

RI-10SA1C-4B12-H1181

Incremental Shaft Encoder

Industrial Line



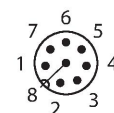
Technical data

Type	RI-10SA1C-4B12-H1181
ID	100046039
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	12 ppr
Electrical data	
Operating voltage U_B	5...30 VDC
No-load current	$\leq 90 \text{ mA}$
Output current	$\leq 20 \text{ mA}$
Short-circuit protection	yes
Wire break/reverse polarity protection	yes
Pulse frequency max.	300 kHz
Signal level high	min. 2.5 V
Signal level low	max. 0.5 V
Output function	RS422/TTL, with inverted signals
Mechanical data	
Flange type	Clamping flange
Flange diameter	$\varnothing 58 \text{ mm}$
Shaft Type	Solid shaft

Features

- Clamping flange, $\varnothing 58 \text{ mm}$
- Solid shaft, $\varnothing 3/8" \times 5/8"$
- 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
- RS422 with inverted signals
- Pulse frequency max. 300 kHz
- 12 pulses per revolution

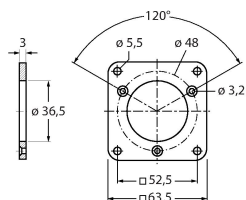
1	GND
2	U_B +
3	A
4	A inv.
5	B
6	B inv.
7	0
8	0 inv.
PH	shield



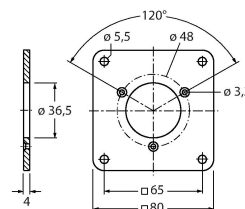
Technical data

Shaft diameter D (mm)	9.525
Shaft diameter D	0.375 in
Shaft Length L [mm]	15.875
Shaft length (L)	0.625 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

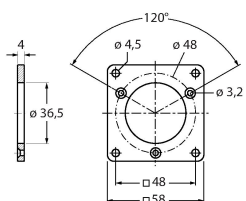
Accessories

RFA-2
1544631


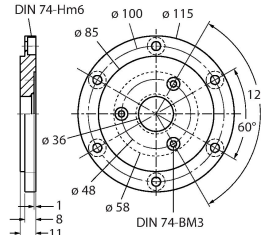
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick

RFA-13
1544642


Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 80 mm; 4 mm thick

RFA-1
1544630


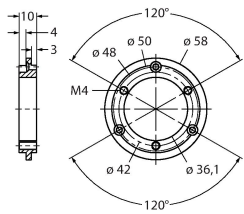
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick

RFA-4
1544633


Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange

RFA-6

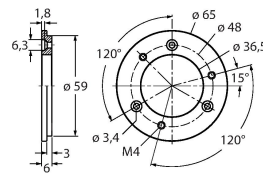
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Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange

RFA-7

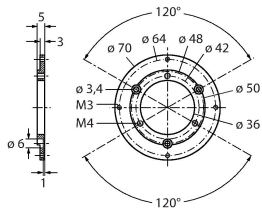
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Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter

RFA-8

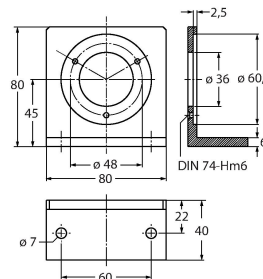
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Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange

RFA-9

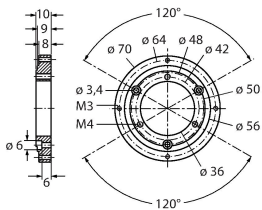
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Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange

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