



## Selector Guide - Optical, Magnetic and Mechanical Encoders



700 Series  
Mechanical Encoder



MMP/Rel Series  
Mechanical Encoder



500 Series  
Magnetic Encoder



900 Series  
Optical Encoder



OE2 Series  
Optical Encoder

	<u>700 Series</u>	<u>MMP/Rel Series</u>	<u>500 Series</u>	<u>900 Series</u>	<u>OE2 Series</u>
<b>Electrical</b>					
<b>Absolute Output Codes</b>					
Hexadecimal	n/a	available	n/a	n/a	n/a
B.C.D	n/a	available	n/a	n/a	n/a
Gray	available	available	n/a	n/a	n/a
PWM	n/a	n/a	available	n/a	n/a
Absolute Code Max Resolution	36	36	1024	n/a	n/a
<b>Incremental Output Codes</b>					
Quadrature	available	available	available	available	available
A/B	available	available	n/a	n/a	n/a
Tachometer	n/a	n/a	available	available	available
Full Quadrature PPR	12 to 24	4 to 24	32 to 256	32 to 256	4 to 8
<b>Analog Output Codes</b>	Resistive 20K Max	n/a	n/a	n/a	n/a
<b>Other Electrical Specifications</b>					
Current Carrying Capacity	Resistive load, 150 mA @ 3.3 VDC	Resistive load, 250 mA @ 28 VDC	n/a	n/a	n/a
Max Switching Loads	1 mA @ 115 VAC 15 mA @ 14 VDC	1.5 mA @ 115 VAC 150 mA @ 14 VDC	n/a n/a	n/a n/a	n/a n/a
Dielectric Strength	750 volts	1,000 volts	n/a	n/a	n/a
Contact Resistance	1 ohm	75 milliohms	n/a	n/a	n/a
Contact Bounce	5 ms @ 15 rpm	5 ms @ 15 rpm	n/a	n/a	n/a
Operating Voltage @ Min Supply	n/a	n/a	5 VDC @ 30mA	5 VDC @ 30mA	5 VDC @ 25mA
<b>Environmental</b>					
Operating Temperature	-40°C to +85°C	-55°C to +85°C	-40°C to +105°C	-40°C to +85°C	-40°C to +85°C
Shock Humidity	MIL-STD 202	MIL-STD 202	MIL-STD 202	MIL-STD 202	MIL-STD 202
<b>Mechanical</b>					
Rotational Life (Cycles)	50,000	50,000	10 million	5 to 100 million	3 to 10 million
Number of Detent Positions	12, 16, 24, 32, 36	4, 6, 8, 10, 12, 16, 18, 20,	n/a	n/a	16, 24, 32
Max Operating Speed	30 rpm	30 rpm	200 rpm	200 to 3,000 rpm	30 rpm
Size	.830" x .890"	.865" square	.459" x .619"	1.0" square	.760" square
<b>Mounting Bushing Diameter</b>	3/8"	1/4" or 3/8"	3/8"	1/2" or 3/8"	3/8"
3/8 inch	Standard	Standard	Standard	Standard	Standard
1/2 inch	n/a	n/a	n/a	available	n/a
<b>Shaft Material</b>					
Cold Rolled Steel	n/a	Standard	n/a	n/a	n/a
Stainless Steel	n/a	available	Standard	available	Standard
Brass	n/a	available	n/a	n/a	n/a
Die Cast	n/a	n/a	n/a	Standard	n/a
Molded Plastic	Standard	n/a	n/a	n/a	n/a
<b>Pin Termination</b>					
Solder Lug	n/a	available	n/a	n/a	n/a
Rear PC Mount	Standard	available	Standard	Standard	Standard
Front PC Mount	n/a	available	n/a	n/a	n/a
Right Angle PC Mount	n/a	available	available	n/a	available
Cable and Connector Termination	n/a	n/a	available	available	available
<b>Stops</b>					
Fixed	available	available	n/a	n/a	n/a
Continuous	available	available	Standard	Standard	Standard
Stop Strength	5 in/lb	15 in/lb	n/a	n/a	n/a
<b>Options</b>					
Non-detent	available	available	Standard	Standard	available
Push-Button	available	available	n/a	n/a	available
Sealing	Shaft	Shaft and Panel	Shaft and Panel	Sealed Bearing	Shaft and Panel
Concentric Shaft	available	available	n/a	n/a	n/a