

SERIES HS60

NorthStar™ brand

Hollowshaft Encoder

Key Features

- Industry-Leading 2-7/8" Hollowshaft Capability
- Multi-Stage Sealing for Wash-Down Applications
- Stainless Steel Shaft for Corrosion Resistance
- Dual-Split Clamping Collar for Positive Shaft Engagement
- Oversized Bearings for Long Service Life
- Magnetic Sensor Technology and Encapsulated Electronics Resist Moisture and Contamination



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS

Code: Incremental
Pulses per Revolution: 64-2048
Phasing Sense: A leads B for Counter-Clockwise rotation (CCW) viewing encoder-mounted end
Quadrature Phasing: 90° ± 22°
Symmetry: 180° ± 54°
Index: Once per revolution

ELECTRICAL

Input Voltage Requirement: 5-15 or 5-26 Volts DC
Current Requirement:
 With Electrical Option L: 45 mA typical per sensor module plus line driver load
 With Electrical Option V or 5: 65 mA typical per sensor module plus line driver load
Output Signals:
 With Elec Option L: 5-15 V Line Driver, 150mA
 With Elec Option V: 5-26 V Line Driver, 100mA
 With Elec Option 5: 5V Line Driver, 150mA
Frequency Response: 0 - 120kHz Data & Index
Electrical Immunity: 2kV ESD, Reverse Polarity, Short Circuit
Connector: 10 pin industrial duty latching, sealed NEMA 4 & 12, IP65; MS connector or pig-tail

MECHANICAL

Mating Shaft Sizes: 1-1/8" to 2-7/8"
Shaft Speed: Labyrinth Shaft Seal: 3,600 RPM; V-Ring Shaft Seal: 1,000 RPM
Mounting Configuration: Hollow Shaft mount with Anti-Rotation Tether
Housing Material: Hard Anodized Aluminum W/Stainless Steel Hub
Acceleration Rate: 3,600 rpm/sec max
Shaft Length Required: 2.36" min
Allowable Shaft End-Play: ± 0.150" (tether limit)
Allowable Shaft Runout: 0.015" TIR typical (rpm dependent)

ENVIRONMENTAL

Operating Temperature Range: -20°C to +80°C
Storage Temperature Range: -40°C to +120°C
Humidity: to 98% RH (non-condensing)
Shock (Sensor Module): 1 meter drop test, 30 G's Min
Vibration: 18 G's @ 5-2000 Hz spectrum

ELECTRICAL CONNECTIONS

Signal	Connector Pin	Pigtail Cable	MS 3102E18-IT#
Common	1	Black	F
B	2	Green	B
A	3	Blue	A
Z *	4	Violet	C
No Connection	5	—	E
Vcc +	6	Red	D
B	7	Yellow	I
A	8	Gray	H
Z *	9	Orange	J
Shield	10	Braid	G

* Index (Z) optional. See Ordering Information

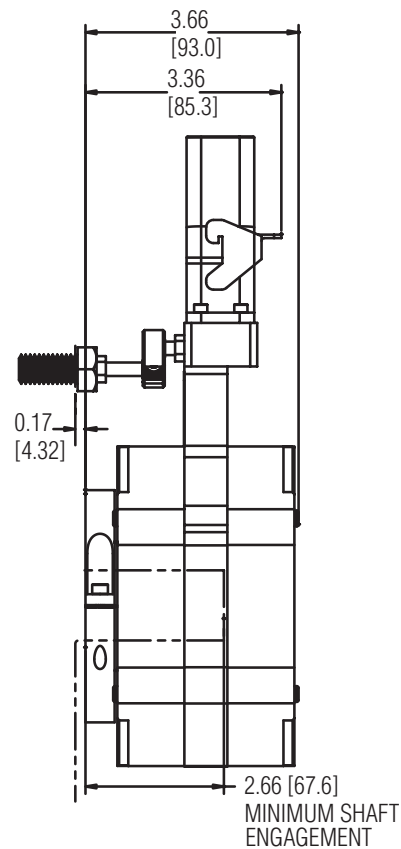
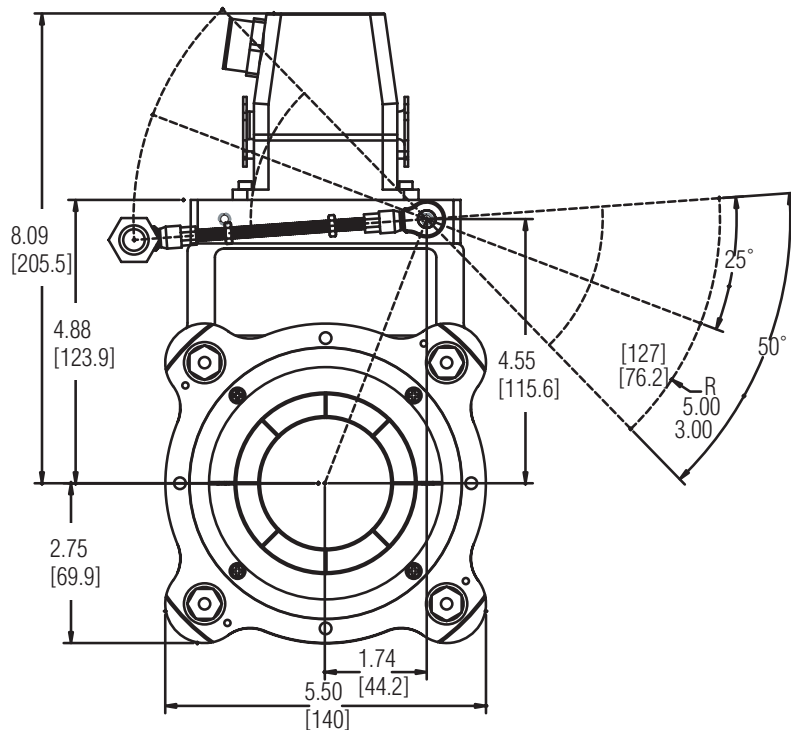
Ordering Information

To order, complete the model number with code numbers from the table below:

Code 1: Model	Code 2: PPR	Code 3: Index	Code 4: Wheel Bore	Code 5: Termination	Code 6: Electrical	Code 7: Seal
<input type="checkbox"/> 6	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	T <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ordering Information						
H6 HS60 Hollowshaft, single output	0064	L No index available when code 2 is 0512, 1024, or 2048	T01 1-1/8"	C Latching Industrial Connector with 1/2" NPT	L 5-15VDC in, 5-15V Line driver (4428) out	L Labyrinth seal
	0128		T02 1-3/8"			
D6 Dual output	0256	G With Gated, differential index	T03 1-5/8"	M 10 pin MS Connector	V 5-26VDC in, 5-26V Line driver (IC-WE) out	V V-ring seal
	0512		T04 1-7/8"			
	1024		T05 2.00"			
	2048		T06 2-1/8"			
			T07 2-1/4"			
			T08 2-3/8"			
	T09 2-1/2"	Z With differential index	T10 2-7/8"	P 18" pigtail cable	5 5-15VDC in, 5V Line driver (4428) out	Differential, bidirectional signals
			<i>Metric bore sizes available. Consult factory for details.</i>			

Note: See ACCESSORIES Section For Connectors, Spare Parts and Pulse Wheels

DIMENSIONS inch
[mm]



Satellite Locations:

- **North America:** North Carolina, South Carolina, Connecticut, Massachusetts, New York, Canada, British Virgin Islands
- **West Indies:** St. Kitts • **Europe:** United Kingdom, Italy, France, Germany, Spain, Slovakia
- **South America:** Brazil • **Asia:** China, Japan, Korea, Singapore

Worldwide Brands: NorthStar™ • Acuro™ • Dynapar™ • Hengstler™ • Harowe™

Headquarters: 1675 Delany Road • Gurnee, IL 60031-1282 • USA • Phone: 1.847.662.2666 • Fax: 1.847.662.6633

Customer Service:

Tel.: +1.800.873.8731
Fax: +1.847.662.4150
custserv@dynapar.com

Technical Support

Tel.: +1.800.234.8731
Fax: +1.847.782.5277
northstar.techsupport@dynapar.com

European Sales Representative

Hengstler GmbH
Uhlandstrasse 49, 78554 Aldingen
Germany
www.hengstler.de