

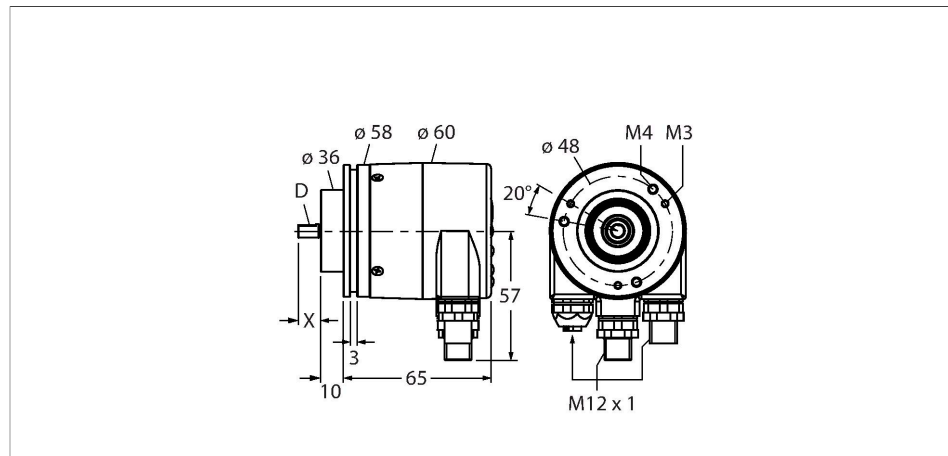
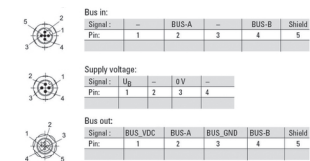
# RS-25S6C-9A16B-R3M12

## Absolute Rotary Encoder - Single-Turn Industrial Line

### Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 6 mm × 10 mm
- Optical measuring principle
- Shaft material: stainless steel
- Protection class IP67 on shaft side
- -40...+80 °C
- Max. 3000 rpm
- Profibus
- Removable bus cover with male connector, 3 × M12
- 360° resolved in 16 bit (65536 positions)
- Scalable, default value 13 bit

### Wiring diagram



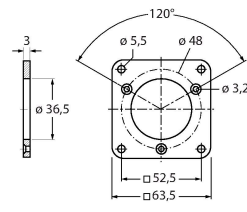
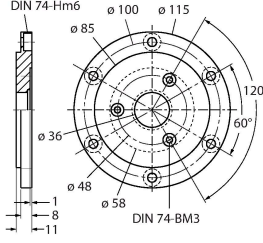
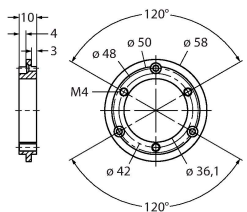
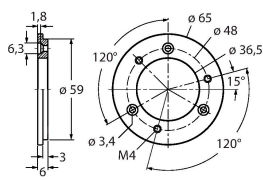
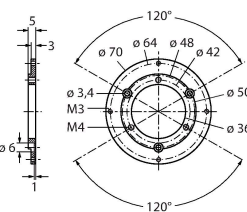
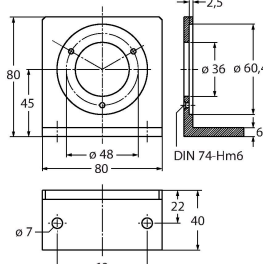
### Technical data

Type	RS-25S6C-9A16B-R3M12
ID	1544363
Measuring principle	Optical
<b>General data</b>	
Max. Rotational Speed	3000 rpm
Moment of inertia of the rotor	$3 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Measuring range	0...360 °
Absolute accuracy	± 0.015 ° At 25 °C
Output type	Absolute singleturn
Resolution singleturn	16 Bit
	scalable
<b>Electrical data</b>	
Operating voltage	10...30 VDC
No-load current	110 mA
Wire breakage/Reverse polarity protection	yes
Communication protocol	PROFIBUS-DP
<b>Mechanical data</b>	
Design	Solid shaft
Flange type	Clamping flange
Flange diameter	Ø 58 mm
Shaft Type	Solid shaft
Shaft diameter D [mm]	6

## Technical data

Shaft Length L [mm]	10
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Bus connection
	3 x M12
Axial shaft load	80 N
Radial shaft load	80 N
<b>Environmental conditions</b>	
Ambient temperature	-40...+80 °C
Vibration resistance (EN 60068-2-6)	100 m/s <sup>2</sup> , 55...2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s <sup>2</sup> , 6 ms
Protection class housing	IP67
Protection class shaft	IP67

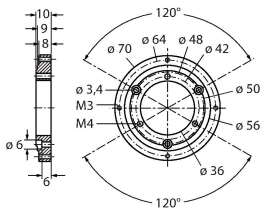
## Accessories

<p><b>RFA-2</b> 1544631</p>  <p>Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick</p>	<p><b>RFA-4</b> 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><b>RFA-6</b> 1544635</p>  <p>Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange</p>	<p><b>RFA-7</b> 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>
<p><b>RFA-8</b> 1544637</p>  <p>Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange</p>	<p><b>RFA-9</b> 1544638</p>  <p>Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange</p>

RS-25S6C-9A16B-R3M12 | 11/07/2023 15-37 | technical changes reserved

RFA-11

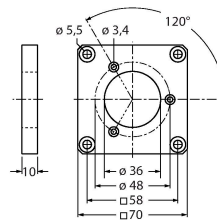
1544640



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

RFA-12

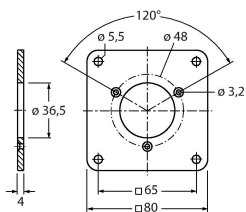
1544641



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

RFA-13

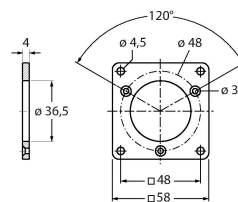
1544642



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