

# ORION METRIC SHANK

HIGH PERFORMANCE DRILLS

**3.00mm - 4.10mm DIAMETER**

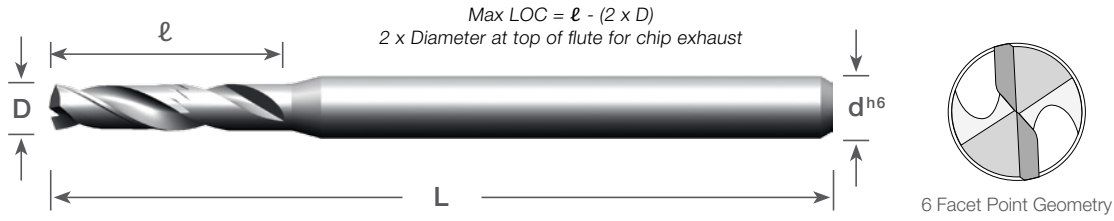
Match with HYDROS Coolant Fed Deep Drills Product Line

Increased Positional Accuracy

Less Heat Build Up

Excellent Pilot Hole Drill

External Coolant



## STANDARD Flute Length



Symbol Descriptions [Page 7](#)

Dimensions (mm)				Point Angle	AITiN Nano	
$D^{m7}$	$d^{h6}$	$l$	$L$		Part Number	Stock
3.00	4	15.0	60	142°	165-1181AG591	●
3.10	4	15.5	60	142°	165-1220AG610	●
3.20	4	16.0	60	142°	165-1260AG630	●
3.30	4	16.5	60	142°	165-1299AG650	●
3.40	4	17.0	60	142°	165-1339AG669	●
3.50	4	17.5	60	142°	165-1378AG689	●
3.60	4	18.0	60	142°	165-1417AG709	●
3.70	4	18.5	60	142°	165-1457AG728	●
3.80	4	19.0	60	142°	165-1496AG748	●
3.90	4	19.5	60	142°	165-1535AG768	●
4.00	6	20.0	70	142°	165-1575AG787	●
4.10	6	20.5	70	142°	165-1614AG807	●

Match with HYDROS Deep Hole Coolant Drills **Series 865** [Page 62](#)

SERIES 165 WORKPIECE MATERIAL															
Coating	P	P	H	H	M	K	N	N	N	N	N	N	S	S	
	Steel ~30HRC	Steel 30-40HRC	Hardened Steel ~55HRC	Hardened Steel ~68HRC	Stainless Steel	Cast Iron	Aluminum	Graphite	Copper Alloy	CFRP	Plastic	Thermoset Plastic	High Density Plastic	Nickel / Cobalt	Titanium Alloy
AITiN Nano	★	★	★	★	★	☆		☆	☆		☆	☆	☆	★	★

★ : Priority ☆ : Applicable Materials

Symbol Descriptions [Page 7](#)

● : U.S. Stock Standard  
 ■ : NOT STOCKED - Call for Delivery

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 Pricing & Availability at [KyoceraPrecisionTools.com](http://KyoceraPrecisionTools.com)