

Hydra

How to Use This Chart:

- 1) Determine your Workpiece Material from the Application Material Groups (AMG) below.
- 2) Use the icons to find Product Features.
- 3) Find the Surface Feet Per Minute (SFM) and Alpha Code.

example: 361 W

361 = SFM

W = Alpha Code used to find your Feed Rate (IPR)

- 4) To find Cutting Feed Rate, refer to chart below.

Fn	Ø						
	1/2"	19/32"	5/8"	3/4"	1"	1.3/16"	1.1/2"
S	0.004	0.005	0.005	0.006	0.007	0.007	0.009
T	0.005	0.006	0.007	0.007	0.008	0.009	0.010
U	0.008	0.009	0.009	0.009	0.011	0.012	0.014
V	0.011	0.012	0.013	0.013	0.016	0.017	0.020
W	0.015	0.016	0.017	0.018	0.019	0.019	0.020

Head Style:	R950			R960		
Head Range:	15/32" - 42.00	15/32" - 42.00	13.50 - 30.50	15/32" - 30.50	15/32" - 30.50	13.50 - 30.50
Body Style:	H853	H855	H858	H853	H855	H858
Tool Material:	HSS	HSS	HSS	HSS	HSS	HSS
Standard:						
Depth of Cut:	3XD	5XD	8XD	3XD	5XD	8XD
Finish/Coating:						
Shank:	DIN 6535HB DIN 6535HE	DIN 6535HB DIN 6535HE	DIN 6535HE	DIN 6535HB DIN 6535HE	DIN 6535HB DIN 6535HE	DIN 6535HE
Direction of Cut:						
Coolant:						

Application Material Groups (AMG)			Hardness HRC	Range:	Page #	19,25	19,28	19,31	22,25	22,28	22,31	ISO
1. Steel	1.1 Magnetic soft steel	12L14, 12L15	<120 HB	12.00 - 42.50	1.1				361W	361V	328U	P 1
	1.2 Structural Steel/ case carburising steel	1005-1025, 1214, 1215, A36	<200 HB	12.00 - 42.50	1.2				328W	328V	295U	P 1
	1.3 Plain Carbon steel	1030-1060, 1050-1060, 1144-1146	<24	14.00 - 42.50	1.3	328W	328V	295U				P 2
	1.4 Alloy steel	4140,4340,52100,8620 H11-H41,A2,D2,01,P20,420	<24	14.00 - 42.50	1.4	279W	279V	246U				P 3
	1.5 Alloy steel/ Hardened and tempered steel	4140,4340,52100,8620 H11-H41,A2,D2,01,P20,420	>24<38	14.00 - 42.50	1.5	279W	279V	246U				P 4
	1.6 Alloy steel/ Hardened and tempered steel	4140,4340,52100,8620 H11-H41,A2,D2,01,P20,420	>38	14.00 - 42.50	1.6	197T	197T	197S				H 1
	1.7 Alloy steel Hardened	A2-D2, H10-H41, L1-L6, M1-M42, T1	49-55	14.00 - 42.50	1.7							H 3
	1.8 Alloy steel Hardened	A2-D2, H10-H41, L1-L6, M1-M42, T1	55-63	14.00 - 42.50	1.8							H 4
2. Stainless Steel	2.1 Free machining Stainless Steel	200, 303, 416, 420F, 430F, 440	<24	12.00 - 42.50	2.1				197V	164V	148U	M 1
	2.2 Austenitic	301, 302, 304, 316, 321, 330, CUSTOM 455, AM-350	<24	12.00 - 42.50	2.2				164T	164S	131S	M 3
	2.3 Ferritic + Austenitic, Martensitic	318-329, 400-446, DUPLEX	<32	12.00 - 42.50	2.3				131T	131S	115S	M 2
	2.4 Precipitation Hardened	15-5PH, Custom 450 17-4PH	<32	12.00 - 42.50	2.4	115T	115T	98S				S 2
3. Cast Iron	3.1 Lamellar graphite	Grey, G10, Gg40, J431C, A48 CLASS 20	<150 HB	12.00 - 42.50	3.1				394V	374V	348U	K 1
	3.2 Lamellar graphite	Grey, GG25-Gg40, J158, A48 CLASS 40-60	>150 HB<32	12.00 - 42.50	3.2				380V	354V	328U	K 2
	3.3 Nodular graphite/ Malleable Cast Iron	A220, A436, A439, A602, Black, GGG40-GGG70	<200 HB	12.00 - 42.50	3.3	289V	279V	262U				K 3
	3.4 Nodular graphite/ Malleable Cast Iron	Black Gts/Gtw, J434C	>200 HB<32	12.00 - 42.50	3.4	289V	279V	262U				K 4
4. Titanium	4.1 Titanium, unalloyed	Commercially Pure	<200 HB	14.00 - 42.50	4.1				148T	148T	115S	S 1
	4.2 Titanium, alloyed	6Al4V, 6A14V-2Sn, Monel, Monel K	<28	14.00 - 42.50	4.2				115T	115T	98S	S 2
	4.3 Titanium, alloyed	6A14V-4Mo, 7A14V-4Mo, 4911-4967	>28<38	14.00 - 42.50	4.3				98S	98S	82S	S 3
5. Nickel	5.1 Nickel, unalloyed	Commercially Pure, 17644, 200, 5553	<150 HB	14.00 - 42.50	5.1				115T	115T	98S	S 1
	5.2 Nickel, alloyed	Monel 400, Hastelloy C, Inconel 625, Waspaloy	<28	14.00 - 42.50	5.2				98S	98S	82S	S 2
	5.3 Nickel, alloyed	Inconel 718, Nimonic 75-95, Rene 41, Inconel 825, A286	>28<38	14.00 - 42.50	5.3				82S	82S	66S	S 3
6. Copper	6.1 Copper	Commercially Pure	<100 HB	14.00 - 42.50	6.1							N 3
	6.2 β-Brass, Bronze	314-340, 350-370	<200 HB	14.00 - 42.50	6.2							N 4
	6.3 α-Brass	Alloyed Cu + Al + Fe, Long Chipping	<200 HB	14.00 - 42.50	6.3							N 3
	6.4 High Strength Bronze	Ampco 18-25	<49	14.00 - 42.50	6.4							N 4
7. Aluminium Magnesium	7.1 Al, Mg, unalloyed	Commercially Pure	<100 HB	14.00 - 42.50	7.1							N 1
	7.2 Al alloyed, Si<0.5%	6061 T6, 7075, 314-340	<150 HB	14.00 - 42.50	7.2							N 1
	7.3 Al alloyed, Si>0.5%<10%	6061 T6, 380-390	<120 HB	14.00 - 42.50	7.3							N 1
	7.4 Al alloyed, Si>10% Mg alloys	Magnesium Whisker Reinforced	<120 HB	14.00 - 42.50	7.4							N 2
8. Synthetic Materials	8.1 Thermoplastics	Ultrad, Polystrol	---	14.00 - 42.50	8.1							O
	8.2 Thermosetting plastics	Bakelit, Pertinax	---	14.00 - 42.50	8.2							O
	8.3 Reinforced plastic materials	CFK, GFKAFK	---	14.00 - 42.50	8.3							O
9. Hard Mat.	9.1 Cermets (Metal-ceramics)	Ferrotic	<54	14.00 - 42.50	9.1							H
10. Graphite	10.1 Standard graphite		---	14.00 - 42.50	10.1							O

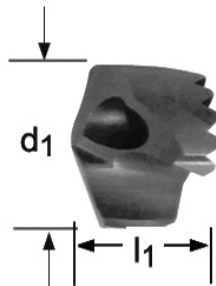
Hydra Drill Head



R950

1.3 1.4 1.5 1.6 2.4 3.3 3.4

Replaceable heads in tough micro-grain carbide for quick and easy tool changes. High productivity in a wide range of steels and harder materials. Superior hole accuracy and precise repeatable tolerances. Special Ti-phos coating for longer tool life.



R950

HM

140°

15/32 - 42.00

* For more information on Hydra, see page 500

d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_1 mm	Pack Qty	R950
15/32	11.91	0.4688	9.1	1	0010860
	12.00	0.4724	9.1	1	0010877
	12.10	0.4764	9.1	1	0037904
	12.20	0.4803	9.1	1	0037911
31/64	12.30	0.4844	9.1	1	0010884
	12.50	0.4921	9.4	1	0010907
	12.60	0.4961	9.4	1	0037928
1/2	12.70	0.5000	9.4	1	0010914
	12.80	0.5039	9.4	1	0037935
	12.90	0.5079	9.4	1	0037942
	13.00	0.5118	9.7	1	0010921
33/64	13.10	0.5156	9.7	1	0010938
	13.20	0.5197	9.7	1	0037959
	17/32	13.49	0.5313	9.7	1
	13.50	0.5315	10.3	1	0010952
	13.60	0.5354	10.3	1	0037966
	13.70	0.5394	10.3	1	0037973
	13.80	0.5433	10.3	1	0037980
	35/64	13.89	0.5469	10.3	1
	14.00	0.5512	10.3	1	0010983
	14.10	0.5551	10.3	1	0037997
	14.20	0.5591	10.3	1	0038000
	9/16	14.29	0.5625	10.3	1
37/64	14.50	0.5709	10.3	1	0011010
	14.60	0.5748	11.0	1	0038017
	14.68	0.5781	11.0	1	0011140
	14.70	0.5787	11.0	1	0038024
	14.80	0.5827	11.0	1	0038031
	15.00	0.5906	11.0	1	0011201
19/32	15.08	0.5938	11.0	1	0011218
	15.10	0.5945	11.0	1	0038048
	15.20	0.5984	11.0	1	0038055
	15.24	0.6000	11.0	1	0032268

d _i Øh ₇ Inch	d _i Øh ₇ mm	d _i decimal Inch	l ₁ mm	Pack Qty	R950
39/64	15.48	0.6094	11.0	1	0011232
	15.50	0.6102	11.0	1	0011362
	15.60	0.6142	11.6	1	0038062
5/8	15.70	0.6181	11.6	1	0038079
	15.88	0.6250	11.6	1	0011379
	16.00	0.6299	11.6	1	0011386
	16.08	0.6331	11.6	1	0032275
	16.10	0.6339	11.6	1	0038086
41/64	16.20	0.6378	11.6	1	0038093
	16.27	0.6406	11.6	1	0011393
	16.30	0.6417	11.6	1	0032282
	16.50	0.6496	11.6	1	0011409
	16.60	0.6535	12.2	1	0038109
21/32	16.67	0.6563	12.2	1	0012161
	16.70	0.6575	12.2	1	0038116
	17.00	0.6693	12.2	1	0012185
43/64	17.07	0.6719	12.2	1	0012215
	17.10	0.6732	12.2	1	0038123
	17.20	0.6772	12.2	1	0038130
11/16	17.46	0.6875	12.2	1	0012239
	17.50	0.6890	12.2	1	0012253
	17.60	0.6929	12.9	1	0032299
	17.70	0.6969	12.9	1	0038147
	17.86	0.7031	12.9	1	0012260
45/64	18.00	0.7087	12.9	1	0012277
	18.10	0.7126	12.9	1	0038154
	18.20	0.7165	12.9	1	0038161
	18.26	0.7188	12.9	1	0012284
23/32	18.50	0.7283	12.9	1	0012307
	18.60	0.7323	13.5	1	0038178
	18.65	0.7344	13.5	1	0012321
	18.70	0.7362	13.5	1	0038185
	18.90	0.7441	13.5	1	0038192
47/64	19.00	0.7480	13.5	1	0012338
	19.05	0.7500	13.5	1	0012345
	19.10	0.7520	13.5	1	0038208
	19.20	0.7559	13.5	1	0038215
	19.25	0.7579	13.5	1	0032305
3/4	19.30	0.7598	13.5	1	0032312
	19.35	0.7618	13.5	1	0032329
	19.45	0.7656	13.5	1	0012376
	19.50	0.7677	13.5	1	0012383
	19.60	0.7717	14.1	1	0038222
	19.70	0.7756	14.1	1	0038239
25/32	19.84	0.7813	14.1	1	0012406
	20.00	0.7874	14.1	1	0012413
	20.24	0.7969	14.1	1	0012437
51/64	20.50	0.8071	14.1	1	0012451
	20.64	0.8125	14.8	1	0012468
13/16	21.00	0.8268	14.8	1	0012475
	21.03	0.8281	14.8	1	0012536
53/64	21.43	0.8438	14.8	1	0012550
	21.50	0.8465	14.8	1	0012574
27/32	21.83	0.8594	15.0	1	0012604
	22.00	0.8661	15.0	1	0012628
55/64	22.22	0.8750	15.0	1	0012635
	22.50	0.8858	15.0	1	0032336
7/8	22.62	0.8906	15.0	1	0012642
	22.70	0.8937	15.0	1	0038246
	23.00	0.9055	15.1	1	0012666
29/32	23.02	0.9063	15.1	1	0012673
	23.42	0.9219	15.1	1	0012680
59/64	23.50	0.9252	15.1	1	0038253
	23.81	0.9375	15.4	1	0012703
15/16	24.00	0.9449	15.4	1	0012727

d ₁ Øh ₇ Inch	d ₁ Øh ₇ mm	d ₁ decimal Inch	l ₁ mm	Pack Qty	R950
61/64	24.21	0.9531	15.4	1	0012741
	24.50	0.9646	15.4	1	0038260
31/32	24.61	0.9688	15.4	1	0012772
	25.00	0.9844	15.8	1	0012819
63/64	25.00	0.9844	15.8	1	0012826
	25.40	1.0000	15.8	1	0012833
1"	25.50	1.0039	15.8	1	0038277
	25.65	1.0098	15.8	1	0032343
1.1/64	25.80	1.0156	15.8	1	0012840
	26.00	1.0236	16.4	1	0013090
1.1/32	26.19	1.0313	16.4	1	0013120
	26.50	1.0433	16.4	1	0038284
1.3/64	26.59	1.0469	16.4	1	0013229
1.1/16	26.99	1.0625	17.1	1	0013243
	27.00	1.0630	17.1	1	0013267
1.5/64	27.38	1.0781	17.1	1	0013274
	27.50	1.0827	17.1	1	0038291
1.3/32	27.78	1.0938	17.1	1	0013281
	28.00	1.1024	17.7	1	0013304
1.7/64	28.18	1.1094	17.7	1	0013311
	28.50	1.1220	17.7	1	0038307
1.1/8	28.58	1.1250	17.7	1	0013328
1.9/64	28.97	1.1406	18.3	1	0013342
	29.00	1.1417	18.3	1	0013366
1.5/32	29.37	1.1563	18.3	1	0013380
	29.50	1.1614	18.3	1	0038314
1.11/64	29.77	1.1719	18.3	1	0013427
	30.00	1.1811	19.0	1	0013434
1.3/16	30.16	1.1875	19.0	1	0013441
	30.50	1.2008	19.0	1	0013465
1.7/32	30.96	1.2188	21.0	1	46104481
	31.00	1.2205	21.0	1	46104482
1.1/4	31.75	1.2500	21.0	1	46104483
	32.00	1.2598	21.0	1	46104484
1.19/64	32.50	1.2795	21.0	1	46104485
	32.94	1.2969	21.0	1	46104486
	33.00	1.2992	21.0	1	46104487
	33.50	1.3189	21.0	1	46104488
1.11/32	34.00	1.3386	23.0	1	46104489
	34.13	1.3438	23.0	1	46104530
1.3/8	34.50	1.3583	23.0	1	46104531
	34.93	1.3750	23.0	1	46104532
	35.00	1.3780	23.0	1	46104533
	36.00	1.4173	23.0	1	46104534
1.27/64	36.12	1.4219	23.0	1	46104535
	36.50	1.4370	23.0	1	46104536
	37.00	1.4567	25.0	1	46104537
	37.31	1.4688	25.0	1	46104538
1.15/32	37.50	1.4764	25.0	1	46104539
	38.00	1.4961	25.0	1	46104540
1.1/2	38.10	1.5000	25.0	1	46104541
	38.50	1.5157	25.0	1	46104542
1.17/32	38.89	1.5313	25.0	1	46104543
	39.00	1.5354	25.0	1	46104544
	39.50	1.5551	25.0	1	46104545
	39.69	1.5625	27.0	1	46104546
1.9/16	40.00	1.5748	27.0	1	46104547
	41.00	1.6142	27.0	1	46104548
1.5/8	41.28	1.6250	27.0	1	46104549
	42.00	1.6535	27.0	1	46104550

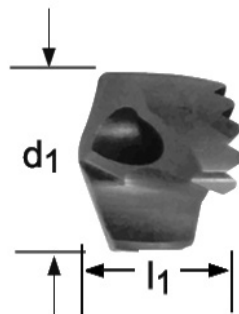
Hydra Drill Head



R960

1.1 1.2 2.1 2.2 2.3 3.1 3.2 4.1 4.2 4.3 5.1 5.3

Replaceable heads in tough micro-grain carbide for quick and easy tool changes. High productivity across a wide range of stainless steel, cast iron & heat resistant materials. Superior hole accuracy and precise repeatable tolerances. Special Ti-phos coating for longer tool life.



R960



HM



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15/32 - 30.50

d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_1 mm	Pack Qty	R960
15/32	11.91	0.4688	9.1	1	0013472
	12.00	0.4724	9.1	1	0013489
	12.10	0.4764	9.1	1	0038338
	12.20	0.4803	9.1	1	0038376
31/64	12.30	0.4844	9.1	1	0013496
	12.50	0.4921	9.4	1	0013519
1/2	12.60	0.4961	9.4	1	0038413
	12.70	0.5000	9.4	1	0013526
	12.80	0.5039	9.4	1	0038437
	12.90	0.5079	9.4	1	0038451
33/64	13.00	0.5118	9.7	1	0013533
	13.10	0.5156	9.7	1	0013540
	13.20	0.5197	9.7	1	0038468
17/32	13.49	0.5313	9.7	1	0013557
	13.50	0.5315	10.3	1	0016022
	13.60	0.5354	10.3	1	0038499
	13.70	0.5394	10.3	1	0038529
35/64	13.80	0.5433	10.3	1	0038543
	13.89	0.5469	10.3	1	0016039
	14.00	0.5512	10.3	1	0016046
	14.10	0.5551	10.3	1	0038567
9/16	14.20	0.5591	10.3	1	0038574
	14.29	0.5625	10.3	1	0016053
	14.50	0.5709	10.3	1	0016060
37/64	14.60	0.5748	11.0	1	0038581
	14.68	0.5781	11.0	1	0016077
	14.70	0.5787	11.0	1	0039601
	14.80	0.5827	11.0	1	0039618
	15.00	0.5906	11.0	1	0016084
19/32	15.08	0.5938	11.0	1	0016091
	15.10	0.5945	11.0	1	0039625
	15.20	0.5984	11.0	1	0039632
	15.24	0.6000	11.0	1	0032350

d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_1 mm	Pack Qty	R960
39/64	15.48	0.6094	11.0	1	0016107
	15.50	0.6102	11.0	1	0016114
	15.60	0.6142	11.6	1	0039649
5/8	15.70	0.6181	11.6	1	0039656
	15.88	0.6250	11.6	1	0016121
	16.00	0.6299	11.6	1	0016138
	16.08	0.6331	11.6	1	0032367
	16.10	0.6339	11.6	1	0039663
41/64	16.20	0.6378	11.6	1	0039670
	16.27	0.6406	11.6	1	0016145
	16.30	0.6417	11.6	1	0032374
	16.50	0.6496	11.6	1	0016152
21/32	16.60	0.6535	12.2	1	0039687
	16.67	0.6563	12.2	1	0016169
	16.70	0.6575	12.2	1	0039694
	17.00	0.6693	12.2	1	0016176
43/64	17.07	0.6719	12.2	1	0016183
	17.10	0.6732	12.2	1	0039700
	17.20	0.6772	12.2	1	0039717
11/16	17.46	0.6875	12.2	1	0016190
	17.50	0.6890	12.2	1	0016503
	17.60	0.6929	12.9	1	0032381
	17.70	0.6969	12.9	1	0039724
45/64	17.86	0.7031	12.9	1	0016640
	18.00	0.7087	12.9	1	0016664
	18.10	0.7126	12.9	1	0039731
	18.20	0.7165	12.9	1	0039748
23/32	18.26	0.7188	12.9	1	0016671
	18.50	0.7283	12.9	1	0016688
	18.60	0.7323	13.5	1	0039755
47/64	18.65	0.7344	13.5	1	0016695
	18.70	0.7362	13.5	1	0039762
	18.90	0.7441	13.5	1	0039779
	19.00	0.7480	13.5	1	0016817
3/4	19.05	0.7500	13.5	1	0016879
	19.10	0.7520	13.5	1	0039786
	19.20	0.7559	13.5	1	0039793
	19.25	0.7579	13.5	1	0032398
	19.30	0.7598	13.5	1	0032404
49/64	19.35	0.7618	13.5	1	0032411
	19.45	0.7656	13.5	1	0016886
	19.50	0.7677	13.5	1	0016947
	19.60	0.7717	14.1	1	0039809
25/32	19.70	0.7756	14.1	1	0039816
	19.84	0.7813	14.1	1	0016954
	20.00	0.7874	14.1	1	0017111
51/64	20.24	0.7969	14.1	1	0017128
	20.50	0.8071	14.1	1	0017159
13/16	20.64	0.8125	14.8	1	0017197
	21.00	0.8268	14.8	1	0017166
53/64	21.03	0.8281	14.8	1	0017203
27/32	21.43	0.8438	14.8	1	0017227
	21.50	0.8465	14.8	1	0017234
55/64	21.83	0.8594	15.0	1	0017241
	22.00	0.8661	15.0	1	0017258
7/8	22.22	0.8750	15.0	1	0017371
	22.50	0.8858	15.0	1	0032428
57/64	22.62	0.8906	15.0	1	0017401
	22.70	0.8937	15.0	1	0039823
	23.00	0.9055	15.1	1	0017425
29/32	23.02	0.9063	15.1	1	0017432
59/64	23.42	0.9219	15.1	1	0017456
	23.50	0.9252	15.1	1	0039830
15/16	23.81	0.9375	15.4	1	0017562
	24.00	0.9449	15.4	1	0017579

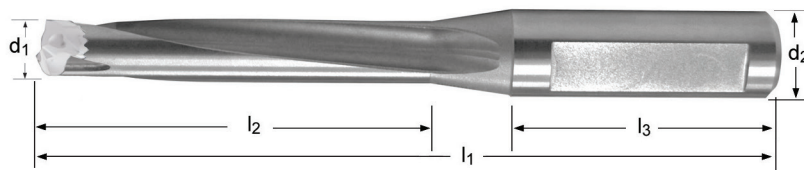
d_1 $\varnothing h_7$ Inch	d_1 $\varnothing h_7$ mm	d_1 decimal Inch	l_1 mm	Pack Qty	R960
61/64	24.21	0.9531	15.4	1	0017586
	24.50	0.9646	15.4	1	0039847
31/32	24.61	0.9688	15.4	1	0017593
	25.00	0.9844	15.8	1	0017722
63/64	25.00	0.9844	15.8	1	0017746
1"	25.40	1.0000	15.8	1	0017753
	25.50	1.0039	15.8	1	0039854
	25.65	1.0098	15.8	1	0032435
1.1/64	25.80	1.0156	15.8	1	0018958
	26.00	1.0236	16.4	1	0018965
1.1/32	26.19	1.0312	16.4	1	0018972
	26.50	1.0433	16.4	1	0039878
1.3/64	26.59	1.0469	16.4	1	0018989
1.1/16	26.99	1.0625	17.1	1	0018996
	27.00	1.0630	17.1	1	0019009
1.5/64	27.38	1.0781	17.1	1	0019016
	27.50	1.0827	17.1	1	0039885
1.3/32	27.78	1.0938	17.1	1	0019023
1.7/64	28.00	1.1024	17.7	1	0019030
	28.18	1.1094	17.7	1	0019047
	28.50	1.1220	17.7	1	0039892
1.1/8	28.58	1.1250	17.7	1	0019054
1.9/64	28.97	1.1406	18.3	1	0019061
	29.00	1.1417	18.3	1	0019078
1.5/32	29.37	1.1563	18.3	1	0019085
	29.50	1.1614	18.3	1	0039908
1.11/64	29.77	1.1719	18.3	1	0019092
	30.00	1.1811	19.0	1	0019108
1.3/16	30.16	1.1875	19.0	1	0019115
	30.50	1.2008	19.0	1	0019122



3xD Hydra Bodies

H853

Cylindrical shank with flat for multi-purpose tool holding. Allows accurate clamping for reliable use of internal coolant.



Four (4) screws and one (1) screwdriver are included with a drill body

H853
Coolant Through

DIN 6535HB
DIN 6535HE

3XD

HSS

140°

12.00 - 42.50

* For more information on Hydra, see page 500

Hydra Head d_1 Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	3xD Hydra Body - Fractional Shank					3xD Hydra Body - Metric Shank				
			d_2 Ø h_6 inch	l_2 mm	l_1 mm	l_3 mm	H853 EDP#	d_2 Ø h_6 mm	l_2 mm	l_1 mm	l_3 mm	H853 EDP#
15/32	0010860	0013472	5/8	44.0	105.0	48.0	0033043	16.0	44.0	105.0	48.0	0017777
12.0	0010877	0013489	5/8	44.0	105.0	48.0	0033043	16.0	44.0	105.0	48.0	0017777
12.1	0037904	0038338	5/8	44.0	105.0	48.0	0033043	16.0	44.0	105.0	48.0	0017777
12.2	0037911	0038376	5/8	44.0	105.0	48.0	0033043	16.0	44.0	105.0	48.0	0017777
31/64	0010884	0013496	5/8	44.0	105.0	48.0	0033043	16.0	44.0	105.0	48.0	0017777
12.5	0010907	0013519	5/8	44.0	105.0	48.0	0033050	16.0	44.0	105.0	48.0	0017791
12.6	0037928	0038413	5/8	44.0	105.0	48.0	0033050	16.0	44.0	105.0	48.0	0017791
1/2	0010914	0013526	5/8	44.0	105.0	48.0	0033050	16.0	44.0	105.0	48.0	0017791
12.8	0037935	0038437	5/8	44.0	105.0	48.0	0033050	16.0	44.0	105.0	48.0	0017791
12.9	0037942	0038451	5/8	44.0	105.0	48.0	0033050	16.0	44.0	105.0	48.0	0017791
13.0	0010921	0013533	5/8	47.0	110.0	48.0	0033067	16.0	47.0	110.0	48.0	0017906
33/64	0010938	0013540	5/8	47.0	110.0	48.0	0033067	16.0	47.0	110.0	48.0	0017906
13.2	0037959	0038468	5/8	47.0	110.0	48.0	0033067	16.0	47.0	110.0	48.0	0017906
17/32	0010945	0013557	5/8	47.0	110.0	48.0	0033067	16.0	47.0	110.0	48.0	0017906
13.5	0010952	0016022	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
13.6	0037966	0038499	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
13.7	0037973	0038529	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
13.8	0037980	0038543	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
35/64	0010969	0016039	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
14.0	0010983	0016046	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
14.1	0037997	0038567	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
14.2	0038000	0038574	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
9/16	0011003	0016053	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
14.5	0011010	0016060	3/4	52.5	116.5	48.0	0033074	16.0	52.5	116.5	48.0	0017913
14.6	0038017	0038581	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
37/64	0011140	0016077	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
14.7	0038024	0039601	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
14.8	0038031	0039618	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
15.0	0011201	0016084	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
19/32	0011218	0016091	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293

Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	3xD Hydra Body - Fractional Shank					3xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ inch	l ₂ mm	l ₁ mm	l ₃ mm	H853 EDP#	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H853 EDP#
15.1	0038048	0039625	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
15.2	0038055	0039632	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
15.24	0032268	0032350	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
39/64	0011232	0016107	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
15.5	0011362	0016114	3/4	55.5	126.5	50.0	0033081	20.0	55.5	126.5	50.0	0018293
15.6	0038062	0039649	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
15.7	0038079	0039656	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
5/8	0011379	0016121	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.0	0011386	0016138	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.08	0032275	0032367	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.1	0038086	0039663	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.2	0038093	0039670	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
41/64	0011393	0016145	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.3	0032282	0032374	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.5	0011409	0016152	3/4	59.5	131.5	50.0	0033098	20.0	59.5	131.5	50.0	0018316
16.6	0038109	0039687	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
21/32	0012161	0016169	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
16.7	0038116	0039694	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
17.0	0012185	0016176	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
43/64	0012215	0016183	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
17.1	0038123	0039700	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
17.2	0038130	0039717	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
11/16	0012239	0016190	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
17.5	0012253	0016503	3/4	62.5	136.5	50.0	0033104	20.0	62.5	136.5	50.0	0018323
17.6	0032299	0032381	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
17.7	0038147	0039724	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
45/64	0012260	0016640	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
18.0	0012277	0016664	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
18.1	0038154	0039731	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
18.2	0038161	0039748	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
23/32	0012284	0016671	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
18.5	0012307	0016688	3/4	66.5	141.5	50.0	0033111	20.0	66.5	141.5	50.0	0018330
18.6	0038178	0039755	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
47/64	0012321	0016695	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
18.7	0038185	0039762	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
18.9	0038192	0039779	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.0	0012338	0016817	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
3/4	0012345	0016879	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.1	0038208	0039786	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.2	0038215	0039793	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.25	0032305	0032398	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.3	0032312	0032404	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.35	0032329	0032411	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
49/64	0012376	0016886	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.5	0012383	0016947	1	69.5	156.5	56.0	0033128	25.0	69.5	156.5	56.0	0018347
19.6	0038222	0039809	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
19.7	0038239	0039816	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
25/32	0012406	0016954	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
20.0	0012413	0017111	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
51/64	0012437	0017128	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
20.5	0012451	0017159	1	73.5	156.5	56.0	0033135	25.0	73.5	156.5	56.0	0018354
13/16	0012468	0017197	1	76.5	156.5	56.0	0033142	25.0	76.5	156.5	56.0	0018361
21.0	0012475	0017166	1	76.5	156.5	56.0	0033142	25.0	76.5	156.5	56.0	0018361
53/64	0012536	0017203	1	76.5	156.5	56.0	0033142	25.0	76.5	156.5	56.0	0018361
27/32	0012550	0017227	1	76.5	156.5	56.0	0033142	25.0	76.5	156.5	56.0	0018361
21.5	0012574	0017234	1	76.5	156.5	56.0	0033142	25.0	76.5	156.5	56.0	0018361
55/64	0012604	0017241	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
22.0	0012628	0017258	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
7/8	0012635	0017371	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
22.5	0032336	0032428	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
57/64	0012642	0017401	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
22.7	0038246	0039823	1	80.1	161.5	56.0	0033159	25.0	80.1	161.5	56.0	0018378
23.0	0012666	0017425	1	82.5	160.5	56.0	0033166	25.0	82.5	160.5	56.0	0018385
29/32	0012673	0017432	1	82.5	160.5	56.0	0033166	25.0	82.5	160.5	56.0	0018385
59/64	0012680	0017456	1	82.5	160.5	56.0	0033166	25.0	82.5	160.5	56.0	0018385



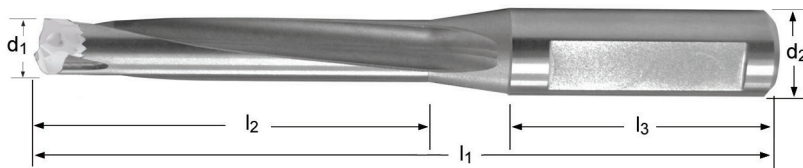
Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	3xD Hydra Body - Fractional Shank					3xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ inch	l ₂ mm	l ₁ mm	l ₃ mm	H853 EDP#	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H853 EDP#
23.5	0038253	0039830	1	82.5	160.5	56.0	0033166	25.0	82.5	160.5	56.0	0018385
15/16	0012703	0017562	1	86.2	170.2	60.0	0033173	32.0	86.2	170.2	60.0	0018392
24.0	0012727	0017579	1	86.2	170.2	60.0	0033173	32.0	86.2	170.2	60.0	0018392
61/64	0012741	0017586	1	86.2	170.2	60.0	0033173	32.0	86.2	170.2	60.0	0018392
24.5	0038260	0039847	1	86.2	170.2	60.0	0033173	32.0	86.2	170.2	60.0	0018392
31/32	0012772	0017593	1	86.2	170.2	60.0	0033173	32.0	86.2	170.2	60.0	0018392
25.0	0012819	0017722	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
63/64	0012826	0017746	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
1	0012833	0017753	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
25.5	0038277	0039854	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
25.65	0032343	0032435	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
1.1/64	0012840	0018958	1.1/4	88.0	170.0	60.0	0033180	32.0	88.0	170.0	60.0	0018408
26.0	0013090	0018965	1.1/4	92.0	175.0	60.0	0033197	32.0	92.0	175.0	60.0	0018415
1.1/32	0013120	0018972	1.1/4	92.0	175.0	60.0	0033197	32.0	92.0	175.0	60.0	0018415
26.5	0038284	0039878	1.1/4	92.0	175.0	60.0	0033197	32.0	92.0	175.0	60.0	0018415
1.3/64	0013229	0018989	1.1/4	92.0	175.0	60.0	0033197	32.0	92.0	175.0	60.0	0018415
1.1/16	0013243	0018996	1.1/4	94.0	175.0	60.0	0033210	32.0	94.0	175.0	60.0	0018422
27.0	0013267	0019009	1.1/4	94.0	175.0	60.0	0033210	32.0	94.0	175.0	60.0	0018422
1.5/64	0013274	0019016	1.1/4	94.0	175.0	60.0	0033210	32.0	94.0	175.0	60.0	0018422
27.5	0038291	0039885	1.1/4	94.0	175.0	60.0	0033210	32.0	94.0	175.0	60.0	0018422
1.3/32	0013281	0019023	1.1/4	94.0	175.0	60.0	0033210	32.0	94.0	175.0	60.0	0018422
28.0	0013304	0019030	1.1/4	97.0	180.0	60.0	0033227	32.0	97.0	180.0	60.0	0018439
1.7/64	0013311	0019047	1.1/4	97.0	180.0	60.0	0033227	32.0	97.0	180.0	60.0	0018439
28.5	0038307	0039892	1.1/4	97.0	180.0	60.0	0033227	32.0	97.0	180.0	60.0	0018439
1.1/8	0013328	0019054	1.1/4	97.0	180.0	60.0	0033227	32.0	97.0	180.0	60.0	0018439
1.9/64	0013342	0019061	1.1/4	100.0	185.0	60.0	0033234	32.0	100.0	185.0	60.0	0018446
29.0	0013366	0019078	1.1/4	100.0	185.0	60.0	0033234	32.0	100.0	185.0	60.0	0018446
1.5/32	0013380	0019085	1.1/4	100.0	185.0	60.0	0033234	32.0	100.0	185.0	60.0	0018446
29.5	0038314	0039908	1.1/4	100.0	185.0	60.0	0033234	32.0	100.0	185.0	60.0	0018446
1.11/64	0013427	0019092	1.1/4	100.0	185.0	60.0	0033234	32.0	100.0	185.0	60.0	0018446
30.0	0013434	0019108	1.1/4	104.0	185.0	60.0	0033425	32.0	104.0	185.0	60.0	0018453
1.3/16	0013441	0019115	1.1/4	104.0	185.0	60.0	0033425	32.0	104.0	185.0	60.0	0018453
30.5	0013465	0019122	1.1/4	104.0	185.0	60.0	0033425	32.0	104.0	185.0	60.0	0018453
1.7/32	46104481	—	—	—	—	—	—	32.0	111.5	196.5	60.0	46111405
31.00	46104482	—	—	—	—	—	—	32.0	111.5	196.5	60.0	46111405
1.1/4	46104483	—	—	—	—	—	—	32.0	111.5	196.5	60.0	46111405
32.00	46104484	—	—	—	—	—	—	32.0	111.5	196.5	60.0	46111405
32.50	46104485	—	—	—	—	—	—	32.0	116.5	201.5	60.0	46111406
1.19/64	46104486	—	—	—	—	—	—	32.0	116.5	201.5	60.0	46111406
33.00	46104487	—	—	—	—	—	—	32.0	116.5	201.5	60.0	46111406
33.50	46104488	—	—	—	—	—	—	32.0	116.5	201.5	60.0	46111406
34.00	46104489	—	—	—	—	—	—	40.0	121.5	216.5	70.0	46111407
1.11/32	46104530	—	—	—	—	—	—	40.0	121.5	216.5	70.0	46111407
34.50	46104531	—	—	—	—	—	—	40.0	121.5	216.5	70.0	46111407
1.3/8	46104532	—	—	—	—	—	—	40.0	121.5	216.5	70.0	46111407
35.00	46104533	—	—	—	—	—	—	40.0	121.5	216.5	70.0	46111407
36.00	46104534	—	—	—	—	—	—	40.0	125.5	221.5	70.0	46111408
1.27/64	46104535	—	—	—	—	—	—	40.0	125.5	221.5	70.0	46111408
36.50	46104536	—	—	—	—	—	—	40.0	125.5	221.5	70.0	46111408
37.00	46104537	—	—	—	—	—	—	40.0	131.5	226.5	70.0	46111409
1.15/32	46104538	—	—	—	—	—	—	40.0	131.5	226.5	70.0	46111409
37.50	46104539	—	—	—	—	—	—	40.0	131.5	226.5	70.0	46111409
38.00	46104540	—	—	—	—	—	—	40.0	131.5	226.5	70.0	46111409
1.1/2	46104541	—	—	—	—	—	—	40.0	136.5	231.5	70.0	46111410
38.50	46104542	—	—	—	—	—	—	40.0	136.5	231.5	70.0	46111410
1.17/32	46104543	—	—	—	—	—	—	40.0	136.5	231.5	70.0	46111410
39.00	46104544	—	—	—	—	—	—	40.0	136.5	231.5	70.0	46111410
39.50	46104545	—	—	—	—	—	—	40.0	136.5	231.5	70.0	46111410
1.9/16	46104546	—	—	—	—	—	—	40.0	146.5	246.5	70.0	46111411
40.00	46104547	—	—	—	—	—	—	40.0	146.5	246.5	70.0	46111411
41.00	46104548	—	—	—	—	—	—	40.0	146.5	246.5	70.0	46111411
1.5/8	46104549	—	—	—	—	—	—	40.0	151.5	251.5	70.0	46111412
42.00	46104550	—	—	—	—	—	—	40.0	151.5	251.5	70.0	46111412



5xD Hydra Bodies

H855

Cylindrical shank with flat for multi-purpose tool holding. Allows accurate clamping for reliable use of internal coolant.



Four (4) screws and one (1) screwdriver are included with a drill body

* For more information on Hydra, see page 500


**H855
Coolant
Through**

DIN
6535HB
DIN
6535HE

5XD

HSS

140°



12.00 - 42.50

Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	5xD Hydra Body - Fractional Shank					5xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ inch	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#
15/32	0010860	0013472	5/8	69.0	130.0	48.0	0033586	16.0	69.0	130.0	48.0	0018460
12.0	0010877	0013489	5/8	69.0	130.0	48.0	0033586	16.0	69.0	130.0	48.0	0018460
12.1	0037904	0038338	5/8	69.0	130.0	48.0	0033586	16.0	69.0	130.0	48.0	0018460
12.2	0037911	0038376	5/8	69.0	130.0	48.0	0033586	16.0	69.0	130.0	48.0	0018460
31/64	0010884	0013496	5/8	69.0	130.0	48.0	0033586	16.0	69.0	130.0	48.0	0018460
12.5	0010907	0013519	5/8	69.0	130.0	48.0	0034095	16.0	69.0	130.0	48.0	0018477
12.6	0037928	0038413	5/8	69.0	130.0	48.0	0034095	16.0	69.0	130.0	48.0	0018477
1/2	0010914	0013526	5/8	69.0	130.0	48.0	0034095	16.0	69.0	130.0	48.0	0018477
12.8	0037935	0038437	5/8	69.0	130.0	48.0	0034095	16.0	69.0	130.0	48.0	0018477
12.9	0037942	0038451	5/8	69.0	130.0	48.0	0034095	16.0	69.0	130.0	48.0	0018477
13.0	0010921	0013533	5/8	74.0	140.0	48.0	0034132	16.0	74.0	140.0	48.0	0018484
33/64	0010938	0013540	5/8	74.0	140.0	48.0	0034132	16.0	74.0	140.0	48.0	0018484
13.2	0037959	0038468	5/8	74.0	140.0	48.0	0034132	16.0	74.0	140.0	48.0	0018484
17/32	0010945	0013557	5/8	74.0	140.0	48.0	0034132	16.0	74.0	140.0	48.0	0018484
13.5	0010952	0016022	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
13.6	0037966	0038499	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
13.7	0037973	0038529	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
13.8	0037980	0038543	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
35/64	0010969	0016039	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
14.0	0010983	0016046	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
14.1	0037997	0038567	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
14.2	0038000	0038574	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
9/16	0011003	0016053	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
14.5	0011010	0016060	3/4	81.5	146.5	48.0	0034699	16.0	81.5	146.5	48.0	0018491
14.6	0038017	0038581	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
37/64	0011140	0016077	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
14.7	0038024	0039601	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
14.8	0038031	0039618	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
15.0	0011201	0016084	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
19/32	0011218	0016091	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507



Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	5xD Hydra Body - Fractional Shank					5xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ inch	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#
15.1	0038048	0039625	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
15.2	0038055	0039632	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
15.24	0032268	0032350	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
39/64	0011232	0016107	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
15.5	0011362	0016114	3/4	86.5	156.5	50.0	0034705	20.0	86.5	156.5	50.0	0018507
15.6	0038062	0039649	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
15.7	0038079	0039656	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
5/8	0011379	0016121	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.0	0011386	0016138	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.08	0032275	0032367	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.1	0038086	0039663	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.2	0038093	0039670	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
41/64	0011393	0016145	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.3	0032282	0032374	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.5	0011409	0016152	3/4	92.5	166.5	50.0	0034712	20.0	92.5	166.5	50.0	0018514
16.6	0038109	0039687	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
21/32	0012161	0016169	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
16.7	0038116	0039694	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
17.0	0012185	0016176	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
43/64	0012215	0016183	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
17.1	0038123	0039700	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
17.2	0038130	0039717	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
11/16	0012239	0016190	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
17.5	0012253	0016503	3/4	97.5	171.5	50.0	0034736	20.0	97.5	171.5	50.0	0018521
17.6	0032299	0032381	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
17.7	0038147	0039724	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
45/64	0012260	0016640	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
18.0	0012277	0016664	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
18.1	0038154	0039731	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
18.2	0038161	0039748	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
23/32	0012284	0016671	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
18.5	0012307	0016688	3/4	103.5	176.5	50.0	0034743	20.0	103.5	176.5	50.0	0018538
18.6	0038178	0039755	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
47/64	0012321	0016695	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
18.7	0038185	0039762	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
18.9	0038192	0039779	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.0	0012338	0016817	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
3/4	0012345	0016879	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.1	0038208	0039786	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.2	0038215	0039793	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.25	0032305	0032398	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.3	0032312	0032404	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.35	0032329	0032411	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
49/64	0012376	0016886	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.5	0012383	0016947	1	108.5	191.5	56.0	0034798	25.0	108.5	191.5	56.0	0018545
19.6	0038222	0039809	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
19.7	0038239	0039816	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
25/32	0012406	0016954	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
20.0	0012413	0017111	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
51/64	0012437	0017128	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
20.5	0012451	0017159	1	114.5	196.5	56.0	0034804	25.0	114.5	196.5	56.0	0018552
13/16	0012468	0017197	1	119.5	196.5	56.0	0034811	25.0	119.5	196.5	56.0	0018569
21.0	0012475	0017166	1	119.5	196.5	56.0	0034811	25.0	119.5	196.5	56.0	0018569
53/64	0012536	0017203	1	119.5	196.5	56.0	0034811	25.0	119.5	196.5	56.0	0018569
27/32	0012550	0017227	1	119.5	196.5	56.0	0034811	25.0	119.5	196.5	56.0	0018569
21.5	0012574	0017234	1	119.5	196.5	56.0	0034811	25.0	119.5	196.5	56.0	0018569
55/64	0012604	0017241	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
22.0	0012628	0017258	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
7/8	0012635	0017371	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
22.5	0032336	0032428	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
57/64	0012642	0017401	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
22.7	0038246	0039823	1	125.1	201.1	56.0	0034835	25.0	125.1	201.1	56.0	0018576
23.0	0012666	0017425	1	129.5	210.5	56.0	0034842	25.0	129.5	210.5	56.0	0018583
29/32	0012673	0017432	1	129.5	210.5	56.0	0034842	25.0	129.5	210.5	56.0	0018583



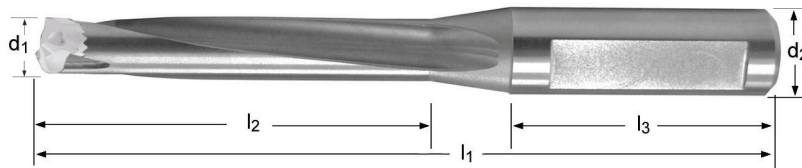
Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	5xD Hydra Body - Fractional Shank					5xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ inch	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#	d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H855 EDP#
59/64	0012680	0017456	1	129.5	210.5	56.0	0034842	25.0	129.5	210.5	56.0	0018583
23.5	0038253	0039830	1	129.5	210.5	56.0	0034842	25.0	129.5	210.5	56.0	0018583
15/16	0012703	0017562	1	135.2	220.2	60.0	0034859	32.0	135.2	220.2	60.0	0018590
24.0	0012727	0017579	1	135.2	220.2	60.0	0034859	32.0	135.2	220.2	60.0	0018590
61/64	0012741	0017586	1	135.2	220.2	60.0	0034859	32.0	135.2	220.2	60.0	0018590
24.5	0038260	0039847	1	135.2	220.2	60.0	0034859	32.0	135.2	220.2	60.0	0018590
31/32	0012772	0017593	1	135.2	220.2	60.0	0034859	32.0	135.2	220.2	60.0	0018590
25.0	0012819	0017722	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
63/64	0012826	0017746	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
1	0012833	0017753	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
25.5	0038277	0039854	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
25.65	0032343	0032435	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
1.1/64	0012840	0018958	1.1/4	140.0	225.0	60.0	0034866	32.0	140.0	225.0	60.0	0018606
26.0	0013090	0018965	1.1/4	146.0	230.0	60.0	0034873	32.0	146.0	230.0	60.0	0018613
1.1/32	0013120	0018972	1.1/4	146.0	230.0	60.0	0034873	32.0	146.0	230.0	60.0	0018613
26.5	0038284	0039878	1.1/4	146.0	230.0	60.0	0034873	32.0	146.0	230.0	60.0	0018613
1.3/64	0013229	0018989	1.1/4	146.0	230.0	60.0	0034873	32.0	146.0	230.0	60.0	0018613
1.1/16	0013243	0018996	1.1/4	151.0	235.0	60.0	0034897	32.0	151.0	235.0	60.0	0018620
27.0	0013267	0019009	1.1/4	151.0	235.0	60.0	0034897	32.0	151.0	235.0	60.0	0018620
1.5/64	0013274	0019016	1.1/4	151.0	235.0	60.0	0034897	32.0	151.0	235.0	60.0	0018620
27.5	0038291	0039885	1.1/4	151.0	235.0	60.0	0034897	32.0	151.0	235.0	60.0	0018620
1.3/32	0013281	0019023	1.1/4	151.0	235.0	60.0	0034897	32.0	151.0	235.0	60.0	0018620
28.0	0013304	0019030	1.1/4	157.0	240.0	60.0	0034903	32.0	157.0	240.0	60.0	0018637
1.7/64	0013311	0019047	1.1/4	157.0	240.0	60.0	0034903	32.0	157.0	240.0	60.0	0018637
28.5	0038307	0039892	1.1/4	157.0	240.0	60.0	0034903	32.0	157.0	240.0	60.0	0018637
1.1/8	0013328	0019054	1.1/4	157.0	240.0	60.0	0034903	32.0	157.0	240.0	60.0	0018637
1.9/64	0013342	0019061	1.1/4	162.0	245.0	60.0	0034934	32.0	162.0	245.0	60.0	0018644
29.0	0013366	0019078	1.1/4	162.0	245.0	60.0	0034934	32.0	162.0	245.0	60.0	0018644
1.5/32	0013380	0019085	1.1/4	162.0	245.0	60.0	0034934	32.0	162.0	245.0	60.0	0018644
29.5	0038314	0039908	1.1/4	162.0	245.0	60.0	0034934	32.0	162.0	245.0	60.0	0018644
1.11/64	0013427	0019092	1.1/4	162.0	245.0	60.0	0034934	32.0	162.0	245.0	60.0	0018644
30.0	0013434	0019108	1.1/4	167.0	255.0	60.0	0034965	32.0	167.0	255.0	60.0	0018651
1.3/16	0013441	0019115	1.1/4	167.0	255.0	60.0	0034965	32.0	167.0	255.0	60.0	0018651
30.5	0013465	0019122	1.1/4	167.0	255.0	60.0	0034965	32.0	167.0	255.0	60.0	0018651
1.7/32	46104481	—	—	—	—	—	—	32.0	176.5	261.5	60.0	46111413
31.00	46104482	—	—	—	—	—	—	32.0	176.5	261.5	60.0	46111413
1.1/4	46104483	—	—	—	—	—	—	32.0	176.5	261.5	60.0	46111413
32.00	46104484	—	—	—	—	—	—	32.0	176.5	261.5	60.0	46111413
32.50	46104485	—	—	—	—	—	—	32.0	186.5	271.5	60.0	46111414
1.19/64	46104486	—	—	—	—	—	—	32.0	186.5	271.5	60.0	46111414
33.00	46104487	—	—	—	—	—	—	32.0	186.5	271.5	60.0	46111414
33.50	46104488	—	—	—	—	—	—	32.0	186.5	271.5	60.0	46111414
34.00	46104489	—	—	—	—	—	—	40.0	196.5	291.5	70.0	46111415
1.11/32	46104530	—	—	—	—	—	—	40.0	196.5	291.5	70.0	46111415
34.50	46104531	—	—	—	—	—	—	40.0	196.5	291.5	70.0	46111415
1.3/8	46104532	—	—	—	—	—	—	40.0	196.5	291.5	70.0	46111415
35.00	46104533	—	—	—	—	—	—	40.0	196.5	291.5	70.0	46111415
36.00	46104534	—	—	—	—	—	—	40.0	201.5	296.5	70.0	46111416
1.27/64	46104535	—	—	—	—	—	—	40.0	201.5	296.5	70.0	46111416
36.50	46104536	—	—	—	—	—	—	40.0	201.5	296.5	70.0	46111416
37.00	46104537	—	—	—	—	—	—	40.0	211.5	306.5	70.0	46111417
1.15/32	46104538	—	—	—	—	—	—	40.0	211.5	306.5	70.0	46111417
37.50	46104539	—	—	—	—	—	—	40.0	211.5	306.5	70.0	46111417
38.00	46104540	—	—	—	—	—	—	40.0	211.5	306.5	70.0	46111417
1.1/2	46104541	—	—	—	—	—	—	40.0	211.5	316.5	70.0	46111418
38.50	46104542	—	—	—	—	—	—	40.0	211.5	316.5	70.0	46111418
1.17/32	46104543	—	—	—	—	—	—	40.0	211.5	316.5	70.0	46111418
39.00	46104544	—	—	—	—	—	—	40.0	211.5	316.5	70.0	46111418
39.50	46104545	—	—	—	—	—	—	40.0	211.5	316.5	70.0	46111418
1.9/16	46104546	—	—	—	—	—	—	40.0	226.5	325.5	70.0	46111419
40.00	46104547	—	—	—	—	—	—	40.0	226.5	325.5	70.0	46111419
41.00	46104548	—	—	—	—	—	—	40.0	226.5	325.5	70.0	46111419
1.5/8	46104549	—	—	—	—	—	—	40.0	236.5	336.5	70.0	46111420
42.00	46104550	—	—	—	—	—	—	40.0	236.5	336.5	70.0	46111420



8xD Hydra Bodies

H858

Cylindrical shank with flat for multi-purpose tool holding. Allows accurate clamping for reliable use of internal coolant.



Four (4) screws and one (1) screwdriver are included with a drill body

H858
Coolant Through

DIN 6535HB
DIN 6535HE

8XD

HSS

140°

14.00 - 42.50

* For more information on Hydra, see page 500

Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	8xD Hydra Body - Metric Shank				H858 EDP#
			d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	
13.5	0010952	0016022	16.0	124.5	191.5	48.0	0018668
13.6	0037966	0038499	16.0	124.5	191.5	48.0	0018668
13.7	0037973	0038529	16.0	124.5	191.5	48.0	0018668
13.8	0037980	0038543	16.0	124.5	191.5	48.0	0018668
35/64	0010969	0016039	16.0	124.5	191.5	48.0	0018668
14.0	0010983	0016046	16.0	124.5	191.5	48.0	0018668
14.1	0037997	0038567	16.0	124.5	191.5	48.0	0018668
14.2	0038000	0038574	16.0	124.5	191.5	48.0	0018668
9/16	0011003	0016053	16.0	124.5	191.5	48.0	0018668
14.5	0011010	0016060	16.0	124.5	191.5	48.0	0018668
14.6	0038017	0038581	20.0	133.5	201.5	50.0	0018675
37/64	0011140	0016077	20.0	133.5	201.5	50.0	0018675
14.7	0038024	0039601	20.0	133.5	201.5	50.0	0018675
14.8	0038031	0039618	20.0	133.5	201.5	50.0	0018675
15.0	0011201	0016084	20.0	133.5	201.5	50.0	0018675
19/32	0011218	0016091	20.0	133.5	201.5	50.0	0018675
15.1	0038048	0039625	20.0	133.5	201.5	50.0	0018675
15.2	0038055	0039632	20.0	133.5	201.5	50.0	0018675
15.24	0032268	0032350	20.0	133.5	201.5	50.0	0018675
39/64	0011232	0016107	20.0	133.5	201.5	50.0	0018675
15.5	0011362	0016114	20.0	133.5	201.5	50.0	0018675
15.6	0038062	0039649	20.0	141.5	211.5	50.0	0018682
15.7	0038079	0039656	20.0	141.5	211.5	50.0	0018682
5/8	0011379	0016121	20.0	141.5	211.5	50.0	0018682
16.0	0011386	0016138	20.0	141.5	211.5	50.0	0018682
16.08	0032275	0032367	20.0	141.5	211.5	50.0	0018682
16.1	0038086	0039663	20.0	141.5	211.5	50.0	0018682
16.2	0038093	0039670	20.0	141.5	211.5	50.0	0018682
41/64	0011393	0016145	20.0	141.5	211.5	50.0	0018682
16.3	0032282	0032374	20.0	141.5	211.5	50.0	0018682



Hydra Head d ₁ Ø	Hydra Head R950 EDP#	Hydra Head R960 EDP#	8xD Hydra Body - Metric Shank				
			d ₂ Øh ₆ mm	l ₂ mm	l ₁ mm	l ₃ mm	H858 EDP#
16.5	0011409	0016152	20.0	141.5	211.5	50.0	0018682
16.6	0038109	0039687	20.0	150.5	221.5	50.0	0018699
21/32	0012161	0016169	20.0	150.5	221.5	50.0	0018699
16.7	0038116	0039694	20.0	150.5	221.5	50.0	0018699
17.0	0012185	0016176	20.0	150.5	221.5	50.0	0018699
43/64	0012215	0016183	20.0	150.5	221.5	50.0	0018699
17.1	0038123	0039700	20.0	150.5	221.5	50.0	0018699
17.2	0038130	0039717	20.0	150.5	221.5	50.0	0018699
11/16	0012239	0016190	20.0	150.5	221.5	50.0	0018699
17.5	0012253	0016503	20.0	150.5	221.5	50.0	0018699
17.6	0032299	0032381	20.0	158.5	226.5	50.0	0018705
17.7	0038147	0039724	20.0	158.5	226.5	50.0	0018705
45/64	0012260	0016640	20.0	158.5	226.5	50.0	0018705
18.0	0012277	0016664	20.0	158.5	226.5	50.0	0018705
18.1	0038154	0039731	20.0	158.5	226.5	50.0	0018705
18.2	0038161	0039748	20.0	158.5	226.5	50.0	0018705
23/32	0012284	0016671	20.0	158.5	226.5	50.0	0018705
18.5	0012307	0016688	20.0	158.5	226.5	50.0	0018705
18.6	0038178	0039755	25.0	167.5	251.5	56.0	0018712
47/64	0012321	0016695	25.0	167.5	251.5	56.0	0018712
18.7	0038185	0039762	25.0	167.5	251.5	56.0	0018712
18.9	0038192	0039779	25.0	167.5	251.5	56.0	0018712
19.0	0012338	0016817	25.0	167.5	251.5	56.0	0018712
3/4	0012345	0016879	25.0	167.5	251.5	56.0	0018712
19.1	0038208	0039786	25.0	167.5	251.5	56.0	0018712
19.2	0038215	0039793	25.0	167.5	251.5	56.0	0018712
19.25	0032305	0032398	25.0	167.5	251.5	56.0	0018712
19.3	0032312	0032404	25.0	167.5	251.5	56.0	0018712
19.35	0032329	0032411	25.0	167.5	251.5	56.0	0018712
49/64	0012376	0016886	25.0	167.5	251.5	56.0	0018712
19.5	0012383	0016947	25.0	167.5	251.5	56.0	0018712
19.6	0038222	0039809	25.0	175.5	264.5	56.0	0018729
19.7	0038239	0039816	25.0	175.5	264.5	56.0	0018729
25/32	0012406	0016954	25.0	175.5	264.5	56.0	0018729
20.0	0012413	0017111	25.0	175.5	264.5	56.0	0018729
51/64	0012437	0017128	25.0	175.5	264.5	56.0	0018729
20.5	0012451	0017159	25.0	175.5	264.5	56.0	0018729
13/16	0012468	0017197	25.0	184.5	266.5	56.0	0018736
21.0	0012475	0017166	25.0	184.5	266.5	56.0	0018736
53/64	0012536	0017203	25.0	184.5	266.5	56.0	0018736
27/32	0012550	0017227	25.0	184.5	266.5	56.0	0018736
21.5	0012574	0017234	25.0	184.5	266.5	56.0	0018736
55/64	0012604	0017241	25.0	192.1	271.1	56.0	0018743
22.0	0012628	0017258	25.0	192.1	271.1	56.0	0018743
7/8	0012635	0017371	25.0	192.1	271.1	56.0	0018743
22.5	0032336	0032428	25.0	192.1	271.1	56.0	0018743
57/64	0012642	0017401	25.0	192.1	271.1	56.0	0018743
22.7	0038246	0039823	25.0	192.1	271.1	56.0	0018743
23.0	0012666	0017425	25.0	200.5	280.5	56.0	0018750
29/32	0012673	0017432	25.0	200.5	280.5	56.0	0018750
59/64	0012680	0017456	25.0	200.5	280.5	56.0	0018750
23.5	0038253	0039830	25.0	200.5	280.5	56.0	0018750
15/16	0012703	0017562	32.0	208.2	295.2	60.0	0018767
24.0	0012727	0017579	32.0	208.2	295.2	60.0	0018767
61/64	0012741	0017586	32.0	208.2	295.2	60.0	0018767
24.5	0038260	0039847	32.0	208.2	295.2	60.0	0018767
31/32	0012772	0017593	32.0	208.2	295.2	60.0	0018767
25.0	0012819	0017722	32.0	217.0	300.0	60.0	0018774
63/64	0012826	0017746	32.0	217.0	300.0	60.0	0018774
1	0012833	0017753	32.0	217.0	300.0	60.0	0018774
25.5	0038277	0039854	32.0	217.0	300.0	60.0	0018774
25.65	0032343	0032435	32.0	217.0	300.0	60.0	0018774
1.1/64	0012840	0018958	32.0	217.0	300.0	60.0	0018774
26.0	0013090	0018965	32.0	225.0	310.0	60.0	0018781

Hydra Head $d_1 \varnothing$	Hydra Head R950 EDP#	Hydra Head R960 EDP#	8xD Hydra Body - Metric Shank				
			d_2 $\varnothing h_6$ mm	l_2 mm	l_1 mm	l_3 mm	H858 EDP#
1.1/32	0013120	0018972	32.0	225.0	310.0	60.0	0018781
26.5	0038284	0039878	32.0	225.0	310.0	60.0	0018781
1.3/64	0013229	0018989	32.0	225.0	310.0	60.0	0018781
1.1/16	0013243	0018996	32.0	234.0	320.0	60.0	0018798
27.0	0013267	0019009	32.0	234.0	320.0	60.0	0018798
1.5/64	0013274	0019016	32.0	234.0	320.0	60.0	0018798
27.5	0038291	0039885	32.0	234.0	320.0	60.0	0018798
1.3/32	0013281	0019023	32.0	234.0	320.0	60.0	0018798
28.0	0013304	0019030	32.0	242.0	325.0	60.0	0018804
1.7/64	0013311	0019047	32.0	242.0	325.0	60.0	0018804
28.5	0038307	0039892	32.0	242.0	325.0	60.0	0018804
1.1/8	0013328	0019054	32.0	242.0	325.0	60.0	0018804
1.9/64	0013342	0019061	32.0	251.0	335.0	60.0	0018811
29.0	0013366	0019078	32.0	251.0	335.0	60.0	0018811
1.5/32	0013380	0019085	32.0	251.0	335.0	60.0	0018811
29.5	0038314	0039908	32.0	251.0	335.0	60.0	0018811
1.11/64	0013427	0019092	32.0	251.0	335.0	60.0	0018811
30.0	0013434	0019108	32.0	259.0	345.0	60.0	0018828
1.3/16	0013441	0019115	32.0	259.0	345.0	60.0	0018828
30.5	0013465	0019122	32.0	259.0	345.0	60.0	0018828
1.7/32	46104481	—	32.0	271.5	356.5	60.0	46111421
31.00	46104482	—	32.0	271.5	356.5	60.0	46111421
1.1/4	46104483	—	32.0	271.5	356.5	60.0	46111421
32.00	46104484	—	32.0	271.5	356.5	60.0	46111421
32.50	46104485	—	40.0	286.5	371.5	60.0	46111422
1.19/64	46104486	—	40.0	286.5	371.5	60.0	46111422
33.00	46104487	—	40.0	286.5	371.5	60.0	46111422
33.50	46104488	—	40.0	286.5	371.5	60.0	46111422
34.00	46104489	—	40.0	301.5	396.5	70.0	46111423
1.11/32	46104530	—	40.0	301.5	396.5	70.0	46111423
34.50	46104531	—	40.0	301.5	396.5	70.0	46111423
1.3/8	46104532	—	40.0	301.5	396.5	70.0	46111423
35.00	46104533	—	40.0	301.5	396.5	70.0	46111423
36.00	46104534	—	40.0	311.5	406.5	70.0	46111424
1.27/64	46104535	—	40.0	311.5	406.5	70.0	46111424
36.50	46104536	—	40.0	311.5	406.5	70.0	46111424
37.00	46104537	—	40.0	326.5	421.5	70.0	46111425
1.15/32	46104538	—	40.0	326.5	421.5	70.0	46111425
37.50	46104539	—	40.0	326.5	421.5	70.0	46111425
38.00	46104540	—	40.0	326.5	421.5	70.0	46111425
1.1/2	46104541	—	40.0	336.5	431.5	70.0	46111426
38.50	46104542	—	40.0	336.5	431.5	70.0	46111426
1.17/32	46104543	—	40.0	336.5	431.5	70.0	46111426
39.00	46104544	—	40.0	336.5	431.5	70.0	46111426
39.50	46104545	—	40.0	336.5	431.5	70.0	46111426
1.9/16	46104546	—	40.0	351.5	451.5	70.0	46111427
40.00	46104547	—	40.0	351.5	451.5	70.0	46111427
41.00	46104548	—	40.0	351.5	451.5	70.0	46111427
1.5/8	46104549	—	40.0	361.5	461.5	70.0	46111428
42.00	46104550	—	40.0	361.5	461.5	70.0	46111428

Screws & Screw Driver

H860

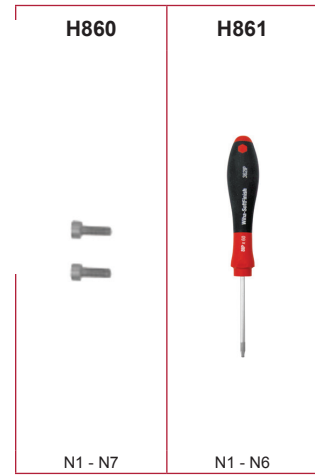
Set of 2 Hydra Screws

H861

Hydra Drill Screw Driver



NOTE: Four (4) screws and one (1) screwdriver are included with a drill body



* For more information on Hydra, see page 500

H860	H861	For Hydra Head Range	Pack Qty	H860	H861
H860N1	H861N1	15/32 - 15.5	1	0018835	0018897
H860N2	H861N2	15.6 - 18.5	1	0018842	0018903
H860N3	H861N3	18.6 - 21.5	1	0018859	0018910
H860N3	H861N3	55/64 - 31/32	1	0018866	0018910
H860N4	H861N4	25.0 - 1.3/32	1	0018873	0018927
H860N5	H861N5	28.0 - 33.5	1	0018880	0018934
H860N6	H861N6	34.0 - 42.0	1	46111949	46260354