Flushing hole diameter 17,0 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515575	235-4937-MF,29	3 660	12'	T38	SH	Rnd45	45	17	65	No	Bottom drive

TDS - Guide Tube



Fully carburized

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
94502648	235-7012,10	1 220	4'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000051	235-7015,10	1 525	5'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000052	235-7018,10	1 830	6'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000053	235-7031,10	3 050	10'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94000054	235-7037,10	3 660	12'	T38	C	Rnd56	56	43	64	Yes	Bottom drive
94502622	235-6937,10	3 660	12'	T38	C	Rnd64	64	46	46	Yes	Bottom drive

Couplings



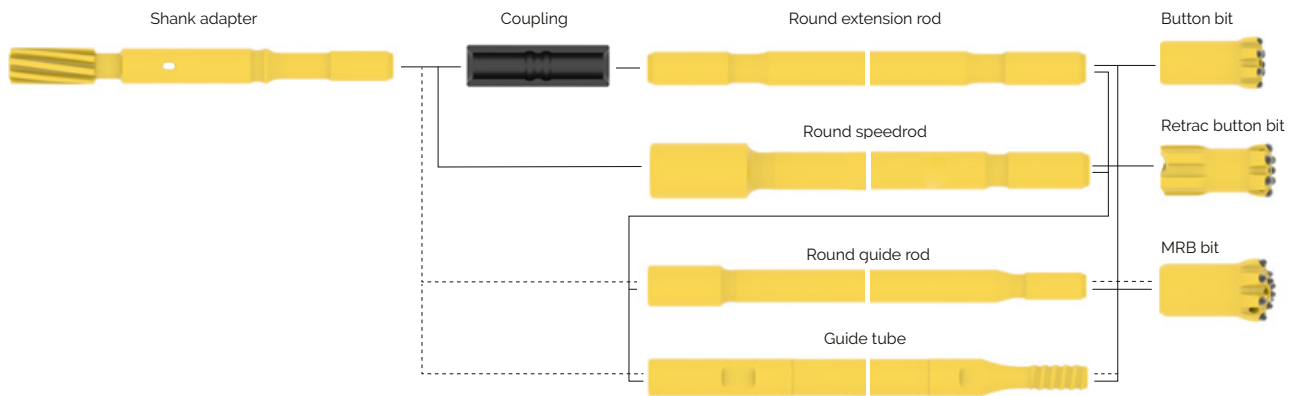
Central stop



Full bridge stop

Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90515733	304-0055,10	R38-Rnd55 coupling	55	2 1/8"	170	6 3/4"	Standard	1.7
90515734	304-0055-57,10	R38-Rnd55 coupling-full bridge	55	2 1/8"	180	7 1/8"	Full bridge	2
90515736	335-0052,10	T38-Rnd52 coupling	52	2"	190	7 1/2"	High frequency drifters	1.7
90515737	335-0055,10	T38-Rnd55 coupling	55	2 1/8"	190	7 1/2"	Standard	1.9
90515738	335-0055-57,10	T38-Rnd52 coupling-full bridge	55	2 1/8"	180	7 1/8"	Full bridge	2

Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029395	136-6070-21-44,57-20	Power Face	70	2 ³ / ₄ "	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029357	136-6076-21-44,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029370	136-5076-44,57-20	Flat Face	76	3"	Yes	15	9x11	6x10	35°	-	-	3	87004433
90029371	136-5076,57-20	Flat Face	76	3"	No	15	9x11	6x10	35°	-	-	3	87004433
90029377	136-6076-21,57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	2	4	87003953
90029360	136-6089-21,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029364	136-6089-21-44,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029366	136-5089-44,57-20	Flat Face	89	3 ¹ / ₂ "	Yes	16	9x11	7x11	35°	-	-	3	87004434
90029367	136-5089,57-20	Flat Face	89	3 ¹ / ₂ "	No	16	9x11	7x11	35°	-	-	3	87004434
90029403	136-5102-44,57-20	Flat Face	102	4"	Yes	16	9x14,5	7x12,7	35°	-	-	3	87004775
90029404	136-5102,57-20	Flat Face	102	4"	No	16	9x14,5	7x12,7	35°	-	-	3	87004775
90029408	136-6102-21,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029413	136-6102-21-44,57-20	Power Face	102	4"	Yes	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029601	136-6115,57-20	Power Face	115	4 ¹ / ₂ "	No	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029602	136-6115-44,57-20	Power Face	115	4 ¹ / ₂ "	Yes	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029604	136-6127-21,57-20	Power Face	127	5"	No	17	8x15,8	4x15,8, 5x11	35°	-	2	4	87003953
90029607	136-5127-42-24,57-20	Dome bit	127	5"	No	19	18x12,7	1x12,7	35°	-	-	3	87004775
90029802	136-9127-51,57-20	Hole opener	127	5"	No	17	8x15,8	6x15,8, 3x11	25°	-	-	2	87003500
90029606	136-5152-42-24,57-20	Dome bit	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775
Trubbnos													
90029614	136-6066-21-44-70,57-20	Power Face	66	2 ⁵ / ₈ "	Yes	10	6x12,7	3x10, 1x8	35°	-	-	3	87003487
90029394	136-6070-21-44-70,57-20	Power Face	70	2 ³ / ₄ "	Yes	13	8x11	5x10	35°	-	-	4	87003953
90029409	136-6070-21-70,57-20	Power Face	70	2 ³ / ₄ "	No	13	8x11	5x10	35°	-	-	4	87003953
90029351	136-6076-21-70,57-20	Power Face	76	3"	No	13	8x12,7	5x11	35°	-	2	4	87003953
90029352	136-6076-70,57-20	Power Face	76	3"	No	13	8x12	5x11	35°	-	2	4	87003953
90029354	136-6076-21-44-70,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029376	136-6076-44-70,57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	2	4	87003953
90029737	136-6076-21-44-70,57-12	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	2	4	87003953
90029833	136-6076-44-70-99,57-20	Power Face	76	3"	Yes	13	8x12	5x11	35°	-	-	4	87003953
90029835	136-6076-21-44-70-99,57-20	Power Face	76	3"	Yes	13	8x12,7	5x11	35°	-	-	4	87003953
5697001733	136-5076-47-44-70,56-20	MRB	76	3"	Yes	14	8x11	6x10	40°	20°	2	4	-
90029615	136-6083-44-70,57-20	Power Face	83	3 ³ / ₈ "	Yes	13	8x12	5x12	35°	-	-	4	87004432
90029361	136-6089-70,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12	5x12	35°	-	2	4	87004432
90029362	136-6089-21-44-70,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029363	136-6089-21-70,57-20	Power Face	89	3 ¹ / ₂ "	No	13	8x12,7	5x12,7	35°	-	2	4	87004432
90029365	136-6089-44-70,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029840	136-6089-44-70-99,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12	5x12	35°	-	-	4	87004432
90029841	136-6089-21-44-70-99,57-20	Power Face	89	3 ¹ / ₂ "	Yes	13	8x12,7	5x12,7	35°	-	-	4	87004432
5697001734	136-5089-47-44-70,56-20	MRB	89	3 ¹ / ₂ "	Yes	14	8x12,7	4x12,7, 2x11	40°	20°	2	4	87004432
90029405	136-6102-21-70,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029407	136-6102-70,57-20	Power Face	102	4"	No	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029411	136-6102-44-70,57-20	Power Face	102	4"	Yes	13	8x14,5	5x12,7	35°	-	2	4	87004435
90029412	136-6102-21-44-70,57-20	Power Face	102	4"	Yes	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029925	136-5102-47-70,57-20	MRB	102	4"	No	14	8x14,5	4x12,7, 2x11	40°	20°	2	4	87004432
90029603	136-6115-70,57-20	Power Face	115	4 ¹ / ₂ "	No	13	8x14,5	5x12,7	35°	-	2	4	87003952
90029605	136-5152-42-70,57-20	Dome bit	152	6"	No	20	18x14,5	2x14,5	35°	-	-	3	87004775

Speedrods

T45 (1 3/4") round Speedrod



Fully carburized. D = 65 mm
Flushing hole diameter 17,0 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029899	236-4906-MF-C.02	600	1'11 1/8"	T45	C	Rnd45	45	17	65	No	Bottom drive
90503096	236-2912-MF-C.02	1 220	4'	T45	C	Rnd45	45	17	65	Yes	Bottom drive
90510730	236-4915-MF-C.02	1 525	5'	T45	C	Rnd45	45	17	65	No	Bottom drive
90510731	236-4918-MF-C.02	1 830	6'	T45	C	Rnd45	45	17	65	No	Bottom drive
90515313	236-4937-MF.29	3 660	12'	T45	SH	Rnd45	45	17	65	No	Bottom drive
90510734	236-4943-MF-C.02	4 270	14'	T45	C	Rnd45	45	17	65	No	Bottom drive
90515316	236-4943-MF.29	4 270	14'	T45	SH	Rnd45	45	17	65	No	Bottom drive
90515568	236-4948-MF.29	4 800	15'9"	T45	SH	Rnd45	45	17	65	No	Bottom drive

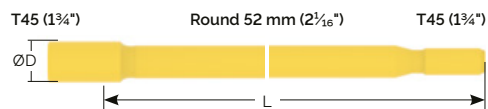
Rod adapter



Fully carburized.
To be used together with female/female guide tube.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90515671	236-4902-C.10	200	7 7/8"	T45	C	Rnd45	45	17	65	No	Bottom drive

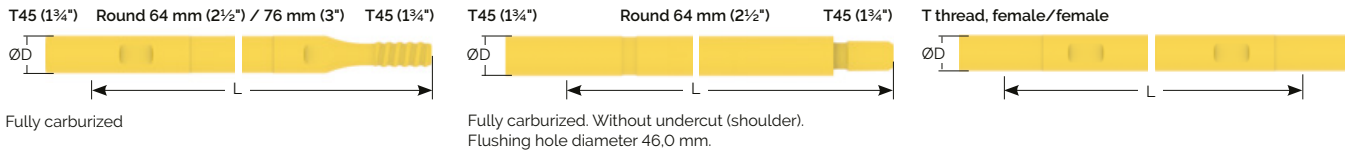
Guide rods



Fully carburized. D = 65 mm
Flushing hole diameter 21.5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90513771	236-5137-MF-C.02	3 660	12'	T45	C	Rnd51	52	21.5	64	No	Bottom drive
90514785	236-5143-MF-C.02	4 270	14'	T45	C	Rnd51	52	21.5	64	No	Bottom drive

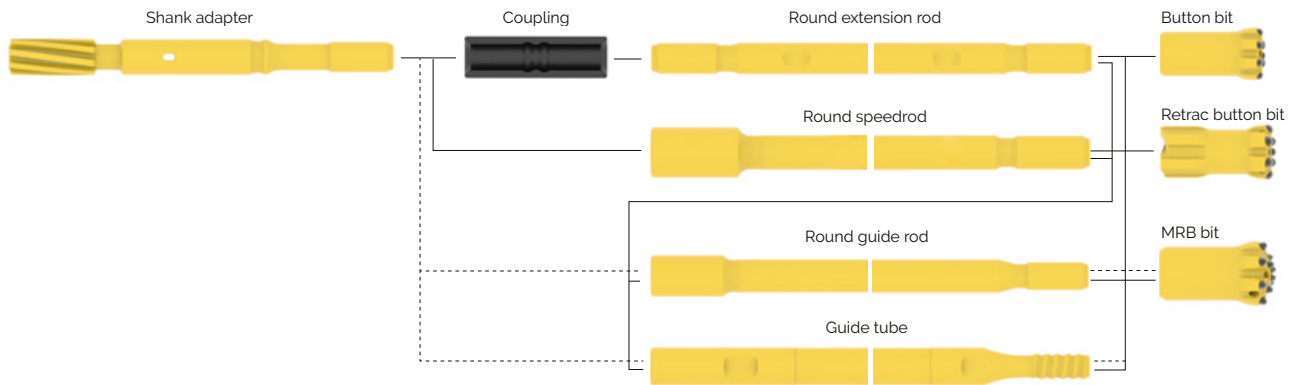
Guide tubes



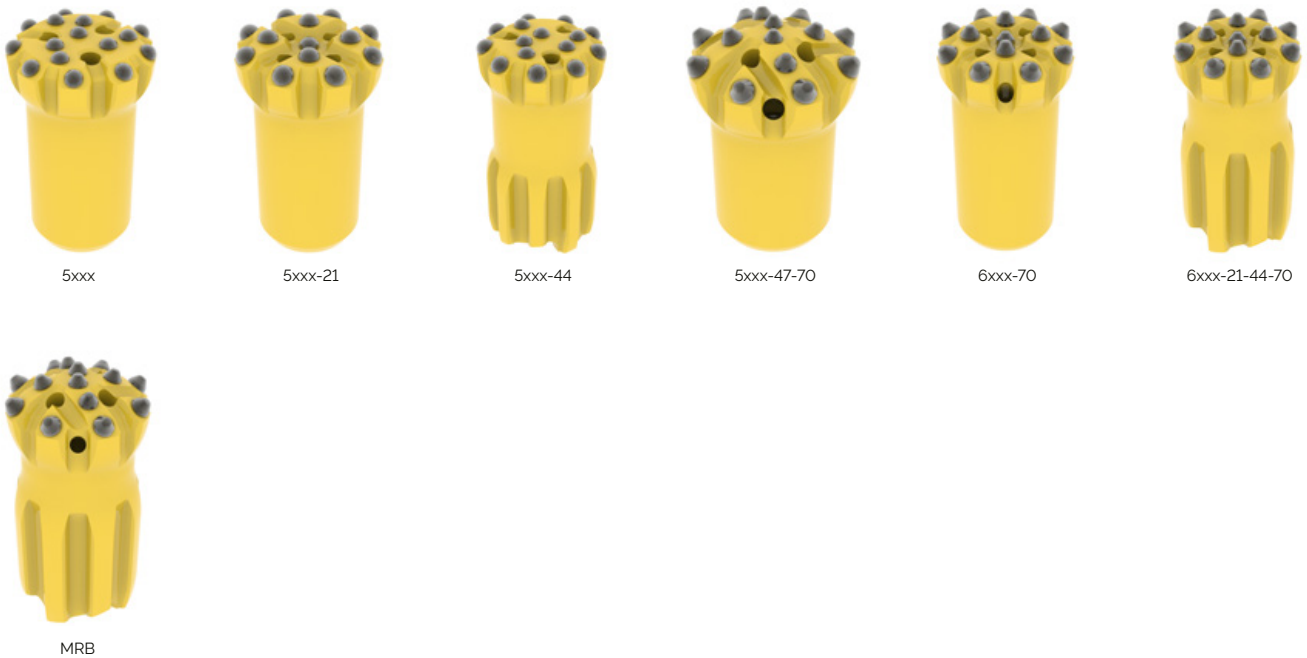
Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
94502687	236-6912.10	1 220	4'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94000047	236-6915.10	1 525	5'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
90003636	236-6915-87.10	1 525	5'	T45	C	Rnd64	64	46	64	No	Bottom drive
94502656	236-6618.10	1 830	6'	T45	C	Rnd76	76	50	76	Yes	Bottom drive
94000046	236-6918.10	1 830	6'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94502714	236-6918-87.10	1 830	6'	T45	C	Rnd64	64	46	64	No	Bottom drive
90510814	236-6918-36.10	1 830	6'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94000050	236-6937.10	3 660	12'	T45	C	Rnd64	64	46	64	Yes	Bottom drive
94502627	236-6637.10	3 660	12'	T45	C	Rnd76	76	50	76	Yes	Bottom drive



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029733	137-6076-21.57-20	Power Face	76	3"	No	13	8x12.7	5x11	35°	-	-	4	87003953
90029731	137-6083-44.57-20	Power Face	83	3 3/8"	Yes	13	12x11	1x9	35°	-	2	4	87004432
90029402	137-5089-44.57-20	Flat Face	89	3 1/2"	Yes	16	9x11	7x11	35°	-	-	3	87004434
90029415	137-6089-21-44.57-20	Power Face	89	3 1/2"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029417	137-5089.57-20	Flat Face	89	3 1/2"	No	16	9x11	7x11	35°	-	-	3	87004434
90029419	137-6089-21.57-20	Power Face	89	3 1/2"	No	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029057	137-6102-44.49-12	Drop Center	102	4"	Yes	14	8x12.7	6x12.7	35°	-	-	4	87003952
90029400	137-6102-21.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029423	137-6102-21-44.57-20	Power Face	102	4"	Yes	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029424	137-5102-44.57-20	Flat Face	102	4"	Yes	16	9x14.5	7x12.7	35°	-	-	3	87004775
90029425	137-5102.57-20	Flat Face	102	4"	No	16	9x14.5	7x12.7	35°	-	-	3	87004775
90029428	137-6115-21-44.57-20	Power Face	115	4 1/2"	Yes	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029429	137-5115-44.57-20	Flat Face	115	4 1/2"	Yes	16	9x14.5	7x14.5	35°	-	-	3	87004775
90029432	137-5115.57-20	Flat Face	115	4 1/2"	No	16	9x14.5	7x14.5	35°	-	-	3	87004775
90029438	137-6115-21.57-20	Power Face	115	4 1/2"	No	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029427	137-6127-21.57-20	Power Face	127	5"	No	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029437	137-6127-21-44.57-20	Power Face	127	5"	Yes	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029439	137-5127-44.57-20	Flat Face	127	5"	Yes	19	9x14.5	10x14.5	35°	-	-	3	87004775
90029444	137-5127.57-20	Flat Face	127	5"	No	19	9x14.5	10x14.5	35°	-	-	3	87004775
90029735	137-6140-21.57-20	Power Face	140	5 1/2"	No	19	10x15.8	9x14.5	35°	-	-	5	87004571
90029736	137-6152-21.57-20	Power Face	152	6"	No	19	10x15.8	9x14.5	35°	-	-	5	87004572
90029766	137-5152-42-24.57-20	Dome bit	152	6"	No	20	18x14.5	2x14.5	35°	-	-	3	87004775
Trubbnos													
90029414	137-6089-21-44-70.57-20	Power Face	89	3 1/2"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029416	137-6089-44-70.57-20	Power Face	89	3 1/2"	Yes	13	8x12	5x12	35°	-	2	4	87004432
90029418	137-6089-21-70.57-20	Power Face	89	3 1/2"	No	13	8x12.7	5x12.7	35°	-	2	4	87004432
90029420	137-6089-70.57-20	Power Face	89	3 1/2"	No	13	8x12	5x12	35°	-	2	4	87004432
5697001821	137-5089-47-44-70.56-20	MRB	89	3 1/2"	Yes	14	8x12.7	4x12.7, 2x11	40°	20°	2	4	87004432
90029734	137-6092-44-70.57-20	Power Face	92	3 5/8"	Yes	13	8x12.7	5x12.7	35°	-	-	4	87003560
90029969	137-6095-44-70.57-20	Power Face	95	3 3/4"	Yes	13	8x12.7	5x12.7	35°	-	2	4	87003560
90029398	137-6102-70.57-20	Power Face	102	4"	No	13	8x14.5	5x12.7	35°	-	2	4	87004435
90029399	137-6102-21-70.57-20	Power Face	102	4"	No	13	8x15.8	5x12.7	35°	-	2	4	87004435
90029421	137-6102-44-70.57-20	Power Face	102	4"	Yes	13	8x14.5	5x12.7	35°	-	2	4	87004435
90029422	137-6102-21-44-70.57-20	Power Face	102	4"	Yes	13	8x15.8	5x12.7	35°	-	2	4	87004435
5697001822	137-5102-47-70-44.56-20	MRB	102	4"	Yes	14	8x14.5	4x12.7, 2x11	40°	20°	2	4	
90029401	137-6115-21-44-70.57-20	Power Face	115	4 1/2"	Yes	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029426	137-6115-44-70.57-20	Power Face	115	4 1/2"	Yes	13	8x14.5	5x14.5	35°	-	2	4	87003952
90029434	137-6115-21-70.57-20	Power Face	115	4 1/2"	No	13	8x15.8	5x14.5	35°	-	2	4	87003952
90029436	137-6115-70.57-20	Power Face	115	4 1/2"	No	13	8x14.5	5x14.5	35°	-	2	4	87003952
90029430	137-6127-70.57-20	Power Face	127	5"	No	17	8x14.5	4x14.5, 5x11	35°	-	2	4	87003953
90029431	137-6127-21-70.57-20	Power Face	127	5"	No	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029433	137-6127-21-44-70.57-20	Power Face	127	5"	Yes	17	8x15.8	4x15.8, 5x11	35°	-	2	4	87003953
90029435	137-6127-44-70.57-20	Power Face	127	5"	Yes	17	8x14.5	4x14.5, 5x11	35°	-	2	4	87003953

Extension rods

T51 (2") round rod



Surface hardened.
Flushing hole diameter 21.5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90002746	237-3137-SH.03	3 660	12'	T51	SH	Rnd51	51	21.5	-	Yes	Bottom drive
90515299	237-5137-SH.03	3 660	12'	T51	SH	Rnd51	51	21.5	-	No	Bottom drive
90515301	237-5161-SH.03	6 095	20'	T51	SH	Rnd51	51	21.5	-	No	Bottom drive
90515302	237-5174-SH.03	7 400	24 3/8'	T51	SH	Rnd51	51	21.5	-	No	Bottom drive

Speedrods

T51 (2") round Speedrod



Fully carburized. D = 72 mm
Flushing hole diameter 21.5 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90510737	237-5115-MF-C.02	1 525	5'	T51	C	Rnd51	51	21.5	72	No	Bottom drive
90510738	237-5118-MF-C.02	1 830	6'	T51	C	Rnd51	51	21.5	72	No	Bottom drive
90515311	237-5137-MF.29	3 660	12'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90515314	237-5143-MF.29	4 270	14'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90029739	237-5149-MF.29	4 880	16'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive
90515557	237-5161-MF.29	6 095	20'	T51	SH	Rnd51	51	21.5	72	No	Bottom drive

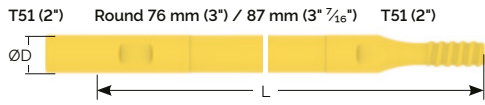
Rod adapter



Fully carburized.
To be used together with female/female guide tube.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90514708	237-5102-C.10	200	7 7/8"	T51	C	Rnd51	51	21.5	-	No	Bottom drive

Guide tubes

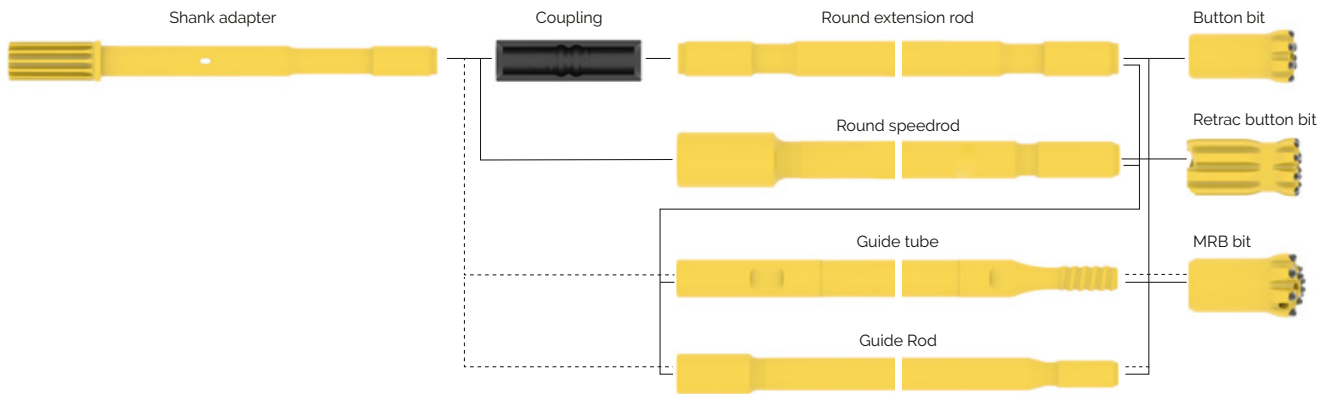


Fully carburized

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch				mm	mm	mm		
90514203	237-6618-87,10	1 830	6'	T51	C	Rnd76	76	50	76	No	Bottom drive
94502624	237-6618,10	1 830	6'	T51	C	Rnd76	76	50	76	Yes	Bottom drive
90513888	237-6637-37,10	3 660	12'	T51	C	Rnd76	76	50	76	Yes	Bottom drive
94502641	237-6637,10	3 660	12'	T51	C	Rnd76	76	66	76	Yes	Bottom drive
94502707	237-6837,10	3 660	12'	T51	C	Rnd87	87	66	87	Yes	Bottom drive



Drill string



Drill bits



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.

Drill bits

Product no.	Product code	Front shape	Bit diameter		Retrac	No. of buttons	Buttons x button diameter		Buttons angle		Flushing hole		Indexing template for grinding
			mm	inch			mm gauge	mm center	Gauge	Center	Side	Center	
Spherical													
90029705	158-6095-21-44,57-20	Power Face	95	3 ³ / ₈ "	Yes	13	8x14,5	5x12,7	35°	-	2	4	87003560
90029781	158-5095-44-99,57-20	Flat Face	95	3 ³ / ₈ "	Yes	17	9x12,7	8x11	35°	-	-	1	87004775
90029702	158-6095-44,57-20	Power Face	95	3 ³ / ₈ "	Yes	16	9x12,7	6x12,7	35°	-	2	3	87004775
90029447	158-6102-21,57-20	Power Face	102	4"	No	13	8x15,8	5x12,7	35°	-	2	4	87004435
90029450	158-6102-21-44,57-20	Power Face	102	4"	Yes	13	8x15,8	5x12,7	35°	-	2	4	87004435
5697002203	158-6102-21-44-99,57-20	Power Face	102	4"	Yes	13	8x15,83	5x12,7	35°	-	-	4	
90029695	158-6115-21,57-20	Power Face	115	4 ¹ / ₂ "	No	13	8x15,8	5x14,5	35°	-	2	4	87003952
90029698	158-6115-21-44,57-20	Power Face	115	4 ¹ / ₂ "	Yes	13	8x15,8	5x14,5	35°	-	2	4	87993952
90029700	158-5115-21-44,57-20	Flat Face	115	4 ¹ / ₂ "	Yes	16	9x15,8	7x12,7	35°	-	-	3	87004475
90029670	158-6127-21-44,57-20	Power Face	127	5"	Yes	17	8x15,8	4x15,8, 5x11	35°	-	2	4	87003953
90029707	158-6127-21,57-20	Power Face	127	5"	No	17	8x15,8	4x15,8, 5x11	35°	-	2	4	87003953
5697002583	158-5127-44,57-20	Flat Face	127	5"	No	19	9x15,83	9x14,5	35°	-	-	3	
90029668	158-6140-21-44,57-20	Power Face	140	5 ¹ / ₂ "	Yes	19	10x15,8	9x14,5	35°	-	2	5	87004571
90029662	158-6152-21,57-20	Power Face	152	6"	No	19	15x15,8	4x14,5	35°	-	2	5	87004572
90029664	158-6152-21-44,57-20	Power Face	152	6"	Yes	19	15x15,8	4x14,5	35°	-	2	5	87004572
Trubbnos													
90029711	158-6092-21-70,57-20	Power Face	92	3 ³ / ₈ "	No	13	8x14,5	5x12,7	35°	-	2	4	87003560
90029701	158-6095-21-44-70,57-20	Power Face	95	3 ³ / ₈ "	Yes	13	8x14,5	5x12,7	35°	-	2	4	87003560
90029449	158-6102-44-70,57-20	Power Face	102	4"	Yes	13	8x14,5	5x12,7	35°	-	2	4	87004435
5697001879	158-5102-44-47-70,56-20	MRB	102	4"	Yes	14	8x14,5	4x12,7/ 2x10,95	40	20	2	4	87004432
90029696	158-6115-21-44-70,57-20	Power Face	115	4 ¹ / ₂ "	Yes	13	8x15,8	5x14,5	35°	-	2	4	87003952
5697001880	158-5115-44-47-70,56-20	MRB	115	4 ¹ / ₂ "	Yes	14	8x14,5	6x14,5	40	20	2	4	87004432
90029672	158-6127-21-44-70,57-20	Power Face	127	5"	Yes	17	8x15,8	4x15,8, 5x11	35°	-	2	4	87003953
90029751	158-6140-21-44-70,57-20	Power Face	140	5 ¹ / ₂ "	Yes	19	10x15,8	9x14,5	35°	-	2	5	87004571

Speedrods

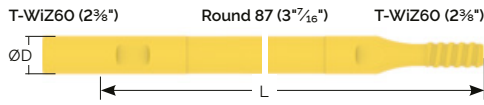
T-WiZ60 (2³/₈") round Speedrod



Fully carburized. D = 85 mm
Flushing hole diameter 22,6 mm.

Product no.	Product code	Rod length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch								
90029922	258-6012-MF-C.02	1 220	4'	T-WiZ60	C	Rnd60	60	22,6	85	No	Bottom drive
90029107	258-6037-MF-C.02	3 630	11'10 ³ / ₄ "	T-WiZ60	C	Rnd60	60	22,6	85	No	Bottom drive
90029071	258-6043-MF-C.02	4 240	13'10 ³ / ₄ "	T-WiZ60	C	Rnd60	60	22,6	85	No	Bottom drive
90029108	258-6061-MF-C.02	6 065	19'10 ³ / ₄ "	T-WiZ60	C	Rnd60	60	22,6	85	No	Bottom drive

Guide tubes



Fully carburized.

Product no.	Product code	Length		Shank thread	Carburized or surface hardened	Shape	Section	Flushing hole	Coupling D	Wrench flat	Strike face contact type
		mm	foot/inch				mm	mm	mm		
90029324	258-6618.10	1 830	6'	T-WiZ60	C	Rnd76	76	22,6	76	No	Bottom drive
90029101	258-6837.10	3 630	11'10 ⁷ / ₈ '	T-WiZ60	C	Rnd87	87	22,6	87	No	Bottom drive
90029100	258-6843.10	4 240	13'10 ⁷ / ₈ '	T-WiZ60	C	Rnd87	87	22,6	87	No	Bottom drive
90029310	258-6643.10	4 240	13'10 ⁷ / ₈ '	T-WiZ60	C	Rnd76	76	22,6	76	No	Bottom drive
90029540	258-6843-58.10	4 240	13'10 ⁷ / ₈ '	T-WiZ60	C	Rnd87	87	22,6	87	No	Bottom drive
90029149	258-6861.10	6 065	19'10 ³ / ₄ '	T-WiZ60	C	Rnd87	87	22,6	87	No	Bottom drive

Coupling



Full bridge stop

Product no.	Product code	Short description	Diameter		Length		Feature	Weight
			mm	inch	mm	inch		kg
90029135	358-0085-57.10	T-WiZ60-Rnd85 coupling-full bridge	85	3 ³ / ₈ '	275	10 ³ / ₄ '	Full bridge	7,2



T-WiZ

BLÅKLÄDD

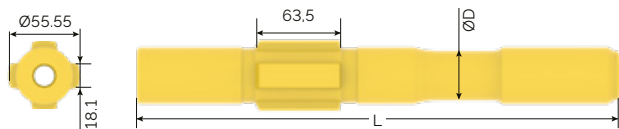
Shank adapters

Epiroc	138
Yamamoto	158
Boart	159
Bohler, Cannon, Furukawa	160
Furukawa	161
Furukawa, Gardner Denver	162
Gardner Denver	163
Ingersoll Rand	164
Joy, Krupp	167
Krupp, Montabert	168
Montabert	169
Secoma, SIG, Permon	173
Sandvik	174





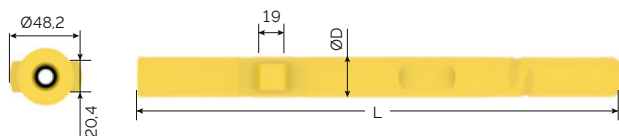
VL 140



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at striking face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90516127	436-03251.10	T45	381	44	-	Straight	63,5	55,55	18,1	Standard
90516116	435-03254.10	T38	446	44	-	Straight	63,5	55,55	18,1	Standard
90516115	435-03251.10	T38	381	44	-	Straight	63,5	55,55	18,1	Standard
90516095	404-03251.10	R38	381	44	-	Straight	63,5	55,55	18,1	Standard
90516084	403-03251.10	R32	381	44	-	Straight	63,5	55,55	18,1	Standard

Shank seal: 9000046

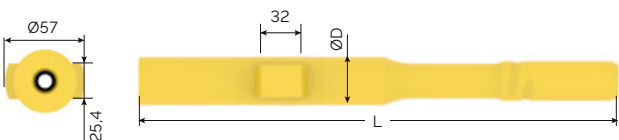
BBC 42, 44, 100



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at striking face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Drifting										
90515858	403-00131.10	R32	380	32	32	Straight	19	48,2	20,4	Standard

Shank seal: 90002571

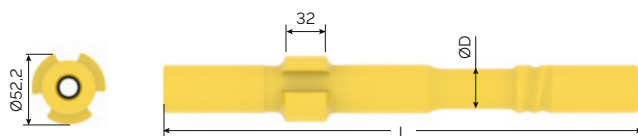
BBC 54, 120



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Drifting										
90516156	403-01131.10	R32	380	38	38	Straight	32	57	25,4	Standard
90516180	435-01131.10	T38	390	38	38	Straight	32	57	25,4	Standard

Shank seal: 90002571

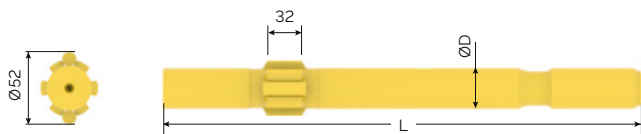
COP 125, 130, 131



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90515979	435-02652.10	T38	380	38	36,6	Straight	32	52,2	NA	Standard

Shank seal: 90000466

COP 131

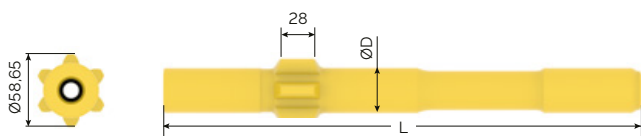


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Drifting and Production drilling

90515993	435-12801.10	T38	445	38,3	38	Straight	32	52	13,4	Standard
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COP 131EB



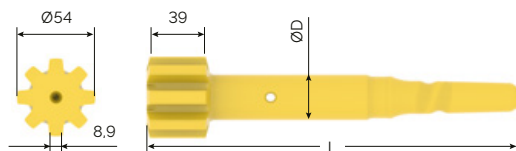
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Drifting and Production drilling

90516192	435-09951.10	T38	405	38	38	Straight	28	58,65	NA	Standard
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Shank seal: 90000466

COP 628

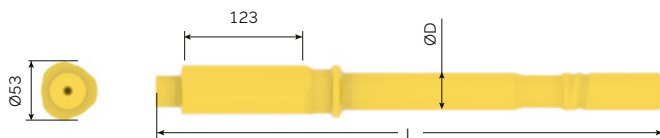


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bolting

90003677	425-18201.10	SR28	245	30	38,4	Straight	39	54	8,9	Standard
90029567	424-18201.10	SR25	245	30	38,4	Straight	39	54	8,9	Standard

COP 925/928, 932/938 with collar

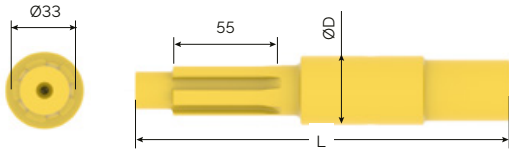


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Drifting, Bench and Production drilling

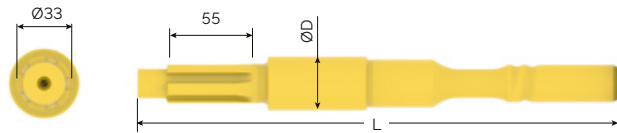
90516119	435-07603.10	T38	510	38	32	Straight	123	53	NA	Standard
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COP 1028



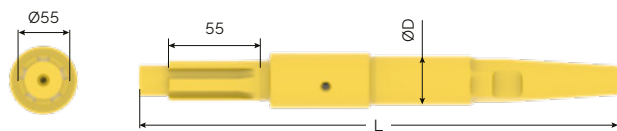
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90515857	402-07201-F,10	R25	245	45	25	Straight	55	33	7	Female
90515865	407-07201-F,10	R28	245	45	25	Straight	55	33	7	Female

COP 1028



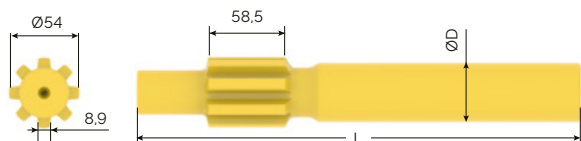
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90515860	403-07202,10	R32	400	45	25	Straight	55	33	7	Standard
90515866	407-07202,10	R28	400	45	25	Straight	55	33	7	Standard
90515870	425-07202,10	SR28	400	45	25	Straight	55	33	7	Standard
90516485	426-07202,10	SR32	400	45	25	Straight	55	33	7	Standard

COP 1028 HB , 7°



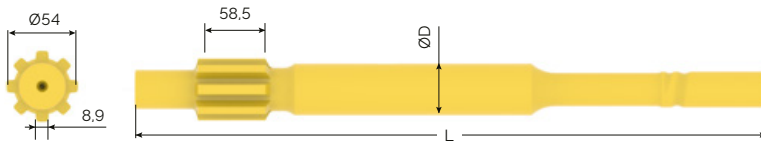
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90029763	489-07203,10	Tapered 7°	397	45	25	Straight	55	33	7	Standard

COP 1032



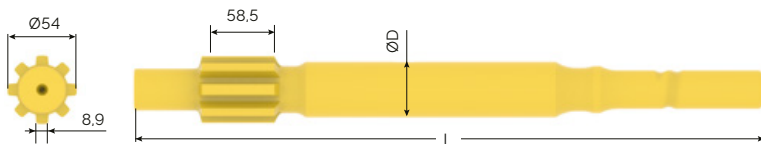
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90515883	403-02002-F,10	R32	340	45	34	Straight	58,5	54	8,9	Female

COP 1032



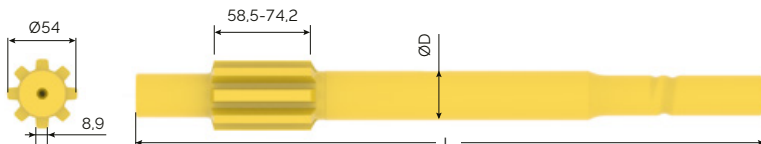
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90515884	403-02003.10	R32	550	45	34	Straight	58,5	54	8,9	Standard
90515977	435-02003.10	T38	550	45	34	Straight	58,5	54	8,9	Standard

COP 1032



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515885	403-02006.10	R32	510	45	34	Straight	58,5	54	8,9	Standard
90515978	435-02006.10	T38	510	45	34	Straight	58,5	54	8,9	Standard

COP 1036, 1038, 1238



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515890	403-03004.10	R32	485	38	8.9	Straight	58,5	54	8,9	Standard
90515961	404-03004.10	R38	485	38	8.9	Straight	58,5	54	8,9	Standard
90515983	435-03004.10	T38	485	38	8.9	Straight	74,2	54	8,9	Standard

COP 1036, 1038, 1238



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90515887	403-03002.10	R32	500	38	34	Straight	74	54	8,9	Standard
90515980	435-03002.10	T38	500	38	34	Straight	74	54	8,9	Standard
90515995	436-03002.10	T45	500	38	34	Straight	74	54	8,9	Standard

COP 1036, 1038, 1238



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench and Production drilling

90515888	403-03003.10	R32	575	38	34	Straight	74	54	8,9	Standard
90515899	404-03003.10	R38	575	38	34	Straight	74	54	8,9	Standard
90515981	435-03003.10	T38	575	38	34	Straight	74	54	8,9	Standard
90515996	436-03003.10	T45	575	38	34	Straight	74	54	8,9	Standard
90515889	403-03003-13.10	R32	575	45	34	Straight	74	54	8,9	Standard
90515982	435-03003-13.10	T38	575	38	34	Straight	74	54	8,9	Standard

COP 1238 SDA



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90516081	403-03006-F.10	R32	700	52	34	Straight	74	54	8,9	Female thread
90516094	404-03006-F.10	R38	710	52	34	Straight	74	54	8,9	Female thread

COP RR11



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

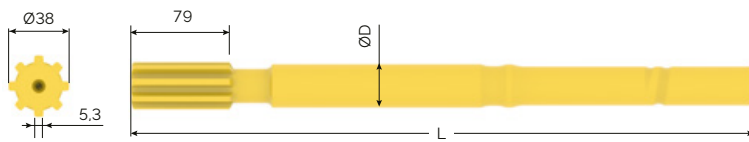
5697001914	402-19003-F.10	R25	480	40	25	Helical	60	38	5,4	Female
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**COP 1132
COP RR11**



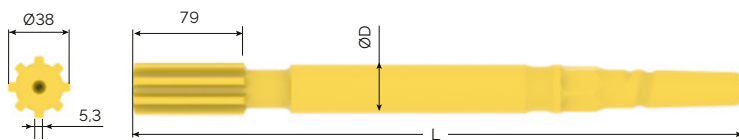
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90516636	469-15701.10	TC35	410	35	28	Straight	79	38	5.3	Standard
90515869	407-15701.10	R28	410	35	-	Straight	79	38	5.3	Standard
90515862	403-15701.10	R32	410	35	28	Straight	79	38	5.3	Standard

**COP 1132
COP RR11**



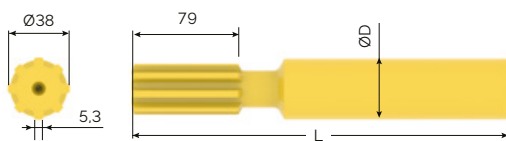
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Long hole drilling										
90515864	403-15704.10	R32	500	35	28	Straight	79	38	5.3	Standard
90516598	469-15704.10	TC35	500	35	28	Straight	79	38	5.3	Standard

**COP 1132
COP RR11**



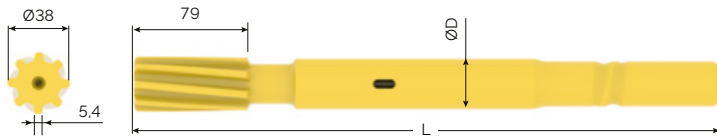
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting										
90516561	425-15705.10	SR28	435	35	28	Straight	79	38	5.3	Standard

**COP 1132
COP RR11**



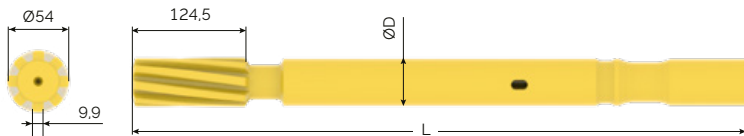
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting										
90515863	403-15703-F.10	R32	280	45	28	Straight	79	38	5.3	Female

**COP 1140
COP SC14, RR14**



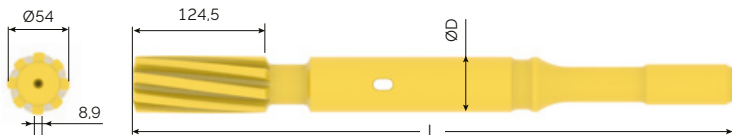
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90003558	403-19001.10	R32	410	35	27.8	Helical	79	37.8	5.5	Standard
90003555	469-19001.10	TC35	410	35	27.8	Helical	79	38	5.4	Standard

**COP 1240,1640, 1840, 1850,2150,2550 and + version
COP SC16, SC19, SC 25-HF**



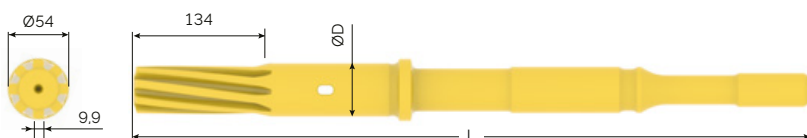
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90516399	403-13304-F.10	R32	680	52	-	Helical	124.5	54	9.9	Female thread
90516400	404-13304-F.10	R38	690	52	-	Helical	124.5	54	9.9	Female thread

**COP 1240,1640, 1840, 1850,2150,2550 and + version
COP SC16, SC19, SC 25-HF**



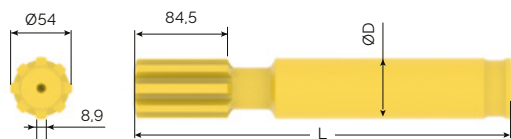
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90515834	403-13302.10	R32	565	52	38.2	Helical	124.5	54	8.9	Standard
90516343	469-13302.10	TC35	565	52	38.2	Helical	124.5	54	8.9	Standard
90516125	435-13302.10	T38	565	52	38.2	Helical	124.5	54	8.9	Standard
90029247	433-13302.10	T35	565	52	-	Helical	124.5	54	8.9	Standard

**COP 1240EX,1640EX, 1840EX, 1850EX,2150EX,2550EX and + version
COP SC19X, SC 25X-HF**

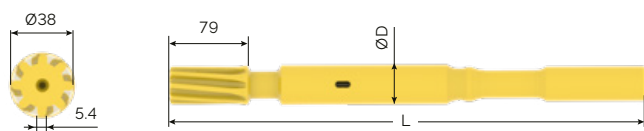


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516289	435-13402.10	T38	770	60	52	Helical	134	54	9.9	Standard
90516305	436-13402.10	T45	770	60	52	Helical	134	54	9.9	Standard
90516317	437-13402.10	T51	770	60	52	Helical	134	54	9.9	Standard

COP 1432, 1532

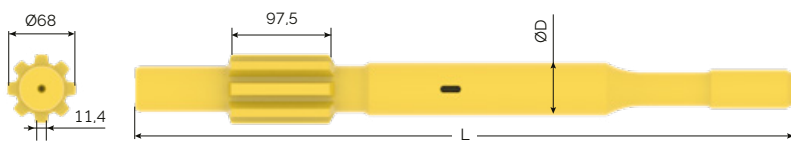


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting										
90516167	403-13203-F.10	R32	341	55	38.4	Straight	84,5	54	8,9	Female
90516195	435-13203-F.10	T38	341	55	38.4	Straight	84,5	54	8,9	Female

COP 1135, 1140, 1435
COP RR14, SC14

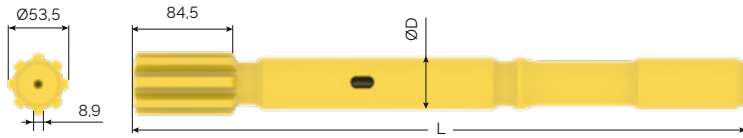
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting, Bench and Production drilling, Extension drilling										
5697001914	402-19003-F.10	R25	480	40	-	Helical	79	37,8	5,4	Female thread
90029926	403-19007-F.10	R32	480	40	-	Helical	79	38	5,4	Female thread
90029800	407-19003-F.10	R28	480	40	-	Helical	79	38	5,4	Female thread
5697001971	407-19008-F.10	R28	480	40	-	Helical	79	37,8	5,4	Female thread
5697001628	425-19001.10	SR28	410	35	25	Helical	79	37,8	5,4	Standard
5697001629	425-19004.10	SR28	500	35	25	Helical	79	37,8	5,4	Standard
90029498	426-19004.10	SR32	500	35	-	Helical	79	38	5,4	Standard
90029316	433-19004.10	T35	500	35	-	Helical	79	38	5,4	Standard

RD 14S, RD 18S, RD 22S



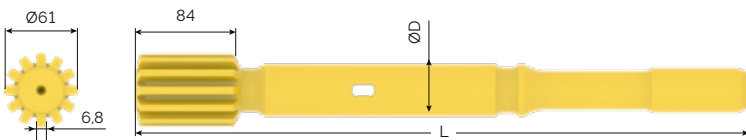
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029088	435-21604.10	T38	655	52	-	Straight	97,5	68	11,4	Standard
90029087	436-21604.10	T45	655	52	-	Straight	97,5	68	11,4	Standard
90029089	437-21605.10	T51	655	52	-	Straight	97,5	68	11,4	Standard

RD 14U, RD 18U



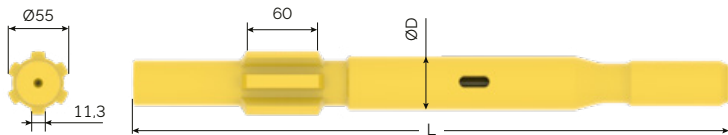
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90029960	436-21703-13-30.10	T45	525	45	-	Straight	84,5	53,5	8,9	Phosphate version

RD 18U, RD 22U



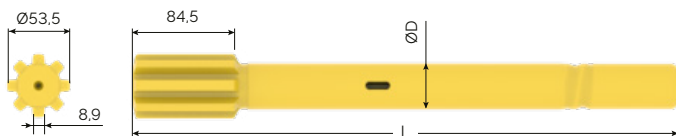
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90030023	435-22103.10	T38	525	45	-	Straight	84	61	6,8	Standard
90030022	436-22103.10	T45	525	45	-	Straight	84	61	6,8	Standard

RD 8



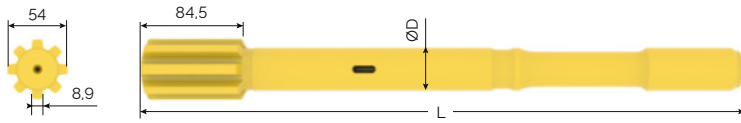
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting and Bench drilling										
90029729	435-21401.10	T38	500	45	-	Straight	60	55	11,3	Standard

COP 1432, 1440, 1532, 1550, 1638, 1838, 2238 and +version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
5697002175	404-09108-31.10	R38	455	38	34,9	Straight	84,5	54	8,9	Chrome version

COP 1432, 1440, 1532, 1550, 1638, 1838, 2238 and +version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516158	403-09103-18,10	R32	525	52	34,9	Straight	84,5	54	8,9	Standard
90029248	433-09103-18,10	T35	525	52	34,9	Straight	84,5	54	8,9	Standard
90516393	469-09103,10	TC35	525	38	-	Straight	84,5	54	8,9	Standard
90516342	469-09103-18,10	TC35	525	52	34,9	Straight	84,5	54	8,9	Standard
90516184	435-09103-18,10	T38	525	52	34,9	Straight	84,5	54	8,9	Standard
90516099	404-09103,10	R38	525	38	34,9	Straight	84,5	54	8,9	Standard
90516206	436-09103,10	T45	525	52	34,9	Straight	84,5	54	8,9	Standard
90516217	437-09103,10	T51	525	52	34,9	Straight	84,5	54	8,9	Standard

COP 1432, 1440, 1532, 1550, 1638, 1838, 2238 and +version



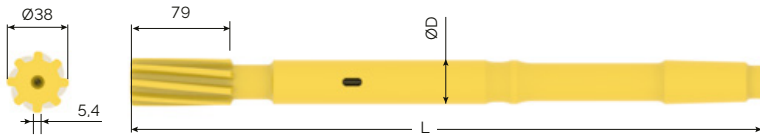
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting, drifting										
90029304	435-09101-31,10	T38	435	38	34,9	Straight	84,5	54	8,9	Chrome version
90030097	436-09101,10	T45	435	52	-	Straight	84,5	54	8,9	Standard

COP MD20



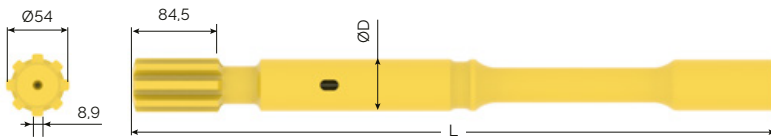
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting, Extension drilling, Bolting and Drifting, Extension drilling										
90029541	404-19301,10	R38	470	38	-	Straight	125	53,5	8,8	Standard
90029542	404-19304,10	R38	560	38	-	Straight	125	53,5	8,8	Standard
90029126	435-19301,10	T38	470	38	-	Straight	125	53,5	8,8	Standard
5697000959	435-19301-30,10	T38	560	38	-	Straight	125	53,5	8,8	Phosphate version
5697000944	435-19301-31,10	T38	470	38	-	Straight	125	53,5	8,8	Chrome version
90029342	435-19304,10	T38	560	38	-	Straight	125	53,5	8,8	Standard

**COP 1435
COP SC14, RR14**



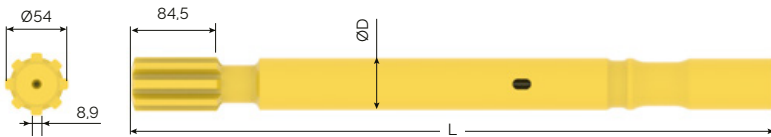
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting										
90003710	403-19004,10	R32	500	35	27.8	Helical	79	37,8	5,5	Standard
90003556	469-19004,10	TC35	500	35	27.8	Helical	79	38	5,4	Standard

COP 1440, 1838 and +version



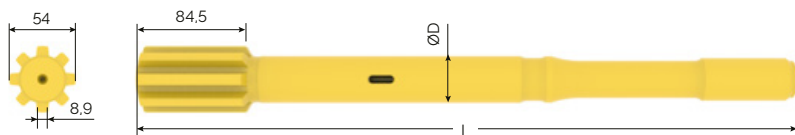
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting SDA (Self drilling anchor)										
90516089	403-09104-F,10	R32	640	52	34,9	Straight	84,5	54	8,9	Female

COP 1440, 1838 and +version



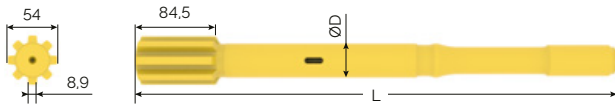
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting SDA, IRIA (Self drilling anchor and Integrated rotary injection adapter)										
90515896	403-09106-F,10	R32	640	52	34,9	Straight	84,5	54	8,9	Female
90515967	404-09106-F,10	R38	650	52	34,9	Straight	84,5	54	8,9	Female

COP 1440, 1550, 1638, 1838 and + version



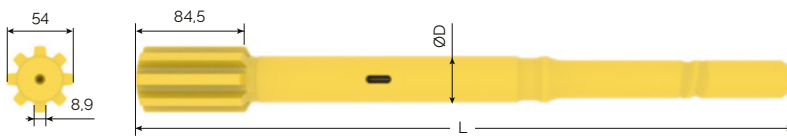
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90515976	433-09103,10	T35	525	38	34,9	Straight	84,5	54	8,9	Standard

COP 1440, 1550, 1638, 1838 and + version



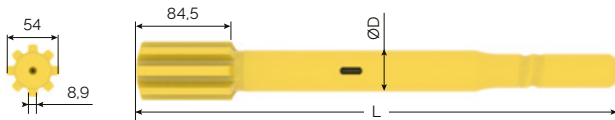
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting, drifting										
90515768	435-09101-30,10	T38	435	38	34,9	Straight	84,5	54	8,9	Phosphate version

COP 1440, 1550, 1638, 1838, 2238 and + version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90516088	403-09103,10	R32	525	38	34,9	Straight	84,5	54	8,9	Standard
90516121	435-09103,10	T38	525	38	34,9	Straight	84,5	54	8,9	Standard

COP 1440, 1550, 1638, 1838, 2238 and + version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516087	403-09101,10	R32	435	38	34,9	Straight	84,5	54	8,9	Standard
90516098	404-09101,10	R38	435	38	34,9	Straight	84,5	54	8,9	Standard
90516120	435-09101,10	T38	435	38	34,9	Straight	84,5	54	8,9	Standard

COP 1638, 1838AW and +version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90029179	403-09108-98,10	R32	455	38	34,9	Straight	84,5	54	8,9	Standard
90516380	404-09108-98,10	R38	455	38	34,9	Straight	84,5	54	8,9	Standard
90516122	435-09108-30,10	T38	455	38	34,9	Straight	84,5	54	8,9	Phosphate version
90516101	404-09108-30,10	R38	455	38	34,9	Straight	84,5	54	8,9	Phosphate version

COP 1638, 1838AW and +version

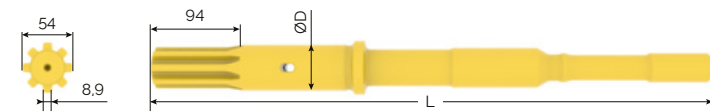


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Long Hole Drilling

90516185	435-0910A-30,10	T38	525	38	34,9	Straight	84,5	54	8,9	Phosphate version
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COP 1838EX, 1838MUX/HUX, 1550EX and +version

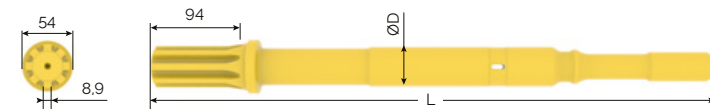


Product no.	Product code	Thread	Length (L)	Diameter (D)	Front guide surface	Front guide surface	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm	mm		mm	mm	mm	

Bench Drilling

90516288	435-12304.10	T38	730	60	52	34,9	Straight	94	54	8,9	Standard
90516304	436-12304.10	T45	730	60	52	34,9	Straight	94	54	8,9	Standard
90516316	437-12304.10	T51	730	60	52	34,9	Straight	94	54	8,9	Standard

COP 1838MUX/HUX and +version



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production Drilling

90003552	435-12305-31.10	T38	730	52	34,9	Straight	94	54	8,9	Chrome version
90003553	436-12305-31.10	T45	730	52	34,9	Straight	94	54	8,9	Chrome version
90003554	469-12305-31.10	TC35	730	52	34,9	Straight	94	54	8,9	Chrome version
90029311	403-12305-31.10	R32	730	52	34,9	Straight	94	54	8,9	Chrome version
90029628	433-12305-31.10	T35	730	52	34,9	Straight	94	54	8,9	Chrome version

COP 1838MUX/HUX and +version

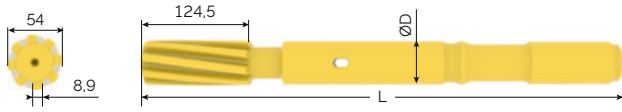


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench Drilling

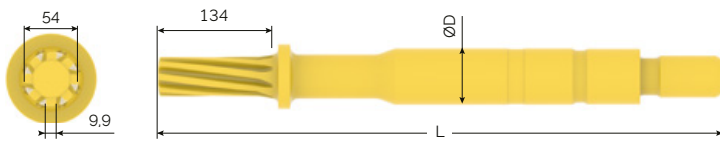
90029708	437-12305.10	T51	730	52	34,9	Straight	94	54	8,9	Standard
90516475	436-12305.10	T45	730	52	34,9	Straight	94	54	8,9	Standard

COP 1840, 1850, 2150, 2550 and + version



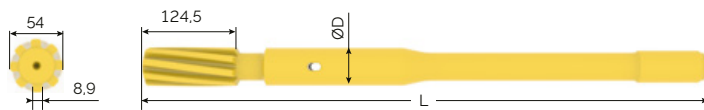
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90516129	437-13302.10	T51	565	52	34,9	Helical	124,5	54	8,9	Standard
90516128	436-13302.10	T45	565	52	34,9	Helical	124,5	54	8,9	Standard

COP 1850EX, 2550UX and + version



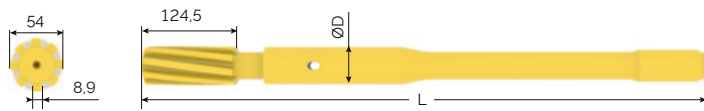
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production Drilling										
90516511	451-13405-31-T,10	ST58	770	77	34,9	Helical	134	54	9,9	Chrome version, Tube

COP 2150, 2540 and + version



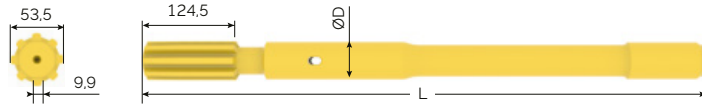
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90515998	436-13303.10	T45	770	52	34,9	Helical	124,5	54	8,9	Standard

COP 2150, 2550 and + version



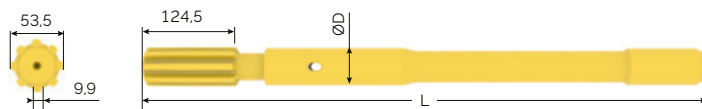
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90515999	437-13303.10	T51	770	52	34,9	Helical	124,5	54	8,9	Standard

COP 1240, 2150, 2550 and + version



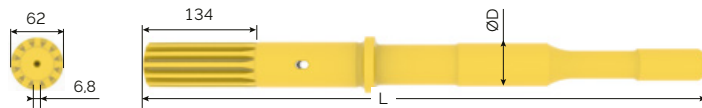
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90515795	436-16002.10	T45	565	52	-	Straight	124,5	53,5	9,9	Standard
90516000	437-16001.10	T51	770	52	34,9	Straight	124,5	54	9,9	Standard

COP 1240



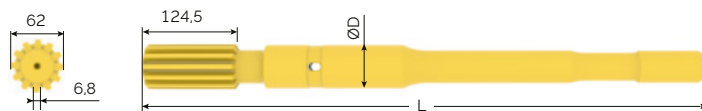
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90029388	436-16001.10	T45	770	52	34,9	Straight	124,5	54	9,9	Standard

COP 2160EX, 2560EX and + version

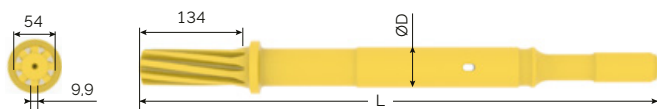


Product no.	Product code	Thread	Length (L)	Diameter (D)	Front guide surface	Front guide surface	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm	mm		mm	mm	mm	
Bench Drilling											
90516035	436-17201.10	T45	770	63	60	34,9	Straight	134	62	6,8	Standard
90516048	437-17201.10	T51	770	63	60	34,9	Straight	134	62	6,8	Standard

COP 2160, 2560 and + version



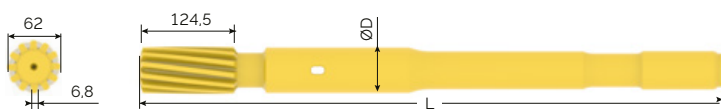
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench Drilling										
90516216	436-17301.10	T45	770	60	34,9	Straight	124,5	62	6,8	Standard
90516220	437-17301.10	T51	770	60	34,9	Straight	124,5	62	6,8	Standard

COP 2550UX, 2550UX+

Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production Drilling

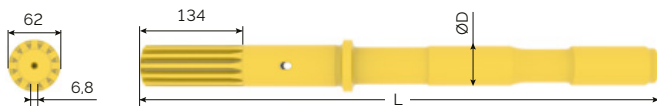
90516030	436-13404.10	T45	770	60	34,9	Helical	134	54	9,9	Standard
90516041	437-13404.10	T51	770	60	34,9	Helical	134	54	9,9	Standard

COP 2560, 2560+, SC25-HE

Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench Drilling

90029156	437-20403.10	T51	770	60	-	Helical	124,5	62	6,8	Standard
90029158	436-20403.10	T45	770	60	-	Helical	124,5	62	6,8	Standard
90029169	458-20403.10	T-WiZ60	770	60	-	Helical	124,5	62	6,8	Standard

COP 2560EX and + version

Product no.	Product code	Thread	Length (L)	Diameter (D)	Front guide surface	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm	mm		mm	mm	mm	

Bench Drilling

90029199	458-17201.10	T-WiZ60	770	63	60	34,9	Straight	134	62	6,8	Standard
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COP 2560EX and + version

Product no.	Product code	Thread	Length (L)	Diameter (D)	Front guide surface	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm	mm		mm	mm	mm	

Bench Drilling

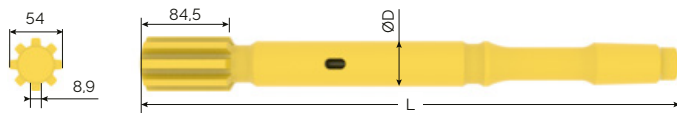
90029157	437-20202.10	T51	770	63	60	34,9	Helical	156	62	6,8	Standard
90029159	436-20202.10	T45	770	63	60	34,9	Helical	156	62	6,8	Standard

COP 3038



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90029857	472-16901-13-30.10	TC42B	435	45	34.9	Straight	84,5	54	8,9	Phosphate version
5697002273	472-16901-13-31.10	TC42B	435	45	33	Straight	84,5	54	8,9	Chrome version
90030031	427-16901-13.10	SR 38	435	45	34.9	Straight	84,5	54	8,9	Standard
90516571	427-16901-13-30.10	SR38	435	45	34.9	Straight	84,5	54	8,9	Phosphate version

COP 3038



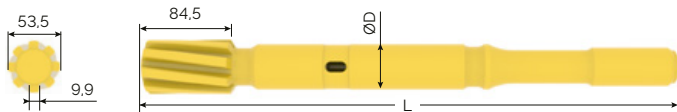
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Long Hole drilling										
90516126	435-16903-13-30.10	T38	525	45	34.9	Straight	84,5	54	8,9	Phosphate version
90029859	472-16903-13-30.10	TC42B	525	45	34.9	Straight	84,5	54	8,9	Phosphate version
90516381	427-16903-13-30.10	SR38	525	45	34.9	Straight	84,5	54	8,9	Phosphate version
90030032	427-16903-13.10	SR38	525	45	34.9	Straight	84,5	54	8,9	Standard

COP 3038, 4038



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting and Production drilling										
90030030	427-18701-13.10	SR38	435	45	34.9	Helical	84,5	54	9,9	Standard
90029834	472-18701.10	TC42B	435	45	34.9	Helical	84,5	54	9,9	Standard

COP 3038, 4038

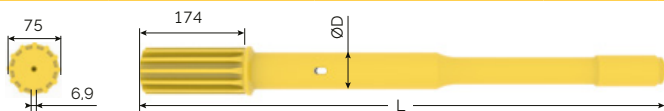


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting and Production drilling

90029947	427-18703-13.10	SR38	525	45	34,9	Helical	84,5	53,5	9,9	Standard
90003527	435-18703-31.10	T38	525	45	34,9	Helical	84,5	53,5	9,9	Chrome version
90029023	427-18703-31.10	SR38	525	45	34,9	Helical	84,5	53,5	9,9	Chrome version
90029836	472-18703.10	TC42B	525	45	34,9	Helical	84,5	53,5	9,9	Standard

COP 3060ME

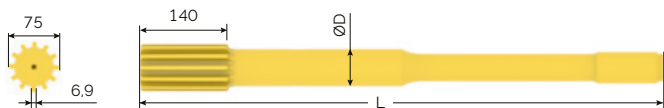


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90029076	437-17706.10	T51	840	60	50,0	Straight	174	75	6,9	Standard
90029094	468-17706.10	GT60	840	60	50,0	Straight	174	75	6,9	Standard
90029137	458-17706.10	T-WIZ60	840	60	50,0	Straight	174	75	6,9	Standard

COP 3060ME

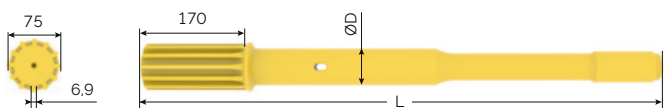


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516633	437-17703.10	T51	840	60	50,0	Straight	140	75	6,9	Standard
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COP 3060MEX

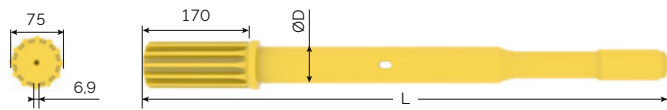


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

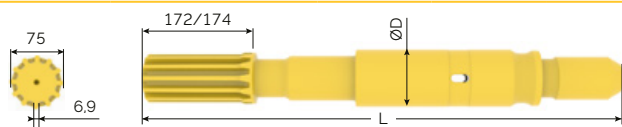
90029062	458-17603.10	T-WIZ60	840	60	50,0	Straight	170	75	6,9	Standard
90516632	437-17603.10	T51	840	60	50,0	Straight	170	75	6,9	Standard

COP 3060MEX



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029075	437-19803.10	T51	840	60	50.0	Straight	170	75	6.9	Standard
90029093	468-19803.10	GT60	840	60	50.0	Straight	170	75	6.9	Standard
90029105	458-19803.10	T-WiZ60	840	60	50.0	Straight	170	75	6.9	Standard

COP 3060MUX



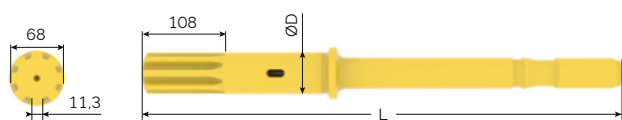
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
90029074	452-17606-31-T.10	ST68	745	90	50.0	Straight	172	75	6.9	Chrome version. Tube
90029079	451-17606-31-T.10	ST58	745	90	50.0	Straight	172	75	6.9	Chrome version. Tube

COP 4050MUX



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
90516512	451-12004-31-T.10	ST58	835	90	45.8	Straight	112	68	11.3	Chrome version. Tube

COP 4050EX



Product no.	Product code	Thread	Length (L)	Diameter (D)	Front guide surface	Front guide surface	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm	mm		mm	mm	mm	
Bench drilling											
90516321	437-12001.10	T51	790	70	52	45.8	Straight	108	68	11.3	Standard

COP 4050MUX



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production drilling

90003708	452-14502-31-T.10	ST68	835	90	45,8	Helical	126	68	6,6	Chrome version, Tube
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COP 4050MUX

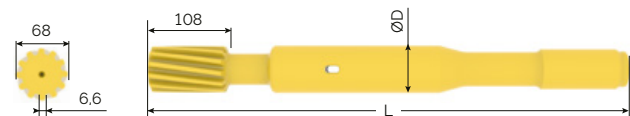


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production drilling

90514632	451-12004-T.10	ST58	835	90	45,8	Straight	112	68	11,3	Standard, Tube
90514316	452-12008-T.10	ST68	835	90	45,8	Straight	112	68	11,3	Standard, Tube
90516513	452-12008-31-T.10	ST68	835	90	45,8	Straight	112	68	11,3	Chrome version, Tube

COP 4050ME



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90029151	458-14802.10	T-WIZ60	700	70	45,8	Helical	108	68	6,6	Standard
90516318	437-14801.10	T51	605	52	45,8	Helical	108	68	6,6	Standard

COP 4050 (L)

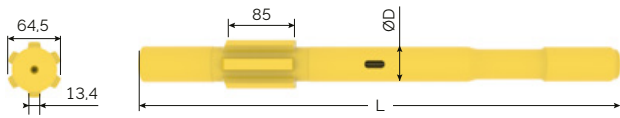


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516315	437-11904.10	T51	605	52	45,8	Straight	108	68	11,3	Standard
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Yamamoto KOP 1540 YH-70A

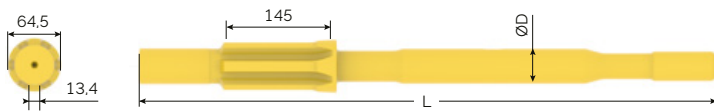


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90029018	436-19602.10	T45	605	45	45,95	Straight	85	64,5	13,4	Standard
90029019	435-19601.10	T38	585	45	45,95	Straight	85	64,5	13,4	Standard

Yamamoto KOP 1540 YH-70ARP Ext.

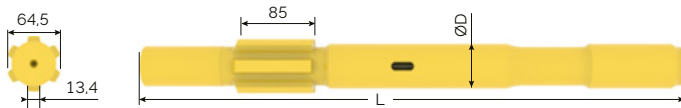


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90029017	435-19703.10	T38	745	45	46	Straight	145	64,5	13,4	Standard
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Yamamoto KOP 1750

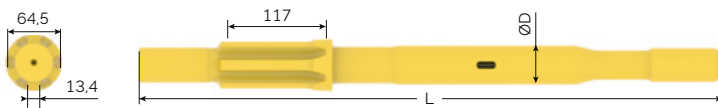


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm		

Bench drilling

90029117	437-20302.10	T51	615	51	46	Straight	85	64,5	13,4	Standard
90029118	436-20301.10	T45	605	51	46	Straight	85	64,5	13,4	Standard

Yamamoto KOP 1750

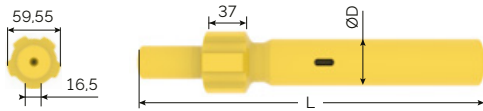


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm		

Bench drilling

90029292	436-20601.10	T45	765	51	46	Straight	117	64,5	13,4	Standard
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Boart HD 65

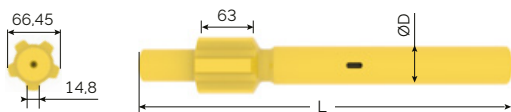


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90516397	403-09601-F,10	R32	324	45	32	Straight	37	59,55	16,5	Female thread
90029804	402-09601-F,10	R25	324	45	32	Straight	37	59,55	16,5	Female thread

Boart HD 125, HD 150, HE 125, HE 150

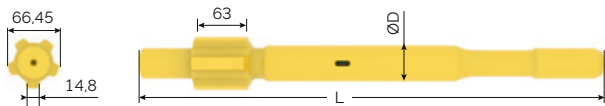


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90516274	403-08005-F,10	R32	428	45	38,1	Straight	63	66,45	14,8	Female thread
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Boart HD 125, HD 150, HE 125, HE 150



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90516282	435-08003,10	T38	570	45	38,1	Straight	63	66,45	14,8	Standard
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Boart SECO HD 155

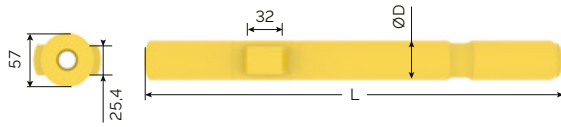


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting

90003580	435-15601,10	T38	580	55	38,2	Striaight	81	70	15,7	Standard
90516275	403-15601,10	R32	580	55	38,2	Striaight	81	70	15,7	Standard

Bohler HM 751, BBC 120F

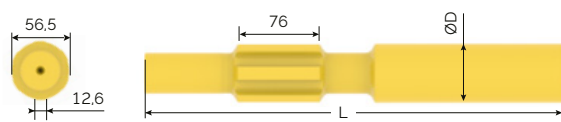


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516156	403-01131.10	R32	380	38	38	Straight	32	57	25,4	Standard
90516180	435-01131.10	T38	390	38	38	Straight	32	57	25,4	Standard

Cannon CH-38

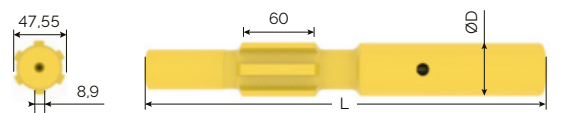


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production drilling

90516118	435-06904-F.10	T38	390	55	38	Straight	76	56,5	12,6	Female thread
90516096	404-06904-F.10	R38	390	55	38	Straight	76	56,5	12,6	Female thread

Cannon CH-38, CH-32

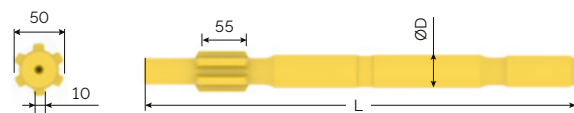


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting

90515861	403-15201-F.10	R32	328	44,5	33,3	Straight	60	47,55	8,9	Female thread
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Furukawa HD 90

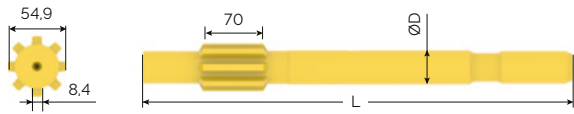


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting

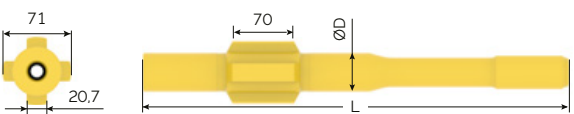
90515969	404-14401.10	R38	515	40	34,6	Straight	55	50	10	Standard
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Furukawa HD 190



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516124	435-10002, 10	T38	500	40	37.8	Straight	70	54,9	8,4	Standard

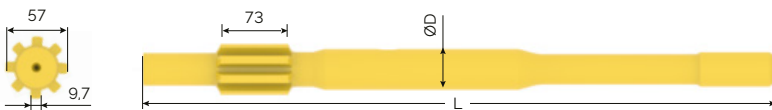
Furukawa PD 200



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516025	436-07751, 10	T45	485	44	44	Straight	70	71	20,7	Standard

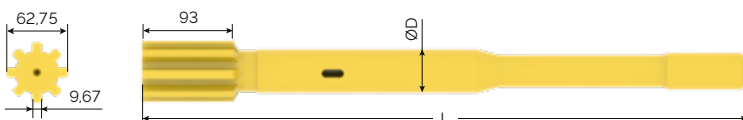
Shank seal: 90000466

Furukawa HD 609



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516197	435-13802, 10	T38	690	45	35,8	Straight	73	57	9,7	Standard
90510276	436-13801, 00	T45	620	45	35,8	Straight	73	57	9,7	Standard

Furukawa HD 709



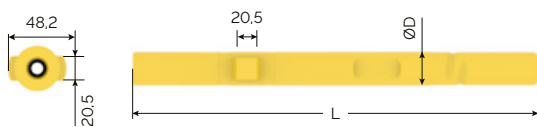
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516486	435-18101,10	T38	620	45	-	Straight	93	62,75	9,67	Standard
90516487	436-18101,10	T45	620	45	-	Straight	93	62,75	9,67	Standard

Furukawa HD 715 RP



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029597	437-20703, 10	T51	790	58	57,2	Straight	100	80	20,3	Standard

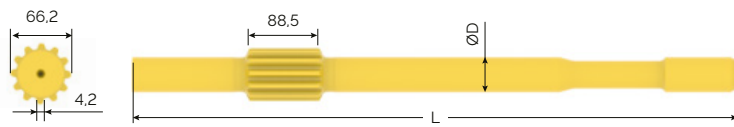
Gardner Denver 93



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90515858	403-00131, 10	R32	380	32	31,7	Straight	20,5	48,2	20,5	Standard

Shank seal: 90002571

Gardner Denver HPR 45



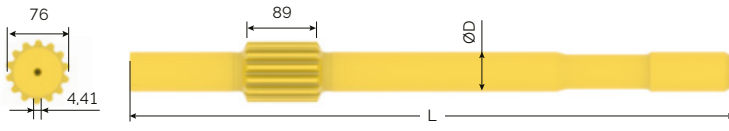
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516296	436-06703, 10	T45	770	44	40,4	Straight	88,5	66,2	4,2	Standard

Gardner Denver HPR 2



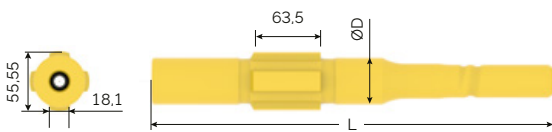
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516322	437-12601,10	T51	914	51	50,65	Straight	102	76,3	4,2	Standard

Gardner Denver HPR 5123 (REEDRILL)



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516470	437-18401.10	T51	770	51	50,7	Straight	89	76	4	Standard
90516469	436-18401.10	T45	770	51	-	Straight	89	76	4	Standard

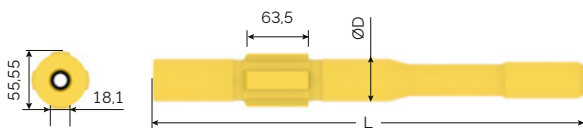
Gardner Denver PR123, VL 120, VL 140



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516084	403-03251.10	R32	381	44	44,3	Straight	63,5	55,55	18,1	Standard
90516095	404-03251.10	R38	381	44	44,3	Straight	63,5	55,55	18,1	Standard
90516115	435-03251.10	T38	381	44	44,3	Straight	63,5	55,55	18,1	Standard
90516127	436-03251.10	T45	381	44	44,3	Straight	63,5	55,55	18,1	Standard

Shank seal: 90000466

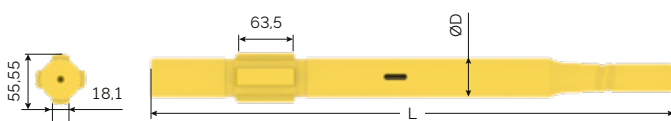
Gardner Denver PR 123



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516116	403-03254.10	T38	446	44	44,3	Straight	63,5	55,55	18,1	Standard

Shank seal: 90000466

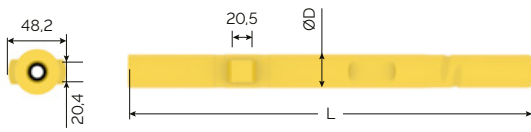
Gardner-Denver PR 123



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516082	403-03205.10	R32	585	44	44,3	Straight	63,5	55,55	18,1	Standard

Shank seal: 90000466

Ingersoll Rand 350



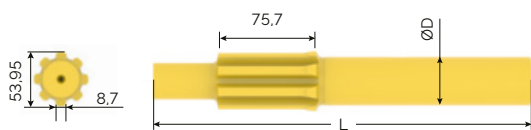
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90515858	403-00131, 10	R32	380	32	31,7	Straight	20,5	48,2	20,4	Standard
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Shank seal: 90002571

Ingersoll Rand Hydrastar 200

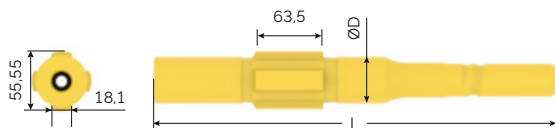


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting

90516090	403-10101-F, 10	R32	351	45	34	Straight	75,7	53,95	8,7	Female thread
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Ingersoll Rand VL 120, VL 140



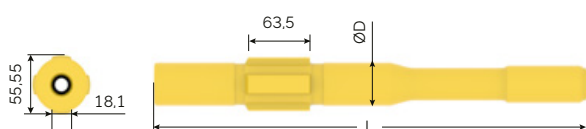
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516084	403-03251, 10	R32	381	44	44,2	Straight	63,5	55,55	18,1	Standard
90516095	404-03251, 10	R38	381	44	44,2	Straight	63,5	55,55	18,1	Standard
90516115	435-03251, 10	T38	381	44	44,2	Straight	63,5	55,55	18,1	Standard
90516127	436-03251, 10	T45	381	44	44,2	Straight	63,5	55,55	18,1	Standard

Shank seal: 90000466

Ingersoll Rand VL 120, VL 140 (with 4 splines)



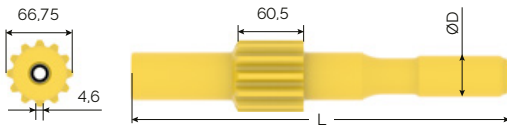
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516116	435-03254, 10	T38	446	44	44,3	Straight	63,5	55,55	18,1	Standard
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Shank seal: 90000466

Ingersoll Rand EVL 130, VL 140 (with 12 splines)



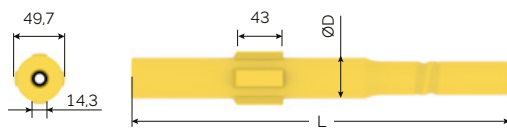
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting

90516292	435-17101, 10	T38	350	44	44.2	Straight	60,5	66,75	4,6	Standard
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Shank seal: 90000466

Ingersoll Rand YD 90 M



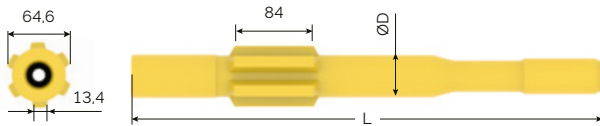
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90515881	403-01631, 10	R32	350	38	38	Straight	43	49,7	14,3	Standard
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Shank seal for 90515881: 90002571

Ingersoll Rand YH 65, YH 70



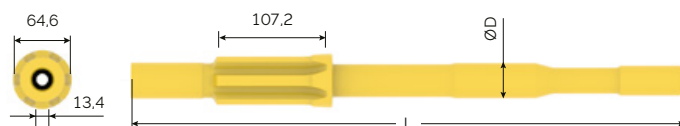
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516283	435-10791, 10	T38	500	45	48	Straight	84	64,6	13,4	Standard
90516199	436-10791, 10	T45	500	45	48	Straight	84	64,6	13,4	Standard

Shank Seal: 90002008

Ingersoll Rand YH 65 RP



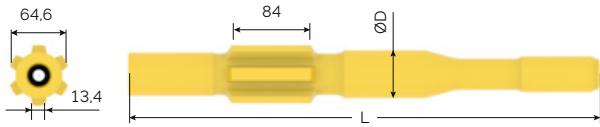
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516285	435-10792, 10	T38	700	45	48	Straight	107,2	64,6	13,4	Standard
90516301	436-10792, 10	T45	700	45	48	Straight	107,2	64,6	13,4	Standard

Shank Seal: 90002008

Ingersoll Rand LM 500, YH 65, YH 70, YH 80A, YH 65 RP, YH 80A RP



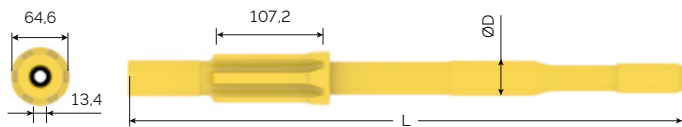
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516299	436-10791.10	T45	500	45	46	Straight	84	64,6	13,4	Standard
90516300	436-10791-17, 10	T45	500	51	48	Straight	84	64,6	13,4	Standard
90516313	437-10791.10	T51	500	51	48	Straight	84	64,6	13,4	Standard

Shank Seal: 90002008

Ingersoll Rand YH 80A RP



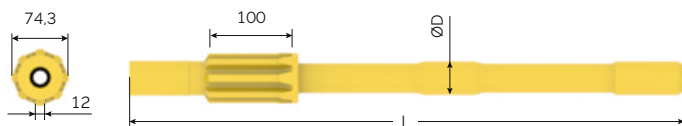
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516302	436-10792-17, 10	T45	700	51	48	Straight	107	64,6	13,4	Standard
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Shank Seal: 90002008

Ingersoll Rand YH 95 RP, YH 100 RP



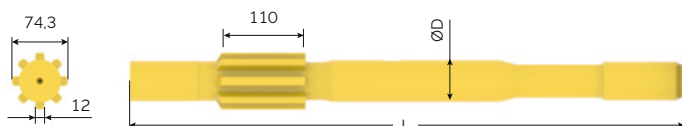
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516039	437-11791, 10	T51	700	51	53	Straight	100	74,3	12	Standard
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Shank Seal: 90504645

Ingersoll Rand YH 110 V, YH 135

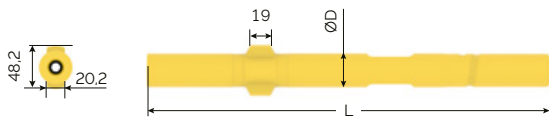


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516043	437-13905, 10	T51	728	55	53	Straight	110	74,3	12	Standard
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Joy 400 RR



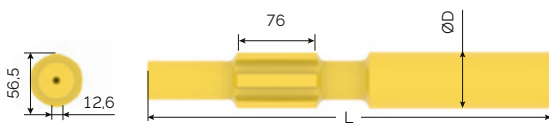
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90515858	403-00131, 10	R32	380	32	32	Straight	19	48,2	20,2	Standard
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Shank seal: 90002571

Joy JH 2

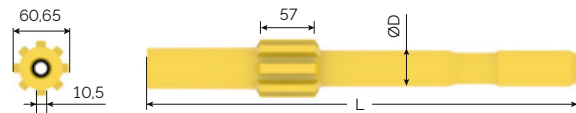


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Production drilling

90516118	435-0604-F, 10	T38	380	55	38	Straight	76	56,5	12,6	Female thread
90516096	404-06904-F,10	R38	390	55	38	Straight	76	56,5	12,6	Female thread

Joy VCR 260



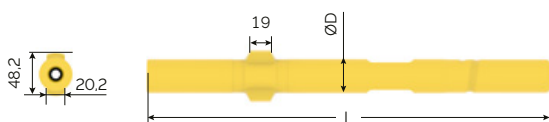
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Drifting

90516182	435-05261, 10	T38	451	38	43,2	Straight	57	60,65	10,5	Standard
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Shank seal: 90001709

Krupp HB 51



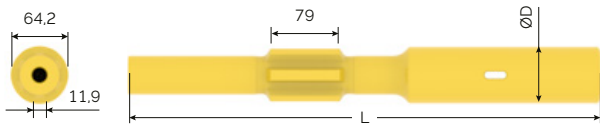
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90515858	403-00131, 10	R32	380	32	31,7	Straight	19	48,2	20,2	Standard
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Shank seal: 90002571

Krupp HB 101

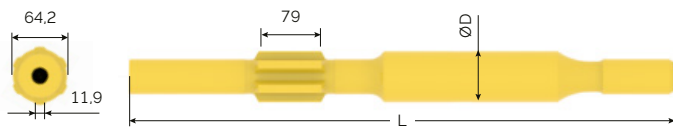


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Drifting

90516280	435-07901-F,10	T38	540	64	44,3	Straight	79	64,2	11,9	Female thread
90516297	436-07901-F, 10	T45	540	64	44,3	Straight	79	64,2	11,9	Female thread

Krupp HB 101

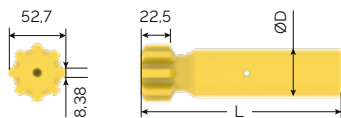


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516280	435-07901-F,10	T38	540	64	44,3	Straight	79	64,2	11,9	Female thread
90516298	436-07902, 10	T45	690	64	44,3	Straight	79	64,2	11,9	Standard
90516312	437-07902, 10	T51	711	64	44,3	Straight	79	64,2	11,9	Standard

Montabert HC 20

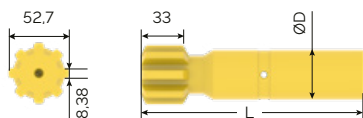


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bolting and Drifting

90029102	403-08502-F,10	R32	187	45	-	Straight	22,5	52,7	8,38	Female thread
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Montabert HC 25

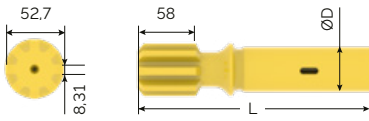


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bolting and Drifting

90029803	402-21102-31-F,10	R25	200	45	-	Straight	33	52,7	8,38	Female thread
90029999	403-21102-30-F,10	R32	200	45	-	Straight	33	52,7	8,38	Female thread
90029443	403-21102-31-F,10	R32	200	45	-	Straight	33	52,7	8,38	Female thread

Montabert HC 40, HC 50

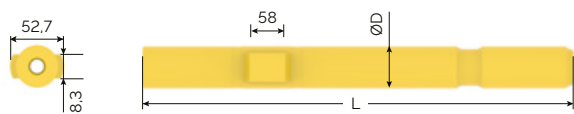


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90029587	403-08504-F,10	R32	270	45	-	Straight	58	52.7	8.31	Female thread
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Montabert HC 40, HC 50



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90515894	403-08501, 10	R32	445	38	34.4	Straight	58	52.7	8.3	Standard
90515965	404-08501, 10	R38	445	38	34.4	Straight	58	52.7	8.3	Standard
90516180	435-01131, 10	T38	445	38	34.4	Straight	58	52.7	8.3	Standard
90515988	435-08501,10	T38	445	38	-	Straight	58	52.7	8.3	Standard
90029769	469-08501,10	TC35	445	38	-	Straight	58	52.7	8.3	Standard

Montabert HC 40, HC 50



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90515895	403-08504, 10	R32	370	38	34.4	Straight	58	52.7	8.3	Standard
90515966	404-08504, 10	R38	370	38	34.4	Straight	58	52.7	8.3	Standard
90515989	435-08504, 10	T38	370	38	34.4	Straight	58	52.7	8.3	Standard
90003694	469-08504,10	TC35	370	38	-	Straight	58	52.7	8.3	Standard

Montabert HC 80, HC 120



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516519	435-08201,10	T38	490	45	-	Straight	97	59.8	9.4	Standard
90516202	436-08201, 10	T45	490	45	38	Straight	97	59.8	9.4	Standard
90516203	436-08203, 10	T45	590	45	38	Straight	97	59.8	9.4	Standard

Montabert HC 80, HC 90, HC 105, HC 120



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515893	403-08101, 10	R32	440	38	34,4	Straight	97	52,7	8,3	Standard
90515964	404-08101, 10	R38	440	38	34,4	Straight	97	52,7	8,3	Standard
90515985	435-08101, 01	T38	440	38	34,4	Straight	97	52,7	8,3	Standard

Montabert HC 80, HC 90, HC 105, HC 120



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515987	435-08103, 10	T38	500	38	34,4	Straight	97	52,7	8,3	Standard

Montabert HC 80 RP, HC 105 RP, HC 107 RP, HC 108 RP, HC 109 RP



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516215	436-11502-11, 10	T45	770	45	38	Straight	102	59,8	9,4	Standard

Montabert HC 80 RP, HC 110 RP, HC 120 RP, HC 150 RP, HC 155 RP, HC 158 RP



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516522	435-11501-11, 10	T38	670	45	38	Straight	102	59,8	9,4	Standard
90516213	436-11501-11, 10	T45	670	45	38	Straight	102	59,8	9,4	Standard
5697002555	472-11501-11,10	TC42B	670	45	97	Straight	102	9,4	9,4	Standard

Montabert HC 109

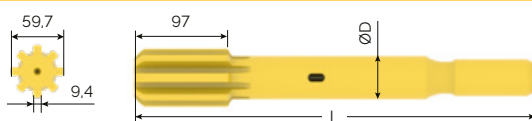


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling and Drifting

90029051	404-19901-11,10	R38	530	45	-	Straight	97	59,7	9,45	Standard
90030000	404-19901-30-11,10	R38	530	45	-	Straight	97	59,7	9,45	Standard

Montabert HC 110



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Drifting and Long hole drilling

90029378	435-21001,10	T38	415	45	-	Straight	97	59,7	9,4	Standard
90030002	472-21001,10	TC42B	415	45	-	Straight	97	59,7	9,4	Standard

Montabert HC 120 RP, HC 150 RP, HC 155 RP, HC 158 RP



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516212	436-11501, 10	T45	670	51	38	Straight	102	59,8	9,4	Standard
90516218	437-11501, 10	T51	670	51	38	Straight	102	59,8	9,4	Standard

Montabert HC 120 RP, HC 150 RP



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516214	436-11502, 10	T45	770	51	38	Straight	102	59,8	9,4	Standard
90516219	437-11502, 10	T51	770	51	38	Straight	102	59,8	9,4	Standard

Montabert HC 160, HC 170

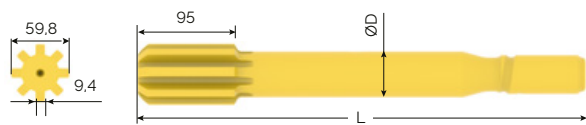


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

90516034	436-16501.10	T45	805	60	43,7	Straight	136	69	9,4	Standard
90516047	437-16501.10	T51	805	60	43,7	Straight	136	69	9,4	Standard

Montabert HC 95



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90029648	435-21301.10	T38	440	45	38	Straight	95	59,8	9,4	Standard
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Montabert HC 95 LQ



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bolting and Drifting

90029590	403-21201.10	R32	505	45	38	Straight	79	59,8	9,4	Standard
90029591	435-21201.10	T38	505	45	38	Straight	79	59,8	9,4	Standard
5697000957	435-21203.10	T38	505	45	38	Straight	79	59,8	9,4	Special Design

Montabert HC 200 A

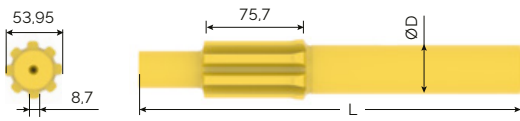


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	

Bench drilling

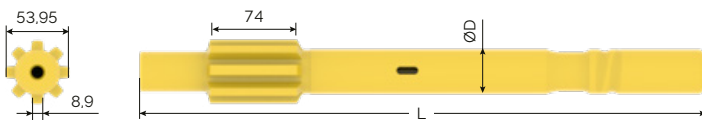
90516046	437-15002.10	T51	865	60	46	Straight	138	73,1	11,3	Standard
90029103	458-15003.10	T Wiz60	850	60	46	Straight	138	73,1	11,3	Standard

Secoma



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516090	403-10101-F, 10	R32	351	45	32	Straight	75,7	53,95	8,7	Female thread

Secoma Hydrastar 200, 300, X2



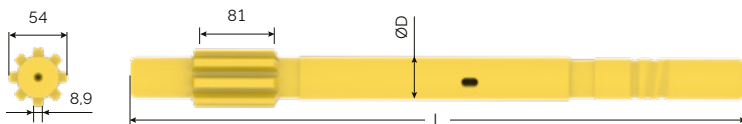
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515961	404-03004,10	R38	485	38	34	Straight	74	53,95	8,9	Standard
90515983	435-03004,10	T38	485	38	34	Straight	74	53,85	8,9	Standard
90515890	403-03004,10	R32	485	38	34	Straight	74	53,95	8,9	Standard

SIG HBM 100, HBM 150



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90515892	403-06601, 10	R32	500	38	38	Straight	74	53,8	8,9	Standard

Permon HVKS 125-1



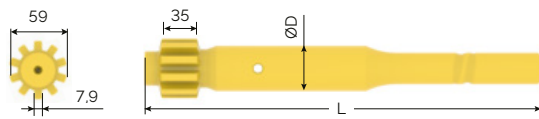
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90003534	404-18903,10	R38	576	40	-	Straight	81	54	8,9	Standard

Sandvik HLX 1



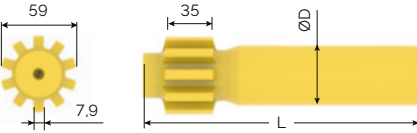
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting										
90029036	424-17801.10	SR25	255	28	-	Straight	24	39	5,3	Standard

Sandvik RD 314



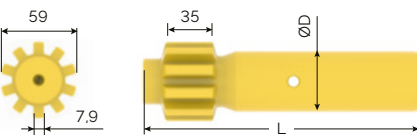
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90029599	403-20903.10	R32	395	45	32	Straight	35	59	7,9	Standard

Sandvik RD 314



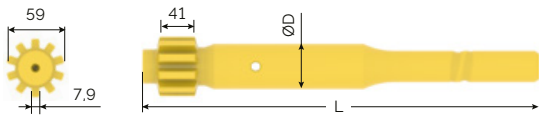
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90029344	403-20901-F.10	R32	205	45	32	Straight	35	59	7,9	Female thread

Sandvik HLX 3



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90003605	403-19101-F.10	R32	205	45	32	Straight	35	59	7,9	Female thread

Sandvik RD 414



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
5697001676	469-20903, 10	TC 35	405	38	32	Straight	41	59	7,9	Standard
5697001681	427-20903, 10	SR 38	405	38	32	Straight	41	59	7,9	Standard

Sandvik RD 414



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
5697001681	427-20903,10	SR38	405	38	32	Straight	41	58,5	7,9	Standard
5697001676	469-20903,10	TC35	405	38	-	Straight	41	59	7,9	Standard

Sandvik HLX 5, HFX5, RDX5



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90516173	404-15401, 10	R38	500	45	37	Straight	49	59	7,9	Standard
90516198	435-15401, 10	T38	500	45	37	Straight	49	59	7,9	Standard
90516177	427-15401, 10	SR38	500	45	37	Straight	49	59	7,9	Standard
90003672	436-15401, 10	T45	500	45	37	Straight	49	59	7,9	Standard
90516199	435-15402, 10	T38	575	45	37	Straight	49	59	7,9	Standard
90516144	436-15402, 10	T38	575	45	37	Straight	49	59	7,9	Standard
90029037	469-15402, 10	TC35	575	45	37	Straight	49	59	7,9	Standard
90516178	427-15402,10	SR38	575	45	-	Striaight	49	58,8	7,9	Standard

Sandvik RD 525, RD 525 PE



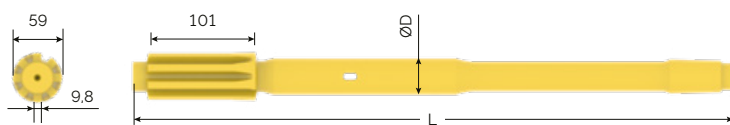
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90029009	435-19502.10	T38	525	45	37	Straight	70	59	7.9	Standard
90029622	436-19512.10	T45	525	45	37	Straight	70	59	7.9	Standard
90029021	435-19503.10	T38	600	45	37	Straight	70	59	7.9	Standard
90029496	435-19504.10	T38	745	45	37	Straight	70	59	7.9	Standard

Sandvik RD 525, RD 525 PE



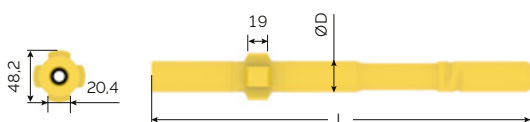
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
90029086	427-20005.10	SR38	745	45	37	Straight	132,5	59	7,9	Standard
90029532	435-20005.10	T45	600	45	37	Straight	132,5	59	7,9	Standard

Sandvik RD525 PE



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting										
5697002303	472-20005.10	TC42B	745	45	-	Straight	101	59	9,8	Standard

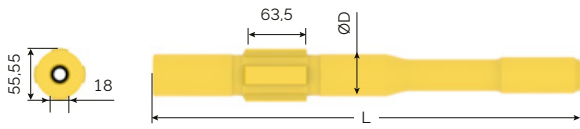
Sandvik L 400, L 500



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bolting and Drifting										
90515859	403-00731.10	R32	380	32	32	Straight	19	48,2	20,4	Standard

Shank seal: 90002571

Sandvik L 600, L 750



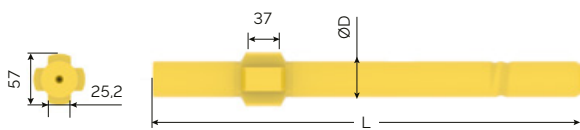
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bolting and Drifting

90516116	435-03254, 10	T38	446	44	44	Straight	63,5	55,55	18	Standard
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Shank seal: 90000466

Sandvik 438 LS, 438 TS, HL 538, HL 538 L, L 550 S

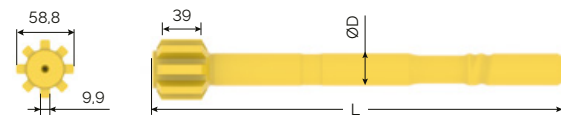


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench, Drifting and Production drilling

90516091	404-01705, 10	R38	450	38	38	Straight	37	57	25,2	Standard
90516111	435-01705, 10	T38	455	38	38	Straight	37	57	25,2	Standard

Sandvik HL 300

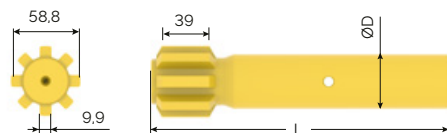


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516166	403-12502, 10	R32	400	32	37	Straight	39	58,8	9,9	Standard
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Sandvik HL 300 S

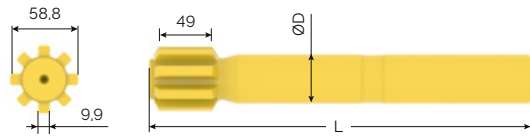


Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	

Bench drilling

90516165	403-12501-F, 10	R32	245	45	37	Straight	39	58,8	9,9	Standard
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Sandvik HL 500 F



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516162	403-09404-F, 10	R32	350	45	32	Straight	49	58,8	9,9	Female thread

Sandvik HL 500



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516187	435-09402-13, 10	T38	550	45	38	Straight	49	58,8	9,9	Standard
90516207	436-09402, 10	T45	550	45	38	Straight	49	58,8	9,9	Standard

Sandvik HL 500, HL 500S



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting, Production drilling										
90516160	403-09401, 10	R32	460	38	37	Straight	49	58,8	9,9	Standard
90003519	469-09401, 10	TC35	460	38	37	Straight	49	58,8	9,9	Standard
90516170	404-09401, 10	R38	460	38	37	Straight	49	58,8	9,9	Standard
90029998	404-09401-30,10	R38	460	45	37	Straight	49	58,8	9,9	Standard
90029473	404-09401-98,10	R38	460	45	37	Straight	49	58,8	9,9	Standard
90516186	435-09401, 10	T38	460	38	37	Straight	49	58,8	9,9	Standard
5697001650	427-09401-13,10	SR38	460	45	37	Straight	49	58,8	9,9	Standard
5697000069	435-09402-13,23	T38	460	45	37	Straight	49	58,8	9,9	Standard

Sandvik HL 500, HL 500 S



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Drifting and Production drilling										
90516508	404-09403,10	R38	500	38	-	Straight	49	58,8	9,9	Standard

Sandvik HL 500, HL 500 S



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90516163	403-09405, 10	R32	550	38	37	Straight	49	58,8	9,9	Standard
90516189	435-09405, 10	T38	550	38	37	Straight	49	58,8	9,9	Standard

Sandvik HL 500, HL 500 S, HL 550 S, HL 560 S



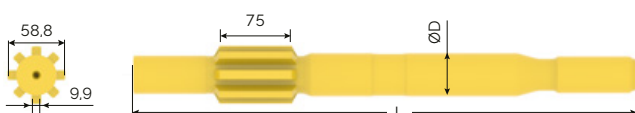
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Drifting										
90516171	404-09403-13, 10	R38	500	45	37	Straight	49	58,8	9,9	Standard
90516188	435-09403-13, 10	T38	500	45	37	Straight	49	58,8	9,9	Standard

Sandvik HL 600, HL 600 S



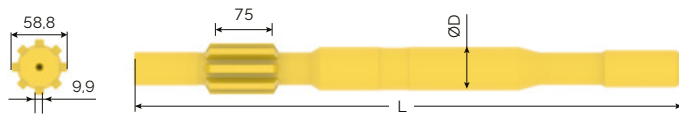
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling and Drifting										
90516190	435-09501, 10	T38	600	45	39	Straight	75	58,8	9,9	Standard
90516209	436-09501, 10	T45	600	45	39	Straight	75	58,8	9,9	Standard

Sandvik HL 600, HL 600 S



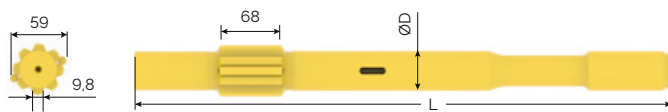
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Drifting and Production drilling										
90516191	435-09502, 10	T38	525	45	39	Straight	75	58,8	9,9	Standard
90516210	436-09502, 10	T45	525	45	39	Straight	75	58,8	9,9	Standard

Sandvik HL 600, HL 600 S



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90516211	436-09503.10	T45	650	52	39	Straight	75	58,8	9,9	Standard

Sandvik HL 645, HL 645 S



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90502270	436-08302.00	T45	600	45	42	Straight	68	59	9,8	Standard

Sandvik HL 700, HL 800



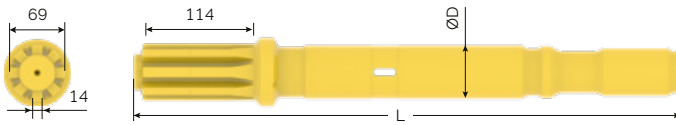
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Bench drilling										
90516306	436-14001.10	T45	600	45	42	Straight	95	69	12,9	Standard
90516290	435-14001-18.10	T38	600	52	42	Straight	95	69	12,9	Standard
90516307	435-14001-18.10	T45	600	45	42	Straight	95	69	12,9	Standard
90516509	437-14001-18.10	T51	600	52	42	Straight	95	69	12,9	Standard
90029850	437-14002-18,10	T51	600	52	-	Straight	95	68,8	12,9	Standard

Sandvik HL 710S, RD 926L



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm			mm	mm	mm	
Production drilling										
90029961	451-21803-13,10	ST58	670	65	-	Straight	170	69	5	Standard

Sandvik RD900 PE



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
5697002523	451-22203.10	ST58	670	65	46	Straight	114	69	14	Standard

Sandvik HL 1000



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling and Production drilling										
90516036	437-08901-20.10	T51	590	52	-	Straight	94	79.2	13.95	Standard

Sandvik HL 1000



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling and Production drilling										
90029026	437-0890A-20.10	T51	670	60	-	Straight	94	79.2	13.95	Standard

Sandvik HL 1000



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling and Production drilling										
90029249	458-0890A-20.10	T-WIZ60	670	60	-	Straight	94	79.2	13.95	Standard

Sandvik HL 1000



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90516037	437-08902-20, 10	T51	670	52	50	Straight	75	79.15	14	Standard

Sandvik HL 1000



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
90510253	452-08908-20, 10	ST68	640	80	50	Straight	75	79.15	14	Standard

Sandvik HL 1000 PE-65, HL 1500, HL 1500 PE-65, HL 1560 T-65



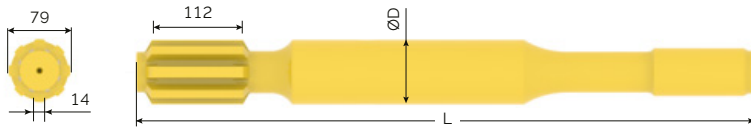
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90003702	437-17901, 10	T51	760	65	50	Straight	130	79.15	14	Standard
90029064	458-17901, 10	T Wiz60	760	65	50	Straight	130	79.15	14	Standard

Sandvik HL 1500-60, 1500-T60



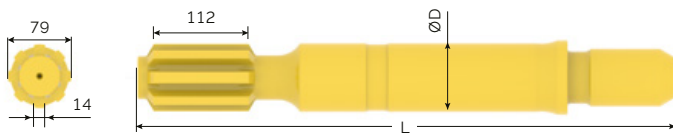
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029152	458-15902, 10	T Wiz60	760	60	50	Straight	131	79.15	14	Standard

Sandvik HL 1500-80, 1560-T80



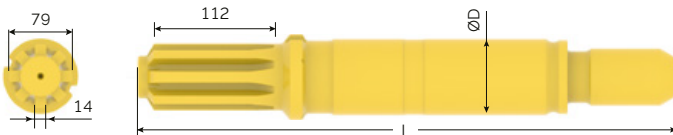
Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029065	458-15904, 10	T Wiz60	760	80	50	Straight	112	79	14	Standard

Sandvik HL 1500



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
90513765	451-14601-T, 10	ST58	635	80	50	Straight	112	79	14	Standard
90510775	452-14601-T, 10	ST68	635	80	50	Straight	112	79	14	Standard

Sandvik HL 1500 SPE-90, HL 1560 SPE-90



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Production drilling										
90029380	451-20101-T, 10	ST58	635	90	50	Straight	112	79	14	Standard
90029113	452-20101-T, 10	ST68	635	90	50	Straight	112	79	14	Standard
5697001910	452-20101-31-T,10	ST68	635	90	50	Straight	112	79	14	Chrome version
5697001909	452-14601-31-T,10	ST68	635	90	50	Straight	112	79	14	Chrome version

Sandvik HL 1500 SPE-90, HL 1560 SPE-90



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Splines type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
5697001823	458-20103,10	T-WIZ60	760	90	50	Straight	112	79	14	Standard

Sandvik RD 1635CF



Product no.	Product code	Thread	Length (L)	Diameter (D)	Diameter at piston strike face	Spline type	Spline length	Spline diameter	Spline dimension	Special feature
			mm	mm	mm		mm	mm	mm	
Bench drilling										
90029912	458-21501.10	T-WiZ60	760	80	-	Straight	130	79	13.95	Standard







COPROD drill strings

Introduction	188
COPROD 76, 89, 102 mm drill strings	189
Drill bits for COPROD 76, 89, 102 mm	190
COPROD 102, 127, 140 mm drill strings	191
Drill bits for COPROD 102, 127, 140 mm	192
Conversion kits	193

COPROD – the product range

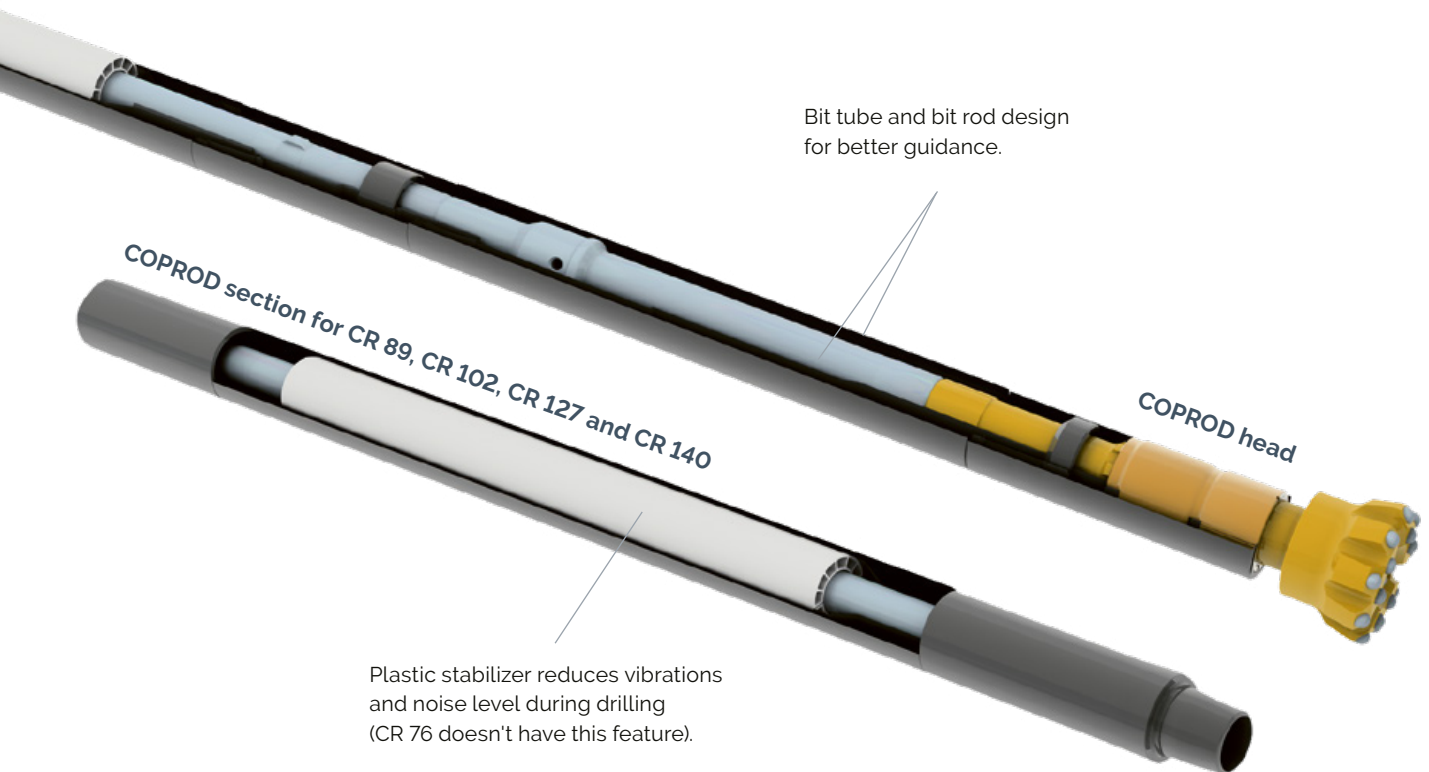
The COPROD product range consists of two surface drill rigs, and five different drill strings.

SmartROC C50

SmartROC C50 is the smaller of the two drill rigs. For this drill rig, three drill strings are available: COPROD 76 mm, 89 mm and 102 mm giving blast holes ranging between 90-140 mm in diameter.

SmartROC CL

The larger drill rig, SmartROC CL can be equipped with COPROD 102 mm, 127 mm or 140 mm drill strings. This means SmartROC CL can drill 115 mm to 216 mm blast holes.



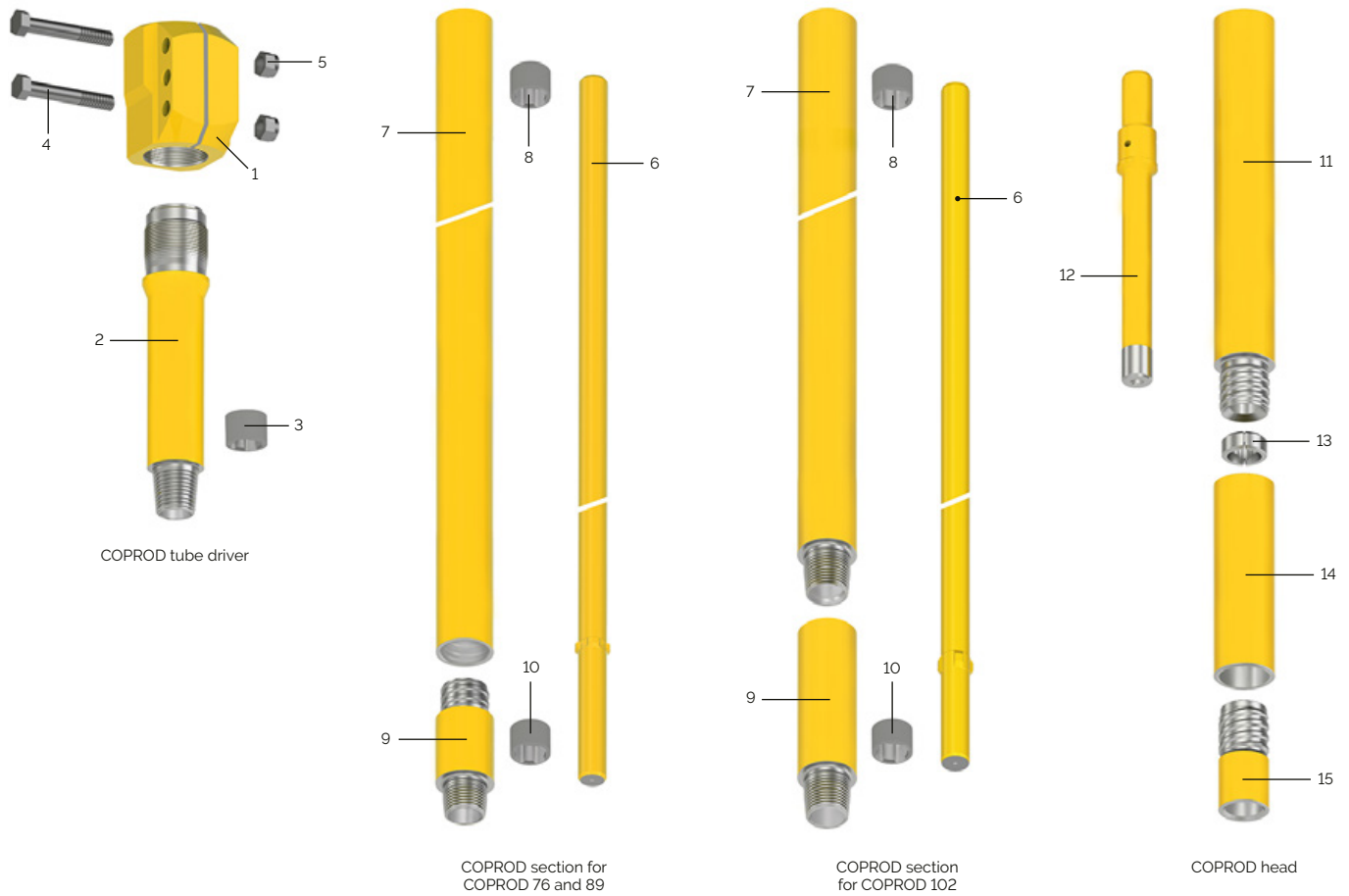
Bit tube and bit rod design for better guidance.

COPROD section for CR 89, CR 102, CR 127 and CR 140

COPROD head

Plastic stabilizer reduces vibrations and noise level during drilling (CR 76 doesn't have this feature).

COPROD 76, 89, 102 mm drill strings
for SmartROC C50 equipped with COP 3060CR rock drill



COPROD drill strings for SmartROC C50 with COP 3060CR

Part description	COPROD 76			COPROD 89			COPROD 102		
	Product No.	Product code	Weight*	Product No.	Product code	Weight*	Product No.	Product code	Weight*
COPROD tube driver									
1. Coupling	90029136	7970-0226-80	18,8	90029136	7970-0226-80	18,8	90029136	7970-0226-80	18,8
2. Tube adapter	90029442	7970-7627-80	12,3	90029133	7970-8927-80	13,8	90029132	7970-0227-80	17,7
3. Rod guide	94800215	7970-8912-00	0,1	94800121	7970-8902-00	0,1	94800087	7970-0202-00	0,1
4. Bolt (2 pcs) M24 × 150**	-	-		-	-		-	-	
5. Nut (2 pcs) M24**	-	-		-	-		-	-	
COPROD section 4,5 m (15')									
6. Rod 4500 mm (15')	90029471	7970-7616-00	55	90029384	7970-8916-00	56	90029386	7970-0216-00	70
7. Tube 4500 mm (15')	90029472	7970-7617-80	64	90029383	7970-8917-81	83	90029387	7970-0217-81	71
8. Rod guide	94800215	7970-8912-00	0,1	94800121	7970-8902-00	0,1	94800087	7970-0202-00	0,1
9. End piece	94800316	7970-7693-80	4,1	94800329	7970-8993-80	6,1	94800086	7970-0253-80	11,7
10. Rod guide	94800215	7970-8912-00	0,1	94800121	7970-8902-00	0,1	94800087	7970-0202-00	0,1
COPROD head									
11. Bit tube	94800317	7970-7682-80	22	94800310	7970-8982-80	32	94800324	7970-0282-80	47
12. Bit rod	94800318	7970-7681-00	12,3	94800311	7970-8981-00	18,2	94800323	7970-0281-00	26,1
13. Stop ring	94800365	7970-7685-00	4,4	94800366	7970-8985-00	5,6	94800367	7970-0285-00	10,4
14. Bit chuck	94800235	7970-7604-00	0,2	94800128	7970-8904-00	0,4	94800096	7970-0204-00	0,5
15. Bit driver	94800320	7970-7683-00	3,8	94800298	7970-8983-00	5,8	94800325	7970-0273-00	7,5
	94800227	7970-7684-00	1,8	94800272	7970-8984-00	2,8	94800082	7970-0274-00	2,9

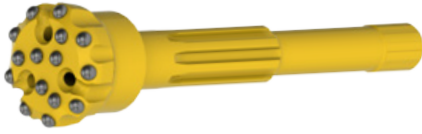
* Weight approx. kg

** Included in coupling.

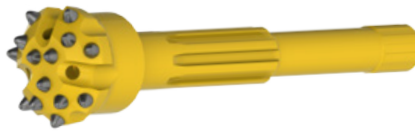
Coprod drill strings

Drill bits for COPROD 76, 89, 102 mm

for SmartROC C50 equipped with COP 3060CR rock drill



Flat front



Convex front



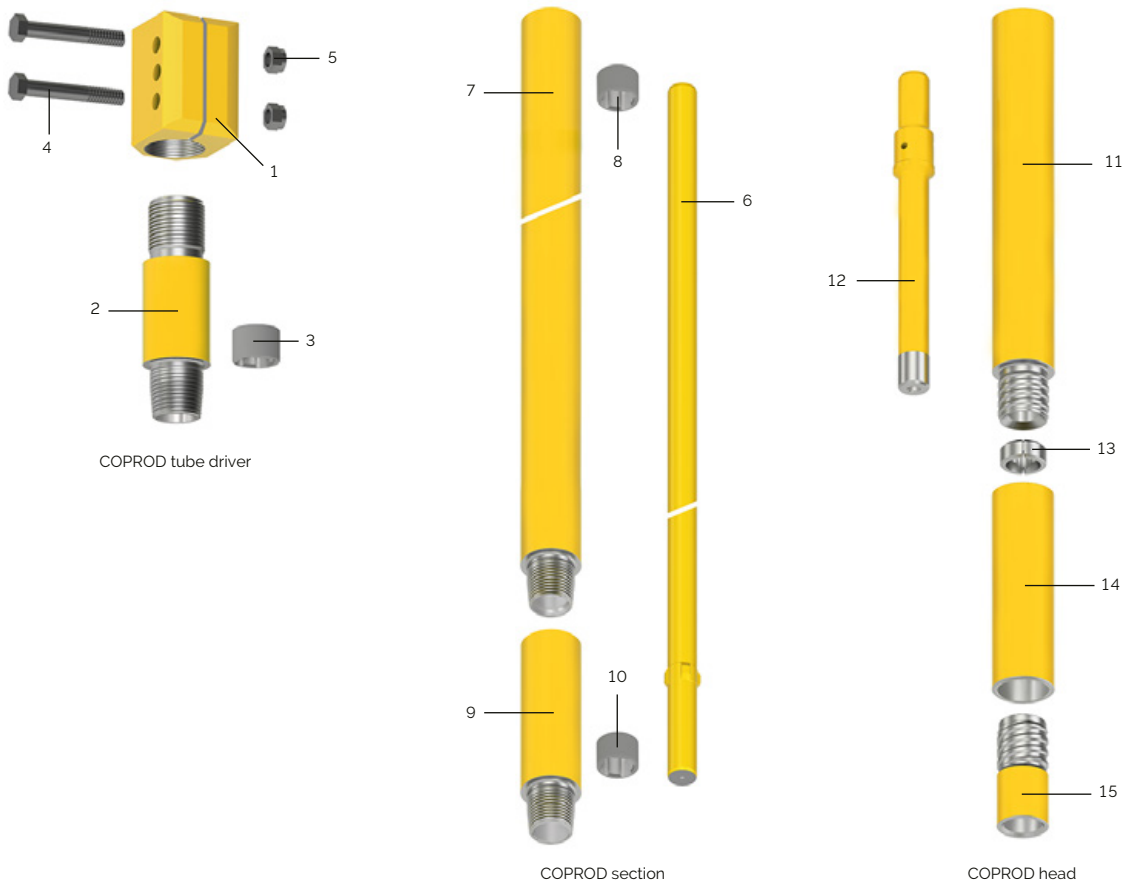
Drop center

COPROD drill bits

COPROD system	Diameter		Product No.	Product code	Buttons × button diameter (mm)			Gauge buttons angle		Flushing holes	Weight approx. kg
	mm	inch			Gauge outer	Gauge inner	Center	Outer	Inner	No. × size (mm)	
COPROD 76	Flat front, HD, spherical buttons										
	90	3 ³ / ₁₆ "	94800332	7976-1090-40.10-20	9×11	-	7×11	35°	-	3×8	5,8
	95	3 ⁷ / ₁₆ "	94800333	7976-1095-40.10-20	9×12,7	-	7×11	35°	-	3×8	6,0
	105	4 ¹ / ₈ "	94800334	7976-1105-40.10-20	9×12,7	-	7×12,7	35°	-	3×10	6,4
	Convex front, ballistic buttons										
	90	3 ³ / ₁₆ "	94800335	7976-2090-66.10-20	7×12,7	4×12,7	2×12,7	40°	20°	2×10	5,6
	95	3 ⁷ / ₁₆ "	94800336	7976-2095-66.10-20	7×12,7	3×12,7	2×12,7	45°	30°	3×8	5,6
	105	4 ¹ / ₈ "	94800337	7976-2105-66.10-20	9×12,7	3×12,7	4×12,7	45°	30°	3×10	6,2
	Drop center front, spherical buttons										
	105	4 ¹ / ₈ "	94800340	7976-3105-40.10-20	8×12,7	4×12,7	2×11	35°	-	4×10	6,2
COPROD 89	Flat front, HD, spherical buttons										
	105	4 ¹ / ₈ "	94800341	7989-1105-40.10-20	9×12,7	-	7×12,7	35°	-	3×13	9,1
	110	4 ⁵ / ₁₆ "	94800342	7989-1110-40.10-20	9×14,5	-	6×14,5	35°	-	3×13	9,5
	110	4 ⁵ / ₁₆ "	90029468	7989-1110-40.10-12	9×14,5	-	6×14,5	35°	-	3×13	9,5
	115	4 ¹ / ₂ "	94800343	7989-1115-40.10-20	9×14,5	-	6×14,5	35°	-	3×13	9,7
	127	5"	94800344	7989-1127-40.10-20	9×14,5	-	7×14,5	35°	-	3×13	10,6
	Convex front, ballistic buttons										
	105	4 ¹ / ₈ "	94800345	7989-2105-66.10-20	9×12,7	3×12,7	4×12,7	45°	30°	3×13	8,8
	110	4 ⁵ / ₁₆ "	94800346	7989-2110-66.10-20	9×12,7	6×12,7	4×12,7	45°	30°	3×13	9,2
	115	4 ¹ / ₂ "	94800347	7989-2115-66.10-20	7×14,5	4×14,5	3×14,5	45°	30°	3×13	9,2
	127	5"	94800348	7989-2127-66.10-20	9×14,5	6×14,5	4×14,5	45°	30°	3×13	10,1
	127	5"	90029962	7989-2127-66.10-12	9×14,5	6×14,5	4×14,5	45°	30°	3×13	10,1
	140	5 ¹ / ₂ "	90003707	7989-2140-66.10-20	9×14,5	6×14,5	5×14,5	45°	30°	3×13	10,7
	Drop center front, spherical buttons										
	105	4 ¹ / ₈ "	94800349	7989-3105-40.10-20	8×12,7	4×12,7	2×11	35°	-	4×13	8,9
	115	4 ¹ / ₂ "	94800351	7989-3115-40.10-20	8×14,5	4×14,5	2×11	35°	-	4×13	9,5
127	5"	94800352	7989-3127-40.10-20	8×14,5	4×14,5	4×11	35°	-	4×13	10,3	
Drop center front, ballistic buttons											
105	4 ¹ / ₈ "	94800443	7989-3105-66.10-20	8×12,7	4×12,7	2×11	40°	-	4×13	8,8	
COPROD 102	Flat front, HD, spherical buttons										
	115	4 ¹ / ₂ "	94800353	7902-1115-40.10-20	9×14,5	-	6×14,5	35°	-	3×13	12,6
	127	5"	94800354	7902-1127-40.10-20	9×14,5	-	7×14,5	35°	-	3×13	13,2
	140	5 ¹ / ₂ "	94800355	7902-1140-40.10-20	9×15,8	-	9×15,8	35°	-	3×13	14,5
	Convex front, ballistic buttons										
	115	4 ¹ / ₂ "	94800356	7902-2115-66.10-20	7×14,5	4×14,5	3×14,5	45°	30°	3×13	12,2
	127	5"	94800357	7902-2127-66.10-20	9×14,5	6×14,5	4×14,5	45°	30°	3×13	12,8
	140	5 ¹ / ₂ "	94800358	7902-2140-66.10-20	9×14,5	6×14,5	5×14,5	45°	30°	3×13	13,8
	Drop center front, spherical buttons										
	127	5"	94800360	7902-2127-40.10-20	9×14,5	6×14,5	4×14,5	35°	-	4×13	12,9
140	5 ¹ / ₂ "	94800361	7902-3140-40.10-20	9×15,8	6×15,8	4×12,7	35°	-	3×13	14,5	

COPROD 102, 127, 140 mm drill strings

for SmartROC CL equipped with COP 5060CR rock drill



COPROD drill strings for SmartROC CL with COP 5060CR

Part description	COPROD 102			COPROD 127			COPROD 140		
	Product No.	Product code	Weight*	Product No.	Product code	Weight*	Product No.	Product code	Weight*
COPROD tube driver									
1. Coupling	90003587	7970-2732-80	17,9	90003587	7970-2732-80	17,9	90003587	7970-2732-80	17,9
2. Tube adapter, L = 253 mm (10')	94800243	7970-0235-80	9,5	94800245	7970-2735-80	16,9	94800245	7970-2735-80	16,9
2. Tube adapter, L = 714 mm (2'4½')	94800244	7970-0233-80	30,4	94800246	7970-2733-80	54,2	94800246	7970-2733-80	54,2
3. Rod guide	94800087	7970-0202-00	0,1	94800087	7970-0202-00	0,1	94800087	7970-0202-00	0,1
4. Bolt (2 pcs) M24 × 160''	-	-	-	-	-	-	-	-	-
5. Nut (2 pcs) M24''	-	-	-	-	-	-	-	-	-
COPROD section 6,1 m (20')									
6. Rod 6100 mm (20')	94800084	7970-0251-00	94	94800295	7970-2751-00	94	94800295	7970-2751-00	94
7. Tube 6100 mm (20')	94800452	7970-0252-81	93	94800454	7970-2752-81	130	90029476	7970-4052-81	184
9. End piece	94800086	7970-0253-80	11,7	94800134	7970-2753-80	15,0	94800377	7970-4053-80	21,7
10. Rod guide	94800087	7970-0202-00	0,1	94800087	7970-0202-00	0,1	94800087	7970-0202-00	0,1
COPROD head									
	94800324	7970-0282-80	47	94800362	7970-2782-80	78	94800369	7970-4082-80	98
11. Bit tube	94800323	7970-0281-00	26,1	94800363	7970-2781-00	45	94800370	7970-4081-00	58
12. Bit rod	94800367	7970-0285-00	10,4	94800364	7970-2785-00	16,5	94800373	7970-4085-00	19,6
13. Stop ring	94800096	7970-0204-00	0,5	94800139	7970-2704-00	0,8	94800374	7970-4004-00	0,9
14. Bit chuck	94800325	7970-0273-00	7,5	94800331	7970-2773-00	11,2	94800371	7970-4083-00	14,4
15. Bit driver	94800082	7970-0274-00	2,9	94800141	7970-2774-00	5,0	94800372	7970-4084-00	5,5

* Weight approx. kg

** Included in coupling.

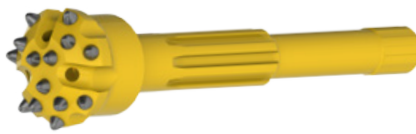
Coprod drill strings

Drill bits for COPROD 102, 127, 140 mm

for SmartROC CL equipped with COP 5060CR rock drill



Flat front



Convex front

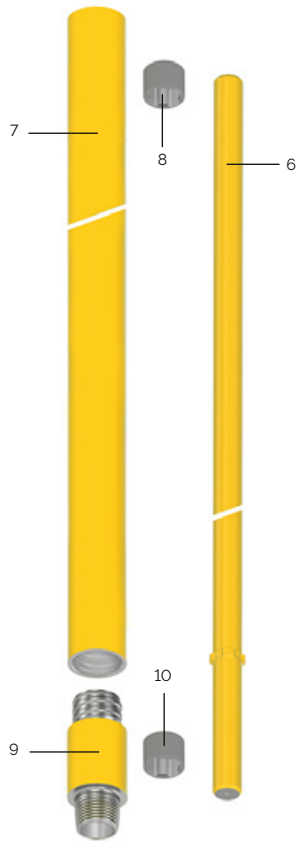


Drop center

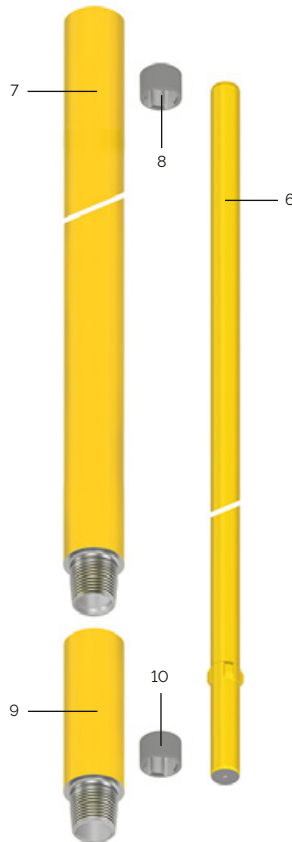
COPROD drill bits

COPROD system	Diameter		Product No.	Product code	Buttons × button diameter (mm)			Gauge buttons angle		Flushing holes No. × size (mm)	Weight approx. kg
	mm	inch			Gauge outer	Gauge inner	Center	Outer	Inner		
COPROD 102	Drop center front, ballistic buttons										
	127	5"	90029832	7902-3127-66.10-20	8×14,5	4×14,5	4×11	40°	-	4×13	12,9
	Drop center front, Trubbnos buttons										
	127	5"	5697000112	7902-6127-21.10-20	8×15,8	4×15,8	5×11	35°	-	4×13	12,9
	Flat front, HD, spherical buttons										
	115	4½"	94800353	7902-1115-40.10-20	9×14,5	-	6×14,5	35°	-	3×13	12,6
	127	5"	94800354	7902-1127-40.10-20	9×14,5	-	7×14,5	35°	-	3×13	13,2
	140	5½"	94800355	7902-1140-40.10-20	9×15,8	-	9×15,8	35°	-	3×13	14,5
	Convex front, ballistic buttons										
	115	4½"	94800356	7902-2115-66.10-20	7×14,5	4×14,5	3×14,5	45°	30°	3×13	12,2
	127	5"	94800357	7902-2127-66.10-20	9×14,5	6×14,5	4×14,5	45°	30°	3×13	12,8
	140	5½"	94800358	7902-2140-66.10-20	9×14,5	6×14,5	5×14,5	45°	30°	3×13	13,8
	Drop center front, spherical buttons										
	140	5½"	94800361	7902-3140-40.10-20	9×15,8	6×15,8	4×12,7	35°	-	3×13	14,5
	Drop center front, ballistic buttons										
127	5"	90029832	7902-3127-66.10-20	8×14,5	4×14,5	4×11	40°	-	4×13	12,9	
COPROD 127	Flat front, HD, spherical buttons										
	152	6"	94800417	7927-1152-40.10-20	9×15,8	-	9×15,8	35°	-	3×16	22,9
	165	6½"	94800384	7927-1165-40.10-20	10×15,8	-	10×15,8	35°	-	3×15	23,9
	Convex front, ballistic buttons										
	165	6½"	94800385	7927-2165-66.10-20	9×15,8	6×15,8	6×15,8	45°	30°	3×15	23,1
	165	6½"	5697000563	7927-2165-67.10-20	9×19,1	6×19,1	4×19,1	35°	20°	3×15	23,1
	203	8"	90029203	7927-2210-66.08-20	9×15,8	6×15,8	7×15,8	45°	25°	3×16	26,5
	Drop center front, spherical buttons										
	165	6½"	94800378	7927-3165-40.10-20	10×15,8	6×15,8	5×15,8	35°	-	2×18	23,8
	Drop center front, ballistic buttons										
140	5½"	94800368	7927-3140-66.10-20	9×15,8	6×15,8	4×12,7	35°	-	3×16	20,2	
COPROD 140	Convex front, ballistic buttons										
	165	6½"	94800379	7940-2165-66.08-20	9×15,8	6×15,8	7×15,8	45°	25°	3×16	30,1
	180	7½"	94800381	7940-2180-66.08-20	9×15,8	6×15,8	7×15,8	45°	25°	3×16	31,2
	Convex front, Trubbnos buttons										
	203	8"	90029721	7940-2203-70.08-23	10×15,8	7×15,8	16×15,8	35°	15°	3×16	34,8
210	8¼"	90029722	7940-2210-70.08-23	10×15,8	7×15,8	16×15,8	35°	15°	3×16	35,5	
216	8½"	90029723	7940-2216-70.08-23	10×15,8	7×15,8	16×15,8	35°	15°	3×16	36,0	

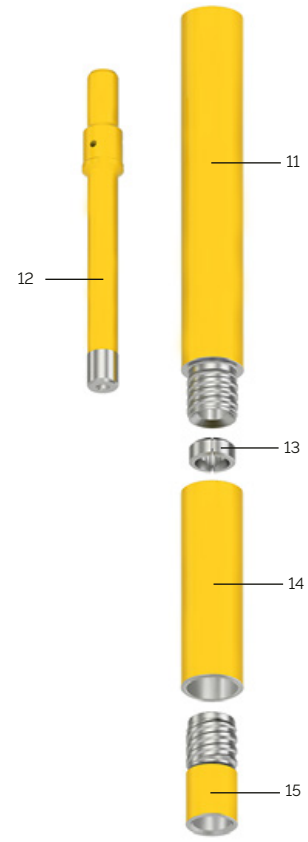
Conversion kits



COPROD section for
COPROD 76 and 89



COPROD section
for COPROD 102, 127



COPROD head

Conversion kits

The COPROD product range includes five tube diameters, each of which accommodates up to five bit diameters. If you would like to drill a larger hole than the original drill string design, there is a conversion kit option. A special adapter can replace the end-piece of the first section of the drill string, allowing the next dimension COPROD bit assortment to be used. This will give you greater flexibility, allowing more hole sizes to be drilled with the same drill string. Larger bits, with their larger flushing holes also give less pressure drop, and lower diesel consumption per hour of operation.

COPROD conversion kits

Part description	Product No.	Product code
Conversion kit for COPROD 76 to COPROD 89		
9. End piece	94800425	7970-7693-89-80
10. Rod guide	94800215	7970-8912-00
COPROD head	Use standard COPROD 89	
Conversion kit for COPROD 89 to COPROD 102		
9. End piece	94800423	7970-8993-02-80
10. Rod guide	94800121	7970-8902-00
COPROD head	Use standard COPROD 102 except for bitrod	
12. Bitrod	94800424	7970-0285-89-00
Conversion kit for COPROD 102 to COPROD 127		
9. End piece	94800426	7970-0253-27-80
10. Rod guide	94800087	7970-0202-00
COPROD head	Use standard COPROD 127	
Conversion kit for COPROD 127 to COPROD 140*		
COPROD head	Use standard COPROD 140	

*COPROD 127 and COPROD 140 use the same thread connection.





Cross over couplings and adapters

Cross over couplings and adapters.....	196
Rod adapters and couplings.....	197

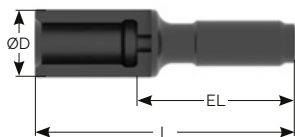
Cross over couplings and adapters

Cross over couplings



Product no.	Product code	Thread (1)	Thread (2)	Length		Diameter		Weight kg
				mm	inch	mm	inch	
90003541	327-1055-35.10	SR38	T38	170	6¾"	55	2½/₃₂"	1.87
90003560	369-1050-03.10	TC35	R32	160	6½/₁₆"	48	1⅞"	1.62
90003562	369-1057-35.10	TC35	T38	170	6¾"	57	2¼"	2.29
90003596	328-1055-35.10	T38	SR35	170	6¾"	55	2½/₃₂"	2
90029837	335-1057-72.10	T38	TC42B	175	6⅞"	57	2¼"	2
90515748	303-1055-04.10	R32	R38	170	6¾"	55	2½/₃₂"	2
90515749	303-1055-35.10	R32	T38	170	6¾"	55	2½/₃₂"	2
90515750	304-1055-35.10	R38	T38	180	7⅛"	55	2½/₃₂"	1.8
90515751	307-1044-03.10	R28	R32	160	6½/₁₆"	44	1²³/₃₂"	1.2
90515753	335-1061-36.10	T38	T45	180	7⅞"	60	2⅜"	2.4
90515755	336-1072-37.10	T45	T51	225	8⅞"	72	2²⁷/₃₂"	4.5
5697000215	303-1057-72.10	R32	TC42B	165	6½"	57	2¼"	2
5697001331	336-1061-03.10	T45	R32	170	6¾"	61	2⅜"	2.5
90515746	302-1044-03.10	R25	R32	160	6½/₁₆"	44	1⁴/₆₄"	1.3

Cross over adapters



Product no.	Product code	Thread		Length		Effective length (EL)		Diameter (D)		Weight kg
		male	female	mm	inch	mm	inch	mm	inch	
90516327	323-2034-29.02	SR22	R23	140	5½"	90	3½"	34	1½/₃₂"	0.45
90516019	302-2045-03.10	R32	R25	195	7⅞/₁₆"	120	4¾"	45	1¾"	1.2
90516020	303-2045-04.10	R38	R32	210	8¼"	135	5⅞/₁₆"	45	1¾"	1.5
90504217	303-2045-35.00	T38	R32	220	8⅞"	145	5⅞/₁₆"	45	1¾"	1.5
90516021	304-2055-03.10	R32	R38	247	9¾"	162	6⅜"	55	2½/₃₂"	2.2
90516022	335-2057-03.10	R32	T38	247	9¾"	162	6⅜"	57	2¼"	2.4
90504088	304-2057-35.00	T38	R38	250	9⅞"	165	6½"	57	2¼"	2.4
90516023	335-2057-04.10	R38	T38	250	9⅞"	165	6½"	57	2¼"	3.4
90503941	335-2057-36.00	T45	T38	260	10¼"	175	6⅞"	57	2¼"	2.9
90504244	336-2063-35.00	T38	T45	260	10¼"	175	6⅞"	63	2¹⁵/₃₂"	2.9
90503942	336-2063-37.00	T51	T45	275	10⅞"	190	7½"	63	2¹⁵/₃₂"	3.6
90504330	337-2071-36.00	T45	T51	290	11⅜"	170	6¾"	71	2²⁵/₃₂"	4
90029616	358-2085-57.10	T60	T-WIZ60	330	13"	200	7⅞"	85	3⁹/₁₆"	7.25
90029741	358-2100-57-45.10	T60	T-WIZ60	340	13²⁷/₃₂"	197	7³/₄₁"	100	3¹⁵/₁₆"	8.18
5697000217	328-2057-35.10	T38	SR35	250	9⅞"	175	6⅞"	57	2¼"	2.8
5697000216	372-2057-35.00	T38	TC42B	250	9⅞"	170	6¾"	57	2¼"	2.6

Rod adapters



Product no.	Product code	Thread		Length		Weight kg
		male	female	mm	inch	
90504952	303-3032-03-63,08	R32	R32	155	6 ¹ / ₄ "	0,8
90515671	236-4902-C,10	T45	T45	220	8 ² / ₃₂ "	1,9
90514708	237-5102-C,10	T51	T51	250	9 ⁷ / ₈ "	2,7

Couplings



Central stop



Full bridge stop

Product no.	Product code	Thread	Short description	Length		Diameter		Weight kg	Feature
				mm	inch	mm	inch		
90029135	358-0085-57,10	T-Wiz60	T-WIZ60-Rnd85 coupling-full bridge	275	10 ⁷ / ₈ "	85	3 ³ / ₈ "	7,2	Full bridge
90515730	303-0042,10	R32	R32-Rnd42 coupling	150	5 ⁷ / ₈ "	42	1 ⁵ / ₈ "	0,9	Standard
90515731	303-0044,10	R32	R32-Rnd44 coupling	150	5 ⁷ / ₈ "	44	1 ⁷ / ₈ "	0,9	Standard
90515732	303-0044-57,10	R32	R32-Rnd42 coupling-full bridge	150	5 ⁷ / ₈ "	44	1 ⁵ / ₈ "	1	Full bridge
90515733	304-0055,10	R38	R38-Rnd55 coupling	170	6 ³ / ₈ "	55	2 ¹ / ₈ "	1,7	Standard
90515734	304-0055-57,10	R38	R38-Rnd55 coupling-full bridge	180	7 ¹ / ₈ "	55	2 ¹ / ₈ "	2	Full bridge
90515735	307-0040,10	R28	R28-Rnd40 coupling	150	5 ⁷ / ₈ "	40	1 ⁵ / ₈ "	0,9	Standard
90515736	335-0052,10	T38	T38-Rnd52 coupling	190	7 ¹ / ₂ "	52	2"	1,7	Standard
90515737	335-0055,10	T38	T38-Rnd55 coupling	190	7 ¹ / ₂ "	55	2 ¹ / ₈ "	1,9	Standard
90515738	335-0055-57,10	T38	T38-Rnd52 coupling-full bridge	180	7 ¹ / ₂ "	55	2 ¹ / ₈ "	2	Full bridge
90515739	336-0063,10	T45	T45-Rnd63 coupling	210	8 ¹ / ₄ "	63	2 ¹ / ₂ "	2,7	Standard
90515740	336-0063-57,10	T45	T45-Rnd63 coupling-full bridge	230	9 ¹ / ₈ "	63	2 ¹ / ₂ "	3,3	Full bridge
90515741	336-0066,10	T45	T45-rnd66 coupling	210	8 ¹ / ₄ "	66	2 ⁵ / ₈ "	3,1	Standard
90515742	336-0066-57,10	T45	T45-Rnd66 coupling-full bridge	230	9 ¹ / ₈ "	66	2 ⁵ / ₈ "	3,5	Full bridge
90515743	337-0072,10	T51	T51-Rnd72 coupling	235	9 ¹ / ₄ "	72	2 ⁷ / ₈ "	4,1	Standard
90515744	337-0072-57,10	T51	T51-Rnd72 coupling-full bridge	255	10"	72	2 ⁷ / ₈ "	4,7	Full bridge
90515728	302-0033,02	R25	R25-Rnd33 coupling	150	5 ⁷ / ₈ "	33	1 ¹ / ₂ "	0,5	Standard
90515729	302-0035,02	R25	R25-Rnd35 coupling	150	5 ⁷ / ₈ "	34,5	1 ¹ / ₂ "	0,8	Standard
90515745	337-0077,10	T51	T51-Rnd77 coupling	235	9 ¹ / ₄ "	77	3"	5,2	Standard
90515727	301-0031,02	R22	R22-Rnd31 coupling	150	5 ⁷ / ₈ "	31	1 ¹ / ₂ "	0,53	Standard

Auxiliary tools

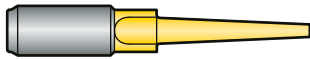
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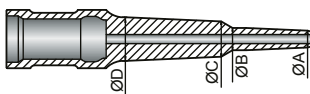
Auxiliary tools

Recovery pikes



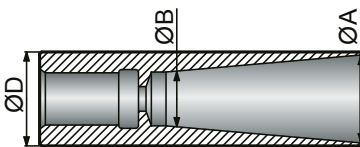
Thread		Product no.	Product code		Weight approx. kg
mm	inch		Rope thread	T thread	
32	1¼"	90000331	9002,49	-	0,5
38	1½"	90001971	-	9250,49	1,0
45	1¾"	90002079	-	9253,49	1,3
51	2"	90002872	-	9265,49	2,3

Recovery pikes for TDS tubes



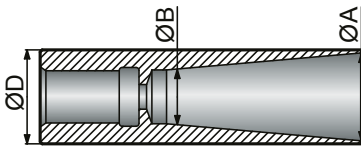
API Reg. Pin	A		B		C		D		Product no.	Product code	Weight approx. kg
	mm	inch	mm	inch	mm	inch	mm	inch			
For TDS tubes											
ST58	22	7⁄8"	29	1½"	50	1¾"	59	2½"	94000061	9268,49	5,5
ST68	18	2³⁄₃₂"	43	1¼"	60	2³⁄₃₂"	71	2²⁵⁄₃₁"	90510783	9277,49	7,7

Recovery sleeves



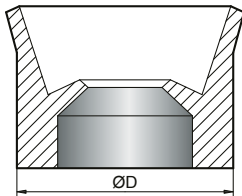
Thread	ØD		Major inner diam. (ØA)		Minor inner diam. (ØB)		Product no.	Product code		Weight approx. kg	
	mm	inch	mm	inch	mm	inch		Rope thread	T thread		
For extension rods											
R32	49	1¹⁵⁄₁₆"	47,2	1²⁷⁄₃₂"	23	2⁹⁄₃₂"	90510880	9041,49	-	1,7	
R38	60	2³⁄₈"	57,2	2¼"	30	1³⁄₁₆"	90510881	9042,49	-	3,1	
T38	61	2¹³⁄₃₂"	58,2	2⁹⁄₃₂"	30	1³⁄₁₆"	90510882	-	9043,49	4,1	
T45	71	2²⁵⁄₃₂"	68	2¹¹⁄₁₆"	36	1¹³⁄₃₂"	90510883	-	9044,49	5,8	
T51	82	3⁷⁄₃₂"	78,2	3¹⁄₁₆"	41	1½"	90510884	-	9045,49	8,3	
For couplings											
R32	49	1¹⁵⁄₁₆"	47,2	1²⁷⁄₃₂"	23	2⁹⁄₃₁"	90510880	9041,49	-	1,7	
T45	71	2²⁵⁄₃₂"	68	2¹¹⁄₁₆"	36	1¹³⁄₃₂"	90510883	-	9044,49	5,8	
T51	82	3⁷⁄₃₂"	78,2	3¹⁄₁₆"	41	1½"	90510884	-	9045,49	8,3	
For speedrods											
T45	71	2²⁵⁄₃₂"	68	2¹¹⁄₁₆"	36	1¹³⁄₃₂"	90510883	-	9044,49	5,8	
T51	82	3⁷⁄₃₂"	78,2	3¹⁄₁₆"	41	1½"	90510884	-	9045,49	8,3	
T W/iz60	95	3¾"	89	3 ½"	54	2½"	90029329	-	9420,49	-	

Recovery sleeves for TDS tubes



Thread	ØD		Major inner diam. (ØA)		Minor inner diam. (ØB)		Product no.	Product code	Weight approx. kg
	mm	inch	mm	inch	mm	inch			
For TDS tubes									
ST58	90	3 ¹ / ₁₆ "	80	3 ³ / ₃₂ "	57	2 ¹ / ₄ "	94000012	9269.49	4.9
ST68	102	4"	92	3 ⁵ / ₁₆ "	70	2 ³ / ₄ "	94502423	9267.49	6.2

Shank seals



Tube diameter		Outer diameter (D)		Product no.	Product code
mm	inch	mm	inch		
6.5	1/4"	9.3	2 ³ / ₆₄ "	90002047	9159-06
10	1 ³ / ₃₂ "	17	2 ¹ / ₃₂ "	90002571	9151-10
14.3	9/16"	22	7/8"	90000466	9156-14
19	3/4"	27	1 ¹ / ₁₆ "	90002008	9158-19
23	2 ⁹ / ₃₂ "	34	1 ¹¹ / ₃₂ "	90504645	9158-23

Thread grease



Acinol grease	Product no.	Product code
4.5 kg (10 lbs) package	90000382	9201.49
18 kg (40 lbs) package	90002915	9210.49
18 kg (40 lbs) package TIN	90029201	9211.49
50 kg (110 lbs) package	90503915	9200.49

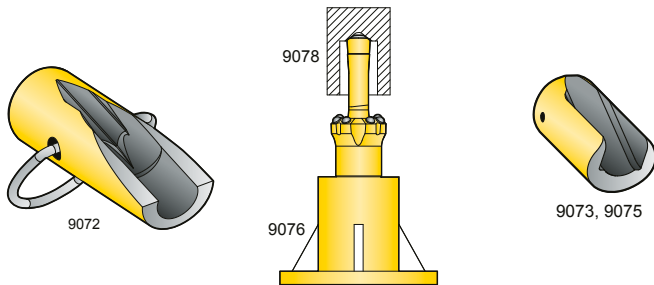
Auxiliary tools

Chuck bushing gauges



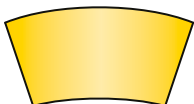
Bushing		Product no.	Product code
mm	inch		
19	¾"	90002667	9131
22	⅞"	90002668	9132
25	1"	90002669	9133

Knock-off tools



	Rod diam. hex.		Product no.	Product code	Weight approx.
	mm	inch			kg
Pilot rod					
-	-	-	90000318	9072.49	4.6
Pilot adapter					
-	-	-	90000928	9076.49	6.6
-	-	-	90000930	9078.49	2.1
Tapered rod					
22	⅞"		90504619	9073.49	1.1
25	1"		90504620	9075.49	1.1

Shim



Description	Product No.	Product code
Shim for 7" taper and 12" taper	90503908	9162.49



 **Epiroc**

Epiroc Drilling Tools AB





Grinding equipment

Grinding machines	206
Accessories and consumables	208
Indexing templates	212

Grind Matic BQ3 – Intensive

Semi-automatic grinding machine for threaded and tapered button bits. High grinding capacity (full shift)



Grind Matic BQ3-DTH

Semi-automatic grinding machine for DTH-and COPROD button bits. Can also be used for threaded and tapered button bits with optional accessories. High grinding capacity (full shift)



Grind Matic Manual B

Handheld portable grinding machine for threaded and tapered button bits. Medium grinding capacity (10-25 bits/day)



Grind Matic BQ3	Product no.
400 V 3-phase 50 Hz	87004800
230 V 3-phase 50 Hz	87004801
400 V 3-phase 60 Hz	87004803
230 V 3-phase 60 Hz	87004805
440 V 3-phase 50 Hz	87004806

Technical data

Air pressure, max.	7 bar (101.5 psi)
Air pressure, min.	5.5 bar (80 psi)
Air consumption	40 L/min
Voltage working lighting	24 V
Weight, excluding packaging	222 kg (490 lb)
Transport dimensions	L 1160 x W 1030 x H 1730 mm (3' 9 5/8" x 3' 4 1/2" x 5' 8 1/8")

Grinding capacity

Maximum height of drill bit	200 mm (7 7/8")
Maximum diameter of drill bit	127 mm (5")
Minimum distance between buttons	3.5 mm (1/4")

Accessories included in delivery

Allen key, 8 mm (1 piece)
Centering cup, 11 mm (1 piece)
Centering device (1 piece)
Grinding wheel, uncoated for centering
Protective goggles
Operator's instructions and spare parts list
Box wrench, 15 mm
Note: Grind Matic BQ3 must be completed with grinding wheels, centering cups (others than 11 mm), bit holders and indexing templates.

Grind Matic BQ3-DTH	Product no.
400 V 3-phase 50 Hz	87004900
230 V 3-phase 50 Hz	87004901
400 V 3-phase 60 Hz	87004903
230 V 3-phase 60 Hz	87004905
440 V 3-phase 50 Hz	87004906

Technical data

Air pressure, max.	7 bar (101.5 psi)
Air pressure, min.	5.5 bar (80 psi)
Air consumption	40 L/min
Voltage working lighting	24 V
Weight, excluding packaging	345 kg (760 lb)
Transport dimensions	L 1200 x W 1200 x H 1700 mm (3' 11 1/4" x 3' 11 1/4" x 5' 6 7/8")

Grinding capacity

Maximum height of drill bit	650 mm (2' 1 1/2")
Maximum diameter of drill bit	178 mm (7")
Minimum distance between buttons	3.5 mm (1/4")

Optional accessories

Accessories	Product no.
Auxiliary set for grinding of top hammer bits/threaded bits in BQ3-DTH grinding machine (exclusive bit holder and templates)	87003939

Accessories included in delivery

Protective goggles
Operator's instructions and spare parts list
Box wrench, 15 mm
Allen key, 8 mm
Note: Grind Matic BQ3-DTH must be completed with grinding wheels, centering cups and bit holders.

Grinding machine	Product no.
Grind Matic Manual B	87001890

Technical data

Air pressure, max.	7 bar (101.5 psi)
Air consumption	15 L/s (900 L/min)
Coolant container	10 l
Weight, excluding packaging	55 kg (121.3 lb)
Weight, incl. packaging	90 kg (198.4 lb)
Transport dimensions	L 1200 x W 800 x H 850 mm (3' 11 1/4" x 2' 7 1/2" x 2' 9 1/2")

Grinding capacity

Max. bit skirt diameter	90 mm (3 5/8")
Max. diameter, threaded bits	127 mm (5")
Max. diameter, retrac bits*	127 mm (5")
Max. diameter, tube drilling*	152 mm (6")

* Large clamping device necessary. Prod no. 87001930

Optional accessories

Accessories	Product no.
Set of 5 centring fingers	87004443

Accessories included in delivery

Allen key, 4 mm
Centering fingers (4 pcs)
Hand-held grinder, 30 000 r/min
Open end spanner, 14 mm (2 pcs)
Protective goggles
Operator's instructions and spare parts list
Note: Grind Matic Manual B must be completed with grinding wheels and bit holders.

Grind Matic Manual B-DTH

Handheld portable grinding machine for DTH- and COPROD bits. Can also be used for threaded and tapered button bits with optional accessories. Medium grinding capacity (10-25 bits/day)



Grinding machine	Product no.
Grind Matic Manual B-DTH	87002300

Technical data

Air pressure, max.	7 bar (101.5 psi)
Air consumption	15 l/s (900 l/min)
Coolant container	10 l
Weight, ex. packaging	110 kg (253 lb)
Weight, incl. packaging	148 kg (326 lb)
Transport dimensions	L 1200 x W 800 x H 940 mm (3'11¼" x 2'7½" x 3'1")

Grinding capacity

Max. height of drill bit	506 mm (17½')
Max. diameter of drill bit	203 mm (8")
Max. diameter of bit shank	170 mm (6¾')

Optional accessories

Accessories	Product no.
Set of 5 centering fingers	87004443
Clamping device for threaded bits	87002401

Accessories included in delivery

Allen key, 5 mm
Allen key, 6 mm
Centering fingers (4 pcs)
Hand-held grinder, 30 000 r/min
Open end spanner, 14 mm (2 pcs)
Protective goggles
Operator's instructions and spare parts list
Note: Grind Matic Manual B must be completed with grinding wheels and bit holders.

Grind Matic RH3

Our multi-grip holder widen your options for grinding different types of bit designs from small top hammer bits to larger DTH and COPROD drill bits. Medium grinding capacity (10-25 bits/day)



Grinding machine	Product no.
Grind Matic RH3	87005200

Rig brackets

Kit	Product no.
Kit for Epiroc cabin rigs	87005205
Kit for FlexiROC T35R rigs	87005206

Main bit holders

Type	Product no.
Multi grip	87004360
Tophammer*	87004964

Oil filter

Type	Product no.
Filter + bracket	87004952

Technical data

Rec. oil pressure, min-max	150-260 bar
Oil consumption	13 l/min
Cooling liquid consumption	Max 20 l/h
Voltage	24 VDC
Current	6 A
IP class	65
Working temperature	-25°C - +50°C
Speed, spindle	10 500 rpm
Weight	85 kg

Grinding capacity

Max. distance between bit holder and grinding wheel	230 mm
Drill bit diameters	35-165 mm
Max. grip size	110 mm
Min. distance between buttons	3,5 mm

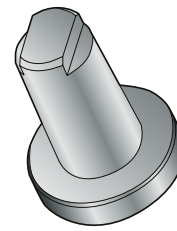
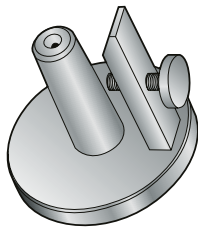
Optional accessories

Centering fingers, S (3 pcs) <11 mm	87004868
Centering fingers, M (3 pcs) 10-14 mm	87004871
Centering fingers, L (3 pcs) >13 mm	87004872
Splash guard	87004423
Belt	87004944
Gear kit (gears + belt)	87004791
Oil filter insert (10 micron)	87004953
Recommended grease: Mobil SHC100 or SKF LGGB2.	

Accessories included in delivery

Allen key, 4 mm
Centering fingers (3 pcs)
Locking pin (1 pcs)
Extractor
Spare screws (4 pcs)
Protective goggles
Operator's instructions and spare parts list

Bit holders for button bits



Bit holder type A

For Grind Matic BQ3 – Can also be used for BQ3-DTH with optional accessories

Type of bit	Product no.
Threaded bits	
R25	87003475
R28	87003476
R32	87003477
R38	87004686
T35	87005089
T38	87004687
T45	87003479
T51 and retrac	87003521
T-WIZ60*	87005052
GT-60*	87005085
SR28	87003960
SR32	87003962
SR35	87003956
TC35	87004685
TC42	87004641
Tube bits	
ST58	87003522
ST68	87003523
Tapered bits	
7° taper	87003524
11° taper	87003909
12° taper	87003525
Reaming bits	
64, 76 and 89 mm	87003526
89, 102 and 127 mm	87003527
Guide bits	
SR35	87004056

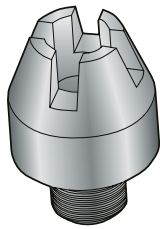
*Must be used together with clamping device 87004777 (observe max bit height).

Bit holder type C

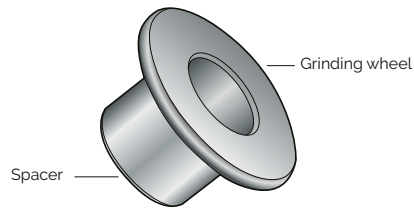
For Grind Matic Manual B and Grind Matic Manual B-DTH

Type of bit	Product no.
Threaded bits	
R25	87000792
R28	87000793
R32	87000794
R35	87003360
R38	87000795
T38	87000795
T45	87000796
T51	87000802
SR28	87003961
SR35	87003957
Tapered bits	
7° taper	87001044

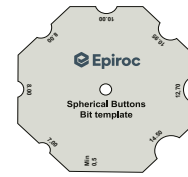
Centering cups



Grinding wheels



Grinding templates



For button bits

For Grind Matic BQ3 and BQ3-DTH	
Button size, mm	Product no.
7	87001040
8	87000842
9	87001047
10	87001041
11	87000840
12	87001042
12.7	87000839
13	87001385
14	87001043
14.5	87001443
15	87001386
16	87001387
18	87003943
19	87003944

For steel removal and for Grind Matic BQ3 and BQ3-DTH	
Type	Product no.
Grinding wheel	87001530
Spacer for 10 mm button	87001631
Spacer for 11 mm button	87001632
Spacer for 12 mm button	87001633
Spacer for 13 mm button	87001634
Spacer for 14 mm button	87001635
For 15 mm button combine 2.0 mm and 2.5 mm spacer.	
For 16 mm button combine two 2.5 mm spacers.	
Note: All grinding wheels in this table have an inner diameter of 12 mm.	

For button bits	
Dimension, mm	Product no.
Button bits, spherical	
7 – 14.5	87005282
11 – 22	87005284
Button bits, Trubbnos	
6 – 12	87005287
12.7 – 19.1	87005288
Button bits, ballistic	
7 – 14.5	87005283
9 – 19.1	87005285

Diamond grinding wheels for button bits – for all Grind Matic BQ and Manual B machines



Grinding wheels – Spherical buttons	
Diameter, mm	Product no.
7	87004554
8	87004555
9	87003969
10	87003970
11	87003971
12	87003972
13	87003973
14	87001025
15	87001384
16	87001027
18	87003964
19	87003966

Note: These grinding wheels have an inner diameter of 12 mm.

Grinding wheels – Trubbnos buttons	
Diameter, mm	Product no.
9	87004589
10	87004590
11	87004591
12	87004592
12.7	87004593
14.5	87004594
15.8	87004595
19.1	5697001210

Note: These grinding wheels have an inner diameter of 12 mm.

Grinding wheels – Ballistic buttons	
Diameter, mm	Product no.
7	87004556
8	87004557
9	87003974
10	87003975
11	87003976
12	87003977
13	87003413
14	87003414
15	87003415
16	87003416
18	87003965
19	87003967

Note: These grinding wheels have an inner diameter of 12 mm.

Diamond grinding wheels for button bits – for Grind Matic RH3



Grinding wheels – Spherical buttons	
Diameter, mm	Product no.
8	87005032
9	87005033
10	87005049
11	87004851
12	87005050
12.7	87004852
13	87004848
14.5	87004853
15.8	87004854
19.1	na

Note: These grinding wheels have an inner diameter of 10 mm.

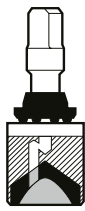
Grinding wheel for Trubbnos buttons	
Diameter, mm	Product no.
9	87004809
10	87004810
11	87004811
12	87004812
12.7	87004813
14.5	87004814
15.8	87004815
19.1	87004816

Note: These grinding wheels have an inner diameter of 10 mm.

Grinding wheels – Ballistic buttons	
Diameter, mm	Product no.
8	87005034
9	87005035
10	87005036
11	87004855
12	87005051
12.7	87004856
13	87004849
14.5	87004857
15.8	87004858
19.1	na

Note: These grinding wheels have an inner diameter of 10 mm.

Diamond grinding cups for Grind Matic HG



Grinding cups – Spherical buttons	
Diameter, mm	Product no.
7	87005110
8	87005111
9	87005112
10	87005113
11	87005114
12	87005115
13	87005116
14	87005117
15	87005118
16	87005119
18	87005120
19	87005121
20	87005122
22	87005123
25	87005124

Grinding cups – Ballistic buttons	
Diameter, mm	Product no.
7 B	87005130
8 B	87005131
9 B	87005132
10 B	87005133
11 B	87005134
12 B	87005135
13 B	87005136
14 B	87005137
15 B	87005138
16 B	87005139

Grinding cups – Trubbnos buttons	
Diameter, mm	Product no.
9 T	87005160
10 T	87005161
11 T	87005162
12 T	87005163
12.7 T	87005164
14.5 T	87005165
15.8 T	87005166
19.1 T	87005167

Grinding cups – For steel removal	
Diameter, mm	Product no.
SG 7 – 8	87005150
SG 9 – 10	87005151
SG 11 – 12	87005152
SG 13 – 14	87005153
SG 15 – 16	87005154
SG 17 – 18	87005155
SG 19 – 20	87005156
SG 21 – 22	87005157

Air line accessories

Any pneumatic machine without built-in lubrication needs a separate lubricator to ensure that all moving parts are continuously covered with a film of oil. Epiroc Grind Matic lubricators are designed to work in any position, horizontal, vertical or upside-down.

This secures a continuous oil supply to protect your machine. Accessories like air hoses, claw couplings, valves and hose clamps are also available in our assortment.



Lubricators

Description	Product no.	Oil volume	Connection
Lubricator mini (max. 8 bar)	87002750	0,05 l	¼" – ¼" coupling

For Grind Matic BQ3

Drill bit		Indexing template
Product no.	Product code	
R25		
90510448	102-5033-17,39-20	87003484
90510274	102-5033-17-67,39-20	87003484
90514118	102-5033-41-67,39-20	87004037
90505181	102-5035-27,39-20	87003483
90509723	102-5035-27-67,39-20	87003483
90505295	102-5037-27,39-20	87003483
90513899	102-5037-99,38-20	87004741
90513900	102-5037-99-67,39-20	87004741
90505179	102-5038-27,39-20	87003483
90505180	102-5038-27-67,39-20	87003483
90515669	102-5038-34-66,39-20	87004741
90505175	102-5041-27,39-20	87003499
90505176	102-5041-27-67,39-20	87003499
90505145	102-5045-27,39-20	87003480
90513912	102-5048-27,39-20	87003499
90505353	102-5051-27,39-20	87003485
90510208	102-5045-56,39-20	87003482
90513912	102-5048-27,39-20	87003499
90505353	102-5051-27,39-20	87003485
R28		
90505296	107-5037-27,39-20	87003483
90505177	107-5038-27,39-20	87003483
90505178	107-5038-27-67,39-20	87003483
90505173	107-5041-27,39-20	87003499
90505174	107-5041-27-67,39-20	87003499
90505169	107-5043-27,39-20	87003499
90509467	107-5045-37,39-20	87003481
SR28		
90514200	125-5033-17,39-20	87003484
90029167	125-5033-27-67-99,39-20	87004741
90514117	125-5033-41,39-20	87004037
90514137	125-5033-41-67,39-20	87004037
90029410	125-5034-27-67,39-20	87004741
90514322	125-5035-27,39-20	87003483
90514102	125-5035-27-67,39-20	87003483
90514167	125-5037-99,39-20	87003483
90003625	125-5037-99-67,39-20	87004741
90514282	125-5038-27,39-20	87003483
90516334	125-5038-41-67,39-20	87004741
90029184	125-5040-27,39-20	87004741
90515379	125-5041-27,39-20	87005309
90515543	125-5042-27,39-20	87005309
90029307	125-5043-27,39-20	87005309
90514507	125-5045-27,39-20	87003480
90516422	125-5045-37-67,39-20	87003481
90003626	125-5048-37,39-20	87003486
90514793	125-5051-27,39-20	87003485
90029897	125-5076-42-24,57-20	87003951

Drill bit		Indexing template
Product no.	Product code	
R32		
90505171	103-5041-27,39-20	87003499
90505172	103-5041-27-67,39-20	87003499
90510744	103-5041-34-67,39-20	87003492
90505164	103-5043-27,39-20	87003499
90510769	103-5043-37-67,39-20	87003486
90029544	103-5043-39-67,56-12	87003495
90504373	103-5045-27,39-20	87003480
90512011	103-5045-27-67,39-20	87003480
90029189	103-5045-34-66,56-20	87003492
90514111	103-5045-37-66,39-20	87003481
90509460	103-5045-37-67,39-20	87003481
90504401	103-5045-39,39-20	87003488
90029325	103-5045-39,56-20	87003488
90514540	103-5045-39-67,39-20	87003488
90029629	103-5045-39-67,56-12	87003488
90029358	103-5045-39-67,56-20	87003488
90509461	103-5048-37,39-20	87003486
90514135	103-5048-37-66,39-20	87003481
90029166	103-5048-37-66-99,39-20	87003481
90509464	103-5048-37-67,39-20	87003486
90515773	103-5048-39-67,39-20	87004754
90510450	103-5051,39-20	87003496
90504566	103-5051-27,39-20	87003485
90029797	103-5051-27-20,56-20	87005311
90029845	103-5051-27-20-45-67,39-20	87005311
90029191	103-5051-34-66,56-20	87005314
90509465	103-5051-37,39-20	87003481
90510836	103-5051-37-45-67,39-20	87003481
90514136	103-5051-37-66,39-20	87003481
90509466	103-5051-37-67,39-20	87003481
90003532	103-5051-37-67-99,39-20	87004478
90029192	103-5051-39-67,56-20	87004314
90510795	103-5054-24-45-67,39-20	87003493
90509481	103-5054-37-67,39-20	87003486
90510453	103-5057-20,39-20	87003495
90510454	103-5057-20-67,39-20	87003495
90514267	103-5057-37-45,49-20	87003495
90515503	103-5057-37-54-67,39-20	87003495
90514440	103-5057-37-66,39-20	87003481
90514414	103-5057-54,39-20	87004775
90510303	103-5064,49-20	87003489
90514983	103-5064-37-66,49-20	87003495
90510381	103-5064-45,49-20	87003489

For Grind Matic BQ3

Drill bit		Indexing template
Product no.	Product code	
R32		
90510327	103-5064-67,49-20	87003489
90510353	103-5076,49-20	87003493
90514373	103-5076-42-24,49-20	87003951
90029885	103-5076-42-24,57-20	87003951
90510821	103-5076-42-24-67,49-20	87003951
90029882	103-5089-42-24,57-20	87003953
90029891	103-5089-42-24-70,57-20	87003953
90029889	103-5102-42-24,57-20	87003953
90029884	103-5102-42-24-70,57-20	87003952
90029896	103-5127-42-24,57-20	87004775
90510308	103-6051-45,49-20	87003487
90514633	103-6051-45-67,49-20	87003487
90515761	103-6051-67,39-20	87003487
90510328	103-6064,49-20	87003487
90510364	103-6064-45,49-20	87003487
90510414	103-6064-45-67,49-20	87003487
90510504	103-6076-45,49-20	87003498
90029913	103-9102-40,49-20	87003560
90029320	103-9102-45-A,49-20	87003560
SR32		
90514501	126-5038-27-67,39-20	87004741
90516483	126-5041-37-67,39-20	87003486
90515721	126-5048-37-67,39-20	87003486
90514954	126-5064-67,49-20	87003489
90029898	126-5076-42-24-70,57-20	87003559
90514503	126-6051,49-20	87003487
SR35		
90513844	128-5043-27,39-20	87003499
90515576	128-5043-27-67,39-20	87003499
90516547	128-5043-39-67,39-20	87003495
90513846	128-5045-37-30-67,39-20	87003481
90513839	128-5045-37-67,39-20	87003481
90514720	128-5045-39-67,39-20	87003488
90029368	128-5045-39-67-S,39-20	87003488
90029303	128-5045-39-S,39-20	87003488
90514709	128-5048-37-67,39-12	87003486
90514150	128-5048-39,39-20	87004754
90003607	128-5048-39-67,39-20	87004635
90029302	128-5048-39-S,39-20	87004754
90029905	128-5051-24-45-,39-20	87004464
90514595	128-5051-24-45-67,39-20	87003493
90513842	128-5051-37-67,39-20	87003481
90514610	128-5051-39,39-06	87003486

Drill bit		Indexing template
Product no.	Product code	
SR35		
90514220	128-5054-24-45-67,39-20	87004464
90513870	128-5064-67,49-20	87003489
90029892	128-5076-42-24-70,57-20	87003951
90029890	128-5089-42-24,57-20	87003953
90029881	128-5089-42-24-70,57-20	87003953
90029807	128-5102-42-24,57-20	87003953
90029808	128-5102-42-24-70,57-20	87003953
90516569	128-6054-45-67,39-20	87004754
90516250	128-6064,49-06	87003487
90515626	128-6064-45-67,49-20	87003487
T35		
90029204	133-5048-37-67,39-20	87003486
90029827	133-5048-39-70,37-20	87005313
90029823	133-6051-44-70,37-20	87003559
90029822	133-6054-44-70,37-20	87003559
90029786	133-6057-44-70,37-20	87003559
90029785	133-6064-21-44-70,57-20	87003487
TC35		
90516336	169-5048-37-67,39-20	87003486
90003692	169-5051-37-67,39-20	87003486
90029029	169-5051-39-99,39-20	87003486
90029770	169-6051-45,39-20	87003487
90516337	169-6051-45-67,49-20	87003487
90029771	169-6054-45,39-20	87003487
90516423	169-6054-45-67,49-20	87003487
90516564	169-6054-67,39-20	87004754
90029298	169-6057-45,39-20	87003487
90516536	169-6057-45-67,39-20	87003487
90029299	169-6064-48-45,49-20	87003985
90516424	169-6064-48-45-67,49-21	87003985
90003723	169-5102-42-24,49-20	87003952
90029572	169-9127-51,49-20	87005315
R38		
90510304	104-5064,49-20	87003489
90510318	104-5076,49-20	87003493
T38		
90029693	135-5064,57-20	87003953
90029753	135-5064-44,57-20	87003953
90029694	135-5064-70,57-20	87003953
90029689	135-5076,57-20	87004433
90029688	135-5076-44,57-20	87004433
90029752	135-5076-79-99,57-20	87005315
90029684	135-5089,57-20	87004434
90029867	135-5089-44,57-20	87004434
90029923	135-5089-47-70,57-20	87004432
90029788	135-5102,57-20	87004775
90029789	135-5102-42-24,57-20	87003953
90029920	135-5102-47-70,57-20	87004432

For Grind Matic BQ3

Drill bit		Indexing template
Product no.	Product code	
T38		
90029784	135-5127-42-24,57-20	87004775
90029783	135-5127-42-24-70,57-20	87004775
90029712	135-6064-21,57-20	87003487
90029467	135-6064-21-44,57-20	87003487
90029466	135-6064-21-44-70,57-20	87003487
90029713	135-6064-21-70,57-20	87003487
90029718	135-6070-21,57-20	87003953
90029690	135-6070-21-44,57-20	87003953
90029691	135-6070-21-44-70,57-20	87003953
90029715	135-6076-21,57-20	87003953
90029686	135-6076-21-44,57-20	87003953
90029687	135-6076-21-44-70,57-20	87003953
90029717	135-6076-21-70,57-20	87003953
90029757	135-6076-44-70,57-12	87003953
90029686	135-6076-44-70,57-20	87003953
90029714	135-6076-70,57-20	87003953
90029716	135-6089-21,57-20	87004432
90029681	135-6089-21,44,57-20	87004432
90029719	135-6089-21-70,57-20	87004432
90029682	135-6089-44-70,57-20	87004432
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90029403	136-5102-44,57-20	87004775
90029925	136-5102-47-70,57-20	87004432
90029607	136-5127-42-24,57-20	87004775
90029606	136-5152-42-24,57-20	87004775
90029605	136-5152-42-24-67,57-20	87004775
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90029409	136-6070-21-70,57-20	87003953
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90510385	136-6070-45-67,49-20	87003559
90510480	136-6070-67,49-20	87003559
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90029376	136-6076-44-70,57-20	87003953
90029833	136-6076-44-70-99,57-20	87003953
90029352	136-6076-70,57-20	87003953
90029615	136-6083-44-70,57-20	87004432
90029360	136-6089-21,57-20	87004432
90029364	136-6089-21-44,57-20	87004432
90029362	136-6089-21-44-70,57-20	87004432
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90029366	136-6089-44,57-20	87004434
90029365	136-6089-44-70,57-20	87004432
90029840	136-6089-44-70-99,57-20	87004432
90029361	136-6089-70,57-20	87004432
90029408	136-6102-21,57-20	87004435
90029413	136-6102-21-44,57-20	87004435
90029412	136-6102-21-44-70,57-20	87004435
90029405	136-6102-21-70,57-20	87004435
90029411	136-6102-44-70,57-20	87004435
90029407	136-6102-70,57-20	87004435
90029601	136-6115,57-20	87003952
90029602	136-6115-44,57-20	87003952
90029603	136-6115-70,57-20	87003952
90029604	136-6127-21,57-20	87003953
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90029417	137-5089,57-20	87004434
90029402	137-5089-44,57-20	87004434
90029917	137-5089-47-70,57-20	87004432
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90029424	137-5102-44,57-20	87004775
90029918	137-5102-47-70,57-20	87004432
90029432	137-5115,57-20	87004775
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90029444	137-5127,57-20	87004775
90029439	137-5127-44,57-20	87004775
90029766	137-5152-42-24,57-20	87004775
90029733	137-6076-21,57-20	87003953
90029731	137-6083-44,57-20	87004432
90029419	137-6089-21,57-20	87004432
90029415	137-6089-21-44,57-20	87004432
90029414	137-6089-21-44-70,57-20	87004432
90029418	137-6089-21-70,57-20	87004432
90029416	137-6089-44-70,57-20	87004432
90029420	137-6089-70,57-20	87004432
90029734	137-6092-44-70,57-20	87003560
90029969	137-6095-44-70,57-20	87003560
90029400	137-6102-21,57-20	87004435
90029423	137-6102-21-44,57-20	87004435
90029422	137-6102-21-44-70,57-20	87004435
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90029398	137-6102-70,57-20	87004435
90029438	137-6115-21,57-20	87003952
90029428	137-6115-21-44,57-20	87003952
90029401	137-6115-21-44-70,57-20	87003952
90510826	137-6115-21-45,49-20	87003750
90029434	137-6115-21-70,57-20	87003952
90029436	137-6115-70,57-20	87003952
90029427	137-6127-21,57-20	87003953
90029437	137-6127-21-44,57-20	87003953
90029433	137-6127-21-44-70,57-20	87003953
90029431	137-6127-21-70,57-20	87003953
90029435	137-6127-44-70,57-20	87003953
90029430	137-6127-70,57-20	87003953
90029735	137-6140-21,57-20	87004571
90029736	137-6152-21,57-20	87004572
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90029781	158-5095-44-99,57-20	87004775
90029700	158-5115-21-44,57-20	87004775
90029111	158-6092-21-44-67,49-20	87003832
90029711	158-6092-21-70,57-20	87003560
90029705	158-6095-21-44,57-20	87003560
90029701	158-6095-21-44-70,57-20	87003560
90029447	158-6102-21,57-20	87004435
90029450	158-6102-21-44,57-20	87004435
90029449	158-6102-44-70,57-20	87004435
90029695	158-6115-21,57-20	87003952
90029698	158-6115-21-44,57-20	87003952
90029696	158-6115-21-44-70,57-20	87003952
90029853	158-6121-44,57-20	87003500
90029707	158-6127-21,57-20	87003953
90029670	158-6127-21-44,57-20	87003953
90029672	158-6127-21-44-70,57-20	87003953
90029668	158-6140-21-44,57-20	87004571
90029751	158-6140-21-44-70,57-20	87004571
90029662	158-6152-21,57-20	87004572
90029664	158-6152-21-44,57-20	87004572
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90029709	151-6089-21,57-20	87004432
90029953	151-6089-21-35,57-20	87004432
90029656	151-6089-21-35-70,37-20	87004432
90029710	151-6102-21,57-20	87004435
90029651	151-6102-35-70,57-20	87004435
90029658	151-6115-21-35-70,57-20	87003952

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90029732	152-6102-21,57-20	87004435
90029725	152-6102-21-70,57-20	87004435
90029678	152-6102-35-70,57-20	87004435
90514048	152-6102-43-67,49-20	87004512
90029795	152-6102-43-70,57-20	87004512
90029673	152-6115-21-35,57-20	87003952
90029674	152-6115-35-70,57-20	87003952
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90029750	152-6152-21,57-20	87004572
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90510821	103-5076-42-24-67,49-20	87003951
90510843	103-5089-42-24,49-20	87003955
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90510781	103-5102-42-24-67,49-20	87003955
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90515258	125-5076-42-24,49-20	87003951
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90029606	136-5152-42-24,57-20	87004775
90029605	136-5152-42-24-67,57-20	87004775
90029766	137-5152-42-24,57-20	87004775

Support and service agreements

Epiroc service, support and training follow every purchase, to ensure that customers extract maximum productivity from their drilling operations.

Having a knowledgeable and reliable drill steel supplier as Epiroc, on site or online, makes the difference between walking alone or sharing the experience and knowhow of a world-class partner. For example, Epiroc knows that using higher productivity bits reduces the cost of each drilled hole, and the simplest way to cut costs is to drill holes faster. This has been a focus of product development, and is at the core of Epiroc technology, ensuring that every generation of products drill faster and more efficiently.

It takes a support team to apply this knowledge, so that customers can be assured they run a profitable and efficient drilling operation in an increasingly competitive business climate.

The bottom line is that the customer can count on Epiroc service and support, supplied by the largest, most dedicated manufacturer of top-hammer drilling tools in the world.





Total drilling cost

Partnership to guarantee a lower cost for you operation over term of contract.



Innovation

Continuous innovation, focused on safety, that will guarantee highest productivity.



Digitalization

Smart inventory management on site to guarantee tools availability for your production.

Our customer agreements

Consignment agreements

Partnership to guarantee lower cost for you operation over term of contract.

Supply and service agreements

Guarantee for availability and best performance of rock tools for your production.

Cost per measure agreements

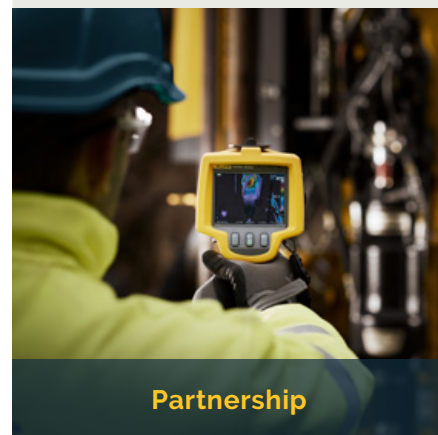
Partnership to guarantee lower cost for your operation.



Supplier



Supplier and partner



Partnership

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