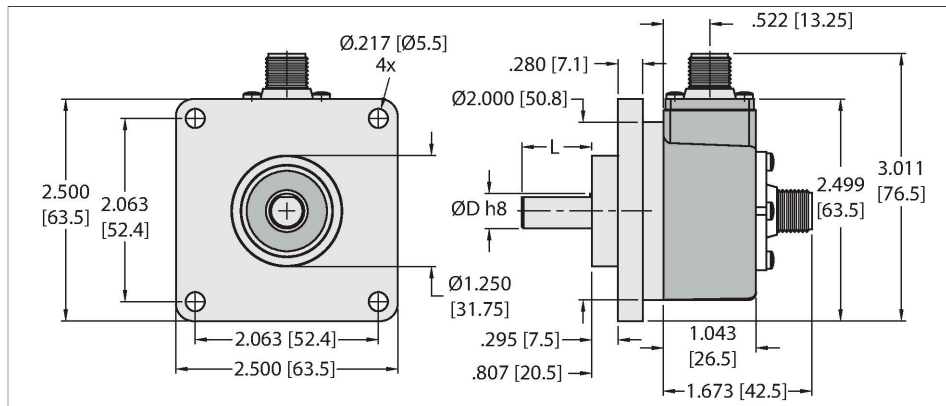


RI-10SA1R-2K1200-H1181

Incremental Shaft Encoder

Industrial Line



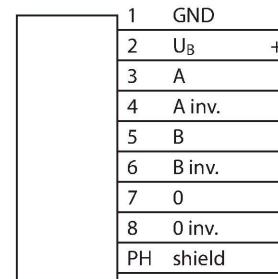
Features

- Square flange, Ø 63.5 mm
- Solid shaft, Ø 3/8" x 7/8"
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP67 on housing and shaft side
- -40...+85 °C
- Max. 6000 rpm (continuous operation 3000 rpm)
- 5...30 VDC
- Male connector, M12 x 1 , 8-pole
- Push-pull, with inverted signals
- Pulse frequency max. 300 kHz
- 1200 pulses per revolution

Technical data

Type	RI-10SA1R-2K1200-H1181
ID	100040758
Measuring principle	Optical
General data	
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	$1.8 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Output type	Incremental
Resolution incremental	1200 ppr
Electrical data	
Operating voltage U_b	5...30 VDC
No-load current	$\leq 100 \text{ mA}$
Output current	$\leq 20 \text{ mA}$
Short-circuit protection	yes
Wire break/reverse polarity protection	no
Pulse frequency max.	300 kHz
Signal level high	min. $U_b - 2 \text{ V}$
Signal level low	max. 0.5 V
Output function	Push-Pull 7272, with inverted signals
Mechanical data	
Flange type	Rectangular flange
Flange diameter	Ø 63.5 mm
Shaft Type	Solid shaft
Shaft diameter D	0.375 in

Wiring diagram



Technical data

Shaft length (L)	0.875 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	50 N
Radial shaft load	100 N
Environmental conditions	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s ² , 6 ms
Protection class	IP67
Protection class shaft	IP67

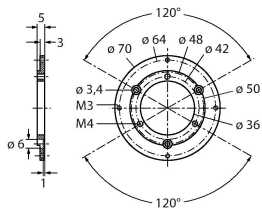
Accessories

<p>RFA-2</p>	<p>1544631</p> <p>Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick</p>	<p>RFA-13</p>	<p>1544642</p> <p>Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 80 mm; 4 mm thick</p>
<p>RFA-1</p>	<p>1544630</p> <p>Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick</p>	<p>RFA-4</p>	<p>1544633</p> <p>Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange</p>
<p>RFA-6</p>	<p>1544635</p> <p>Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange</p>	<p>RFA-7</p>	<p>1544636</p> <p>Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter</p>

RI-10SA1R-2K1200-H1181 | 01/22/2025 20-43 | technical changes reserved

RFA-8

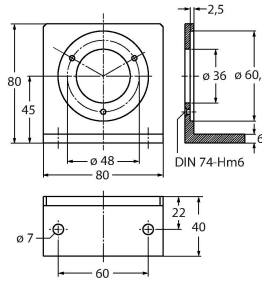
1544637



Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange

RFA-9

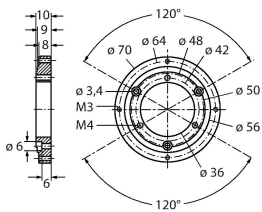
1544638



Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange

RFA-11

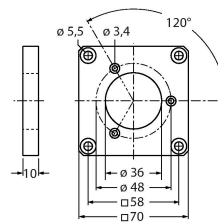
1544640



Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 10 mm, adapts to Ø 70 mm flange

RFA-12

1544641



Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 70 mm; 10 mm thick