

MODEL	RF35-STD		RF40-STD		RF50-STD		RF55-STD		RF60-STD		RF65-STD		RF80-STD		RF88-STD		RF100-STD		RF120-STD		RF200-STD		RF200S-STD			
CPN	91002395		91001602		91001174		91000917		91001065		91000912		91001192		91001223		91001593		91001390		91001256		91002141			
DESCRIPTION	RF35 with 2-3/8 API reg pin connection		RF40 with 2-3/8 API reg pin connection		RF50 with 3-1/2 API reg pin connection		RF55 with 3-1/2 API reg pin connection & cutting backhead		RF60 with 3-1/2 API reg pin connection		RF65 with 3-1/2 API reg pin connection & cutting backhead		RF80 with 4-1/2 API reg pin connection		RF88 with 4-1/2 API reg pin connection		RF100 with 6-5/8 API reg pin connection		RF120 with 6-5/8 API reg pin connection		RF200 with 8-5/8 API reg pin connection and jetted backhead		RF200S with 8-5/8 API reg pin connection and jetted backhead			
APPLICATION SUITABILITY																										
Geotechnical/Foundation	✓		✓		✓				✓		✓		✓		✓		✓		✓		✓		✓		✓	
Waterwell/Geothermal	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
Quarry/Mining	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
Mineral Exploration					✓																					
Oil/Gas													✓		✓		✓		✓		✓		✓		✓	
AVAILABLE OPTIONS																										
Bit retainer system									✓				✓		✓		✓		✓		✓					
Jetted backhead									✓				✓		✓		✓		✓		✓		✓		✓	
Deep-hole design					✓				✓				✓		✓		✓		✓		✓		✓		✓	
GENERAL SPECIFICATIONS	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric	Imperial	Metric
Connection	2-3/8 API reg pin		2-3/8 API reg pin		3-1/2 API reg pin		3-1/2 API reg pin		3-1/2 API reg pin		3-1/2 API reg pin		4-1/2 API reg pin		4-1/2 API reg pin		6-5/8 API Reg Pin		6-5/8 API reg pin		8-5/8 API reg pin		8-5/8 API reg pin			
Bit Shank	DHD 35		CR40		QL50		QL50		QL60		QL60		QL80		CR88		N100		QL120		QL200		QL200			
Reversible casing	NO		NO		YES		YES		YES		YES		YES		YES		NO		NO		YES		YES			
Outside diameter (in/mm)	3.19	81.0	4.00	101.6	4.75	120.7	5.00	127.0	5.44	138.2	5.88	149.4	7.13	181.1	7.75	196.9	9.0	228.6	11.20	284.5	15.60	396.2	15.60	396.2		
Length w/o bit, shoulder to shoulder (in/mm)	30.0	762.8	36.8	934.0	42.4	1077.7	40.1	1017.3	42.7	1083.8	41.8	1060.7	57.2	1452.6	58.9	1496.1	59.9	1520.2	72.9	1850.6	67.2	1705.6	73.7	1872.9		
Length with bit extended (in/mm)	33.9	861.8	40.8	1036.1	46.6	1184.4	44.6	1132.6	47.8	1214.1	46.0	1169.4	63.7	1618.0	66.8	1697.7	69.0	1753.4	83.6	2124.5	78.5	1992.9	85.3	2166.9		
Length with bit retracted (in/mm)	32.6	828.5	39.7	1007.1	45.4	1153.9	43.3	1100.3	46.4	1179.1	44.9	1141.5	61.9	1571.5	64.9	1649.2	67.1	1704.3	81.4	2066.5	76.2	1935.7	83.1	211.5		
Weight w/o bit (pds/kgs)	47.7	21.7	90	41.0	145	65.9	153	69.5	186	84.5	219	99.5	443	201.4	518	235.5	740.0	336.4	1358	617.3	2663	1210.5	3055	1385.7		
Backhead across flats (in)	1.25 X 2.5 AF		1.5 x 3 AF		2 x 3-1/2 AF		2 x 3-1/2 AF		2-1/2 x 4 AF		2-1/4 x 3-1/2 AF		2-1/2 x 5-7/8 AF		2 x 6-7/16 AF		2-1/2 x 7-1/2 AF		2-1/2 x 9-1/4 AF		1" Holes		1" Holes			
Minimum bit size (in/mm)	3.50	88.9	4.50	114.3	5.25	133.4	5.5	139.7	6.00	152.4	6.50	165.1	7.88	200.2	8.75	222.3	9.63	244.6	12.25	311.2	17.50	444.5	28.00	711.2		
Maximum bit size (in/mm)	4.25	108.0	5.00	127.0	6.00	152.4	6.00	152.4	6.75	171.5	6.75	171.5	10.00	254.0	11.00	279.4	12.25	311.2	22.00	558.8	26.00	660.4	36.00	914.4		
Bore (in/mm)	2.625	66.68	3.190	81.03	3.890	98.81	4.125	104.78	4.500	114.30	4.875	123.83	5.875	149.23	6.410	162.81	7.54	191.52	9.25	234.95	12.25	311.15	12.25	311.15		
Piston weight (pds/kgs)	10.5	4.8	20.0	9.1	31.9	14.5	31.5	14.3	40.0	18.2	45	20.5	107.2	48.7	117	53.2	178.0	80.9	304	138.2	610	277.3	610	277.3		
Stroke (in/mm)	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.0	101.6	4.00	101.6	4.00	101.6	4.00	101.6		
Maximum pressure (psig/bar)	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	350.0	24.1	250.0	17.2	250.0	17.2		
Maximum choke diameter (in/mm)	0.25	6.35	0.25	6.35	0.50	12.70	0.50	12.70	0.38	9.53	0.00	0.00	0.00	0.00	0.00	0.00	.00	.00	0.88	22.23	1.40	35.56	1.40	35.56		
Make-up torque (ft-lb & N-m)	3000	4062	4000	5416	5000	6770	5000	6770	6000	8124	6000	8124	8000	10832	9000	12186	10000	13540	12000	16248	18000	24372	18000	24372		
AIR CONSUMPTION																										
100 PSI/6,9 bar (scfm/m <sup>3</sup> /min)	142	4.0	183	5.2	202	5.7	149	4.2	305	8.6	235	6.6	358	10.1	560	15.8	581	16.4	909	25.7	1584	44.7	1584	44.7		
100 psi (bpm)	1289	1289	1226	1226	1116	1116	1116	1116	1122	1122	1350	1350	830	830	968	968	950	950	585	585	701	701	701	701		
150 psi/10,3 bar (scfm/m <sup>3</sup> /min)	219	6.2	284	8.0	310	8.8	247	7.0	431	12.2	383	10.8	571	16.1	826	23.3	1000	28.2	1336	37.8	2470	69.8	2470	69.8		
150 psi (bpm)	1509	1509	1353	1353	1266	1266	1266	1266	1301	1301	1456	1456	947	947	1050	1050	1050	1050	695	695	807	807	807	807		
200 psi/ 13,8 bar (scfm/m <sup>3</sup> /min)	288	8.1	386	10.9	422	11.9	360	10.2	561	15.8	543	15.3	808	22.8	1092	30.8	1400	39.5	1811	51.2	3389	95.7	3389	95.7		
200 psi (bpm)	1699	1699	1479	1479	1401	1401	1401	1401	1453	1453	1561	1561	1063	1063	1132	1132	1150	1150	805	805	923	923	923	923		
250 psi/ 17,2 bar (scfm/m <sup>3</sup> /min)	348	9.8	488	13.8	538	15.2	488	13.8	695	19.6	713	20.1	1067	30.2	1358	38.4	1781	50.3	2333	65.9	4341	122.6	4341	122.6		
250 psi (bpm)	1858	1858	1606	1606	1521	1521	1521	1521	1576	1576	1667	1667	1180	1180	1215	1215	1250	1250	915	915	1049	1049	1049	1049		
300 psi/ 20,7 bar (scfm/m <sup>3</sup> /min)	400	11.3	590	16.7	658	18.6	632	17.8	832	23.5	894	25.3	1350	38.1	1624	45.9	2143	60.5	2903	82.0	5324	150.4	5324	150.4		
300 psi (bpm)	1,987	1,987	1733	1733	1626	1626	1626	1626	1671	1671	1773	1773	1297	1297	1297	1297	1350	1350	1025	1025	1185	1185	1185	1185		
350 psi/ 24,1 bar (scfm/m <sup>3</sup> /min)	444	12.5	691	19.5	783	22.1	791	22.3	973	27.5	1086	30.7	1656	46.8	1890	53.4	2486	70.2	3519	99.4	6340	179.1	6340	179.1		
350 psi (bpm)	2086	2086	1860	1860	1716	1716	1716	1716	1738	1738	1878	1878	1414	1414	1379	1379	1450	1450	1135	1135	1331	1331	1331	1331		