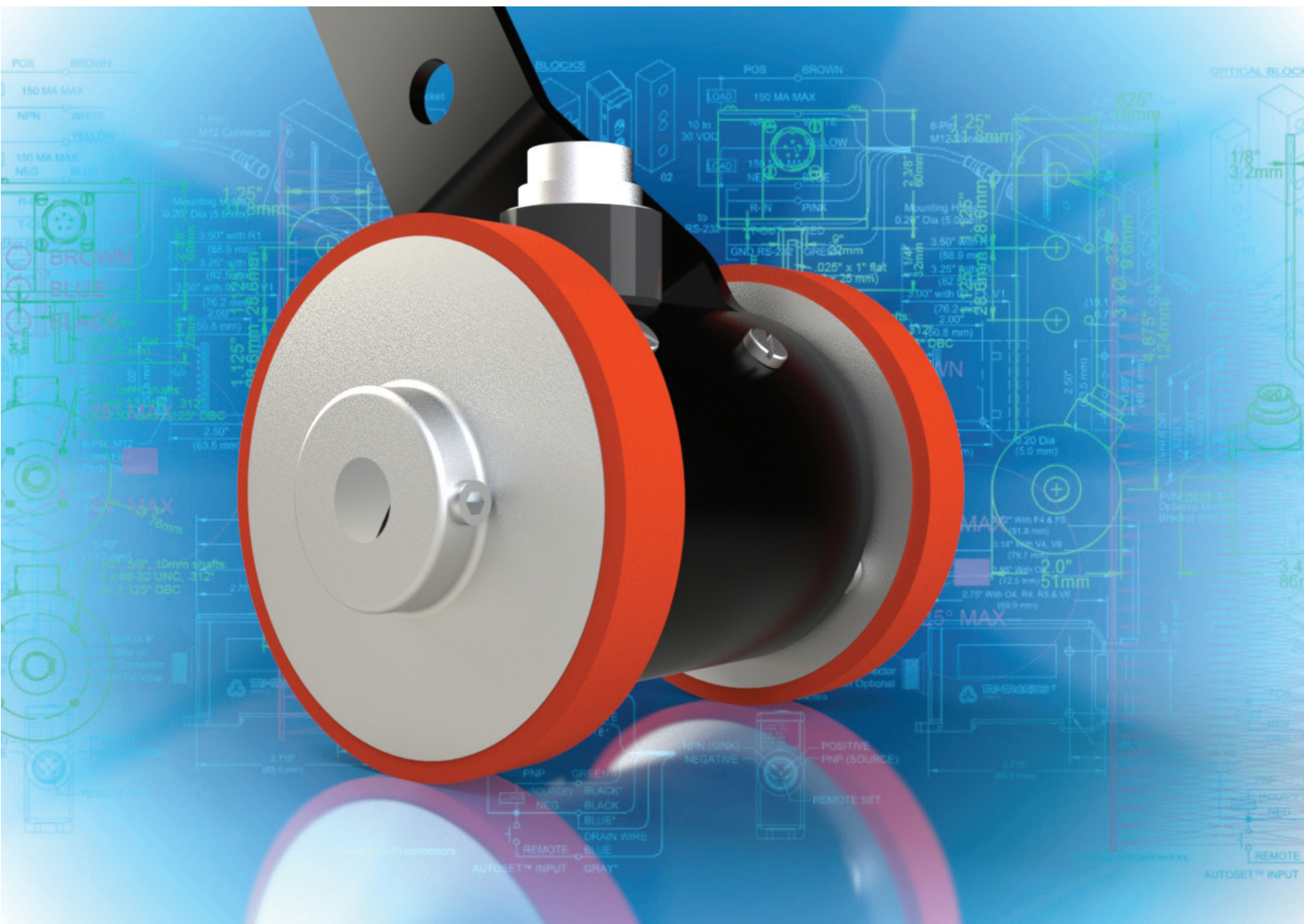
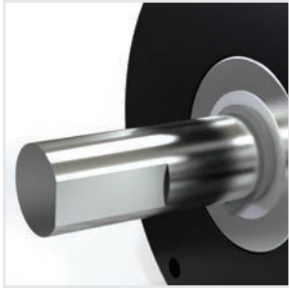




## Quick Reference Guide



**For Complete Listing Visit:  
[www.PhotocraftEncoders.com](http://www.PhotocraftEncoders.com)**



# Shaft Encoders

directly couple to a device shaft and generate a specific pulse output for each revolution. Select from a wide offering of body sizes and styles.

See Website for full listing.



Model	Size			Cubical	3" Square Face	Shaft diameter				Counts per Revolution (CPR) Range					Programmable	Anti Jitter	Up to 600	Up to 1200	Up to 2400	Up to 10,000	
	Size 20	Size 22.5	Size 30			.187"	1/4"	5/16"	3/8"	1/2"	5/8"	4mm	6mm	8mm							10mm
RB20	x					x	x	x	x					x	x	x	x				x
R20	x					x	x	x	x					x	x	x	x			x	
R20-P	x					x	x	x	x					x	x						240*
RG		x					x	x	x											x	
RJ		x							x											x	
RBL			x						x	x	x									x	
RL			x						x	x	x									x	
RL-P			x						x	x	x									x	
RBS				x			x	x	x	x											x
RS				x			x	x	x	x										x	
RS-P				x			x	x	x	x											480*
RBX					x				x											x	x

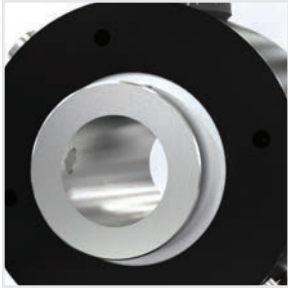
\*Consult factory for higher programmable CPR.

## Shaft Couplings



See page 6 for mounting options.

Model	Bore to Bore
<i>Flexible Shaft Coupling</i>	
AE087-10-10	5/16" to 5/16"
AE087-12-10	3/8" to 5/16"
AE087-8MM-8MM	8mm to 8mm
AE100-12-12	3/8" to 3/8"
AE100-12-10MM	3/8" to 10mm
AE100-10MM-10MM	10mm to 10mm
AE100-12MM-10MM	10mm to 12mm
AE100-12MM-12MM	12mm to 12mm
<i>Rigid Shaft Coupling</i>	
MB-085	3/8"D to 1"D
MB-085-.375	3/8"D to 3/8"D
MB-085-.75	3/8"D to 3/4"D
MB-085-M30	3/8"D to 30mmD



# Hollow Shaft Encoders

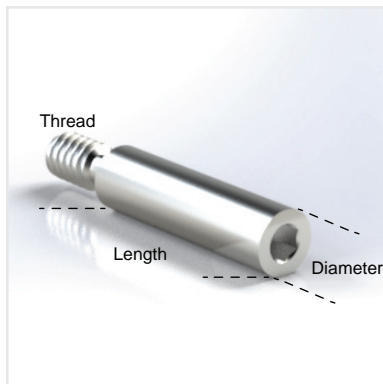
are designed with either a through-bore or blind-bored shaft which mounts to a rotating shaft. They "float" on the shaft eliminating the need for a shaft-to-shaft coupling and mounting adapter, saving space and cost. A tether or flexible mounting bracket prevents the encoder from turning and absorbs shaft-to-shaft misalignment increasing bearing life. Select from a wide offering of body sizes and styles.



Model	Shaft Bore Diameter				Shaft Bore Diameter											Programmable	Anti Jitter	Counts per Revolution (CPR) Range					
	Size 20	Size 25	Size 30	Cubical	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	6mm	8mm			10mm	12mm	16mm	25mm	Up to 1200	Up to 2400
HSB20	x					x	x	x	x	x				x	x	x	x	x					x
HS20	x					x	x	x	x	x				x	x	x	x	x			x		
HS20-P	x					x	x	x	x	x				x	x	x	x	x		x			512*
HS25		x			x	x	x	x						x	x	x				x	x		
HS25-P		x			x	x	x	x						x	x	x				x	x		600*
HS30			x						x	x	x	x	x					x	x		x		
HRL			x			x	x	x	x	x	x	x	x				x	x	x		x		
HRL-P			x			x	x	x	x	x	x	x	x				x	x	x		x		436*
HRS				x		x	x	x	x	x	x	x	x				x	x	x		x		
HRS-P				x		x	x	x	x	x	x	x	x				x	x	x				256*

\*Consult factory for higher programmable CPR.

## Shaft Stubs



See page 6 for mounting options.

Model	Diameter	Length	Thread
<i>Shaft stub</i>			
<b>MB-ST-M10</b>	10mm	27mm	M8 x 1.25
<b>MB-ST-M12</b>	12mm	44mm	M10 x 1.5
<b>MB-ST-M12A</b>	12mm	25mm	M10 x 1.5
<b>MB-ST.250</b>	1/4"	1.7"	10-24
<b>MB-ST.250A</b>	1/4"	.94"	10-24
<b>MB-ST.312</b>	5/16"	1.72"	1/4-20
<b>MB-ST.375</b>	3/8"	1-3/4"	5/16-18
<b>MB-ST.5</b>	1/2"	1.8"	3/8-16
<b>MB-ST.5A</b>	1/2"	1.1"	3/8-16
<i>Roll pin shaft stub</i>			
<b>MB-SR.375</b>	3/8"	2.25"	



# Wheel Encoders

ride directly on the moving material. The wheel tread has a high coefficient of friction, and have a very low starting torque resulting in virtually no slippage. The wheel's circumference is precision ground with exacting tolerances translating into an integral number of encoder pulses per unit of linear movement.

**RB21**



**RB22**



**RBH**



**R21**



**R22**



**RH**



**R21-P**



**R22-P**



**RH-P**



Model	Size		Wheel Type		Regular Wheel					Wide Wheel		O-ring Wheel		Programmable	Anti Jitter	Counts per Revolution (CPR) Range			
	20	30	Single	Dual	MW8	MW10	MW1	MW20	MW30	MW1W	MW30W	MW1R	MW30R			Up to 1,200	Up to 1,500	Up to 2,400	Up to 10,000
RB21	x		x		x	x	x	x	x	x	x	x	x						x
R21	x		x		x	x	x	x	x	x	x	x	x		x	x			
R21-P	x		x		x	x	x	x	x	x	x	x	x	x	x	x*			
RB22	x			x	x	x	x	x	x	x	x	x	x						x
R22	x			x	x	x	x	x	x	x	x	x	x		x	x			
R22-P	x			x	x	x	x	x	x	x	x	x	x	x	x	x*			
RBH		x		x			x		x	x	x	x	x						x
RH		x		x			x		x	x	x	x	x		x			x	
RH-P		x		x			x		x	x	x	x	x	x	x		x*		

\*Consult factory for higher programmable CPR.

To obtain Maximum Linear Measurement, divide CPR by wheel circumference.

**MW8**  
8" circumference



**MW1**  
12" circumference



**MW30W**  
30cm circumference  
1" wide



**MW20**  
20cm circumference



**MW30**  
30cm circumference



**MW1R**  
12" circumference  
with replacement o-ring



**MW10**  
10" circumference



**MW1W**  
12" circumference  
1" wide



**MW30R**  
30cm circumference  
with replacement o-ring







# Absolute Encoders

generate a digital code indicating the angular position of the shaft. Each increment of one shaft rotation is given a unique digital code for a single-turn encoder. When power is first applied, shaft position is immediately known without having to home the encoder. Even if the shaft is moved when power is off, shaft position is not lost. Select from a wide offering of body sizes and styles.

**MR30**



**R30**



**SR30**



**SR12**



Model	Modular	Size 30	Size 12	7 Bit Res	8 Bit Res	9 Bit Res	10 Bit Res	11 Bit Res	Gray Code	Natural Binary	Custom Code	Parallel	Serial	Analog	1KHz Sample Rate	2KHz Sample Rate	3KHz Sample Rate	40KHz +
MR30/31					x	x	x	x	x	x		x			x		x	
R30					x	x	x		x	x	x	x						x
SR30/31					x	x	x	x	x	x		x			x		x	
SR12				x	x	x	x		x	x		x	x	x		x		

# Mounting Options

Model	RB20, R20, R20-P	RG	RJ	RBL, RL, RL-P	RS, RS, RS-P	HSB20, HS20, HS20-P	HS25, HS25-P	HS30	HRL, HRL-P	HRS, HRS-P	RB21, R21, R21-P	RB22, R22, R22-P	RBH, RH, RH-P
<b>Brackets &amp; Tethers</b>													
55-SCR808													
MB-56C													
MB-FB1													
MB-FB2	x	x	x	x		x			x	x			
MB-FB2A	x	x	x	x		x							
MB-FB2B	x	x	x	x		x							
MB-FB3						x							
MB-FB5					x				x	x			
MB-FB5C					x				x	x			
MB-FL5					x								
MB-UB6											x	x	x
<b>Flange &amp; Servo Adapters</b>													
MB-5PY	x	x	x										
MB-75	x	x	x										
MB-76	x	x	x										
MB-78	x	x	x										
MB-FL	x	x	x										
MB-FL2	x	x	x										
MB-FL3	x	x			x								
MB-FL4	x	x	x										
MB-FL6	x	x	x										
MB-KOYO	x	x	x										
<b>Above-Belt</b>													
MB-RD	x	x	x										
MB-RD2	x	x	x										
MB-UB2											x	x	x
MB-UB2A											x	x	x
MB-UB2AG	x	x	x										
MB-UB2AS													x
MB-UB2G	x	x	x										
MB-UB2S													x
Y-1												x	
Y-1G	x	x	x								x	x	
Y-2													x
Y-2A													x
Y-2G	x	x	x								x	x	
Y-3													x
Y-3G	x	x	x	x							x	x	
<b>Below-Belt</b>													
<b>Torsion Spring</b>													
MB-UB1													
MB-UB1 M185													
MB-UB1A													
MB-UB1M													
MBUB3													
MB-UB3G	x	x	x										
MB-UB4													
MB-UB4W													

See website for complete listing.

**550-SCR808**  
Anti-rotation pin



**MB-56C**  
Protective Cover



**MB-FB1**  
Flexible mounting bracket



**MB-FB2**  
Flexible mounting tether



**MB-FB2A**  
Flexible mounting tether



**MB-FB2B**  
Rigid mounting tether



**MB-FB3**  
Flexible mounting bracket



**MB-FB5**  
Flexible mounting tether



**MB-UB6**  
Rigid under-belt "L" bracket



**MB-5PY**  
5PY adapter



**MB-FL2**  
Flange adapter



**MB-FL3**  
Flange adapter



**MB-FL4**  
Flange adapter



**MB-FL6**  
Flange adapter



**MB-FL8**  
adapter kit for conveyor roller bearing



**MB-FL8A**  
adapter kit for conveyor roller bearing with shaft guards



**MB-RD**  
Measuring wheel arm



**MB-KOYO**  
Face mounting



**MB-UB2**  
Offset mounting bracket - 7" arm,



**MB-UB2A**  
Offset mounting bracket - 11.25" arm



**Y-1**  
Yoke assembly with 1/4"-28 bolt



**Y-1G**  
Wheel encoder mounting yoke, 1/4-28 cap screw



**Y-2**  
Yoke assembly for MB-UB1



**Torsion Spring**



**MB-UB1**  
Under-belt counter-weight



**MB-UB1A**  
Under-belt counter-weight



**MB-UB3**  
Spring loaded, under-belt



**MB-UB4**  
Spring Loaded



# Encoder Cables



Connector	3-wire	4-wire	5-wire	6-wire	8-wire	9-wire	2 pair braided	pulse/index output	line driver
12mm 4-pin	x	x							
16mm 6-pin	x	x	x						
16mm 8-pin		x	x	x					
DB 9-pin	x	x	x	x	x			x	x
MS 3-pin	x						x		
MS 5-pin	x	x	x	x				x	x
MS 6-pin	x	x	x	x					x
MS 10-pin		x		x	x	x			x

Standard Lengths = 10ft, 20ft, 3m, 6m  
 Custom Lengths Available



## About Us...

**T**RI-TRONICS® Co. Inc., together with Photocraft, offers a wide range of rotary encoders for industrial automation and motion feedback control.

For more than 60 years, we have provided innovative solutions for real-world applications. We understand our customers have a job to do and have no time for issues. That is why every one of our products is individually tested for durability and reliability, so they stand the test of time.

Our mission is to amaze our customers, improve their business, and promote mutual prosperity. We recognize that our customers are kings and no two companies are alike. This is why we tailor solutions to fit your needs and will do whatever it takes to help you succeed.

All our products are assembled in the United States at our 28,000-sq. ft. facility in Tampa, FL. Our agile workforce attends to the needs of our customers - big or small - to complete requests with short turnaround times.



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