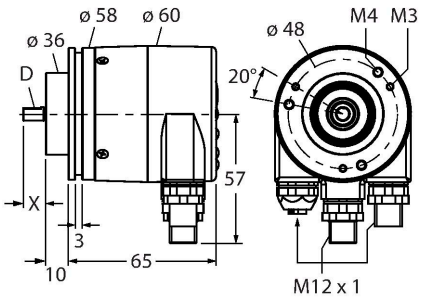
RS-25S10C-9A16B-R3M12
Absolute Rotary Encoder - Singleturn
Industrial Line



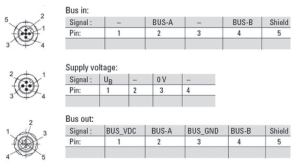
Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 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

Technical data

Type	RS-25S10C-9A16B-R3M12
ID	1544367
Measuring principle	Optical
General data	
Max. rotational speed	3000 rpm
Moment of inertia of the rotor	3 × 10^{-6} kgm²
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
Electrical data	
Operating voltage U_B	10…30 VDC
No-load current	≤ 110 mA
Wire break/reverse polarity protection	yes
Communication protocol	PROFIBUS-DP
Mechanical data	
Flange type	Clamping flange
Flange diameter	Ø 58 mm
Shaft Type	Solid shaft
Shaft diameter D (mm)	10
Shaft Length L [mm]	20

Wiring diagram



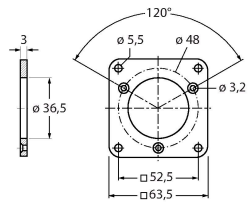
RS-25S10C-9A16B-R3M12| 02/21/2025 14-55 | technical changes reserved

Technical data

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
Environmental conditions	
Ambient temperature	-40…+80 °C
Vibration resistance (EN 60068-2-6)	100 m/s², 55…2000 Hz
Shock resistance (EN 60068-2-27)	2500 m/s², 6 ms
Protection class housing	IP67
Protection class shaft	IP67

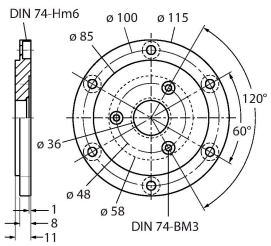
Accessories

RFA-2 1544631



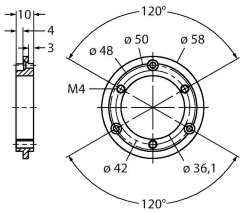
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 63.5 mm; 3 mm thick

RFA-4 1544633



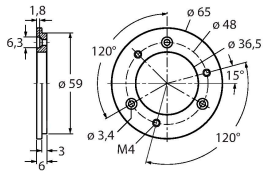
Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange

RFA-6 1544635



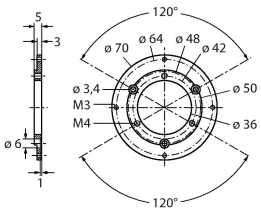
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange

RFA-7 1544636



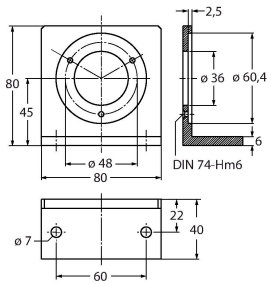
Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter

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

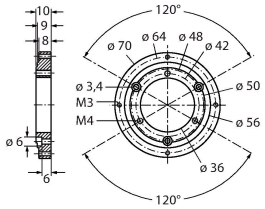
RFA-9 1544638



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

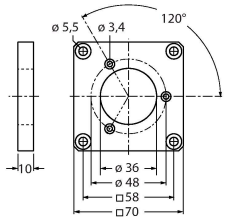
RS-25S10C-9A16B-R3M12| 02/21/2025 14-55 | technical changes reserved

RFA-11	1544640



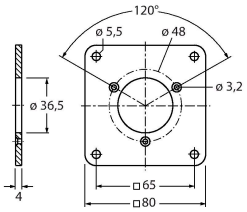
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 10 mm, adapts to Ø 70 mm flange

RFA-12	1544641



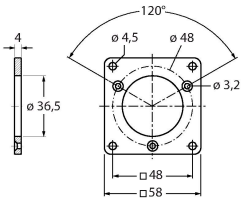
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 70 mm; 10 mm thick

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

RS-25S10C-9A16B-R3M12| 02/21/2025 14-55 | technical changes reserved