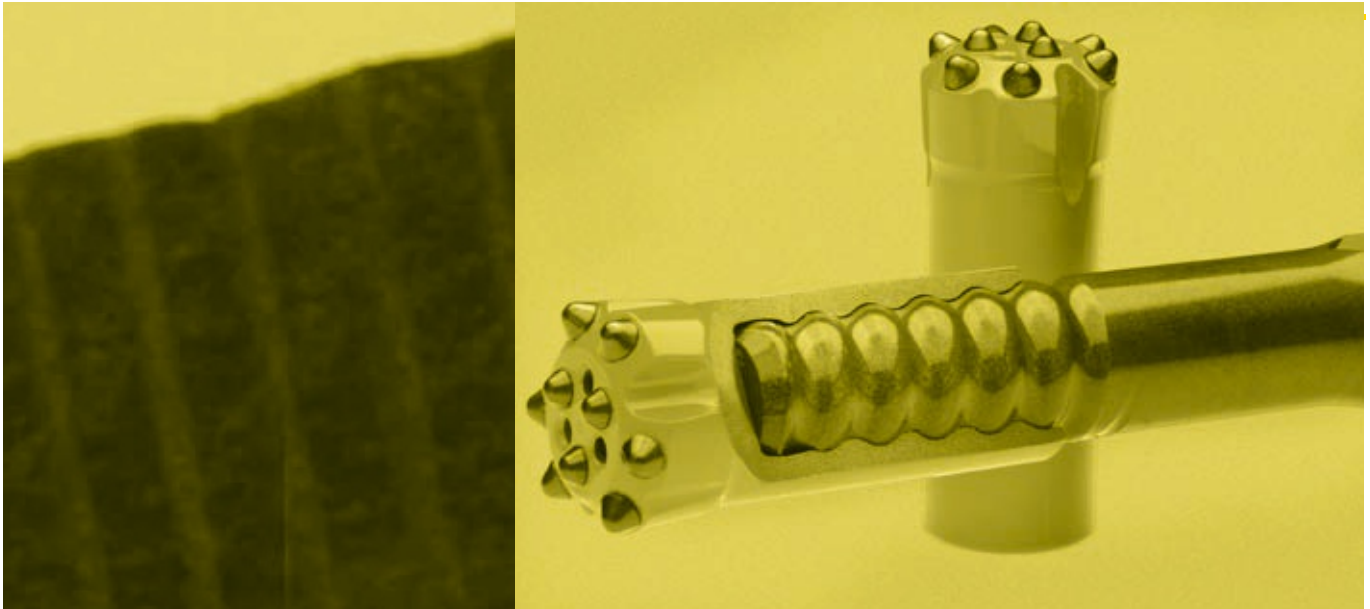




Drifting and tunnelling

Drill bit design	22
R25 (1")	23
Magnum SR28 (1¹/₈")	26
R28 (1¹/₈")	28
Magnum SR32 (1¹/₄")	30
R32 (1¹/₄")	32
Magnum SR35 (1³/₈")	37
Dome bits for reaming	40
Reaming equipment	41

Drifting and tunnelling

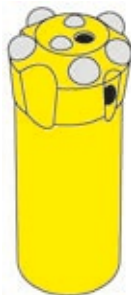
Drill bit design



Model -17

2+3 gauge buttons, 2 front buttons.

One front and two side flushing holes.



Model -27

2+3 gauge buttons, 2 front buttons.

With its large gauge buttons, model -27 is ideal for medium-hard to hard abrasive rock. Available with spherical or ballistic (-67) buttons.



Model -34

3+3 gauge buttons, 2 front buttons.

Model -34 offers very good penetration. Ideal for most rock formations including hard rock. Available with spherical or ballistic (-67) buttons.



Model -37

2+2+2 gauge buttons, 3 front buttons.

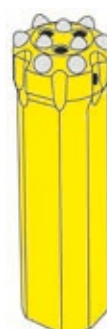
With 9 buttons and superb flushing, model -37 bits offer very good penetration. Ideal for most rock formations including hard rock with heavy frontal wear on the bit. Available with spherical or ballistic (-67) buttons.



Model -27-30, -37-30

Guide bit. Square skirt.

Ideal where hole deviation is a problem. Longer service life, better penetration rate and longer grinding intervals compared to a cross-type bit, which is normally used to avoid hole deviations. Suitable for most rock formations including hard rock. Available with spherical or ballistic (-67) buttons.



Model -37-66

2+2+2 gauge buttons, 3 front buttons.

With 9 full-ballistic buttons and excellent flushing with extra flushing grooves, model -37-66 offers extremely good penetration rate in soft rock.



Model -39

2+2+2 gauge buttons, 3 smaller front buttons.

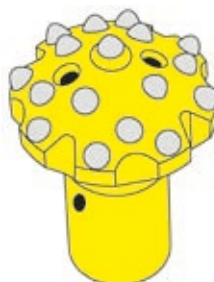
With its larger gauge buttons, model -39 is ideal for abrasive rock. Available with spherical buttons.



Model -41

2+3 gauge buttons, 2 front buttons.

For medium-hard to hard rock formations. Available with spherical or ballistic buttons. Inclined front.



Model -42

Reaming bit. Dome-shaped front.

Model -42 is an alternative to traditional reaming equipment. Use in a pre-drilled pilot hole. Tried and tested with excellent results.



Model -56

2+2 gauge buttons, 2 smaller front buttons.

Traditionally used in hard rock formations, model -56 delivers excellent penetration rate. Available only with spherical buttons.



Cross-type bit

4 chisel inserts in cross formation.

Traditional insert bit for extremely abrasive rock formations. Ideal for soft formations that cause "snake-skin" problems for carbide. Produces straight holes but has lower penetration than button bits.

- [5] XXX

Flat face button bit

- [6] XXX

Drop centre button bit

-XXXX- [67]

Ballistic buttons

-XXXX- [66]

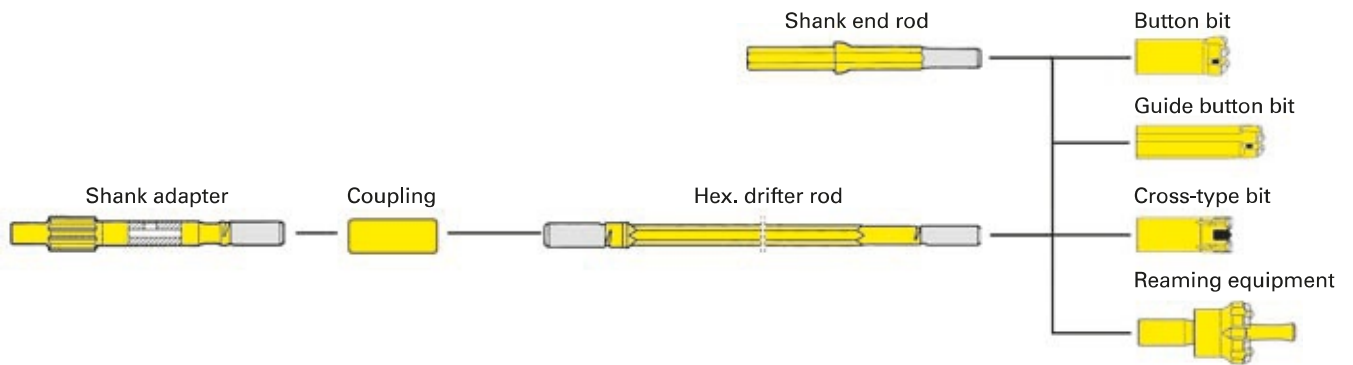
Full-ballistic buttons

-XXXX- [45]

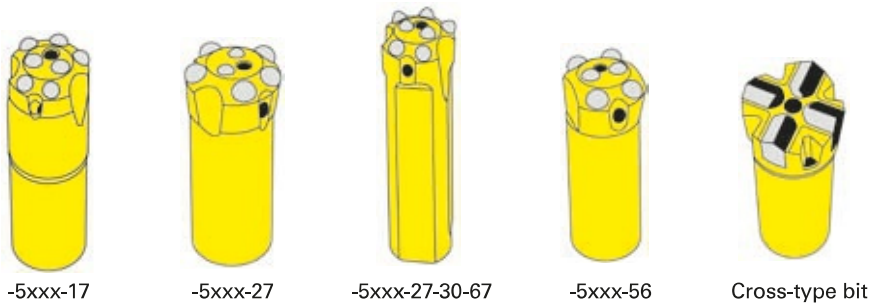
Retrac skirt

Please observe that all button bits are manufactured over-sized 0,5–1,0 mm, meaning that for example a 36 mm bit is at least 36,5 mm as new. This is done because of the fast initial wear on button bits.

When it is of importance, also consider that the hole is always 1,0–3,0 mm bigger than the bit dimension depending on rock formation.



Drill bit design



Please note text on page 22 re. finished hole size.

Drill bit

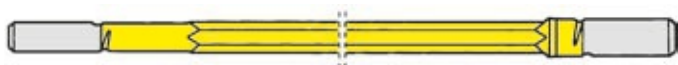
Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Buttons angle°		Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre	Gauge	Centre	Side	Centre	
BUTTON BIT - Spherical buttons											
33	1 ⁵ / ₁₆	90510448	102-5033-17,39-20	7	5×7	2×7	35°	–	1	1	0,4
35	1 ³ / ₈	90505181	102-5035-27,39-20	7	5×9	2×7	25°	10°	1	1	0,5
37	1 ⁵ / ₃₂	90505295	102-5037-27,39-20	7	5×9	2×7	30°	–	1	1	0,6
38	1½	90505179	102-5038-27,39-20	7	5×9	2×7	30°	–	1	1	0,6
38	1½	90510206	102-5038-56,39-20	6	4×9	2×8	30°	–	2	1	0,5
41	1 ⁵ / ₈	90505175	102-5041-27,39-20	7	5×9	2×8	35°	–	1	1	0,6
41	1 ⁵ / ₈	90510207	102-5041-56,39-20	6	4×9	2×9	35°	–	2	1	0,6
45	1¾	90505145	102-5045-27,39-20	7	5×11	2×8	30°	–	2	1	0,7
45	1¾	90510208	102-5045-56,39-20	6	4×11	2×9	35°	–	2	1	0,6
BUTTON BIT - Ballistic buttons											
33	1 ⁵ / ₁₆	90510274	102-5033-17-67,39-20	7	5×7	2×7	35°	–	1	1	0,4
35	1 ³ / ₈	90509723	102-5035-27-67,39-20	7	5×9	2×7	25°	–	1	1	0,5
38	1½	90505180	102-5038-27-67,39-20	7	5×9	2×7	40°	–	1	1	0,6
41	1 ⁵ / ₈	90505176	102-5041-27-67,39-20	7	5×9	2×8	40°	–	1	1	0,6
41	1 ⁵ / ₈	90510662	102-5041-27-30-67,39-20	7	5×9	2×8	40°	–	1	1	1,0
CROSS-TYPE BIT				Insert							
				Width (mm)		Height (mm)					
35	1 ³ / ₈	90514221	102-7035-44,20-17	10,3		19,5		2	1	0,6	
38	1½	90514222	102-7038-44,20-17	10,3		19,5		4	1	0,7	
41	1 ⁵ / ₈	90514231	102-7041-44,20-17	11,1		20,0		4	1	0,8	
45	1¾	90510687	102-7045-44,20-17	11,1		20,0		2	1	0,8	

Drifter rod

R25 (1")

Hex. 25 mm (1")

R32 (1¼")

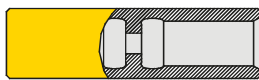


Fully carburized. Rod section 28,5 mm.



Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
2100	6'10 ⁵ / ₈ "	90503413	202-0321-03-C,02	8,6
2200	7'2 ⁵ / ₈ "	90580096	202-0322-03-C,02	9,0
2400	7'10 ¹ / ₂ "	90503115	202-0324-03-C,02	9,3
2600	8'6 ³ / ₈ "	90504963	202-0326-03-C,02	10,0
2675	8'9 ³ / ₈ "	90505259	202-0327-03-91-C,02	10,4
2800	9'2 ¹ / ₄ "	90505346	202-0328-03-C,02	10,8
3090	10'1 ⁵ / ₈ "	90539158	202-0331-03-C,02	12,0
3700	12'1 ⁵ / ₈ "	90002721	202-0337-03-C,02	14,6

Coupling



Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
32	1¼	44	1 ²³ / ₃₂	155	6 ¹ / ₈	90515731	303-0044,10	1,0
32	1¼	44	1 ²³ / ₃₂	160	6 ⁵ / ₁₆	90515732	303-0044-57,10	1,2

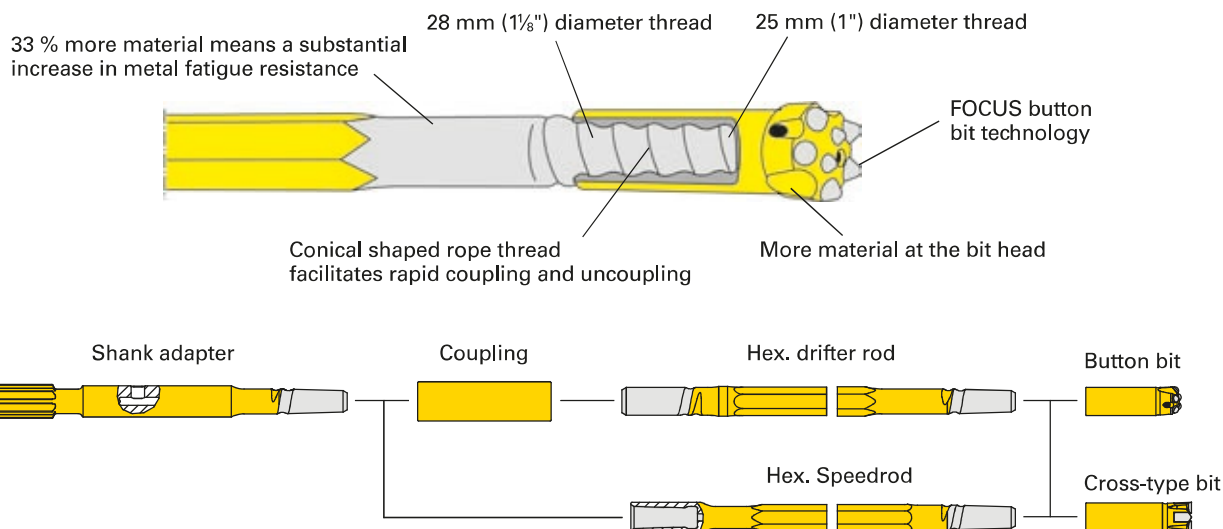
Shank end rod



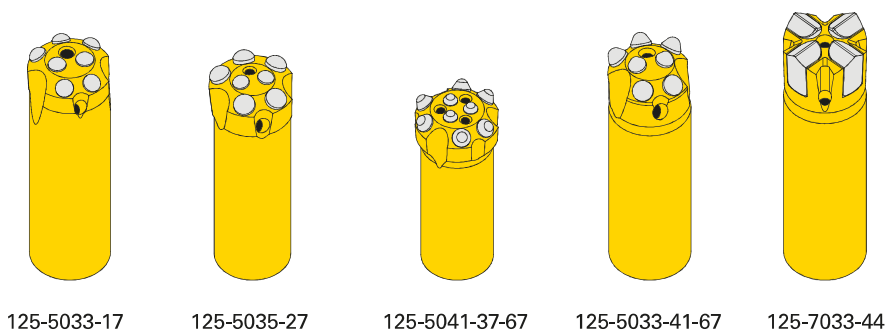
Fully carburized.

Length (L)		Product No.	Product code	Seal Product No.	Seal Product code	Weight approx. kg
mm	foot/inch					
Shank hex. 22 mm (7/8") × 108 mm (4¼"). 25 mm (1") thread.						
265	10⅜"	90000237	502-0103-06-C,02	90002182	9232	1,2
610	2'	90570115	502-0106-06-C,02	90002182	9232	2,3
760	2'5⅞"	90510004	502-0108-06-C,02	90002182	9232	2,9
1000	3'3⅜"	90531258	502-0110-06-C,02	90002182	9232	3,4
1200	3'11¼"	90580089	502-0112-06-C,02	90002182	9232	4,5
1830	6'	90500017	502-0118-06-C,02	90002182	9232	6,2
2435	8'	90510009	502-0124-06-C,02	90002182	9232	8,0
3200	10'6"	90500012	502-0132-06-C,02	90002182	9232	10,4
3600	11'9¾"	90510785	502-0136-C,02	—	—	11,8
Shank hex. 25 mm (1") × 108 mm (4¼"). 25 mm (1") thread.						
255	10"	90000240	502-1203-C,02	90000378	9150-08	1,5
610	2'	90505425	502-1206-C,02	90000378	9150-08	3,1
1200	3'11¼"	90505424	502-1212-C,02	90000378	9150-08	5,1
1830	6'	90505423	502-1218-C,02	90000378	9150-08	7,7
2435	8'	90500568	502-1224-C,02	90000378	9150-08	9,5
Shank hex. 25 mm (1") × 159 mm (6¼"). 25 mm (1") thread.						
255	10"	90000247	502-1503-C,02	90000378	9150-08	1,7
610	2'	90510516	502-1506-C,02	90000378	9150-08	3,1
800	2'7½"	90513915	502-1508-C,02	90000378	9150-08	4,1
3200	10'6"	90000986	502-1532-C,02	90000378	9150-08	13,2
Shank hex. 28 mm (1⅛") × 159 mm (6¼"). 25 mm (1") thread.						
2700	8'10¼"	90510068	502-2127-C,02	90000378	9150-08	11,3

Magnum SR28 thread system



Drill bit design



Please note text on page 22 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Buttons angle°		Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre	Gauge	Centre	Side	Centre	
BUTTON BIT - Spherical buttons											
33	1⅝ ₁₆	90514200	125-5033-17,39-20	7	5×7	2×7	35°	–	1	1	0,5
33	1⅝ ₁₆	90514117	125-5033-41,39-20	7	5×8	2×7	40°	15°	1	1	0,4
35	1⅜ ₈	90514322	125-5035-27,39-20	7	5×9	2×7	25°	10°	1	1	0,5
37	1⅝ ₃₂	90514167	125-5037-99,39-20	7	5×9	2×7	35°	15°	1	1	0,5
38	1½	90514282	125-5038-27,39-20	7	5×9	2×7	30°	–	1	1	0,6
41	1⅝ ₈	90515379	125-5041-27,39-20	7	5×9	2×8	40°	–	1	1	0,7
45	1¾	90514507	125-5045-27,39-20	7	5×11	2×8	30°	–	2	1	0,8
BUTTON BIT - Ballistic buttons											
33	1⅝ ₁₆	90514137	125-5033-41-67,39-20	7	5×8	2×7	40°	15°	1	1	0,4
35	1⅜ ₈	90514102	125-5035-27-67,39-20	7	5×9	2×7	25°	10°	1	1	0,4
38	1½	90516334	125-5038-41-67,39-20	7	5×9	2×8	40°	20°	1	1	0,5
41	1⅝ ₈	90516383	125-5041-37-67,39-20	9	6×9	3×7	40°	–	–	3	0,5
45	1¾	90516422	125-5045-37-67,39-20	9	6×9	3×8	40°	–	–	3	0,7
CROSS-TYPE BIT				Insert							
				Width (mm)		Height (mm)					
33	1⅝ ₁₆	90514429	125-7033-44,20-17	10.3		19.5		2	1	0.5	

Drifter rod

SR28 (1 1/8")

Hex. 28 mm (1 1/8")

R32 (1 1/4")



Fully carburized. Rod section 32 mm.



Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
2100	6'10 5/8"	90514162	225-0421-03-C,02	10,4
2300	7'6 5/8"	90514163	225-0423-03-C,02	11,4
2400	7'10 1/2"	90514370	225-0424-03-C,02	12,2
2600	8'6 3/8"	90514153	225-0426-03-C,02	12,9
2675	8'9 3/8"	90514103	225-0427-03-91-C,02	13,3
2800	9'2 1/4"	90514164	225-0428-03-C,02	14,3
2950	9'8 1/8"	90514371	225-0430-03-91-C,02	14,9
3090	10'1 5/8"	90514168	225-0431-03-C,02	15,8

SR28 (1 1/8")

Hex. 25 mm (1")

SR28 (1 1/8")



Speedrod, fully carburized. D = 34 mm. Rod section 28,5 mm.



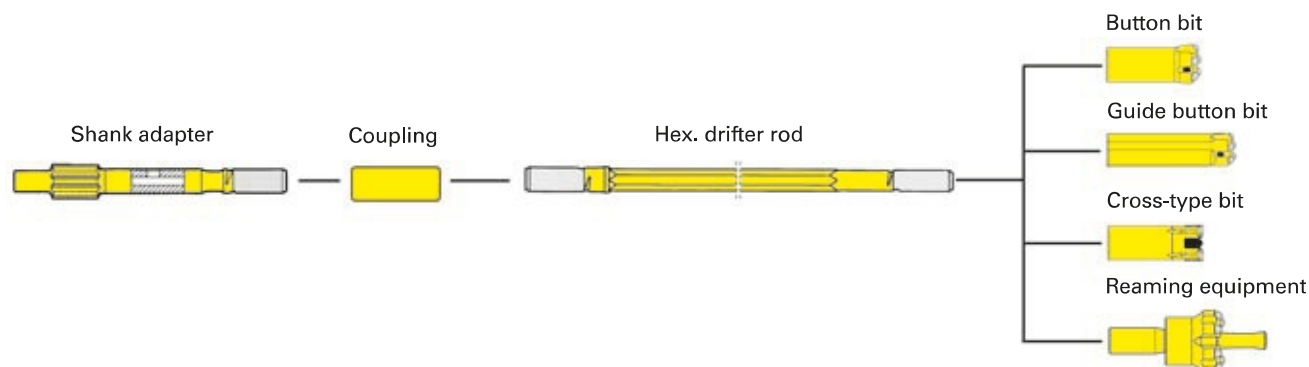
Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3050	10	90516350	225-0331-69-MF-C,02	12,1

Coupling

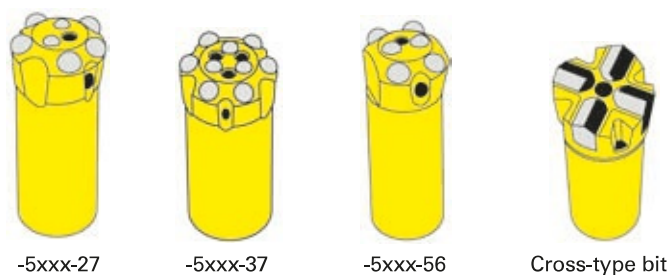


Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
32	1 1/4	44	1 23/32	155	6 1/8	90515731	303-0044,10	1,0
32	1 1/4	44	1 23/32	160	6 5/16	90515732	303-0044-57,10	1,2



Drill bit design



Please note text on page 22 re. finished hole size.

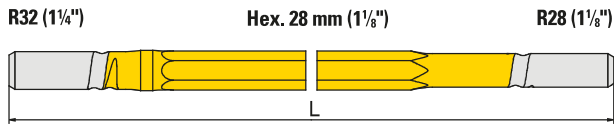
Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
37	1 ¹⁵ / ₃₂	90505296	107-5037-27,39-20	7	5×9	2×7	30°	1	1	0,5
38	1½	90505177	107-5038-27,39-20	7	5×9	2×7	30°	1	1	0,6
38	1½	90510216	107-5038-56,39-20	6	4×9	2×8	30°	2	1	0,6
41	1⅝	90505173	107-5041-27,39-20	7	5×9	2×8	35°	1	1	0,7
43	1 ¹¹ / ₁₆	90505169	107-5043-27,39-20	7	5×9	2×9	35°	2	1	0,7
45	1¾	90509467	107-5045-37,39-20	9	6×9	3×8	35°	1	3	0,8
BUTTON BIT- Ballistic buttons										
38	1½	90505178	107-5038-27-67,39-20	7	5×9	2×7	40°	1	1	0,6
41	1⅝	90505174	107-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,7
CROSS-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
38	1½	90514249	107-7038-44,20-17	10,3		19,5		1	1	0,6
41	1⅝	90514234	107-7041-44,20-17	11,1		20,0		4	1	0,8
45	1¾	90514252	107-7045-44,20-17	11,1		20,0		4	1	0,9

R28 (1 1/8")

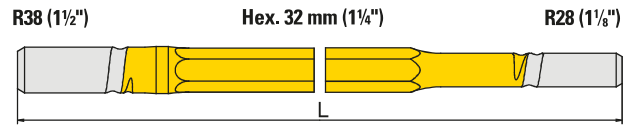
Drifting and tunnelling

Drifter rod



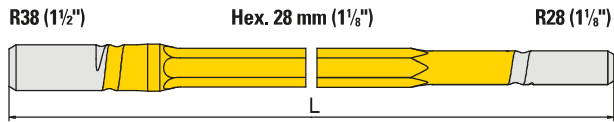
Fully carburized. Rod section 32 mm.

Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
2400	7'10 1/2"	90500951	207-0424-03-C,02	11,9
2600	8'6 3/8"	90502257	207-0426-03-C,02	13,6
2750	9'1 1/4"	90509861	207-0428-03-91-C,02	14,4
3700	12'1 5/8"	90500410	207-0437-03-C,02	18,5
4000	13'1 1/2"	90002713	207-0440-03-C,02	20,5
4310	14'1 5/8"	90500445	207-0443-03-C,02	21,5



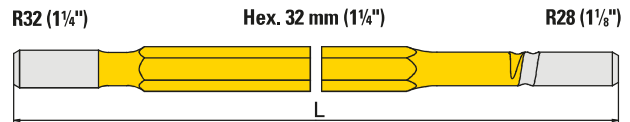
Fully carburized. Rod section 35,8 mm.

Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3700	12'1 5/8"	90503041	207-0537-04-C,02	23,5
4310	14'1 5/8"	90502357	207-0543-04-C,02	27,3



Fully carburized. Rod section 32 mm.

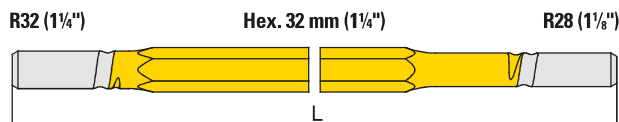
Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
2475	8'1 1/2"	90505270	207-0424-04-91-C,02	13,0
4310	14'1 5/8"	90570055	207-0443-04-C,02	22,0



With slimmed shank end for female shank adapters.

Fully carburized. Rod section 35,8 mm.

Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
4000	13'1 1/2"	90503345	207-0540-03-78-C,02	25,6
4310	14'1 5/8"	90503346	207-0543-03-78-C,02	27,5



Fully carburized. Rod section 35,8 mm.

Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3090	10'1 5/8"	90502740	207-0531-03-C,02	19,7

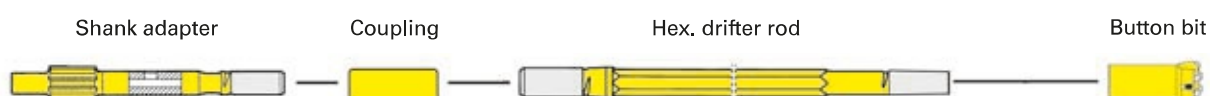
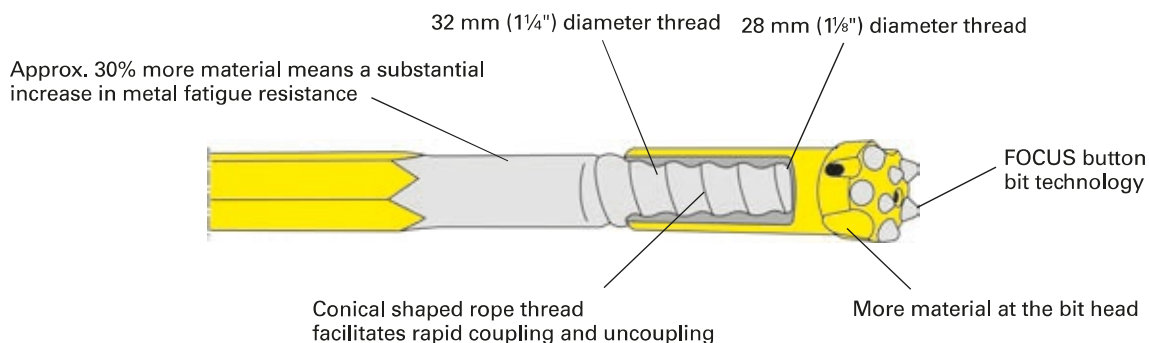
Coupling



Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
32	1 1/4	44	1 23/32	155	6 1/8	90515731	303-0044,10	1,0
32	1 1/4	44	1 23/32	160	6 5/16	90515732	303-0044-57,10	1,2
38	1 1/2	55	2 5/32	170	6 3/4	90515733	304-0055,10	1,7
38	1 1/2	55	2 5/32	180	7 1/8	90515734	304-0055-57,10	1,9

Magnum SR32 thread system



Drill bit design

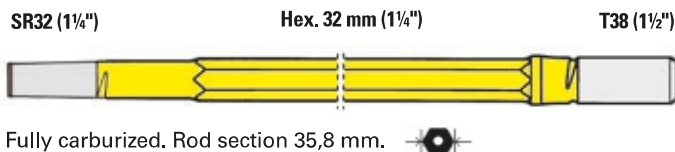


Please note text on page 22 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
43	1 ¹¹ / ₁₆	90514754	126-5043-27,39-20	7	5×9	2×9	35°	2	1	0,7
45	1¾	90514795	126-5045-27,39-20	7	5×11	2×8	30°	2	1	0,6
51	2	90514503	126-6051,49-20	9	6×10	3×9	35°	–	3	0,9
BUTTON BIT - Ballistic buttons										
38	1½	90514501	126-5038-27-67,39-20	7	5×9	2×7	40°	1	1	0,5
41	1 ⁵ / ₈	90514728	126-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,7
45	1¾	90514953	126-5045-37-67,39-20	9	6×9	3×8	40°	1	3	0,7

Drifter rod



Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3100	10'2"	90514504	226-0531-35-C,02	19,7
3700	12'1½"	90514727	226-0537-35-C,02	23,6
4300	14'1¼"	90514505	226-0543-35-C,02	27,5

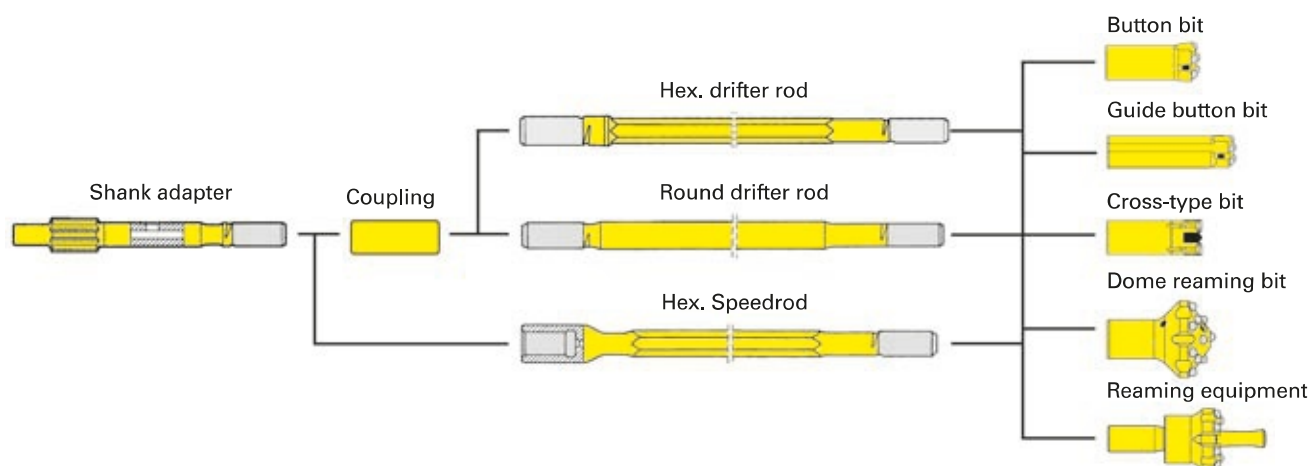
Coupling



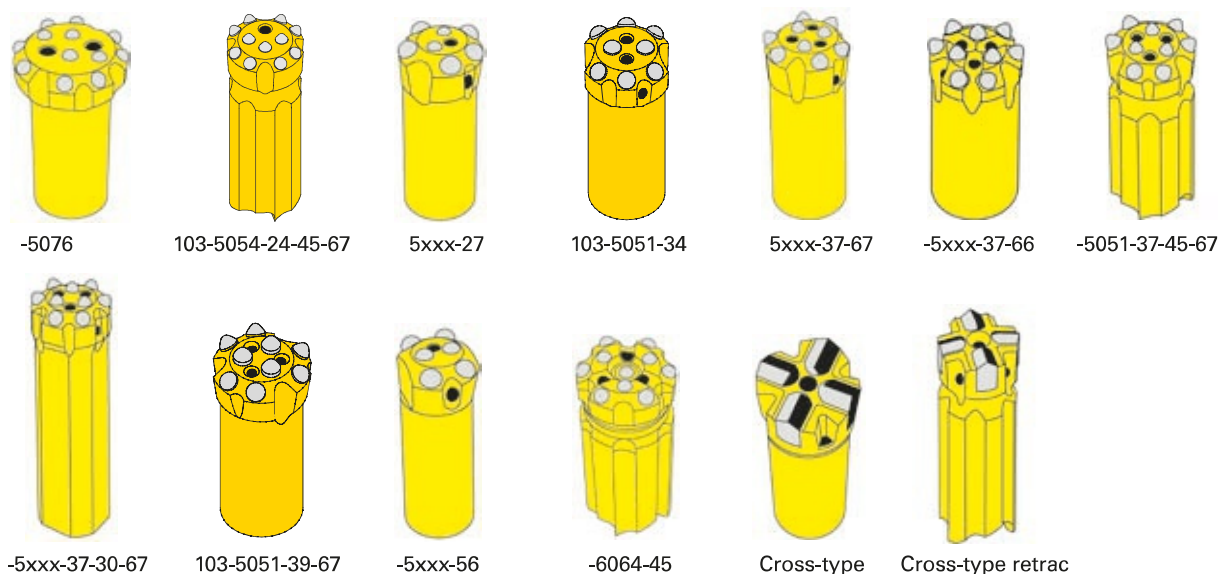
Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code		Weight approx. kg
mm	inch	mm	inch	mm	inch		Rope thread	T thread	
32	1¼	44	1 ²³ / ₃₂	150	5 ⁷ / ₈	90515731	303-0044,10		1,0
32	1¼	44	1 ²³ / ₃₂	160	6 ⁵ / ₁₆	90515732	303-0044-57,10		1,0
38	1½	52	2 ¹ / ₁₆	170	6¾	90515736		335-0052,10*	1,5
38	1½	55	2 ⁵ / ₃₂	170	6¾	90515733	304-0055,10		1,7
38	1½	55	2 ⁵ / ₃₂	170	6¾	90515737		335-0055,10	1,9
38	1½	55	2 ⁵ / ₃₂	180	7 ¹ / ₈	90515734	304-0055-57,10		1,9
38	1½	55	2 ⁵ / ₃₂	180	7 ¹ / ₈	90515738		335-0055-57,10	1,9

* Recommended for high frequency drifters.



Drill bit design



Please note text on page 22 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
41	1⅝	90505171	103-5041-27,39-20	7	5×9	2×8	35°	1	1	0,8
41	1⅝	90510209	103-5041-56,39-20	6	4×9	2×9	35°	2	1	0,6
43	1 ¹¹ / ₁₆	90505164	103-5043-27,39-20	7	5×9	2×9	35°	2	1	0,7
43	1 ¹¹ / ₁₆	90514717	103-5043-37,39-20	9	6×9	3×8	40°	1	3	0,8
45	1¾	90504373	103-5045-27,39-20	7	5×11	2×8	30°	2	1	0,8
45	1¾	90509457	103-5045-37,39-20	9	6×9	3×8	35°	1	3	0,8
45	1¾	90504401	103-5045-39,39-20	9	6×10	3×8	30°	1	3	0,8
48	1⅞	90504374	103-5048-27,39-20	7	5×11	2×9	35°	2	1	1,0
48	1⅞	90509461	103-5048-37,39-20	9	6×10	3×8	40°	1	3	0,9
51	2	90504566	103-5051-27,39-20	7	5×11	2×10	35°	2	1	1,0
51	2	90510451	103-5051-34,39-20	8	6×10	2×10	40°	2	2	1,0
51	2	90509465	103-5051-37,39-20	9	6×10	3×9	40°	1	3	1,0
51	2	90510302	103-6051,49-20	9	6×10	3×9	30°	–	3	1,0

Cont. next page

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
51	2	90510308	103-6051-45,49-20	9	6×10	3×9	30°	–	3	1,2
57	2¼	90510453	103-5057-20,39-20	9	6×11	3×9	35°	–	3	1,1
64	2½	90510303	103-5064,49-20	12	8×10	4 ×10	40°	–	2	1,5
64	2½	90510381	103-5064-45,49-20	12	8×10	4 ×10	40°	–	2	2,2
64	2½	90510328	103-6064,49-20	10	6×11	3×10, 1×10	35°	–	3	1,5
64	2½	90510364	103-6064-45,49-20	10	6×11	3×10, 1×10	35°	–	3	2,2
76	3	90510353	103-5076,49-20	12	8×11	4×11	40°	–	2	1,8
76	3	90510504	103-6076-45,49-20	13	8×11	4×11, 1×11	35°	1	4	3,5
BUTTON BIT - Ballistic buttons										
41	1⅝	90505172	103-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,7
43	1⅞	90505168	103-5043-27-67,39-20	7	5×9	2×9	40°	2	1	0,7
43	1⅞	90510769	103-5043-37-67,39-20	9	6×8	3×8	40°	1	3	0,7
45	1¾	90512011	103-5045-27-67,39-20	7	5×11	2×8	30°	2	1	0,8
45	1¾	90510275	103-5045-34-67,39-20	8	6×9	2×9	40°	2	2	0,8
45	1¾	90509460	103-5045-37-67,39-20	9	6×9	3×8	40°	1	3	0,8
48	1⅞	90509464	103-5048-37-67,39-20	9	6×10	3×9	40°	1	3	0,9
48	1⅞	90509463	103-5048-37-30-67,39-20	9	6×10	3×8	25°	1	3	1,2
51	2	90509466	103-5051-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
51	2	90510836	103-5051-37-45-67,39-20	9	6×10	3×9	40°	1	3	1,1
51	2	90514764	103-5051-39-67,39-20	9	6×10	3×10	35°	–	3	1,0
51	2	90514633	103-6051-45-67,49-20	9	6×10	3×9	35°	–	3	1,2
54	2⅞	90510795	103-5054-24-45-67,39-20	11	8×9	3×9	35°	2	1	1,4
54	2⅞	90509481	103-5054-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
64	2½	90510327	103-5064-67,49-20	12	8×10	4×10	40°	–	2	1,6
BUTTON BIT - Full-ballistic buttons (Soft rock bit)										
45	1¾	90514771	103-5045-34-66,39-20	8	6×9	2×9	40°	2	–	0,8
45	1¾	90514111	103-5045-37-66,39-20	9	6×9	3×8	40°	1	3	0,8
48	1⅞	90514714	103-5048-34-66,39-20	8	6×9	2×9	40°	2	–	0,8
48	1⅞	90514135	103-5048-37-66,39-20	9	6×9	3×9	40°	1	3	0,8
51	2	90514715	103-5051-34-66,39-20	8	6×10	2×10	40°	–	2	0,9
51	2	90514136	103-5051-37-66,39-20	9	6×10	3×9	40°	1	3	0,8
57	2¼	90514440	103-5057-37-66,39-20	9	6×10	3×10	40°	1	3	1,1
CROSS-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
43	1⅞	90514246	103-7043-44,20-17	11,1		20,0		2	1	0,8
45	1¾	90514235	103-7045-44,20-17	11,1		20,0		4	1	0,9
48	1⅞	90510658	103-7048-38,02-17	14,0		22,0		4	1	0,9
51	2	90514248	103-7051-38,02-17	14,0		22,0		4	1	1,2
51	2	90510551	103-7051-38-45,02-17	14,0		22,0		4	1	1,7
57	2¼	90514239	103-7057,02-17	10,3		19,5		4	1	1,3
64	2½	90001719	103-7064,08-17	10,3		19,5		4	1	1,4

Drifter rod

R32 (1 1/4") Hex. 32 mm (1 1/4") R/T38 (1 1/2")



Fully carburized. Rod section 35,8 mm.

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
2400	7'10 1/2"	90590025	203-0524-04-C,02		15,3
2700	8'10 1/4"	90509478	203-0527-04-C,02		17,2
3090	10'1 5/8"	90003070	203-0531-04-C,02		19,8
3090	10'1 5/8"	90500107		203-0531-35-C,02	19,8
3400	11'1 7/8"	90505189		203-0534-35-C,02	22,0
3700	12'1 5/8"	90002720	203-0537-04-C,02		23,6
3700	12'1 5/8"	90590043		203-0537-35-C,02	23,6
4000	13'1 1/2"	90531063	203-0540-04-C,02		26,0
4310	14'1 5/8"	90002693	203-0543-04-C,02		27,5
4310	14'1 5/8"	90500213		203-0543-35-C,02	27,5
4920	16'1 3/4"	90002694	203-0549-04-C,02		31,4
4920	16'1 3/4"	90500046		203-0549-35-C,02	31,3
5530	18'1 3/4"	90002695	203-0555-04-C,02		34,8

R32 (1 1/4") Hex. 32 mm (1 1/4") R38 (1 1/2")



Double thread, fully carburized. Rod section 35,8 mm.

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
4310	14'1 5/8"	90002718	203-0543-04-95-C,02		27,5

R32 (1¼")

Drifting and tunnelling

R32 (1¼")

Hex. 35 mm (1⅜")

R/T38 (1½")



Fully carburized. Rod section 39,3 mm.

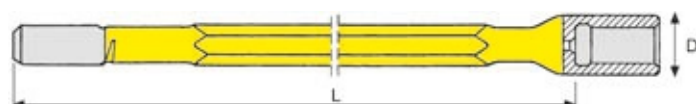


Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
3090	10'1⅝"	90502129	203-0631-04-C,02		24,0
3090	10'1⅝"	90504392		203-0631-35-C,02	24,0
3600	11'9¾"	90510484		203-0636-35-C,02	28,3
3700	12'1⅝"	90501015	203-0637-04-C,02		28,7
3700	12'1⅝"	90502308		203-0637-35-C,02	28,7
4000	13'1½"	90502995	203-0640-04-C,02		31,2
4310	14'1⅝"	90002966	203-0643-04-C,02		33,7
4310	14'1⅝"	90500862		203-0643-35-C,02	33,6
4500	14'9⅞"	90504182	203-0645-04-C,02		34,9
4500	14'9⅞"	90504966		203-0645-35-C,02	34,9
4920	16'1¾"	90002964	203-0649-04-C,02		38,2
4920	16'1¾"	90502235		203-0649-35-C,02	38,3
5530	18'1¾"	90002965	203-0655-04-C,02		43,1
5530	18'1¾"	90502616		203-0655-35-C,02	43,2
6100	20'1⅞"	90509664	203-0661-04-C,02		47,6
6100	20'1⅞"	90503854		203-0661-35-C,02	47,7

R32 (1¼")

Hex. 35 mm (1⅜")

T38 (1½")



Speedrod, fully carburized. D = 57 mm. Rod section 39,3 mm.



Length (L)		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
4310	14'1⅝"	90503663		203-0643-35-MF-C,02	34,7
4920	16'1¾"	90503563		203-0649-35-MF-C,02	39,6
5530	18'1¾"	90503940		203-0655-35-MF-C,02	43,0
6400	21'	90504708		203-0664-35-MF-C,02	51,0

Coupling



Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code		Weight approx. kg
mm	inch	mm	inch	mm	inch		Rope thread	T thread	
38	1 1/2	52	2 1/16	170	6 3/4	90515736		335-0052,10*	1,5
38	1 1/2	55	2 5/32	170	6 3/4	90515733	304-0055,10		1,9
38	1 1/2	55	2 5/32	170	6 3/4	90515737		335-0055,10	1,9
38	1 1/2	55	2 5/32	180	7 1/8	90515734	304-0055-57,10		1,9
38	1 1/2	55	2 5/32	180	7 1/8	90515738		335-0055-57,10	1,9

* Recommended for high frequency drifters.

Magnum SR35 thread system

25% more material means a substantial increase in metal fatigue resistance

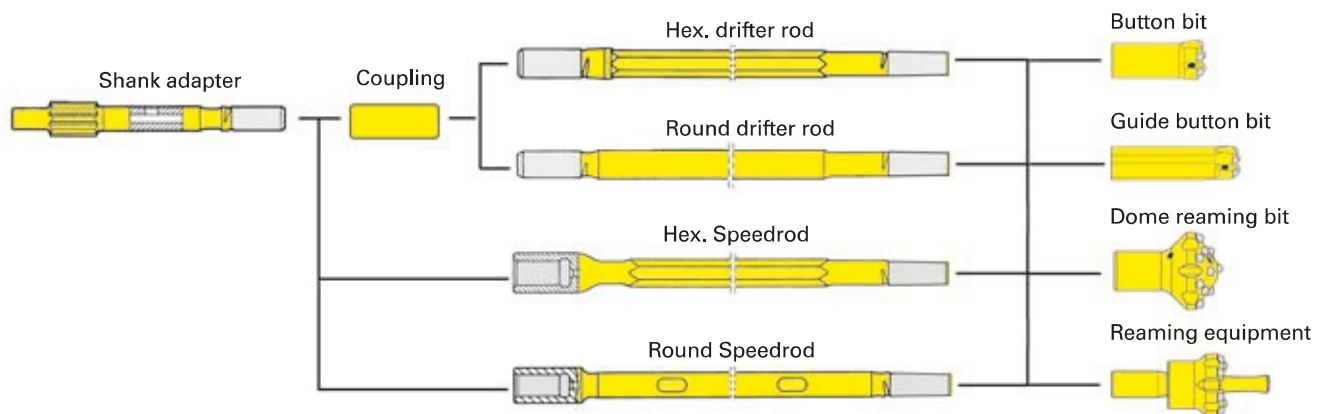
35 mm (1³/₈" diameter thread

32 mm (1¹/₄" diameter thread

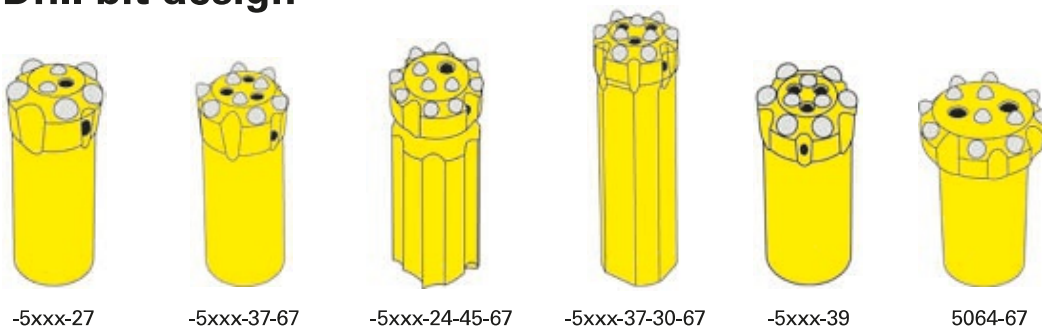
FOCUS button bit technology

Conical shaped rope thread facilitates rapid coupling and uncoupling

More material at the bit head



Drill bit design



Please note text on page 22 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
43	1 ¹¹ / ₁₆	90513844	128-5043-27,39-20	7	5×9	2×9	35°	2	2	0,7
45	1 ³ / ₄	90513841	128-5045-39,39-20	9	6×10	3×8	30°	1	3	0,8
48	1 ⁷ / ₈	90514150	128-5048-39,39-20	9	6×11	3×8	35°	1	3	0,9
BUTTON BIT - Ballistic buttons										
45	1 ³ / ₄	90513839	128-5045-37-67,39-20	9	6×9	3×8	40°	1	3	0,7
45	1 ³ / ₄	90513846	128-5045-37-30-67,39-20	9	6×9	3×8	40°	1	3	1,0
45	1 ³ / ₄	90514720	128-5045-39-67,39-20	9	6×10	3×8	35°	1	3	0,8
48	1 ⁷ / ₈	90513843	128-5048-37-67,39-20	9	6×10	3×9	40°	1	3	0,8
48	1 ⁷ / ₈	90514029	128-5048-37-30-67,39-20	9	6×10	3×8	40°	1	3	1,1
51	2	90513842	128-5051-37-67,39-20	9	6×10	3×9	40°	1	3	0,9
54	2 ¹ / ₈	90514220	128-5054-24-45-67,39-20*	11	8×9	3×9	35°	2	1	1,8
54	2 ¹ / ₈	90513871	128-5054-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
64	2 ¹ / ₂	90513870	128-5064-67,49-20	12	8×10	4×10	40°	–	2	1,6

* Reversed flushing.

Drifter rod

SR35 (1³/₈"

Hex. 35 mm (1³/₈"

R/T38 (1¹/₂"

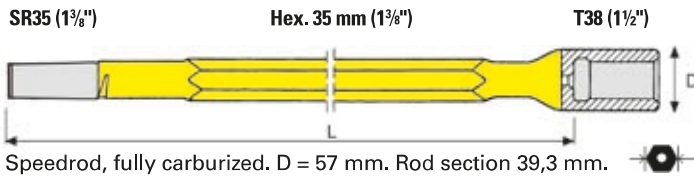


Fully carburized. Rod section 39,3 mm.

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
2670	8'9 ¹ / ₈ "	90514159		228-0627-35-91-C,02	21,0
3090	10'1 ⁵ / ₈ "	90513854	228-0631-04-C,02		24,0
3150	10'4"	90514160		228-0632-35-91-C,02	24,5
3700	12'1 ⁵ / ₈ "	90513855	228-0637-04-C,02		29,1
3700	12'1 ⁵ / ₈ "	90513856		228-0637-35-C,02	28,8
4310	14'1 ⁵ / ₈ "	90513857	228-0643-04-C,02		33,6
4310	14'1 ⁵ / ₈ "	90513858		228-0643-35-C,02	33,7
4920	16'1 ³ / ₄ "	90513859	228-0649-04-C,02		38,4
4920	16'1 ³ / ₄ "	90513860		228-0649-35-C,02	38,4
5530	18'1 ³ / ₄ "	90513861		228-0655-35-C,02	42,4
6400	21'	90514140		228-0664-35-C,02	49,7

SR35 (1³/₈"

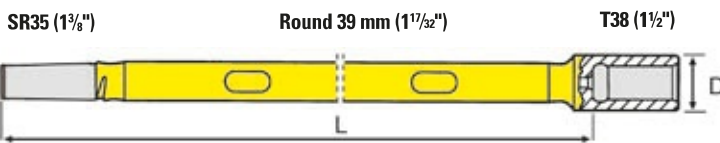
Drifting and tunnelling



Length (L)		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
3700	12'1 ⁵ / ₈ "	90514641		228-0637-35-MF-C,02	28,9
4310	14'1 ⁵ / ₈ "	90514124		228-0643-35-MF-C,02	34,1
4920	16'1 ³ / ₄ "	90514280		228-0649-35-MF-C,02	38,8



Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
5530	18'1 ³ / ₄ "	90513864		228-2855-35-C,02	47,6
6100	20'1 ⁵ / ₈ "	90514637		228-2861-35-C,02	52,1



Length (L)		Product No.	Product code		Weight approx. kg
mm	foot/inch		Rope thread	T thread	
5530	18'1 ³ / ₄ "	90513853		228-2855-35-MF-C,02	46,9

Coupling



Thread diameter		Diameter		Length		Product No.	Product code		Weight approx. kg
mm	inch	mm	inch	mm	inch		Rope thread	T thread	
38	1 ¹ / ₂	52	2 ¹ / ₁₆	170	6 ³ / ₄	90515736		335-0052,10*	1,5
38	1 ¹ / ₂	55	2 ⁵ / ₃₂	170	6 ³ / ₄	90515733	304-0055,10		1,9
38	1 ¹ / ₂	55	2 ⁵ / ₃₂	170	6 ³ / ₄	90515737		335-0055,10	1,9
38	1 ¹ / ₂	55	2 ⁵ / ₃₂	180	7 ¹ / ₈	90515734	304-0055-57,10		1,9
38	1 ¹ / ₂	55	2 ⁵ / ₃₂	180	7 ¹ / ₈	90515738		335-0055-57,10	1,9

* Recommended for high frequency drifters.

Drifting and tunnelling

SR28 (1⅛"), SR32 (1¼"), R32 (1¼"), SR35 (1⅜")

Dome bits for reaming



-5076-42-24-67



-5089-42-24



-5102-42-24-67



-5127-42-24

Please note text on page 22 re. finished hole size.

Thread		Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle	Flushing hole		Weight approx. kg
mm	inch	mm	inch				Gauge	Centre		Side	Centre	
DOME BIT - Spherical buttons												
SR28	1⅛	76	3	90515258	125-5076-42-24,49-20	10	9×12,7	1×12,7	35°	–	3	2,1
SR32	1¼	102	4	90515257	126-5102-42-24,49-20	17	16×12,7	1×12,7	35°	2	2	3,2
R32	1¼	76	3	90514373	103-5076-42-24,49-20	10	9×12,7	1×12,7	35°	1	3	2,0
R32	1¼	89	3½	90510843	103-5089-42-24,49-20	15	14×12,7	1×12,7	35°	2	2	2,5
R32	1¼	127	5	90513779	103-5127-42-24,49-20	19	18×12,7	1×12,7	35°	1	3	4,8
SR35	1⅜	89	3½	90513848	128-5089-42-24,49-20	15	14×12,7	1×12,7	35°	2	2	2,5
SR35	1⅜	102	4	90513850	128-5102-42-24,49-20	17	16×12,7	1×12,7	35°	2	2	3,1
SR35	1⅜	127	5	90514219	128-5127-42-24,49-20	19	18×12,7	1×12,7	35°	1	3	4,8
DOME BIT - Ballistic buttons												
SR32	1¼	76	3	90514502	126-5076-42-24-67,49-20	10	9×12,7	1×12,7	35°	1	3	2,0
R32	1¼	76	3	90510821	103-5076-42-24-67,49-20	10	9×12,7	1×12,7	35°	1	3	2,0
R32	1¼	89	3½	90510820	103-5089-42-24-67,49-20	15	14×12,7	1×12,7	35°	2	2	2,5
R32	1¼	102	4	90510781	103-5102-42-24-67,49-20	17	16×12,7	1×12,7	35°	2	2	3,2
SR35	1⅜	89	3½	90513849	128-5089-42-24-67,49-20	15	14×12,7	1×12,7	35°	2	2	2,5
SR35	1⅜	102	4	90513851	128-5102-42-24-67,49-20	17	16×12,7	1×12,7	35°	2	2	3,1

**Hex. 22 mm ($\frac{7}{8}$ "), R25 (1"), R28 ($1\frac{1}{8}$ "), SR32 ($1\frac{1}{4}$ "),
R32 ($1\frac{1}{4}$ "), SR35 ($1\frac{3}{8}$ ")**

Reaming equipment

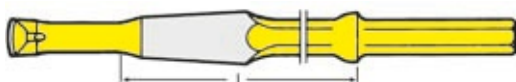
Drill bit, 6° taper



Reaming button bit for
22 mm ($\frac{7}{8}$ ") pilot rod and
25 mm (1"), 28 mm ($1\frac{1}{8}$ "),
32 mm ($1\frac{1}{4}$ ") pilot adapter.

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Weight approx. kg
mm	inch				Gauge	Centre		
64	2½	90510459	175-5064,39-20	10	8×10	2×9	35°	0,8
76	3	90510460	175-5076,39-20	10	8×11	2×11	35°	1,2
89	3½	90510461	175-5089,39-20	12	8×11	4×11	35°	1,7

Pilot rod, 6° taper



22 mm ($\frac{7}{8}$ ") hex. Shank length 108 mm ($4\frac{1}{4}$ ").

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
800	2'7½"	90000296	575-3108,11-17	3,3
1200	3'11¼"	90000297	575-3112,11-17	4,5
1600	5'3"	90000298	575-3116,11-17	5,6
2000	6'6¾"	90000300	575-3120,11-17	7,0
2400	7'10½"	90000301	575-3124,11-17	8,2

Pilot adapter, 6° taper



For 64, 76 and 89 mm reaming button bits.

Thread		Diameter		Pilot hole mm	Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch				
25	1	26	1⅓	36	90550018	502-2303,00-17	1,3
28	1⅓	26	1⅓	36	90002958	507-2503,00-17	1,5
32	1¼	26	1⅓	36	90000392	503-2603,00-17	1,5
SR32	1¼	26	1⅓	36	90514500	526-2603,00-17	1,4

Drifting and tunnelling

Hex. 22 mm ($\frac{7}{8}$ "), R25 (1"), R28 ($1\frac{1}{8}$ "), SR32 ($1\frac{1}{4}$ "),
R32 ($1\frac{1}{4}$ "), SR35 ($1\frac{3}{8}$ ")

Reaming equipment

Drill bit, 12° taper



Reaming button bit for
28 mm ($\frac{1}{8}$ "),
32 mm ($\frac{1}{4}$ ") and
35 mm ($\frac{1}{2}$ ") pilot adapter.

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Weight approx. kg
mm	inch				Gauge	Centre		
89	3½	90510174	187-5089-20,39-20	12	8×12,7	4×10	35°	1,8
102	4	90510468	187-5102,39-20	12	8×11	4×11	35°	2,0
102	4	90510469	187-5102-20,39-20	12	8×12,7	4×12,7	35°	2,1
127	5	90510470	187-5127,39-20	20	12×12,7	8×12,7	35°	4,0

Pilot adapter, 12° taper (with insert)



For 89, 102 and 127 mm reaming button bits.

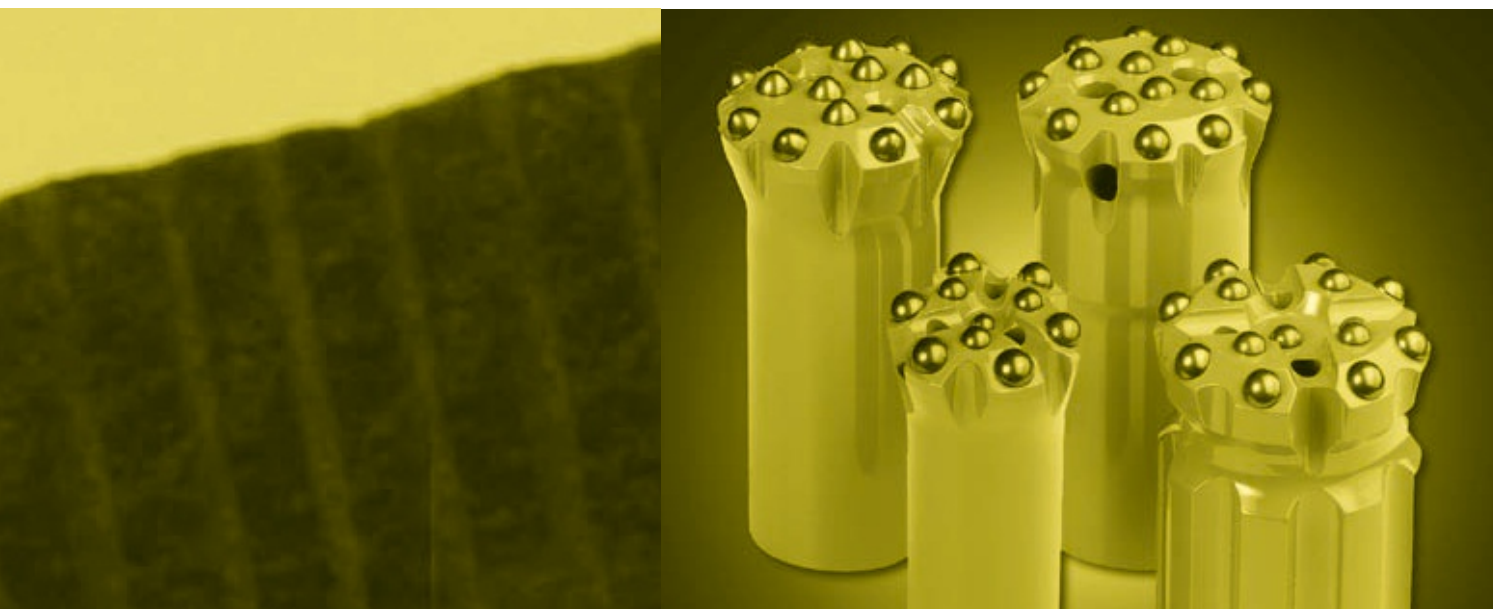
Thread		Diameter		Pilot hole mm	Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch				
28	1⅛	36	1⅜	38–48	90516254	507-7802,02-17	2,2
32	1¼	40	1⅝	41–48	90002333	503-7802,00-17	2,2
SR35	1⅜	40	1⅝	45–51	90516262	528-7802,02-17	2,3

Pilot adapter, 12° taper



For 89, 102 and 127 mm reaming button bits.

Thread		Diameter		Pilot hole mm	Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch				
32	1¼	–	–	41–48	90503472	503-7902,00	2,1



Bench and production drilling

Drill bit design	44
R25 (1")	46
Magnum SR28 (1¹/₈")	49
R28 (1¹/₈")	51
R32 (1¹/₄")	53
R/T38 (1¹/₂")	57
T45 (1³/₄")	62
T51 (2")	66
T60 (2³/₈")	69
Tube drilling system (TDS)	71

Bench and production drilling

Drill bit design



-5076

Flat front bit with spherical buttons. Standard skirt.
Ideal for medium-hard rock when the rock formation causes heavy gauge wear on the bit. Can also be used in very hard and abrasive rock formations.



-5076-45

Flat front bit with spherical buttons. Retractable skirt.
To be used in the same applications as -5076 when you have rock formations that also create hole deviations.



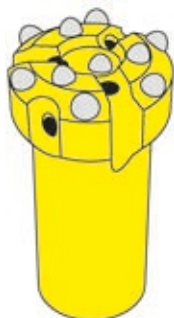
-6076

Drop centre bit with spherical buttons. Standard skirt.
Perfect in slightly more abrasive formations where there is accelerated button wear or in medium to hard rock when ballistic buttons have a tendency to break.



-6076-45

Drop centre bit with spherical buttons. Retractable skirt.
Use in the same applications as -6076 when you have rock formations that also create hole deviations.



-6076-67

Drop centre bit with ballistic buttons. Standard skirt.
Designed for medium-hard rock. Bits with ballistic buttons perform especially well in non-abrasive or medium abrasive rock formations.



-6076-45-67

Drop centre bit with ballistic buttons. Retractable skirt.
To be used in the same applications as -6076-67 when you have rock formations that also create hole deviations.



-5127-21



-6089-21-67



-6076-21-45-67

Model -21, a heavy duty bit with larger gauge buttons. Flat or drop centre front. Retractable or standard skirt. Ballistic or spherical buttons.
A new bit design for hard to very hard abrasive rock. The asymmetrical button pattern gives excellent rock crushing. A shorter head and larger clearing angle allow for better flushing of cuttings.
Model -20 is used for the same applications.

- [5] XXX

Flat face button bit

- [6] XXX

Drop centre button bit

-XXXX- [67]

Ballistic buttons

-XXXX- [66]

Full-ballistic buttons

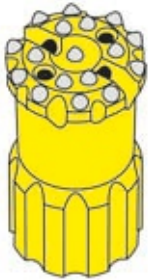
-XXXX- [45]

Retrac skirt

Please observe that all button bits are manufactured oversized 1,0–1,5 mm, meaning that for example a 45,0 mm bit is at least 46,0 mm as new and a 89,0 mm bit 90,0 mm. This is done because of the fast initial wear on button bits.

When it is of importance, also consider that the hole is always 1,0–3,0 mm bigger than the bit dimension depending on rock formation.

Bench and production drilling

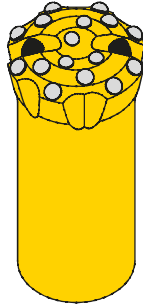


-6089-35-67

Model -35

Guide bit for the TDS tube drilling system.

Model -35 guide bit should be used in rock formations that create hole deviations.



-6102-41

Model -41

Standard bit for T60 system.

This new bit design for T60 system with spherical buttons is created for drilling in very hard and abrasive rock formations. The flushing is concentrated to the front of the bit to get maximal flushing capacity.



Soft rock bit -66

Full-ballistic button bit.

The two types of full-ballistic button bits, model 5xxx-47-66 and model 6xxx-21-66 are developed specially for drilling in soft formations.

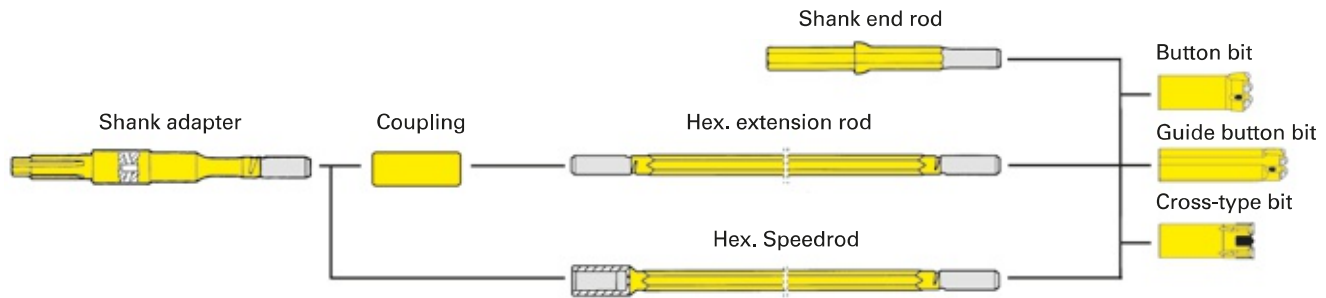
The penetration rate is very fast due to the high button protrusion. Excellent flushing concentrated to the front.



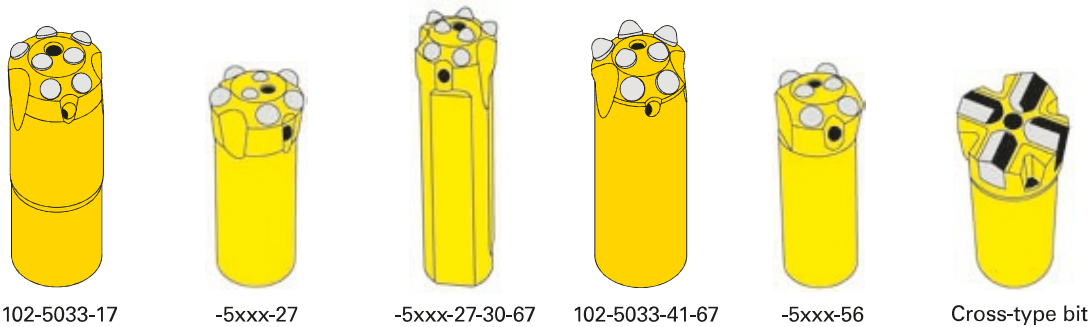
Insert bits

Cross- and X-type bits.

Traditional chisel bits in cross- and X-type formations for extremely abrasive rock. Ideal for soft formations that cause snakeskin problems for carbide. Produce straight holes. X-type bits are used for larger hole dimensions.



Drill bit design



Please note text on page 44 re. finished hole size.

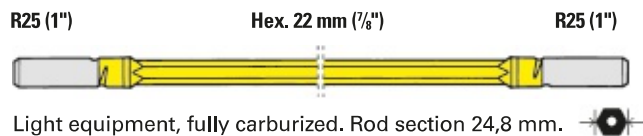
Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
33	1⅝ ₁₆	90510448	102-5033-17,39-20	7	5×7	2×7	35°	1	1	0,4
35	1⅜ ₈	90505181	102-5035-27,39-20	7	5×9	2×7	25°	1	1	0,5
37	1⅝ ₃₂	90505295	102-5037-27,39-20	7	5×9	2×7	30°	1	1	0,6
38	1½	90505179	102-5038-27,39-20	7	5×9	2×7	30°	1	1	0,6
41	1⅝ ₈	90505175	102-5041-27,39-20	7	5×9	2×8	35°	1	1	0,6
41	1⅝ ₈	90510207	102-5041-56,39-20	6	4×9	2×9	35°	2	1	0,6
45	1¾	90505145	102-5045-27,39-20	7	5×11	2×8	30°	2	1	0,7
45	1¾	90510208	102-5045-56,39-20	6	4×11	2×9	35°	2	1	0,6
51	2	90505353	102-5051-27,39-20	7	5×11	2×10	35°	2	1	1,0
BUTTON BIT - Ballistic buttons										
33	1⅝ ₁₆	90510274	102-5033-17-67,39-20	7	5×7	2×7	35°	1	1	0,4
33	1⅝ ₁₆	90514118	102-5033-41-67,39-20	7	5×8	2×7	40°	1	1	0,4
35	1⅜ ₈	90509723	102-5035-27-67,39-20	7	5×9	2×7	25°	1	1	0,5
38	1½	90505180	102-5038-27-67,39-20	7	5×9	2×7	40°	1	1	0,6
41	1⅝ ₈	90505176	102-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,6
41	1⅝ ₈	90510662	102-5041-27-30-67,39-20	7	5×9	2×8	40°	1	1	1,0
CROSS-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
38	1½	90514222	102-7038-44,20-17	10,3		19,5		4	1	0,7
41	1⅝ ₈	90514231	102-7041-44,20-17	11,1		20,0		4	1	0,8
45	1¾	90510687	102-7045-44,20-17	11,1		20,0		2	1	0,8
48	1⅞ ₈	90510652	102-7048-38,02-17	14,0		22,0		4	1	1,0
51	2	90510653	102-7051-38,02-17	14,0		22,0		4	1	1,1

R25 (1")

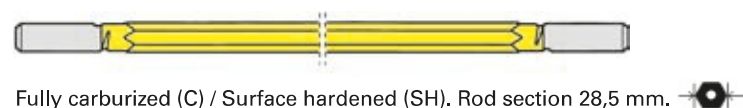
Bench and production drilling

Extension rod



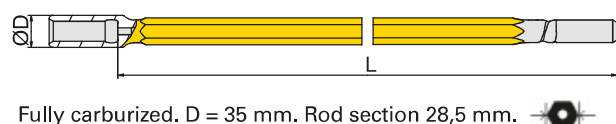
Length		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
610	2	90548008	202-0206-C,02		2,0
1220	4	90000524	202-0212-C,02		3,7

R25 (1") hex. rod



Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Fully carburized	Surface hardened	
915	3'	90548035	202-0309-C,02		3,3
1000	3'3 3/8"	90509525	202-0310-C,02		3,9
1220	4'	90000131	202-0312-C,02		4,5
1525	5'	90000535	202-0315-C,02		5,7
1830	6'	90000132	202-0318-C,02		6,9
2435	8'	90548093	202-0324-C,02		9,2
3050	10'	90000981	202-0331-C,02		11,9
3050	10'	90002576		202-0331-SH,03	11,9

R25 (1") hex. Speedrod



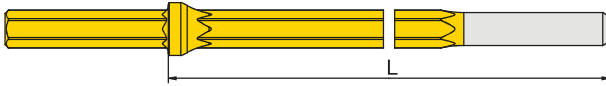
Length (L)		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
610	2	90505035	202-0306-MF-C,02		2,6
1220	4	90505036	202-0312-MF-C,02		5,0
3050	10	90515578	202-0331-MF-C,02		12,0

Coupling



Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
25	1	33	1 1/16	150	5 7/8	90503145	302-0033,00	0,5
25	1	35	1 3/8	150	5 7/8	90000163	302-0035,00	0,7

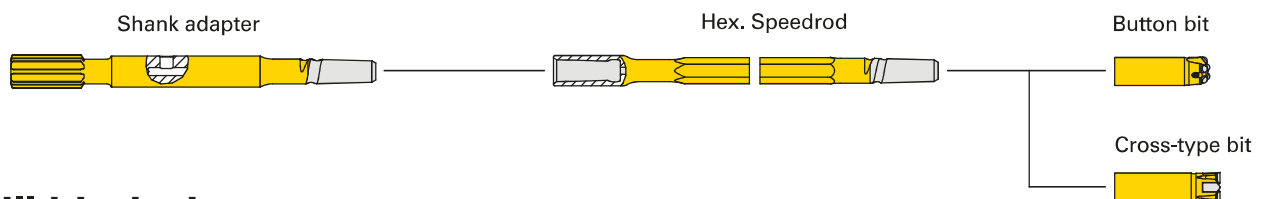
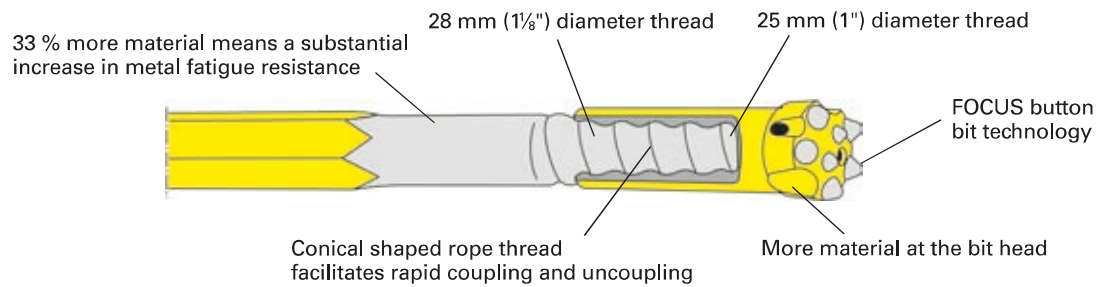
Shank end rod



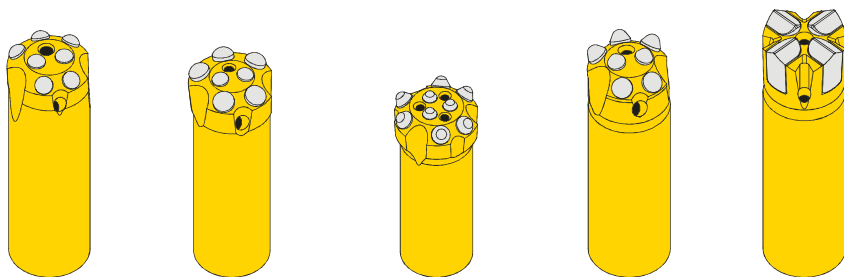
Fully carburized.

Length (L)		Product No.	Product code	Seal Product No.	Seal Product code	Weight approx. kg
mm	foot/inch					
Shank hex. 22 mm (7/8") × 108 mm (4¼"). 25 mm (1") thread.						
265	10⅜"	90000237	502-0103-06-C,02	90002182	9232	1,2
610	2'	90570115	502-0106-06-C,02	90002182	9232	2,3
760	2'5⅞"	90510004	502-0108-06-C,02	90002182	9232	2,9
1000	3'3⅜"	90531258	502-0110-06-C,02	90002182	9232	3,4
1200	3'11¼"	90580089	502-0112-06-C,02	90002182	9232	4,5
1600	5'3"	90514336	502-0116-06-C,02	90002182	9232	5,7
1830	6'	90500017	502-0118-06-C,02	90002182	9232	6,1
2435	8'	90510009	502-0124-06-C,02	90002182	9232	8,0
3200	10'6"	90500012	502-0132-06-C,02	90002182	9232	10,4
3700	12'1⅝"	90510715	502-0137-06-C,02	90002182	9232	12,0
4000	13'1½"	90502700	502-0140-06-C,02	90002182	9232	13,0
265	10⅜"	90505427	502-0103-C,02	–	–	1,2
455	1'5⅞"	90513914	502-0104-C,02	–	–	1,5
610	2'	90516356	502-0106-C,02	–	–	2,3
760	2'5⅞"	90516357	502-0108-C,02	–	–	2,9
1600	5'3"	90516358	502-0116-C,02	–	–	5,7
1830	6'	90516360	502-0118-C,02	–	–	6,1
2400	7'10½"	90513918	502-0124-C,02	–	–	7,9
3200	10'6"	90513919	502-0132-C,02	–	–	10,4
3600	11'9¾"	90510785	502-0136-C,02	–	–	11,8
4000	13'1½"	90514359	502-0140-C,02	–	–	12,2
Shank hex. 25 mm (1") × 108 mm (4¼"). 25 mm (1") thread.						
255	10"	90000240	502-1203-C,02	90000378	9150-08	1,4
Shank hex. 25 mm (1") × 159 mm (6¼"). 25 mm (1") thread.						
255	10"	90000247	502-1503-C,02	90000378	9150-08	1,6
610	2'	90510516	502-1506-C,02	90000378	9150-08	3,1
3200	10'6"	90000986	502-1532-C,02	90000378	9150-08	13,2
Shank hex. 28 mm (1⅝") × 159 mm (6¼"). 25 mm (1") thread.						
2700	8'10¼"	90510068	502-2127-C,02	–	–	11,2

Magnum SR28 thread system



Drill bit design



125-5033-17

125-5035-27

125-5041-37-67

125-5033-41-67

125-7033-44

Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Buttons angle°		Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre	Gauge	Centre	Side	Centre	
BUTTON BIT - Spherical buttons											
33	1⅝ ₁₆	90514200	125-5033-17,39-20	7	5×7	2×7	35°	–	1	1	0,5
33	1⅝ ₁₆	90514117	125-5033-41,39-20	7	5×8	2×7	40°	15°	1	1	0,4
35	1⅜ ₈	90514322	125-5035-27,39-20	7	5×9	2×7	25°	10°	1	1	0,5
38	1½ ₂	90514282	125-5038-27,39-20	7	5×9	2×7	30°	–	1	1	0,6
41	1⅝ ₈	90515379	125-5041-27,39-20	7	5×9	2×8	40°	–	1	1	0,7
45	1¾ ₄	90514507	125-5045-27,39-20	7	5×11	2×8	30°	–	2	1	0,8
BUTTON BIT - Ballistic buttons											
33	1⅝ ₁₆	90514137	125-5033-41-67,39-20	7	5×8	2×7	40°	15°	1	1	0,4
35	1⅜ ₈	90514102	125-5035-27-67,39-20	7	5×9	2×7	25°	10°	1	1	0,4
38	1½ ₂	90516334	125-5038-41-67,39-20	7	5×9	2×8	40°	20°	1	1	0,5
41	1⅝ ₈	90516383	125-5041-37-67,39-20	9	6×9	3×7	40°	–	–	3	0,5
45	1¾ ₄	90516422	125-5045-37-67,39-20	9	6×9	3×8	40°	–	–	3	0,7
CROSS-TYPE BIT				Insert							
				Width (mm)		Height (mm)					
33	1⅝ ₁₆	90514429	125-7033-44 20-17	10 3	19 5			2	1	0 5	

Extension rod

SR28 (1 1/8")

Hex. 25 mm (1")

SR28 (1 1/8")



Speedrod, fully carburized. D = 34 mm. Rod section 28,5 mm.



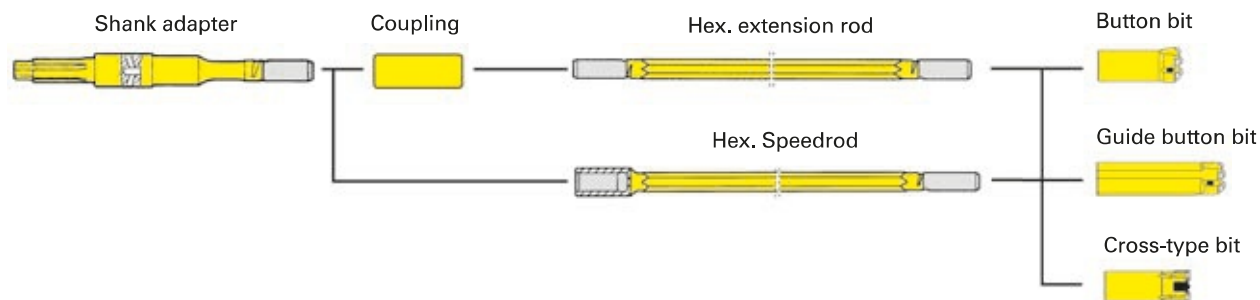
Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3050	10	90516350	225-0331-69-MF-C,02	12,1

Shank end rod

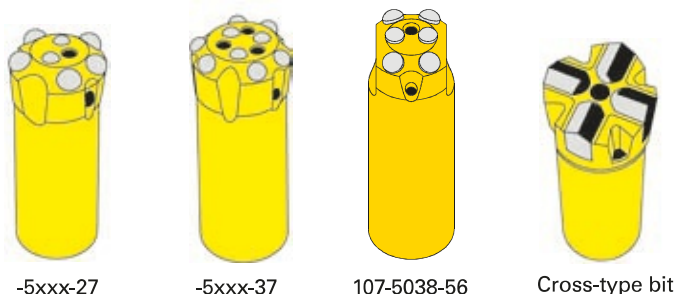


Fully carburized.

Length (L)		Product No.	Product code	Seal Product No.	Seal Product code	Weight approx. kg
mm	foot/inch					
Shank hex. 25 mm (1") × 108 mm (4¼"). 28 mm (1⅞) thread.						
265	10⅜"	90516367	525-1103-C,02	–	–	1,7
3660	12'	90516330	525-1237-C,02	90000373	9150-08	15,2



Drill bit design



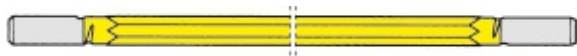
Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
37	1 ¹⁵ / ₃₂	90505296	107-5037-27,39-20	7	5×9	2×7	30°	1	1	0,6
38	1½	90505177	107-5038-27,39-20	7	5×9	2×7	30°	1	1	0,6
38	1½	90510216	107-5038-56,39-20	6	4×9	2×8	30°	2	1	0,6
41	1⅝	90505173	107-5041-27,39-20	7	5×9	2×8	35°	1	1	0,7
43	1 ¹¹ / ₁₆	90505169	107-5043-27,39-20	7	5×9	2×9	35°	2	1	0,8
51	2	90510397	107-6051,49-20	9	6×10	3×9	30°	–	3	1,0
BUTTON BIT - Ballistic buttons										
38	1½	90505178	107-5038-27-67,39-20	7	5×9	2×7	40°	1	1	0,6
41	1⅝	90505174	107-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,6
CROSS-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
41	1⅝	90514234	107-7041-44,20-17	11,1		20,0		4	1	0,8
45	1¾	90514252	107-7045-44,20-17	11,1		20,0		4	1	0,9

Extension rod

R28 (1 1/8") hex. rod



Fully carburized. Rod section 32 mm. 

Length		Product No.	Product code	Weight approx. kg
mm	foot			
1830	6	90502190	207-0418-C,02	9,3
3050	10	90002945	207-0431-C,02	15,3

R28 (1 1/8") hex. Speedrod



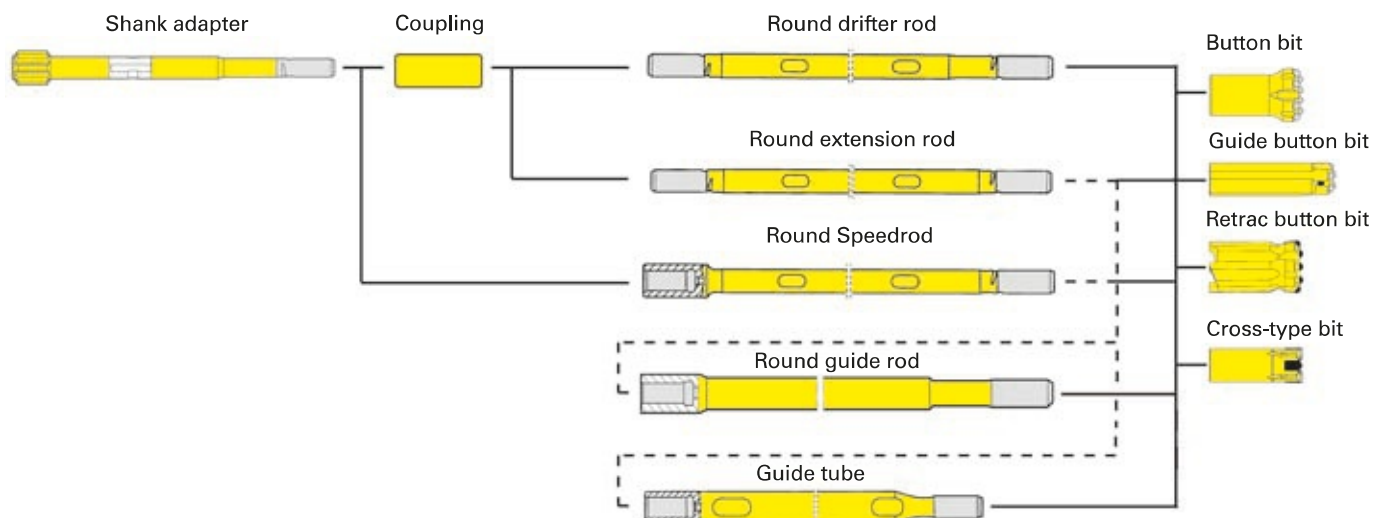
Fully carburized. D = 39 mm. Rod section 32 mm. 

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
1220	4	90514037	207-0412-MF-C,02	6,2
3050	10	90502656	207-0431-MF-C,02	15,7

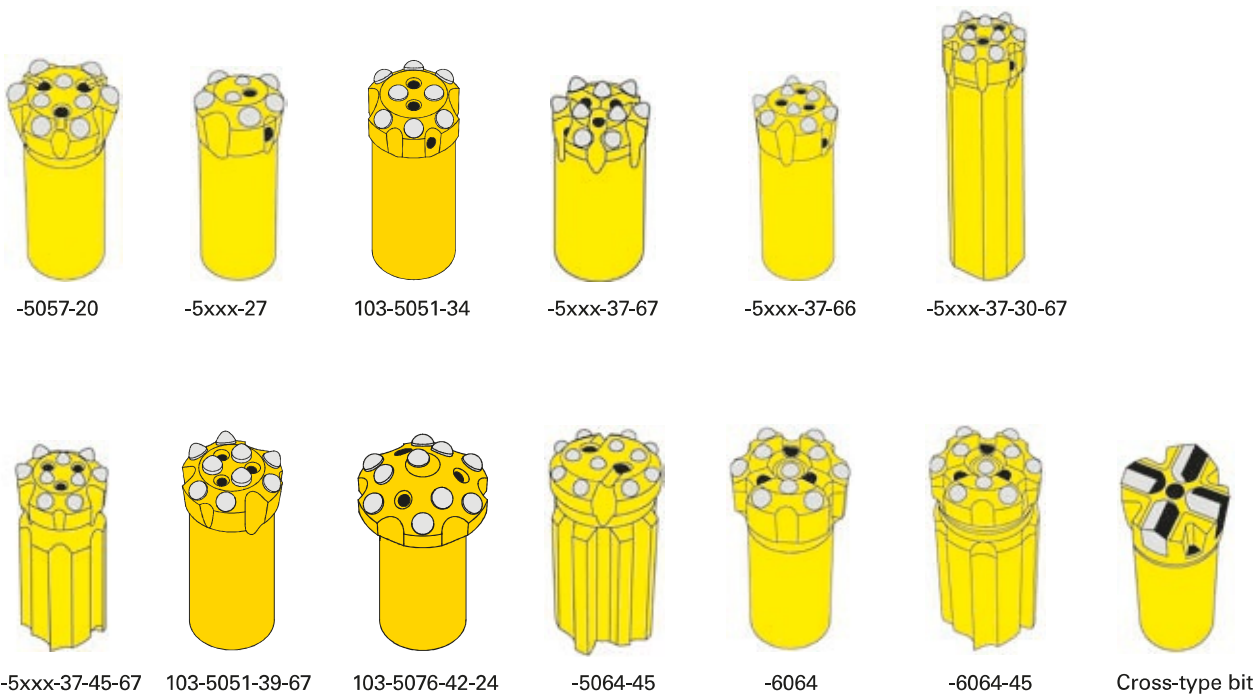
Coupling



Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
28	1 1/8	44	1 1/16	150	5 7/8	90515735	307-0040,10	0,9



Drill bit design



Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
48	1⅞	90504374	103-5048-27,39-20	7	5×11	2×9	35°	2	1	1,0
48	1⅞	90509461	103-5048-37,39-20	9	6×10	3×8	40°	1	3	0,9
51	2	90504566	103-5051-27,39-20	7	5×11	2×10	35°	2	1	1,0
51	2	90510451	103-5051-34,39-20	8	6×10	2×10	40°	2	2	1,0
51	2	90509465	103-5051-37,39-20	9	6×10	3×9	40°	1	3	1,0
51	2	90510302	103-6051,49-20	9	6×10	3×9	30°	–	3	1,0
51	2	90510308	103-6051-45,49-20	9	6×10	3×9	30°	–	3	1,2
54	2⅞	90509480	103-5054-37,39-20	9	6×10,5	3×10	35°	1	4	1,0
57	2¼	90510453	103-5057-20,39-20	9	6×11	3×9	35°	–	3	1,1
57	2¼	90514267	103-5057-37-45,49-20	9	6×10,5	3×9	35°	–	3	1,5
64	2½	90510303	103-5064,49-20	12	8×10	4×10	40°	–	2	1,6
64	2½	90510381	103-5064-45,49-20	12	8×10	4×10	40°	–	2	2,2
64	2½	90510328	103-6064,49-20	10	6×11	3×10, 1×10	35°	–	3	1,5
64	2½	90510364	103-6064-45,49-20	10	6×11	3×10, 1×10	35°	–	3	2,2
76	3	90510353	103-5076,49-20	12	8×11	4×11	40°	–	2	1,8
76	3	90514373	103-5076-42-24,49-20	10	9×12,7	1×12,7	35°	1	3	2,0
76	3	90510504	103-6076-45,49-20	13	8×11	4×11, 1×11	35°	1	4	3,5
BUTTON BIT - Ballistic buttons										
48	1⅞	90509464	103-5048-37-67,39-20	9	6×10	3×8	40°	1	3	0,9
48	1⅞	90509463	103-5048-37-30-67,39-20	8	6×10	2×8	25°	1	3	1,0
51	2	90509466	103-5051-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
51	2	90510836	103-5051-37-45-67,39-20	9	6×10	3×9	40°	1	3	1,2
51	2	90514633	103-6051-45-67,49-20	9	6×10	3×9	35°	–	3	1,2
54	2⅞	90509481	103-5054-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
57	2¼	90510454	103-5057-20-67,39-20	9	6×11	3×9	35°	–	3	1,1
64	2½	90510327	103-5064-67,49-20	12	8×10	4×10	40°	–	2	1,6
76	3	90510821	103-5076-42-24-67,49-20	10	9×12,7	1×12,7	35°	1	3	2,0
BUTTON BIT - Full-ballistic buttons (Soft rock bit)										
48	1⅞	90514714	103-5048-34-66,39-20	8	6×9	2×9	40°	–	2	0,8
48	1⅞	90514135	103-5048-37-66,39-20	9	6×9	3×9	40°	1	3	0,8
51	2	90514715	103-5051-34-66,39-20	8	6×10	2×10	40°	–	2	0,9
51	2	90514136	103-5051-37-66,39-20	9	6×10	3×9	40°	1	3	0,8
CROSS-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
48	1⅞	90510658	103-7048-38,02-17	14,0		22,0		4	1	1,1
51	2	90514248	103-7051-38,02-17	14,0		22,0		4	1	1,2
51	2	90510551	103-7051-38-45,02-17	14,0		22,0		4	1	1,7
57	2¼	90514239	103-7057,02-17	10,3		19,5		4	1	1,3
64	2½	90001719	103-7064,08-17	10,3		19,5		4	1	1,4

Extension rod

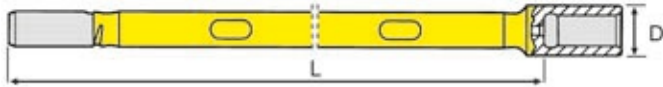
R32 (1¼") round rod



Fully carburized (C) / Surface hardened (SH).

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Fully carburized	Surface hardened	
915	3'	90550062	203-2509-C,02		4,8
1000	3'3⅜"	90500360	203-2510-C,02		6,0
1220	4'	90000138	203-2512-C,02		6,5
1525	5'	90509485	203-2515-C,02		8,7
1830	6'	90000139	203-2518-C,02		9,8
2435	8'	90000989	203-2524-C,02		13,2
2435	8'	90515400		203-4524-SH,03	13,9
3050	10'	90000990	203-2531-C,02		16,6
3050	10'	90515401		203-4531-SH,03	16,6
3660	12'	90509565	203-2537-C,02		20,0
3660	12'	90515402		203-4537-SH,03	20,8

R32 (1¼") round Speedrod



Fully carburized. D = 46 mm.

Length (L)		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
915	3	90503329	203-2509-MF-C,02		5,5
1220	4	90500834	203-2512-MF-C,02		7,3
1525	5	90500627	203-2515-MF-C,02		9,0
1830	6	90500628	203-2518-MF-C,02		10,6
2435	8	90502259	203-2524-MF-C,02		14,0
Both surface hardened and fully carburized					
3050	10	90515604	203-2531-MF,29		18,6
3660	12	90515605	203-2537-MF,29		22,1
4270	14	90515606	203-2543-MF,29		25,6

Drifter rod

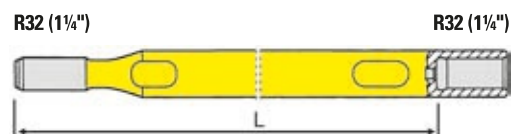
R32 (1¼") round rod



Fully carburized.

Length		Product No.	Product code	Weight approx. kg
mm	foot/inch			
4000	13'1½"	90002394	203-2540-03-C,02	21,7
4310	14'1⅝"	90000993	203-2543-03-C,02	23,4

Guide tube



Fully carburized.

Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot			
51-57	2-2¼	45	1¾	1220	4	94502681	203-7112,10	10,0
51-57	2-2¼	45	1¾	1525	5	94502658	203-7115,10	12,5
51-57	2-2¼	45	1¾	1830	6	94502659	203-7118,10	14,2
51-57	2-2¼	45	1¾	3050	10	94502660	203-7131,10	25,0

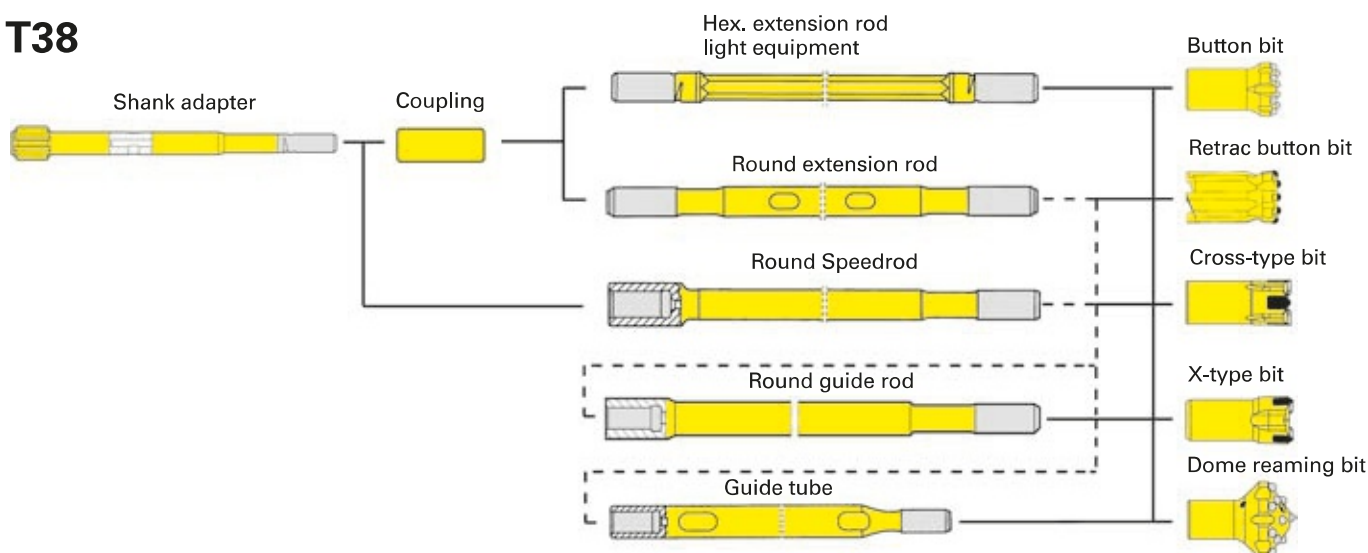
Coupling



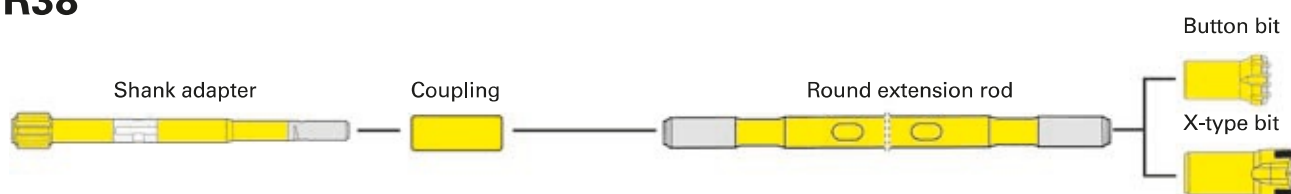
Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code Rope thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
32	1¼	42	1 ²¹ / ₃₂	150	5 ⁷ / ₈	90515730	303-0042,10	0,9
32	1¼	44	1 ²³ / ₃₂	150	5 ⁷ / ₈	90515731	303-0044,10	1,0
32	1¼	44	1 ²³ / ₃₂	160	6 ⁵ / ₁₆	90515732	303-0044-57,10	1,2

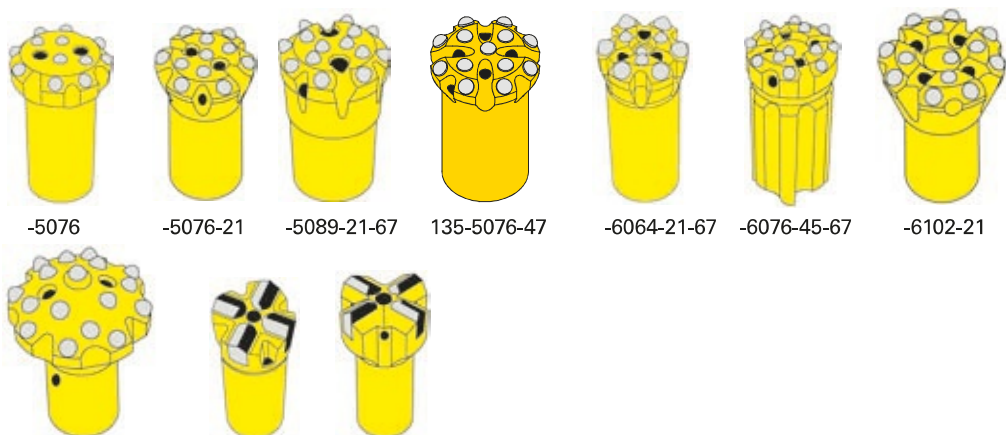
T38



R38



Drill bit design



Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code		No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch		R38 thread	T38 thread		Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons											
64	2½	90510304	104-5064,49-20		12	8×10	4×10	40°	–	2	1,6
64	2½	90510305		135-5064,49-20	12	8×10	4×10	40°	–	2	1,6
64	2½	90510309		135-5064-45,49-20	12	8×10	4×10	40°	–	2	1,9
64	2½	90510316		135-5064-20,49-20	9	6×12,7	3×11	35°	1	1	1,9
64	2½	90513748		135-5064-21,49-20	10	6×11	4×10	35°	1	2	1,6
64	2½	90510307		135-6064,49-20	10	6×11	3×10, 1×10	35°	–	3	1,7
64	2½	90510311		135-6064-45,49-20	10	6×11	3×10, 1×10	35°	–	3	2,3
64	2½	90510347		135-6064-21,49-20	10	6×12,7	3×10, 1×8	25°	–	3	1,7

Cont. next page

Diameter		Product No.	Product code		No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch		R38 thread	T38 thread		Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons											
70	2¾	90510349		135-5070,49-20	12	8×11	4×11	40°	–	2	2,0
70	2¾	90510350		135-5070-20,49-20	11	6×12,7	5×11	35°	2	1	2,3
70	2¾	90510352		135-6070,49-20	10	6×11	3×11, 1×9	35°	–	3	1,9
70	2¾	90510707		135-6070-21,49-20	10	6×12,7	3×10, 1×10	35°	–	3	1,7
70	2¾	90514157		135-6070-21-45,49-20	10	6×12,7	3×10, 1×10	35°	–	3	2,3
76	3	90510318	104-5076,49-20		12	8×11	4×11	40°	–	2	2,6
76	3	90510319		135-5076,49-20	12	8×11	4×11	40°	–	2	2,2
76	3	90510366		135-5076-45,49-20	12	8×11	4×11	40°	–	2	3,1
76	3	90510321		135-5076-20,49-20	11	6×12,7	5×11	35°	2	1	2,5
76	3	90513749		135-5076-21,49-20	13	8×12,7	5×11	35°	1	2	2,3
76	3	90515235		135-5076-47,49-20	13	8×11	5×11	35°	1	4	2,2
76	3	90510330		135-6076,49-20	10	6×12,7	3×11, 1×11	35°	1	3	2,6
76	3	90510369		135-6076-45,49-20	13	8×11	4×11, 1×11	35°	1	4	3,5
76	3	90513806		135-6076-21,49-20	13	8×12,7	4×11, 1×11	35°	–	4	2,4
76	3	90510810		135-6076-21-45,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,3
89	3½	90510323	104-5089,49-20		12	8×12,7	4×12,7	40°	–	2	3,3
89	3½	90510324		135-5089,49-20	12	8×12,7	4×12,7	40°	–	2	3,2
89	3½	90510367		135-5089-45,49-20	12	8×12,7	4×12,7	40°	–	2	5,2
89	3½	90515273		135-5089-47,49-20	16	10×11	6×11	35°	1	4	3,4
89	3½	90510332		135-6089,49-20	11	6×12,7	3×11, 2×11	35°	1	3	3,0
89	3½	90513808		135-6089-21,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,0
89	3½	90515287		135-6089-21-45,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,6
102	4	90510329		135-5102,49-20	12	8×14,5	4×14,5	40°	–	2	4,0
102	4	90515369		135-5102-47,49-20	14	8×14,5	6×12,7	35°	1	4	4,3
102	4	90513810		135-6102-21,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	3,9
127	5	90513776		135-5127-42-24,49-20*	19	18×12,7	1×12,7	35°	1	3	5,2
BUTTON BIT - Ballistic buttons											
64	2½	90510413		135-5064-67,49-20	12	8×10	4×10	40°	–	2	1,6
64	2½	90510365		135-5064-45-67,49-20	12	8×10	4×10	40°	–	2	1,9
64	2½	90510306		135-6064-67,49-20	10	6×11	3×10, 1×10	35°	–	3	1,6
64	2½	90510368		135-6064-45-67,49-20	10	6×11	3×10, 1×10	35°	–	3	2,3
64	2½	90510524		135-6064-21-67,49-20	10	6×12,7	3×10, 1×8	25°	–	3	1,8
64	2½	90513805		135-6064-21-45-67,49-20	10	6×12,7	3×10, 1×8	25°	–	3	2,2
64	2½	90514631		135-6064-48-45-67,49-20	13	8×10	4×10, 1×7	35°	–	4	2,0
70	2¾	90510351		135-6070-67,49-20	10	6×11	3×11, 1×9	35°	–	3	1,9
70	2¾	90510384		135-6070-45-67,49-20	10	6×11	3×11, 1×9	35°	–	3	2,4
76	3	90513760		135-5076-21-67,49-20	13	8×12,7	5×11	35°	1	2	2,3
76	3	90510312		135-5076-45-67,49-20	12	8×11	4×11	40°	–	2	3,1
76	3	90510331		135-6076-67,49-20	10	6×12,7	3×11, 1×11	35°	1	3	2,5
76	3	90510370		135-6076-45-67,49-20	13	8×11	4×11, 1×11	35°	1	4	3,5
76	3	90513807		135-6076-21-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	2,4
76	3	90510811		135-6076-21-45-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,3
89	3½	90513763		135-5089-21-67,49-20	14	8×12,7	6×12,7	35°	1	2	3,1

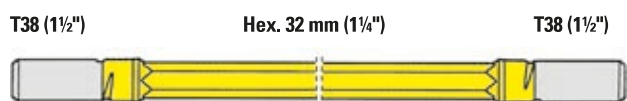
* For reaming, reversed flushing.

Cont. next page

Diameter		Product No.	Product code		No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch		R38 thread	T38 thread		Gauge	Centre		Side	Centre	
BUTTON BIT - Ballistic buttons											
89	3½	90510355		135-6089-67,49-20	11	6×12,7	3×11, 2×11	35°	1	3	3,1
89	3½	90510654		135-6089-45-67,49-20	14	8×11	4×11, 2×9	35°	1	4	5,0
89	3½	90513809		135-6089-21-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,0
102	4	90513762		135-6102-21-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	3,9
127	5	90513775		135-5127-42-24-67,49-20*	19	18×12,7	1×12,7	35°	1	3	5,2
X-TYPE BIT											
64	2½	90002256		135-8064,08-16	14,0		25,0		4	1	1,9
76	3	90001716	104-8076,08-16		14,0		26,0		4	1	2,5
76	3	90002260		135-8076,08-16	14,0		26,0		4	1	2,5

* For reaming, reversed flushing.

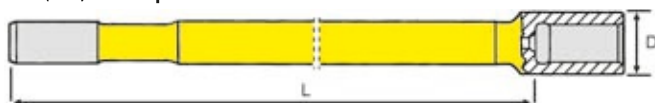
Extension rod



Light equipment, fully carburized. Rod section 35,8 mm. 

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		R38 thread	T38 thread	
3050	10'	90001962		235-0531-C,02	18,7
4000	13'1½"	90510050		235-0540-C,02	23,6

T38 (1½") round Speedrod

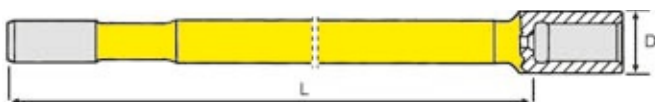


Fully carburized. D = 57 mm.

Length (L)		Product No.	Product code		Weight approx. kg
mm	foot/inch		R38 thread	T38 thread	
600	1'11⅝"	90510857		235-4706-MF-C,02	6,0
915	3'	90510718		235-4709-MF-C,02	8,3
1220	4'	90510719		235-4712-MF-C,02	10,9
1525	5'	90510720		235-4715-MF-C,02	13,3
1830	6'	90510721		235-4718-MF-C,02	15,8

Both surface hardened and fully carburized, see next page.

T38 (1½") round Speedrod



Fully carburized (C) and Surface hardened (SH). D = 57 mm.

Length (L)		Product No.	Product code		Weight approx. kg
mm	foot		R38 thread	T38 thread	
Both surface hardened and fully carburized					
3050	10	90515312		235-4731-MF,29	26,3
3660	12	90515315		235-4737-MF,29	31,5
4270	14	90515570		235-4743-MF,29	36,9
4880	16	90515571		235-4749-MF,29	41,9

R/T38 (1½") round rod



Fully carburized (C) / Surface hardened (SH).

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		R38 thread	T38 thread	
Fully carburized					
280	11"	90504090	204-2702-C,02		2,0
610	2'	90502448		235-2706-C,02	5,0
1220	4'	90500622		235-2712-C,02	10,0
Surface hardened					
1830	6'	90590109	204-2718-SH,03		14,9
3050	10'	90515405	204-4731-SH,03		24,3
3050	10'	90515289		235-4731-SH,03	24,8
3660	12'	90515288		235-4737-SH,03	29,0
4270	14'	90515291		235-4743-SH,03	34,7

T38 (1½") round rod with double thread



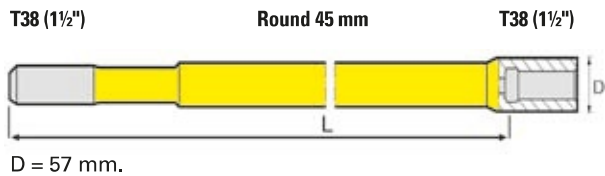
Surface hardened.

Length		Product No.	Product code		Weight approx. kg
mm	foot		R38 thread	T38 thread	
3050	10	90515292		235-4731-95-SH,03	27,0
3660	12	90515290		235-4737-95-SH,03	30,0

Drifter rod

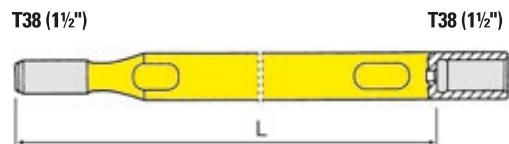
For one rod drilling drifter rods can be used. See page 34.

Guide rod



Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3660	12	90515575	235-4937-MF,29	44,8

Guide tube



Fully carburized.

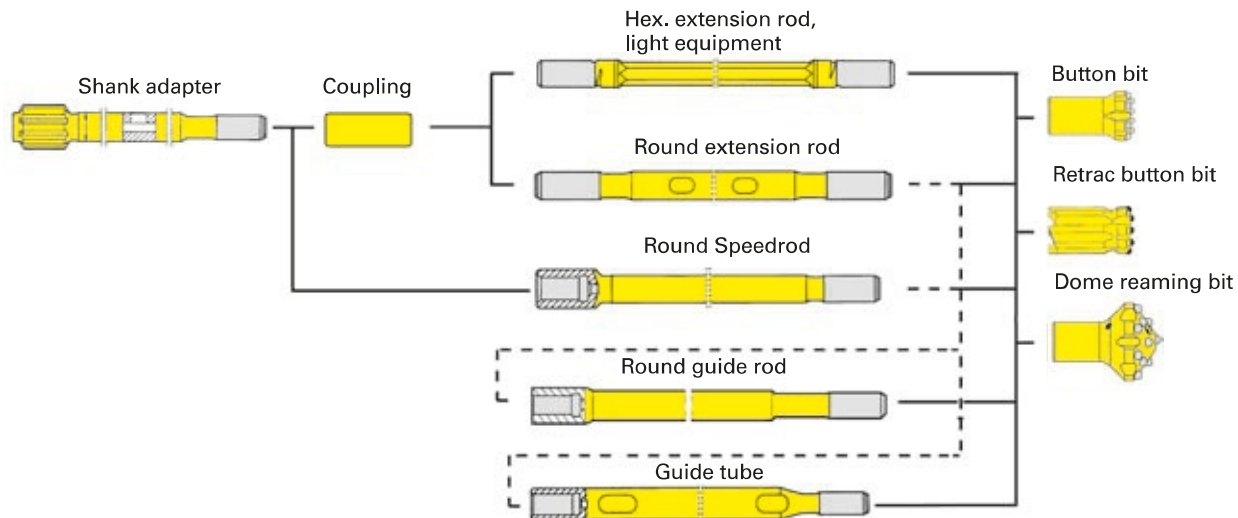
Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot			
64	2½	56	2⅞	1220	4	94502648	235-7012,10	12,6
64	2½	56	2⅞	1525	5	94000051	235-7015,10	14,0
64	2½	56	2⅞	1830	6	94000052	235-7018,10	17,4
64	2½	56	2⅞	3050	10	94000053	235-7031,10	28,3
64	2½	56	2⅞	3660	12	94000054	235-7037,10	32,8
76	3	64	2½	3660	12	94502622	235-6937,10	51,0

Coupling

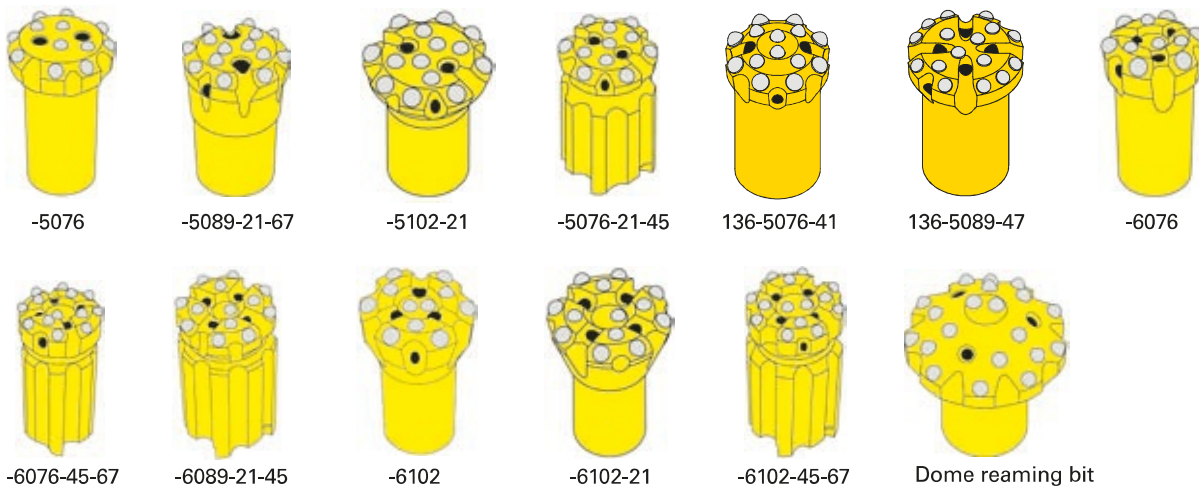


Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code		Weight approx. kg
mm	inch	mm	inch	mm	inch		Rope thread	T thread	
38	1½	52	2⅞	190	7½	90515736		335-0052,10	1,8
38	1½	55	2⅞	170	6¾	90515733	304-0055,10		1,7
38	1½	55	2⅞	170	6¾	90515737		335-0055,10	1,7
38	1½	55	2⅞	180	7⅞	90515734	304-0055-57,10		1,9
38	1½	55	2⅞	180	7⅞	90515738		335-0055-57,10	1,9



Drill bit design



Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
70	2¾	90510478	136-6070,49-20	10	6×11	3×11, 1×9	35°	–	3	2,0
70	2¾	90510479	136-6070-45,49-20	10	6×11	3×11, 1×9	35°	–	3	2,1
76	3	90510320	136-5076,49-20	12	8×11	4×11	40°	–	2	2,2
76	3	90510371	136-5076-45,49-20	12	8×11	4×11	40°	–	2	2,8
76	3	90510322	136-5076-20,49-20	11	6×12,7	5×11	35°	2	1	2,6
76	3	90514051	136-5076-21,49-20	13	8×12,7	5×11	35°	1	2	2,4
76	3	90513761	136-5076-21-45,49-20	13	8×12,7	5×11	35°	1	2	2,7
76	3	90515248	136-5076-41,49-20	14	8×12,7	4×11, 2×11	35°	2	2	2,5
76	3	90510333	136-6076,49-20	10	6×12,7	3×11, 1×11	35°	1	2	2,6
76	3	90510313	136-6076-45,49-20	13	8×11	4×11, 1×11	35°	1	4	3,2
76	3	90513750	136-6076-21,49-20	13	8×12,7	4×11, 1×11	35°	–	4	2,4
76	3	90510808	136-6076-21-45,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,0

Cont. next page

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
89	3½	90510325	136-5089,49-20	12	8×12,7	4×12,7	40°	–	2	3,3
89	3½	90510418	136-5089-20,49-20	14	8×12,7	6×11	35°	1	1	3,8
89	3½	90510372	136-5089-45,49-20	12	8×12,7	4×12,7	40°	–	2	5,0
89	3½	90515268	136-5089-47,49-20	16	10×11	6×11	35°	1	4	3,0
89	3½	90513751	136-5089-21-45,49-20	14	8×12,7	6×12,7	35°	1	2	4,7
89	3½	90510335	136-6089,49-20	11	6×12,7	3×11, 2×11	35°	1	3	3,5
89	3½	90510374	136-6089-45,49-20	14	8×11	4×11, 2×9	35°	1	4	4,7
89	3½	90513752	136-6089-21,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,0
89	3½	90510692	136-6089-21-45,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,2
102	4	90510326	136-5102,49-20	12	8×14,5	4×14,5	40°	–	2	4,4
102	4	90510888	136-5102-21,49-20	14	8×15,8	6×12,7	35°	1	2	3,7
102	4	90510373	136-5102-45,49-20	12	8×14,5	4×14,5	40°	–	2	6,7
102	4	90515364	136-5102-47,49-20	14	8×14,5	6×12,7	35°	1	4	4,1
102	4	90510337	136-6102,49-20	11	6×14,5	3×12,7, 2×12,7	35°	1	3	3,9
102	4	90510392	136-6102-45,49-20	14	8×12,7	4×12,7, 2×12,7	35°	1	4	7,8
102	4	90513811	136-6102-21,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	5,3
102	4	90515366	136-6102-21-45,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	6,4
115	4½	90510409	136-5115,49-20	18	10×12,7	8×12,7	35°	–	2	5,4
115	4½	90515269	136-5115-47,49-20	14	8×14,5	6×14,5	35°	1	4	5,8
115	4½	90510399	136-6115,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	5,0
115	4½	90514660	136-6115-45,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	9,0
127	5	90515253	136-5127-47,49-20	14	8×15,8	6×15,8	35°	–	4	6,6
127	5	90513778	136-5127-42-24,49-20*	19	18×12,7	1×12,7	35°	1	3	5,3
152	6	90513818	136-5152-42-24,49-20*	20	18×14,5	2×14,5	35°	1	3	9,9
BUTTON BIT - Ballistic buttons										
70	2¾	90510385	136-6070-45-67,49-20	10	6×11	3×11, 1×9	35°	–	3	2,1
76	3	90514027	136-5076-21-67,49-20	13	8×12,7	5×11	35°	1	2	2,3
76	3	90510386	136-5076-45-67,49-20	12	8×11	4×11	40°	–	2	2,8
76	3	90510334	136-6076-67,49-20	10	6×12,7	3×11, 1×11	35°	1	2	2,6
76	3	90510314	136-6076-45-67,49-20	13	8×11	4×11, 1×11	35°	1	4	3,1
76	3	90510809	136-6076-21-45-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,0
89	3½	90510390	136-5089-45-67,49-20	12	8×12,7	4×12,7	40°	–	2	5,0
89	3½	90510780	136-5089-21-67,49-20	14	8×12,7	6×12,7	35°	1	2	3,3
89	3½	90514073	136-5089-21-45-67,49-20	14	8×12,7	6×12,7	35°	1	2	4,7
89	3½	90510336	136-6089-67,49-20	11	6×12,7	3×11, 2×11	35°	1	3	3,4
89	3½	90510375	136-6089-45-67,49-20	14	8×11	4×11, 2×9	35°	1	4	4,8
89	3½	90515523	136-6089-21-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,1
89	3½	90510772	136-6089-21-45-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,8
102	4	90510889	136-5102-21-67,49-20	14	8×15,8	6×12,7	35°	1	2	3,7
102	4	90515367	136-6102-21-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	4,9
102	4	90510376	136-6102-45-67,49-20	14	8×12,7	4×12,7, 2×12,7	35°	1	4	7,8
115	4½	90515263	136-6115-67,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	4,7
115	4½	90515256	136-6115-45-67,49-20	14	8×14,5	6×12,7	35°	1	4	8,1
152	6	90510782	136-5152-42-24-67,49-20*	20	18×14,5	2×14,5	35°	3	3	9,5

* For reaming, reversed flushing.

Cont. next page

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Full-ballistic buttons (Soft rock bit)										
89	3½	90514993	136-5089-47-45-66,49-20	16	10×11	6×11	35°	1	4	4,9
X-TYPE BIT				Insert						
				Width (mm)		Height (mm)				
76	3	90514366	136-8076,02-17	14,0		26,0		4	1	2,5

Extension rod

T45 (1³/₄") Hex. 38 mm (1½") T45 (1³/₄")



Light equipment, fully carburized. Rod section 42,6 mm.



Length		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
3050	10	90002188	236-0731-C,02		25,6
3660	12	90002163	236-0737-C,02		30,8

T45 (1³/₄") round rod



Surface hardened.

Length		Product No.	Product code		Weight approx. kg
mm	foot/inch		Fully carburized	Surface hardened	
3050	10'	90515296		236-4931-SH,03	34,5
3660	12'	90515294		236-4937-SH,03	41,4
4270	14'	90515295		236-4943-SH,03	48,3
4800	15'9"	90515408		236-4948-SH,03	54,3
6095	20'	90515297		236-4961-SH,03	69,0

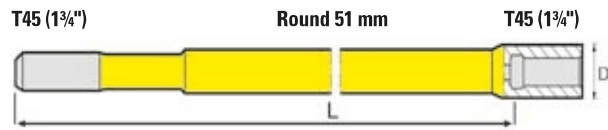
T45 (1³/₄") round Speedrod



Fully carburized. D = 65 mm.

Length (L)		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
1525	5	90510730	236-4915-MF-C,02		18,2
1830	6	90510731	236-4918-MF-C,02		21,5
Both surface hardened and fully carburized					
3050	10	90515567	236-4931-MF,29		37,6
3660	12	90515313	236-4937-MF,29		43,5
4270	14	90515316	236-4943-MF,29		51,5

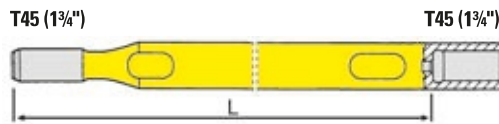
Guide rod



Fully carburized. D = 65 mm.

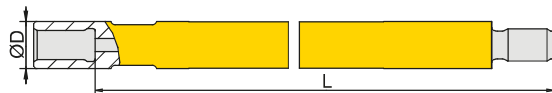
Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3660	12	90513771	236-5137-MF-C,02	55,0
4270	14	90514785	236-5143-MF-C,02	63,5

Guide tube



Fully carburized.

Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot			
76	3	64	2½	1220	4	94502687	236-6912,10	20,0
76	3	64	2½	1525	5	94000047	236-6915,10	21,6
76	3	64	2½	1830	6	94000046	236-6918,10	25,4
76	3	64	2½	3660	12	94000050	236-6937,10	49,0
89	3½	76	3	1830	6	94502656	236-6618,10	40,0
89	3½	76	3	3660	12	94502627	236-6637,10	77,8



Fully carburized. Without undercut (shoulder).

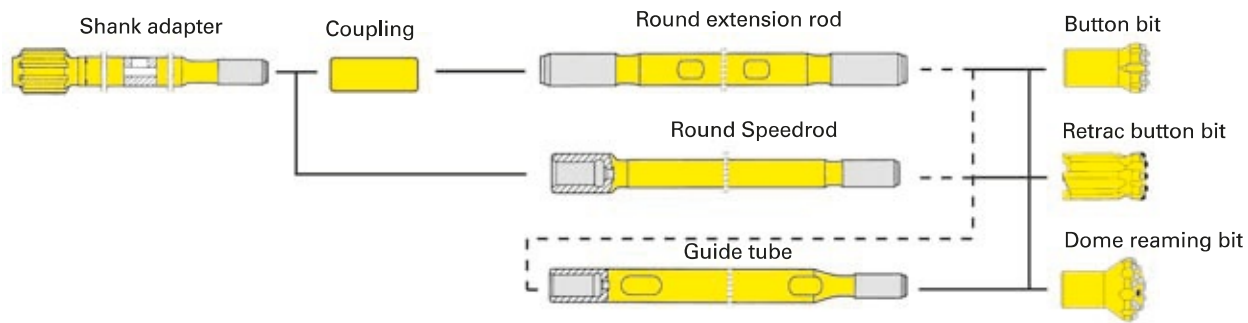
Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot/inch			
76	3	64	2½	1830	6'	94502714	236-6918-87,10	27,0

Coupling

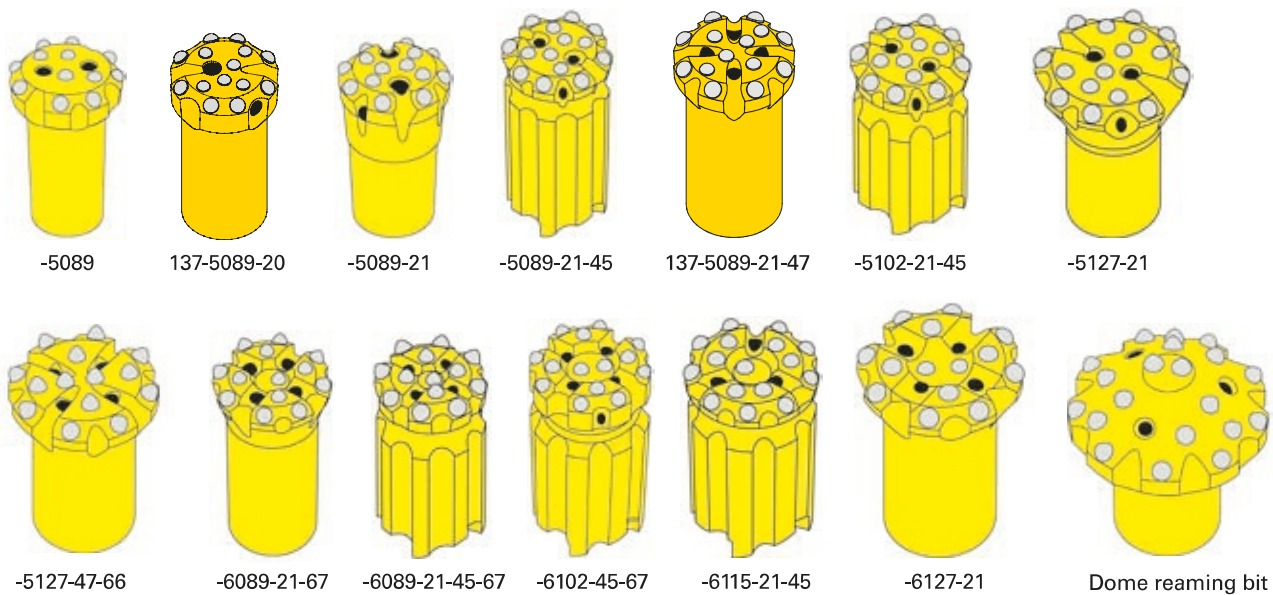


Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code T thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
45	1¾	63	2½ ₃₂	210	8¼	90515739	336-0063,10	2,7
45	1¾	63	2½ ₃₂	210	8¼	90515740	336-0063-57,10	2,7
45	1¾	66	2 ₅ / ₈	210	8¼	90515741	336-0066,10	3,2
45	1¾	66	2 ₅ / ₈	210	8¼	90515742	336-0066-57,10	3,2



Drill bit design



Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
89	3½	90510338	137-5089,49-20	12	8×12,7	4×12,7	40°	–	2	3,5
89	3½	90510377	137-5089-45,49-20	12	8×12,7	4×12,7	40°	–	2	4,8
89	3½	90510357	137-5089-20,49-20	14	8×12,7	6×11	35°	1	1	4,0
89	3½	90510527	137-5089-21,49-20	14	8×12,7	6×12,7	35°	1	2	3,7
89	3½	90513764	137-5089-21-45,49-20	14	8×12,7	6×12,7	35°	1	2	5,3
89	3½	90515252	137-5089-21-47,49-20	14	8×12,7	6×11	35°	–	4	3,6
89	3½	90515251	137-5089-47,49-20	16	10×11	6×11	35°	–	4	3,8
89	3½	90510341	137-6089,49-20	11	6×12,7	3×11, 2×11	35°	1	3	3,6
89	3½	90510391	137-6089-45,49-20	14	8×11	4×11, 2×9	35°	1	4	4,7
89	3½	90513813	137-6089-21,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,5
89	3½	90510773	137-6089-21-45,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,9
102	4	90510339	137-5102,49-20	12	8×14,5	4×14,5	40°	–	2	4,8
102	4	90510378	137-5102-45,49-20	12	8×14,5	4×14,5	40°	–	2	7,1

Cont. next page

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
102	4	90510807	137-5102-21,49-20	14	8×15,8	6×12,7	35°	1	2	5,1
102	4	90510855	137-5102-21-45,49-20	14	8×15,8	6×12,7	35°	1	2	6,9
102	4	90515365	137-5102-47,49-20	14	8×14,5	6×12,7	35°	1	4	5,1
102	4	90510343	137-6102,49-20	11	6×14,5	3×12,7, 2×12,7	35°	1	3	5,1
102	4	90510415	137-6102-45,49-20	14	8×12,7	4×12,7, 2×12,7	35°	1	4	7,2
102	4	90510824	137-6102-21,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	5,3
102	4	90510825	137-6102-21-45,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	7,2
115	4½	90510340	137-5115-20,49-20	17	9×14,5	8×12,7	35°	2	1	6,7
115	4½	90510791	137-5115-20-45,49-20	17	9×14,5	8×12,7	35°	2	1	7,0
115	4½	90510818	137-5115-21,49-20	14	8×15,8	6×14,5	35°	1	2	6,1
115	4½	90515250	137-5115-47,49-20	14	8×14,8	6×14,5	35°	1	4	5,8
115	4½	90510344	137-6115,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	5,8
115	4½	90510655	137-6115-45,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	9,5
115	4½	90510874	137-6115-21,49-20	14	8×15,8	4×14,5, 2×14,5	35°	–	4	6,0
115	4½	90510826	137-6115-21-45,49-20	16	9×14,5	6×14,5, 1×14,5	35°	–	3	9,7
127	5	90510360	137-5127,49-20	22	12×12,7	10×12,7	35°	–	2	6,8
127	5	90510361	137-5127-20,49-20	20	10×14,5	10×12,7	35°	–	2	6,8
127	5	90510790	137-5127-20-45,49-20	20	10×14,5	10×12,7	35°	–	2	11,9
127	5	90513747	137-5127-21,49-20	16	8×15,8	8×14,5	35°	1	2	6,8
127	5	90515249	137-5127-47,49-20	14	8×15,8	6×15,8	35°	–	4	8,0
127	5	90510406	137-6127,49-20	16	8×14,5	4×14,5, 4×11	35°	1	4	6,8
127	5	90510656	137-6127-45,49-20	16	8×14,5	4×14,5, 4×11	35°	1	4	11,2
127	5	90513815	137-6127-21,49-20	14	8×15,8	4×15,8, 2×12,7	35°	–	4	7,7
127	5	90513757	137-6127-21-45,49-20	14	8×15,8	4×15,8, 2×12,7	35°	–	4	11,0
140	5½	90515254	137-5140-47,49-20	14	8×15,8	6×15,8	35°	–	4	9,4
152	6	90514185	137-5152-42-24,39-20*	20	18×14,5	2×14,5	35°	1	3	10,0
BUTTON BIT - Ballistic buttons										
89	3½	90514003	137-5089-21-67,49-20	14	8×12,7	6×12,7	35°	1	2	3,7
89	3½	90514002	137-5089-21-45-67,49-20	14	8×12,7	6×12,7	35°	1	2	5,3
89	3½	90514329	137-5089-45-67,49-20	12	8×12,7	4×12,7	40°	–	2	5,0
89	3½	90513814	137-6089-21-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	3,6
89	3½	90510696	137-6089-21-45-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,9
89	3½	90510380	137-6089-45-67,49-20	14	8×11	4×11, 2×9	35°	1	4	4,7
102	4	90514476	137-5102-45-67,49-20	12	8×14,5	4×14,5	40°	–	2	7,0
102	4	90510841	137-5102-21-45-67,49-20	14	8×15,8	6×12,7	35°	1	2	7,0
102	4	90510346	137-6102-67,49-20	11	6×14,5	3×12,7, 2×12,7	35°	1	3	5,2
102	4	90510379	137-6102-45-67,49-20	14	8×12,7	4×12,7, 2×12,7	35°	1	4	7,2
102	4	90513756	137-6102-21-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	5,2
102	4	90515368	137-6102-21-45-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	7,2
115	4½	90510819	137-5115-21-67,49-20	14	8×15,8	6×12,7	35°	1	2	6,1
115	4½	90510407	137-6115-67,49-20	14	8×14,5	4×12,7, 2×12,7	35°	1	4	5,8
BUTTON BIT - Full-ballistic buttons (Soft rock bit)										
102	4	90514538	137-5102-47-66,49-20	14	8×14,5	6×12,7	35°	1	4	5,0
127	5	90514361	137-5127-47-66,49-20	14	8×15,8	6×15,8	35°	–	4	8,0

* For reaming, reversed flushing.

Extension rod

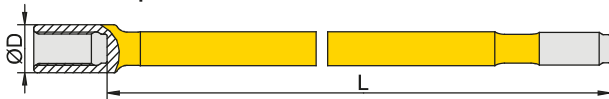
T51 (2") round rod



Surface hardened.

Length		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
3660	12	90515299		237-5137-SH,03	51,1
4270	14	90515300		237-5143-SH,03	59,5
6095	20	90515301		237-5161-SH,03	85,1

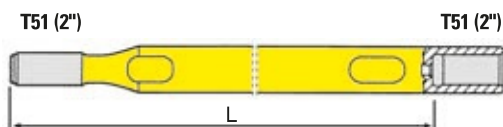
T51 (2") round Speedrod



Fully carburized. D = 72 mm.

Length (L)		Product No.	Product code		Weight approx. kg
mm	foot		Fully carburized	Surface hardened	
1525	5	90510737	237-5115-MF-C,02		25,0
1830	6	90510738	237-5118-MF-C,02		26,8
Both surface hardened and fully carburized					
3660	12	90515311	237-5137-MF,29		55,4
4270	14	90515314	237-5143-MF,29		64,0
6095	20	90515557	237-5161-MF,29		89,5

Guide tube



Fully carburized.

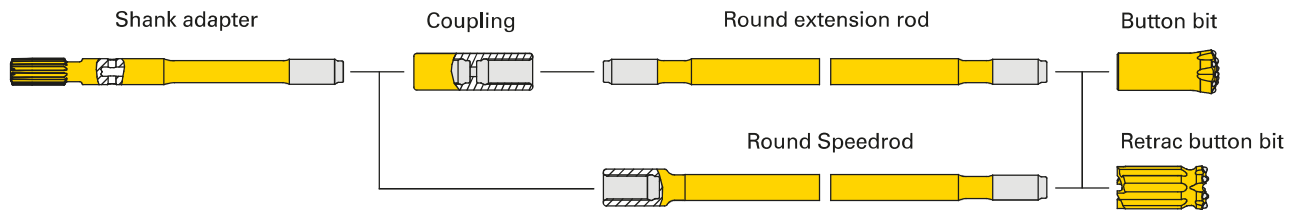
Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot			
89	3½	76	3	1830	6	94502624	237-6618,10	40,0
89	3½	76	3	3660	12	94502641	237-6637,10	79,1
102	4	87	3⅞	3660	12	94502707	237-6837,10	80,0

Coupling

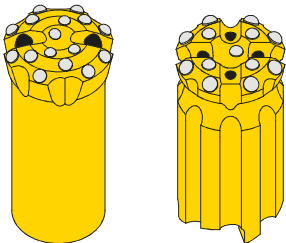


Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code T thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
51	2	72	2⅞	235	9¼	90515743	337-0072,10	4,0
51	2	72	2⅞	255	10	90515744	337-0072-57,10	4,0
51	2	77	3⅞	235	9¼	90515745	337-0077,10	4,3



Drill bit design



157-6102-41

157-6102-45

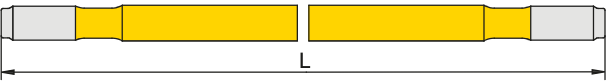
Please note text on page 44 re. finished hole size.

Drill bit

Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Spherical buttons										
102	4	90515472	157-6102-41,49-20	16	8×12,7	4×14,7, 4×11	35°	–	2	8,1
102	4	90516351	157-6102-45,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	7,4
115	4½	90515470	157-6115-41,49-20	16	8×14,5	4×14,5, 4×12,7	35°	–	2	9,0
115	4½	90516063	157-6115-45,49-20	16	8×14,5	4×14,5, 4×11,0	35°	1	4	11,9
127	5	90515431	157-6127-41,49-20	16	8×15,8	4×15,8, 4×14,5	35°	–	2	10,1
127	5	90516353	157-6127-45,49-20	16	8×14,5	4×14,5, 4×11,0	35°	1	4	11,9
140	5½	90515450	157-6140-41,49-20	16	8×15,8	5×15,8, 3×15,8	35°	–	2	11,6
140	5½	90516354	157-6140-45,49-20	16	8×14,5	4×14,5, 4×12,7	35°	1	4	16,0
152	6	90515473	157-6152-41,49-20	16	8×18,0	7×15,8, 3×15,8	35°	–	2	13,5
152	6	90516352	157-6152-45,49-20	16	8×16,0	4×16,0, 4×14,5	35°	–	4	19,0
BUTTON BIT - Ballistic buttons										
102	4	90515478	157-6102-45-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	7,4
115	4½	90515477	157-6115-45-67,49-20	16	8×14,5	4×12,7, 4×11	35°	1	4	11,9
127	5	90515449	157-6127-45-67,49-20	16	8×14,5	4×14,5, 4×11	35°	1	4	11,9
140	5½	90515475	157-6140-45-67,49-20	16	8×14,5	4×14,5, 4×12,7	35°	1	4	16,0
152	6	90515480	157-6152-45-67,49-20	16	8×15,8	4×15,8, 4×14,5	35°	–	4	19,0

Extension rod

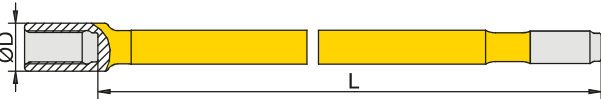
T60 (2³/₈" round rod



Fully carburized.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3630	11' 10 ⁷ / ₈ "	90516270	257-6037-C,02	67,7
4240	13' 10 ⁷ / ₈ "	90516271	257-6043-C,02	79,2

T60 (2³/₈" round Speedrod



Fully carburized. D = 85 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3630	11' 10 ⁷ / ₈ "	90515453	257-6037-MF-C,02	72,0
4240	13' 10 ⁷ / ₈ "	90515454	257-6043-MF-C,02	83,5
5470	17' 11 ³ / ₈ "	90515455	257-6055-MF-C,02	108,5
6065	19' 10 ³ / ₄ "	90515456	257-6061-MF-C,02	120,0

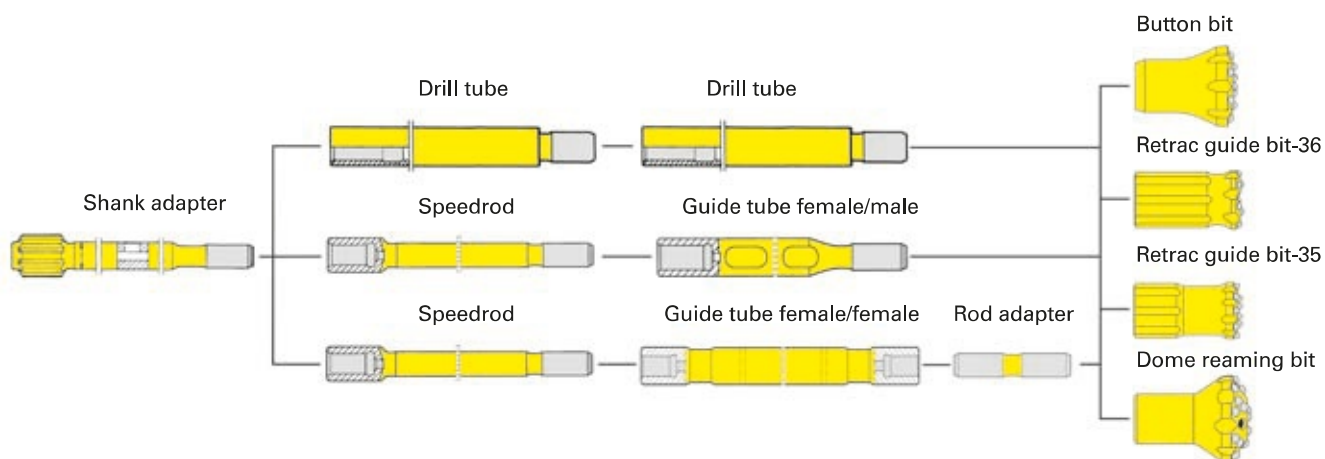
Coupling



Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code T thread	Weight approx. kg
mm	inch	mm	inch	mm	inch			
60	2 ³ / ₈	85	3 ¹¹ / ₃₂	315	1' 3 ³ / ₈ "	90516269	357-0085-57,10	7,9

Tube drilling system Bench and production drilling



Drill bit design



-6089-21-36-67 -6089-35-67 -6115-21-35-67 -5152-21 151-5152-42-24

Please note text on page 44 re. finished hole size.

Drill bit

System	Thread	Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
		mm	inch				Gauge	Centre		Side	Centre	
TDS 45	R32				See page 53							
TDS 56	T38				See page 57							
TDS 64	T45				See page 62							
TDS 76	T51				See page 66							
TDS 87	T51				See page 66							
BUTTON BIT - Spherical buttons												
TDS 76	ST58	89	3½	90510522	151-5089-21,49-20	14	8×12,7	6×12,7	35°	1	2	4,0
		102	4	90510789	151-5102-21,49-20	14	8×15,8	6×12,7	35°	1	2	5,3
		152	6	90513754	151-5152-42-24,49-20*	21	18×14,5	3×14,5	35°	3	3	10,4
TDS 87	ST68	102	4	90510494	152-5102-21,49-20	14	8×15,8	6×12,7	35°	1	2	5,5
		127	5	90514264	152-5127-21,49-20	17	8×15,8	9×14,5	35°	1	2	6,9
		152	6	90510528	152-5152-21,49-20	18	8×15,8	10×14,5	35°	1	2	11,8
		152	6	90513755	152-5152-42-24,49-20*	21	18×14,5	3×14,5	35°	3	3	11,8
BUTTON BIT - Ballistic buttons												
TDS 76	ST58	89	3½	90510831	151-6089-21-36-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,3
		89	3½	90513887	151-6089-35-67,49-20	17	10×11	6×11, 1×11	35°	–	4	4,1
TDS 87	ST68	102	4	90510777	152-5102-21-67,49-20	14	8×15,8	6×12,7	35°	1	2	5,5
		105	4⅞	90514291	152-6105-35-67,49-20	18	10×12,7	6×12,7, 2×12,7	35°	–	4	5,4
		115	4½	90510701	152-5115-21-67,49-20	14	8×16	6×14,5	35°	1	2	5,8
		115	4½	90514389	152-6115-21-35-67,49-20	17	9×14,5	6×14,5, 2×14,5	35°	–	3	7,2

* For reaming, reversed flushing.

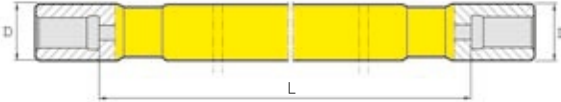
Bench and production drilling Tube drilling system

Guide tube, R32–T51 thread

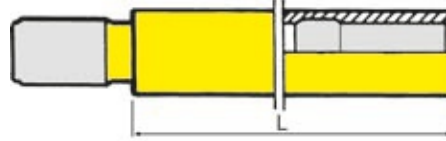
Rope/T thread, male/female



T thread, female/female, -36, -37



Drill tube, ST58, ST68 thread



TDS 76 with T45 and T51 thread: Without wrench flat.

TDS 76 with ST58 thread: Wrench flat in female end only.

TDS 87 with ST68 thread: Wrench flat in female end only.

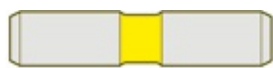
System	Thread	Length (L)		Product No.	Product code	Outer diameter mm	Flushing hole diameter, mm	Weight approx. kg
		mm	foot					
TDS 45	R32	1220	4	94502681	203-7112,10	45	10	10,0
		1525	5	94502658	203-7115,10	45	10	12,5
		1830	6	94502659	203-7118,10	45	10	14,2
		3050	10	94502660	203-7131,10	45	10	23,4
TDS 56	T38	1220	4	94502648	235-7012,10	56	16	12,6
		1525	5	94000051	235-7015,10	56	16	14,0
		1830	6	94000052	235-7018,10	56	16	17,4
		3050	10	94000053	235-7031,10	56	16	28,3
		3660	12	94000054	235-7037,10	56	16	32,8
TDS 64	T38	3660	12	94502622	235-6937,10	64	18	51,0
TDS 64	T45	1220	4	94502687	236-6912,10	64	18	20,0
		1525	5	94000047	236-6915,10	64	18	21,6
		1830	6	94000046	236-6918,10	64	18	25,4
		1830	6	90510814	236-6918-36,10**	64	18	27,6
		1830	6	94502714	236-6918-87,10	64	18	26,0
		3050	10	94000057	236-6931-86,10	64	20	41,7
		3660	12	94000050	236-6937,10	64	18	49,0
TDS 76	T45	1830	6	94502656	236-6618,10	76	18	40,0
		3660	12	94502627	236-6637,10	76	18	77,8
TDS 76	T51	1830	6	94502624	237-6618,10	76	22	40,0
		3660	12	90513888	237-6637-37,10**	76	22	81,2
TDS 76	ST58	1525	5	94502572	251-6615,10	76	24	34,0
		1830	6	94000015	251-6618,10	76	24	40,0
		1830	6	94502715	251-6618-88,10*	76	24	40,0
TDS 87	ST68	1220	4	90514263	252-6812,10	87	38	29,6
		1525	5	94502712	252-6815,10	87	38	35,5
		1830	6	94502713	252-6818,10	87	38	41,6
		1830	6	94502710	252-6818-88,10*	87	38	43,8
		3660	12	94502709	252-6837,10	87	38	81,0

* C-Drive.

** Female/female.

Tube drilling system Bench and production drilling

Rod adapter



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

Length		Thread	Product No.	Product code	Weight approx. kg
mm	inch				
220	8 ⁵ / ₈	T45	90510815	236-4902-C,00	1,9
250	9 ⁷ / ₈	T51	90514708	237-5102-C,10	2,7