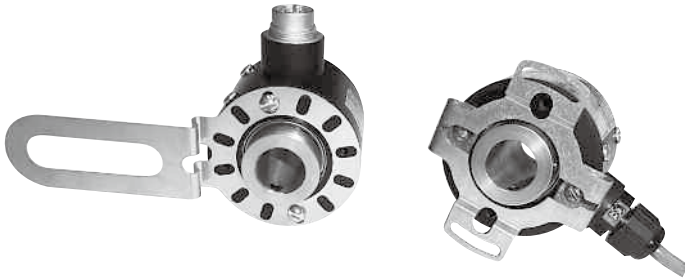


SIZE 20 SERIES HS20

INCREMENTAL HOLLOW SHAFT ENCODER / Thru-Hub

Starting at US \$485.00 List Price
(w/cable model - A ch. only)



Amphenol connector w/ L.D. model
US \$485.00 List Price

FEATURES

**WORLD
ENCODERS**

brand, Made in USA

- Size 20 Housing, heavy duty designed
- Up to 5/8" or 16mm, Thru-hub design
- Unbreakable code disk
- Short circuit and ESD protected
- Up to 1200 PPR
- Attached cable or optional Amphenol connector
- Super Linedriver 7272 compatible 5-26Vdc available
- NEMA12/IP54 enclosure

SPECIFICATIONS

Mechanical

Shaft Bore	3/8", 1/2", 5/8", 16mm diameter
Maximum Speed	6000 RPM
Shaft Loading	Radial: 30 lbs. Axial: 20 lbs.
Materials	Case: Aluminum, anodized Shaft: 303 Stainless Steel
Weight	8.0 oz

Electrical

Supply Voltage	5-26 Vdc Push-Pull, Open Collector, Line Driver
Current	50mA Max. No Load 100mA Max. (Line Driver)
Pulse Rate	0-30 kHz
Pulses per Revolution	1 to 1200
Output Circuit	Single-ended <ul style="list-style-type: none"> • 7273 open collector (30VDC max, 50 mA max) • 7272 Push-Pull (50 mA max source or sink) Differential Line Driver <ul style="list-style-type: none"> • 7272 differential line driver
Output Wave	Square wave outputs A, B and Z are 50/50 duty cycle nominal output Z (index output) is approximately the width of one cycle on outputs A or B. <ul style="list-style-type: none"> • Pulse symmetry: 180 ±30% • Pulse interval jitter: 30% max • Quadrature: 90° ±30% max • Phase jitter: 30% max

Environmental

Temperature	Operating: 0 ~ 70°C Storage: -10 ~ 85°C
Operation Humidity	35-85% without condensation
Vibration	Max 10g (58 to 500 Hz)
Shock	50g (11 ms duration)
Enclosure	IP-54/NEMA 12

Electrical Connections

Single-ended Outputs:

6-Pin Connector*	Function	Wire Color
1	Common	Black
2	+vdc	Red
3	Output Z	Brown
4	Output A	White
5	Output B	Green
6	not used	—

*connector is Amphenol T34020000 or equivalent

Differential Line Driver Outputs:

8-Pin Connector*	Function	Wire Color
1	Output +A	White
2	Output +B	Green
3	Output +Z	Yellow
4	Supply Voltage	Red
5	Common	Black
6	Output -A	Blue
7	Output -B	Brown
8	Output -Z	Orange

*connector is Amphenol T34020000 or equivalent

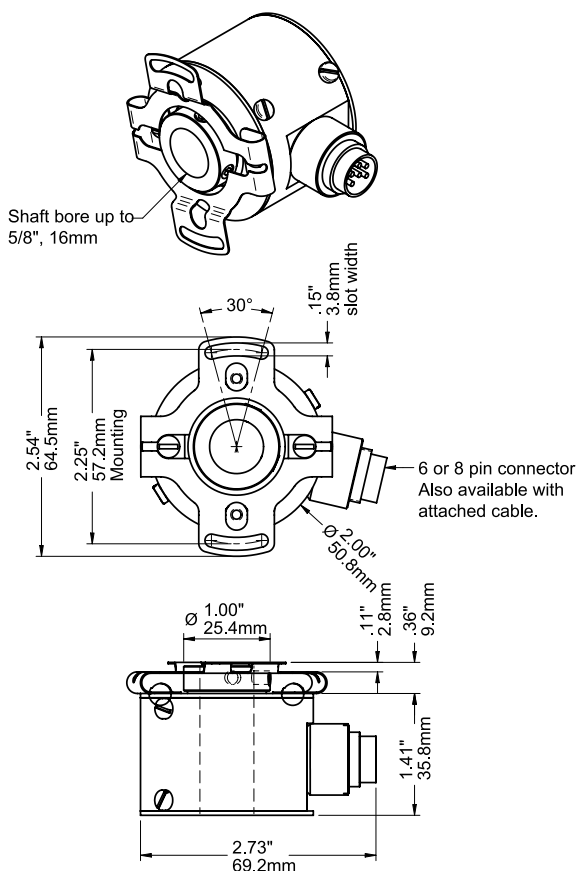
Standard Cable length is 10 ft / 3 meters.

SIZE 20 SERIES HS20

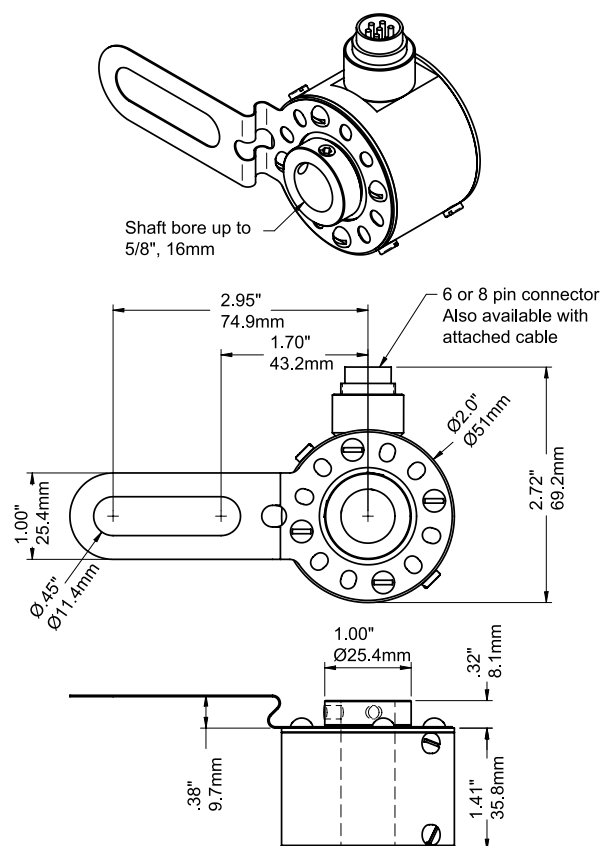
INCREMENTAL HOLLOW SHAFT ENCODER / Thru-Hub

DIMENSIONS

Std. Flex-Mtg. Spring 2.25" B.C.

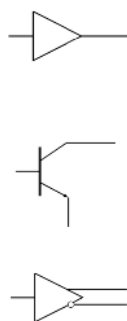


C-Face Motor Mtg. 3.4" - 5.9" B.C.

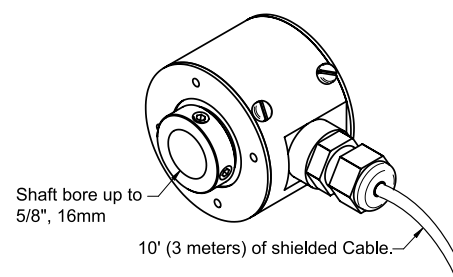


Outputs

- **Push-Pull (7272)** This general purpose output functions as a PNP transistor for applications requiring a current sourcing output. It functions as an NPN transistor with 3.3K pull-up for applications requiring a current sinking output. This output is TTL compatible when used with a 5vdc supply. Maximum source / sink current is 50 ma. per output.
- **7273 Open Collector (NPN)** For applications requiring an uncommitted output. The output voltage level can be pulled up with an external resistor to a maximum of 30vdc. Maximum sink current is 50ma. per output.
- **Differential Line Driver (7272)** An 7272 differential line driver that generates complimentary outputs: A / -A, B / -B, and Z / -Z as needed. The encoder must be operated at 5-26 vdc, input and output.



Std. 10 ft Cable w/ Straight Plug Cap



Size 20 Series HS20 Hollow Shaft Encoder/Thru-Hub

Model	Hub I.D.	Channels	Resolution	Voltage/Output	Cable/Connector	Flex-Mtg. Spring
HS20	<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						
HS20	B = 3/8"	Blank: Sgl. Ended	100	1000	5-26: Push-Pull	Blank: 10 ft. Cable
	.5 = 1/2"	(A ch.)	250	1024	(7272)	Blank: Std. Flex-Mtg.
	.625 = 5/8"		360	1200		(2) holes @
	M8 = 8mm	Q: Quadrature	500		5-26C: Open	2.25" B.C.
	M10 = 10mm	(A, B ch.)	512		Collector	C: C-face Motor Mtg.
	M12 = 12mm				(7273)	(1) slot hole @
	M14 = 14mm	QZ: Quadrature			5-26D: Line Driver*	3.4" ~ 5.9" B.C.
	M16 = 16mm	(A, B, Z ch. w/Index)			(7272)	

PRICING INFORMATION						
MODEL	HUB I.D.	HUB I.D.	RESOLUTION	VOLTAGE/OUTPUT	CABLE/CONNECTOR	FLEX-MTG. SPRING
HS20 Base price \$370.00	B = 3/8"	Blank: A ch. only	50	5-26: Push-Pull	Blank: 10 ft. Cable	Blank: Std. Flex-Mtg.
	.5 = 1/2"	N/C	Thru	N/C	N/C	(2) holes @
	.625 = 5/8"		100			2.25" B.C.
	M8 = 8mm	Q: A, B ch.		5-26C: Open		N/C
	M10 = 10mm	Add \$20.00		Collector		C: C-face Motor Mtg.
	M12 = 12mm		360	Add \$25.00	S: 16mm Circular	(1) slot hole @
	M14 = 14mm	QZ: A, B, Z ch.	Thru	5-26D: Line Driver*	Conn. at side	3.4" ~ 5.9" B.C.
	M16 = 16mm	Add \$30.00	1200	Add \$25.00	Add \$30.00	Add \$20.00
	N/C		Add \$30.00			

PART NUMBER	LIST PRICE	PART NUMBER	LIST PRICE
HS20M6QZ50/5-26D	\$425.00	HS20.625QZ360/5-26D	\$455.00
HS20M8Q1000/5-26C	\$445.00	HS20.625QZ100/5-26DS	\$455.00
HS20M10QZ1000/5-26DS	\$485.00	HS20.625QZ100/8-30	\$400.00
HS20BQZ100/5-26DS	\$455.00	HS20.625-500/8-30	\$400.00
HS20BQZ500/5-26DS	\$485.00	HS20.625QZ1000/526DS	\$485.00
HS20BQZ1000/5-26	\$430.00	HS20.625QZ1024/526DS	\$485.00
HS20BQZ1024/5-26DS	\$485.00	Mating Connector w/ 10-20ft. Cable Assemblies	
HS20.5QZ100/5-26DS	\$455.00	D6-5-10 (Sgl.Ended)	
HS20.5QZ500/5-26DS	\$485.00	Amphenol 6 pin mating conn. w/10ft. Cable (5 wires)	\$40.00
HS20.5QZ1000/5-26DS	\$485.00	D6-6-20CF (Sgl.Ended)	
HS20.5Q1024/5-26DC	\$465.00	Amphenol 6 pin mating conn. w/20ft. Cable (6 wires)	\$80.00
HS20M12Q1200/8-30DHS	\$495.00	D8-8-10 (Linedriver)	
HS20M8QZ1024/5-26DC	\$450.00	Amphenol 8 pin mating conn. w/10ft. Cable (8 wires)	\$50.00
HS20M10QZ1000/5-26DS	\$485.00	D8-8-20 (Linedriver)	
HS20.5QZ1024/5-26DS	\$485.00	Amphenol 8 pin mating conn. w/20ft. Cable (8 wires)	\$80.00
HS20.625QZ360/5D	\$455.00	Mounting Bracket	
		#MB-FB2	
		C-face Motor Mtg. Bracket	\$20.00

Standard Stock Items: Shipped immediately. Non Stock Items: 2-3 weeks Lead Time