

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

HD
Heavy Duty

CE
EN 61326-1

RoHS



SPECIFICATIONS

STANDARD OPERATING CHARACTERISTICS

Code: Incremental, Magnetic
Pulses per Revolution: 64-1024 PPR
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
Number of Output Modules: Single or Dual

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:
 4428 Differential Line Driver: 150mA, sink or source
 IC-WE Differential Line Driver: 150mA, sink or source
Frequency Response: 0 - 120kHz Data & Index
Noise Immunity: Tested to EN61326-1
Electrical Immunity: Reverse polarity and short circuit protected
Connector: 10 pin industrial duty latching, sealed NEMA 4 & 12, IP65; MS connector or pig-tail

MECHANICAL

Bore Diameter: 1-1/8" to 2-7/8"
Mounting Configuration: Hollow Shaft mount with Anti-Rotation Tether
Shaft Speed: Labyrinth Shaft Seal: 3,600 RPM; V-Ring Shaft Seal: 1,000 RPM
Shaft Length Required: 2.36" min
Acceleration Rate: 3,600 rpm/sec max
Allowable Shaft End-Play: ± 0.150" (tether limit)
Allowable Shaft Runout: 0.015" TIR typical (rpm dependent)
Housing Material: Hard Anodized Aluminum W/Stainless Steel Hub
Weight: 14.7 lbs

ENVIRONMENTAL

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

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

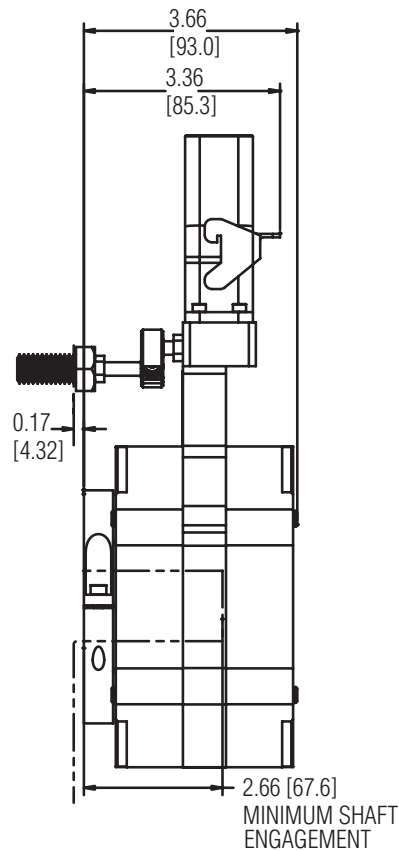
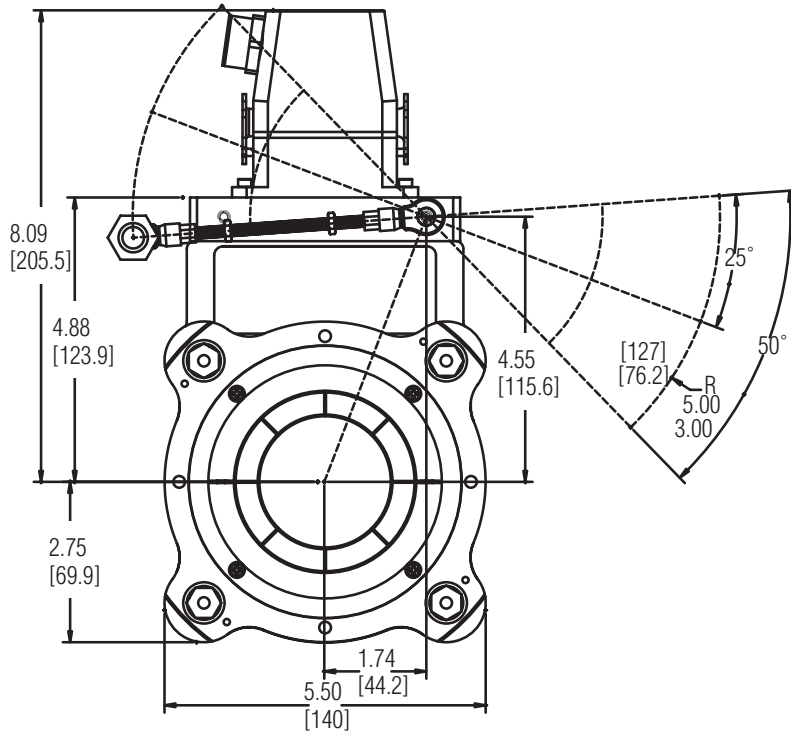
Ordering Information

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"/>	<input type="checkbox"/> <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 or 1024	T01 1-1/8"	M45 45 mm	C Latching Industrial Connector with 1/2" NPT	L 5-15VDC In, 5-15V Line Driver (4428) Out	L Labyrinth seal V V-ring seal
	0128		T02 1-3/8"	M50 50 mm			
D6 Hollowshaft, Dual Output	0256	G With Gated, Differ- ential Index	T03 1-5/8"	M55 55 mm	M 10 Pin MS Connector	5 5-15VDC In, 5V Line Driver (4428) Out	
	0512		T04 1-7/8"				
	1024	Z With Differential Index	T05 2.00"		Q Latching Industrial Connector on 18" Pigtail Cable		
			T06 2-1/8"			R Latching Industrial Connector on 18" Pigtail Cable without Mating Connector	
		T07 2-1/4"					
		T08 2-3/8"					
		T09 2-1/2"					
		T10 2-7/8"					
			Additional Bore Sizes Available, Please Consult Factory				

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

DIMENSIONS inch
[mm]



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