

Rock Drilling Tools

Small Holes



Global Fluid Dynamics

 064 792 9611

 www.globalfluid.co.za

 [globalfluidynamics](https://www.instagram.com/globalfluidynamics)

 [Global Fluid Dynamics](https://www.linkedin.com/company/globalfluidynamics)

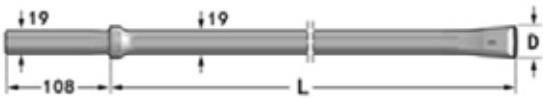


Small hole drilling

	<u>Page</u>
H19 Integral drill steels	01
Plug hole integral steels	01
H22 Integral drill steels	02
Tapered tools 7°	03
Tapered tools 11°	06
Tapered tools 12°	08
Shoulder drive drilling	10



Integral drill steels

19mm	Length		Bit dia.	Weight approx kg	ANMA P/N
	mm	foot			
Chisel bit integral Shank 19mm×108mm 	400	1' 4"	29	1.3	5H19-291508-0400-40-2
	500	1' 8"	29	1.5	5H19-291508-0500-40-2
	800	2' 7"	28	2.2	5H19-281508-0800-40-2
	1000	3' 33/8"	28	2.6	5H19-281508-1000-40-2
	1200	3' 11"	27	3.0	5H19-271508-1200-40-2
	1600	5' 3"	27	3.9	5H19-271508-1600-40-2
	2400	7' 10"	26	5.7	5H19-261508-2400-40-2
	3200	10' 6"	25	7.5	5H19-251508-3200-40-2
	4000	13' 1"	24	9.2	5H19-251508-4000-40-2
	400	1' 4"	24	1.3	5H19-241508-0400-40-2
	800	2' 7"	23	2.2	5H19-231508-0800-40-2
	600	2'	27	1.7	5H19-271508-0600-40-2
	1200	3' 11"	26	3.0	5H19-261508-1200-40-2
	2000	6' 7"	24	4.8	5H19-241508-2000-40-2
	2400	7' 10"	24	5.7	5H19-241508-2400-40-2
	2700	8' 10"	24	6.3	5H19-241508-2700-40-2
	400	1' 4"	35	1.3	5H19-351810-0400-40-2
	800	2' 7"	34	2.2	5H19-341810-0800-40-2
Chisel bit integral Shank 22mm×108mm 	400	1' 4"	24	1.5	5H19-241508-0400-40-2
	400	1' 4"	29	1.5	5H19-291508-0400-40-2
	600	2'	27	1.7	5H19-271508-0600-40-2
	800	2' 7"	23	2.3	5H19-231508-0800-40-2
	800	2' 7"	28	2.3	5H19-281508-0800-40-2
	1200	3' 11"	23	3.2	5H19-231508-1200-40-2
	1600	5' 3"	27	4.0	5H19-271508-1600-40-2
	2000	6' 7"	28	5.0	5H19-281508-2000-40-2
	2400	7' 10"	26	5.8	5H19-261508-2400-40-2
	3200	10' 6"	25	7.5	5H19-251508-3200-40-2
Plug hole integral steels Shank 19mm×108mm 	Length (mm)	Bit dia.	Turned length	Weight approx kg	ANMA P/N
	210	17	150	0.7	5H19-171308-0210-40-2
	210	20	150	0.7	5H19-201308-0210-40-2
	210	22	150	0.7	5H19-221308-0210-40-2
	260	20	200	0.8	5H19-201308-0260-40-2
	260	22	200	0.8	5H19-221308-0260-40-2
	310	22	250	0.9	5H19-221308-0310-40-2
	340	20	280	1.0	5H19-201308-0340-40-2
Shank 19mm×82mm	210	20	150	0.7	5H19-201308-0210-40-2
	210	22	150	0.7	5H19-221308-0210-40-2



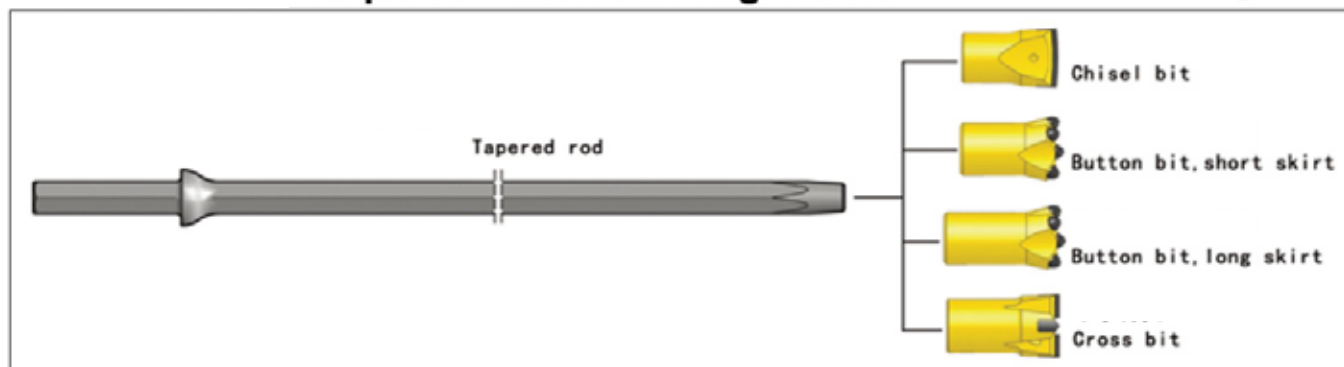
Integral drill steels

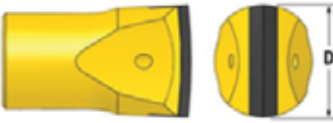
22mm	Length		Bit dia.	Weight approx kg	ANMA P/N
	mm	Foot			
Chisel bit integral Shank 22mm×108mm	800	2' 7"	34	3.0	5H22-341810-0800-40-2
	1600	5' 3"	33	5.2	5H22-331810-1600-40-2
	2400	7' 10"	32	8.0	5H22-321808-2400-40-2
	3200	10' 6"	31	10.2	5H22-311808-3200-40-2
	4000	13' 1"	30	12.9	5H22-301808-4000-40-2
	4800	15' 9"	29	15.1	5H22-291508-4800-40-2
	5600	18' 4"	28	17.6	5H22-281508-5600-40-2
	6400	21'	27	20.1	5H22-271508-6400-40-2
	7200	23' 6"	26	22.5	5H22-261508-7200-40-2
	800	2' 7"	40	3.0	5H22-401810-0800-40-2
	1600	5' 3"	39	5.2	5H22-391810-1600-40-2
	2400	7' 10"	38	8.0	5H22-381810-2400-40-2
	3200	10' 6"	37	10.2	5H22-371810-3200-40-2
	4000	13' 1"	36	12.9	5H22-361810-4000-40-2
	4800	15' 9"	35	15.1	5H22-351810-4800-40-2
	5600	18' 4"	34	17.6	5H22-341810-5600-40-2
	6400	21'	33	20.1	5H22-331810-6400-40-2
	7200	23' 6"	32	22.5	5H22-321808-7200-40-2
	8000	26' 2"	31	25.0	5H22-311808-8000-40-2
	400	1' 4"	34	1.7	5H22-341810-0400-40-2
	800	2' 7"	33	3.0	5H22-331810-0800-40-2
	1200	3' 11"	32	4.1	5H22-321808-1200-40-2
	1600	5' 3"	31	5.2	5H22-311808-1600-40-2
	2000	6' 7"	30	6.7	5H22-301808-2000-40-2
	600	2'	41	2.4	5H22-411810-0600-40-2
	1200	3' 11"	40	4.3	5H22-401810-1200-40-2
	1800	5' 11"	39	6.2	5H22-391810-1800-40-2
	2400	7' 10"	38	8.0	5H22-381810-2400-40-2
	400	1' 4"	41	1.7	5H22-411810-0400-40-2
	800	2' 7"	29	3.0	5H22-291508-0800-40-2
	800	2' 7"	38	3.1	5H22-381810-0800-40-2
	1200	3' 11"	39	4.3	5H22-391810-1200-40-2
	1600	5' 3"	36	5.2	5H22-361810-1600-40-2
	1800	5' 11"	36	6.0	5H22-361810-1800-40-2
	2000	6' 7"	32	6.7	5H22-321808-2000-40-2
	2400	7' 10"	27	8.0	5H22-271508-2400-40-2
	3200	10' 6"	27	10.2	5H22-271508-3200-40-2
	3200	10' 6"	32	10.3	5H22-321808-3200-40-2
	6400	21'	30	20.1	5H22-301808-6400-40-2
	8000	26' 2"	26	25.0	5H22-261508-8000-40-2



Tapered rock drilling tools

7°

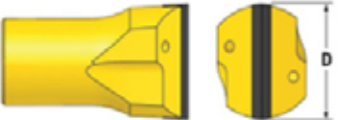


Drill bit	Diameter		For class of rock	Tip size(mm)	Taper	Weight (kg)	ANMA P/N
	mm	inch		Height x Width			
Horseshoe chisel bit 	26	1 1/32	10-14	10x7	7°	0.17	1111-26721-10/7-40-21
	28	1 7/64	10-14	10x7	7°	0.18	1111-28721-10/7-40-21
	30	1 3/16	8-12	13.5x8	7°	0.22	1111-30722-13.5/8-40-14
	30	1 3/16	10-14	13.5x8	7°	0.22	1111-30722-13.5/8-40-13
	32	1 1/4	8-12	13.5x8	7°	0.24	1111-32722-13.5/8-40-14
	32	1 1/4	10-14	13.5x8	7°	0.24	1111-32722-13.5/8-40-13
	34	1 11/32	8-12	13.5x8	7°	0.27	1111-34722-13.5/8-40-14
	34	1 11/32	10-14	13.5x8	7°	0.27	1111-34722-13.5/8-40-13
	36	1 27/64	8-12	13.5x8	7°	0.30	1111-36722-13.5/8-40-14
	36	1 27/64	10-14	13.5x8	7°	0.30	1111-36722-13.5/8-40-13
	38	1 1/2	8-12	13.5x8	7°	0.33	1111-38723-13.5/8-40-14
	38	1 1/2	10-14	13.5x8	7°	0.33	1111-38723-13.5/8-40-13
	38	1 1/2	8-12	15x9	7°	0.33	1111-38723-15/9-40-14
	38	1 1/2	10-14	15x9	7°	0.33	1111-38723-15/9-40-13
	40	1 37/64	8-12	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-14
	40	1 37/64	10-14	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-13
	40	1 37/64	14-16	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-12
	40	1 37/64	16-18	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-11
	40	1 37/64	8-12	15x9.8	7°	0.38	1111-40723-15/9.8-40-14
	40	1 37/64	10-14	15x9.8	7°	0.38	1111-40723-15/9.8-40-13
	40	1 37/64	14-16	15x9.8	7°	0.38	1111-40723-15/9.8-40-12
	40	1 37/64	16-18	15x9.8	7°	0.38	1111-40723-15/9.8-40-11
	42	1 2/3	8-12	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-14
	42	1 21/32	10-14	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-13
	42	1 21/32	14-16	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-12
	42	1 21/32	16-18	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-11
	42	1 21/32	8-12	15x9.8	7°	0.41	1111-42723-15/9.8-40-14
	42	1 21/32	10-14	15x9.8	7°	0.41	1111-42723-15/9.8-40-13
	42	1 21/32	10-14	15x9.8	7°	0.41	1111-42723-15/9.8-40-12
	42	1 21/32	16-18	15x9.8	7°	0.41	1111-42723-15/9.8-40-11
	43	1 11/16	8-12	13.5x9.2	7°	0.42	1111-43723-13.5/9.2-40-14
	43	1 11/16	10-14	13.5x9.2	7°	0.42	1111-43723-13.5/9.2-40-13
	43	1 11/16	8-12	15x9.8	7°	0.42	1111-43723-15/9.8-40-14
	43	1 11/16	10-14	15x9.8	7°	0.42	1111-43723-15/9.8-40-13



Tapered rock drilling tools

7°

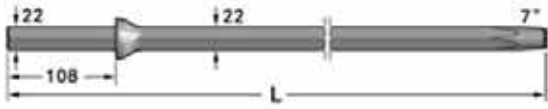
Drill bit	Diameter		For class of rock	Tip size (mm)	Taper	Weight (kg)	ANMA P/N
	mm	inch		Height X Width			
Oblique chipways chisel bit 	20	25/32	10-14	12×6	4°	0.10	1112-20415-12/6-40-22
	22	55/64	10-14	12×6	4°	0.12	1112-22415-12/6-40-22
	24	15/16	10-14	12×6	4°	0.14	1112-24415-12/6-40-22
	26	1 1/32	10-14	12×6	4°	0.16	1112-26415-12/6-40-22
	28	1 7/64	10-14	13×8	7°	0.19	1112-28722-13/8-40-22
	30	1 3/16	10-14	13.5×8	7°	0.22	1112-30722-13/8-40-22
	32	1 1/4	10-14	13.5×8	7°	0.24	1112-32722-13/8-40-22
	33	1 19/64	10-14	13.5×8	7°	0.25	1112-33722-13/8-40-22
	34	1 11/32	10-14	13.5×8	7°	0.27	1112-34722-13/8-40-22
	36	1 27/64	10-14	13.5×8	7°	0.29	1112-36722-13/8-40-22
	38	1 1/2	10-14	13.5×8	7°	0.34	1112-38723-13/8-40-22
	40	1 37/64	10-14	13.5×9.2	7°	0.40	1112-40723-13/9-40-22
	41	1 5/8	10-14	13.5×9.2	7°	0.41	1112-41723-13/9-40-22
	42	1 21/32	10-14	13.5×9.2	7°	0.43	1112-42723-13/9-40-22
Flat chipways chisel bit 	38	1 1/2	10-14	16×10	7°	0.36	1113-38723-16/10-40-22
	40	1 37/64	10-14	16×10	7°	0.38	1113-40723-16/10-40-22
	41	1 5/8	10-14	16×10	7°	0.41	1113-41723-16/10-40-22
	42	1 21/32	10-14	16×10	7°	0.43	1113-42723-16/10-40-22
	45	1 3/4	10-14	22×16×10	7°	0.60	1113-45723-16/10-40-22
	46	1 3/4	10-14	22×16×10	7°	0.61	1113-46723-16/10-40-22
	48	1 7/8	10-14	22×16×10	7°	0.63	1113-48723-16/10-40-22
	50	1 31/32	10-14	22×16×10	7°	0.65	1113-50723-16/10-40-22
	56	2 1/4	10-14	24×16×10	7°	0.82	1113-56723-16/10-40-22
	60	2 23/64	10-14	26×16×10	7°	0.91	1113-60723-16/10-40-22
	65	2 1/2	10-14	26×16×10	7°	1.12	1113-65723-16/10-40-22
	80	3 1/8	10-14	36×16×10	7°	1.40	1113-80723-16/10-40-22
Oblique-flat chipways chisel bit 	36	1 27/64	10-14	15×10	7°	0.40	1114-36725-15/10-40-22
	38	1 1/2	10-14	15×10	7°	0.42	1114-38725-15/10-40-22
	40	1 37/64	10-14	15×10	7°	0.45	1114-40725-15/10-40-22
	41	1 5/8	10-14	15×10	7°	0.47	1114-41725-15/10-40-22
	42	1 21/32	10-14	15×10	7°	0.49	1114-42725-15/10-40-22
	43	1 11/16	10-14	15×10	7°	0.51	1114-43725-15/10-40-22
Cross-type bit 	30	1 3/16	11-15	12×12×8	7°	0.29	1221-30722-12/8-40-22
	32	1 1/4	11-15	12×12×8	7°	0.31	1221-32722-12/8-40-22
	33	1 19/64	11-15	12×12×8	7°	0.33	1221-33722-12/8-40-22
	34	1 11/32	11-15	12×12×8	7°	0.34	1221-34722-12/8-40-22
	35	1 3/8	11-15	12×12×8	7°	0.36	1221-35722-12/8-40-22
	36	1 27/64	11-15	13×12×8	7°	0.37	1221-36722-12/8-40-22
	38	1 1/2	11-15	14×12×8	7°	0.43	1221-38723-12/8-40-22
	40	1 37/64	11-15	15×12×8	7°	0.47	1221-40723-12/8-40-22
	41	1 5/8	11-15	15×12×8	7°	0.49	1221-41723-12/8-40-22
	42	1 21/32	11-15	15×12×8	7°	0.51	1221-42723-12/8-40-22
	43	1 11/16	11-15	15×12×8	7°	0.53	1221-43723-12/8-40-22
	45	1 3/4	11-15	17×14×8	7°	0.58	1221-45723-14/8-40-22
	48	1 7/8	11-15	17×14×8	7°	0.67	1221-48723-14/8-40-22
	50	1 31/32	11-15	19×14×8	7°	0.72	1221-50723-14/8-40-22
	55	2 1/4	11-15	20×16×10	7°	0.92	1221-55725-16/10-40-22
	60	2 3/8	11-15	22×16×10	7°	1.19	1221-60725-16/10-40-22



Tapered rock drilling tools

7°

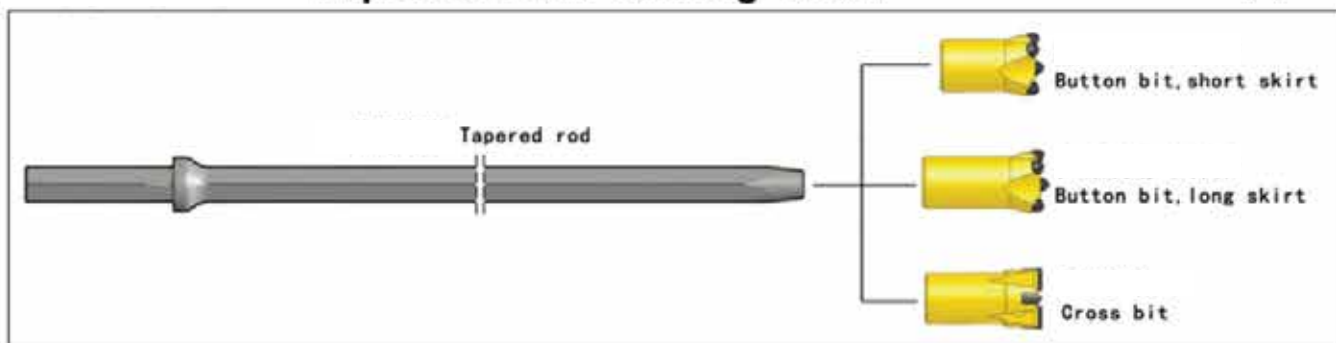
Drill bit	Diameter		No X button diameter			Flushing hole		Weight approx kg	ANMA P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit, Short skirt 	32	1 1/4	1×8	3×8	35°	1	1	0.24	1431-32722-18/38-40-53
	33	1 19/64	2×7	5×7	35°	2	1	0.26	1431-33722-27/57-42-53
	34	1 11/32	2×7	4×7	40°	1	1	0.29	1431-34722-27/47-42-53
	35	1 3/8	2×7	5×8	35°	1	1	0.33	1431-35722-27/58-42-53
	36	1 27/64	1×8	3×9	40°	1	1	0.37	1431-36722-18/39-42-53
	36	1 27/64	2×7	5×8	35°	1	1	0.37	1431-36722-27/58-42-53
	38	1 1/2	1×8	3×9	35°	1	1	0.38	1431-38723-18/39-42-53
	38	1 1/2	2×7	5×8	35°	1	1	0.38	1431-38723-27/58-42-53
	38	1 1/2	2×7	5×9	40°	2	1	0.38	1431-38723-27/59-42-53
	40	1 37/64	1×8	3×9	30°	1	1	0.40	1431-40723-18/39-40-53
	40	1 37/64	1×9	3×10	30°	1	1	0.40	1431-40723-19/310-40-53
	40	1 37/64	1×9	3×9	35°	1	1	0.40	1431-40723-19/39-42-53
Long skirt 	40	1 37/64	2×7	5×9	35°	1	1	0.40	1431-40723-27/59-42-53
	42	1 21/32	1×8	3×9	30°	1	1	0.43	1431-42723-18/39-40-53
	42	1 21/32	1×9	3×10	30°	1	1	0.43	1431-42723-19/310-40-53
	42	1 21/32	1×9	3×9	35°	1	1	0.43	1431-42723-19/39-42-53
	42	1 37/64	2×8	5×9	35°	1	1	0.43	1431-42723-28/59-42-53
	32	1 1/4	2×7	5×7	35°	1	1	0.30	1435-32722-27/57-45-51
	33	1 19/64	2×7	5×7	35°	1	1	0.31	1435-33722-27/57-45-51
	35	1 3/8	2×7	5×8	35°	1	1	0.36	1435-35722-27/58-45-51
	38	1 1/2	2×7	5×9	35°	1	1	0.41	1435-38723-27/59-45-51
	41	1 5/8	2×7	5×9	35°	1	1	0.42	1435-41723-27/59-45-51

Drill rod	Length		Weight approx kg	ANMA P/N
	mm	Foot		
Hex. Tapered rod 	600	2'	1.93	21H22-7/108-0600-40
	800	2'6"	2.54	21H22-7/108-0800-40
	1000	3'3"	3.15	21H22-7/108-1000-40
	1200	3'9"	3.76	21H22-7/108-1200-40
	1500	4'11"	4.68	21H22-7/108-1500-40
	1600	5'3"	4.98	21H22-7/108-1600-40
	1800	5'9"	5.59	21H22-7/108-1800-40
	2000	6'7"	6.20	21H22-7/108-2000-40
	2200	7'2"	6.81	21H22-7/108-2200-40
	2300	7'6"	7.12	21H22-7/108-2300-40
	2400	7'9"	7.42	21H22-7/108-2400-40
	2500	8'2"	7.73	21H22-7/108-2500-40
	2600	8'8"	8.03	21H22-7/108-2600-40
	3000	9'10"	9.25	21H22-7/108-3000-40
	3500	11'5"	10.78	21H22-7/108-3500-40
	4000	13'1"	12.30	21H22-7/108-4000-40
	4500	14'8"	13.83	21H22-7/108-4500-40
	5000	16'4"	15.35	21H22-7/108-5000-40
	5500	18'1"	16.88	21H22-7/108-5500-40
	6000	19'7"	18.30	21H22-7/108-6000-40
	4000	13'1"	16.10	21H25-7/159-4000-40
	4700	15'4"	18.90	21H25-7/159-4700-40
	5000	16'4"	22.10	21H25-7/159-5000-40
	5500	18'1"	22.10	21H25-7/159-5500-40
	6000	19'7"	24.10	21H25-7/159-6000-40



Tapered rock drilling tools

11°



Drill bit	Diameter		No X button diameter			Flushing hole		Weight approx kg	ANMA P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit, Short skirt 	32	1 1/4	1×8	3×8	35°	1	2	0.24	1431-321122-18/38-45-51
	32	1 1/4	2×7	5×7	40°	1	1	0.24	1431-321122-27/57-45-51
	33	1 19/64	2×7	4×7	40°	1	1	0.25	1431-331122-27/47-45-51
	34	1 11/32	2×7	4×7	40°	1	1	0.29	1431-341122-27/47-45-51
	35	1 3/8	2×7	5×7	35°	1	1	0.33	1431-351122-27/57-45-51
	35	1 3/8	2×7	5×8	35°	1	1	0.33	1431-351122-27/58-45-51
	36	1 27/64	1×8	3×9	40°	1	1	0.36	1431-361122-18/39-45-51
	36	1 27/64	2×7	4×7	40°	1	1	0.36	1431-361122-27/47-45-51
	36	1 27/64	2×7	5×8	35°	1	1	0.36	1431-361122-27/58-45-51
	38	1 1/2	1×9	3×9	40°	1	1	0.39	1431-381122-19/39-45-51
	38	1 1/2	2×8	3×9	40°	1	1	0.39	1431-381122-28/39-45-51
	38	1 1/2	2×7	5×8	35°	1	1	0.39	1431-381122-27/58-45-51
	38	1 1/2	2×7	5×9	35°	1	1	0.39	1431-381122-27/59-45-51
	40	1 37/64	1×9	3×9	40°	1	1	0.40	1431-401122-19/39-45-51
	40	1 37/64	2×8	3×9	40°	1	1	0.40	1431-401122-28/39-45-51
	40	1 37/64	2×9	3×9	40°	1	2	0.40	1431-401122-29/39-45-51
Long skirt 	40	1 37/64	2×7	5×9	35°	1	1	0.40	1431-401122-27/59-45-51
	40	1 37/64	2×8	5×9	35°	1	1	0.40	1431-401122-28/59-45-51
	41	1 5/8	2×7	5×9	35°	1	1	0.41	1431-411122-27/59-45-51
	32	1 1/4	2×7	5×7	35°	1	1	0.30	1435-321122-27/57-45-51
	33	1 19/64	2×7	5×7	35°	1	1	0.31	1435-331122-27/57-45-51
	33	1 19/64	2×7	6×7	40°	2	1	0.31	1435-331122-27/67-45-51
	35	1 3/8	2×7	6×7	40°	2	1	0.35	1435-351122-27/67-45-51
	38	1 1/2	2×7	5×9	35°	1	1	0.41	1435-381122-27/59-45-51
	41	1 5/8	2×7	5×9	35°	1	1	0.42	1435-411122-27/59-45-51
	35	1 3/8	2×7	5×9	35°	1	1	0.38	1435-351125-27/59-45-51
Cross-type bit 	36	1 27/64	2×7	5×9	35°	1	1	0.39	1435-361125-27/59-45-51
	38	1 1/2	2×7	5×9	35°	1	1	0.41	1435-381125-27/59-45-51
	41	1 5/8	2×7	5×9	35°	1	1	0.42	1435-411125-27/59-45-51
	29	1 9/64	12×8	-	-	1	2	0.25	1221-291122-12/8-42-22
	30	1 3/16	12×8	-	-	1	2	0.26	1221-301122-12/8-42-22
	32	1 1/4	12×8	-	-	1	2	0.30	1221-321122-12/8-42-22
	33	1 19/64	12×8	-	-	1	2	0.32	1221-331122-12/8-42-22
	35	1 3/8	12×8	-	-	1	2	0.36	1221-351122-12/8-42-22
	36	1 27/64	12×8	-	-	1	2	0.39	1221-361122-12/8-42-22
	38	1 1/2	12×8	-	-	1	2	0.43	1221-381122-12/8-42-22
	41	1 5/8	14×8	-	-	1	2	0.49	1221-411122-14/8-42-22



Tapered rock drilling tools

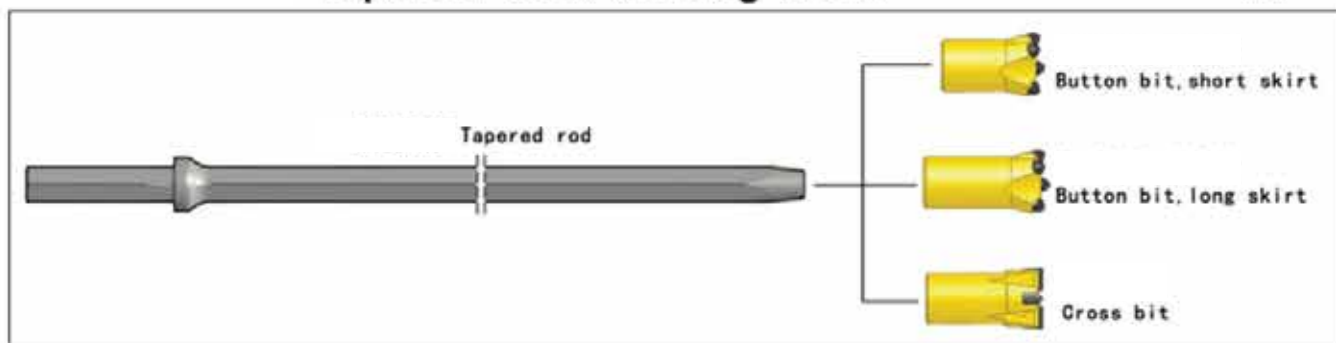
11°

Drill rod	Length		Weight approx kg	ANMA P/N
	mm	Foot		
Hex. 22mm Tapered rod, carburized	610	2'	2.2	21H22-11/108-0610-40
	1220	4'	4.1	21H22-11/108-1220-40
	1830	6'	5.9	21H22-11/108-1830-40
	2000	6' 7"	6.4	21H22-11/108-2000-40
	2435	8'	7.8	21H22-11/108-2435-40
	2600	8' 8"	8.3	21H22-11/108-2600-40
	3200	10' 6"	10.1	21H22-11/108-3200-40
	3655	12'	11.5	21H22-11/108-3655-40
	4000	13' 1"	12.6	21H22-11/108-4000-40
	4800	15' 9"	14.9	21H22-11/108-4800-40
	5600	18' 4"	17.4	21H22-11/108-5600-40
	6400	21'	19.8	21H22-11/108-6400-40
	7200	23' 6"	22.2	21H22-11/108-7200-40
	8000	26' 2"	24.6	21H22-11/108-8000-40



Tapered rock drilling tools

12°

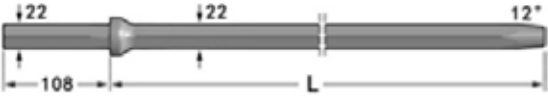
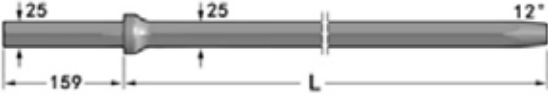


Drill bit	Diameter		No x button diameter			Flushing hole		Weight approx kg	ANMA P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit, Short skirt 	28	1 7/64	1x7	3x7	20°	1	1	0.20	1431-281222-17/37-45-51
	28	1 7/64	1x7	4x7	35°	1	1	0.20	1431-281222-17/47-45-51
	29	1 9/64	1x7	3x7	40°	1	1	0.21	1431-291222-17/37-45-51
	30	1 3/16	1x7	3x7	40°	1	1	0.22	1431-301222-17/37-45-51
	30	1 3/16	1x7	4x7	35°	1	1	0.22	1431-301222-17/47-45-51
	30	1 3/16	2x7	4x7	30°	1	1	0.22	1431-301222-27/47-45-51
	32	1 1/4	2x7	5x7	40°	2	1	0.24	1431-321222-27/57-45-51
	33	1 19/64	2x7	5x7	35°	1	1	0.25	1431-331222-27/57-45-51
	34	1 11/32	2x7	5x8	35°	1	1	0.29	1431-341222-27/58-45-51
	35	1 3/8	2x7	4x7	35°	1	1	0.33	1431-351222-27/47-45-51
	35	1 3/8	2x7	5x8	35°	2	1	0.33	1431-351222-27/58-45-51
	35	1 3/8	2x7	5x9	35°	1	1	0.33	1431-351222-27/59-45-51
	36	1 27/64	2x7	5x9	35°	1	1	0.37	1431-361222-27/59-45-51
	37	1 29/64	2x7	5x9	40°	1	1	0.38	1431-371222-27/59-45-51
Long skirt 	38	1 1/2	1x9	3x9	40°	1	1	0.40	1431-381222-19/39-45-51
	38	1 1/2	2x7	5x9	35°	1	1	0.40	1431-381222-27/59-45-51
	41	1 5/8	2x7	5x9	35°	1	1	0.41	1431-411222-27/59-45-51
	32	1 1/4	2x7	5x7	35°	1	1	0.30	1435-321222-27/57-45-51
	33	1 19/64	2x7	5x7	35°	1	1	0.31	1435-331222-27/57-45-51
	33	1 19/64	2x7	6x7	40°	2	1	0.31	1435-331222-27/67-45-51
	35	1 3/8	2x7	6x7	40°	2	1	0.35	1435-351222-27/67-45-51
	38	1 1/2	2x7	5x9	35°	1	1	0.41	1435-381222-27/59-45-51
	41	1 5/8	2x7	5x9	35°	1	1	0.42	1435-411222-27/59-45-51
	35	1 3/8	2x7	5x9	35°	1	1	0.38	1435-351222-27/59-45-51
Cross-type bit 	36	1 27/64	2x7	5x9	35°	1	1	0.39	1435-361222-27/59-45-51
	38	1 1/2	2x7	5x9	35°	1	1	0.41	1435-381222-27/59-45-51
	41	1 5/8	2x7	5x9	35°	1	1	0.42	1435-411222-27/59-45-51
	29	1 9/64	12x8	-	-	1	2	0.25	1221-291222-12/8-42-22
	30	1 3/16	12x8	-	-	1	2	0.26	1221-301222-12/8-42-22
	32	1 1/4	12x8	-	-	1	2	0.30	1221-321222-12/8-42-22
	33	1 19/64	12x8	-	-	1	2	0.32	1221-331222-12/8-42-22
	35	1 3/8	12x8	-	-	1	2	0.36	1221-351222-12/8-42-22
	36	1 27/64	12x8	-	-	1	2	0.39	1221-361222-12/8-42-22
	38	1 1/2	12x8	-	-	1	2	0.43	1221-381222-12/8-42-22
	40	1 37/64	12x8	-	-	1	2	0.46	1221-401222-12/8-42-22
	41	1 5/8	14x8	-	-	1	2	0.49	1221-411222-14/8-42-22



Tapered rock drilling tools

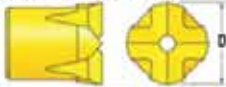
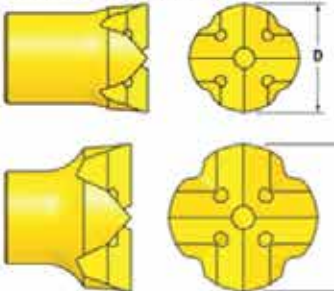
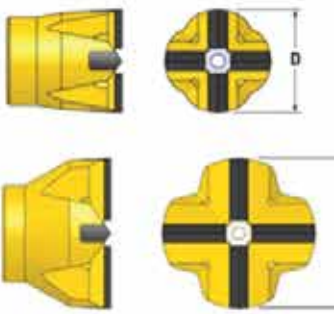
12°

Drill rod	Length		Weight approx kg	ANMA P/N
	mm	Foot		
Hex. 22mm Tapered rod, carburized 	610	2'	2.20	21H22-12/108-0610-40
	1220	4'	4.10	21H22-12/108-1220-40
	1830	6'	5.90	21H22-12/108-1830-40
	2000	6' 7"	6.40	21H22-12/108-2000-40
	2435	8'	7.80	21H22-12/108-2435-40
	2600	8' 8"	8.30	21H22-12/108-2600-40
	3200	10' 6"	10.10	21H22-12/108-3200-40
	3655	12'	11.50	21H22-12/108-3655-40
	4000	13' 1"	12.60	21H22-12/108-4000-40
	4800	15' 9"	14.90	21H22-12/108-4800-40
	5600	18' 4"	17.40	21H22-12/108-5600-40
	6400	21'	19.80	21H22-12/108-6400-40
	7200	23' 6"	22.20	21H22-12/108-7200-40
	8000	26' 2"	24.60	21H22-12/108-8000-40
Hex. 25mm Tapered rod, carburized 	1830	6'	7.96	21H25-12/159-1830-40
	2435	8'	10.38	21H25-12/159-2435-40
	3050	10'	12.84	21H25-12/159-3050-40
	3655	12'	15.26	21H25-12/159-3655-40
	3965	13'	16.50	21H25-12/159-3965-40
	4270	14'	17.72	21H25-12/159-4270-40
	4880	16'	20.16	21H25-12/159-4880-40
	5530	18'	22.76	21H25-12/159-5530-40
	6095	20'	25.02	21H25-12/159-6095-40



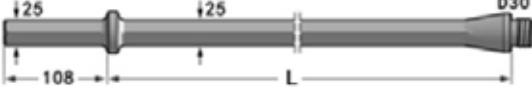
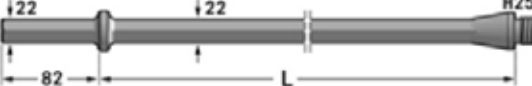
Shoulder drive drilling



Drill bit	Diameter		(mm)			Flushing hole		Weight approx kg	ANMA P/N
	mm	inch	Height x Width			Front	Side		
E-Thread steel cross bit 	24	15/16	-			1	-	0.07	1223-24E16-42
	25	1	-			1	-	0.08	1223-25E16-42
	28	1 1/8	-			1	-	0.09	1223-28E16-42
	32	1 1/4	-			1	-	0.10	1223-32E16-42
D-Thread steel cross bit 	45	1 3/4	-			1	4	0.30	1223-45D30-42
	48	1 7/8	-			1	4	0.40	1223-48D30-42
	51	2	-			1	4	0.42	1223-51D30-42
	57	2 1/4	-			1	4	0.51	1223-57D30-42
	64	2 1/2	-			1	4	0.58	1223-64D30-42
	70	2 3/4	-			1	4	0.63	1223-70D30-42
	76	3	-			1	4	0.69	1223-76D30-42
	83	3 1/4	-			1	4	1.08	1223-83D30-42
	89	3 1/2	-			1	4	1.18	1223-89D30-42
	102	4	-			1	4	1.39	1223-102D30-42
H-Thread cross bit 	35	1 3/8	12x8			1	4	0.22	1221-35H25-12/8-42-23
	38	1 1/2	12x8			1	4	0.26	1221-38H25-12/8-42-23
	41	1 5/8	12x8			1	4	0.30	1221-41H25-12/8-42-23
	45	1 3/4	14x8			1	4	0.38	1221-45H25-14/8-42-23
	48	1 7/8	14x8			1	4	0.42	1221-48H25-14/8-42-23
	51	2	14x8			1	4	0.50	1221-51H25-14/8-42-23
	54	2 1/8	14x8			1	4	0.50	1221-54H25-14/8-42-23
	57	2 1/4	16x10			1	4	0.61	1221-57H25-16/10-42-23
	64	2 1/2	16x10			1	4	0.71	1221-64H25-16/10-42-23
	70	2 3/4	16x10			1	4	0.88	1221-70H25-16/10-42-23
H-Thread button bit 	76	3	20x12			1	4	1.25	1221-76H25-20/12-42-23
	35	1 3/8	2x7	5x8	35°	1	1	0.26	1431-35H25-27/58-42-53
	38	1 1/2	2x7	5x9	30°	1	1	0.30	1431-38H25-27/59-42-53
	41	1 5/8	2x8	5x9	35°	1	1	0.34	1431-41H25-28/59-42-53
	45	1 3/4	3x8	6x9	40°	1	1	0.42	1431-45H25-38/69-42-53
	48	1 7/8	3x8	6x10	40°	1	1	0.46	1431-48H25-38/610-42-53
	51	2	3x9	6x10	40°	1	1	0.54	1431-51H25-39/610-42-53
	57	2 1/4	3x9	6x11	35°	1	1	0.66	1431-57H25-39/611-42-53



Shoulder drive drilling

Drill rod	Length		Weight approx kg	ANMA P/N
	mm	Foot		
Hex. 22mm Hollow drill steel 	305	1'	1.20	21H22-E16/82-0305-40
	455	1' 6"	1.67	21H22-E16/82-0455-40
	610	2'	2.15	21H22-E16/82-0610-40
	762	2' 6"	2.62	21H22-E16/82-0762-40
	915	3'	3.10	21H22-E16/82-0915-40
	1220	4'	4.04	21H22-E16/82-1220-40
	1525	5'	4.99	21H22-E16/82-1525-40
	1830	6'	5.93	21H22-E16/82-1830-40
Hex. 25mm Hollow drill steel 	305	1'	1.66	21H25-D30/108-0305-40
	455	1' 6"	2.26	21H25-D30/108-0455-40
	610	2'	2.88	21H25-D30/108-0610-40
	762	2' 6"	3.48	21H25-D30/108-0762-40
	915	3'	4.10	21H25-D30/108-0915-40
	1220	4'	5.32	21H25-D30/108-1220-40
	1525	5'	6.54	21H25-D30/108-1525-40
	1830	6'	7.76	21H25-D30/108-1830-40
Hex. 22mm Hollow drill steel 	305	1'	1.20	21H22-H25/82-0305-40
	455	1' 6"	1.67	21H22-H25/82-0455-40
	610	2'	2.15	21H22-H25/82-0610-40
	762	2' 6"	2.62	21H22-H25/82-0762-40
	915	3'	3.10	21H22-H25/82-0915-40
	1220	4'	4.04	21H22-H25/82-1220-40
	1525	5'	4.99	21H22-H25/82-1525-40
	1830	6'	5.93	21H22-H25/82-1830-40
	2440	8'	7.82	21H22-H25/82-2440-40
	3050	10'	9.71	21H22-H25/82-3050-40
Hex. 22mm Hollow drill steel 	305	1'	1.30	21H22-H25/108-0305-40
	455	1' 6"	1.72	21H22-H25/108-0455-40
	610	2'	2.24	21H22-H25/108-0610-40
	762	2' 6"	2.71	21H22-H25/108-0762-40
	915	3'	3.18	21H22-H25/108-0915-40
	1220	4'	4.12	21H22-H25/108-1220-40
	1525	5'	5.07	21H22-H25/108-1525-40
	1830	6'	6.01	21H22-H25/108-1830-40
	2440	8'	7.90	21H22-H25/108-2440-40
	3050	10'	9.79	21H22-H25/108-3050-40
Hex. 25mm Hollow drill steel 	305	1'	1.66	21H25-H25/108-0305-40
	455	1' 6"	2.26	21H25-H25/108-0455-40
	610	2'	2.88	21H25-H25/108-0610-40
	762	2' 6"	3.48	21H25-H25/108-0762-40
	915	3'	4.10	21H25-H25/108-0915-40
	1220	4'	5.32	21H25-H25/108-1220-40
	1525	5'	6.54	21H25-H25/108-1525-40
	1830	6'	7.76	21H25-H25/108-1830-40
	2440	8'	10.20	21H25-H25/108-2440-40
	3050	10'	12.64	21H25-H25/108-3050-40
	3660	12'	15.08	21H25-H25/108-3660-40
	4270	14'	17.52	21H25-H25/108-4270-40



Air-leg driller

	<u>Page</u>
7655 rock drill	13
YT27 drilling machineH22	14
YT28 drilling machine	15



7655

7655

Kg	24
mm	628
mm	H22×108 ± 1
mm	34-42
mm	76
mm	60
L/s	≤54
Hz	≥36
R/min	≥300
mm	25
	3312 3003 00

FY200B

Kg	1.2
ml	200
	3312 3115 71

FT160A

Kg	17
mm	1668
mm	3006
mm	1338
mm	65
	3312 3006 00

FT160C

Kg	18
mm	1820
mm	3310
mm	1490
mm	65
	3312 3006 01



Global Fluid Dynamics

SS YT27

YT27

Kg	27
mm	668
mm	H22 × 108 ± 1
mm	34-42
mm	80
mm	60
L/s	≤57
Hz	≥39
R/min	≥300
mm	25
	3312 3003 03

FY250C

Kg	1.2
ml	250
	3312 3120 62

FT160A

Kg	17
mm	1668
mm	3006
mm	1338
mm	65
	3312 3006 00

FT160C

Kg	18
mm	1820
mm	3310
mm	1490
mm	65
	3312 3006 01



Global Fluid Dynamics

SS YT28

YT28

Kg	26
mm	661
mm	H22×108
mm	34-42
mm	80
mm	60
L/s	≤58
Hz	≥35
R/min	≥260
mm	25
3312 3003 35	

FY200C

Kg	1.2
ml	200
3312 3123 07	

FT160BD

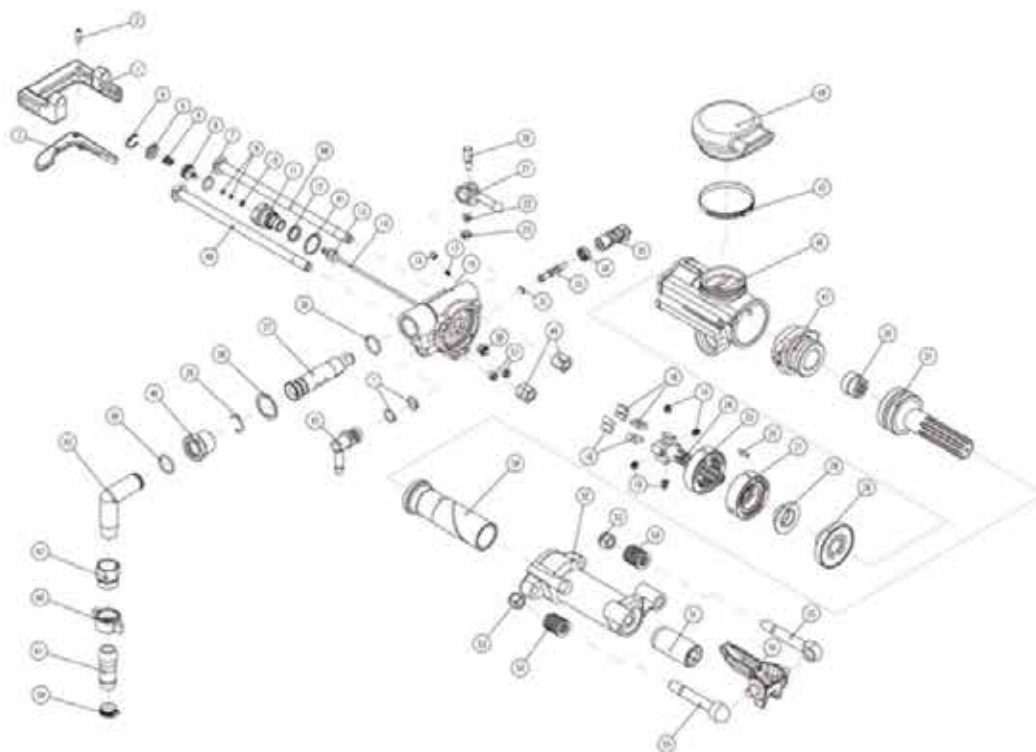
Kg	14.4
mm	1400
mm	965
mm	65
3312 3006 20	

FT160BC

Kg	16.9
mm	1800
mm	1365
mm	65
3312 3006 19	



7655



Serial	Part No.
1	7655-301
2	GB879 8x24
3	7655-302A
4	YT25-3.34
5	YT25-3.05
6	YT25-3.06
7	18x3-25
8	YT25-3.11
9	4x2-25
10	YT25-3.13
11	YT25-3.08
12	YT25-3.24
13	7655-304
14	7655-303
15	7655-319B
16	YT25-3.21
17	YT25-3.20
18	YT25-1.14

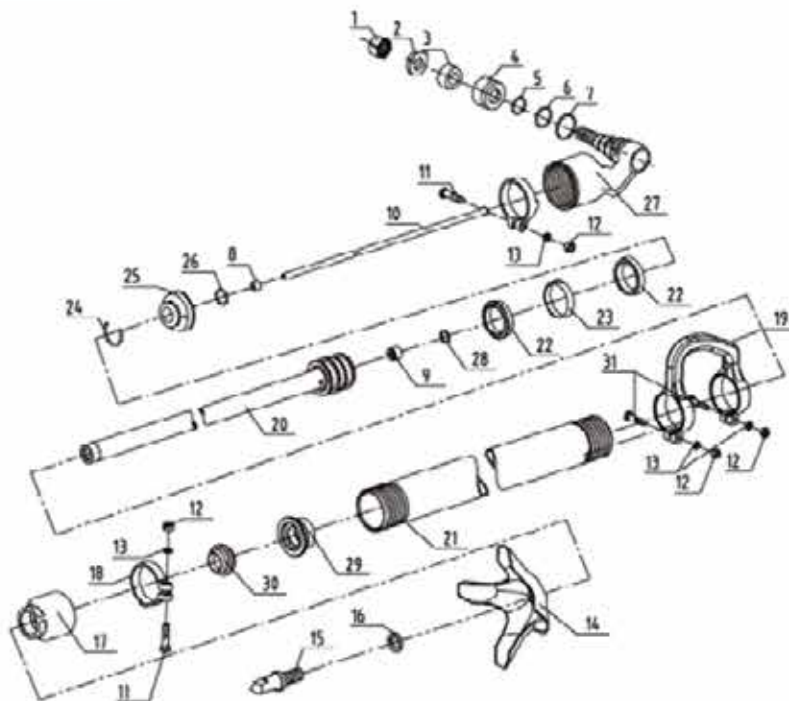
	Serial	Part No.
1	3312310016	19 YT25-1.15
1	3312310708	20 YT25-3.17A
1	3312310017	21 YT25-3.18A
1	3312310173	22 GB93 10
1	3312310159	23 GB6172 M10
1	3312310160	24 7655-107A
3	3312310627	25 7655-101
1	3312310163	26 7655-105
2	3312310642	27 7655-102
1	3312310165	28 7655-103
1	3312310161	29 7655-104
1	3312310171	30 7655-111
1	3312310019	31 7655-108A
1	3312310018	32 7655-321
1	3312310026	33 7655-317
1	3312310170	34 7655-320A
1	3312310169	35 7655-318A
4	3312310155	36 30x3-25

	Serial	Part No.
4	3312310156	37 7655-308A
1	3312310167	38 YT25-3.12
1	3312310168	39 YT25-3.33
1	3312310716	40 7655-307
1	3312310704	41 YT25-3.35
1	3312310005	42 7655-309A
1	3312310000	43 7655-315B
1	3312310004	44 YT27-106A
1	3312310001	45 No.4X
1	3312310002	46 7655-109A
1	3312310003	47 7655-110A
1	3312310009	48 7655-322
1	3312310006	49 GB58 M16
1	3312310028	50 7655-202A
1	3312310024	51 YT25-2.03
1	3312310027	52 7655-201C
1	3312310025	53 GB889 M16
2	3312310633	54 7655-205

1	3312310021
1	3312310164
1	3312310172
1	3312310020
1	3312310174
1	3312310022
1	3312310023
1	3312310125
1	3312310725
1	3312310007
1	3312310008
2	3312310029
2	3312310697
1	3312310011
1	3312310157
1	3312310010
2	3312310713
2	3312310013



FT160A /FT160C



Serial	Part No.
55	7655-203C
56	7655-207C
57	YT30-3.06
58	YT30-3.07
59	No.2A
60	25-01
61	25-04
62	25-16

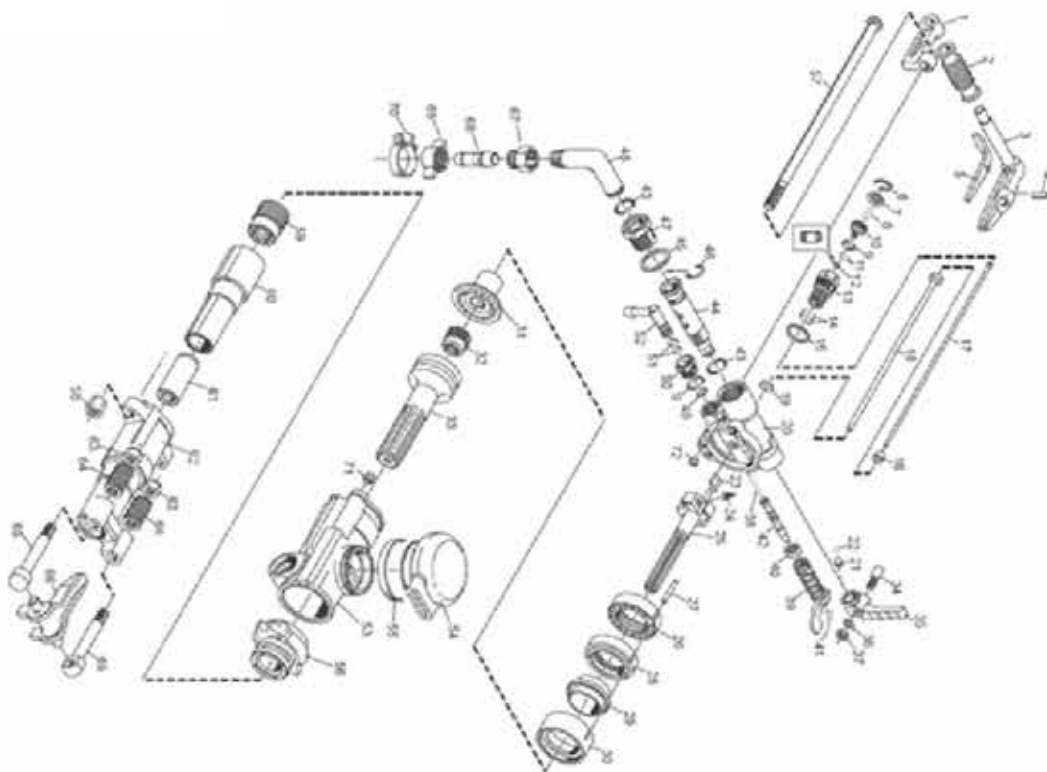
Serial	Part No.
2	3312311820
1	3312311821
2	3312310726
1	3312310727
1	3312310723
1	3312310175
1	3312310176
1	3312310177
	9 FT160A-10
	10 FT140-14 (FT160A) FT160C-3
	11 GB5782 M10x40
	12 AM10 GB53-76
	13 GB93 10
	14 FT160A-15
	15 FT160A-14
	16 GB93 22
	17 FT160A-12A
	18 FT160-11

Serial	Part No.
1	3312310338
1	3312310339
1	3312310340
1	3312310341
1	3312310677
1	3312310680
1	3312310681
1	3312310353
1	3312310347
1	3312310388
3	3312310699
3	3312311016
3	3312310716
1	3312310352
1	3312310351
1	3312310718
1	3312310357
2	3312310356

Serial	Part No.
1	3312310354
1	3312310355
1	3312310349
1	3312311034
1	3312310348
1	3312310360
1	3312310346
1	3312310345
1	3312310344
1	3312310343
1	3312310675
1	3312310342
1	3312310715
1	3312310350
1	3312310387
2	3312310700



YT27



Serial	Part No.
1	YT27-317A
2	YT27-318A
3	YT27-319A
4	GB879 8x24
5	YT27-316
6	YT25-3.34
7	YT25-3.05
8	YT25-3.06
9	18x3-25
10	YT25-3.11
11	4x2-25
12	YT25-3.13
13	YT27-302
14	24x2.4 GB1235-76
15	YT25-3.35
16	YT27-303
17	YT25-3.10
18	YT27-304

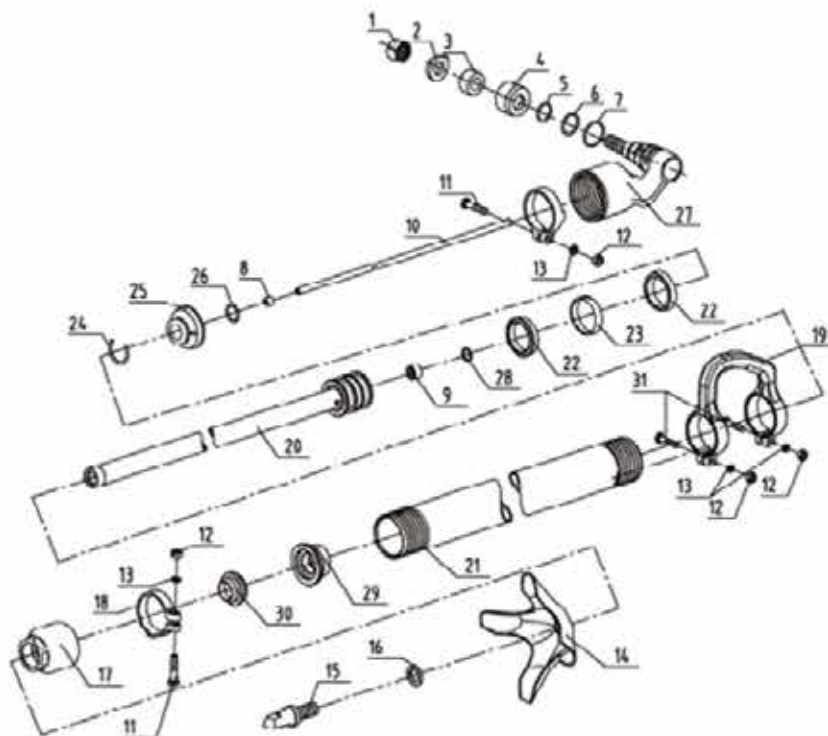
Serial	Part No.
1	3312310152 19 YT25-3.14
1	3312310153 20 YT27-301
1	3312310154 21 YT25-3.21
1	3312310708 22 YT25-3.20
1	3312310151 23 YT25-1.14
1	3312310173 24 YT25-1.15
1	3312310159 25 YT27-107
1	3312310160 26 YT27-101
2	3312310627 27 YT27-105
1	3312310163 28 YT27-111
2	3312310642 29 YT27-103
1	3312310165 30 YT27-102
1	3312310137 31 YT27-104
2	3312310671 32 7655-111
1	3312310174 33 YT27-108
1	3312310138 34 YT25-3.17A
1	3312310162 35 YT27-306
1	3312310139 36 GB93 10

Serial	Part No.
1	3312310166 37 GB6172 M10
1	3312310136 38 YT27-311
1	3312310170 39 YT27-313
1	3312310169 40 YT27-312
4	3312310155 41 YT27-314
4	3312310156 42 YT27-315
1	3312310126 43 30x3-25
1	3312310119 44 YT27-307
1	3312310123 45 YT25-3.12
1	3312310130 46 YT25-3.33
1	3312310121 47 7655-307
1	3312310120 48 7655-309A
1	3312310122 49 YT27-310
1	3312310009 50 YT27-309
1	3312310127 51 16x2.4 GB1235-76
1	3312310167 52 YT27-308
1	3312310141 53 YT27-109
1	3312310716 54 YT27-106A

Serial	Part No.
1	3312310704 55
1	3312310146 56
1	3312310148 57
2	3312310147 58
1	3312310149 59
1	3312310150 60
2	3312310633 61
1	3312310142 62
1	3312310164 63
1	3312310172 64
1	3312310020 65
1	3312310022 66
1	3312310145 67
1	3312310144 68
2	3312310667 69
1	3312310143 70
1	3312310128 71
1	3312310125 72



FT160A /FT160C



Part No.
No.4X
YT27-110
YT27-305
GB56 M16
YT27-204
YT27-202A
YT27-203
YT27-201
GB889 M16
7655-205
7655-203C
7655-207C
25-16
25-04
25-01
No.2A
YT30-3.07
YT30-3.06

	Serial	Part No.
1 3312310725	1	FT160A-1
1 3312310129	2	FT160A-2
2 3312310140	3	FT160A-3
2 3312310697	4	FT160A-4
1 3312310135	5	32x3.1 GB1235-76
1 3312310133	6	38x3.5 GB1235-76
1 3312310134	7	45x3.1 GB1235-76
1 3312310131	8	FT160A-16
2 3312310713	9	FT160A-10
2 3312310013	10	FT140-14 (FT160A)
2 3312311820	11	FT160C-3 GB5782 M10x40
1 3312311821	12	AM10 GB53-76
1 3312310177	13	GB93 10
1 3312310176	14	FT160A-15
1 3312310175	15	FT160A-14
1 3312310723	16	GB93 22
1 3312310727	17	FT160A-12A
2 3312310728	18	FT160-11

	Serial	Part No.
1 3312310338	19	FT16A-17 FT160-10(FT60C)
1 3312310339	20	FT160A-12 FT160C-2
1 3312310340	21	FT160A-11 FT160C-1
1 3312310341	22	FT160A-9
1 3312310677	23	FT160A-8
1 3312310680	24	FT160A-7
1 3312310681	25	FT160A-6
1 3312310353	26	30x3.1 GB1235-76
1 3312310347	27	FT160A-5
1 3312310386	28	GB893.1 22
3 3312310699	29	FT160A-13
3 3312311016	30	FT140-16A
3 3312310716	31	GB5782 M10X65 (FT160C)
1 3312310352		
1 3312310351		
1 3312310718		
1 3312310357		
2 3312310356		

	Serial	Part No.
1 3312310354		
1 3312310355		
1 3312310349		
1 3312311034		
1 3312310348		
1 3312310360		
2 3312310346		
1 3312310345		
1 3312310344		
1 3312310343		
1 3312310675		
1 3312310342		
1 3312310715		
1 3312310350		
1 3312310387		
2 3312310700		



YT28

Serial	Part No.	Part No.
1	3312312282	YT28-1.02
2	3312312283	YT28-1.03
3	3312312284	YT28-1.05
4	3312312285	YT28-1.08
5	3312312286	YT28-1.10
6	3312312287	YT28-1.11a
7	3312312289	YT28-1.12a
8	3312310125	YT28-1.13
9	3312312290	YT28-1.14
10	3312310041	YT24-1.04
11	3312310039	YT24-1.06
12	3312310073	YT24-1.07
13	3312310075	YT24-1.09
14	3312310156	YT24-1.15
15	3312312291	YT28-2.01b
16	3312312292	YT28-2.02a
17	3312310157	YT24-2.03
18	3312310089	YT28-2.12
19	3312310086	YT28-2.05a
20	3312310087	YT24-2.06
21	3312312306	YT24-2.07a
22	3312312293	YT28-2.09
23	3312310713	GB889 M16
24	3312312294	YT28-3.02
25	3312312295	YT28-3.03a
26	3312310162	YT28-3.04
27	3312312296	YT28-3.05
28	3312312297	YT28-3.07
29	3312312298	YT28-3.08a
30	3312312299	YT28-3.13
31	3312312300	YT28-3.14
32	3312312301	YT28-3.21
33	3312312302	YT28-3.27
34	3312310149	YT24-3.01
35	3312310726	YT24-3.06
36	3312310697	YT24-3.09

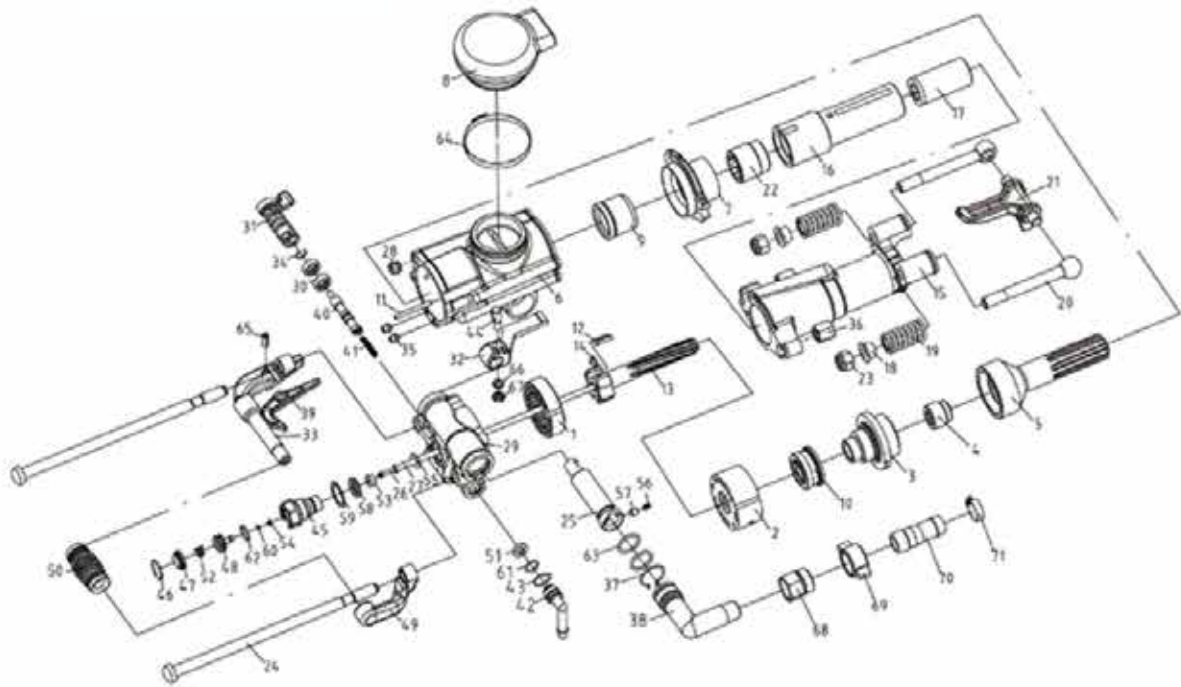
YT28

Serial	Part No.	Part No.
1	37	3312310096 YT24-3.10
1	38	3312312303 YT28-3.11
1	39	3312310098 YT24-3.12
1	40	3312310150 YT24-3.15
1	41	3312310146 YT24-3.16
1	42	3312312304 YT28-3.18
1	43	3312310106 YT24-3.19
1	44	3312310167 YT24-3.22
1	45	3312310110 YT24-3.23
1	46	3312310111 YT24-3.24
1	47	3312310112 YT24-3.25A
4	48	3312310113 YT24-3.26
1	49	3312310115 YT24-3.28
4	50	3312310116 YT24-3.29
1	51	3312310117 YT24-3.30
1	52	3312310160 YT25-3.06
1	53	3312312305 YT25-3.09
2	54	3312310165 YT25-3.13
2	55	3312310166 YT25-3.14
2	56	3312310169 YT25-3.20
1	57	3312310170 YT25-3.21
1	58	3312310171 YT25-3.24
2	59	3312310174 YT25-3.35
2	60	3312310684 8×1.9 GB1235-76
1	61	3312310670 22×2.4 GB1235-76
1	62	3312310672 25×2.4 GB1235-76
1	63	3312310679 36×3.5 GB1235-76
1	64	3312310725 D100 ZBJ15 001-87
1	65	3312310708 GB879 8×24
2	66	3312310716 GB93 10
1	67	3312310704 GB6172 M10
1	68	3312310177 Q/LB14-92-A25
1	69	3312310176 Q/LB4-92-25
1	70	3312310175 Q/LB3-94-25
2	71	3312310723 NO.2A
2		

Serial	Part No.	Part No.
1	3312312308	FT160BC-1a
1	3312312324	FT160BD-1a
1	3312312310	FT160BC-3
1	3312312325	FT160BD-3
1	3312312317	FT160BC-14
1	3312312326	FT160BD-14
1	3312312309	FT160BC-2
1	3312312311	FT160BC-4
1	3312312312	FT160BC-6
1	3312312313	FT160BC-8a
1	3312312314	FT160BC-11b
1	3312312315	FT160BC-12
1	3312312316	FT160BC-13
1	3312312318	FT160BC-17
1	3312310387	FT140B-18b
1	3312312319	FT160BC-22
1	3312312320	FT160BC-23
1	3312310359	FT160BC-30
1	3312310345	FT160BC-21
1	3312310355	FT160BC-24
1	3312310700	M10×65 GB5782-86
1	3312310370	FT140B-9
1	3312310371	FT140B-10
1	3312312321	FT160BC-25
1	3312310340	FT140B-26
1	3312310383	FT140B-27
3	3312310384	FT140B-29
1	3312310346	D65 JB/ZQ4264-86
1	3312310674	28×2.4 GB1235-76
1	3312312322	28×3.1 GB1235-76
1	3312310677	32×3.1 GB1235-76
1	3312310718	GB93 22
1	3312310716	GB93 10
1	3312310698	M10×40 GB5782-86
1	3312310704	GB6172 M10



YT28



YT28

