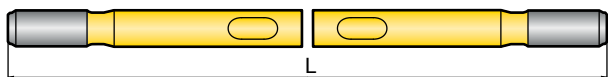


Extension rods

T51 (2") round rod



Surface hardened. Flushing hole diameter 21,5 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
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

Speedrods

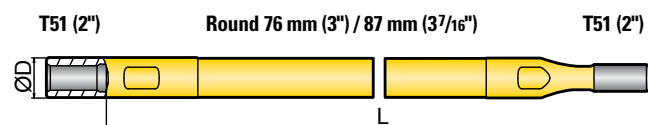
T51 (2") round Speedrod



Fully carburized. D = 72 mm. Flushing hole diameter 21,5 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
3660	12	90510739	237-5137-MF-C,02		51,8
Both surface hardened (male part) and fully carburized (female part)					
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 tubes



Fully carburized.

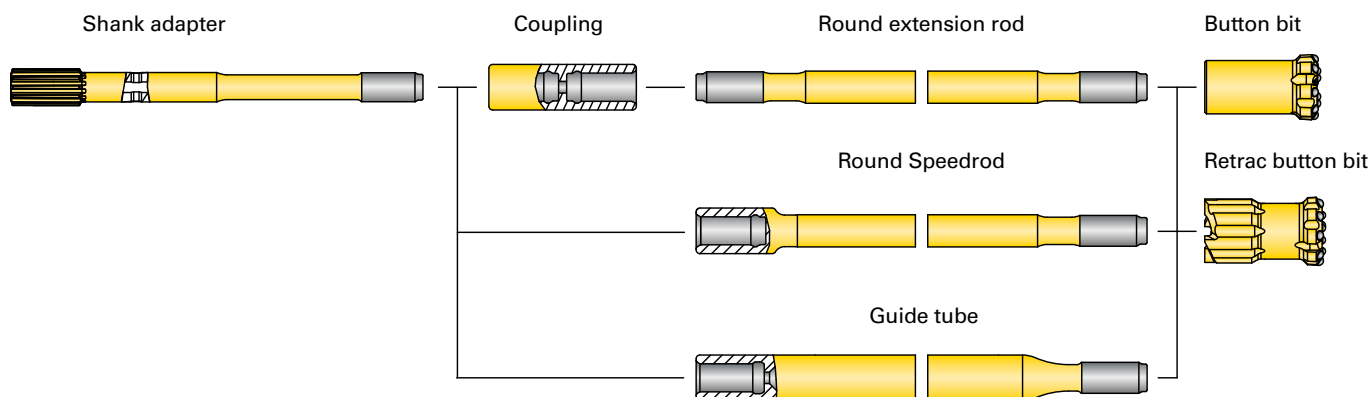
Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Flushing hole Ø		Weight approx. kg
mm	inch	mm	inch	mm	foot			mm	inch	
89	3½	76	3	1220	4	90514257	237-6612,10	50,0	1¾	28,8
89	3½	76	3	1830	6	94502624	237-6618,10	50,0	1¾	40,0
89	3½	76	3	3660	12	94502641	237-6637,10	66,0	2⅝	79,1
102	4	87	3⅞	3660	12	94502707	237-6837,10	50,0	1¾	80,0

Couplings

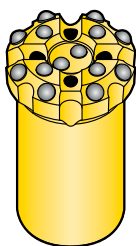


Full bridge -57.

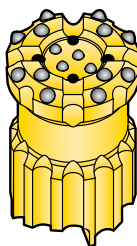
Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	inch			
T51	2	72	2⅞	235	9¼	90515743	337-0072,10	4,1
T51	2	72	2⅞	255	10	90515744	337-0072-57,10	4,7
T51	2	77	3⅞	235	9¼	90515745	337-0077,10	5,2



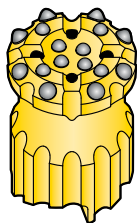
Drill bits



-6xxx-21



-6xxx-44-67



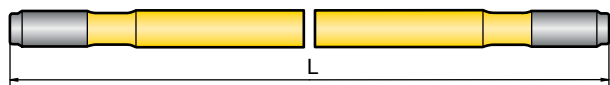
-6xxx-21-44-67

Please note text on page 64 about finished hole size.

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 BITS - Spherical buttons										
95	3¾	90029119	158-6095-21-44,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	6,0
102	4	90029143	158-6102-21,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	6,6
102	4	90029110	158-6102-21-44,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	6,6
115	4½	90029121	158-6115-21,49-20	14	8×15,8	4×14,5, 2×14,5	35°	–	4	8,9
115	4½	90029070	158-6115-21-44,49-20	14	8×15,8	4×14,5, 2×14,5	35°	–	4	9,4
127	5	90029146	158-6127-21,49-20	14	8×15,8	4×15,8, 2×14,5	35°	–	4	11,3
127	5	90029069	158-6127-44,49-20	14	8×15,8	4×15,8, 2×14,5	35°	–	4	11,3
140	5½	90029154	158-6140-21-44,49-12	16	8×19,1	4×15,8, 4×15,8	35°	–	4	15,0
140	5½	90029081	158-6140-21-44,49-20	16	8×19,1	4×15,8, 4×15,8	35°	–	4	15,0
152	6	90029147	158-6152-21,49-20	16	8×19,1	4×15,8, 4×15,8	35°	–	4	13,1
152	6	90029073	158-6152-21-44,49-20	16	8×19,1	4×15,8, 4×15,8	35°	–	4	18,1
BUTTON BITS - Ballistic buttons										
92	3⅝	90029111	158-6092-21-44-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	4,7
92	3⅝	90029142	158-6092-21-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	4,5
95	3¾	90029066	158-6095-21-44-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	5,9
102	4	90029067	158-6102-44-67,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	6,6
115	4½	90029109	158-6115-21-44-67,49-20	14	8×15,8	4×14,5, 2×14,5	35°	–	4	9,5
127	5	90029068	158-6127-44-67,49-20	14	8×15,8	4×15,8, 2×14,5	35°	–	4	11,3
140	5½	90029148	158-6140-21-44-67,49-20	16	8×19,1	4×15,8, 4×15,8	35°	–	4	15,0

Extension rods

T-WiZ60 (2³/₈" round rod



Fully carburized. Flushing hole diameter 22,6 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3630	11'10 ⁷ / ₈ "	90029122	258-6037-C,02	68,0
4240	13'10 ⁷ / ₈ "	90029123	258-6043-C,02	80,0

Speedrods

T-WiZ60 (2³/₈" round Speedrod



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

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
3630	11'10 ⁷ / ₈ "	90029107	258-6037-MF-C,02	72,0
4240	13'10 ⁷ / ₈ "	90029071	258-6043-MF-C,02	84,0
5470	17'11 ³ / ₈ "	90029150	258-6055-MF-C,02	107,0
6065	19'10 ³ / ₄ "	90029108	258-6061-MF-C,02	119,0

Guide tubes

T-WiZ60 (2³/₈"

Round 87 mm (3⁷/₁₆"

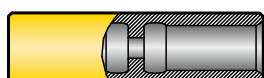
T-WiZ60 (2³/₈"



Fully carburized.

Min. bit diameter		Tube diameter		Length (L)		Product No.	Product code	Flushing hole diam. (male thread)		Weight approx. kg
mm	inch	mm	inch	mm	foot			mm	inch	
102	4	87	3 ⁷ / ₁₆	3660	12	90029101	258-6837,10	24	1 ⁵ / ₁₆	76,4
102	4	87	3 ⁷ / ₁₆	4270	14	90029100	258-6843,10	24	1 ⁵ / ₁₆	88,5
102	4	87	3 ⁷ / ₁₆	6095	20	90029149	258-6861,10	24	1 ⁵ / ₁₆	124,6

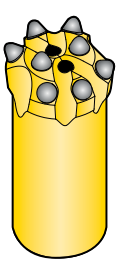
Coupling



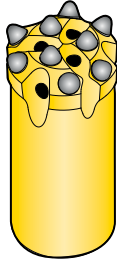
Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot/inch			
T60	2 ³ / ₈	85	3 ¹¹ / ₃₂	275	10 ⁷ / ₈ "	90029135	358-0085-57,10	7,2

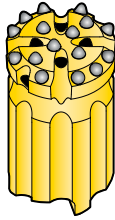
Drill bits



103-5048-34-66



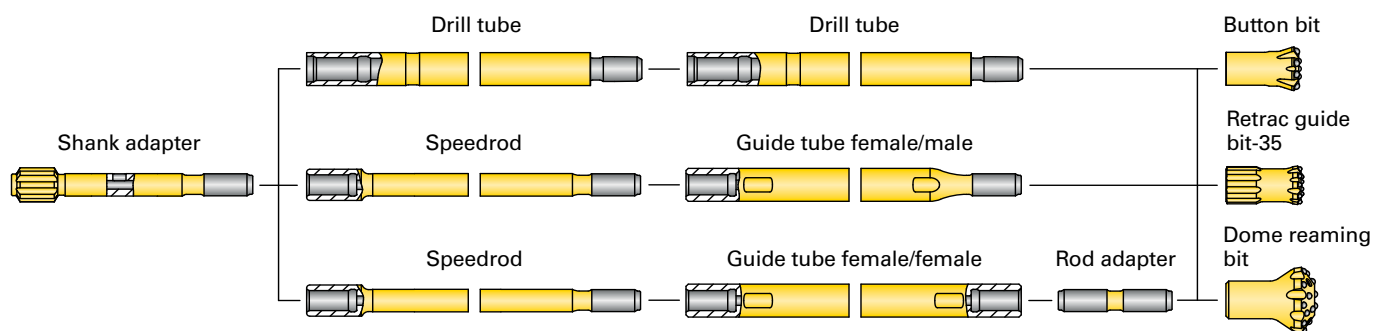
103-5048-37-66



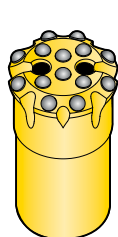
136-5089-47-45-66

Please note text on page 64 about finished hole size.

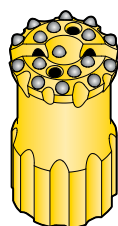
Thread		Diameter		Product No.	Product code	No. of buttons	Buttons × button diameter (mm)		Gauge buttons angle°	Flushing hole		Weight approx. kg
mm	inch	mm	inch				Gauge	Centre		Side	Centre	
BUTTON BIT - Full-ballistic buttons (soft rock bit)												
R32	1¼	48	1⅞	90514714	103-5048-34-66,39-20	8	6×9	2×9	40°	–	2	0,8
R32	1¼	48	1⅞	90514135	103-5048-37-66,39-20	9	6×9	3×9	40°	1	3	0,8
R32	1¼	51	2	90514715	103-5051-34-66,39-20	8	6×10	2×10	40°	–	2	0,9
R32	1¼	51	2	90514136	103-5051-37-66,39-20	9	6×10	3×9	40°	1	3	0,8
R32	1¼	57	2¼	90514440	103-5057-37-66,39-20	9	6×10	3×10	40°	1	3	1,1
T45	1¾	89	3½	90514993	136-5089-47-45-66,49-20	16	10×11	6×11	35°	1	4	4,9
T51	2	102	4	90514538	137-5102-47-66,49-20	14	8×14,5	6×12,7	35°	1	4	5,0



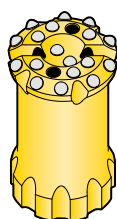
Drill bits



-5xxx-21



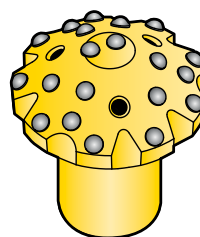
-6xxx-35-67



-6105-35-67



-6115-21-35-67



Dome reaming bit

Please note text on page 64 about finished hole size.

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 76							
TDS 56	T38				See page 82							
TDS 64	T45				See page 87							
TDS 76	T51				See page 92							
TDS 87	T51				See page 92							
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	3,5
		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
		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	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	5,1
		115	4½	90514389	152-6115-21-35-67,49-20	17	9×14,5	6×14,5, 2×14,5	35°	–	3	7,2

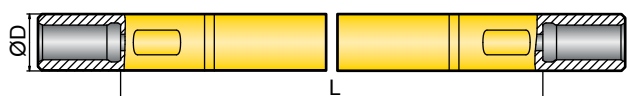
* For reaming, reversed flushing.

Guide tubes, R32–T51 thread

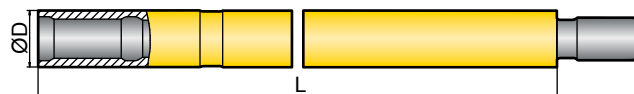
Rope/T thread, male/female



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



Drill tubes, ST58 or ST68 thread



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

TDS 76 with ST58 thread: Slimmed section in female end only.

TDS 87 with ST68 thread: Slimmed section 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
		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	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
		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	94502641	237-6637,10	76	22	79,1
		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

* C-Drive.

** Female/female.

Rod adapters



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	90515671	236-4902-C,10	1,9
250	9 ⁷ / ₈	T51	90514708	237-5102-C,10	2,7



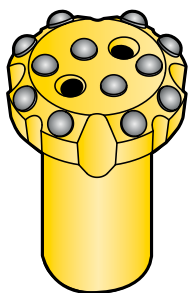




BENCH AND PRODUCTION DRILLING

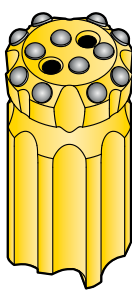
Drill bit design	64
R25 (1")	66
Magnum SR28 (1$\frac{1}{8}$")	69
R28 (1$\frac{1}{8}$")	72
Magnum SR32 (1$\frac{1}{4}$")	74
R32 (1$\frac{1}{4}$")	76
TC35 (1$\frac{3}{8}$")	80
R/T38 (1$\frac{1}{2}$")	82
T45 (1$\frac{3}{4}$")	87
T51 (2")	92
T-WiZ60 (2$\frac{3}{8}$")	95
Soft rock bits	97
Tube drilling system (TDS)	98

Drill bit design



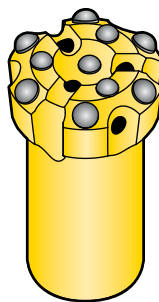
-5076

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.



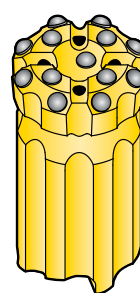
-5076-45

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.



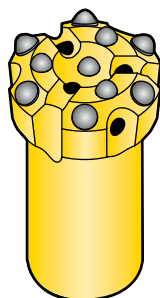
-6076

Drop center 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.



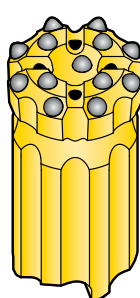
-6076-45

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



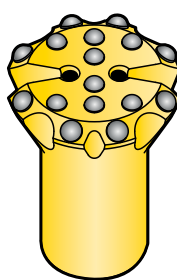
-6076-67

Drop center 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 center 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.

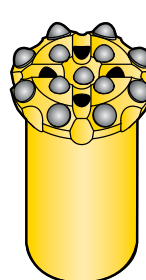


-5127-21

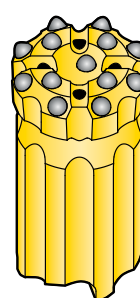
Model -21, a heavy duty bit with larger gauge buttons. Flat or drop center front. Retractable or standard skirt. Ballistic or spherical buttons.

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.



-6089-21-67



-6076-21-45-67

- [5] XXX

Flat face button bit

- [6] XXX

Drop center button bit

-XXXX- [67]

Ballistic buttons

-XXXX- [66]

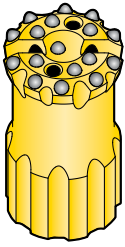
Full-ballistic buttons

-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.

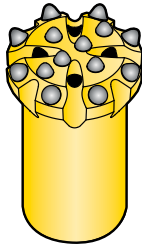
It is important to consider that the drilled hole could vary in size due to drilling conditions, drilling practices and ground formation.



-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.

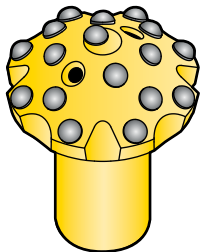


Soft rock bit -66

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.

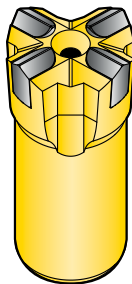
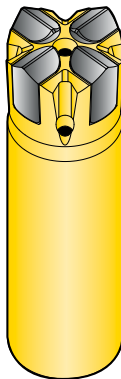
The penetration rate is very fast due to the high button protrusion. Excellent flushing concentrated to the front.



-5xxx-42-24

Dome reaming bit
Dome-shaped front.

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

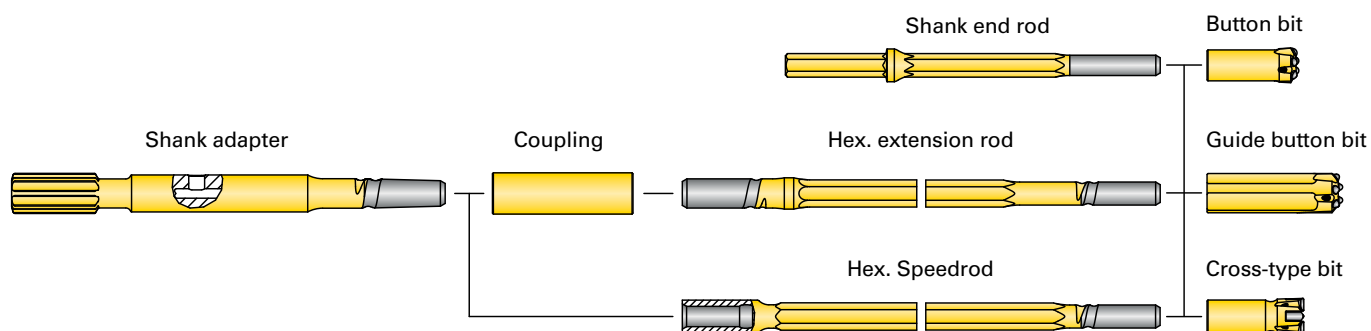


Insert bits

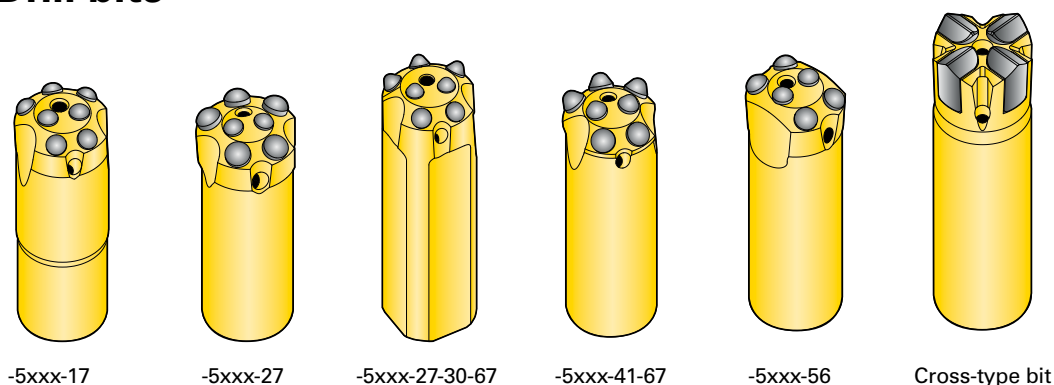
Cross- and X-type bits.

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 bits



Please note text on page 64 about finished hole size.

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	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°	1	1	0,5
37	1 ¹⁵ / ₃₂	90505295	102-5037-27,39-20	7	5×9	2×7	30°	1	1	0,4
38	1½	90505179	102-5038-27,39-20	7	5×9	2×7	30°	1	1	0,6
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
48	1 ⁷ / ₈	90513912	102-5048-27,39-20	7	5×11	2×9	35°	2	1	1,0
51	2	90505353	102-5051-27,39-20	7	5×11	2×10	35°	2	1	1,0
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
33	1 ⁵ / ₁₆	90514118	102-5033-41-67,39-20	7	5×8	2×7	40°	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	0,5
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	0,8
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	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
48	1 ⁷ / 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

Extension rods

R25 (1") Hex. 22 mm ($\frac{7}{8}$ ") R25 (1")



Light equipment, fully carburized. Rod section 24,8 mm. 
Flushing hole diameter 6,7 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
610	2	90548008	202-0206-C,02	2,0
1220	4	90000524	202-0212-C,02	3,7

R25 (1") hex. rod



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

Length (L)		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 $\frac{3}{8}$ "	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
2800	9'2 $\frac{1}{4}$ "	90003687	202-0328-C,02		11,9
3050	10'	90000981	202-0331-C,02		11,9
3050	10'	90002576		202-0331-SH,03	11,9

Speedrods

R25 (1") hex. Speedrod



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

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
610	2	90505035	202-0306-MF-C,02	2,6
1220	4	90505036	202-0312-MF-C,02	5,0
1830	6	90515510	202-0318-MF-C,02	7,2
3050	10	90515578	202-0331-MF-C,02	12,0

Couplings



Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	inch			
R25	1	33	1 ⁵ / ₁₆	150	5 ⁷ / ₈	90515728	302-0033,02	0,5
R25	1	34,5	1 ³ / ₈	150	5 ⁷ / ₈	90515729	302-0035,02	0,8

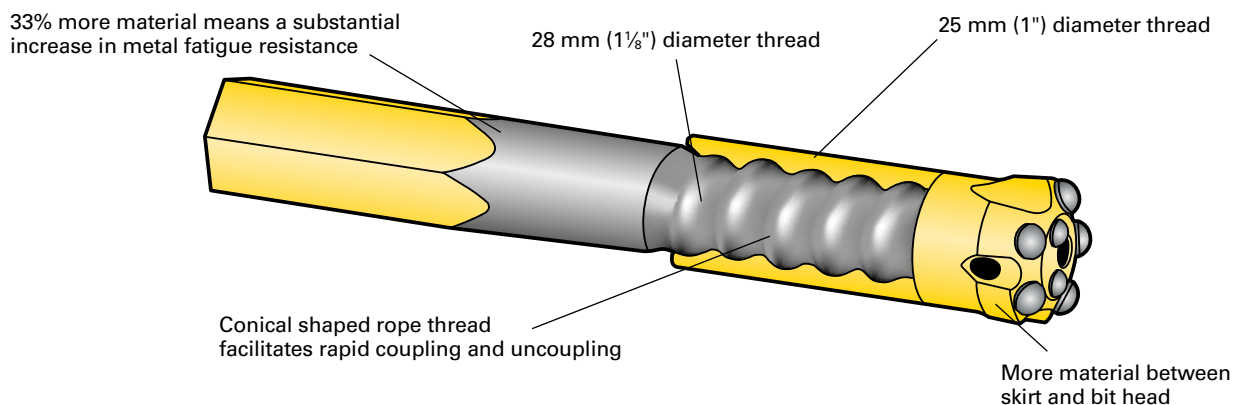
Shank end rods



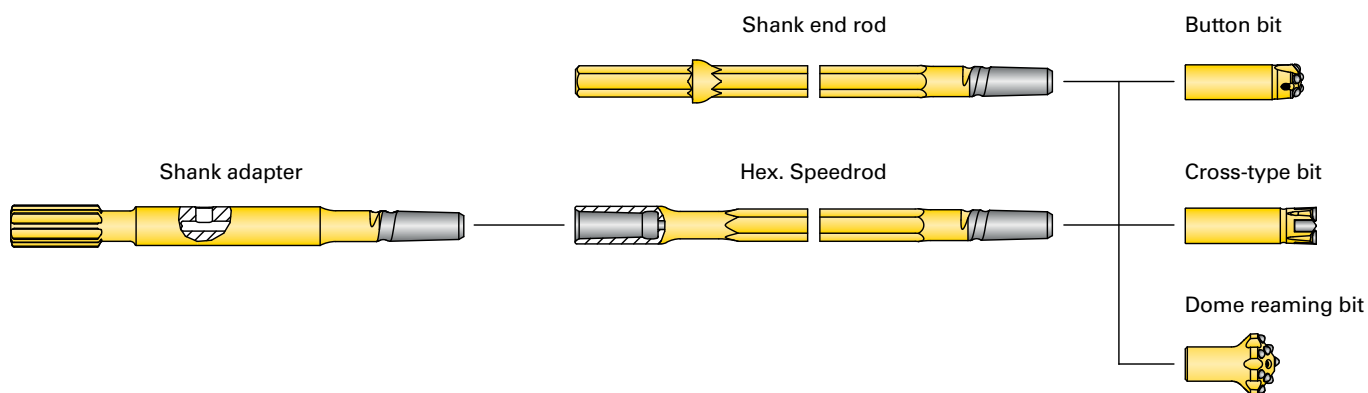
Fully carburized.

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. Flushing hole diameter 6,7 mm.						
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	7,9
3200	10'6"	90500012	502-0132-06-C,02	90002182	9232	10,4
4000	13'1½"	90502700	502-0140-06-C,02	90002182	9232	13,0
265	10⅜"	90505427	502-0103-C,02	—	—	1,2
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	—	—	6,2
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"	90516359	502-0140-C,02	—	—	12,2
Shank hex. 25 mm (1") × 108 mm (4¼"). 25 mm (1") thread. Flushing hole diameter 8,6 mm.						
255	10"	90000240	502-1203-C,02	90000378	9150-08	1,4
Shank hex. 25 mm (1") × 159 mm (6¼"). 25 mm (1") thread. Flushing hole diameter 8,6 mm.						
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

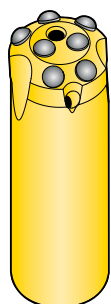
Magnum SR28 thread system



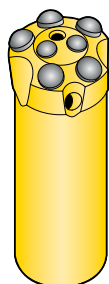
Magnum SR28 drill string



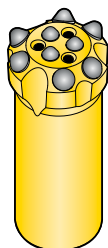
Drill bits



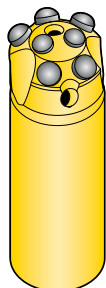
-5033-17



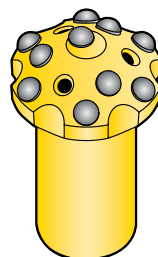
-5xxx-27



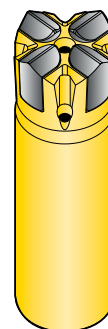
-5xxx-37-67



-5xxx-41



Dome
reaming bit



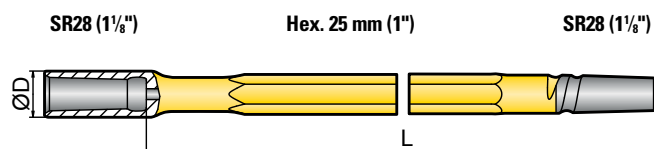
Cross-type
bit

Please note text on page 64 about finished hole size.

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	0,4
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	0,4
38	1½ ₂	90514282	125-5038-27,39-20	7	5×9	2×7	30°	–	1	1	0,5
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	0,9
76	3	90515258	125-5076-42-24,49-20*	10	9x12,7	1x12,7	35°	–	1	3	2,0
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
35	1⅜ ₈	90516590	125-7035-44,20-17	10,3		19,5		2		1	0,5

* For reaming, reversed flushing.

Speedrods



Fully carburized. D = 34 mm. Rod section 28,5 mm.
Flushing hole diameter 8,6 mm.

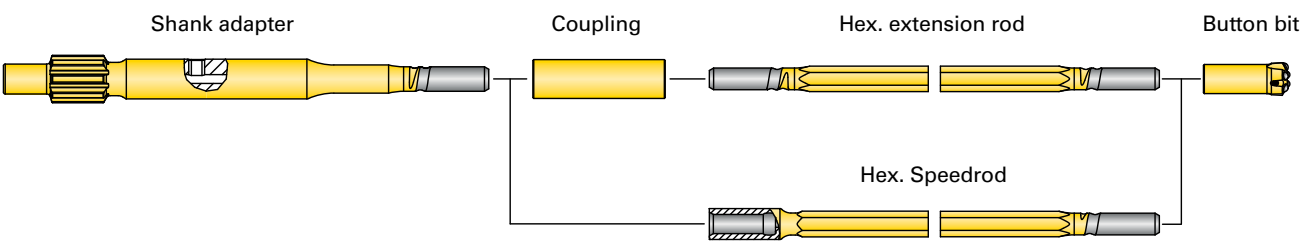
Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3050	10	90516350	225-0331-69-MF-C,02	12,1

Shank end rods

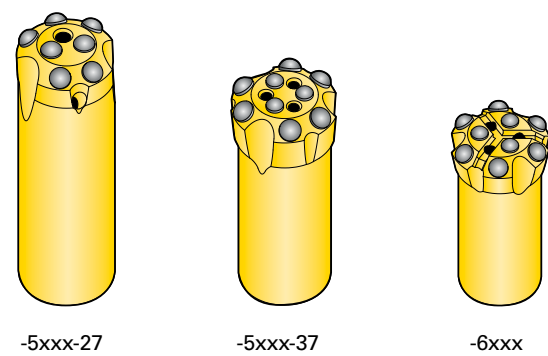


Fully carburized.
Flushing hole diameter 8,6 mm.

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 (4 1/4"). 28 mm (1 1/8") thread.						
265	10 3/8"	90516367	525-1103-C,02	—	—	1,7
3660	12'	90516330	525-1237-C.02	90000378	9150-08	15,2



Drill bits



Please note text on page 64 about finished hole size.

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
41	1 ⁵ / ₈	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	1 ⁵ / ₈	90505174	107-5041-27-67,39-20	7	5×9	2×8	40°	1	1	0,6

Extension rods

R28 (1 1/8") hex. rod



Fully carburized. Rod section 32 mm.
Fluting hole diameter 8,8 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
1830	6	90502190	207-0418-C,02	9,3

Speedrods

R28 (1 1/8") hex. Speedrod



Fully carburized. D = 39 mm. Rod section 32 mm.
Fluting hole diameter 8,8 mm.

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

Coupling



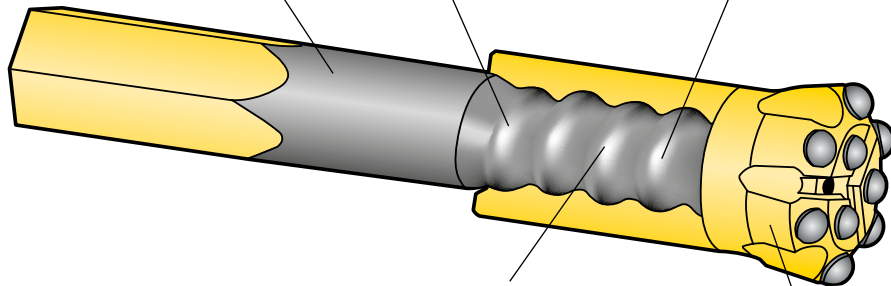
Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	inch			
R28	1 1/8	44	1 9/16	150	5 7/8	90515735	307-0040,10	0,9

Magnum SR32 thread system

30% more material means a substantial increase in metal fatigue resistance

32 mm (1¼") diameter thread

28 mm (1⅛") diameter thread



Conical shaped rope thread facilitates rapid coupling and uncoupling

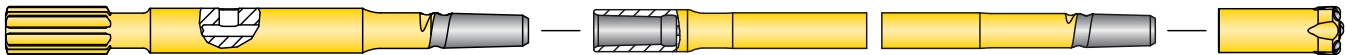
More material between skirt and bit head

Magnum SR32 drill string

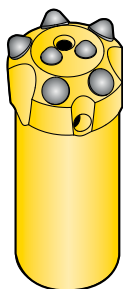
Shank adapter

Round Speedrod

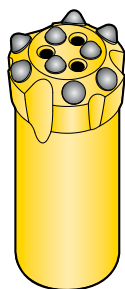
Button bit



Drill bits



-5xxx-27-67



-5xxx-37-67

Please note text on page
64 about finished hole size.

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 - Ballistic buttons										
38	1½	90514501	126-5038-27-67,39-20	7	5×9	2×7	40°	1	1	0,5
41	1⅝	90516483	126-5041-37-67,39-20	9	6×9	3×7	40°	–	3	0,5
43	1⅞	90516484	126-5043-37-67,39-20	9	6×9	3×7	40°	–	3	0,6
45	1¾	90514953	126-5045-37-67,39-20	9	6×9	3×8	40°	1	3	0,7
48	1⅞	90515721	126-5048-37-67,39-20	9	6×10	3×9	40°	1	3	0,9

Speedrods

SR32 (1¼")

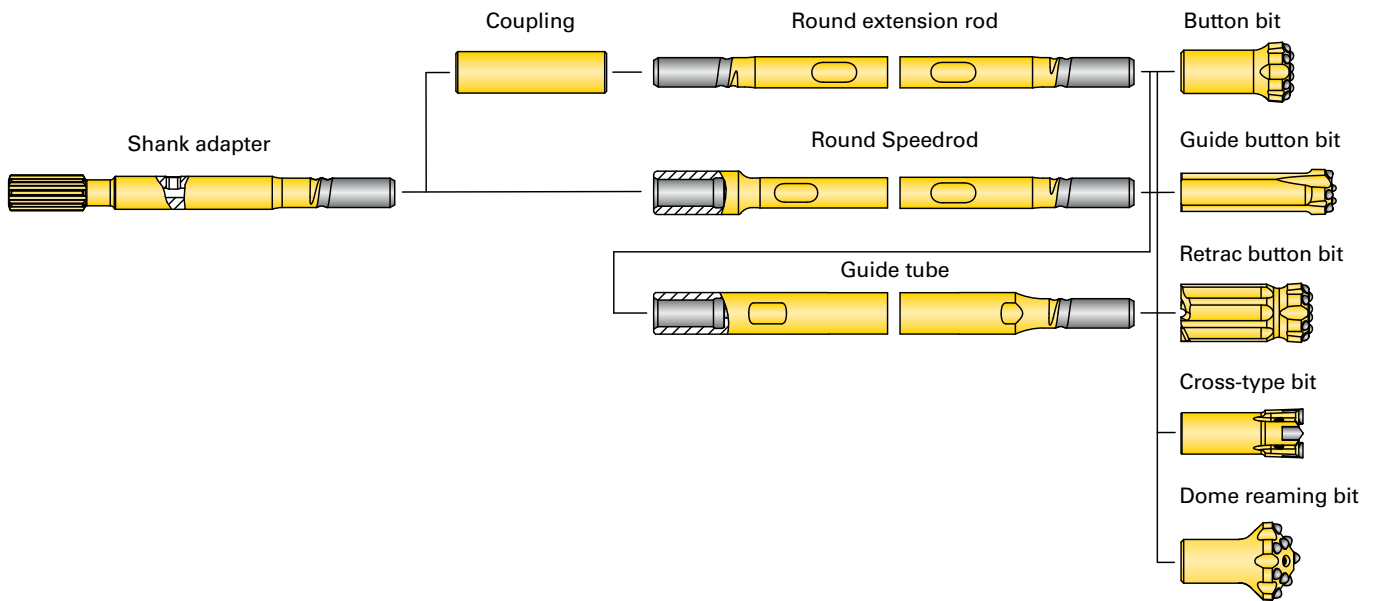
Round 32 mm (1¼")

SR32 (1¼")



Fully carburized. D = 38 mm.
Flushing hole diameter 11,7 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
1830	6'	90003686	226-4518-69-MF-C,02	11,7
3090	10'1⅝"	90516482	226-4531-69-MF-C,02	18,5



Drill bits



Please note text on page 64 about finished hole size.

Drill bits

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	0,8
48	1⅞	90509461	103-5048-37,39-20	9	6×10	3×8	40°	1	3	0,9
51	2	90510450	103-5051,39-20	7	5×11	2×11	35°	1	1	0,8
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	0,9
51	2	90510302	103-6051,39-20	9	6×10	3×9	30°	–	3	1,0
51	2	90510308	103-6051-45,39-20	9	6×10	3×9	30°	–	3	1,1
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	6×11	3×9	35°	–	3	1,5
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	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	3,4
BUTTON BIT - Ballistic buttons										
48	1⅞	90509464	103-5048-37-67,39-20	9	6×10	3×8	40°	1	3	0,8
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	0,9
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	103-6051-45-67,39-20	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	1,0
64	2½	90510327	103-5064-67,49-20	12	8×10	4×10	40°	–	2	1,4
64	2½	90510414	103-6064-45-67,49-20	10	6×11	3×10, 1×10	35°	–	3	2,2
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	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)				
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		2	1	1,4

* For reaming, reversed flushing.

Extension rods

R32 (1¼") round rod



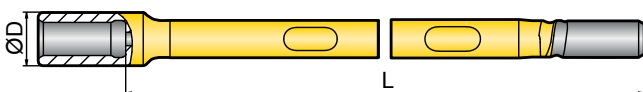
Fully carburized or surface hardened.

Flushing hole diameter 11,7 mm.

Length (L)		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		5,2
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
2000	6'6¾"	90515394	203-2520-C,02		11,6
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'	90000141		203-2531-SH,03	17,1
3050	10'	90515401		203-4531-SH,03	19,9
3660	12'	90509565	203-2537-C,02		20,0
3660	12'	90000142		203-2537-SH,03	20,5
3660	12'	90515402		203-4537-SH,03	20,8
4000	13'1½"	90002394	203-2540-C,02		21,7
4310	14'1⅝"	90000993	203-2543-C,02		23,4

Speedrods

R32 (1¼") round Speedrod

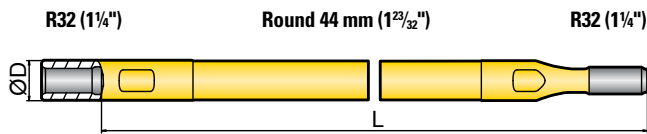


Fully carburized. D = 46 mm.

Flushing hole diameter 11,7 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 (male part) and fully carburized (female part)					
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

Guide tubes



Fully carburized.
Flushing hole diameter 27,0 mm.

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	1830	6	94502659	203-7118,10	14,2
51-57	2-2¼	45	1¾	3050	10	94502660	203-7131,10	23,4

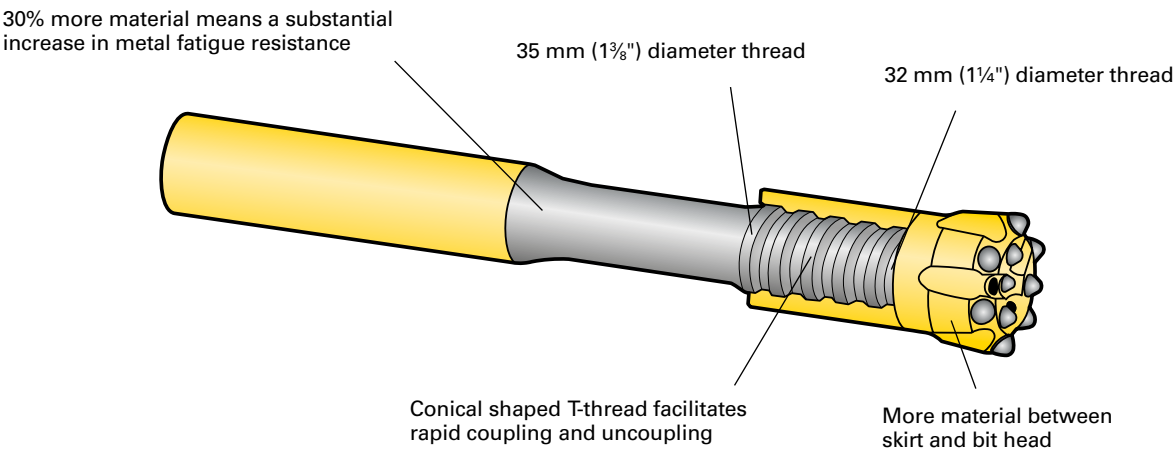
Couplings



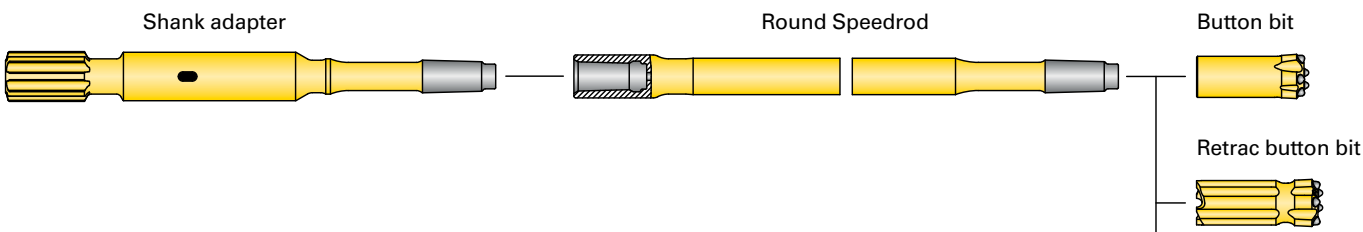
Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	inch			
R32	1¼	42	1 21/32	150	5 7/8	90515730	303-0042,10	0,9
R32	1¼	44	1 23/32	150	5 7/8	90515731	303-0044,10	0,9
R32	1¼	44	1 23/32	160	6 5/16	90515732	303-0044-57,10	1,0

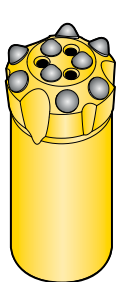
TC35 thread system



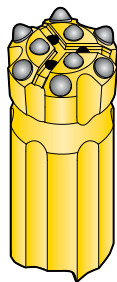
TC35 drill string



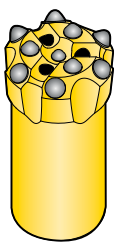
Drill bits



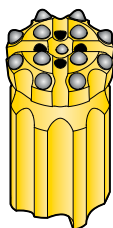
-5048-37-67



-6xxx-45-67



-6054-67



-6064-48-45-67

Please note text on page 64 about finished hole size.

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 - Ballistic buttons										
48	1 ⁷ / ₈	90516336	169-5048-37-67,39-20	9	6×10	3×9	40°	1	3	1,0
51	2	90516337	169-6051-45-67,49-20	9	6×10	3×9	35°	–	3	1,2
54	2 ¹ / ₈	90516564	169-6054-67,39-20	9	6×10	3×9, 1×7	40°	–	3	1,0
54	2 ¹ / ₈	90516423	169-6054-45-67,49-20	9	6×11	3×9	40°	–	3	1,3
57	2 ¹ / ₄	90516536	169-6057-45-67,39-20	9	6×11	3×9	40°	–	3	1,5
64	2 ¹ / ₂	90516424	169-6064-48-45-67,49-20	13	8×10	4×10, 1×7	35°	–	4	2,0

Speedrods

TC35 (1³/₈"

Round 39 mm (1¹/₂"

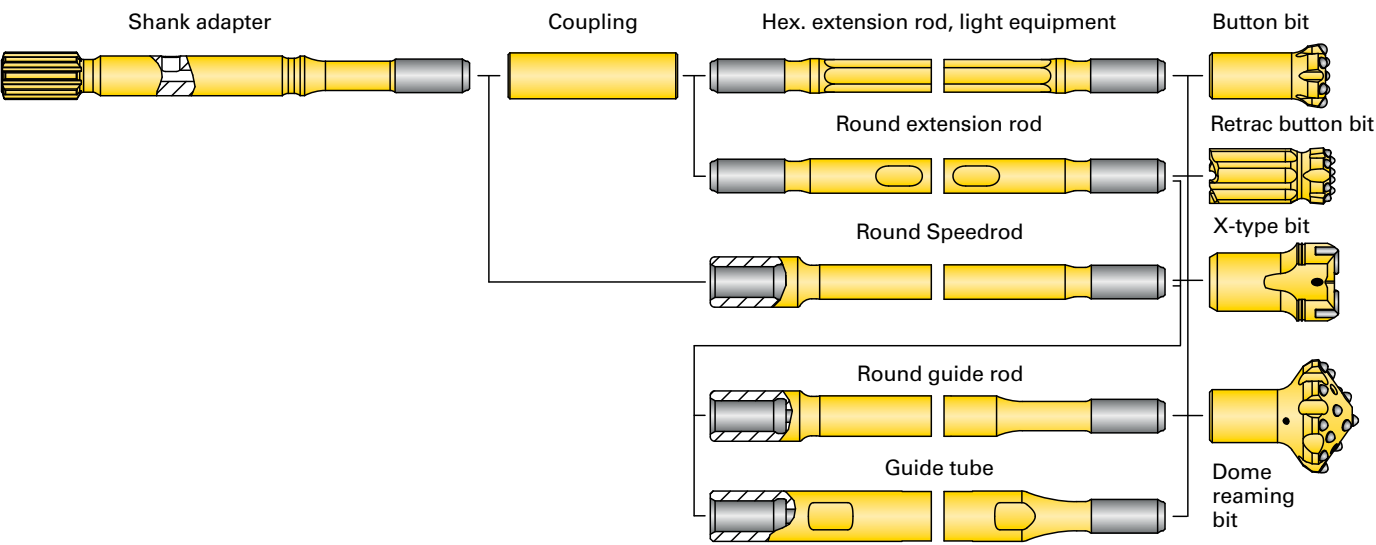
TC35 (1³/₈"



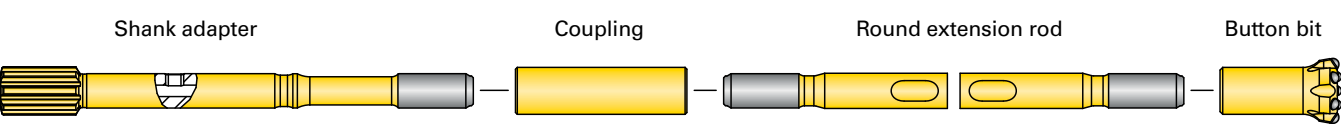
Fully carburized. D = 46 mm.
Flushing hole diameter 14,5 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
1220	4	90003595	269-4712-MF-C,02	9,8
1525	5	90003647	269-4715-MF-C,02	12,3
1830	6	90003576	269-4718-MF-C,02	14,9
2435	8	90003646	269-4724-MF-C,02	19,7
3050	10	90003577	269-4731-MF-C,02	24,7
3660	12	90003578	269-4737-MF-C,02	29,6
4270	14	90003579	269-4743-MF-C,02	34,6

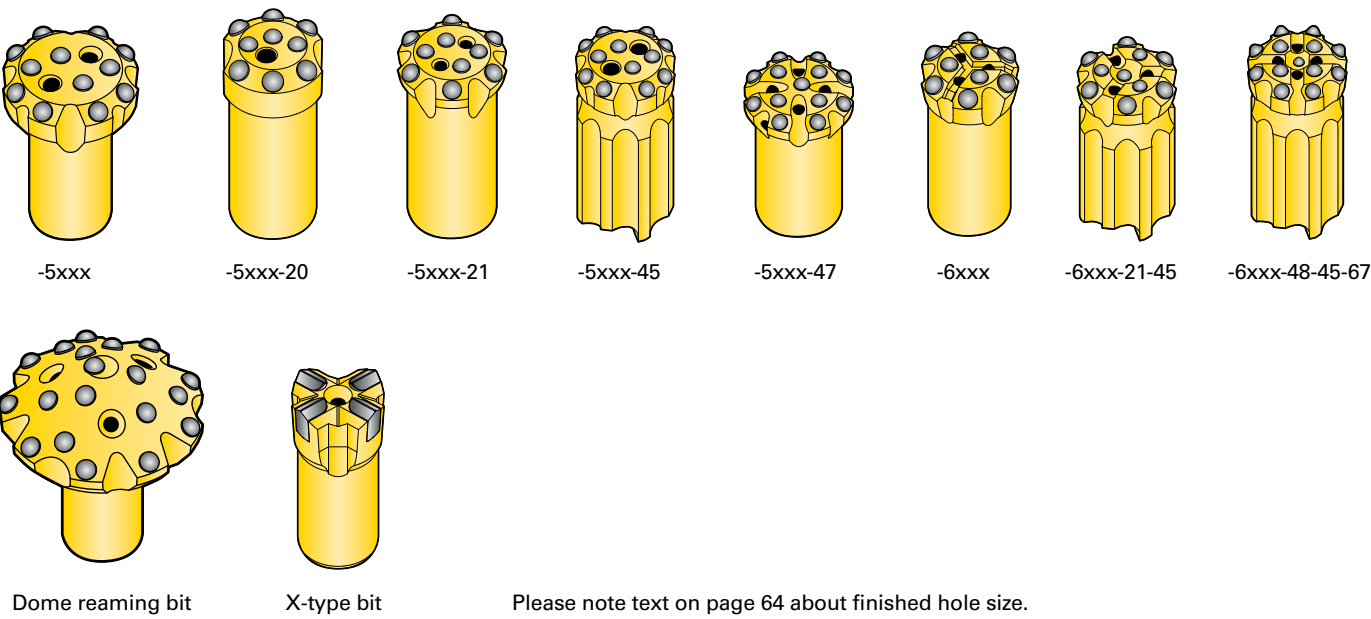
T38 drill string



R38 drill string



Drill bits



Please note text on page 64 about finished hole size.

Drill bits

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	1,5
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
70	2¾	90510350		135-5070-20,49-20	11	6×12,7	5×11	35°	2	1	2,3
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	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	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	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	1,8
64	2½	90514631		135-6064-48-45-67,49-20	13	8×10	4×10, 1×7	35°	–	4	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

* For reaming, reversed flushing.

Cont. next page

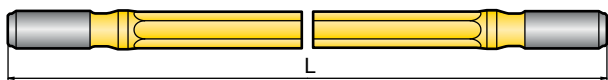
Drill bits

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											
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
89	3½	90513763		135-5089-21-67,49-20	14	8×12,7	6×12,7	35°	1	2	3,1
89	3½	90510654		135-6089-45-67,49-20	14	8×11	4×11, 2×9	35°	1	4	5,0
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					Insert						
					Width (mm)		Height (mm)				
64	2½	90002256		135-8064,08-16	14,0	25,0			4	1	1,9

* For reaming, reversed flushing.

Extension rods

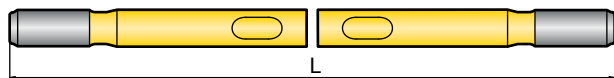
T38 (1½") Hex. 32 mm (1¼") T38 (1½")



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

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

R/T38 (1½") round rod



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

Length (L)		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
Surface hardened					
1830	6'	90590109	204-2718-SH,03		14,8
3050	10'	90515405	204-4731-SH,03		24,0
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

Extension rods

T38 (1½") round rod with double thread



Surface hardened.
Flushing hole diameter 14,5 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3050	10	90515292	235-4731-95-SH,03	27,0

Speedrods

T38 (1½") round Speedrod



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

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
600	1'11½"	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

T38 (1½") round Speedrod



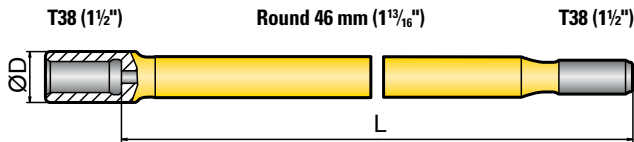
Fully carburized and surface hardened. D = 57 mm.
Flushing hole diameter 14,5 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
Both surface hardened (male part) and fully carburized (female part)				
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

Drifter rods

For one rod drilling drifter rods can be used. See page 42.

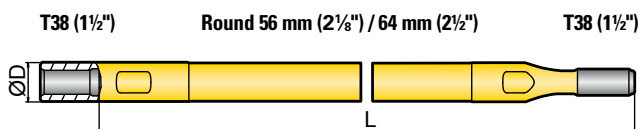
Guide rod



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

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
Both surface hardened (male part) and fully carburized (female part)				
3660	12	90515575	235-4937-MF,29	44,8

Guide tubes



Fully carburized.

Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Flushing hole Ø		Weight approx. kg
mm	inch	mm	inch	mm	foot			mm	inch	
64	2½	56	2⅛	1220	4	94502648	235-7012,10	43,0	1⅞	12,6
64	2½	56	2⅛	1525	5	94000051	235-7015,10	43,0	1⅞	14,0
64	2½	56	2⅛	1830	6	94000052	235-7018,10	43,0	1⅞	17,4
64	2½	56	2⅛	3050	10	94000053	235-7031,10	43,0	1⅞	28,3
64	2½	56	2⅛	3660	12	94000054	235-7037,10	43,0	1⅞	32,8

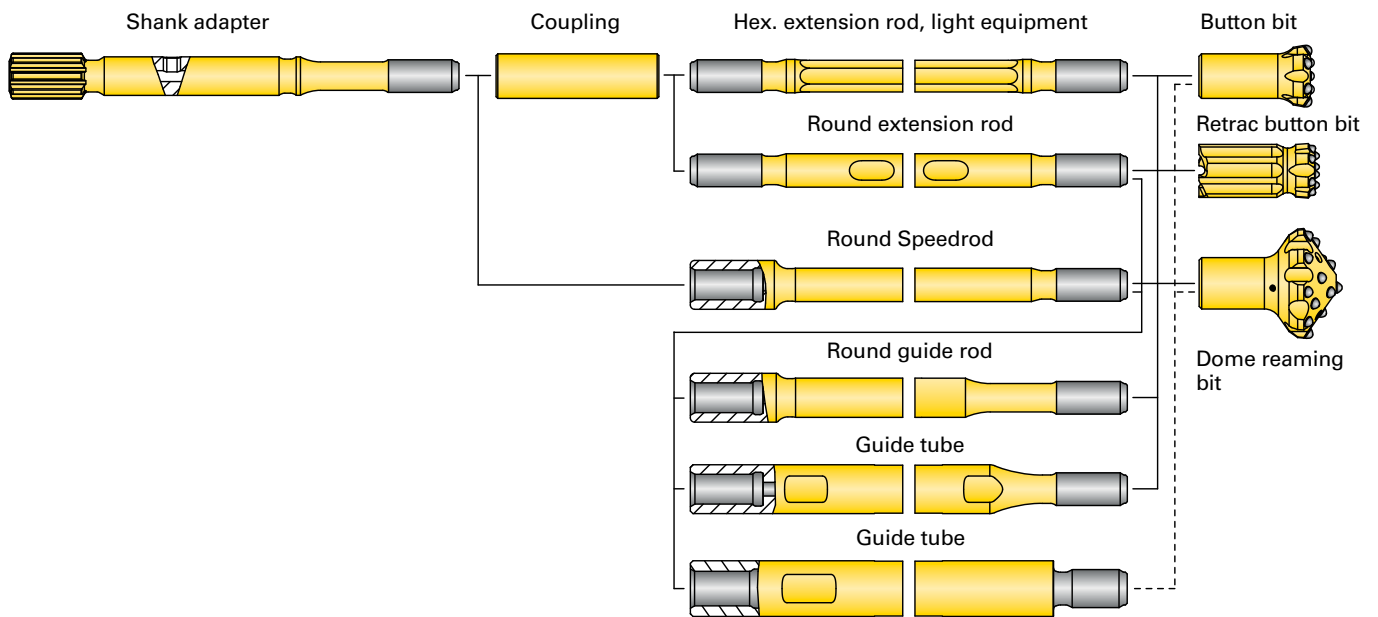
Couplings



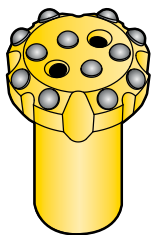
Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code		Weight approx. kg
mm	inch	mm	inch	mm	inch		R38 thread	T38 thread	
T38	1½	52	2⅛	190	7½	90515736		335-0052,10*	1,7
R38	1½	55	2⅝	170	6¾	90515733	304-0055,10		1,7
T38	1½	55	2⅝	190	7½	90515737		335-0055,10	1,9
R38	1½	55	2⅝	180	7⅛	90515734	304-0055-57,10		2,0
T38	1½	55	2⅝	180	7⅛	90515738		335-0055-57,10	2,0

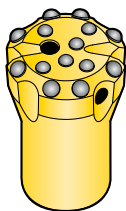
* Recommended for high frequency drifters.



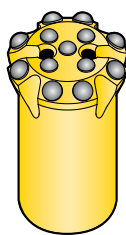
Drill bits



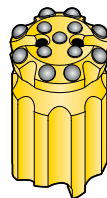
-5xxx



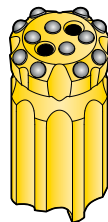
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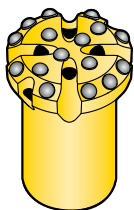
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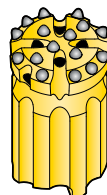
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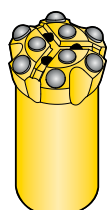
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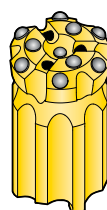
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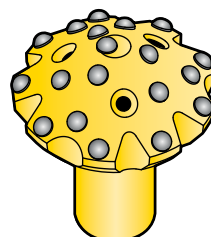
-5xxx-47-45-66



-6xxx



-6xxx-45



Dome reaming bit

Please note text on page 64 about finished hole size.

Drill bits

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	90510333	136-6076,49-20	10	6×12,7	3×11, 1×11	35°	1	3	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
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	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	90510373	136-5102-45,49-20	12	8×14,5	4×14,5	40°	–	2	6,7
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	7,0
102	4	90513811	136-6102-21,49-20	13	8×14,5	4×12,7, 1×12,7	35°	–	4	3,4
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	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

* For reaming, reversed flushing.

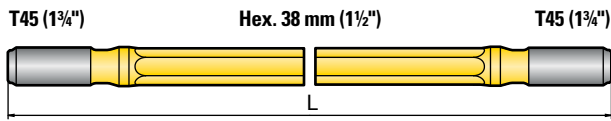
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Drill bits

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 - 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	3	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	3,2
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	90510772	136-6089-21-45-67,49-20	13	8×12,7	4×11, 1×11	35°	–	4	4,2
102	4	90510889	136-5102-21-67,49-20	14	8×15,8	6×12,7	35°	1	2	3,7
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
152	6	90510782	136-5152-42-24-67,49-20*	20	18×14,5	2×14,5	35°	3	3	9,5
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

* For reaming, reversed flushing.

Extension rods

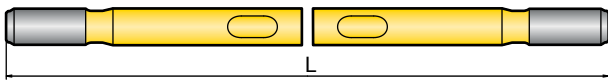


Light equipment, fully carburized. Rod section 42,6 mm.
Flushing hole diameter 16,0 mm.



Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
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.
Flushing hole diameter 17,0 mm.

Length (L)		Product No.	Product code	Weight approx. kg
mm	foot/inch			
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

Speedrods

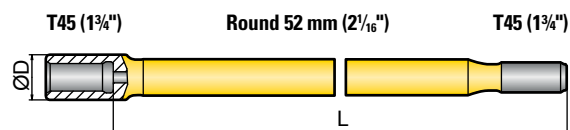
T45 (1³/₄" round Speedrod



Fully carburized. D = 65 mm.
Flushing hole diameter 17,0 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
3660	12	90510733	236-4937-MF-C,02		44,5
Both surface hardened (male part) and fully carburized (female part)					
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

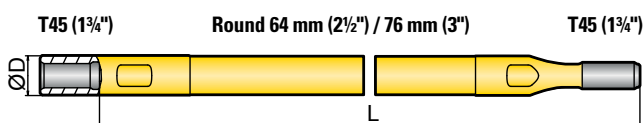
Guide rods



Fully carburized. D = 65 mm.
Flushing hole diameter 21,5 mm.

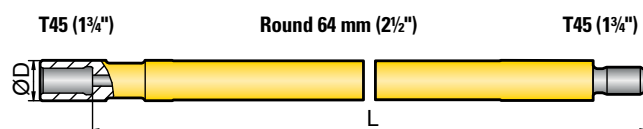
Length (L)		Product No.	Product code	Weight approx. kg
mm	foot			
3660	12	90513771	236-5137-MF-C,02	55,0
4270	14	90514785	236-5143-MF-C,02	63,5

Guide tubes



Fully carburized.

Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Flushing hole Ø		Weight approx. kg
mm	inch	mm	inch	mm	foot			mm	inch	
76	3	64	2 1/2	1220	4	94502687	236-6912,10	46,0	1 13/16	20,0
76	3	64	2 1/2	1525	5	94000047	236-6915,10	46,0	1 13/16	21,6
76	3	64	2 1/2	1830	6	94000046	236-6918,10	46,0	1 13/16	25,4
76	3	64	2 1/2	3660	12	94000050	236-6937,10	46,0	1 13/16	49,0
89	3 1/2	76	3	1830	6	94502656	236-6618,10	50,0	1 31/32	40,0
89	3 1/2	76	3	3660	12	94502627	236-6637,10	50,0	1 31/32	77,8



Fully carburized. Without undercut (shoulder).
Flushing hole diameter 46,0 mm.

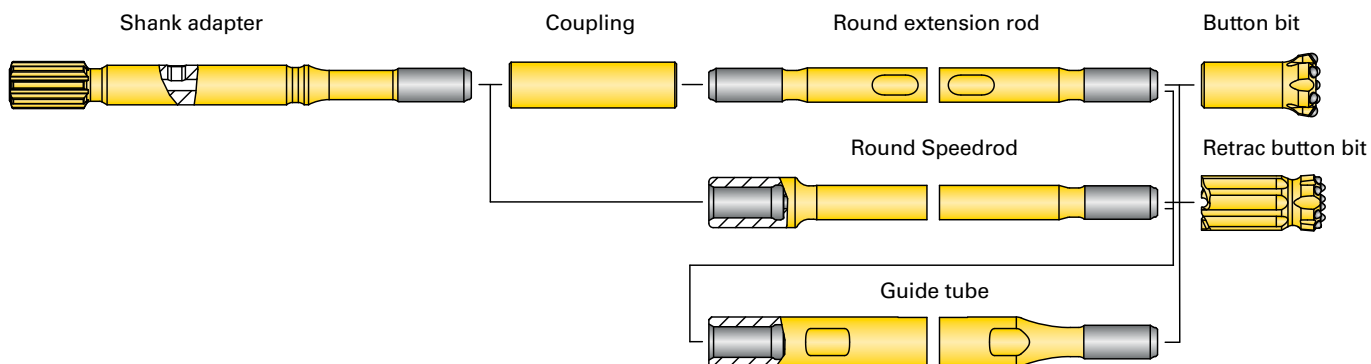
Hole diameter		Tube diameter		Length (L)		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	foot			
76	3	64	2 1/2	1830	6	94502714	236-6918-87,10	26,0

Couplings

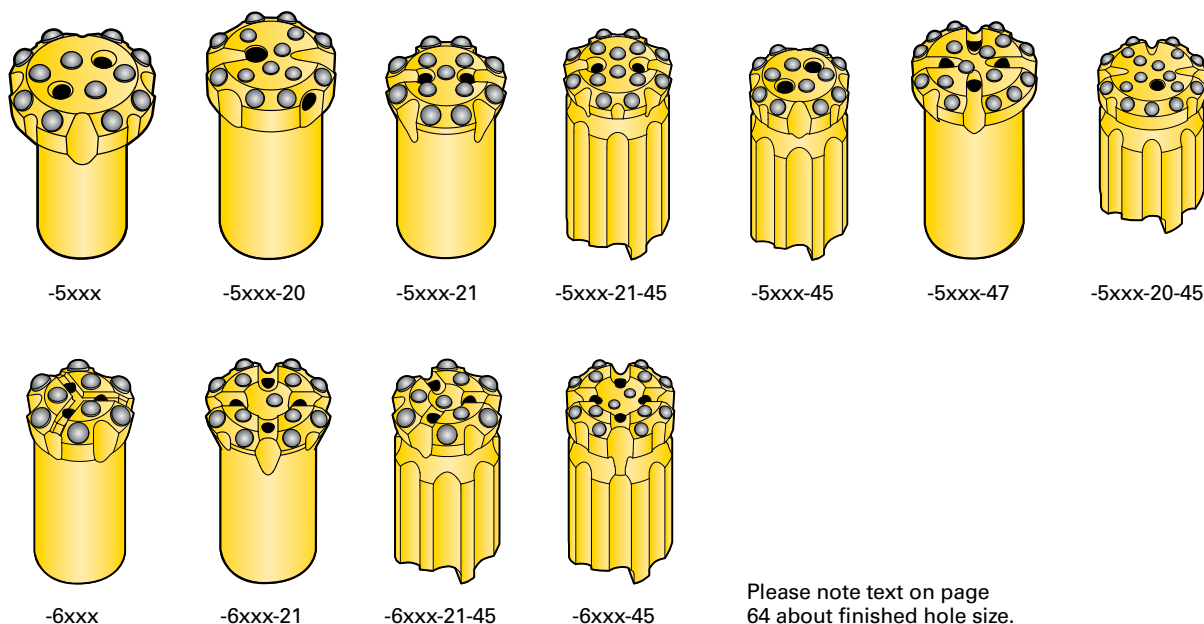


Full bridge -57.

Thread diameter		Diameter		Length		Product No.	Product code	Weight approx. kg
mm	inch	mm	inch	mm	inch			
T45	1 3/4	63	2 15/32	210	8 1/4	90515739	336-0063,10	2,7
T45	1 3/4	63	2 15/32	210	8 1/4	90515740	336-0063-57,10	3,3
T45	1 3/4	66	2 5/8	210	8 1/4	90515741	336-0066,10	3,1
T45	1 3/4	66	2 5/8	210	8 1/4	90515742	336-0066-57,10	3,5



Drill bits



Please note text on page 64 about finished hole size.

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	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

Drill bits

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	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	9,8
115	4½	90510818	137-5115-21,49-20	14	8×15,8	6×14,5	35°	1	2	6,1
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	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
140	5½	90515254	137-5140-47,49-20	14	8×15,8	6×15,8	35°	–	4	9,4
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
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