

SIZE 20 SERIES R22 WHEELED INCREMENTAL SHAFT ENCODER



FEATURES

WORLD ENCODERS

brand, Made in USA

- Generates pulses for accurate linear measurement.
- Heavy Duty construction, NEMA12, IP-54.
- Compact size vs. Size 30.
- Precision 8" or 20cm circumference measuring wheels.
- 16mm or M12 mating conn. with 10' cable.
- "Anti-Jitter" and other material handling features.
- ESD, Short Circuit, Reverse Voltage protection.
- Various mounting hardware kits are available.
- Programmable model available - see Model R22-P.

Electrical

Pulse per Revolution	Up to 1200 P/R, 1800, 3600 (A ch only)
Output Format	Single Ended (A ch.) Dual Square Wave in Quadrature (A & B ch.) Dual Square Wave in Quadrature with Index (A, B, Z ch.)
Supply Voltage (V) & Output Circuit	
5-26*	Push-Pull 5-26 vdc 7272
5-26C*	Open Collector 7273 (Max. 50mA)
5-26D*	Diff. Line Driver 7272 (Max. 100mA)
5-26DH*	Diff. Line Driver 7272 (Max. 100mA) w/index
Frequency Response	100kHz
Duty Ratio	50±25%
Phase Shift	25±12.5%
Index Signal Width	100±50%

* Note: Refer to Outputs on page 50.

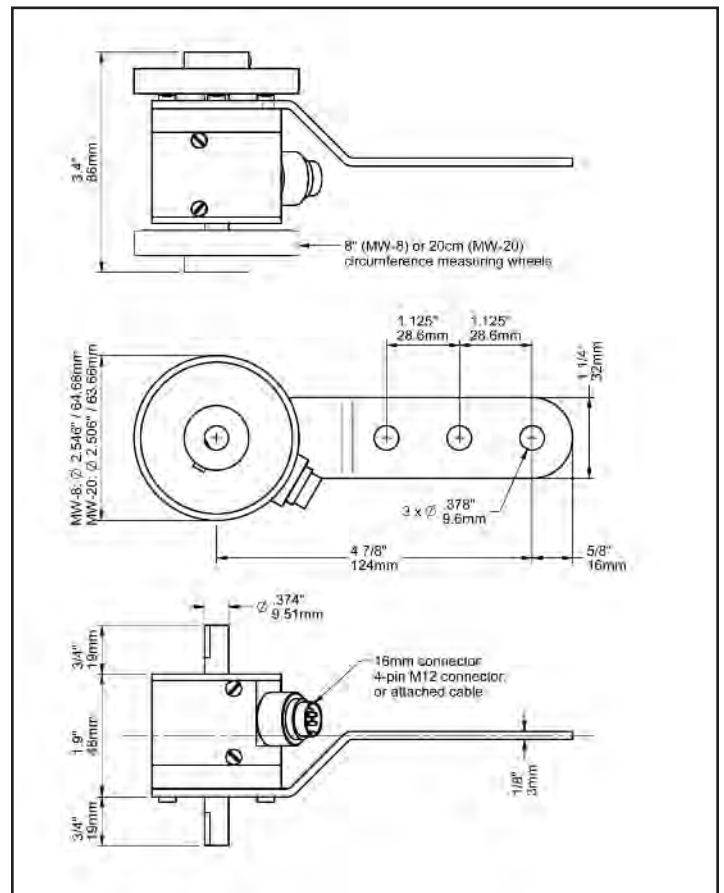
Mechanical

Shaft Diameter	3/8"
Shaft Type	Dbl. ended
Shaft Loading	Axial: 30 lbs. Max. Radial: 40 lbs. Max.
Rated Speed	6000 RPM
Materials	Aluminum Case (Anodized) Shaft: 303 Stainless
Weight	12 oz. (340g)

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

DIMENSIONS



Due to circumstances beyond World Encoders' control, small quantities of In-Stock items will be shipped immediately, and lead time on Non-Stock items is up to a few weeks.

SIZE 20 SERIES R22

WHEELED INCREMENTAL SHAFT ENCODER

Wiring Diagram

M16-6 Pin Sgl-ended	M12-4 Pin Sgl-ended	Function	Wire Color	6 pin Diff. Line Driver	Pin #	Same Wire Color
1	3	Common	Black	Common	5	Black
2	1	Supply Voltage	Red	Supply Voltage	4	Red
3	—	Z ch.	Brown	A ch.	1	White
4	4	A ch.	White	A not ch.	6	Blue or Green
5	2	B ch.	Green	B ch.	2	Green
6	—	N/C	—	B not ch.	7	Brown
				Z ch.	3	Yellow
				Z not ch.	8	Orange

M12-4 pin Connector: Turck FS4.4

M16-6 pin/8 pin Connector: Amphenol T3402000.

Model	Channels	Resolution	Voltage/Output	Measuring Wheel
R22	<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				
R22	Blank: Sgl-ended (A ch. Only) M12-4 pin Q: Quadrature (A & B ch.) M12-4 pin QZ: Quadrature w/index (A, B, & Z ch.) M16-6 pin, M16-8 pin P: Programmable w/Sgl-ended (A ch.) M12-4 pin	24 360 60 500 100 512* 120 600* 180* 720* 200* 1000 240 1024 250* 1200 300* 1800** 3600**	5-26 = Push-Pull 5-26vdc 7272 (M12-4 pin) 5-26C = Open Collector 5-26vdc 7273 (NPN w/o resistor) (M12-4 pin) 5-26D = Diff. Line Driver 7272 5-26vdc (M16-6 pin, A & B ch) 5-26DH = Diff. Line Driver 7272 5-26vdc (M16-8 pin, A, B & Z ch)	MW8: Std. (2) MW-1-B wheels 2.5" dia., 8" cir., 3/8" wide Options: MW20: 64mm dia, 3/8" wide, 20 cm cir.

PRICING INFORMATION

Model	Channels	Resolution	Anti-Jitter	Voltage/Output
R22	Blank: A Ch. Only N/C *Q: A & B Ch. Add \$30.00 *QZ: A, B & Z Ch. Add \$80.00 P: Prog. Add \$30.00	60 Thru N/C 1200 1800** 3600** Add \$30.00	Blank: Std. AJ: Add \$40.00	5-26: (Push-Pull) N/C 5-26C: (Open Collector) Add \$25.00 5-26D or 5-26DH: (Line Driver) Add \$25.00
Base Price	\$250.00			

Standard Stock Items: Shipped immediately. *Lead Time: 7 - 10 days to ship. **Available: A ch only

PART NUMBER	LIST PRICE	PART NUMBER	LIST PRICE
R22-60/5-26MW-8	\$250.00	Replacement Measuring Wheels (Urethane Tire)	
R22-120/5-26MW-8	\$250.00	#MW-8-B 2.5" Dia., 8" Circumference	\$30.00
R22-360/5-26MW-8	\$250.00	3/8" wide, 3/8" Hub I.D.	
R22-1000/5-26MW-8	\$250.00	#MW-20-B 20cm Circumference, 64mm dia	\$30.00
R22-1024/5-26MW-8	\$250.00	3/8" wide, 3/8" Hub I.D.	
R22-1200/5-26MW-8	\$250.00	Mating Connector with 10 Ft. Cable Assembly	
Mounting Bracket		#D4-4-10 (1 or 2 ch. Sgl.ended)	\$32.00
#Y-1 York Ass'y w/1/4"-28 Bolt	\$15.00	M12 conn. 4 pin mating w/10 ft cable (4 wires)	
#Y-3 York Ass'y w/3/8"-16 Bolt	\$15.00	#D6-5-10 (A,B & Z chs.-Sgl.ended)	\$35.00
#MB-UB2 Offset Mtg. Bracket w/7" Arm	\$56.00	M16 conn. 6 pin mating w/10 ft cable (5 wires)	
#MB-UB2A Offset Mtg. Bracket w/11.25" Arm	\$60.00	#D8-8-10 (Linedriver)	\$45.00
#MB-UB3 Under-Belt Center Hgt. Foot Bracket w/2 springs tension controlled	\$80.00	M16 conn. 8 pin mating w/10ft cable (8 wires)	
#MB-UB4 Under-Belt Mtg. Bracket w/2 springs tension controlled	\$75.00		

Standard Stock Items: Shipped immediately.

*Lead Time: 7 - 10 days to ship.

**Available: A channel only