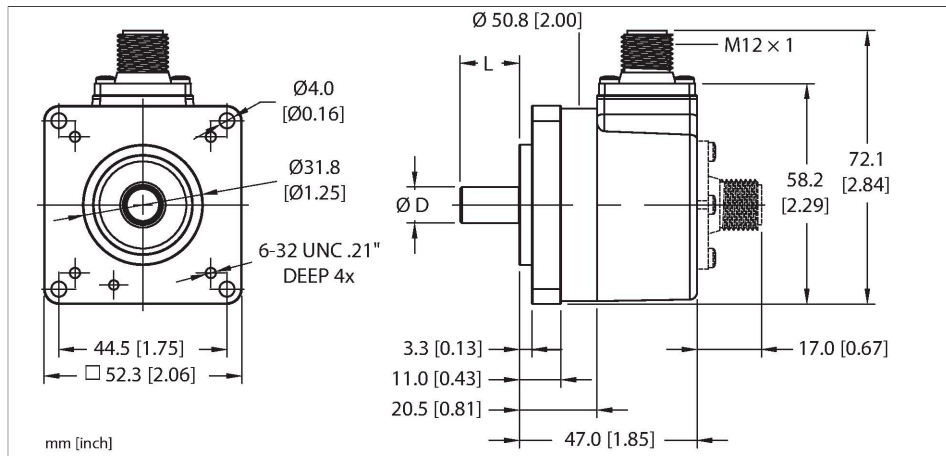


# RI-10SA1Z4-CA2500-H1181

## Incremental Shaft Encoder

### Industrial Line

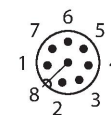
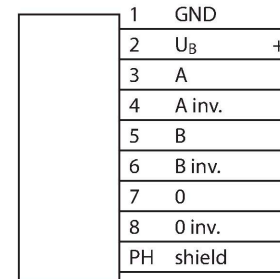


### Features

- Square flange, Ø 50,8mm
- Solid shaft, Ø 3/8" x 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
- Open Collector with inverted signals
- Pulse frequency max. 300 kHz
- 2500 pulses per revolution

### Technical data

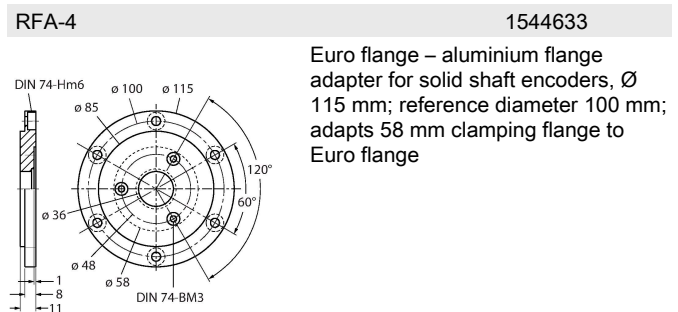
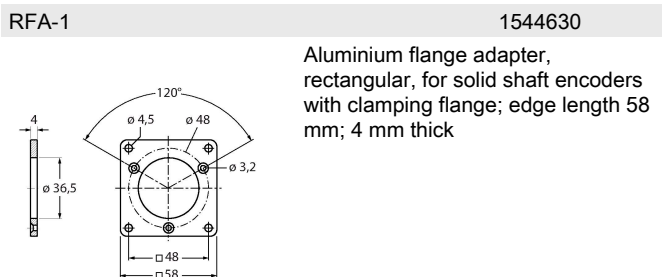
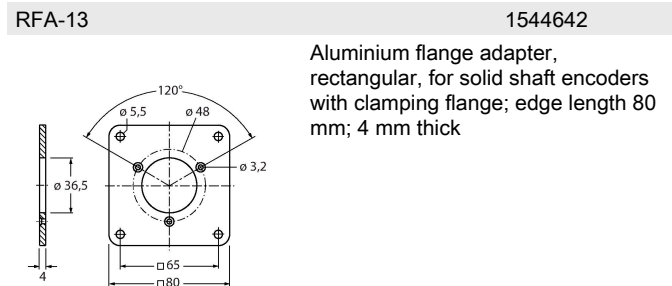
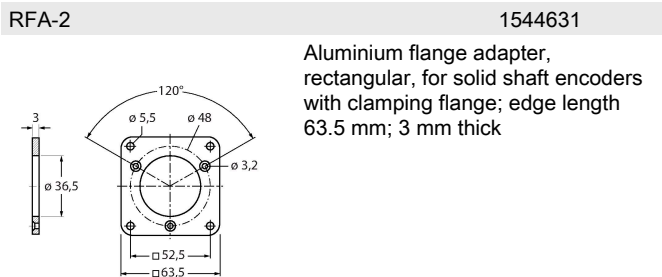
Type	RI-10SA1Z4-CA2500-H1181
ID	200005814
Measuring principle	Optical
<b>General data</b>	
Max. rotational speed	6000 rpm
Moment of inertia of the rotor	$1.8 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Output type	Incremental
Resolution incremental	2500 ppr
<b>Electrical data</b>	
Operating 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	no
Pulse frequency max.	300 kHz
Signal level high	min. 2.5 V
Signal level low	max. 0.5 V
Output function	8-wire, RS422, with inverted signals
<b>Mechanical data</b>	
Flange type	Rectangular flange
Flange diameter	Ø 50.8 mm
Shaft Type	Solid shaft



## Technical data

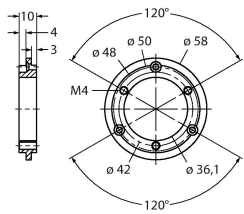
Shaft diameter D	0.375 in
Shaft length (L)	0.625 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	40 N
Radial shaft load	80 N
<b>Environmental conditions</b>	
Ambient temperature	-40...+85 °C
Vibration resistance (EN 60068-2-6)	300 m/s <sup>2</sup> , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s <sup>2</sup> , 6 ms
Protection class	IP67
Protection class shaft	IP67

## Accessories



RFA-6

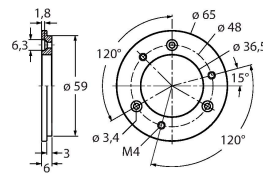
1544635



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

RFA-7

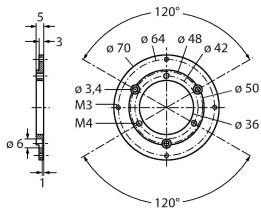
1544636



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

RFA-8

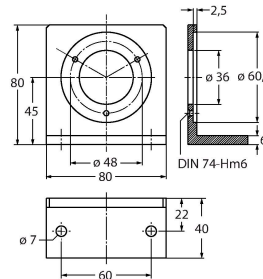
1544637



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

RFA-9

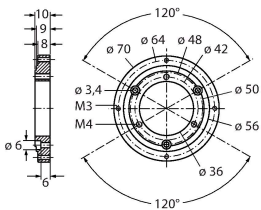
1544638



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

RFA-11

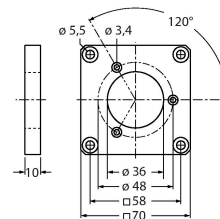
1544640



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