

REI-10S10C-2B2048-H1181
Incremental Encoder
Industrial Line



Technical data

Type	REI-10S10C-2B2048-H1181
ID	100010229
Measuring principle	Optical
General data	
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	$1.8 \times 10^{-5} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Output type	Incremental
Resolution, incremental	2048 ppr
Electrical data	
Operating voltage	10...30 VDC
No-load current	100 mA
Output current	≤ 30 mA
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	yes
Pulse frequency max.	300 kHz
Signal level high	min. $U_B - 1 \text{ V}$
Signal level low	max. 0.5 V
Output function	Push-Pull/HTL, invertable
Mechanical data	
Design	Solid shaft
Flange type	Clamping flange
Flange diameter	Ø 58 mm
Shaft Type	Solid shaft
Shaft diameter D [mm]	10

Features

- Clamping flange, Ø 58 mm
- Solid shaft, Ø 10 mm × 20 mm
- 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)
- 10...30 VDC
- Push-pull/HTL invertible
- Pulse frequency max. 300 kHz
- M12 × 1 male connector, 8-pin
- 2048 pulses per revolution

Wiring diagram

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



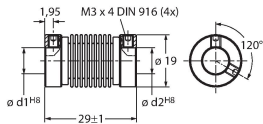
Technical data

Shaft Length L [mm]	20
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

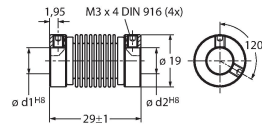
Accessories

RCS-19-10-10
1545356

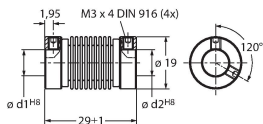
Bellows coupling, outer diameter:
19 mm, bore diameter: 10 mm/10 mm


RCS-19-10-08
1545357

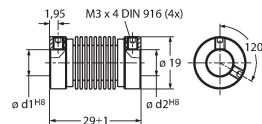
Bellows coupling, outer diameter:
19 mm, bore diameter: 10 mm/8 mm


RCS-19-10-06
1545358

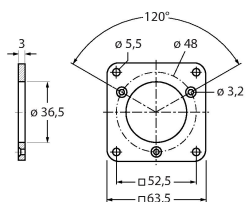
Bellows coupling, outer diameter:
19 mm, bore diameter: 10 mm/6 mm


RCS-19-12-10
1545355

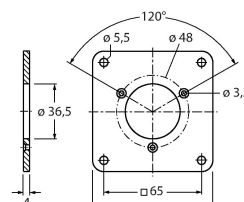
Bellows coupling, outer diameter:
19 mm, bore diameter: 12 mm/10 mm


RFA-2
1544631

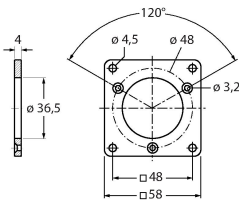
Aluminium flange adapter,
rectangular, for solid shaft encoders
with clamping flange; edge length
63.5 mm; 3 mm thick


RFA-13
1544642

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

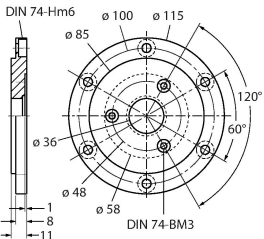


RFA-1 1544630



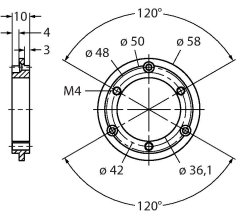
Aluminium flange adapter, rectangular, for solid shaft encoders with clamping flange; edge length 58 mm; 4 mm thick

RFA-4 1544633



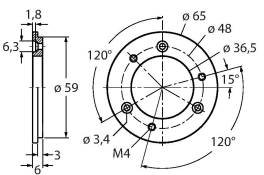
Euro flange – aluminium flange adapter for solid shaft encoders, Ø 115 mm; reference diameter 100 mm; adapts 58 mm clamping flange to Euro flange

RFA-6 1544635



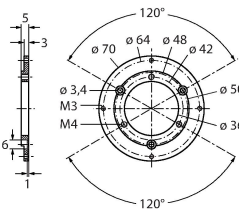
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 58 mm; adapts clamping flange to synchro flange

RFA-7 1544636



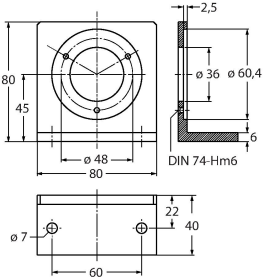
Aluminium flange adapter for solid shaft encoders, Ø 65 mm; adapts to Ø 65 mm flange and 48 mm reference diameter

RFA-8 1544637



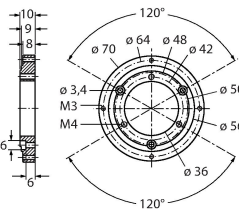
Aluminium flange adapter for solid shaft encoders with clamping flange, Ø 70 mm; thickness 4 mm, adapts to Ø 70 mm flange

RFA-9 1544638



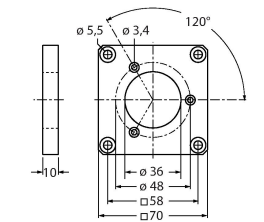
Aluminium angle flange for solid shaft encoders with Ø 58 mm clamping flange

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

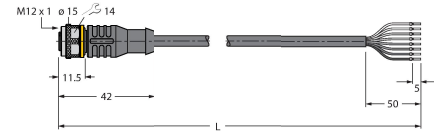
RFA-12 1544641



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

Accessories

Dimension drawing	Type	ID	
	RKC8T-2/TXL	6625142	Connection cable, M12 female connector, straight, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval



Dimension drawing	Type	ID	
	WKC8T-2/TXL	6625145	Connection cable, M12 female connector, angled, 8-pin, cable length: 2 m, jacket material: PUR, black; cULus approval

Accessories

Dimension drawing	Type	ID	
	RA-MW-200-12-DK1-10	100038302	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-200-12-PS1-10	100038303	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-200-12-RT1-10	100038304	Aluminum measuring wheel (studded PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-200-12-PC1-10	100038305	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.2 m, width 12 mm, D = 10 mm
	RA-MW-500-25-DK1-10	100038314	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-500-25-PS1-10	100038315	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm

Dimension drawing	Type	ID	
	RA-MW-500-25-RT1-10	100038316	Aluminum measuring wheel (studded PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-500-25-PC1-10	100038317	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.5 m, width 25 mm, D = 10 mm
	RA-MW-300-12-DK1-10	100038306	Aluminum measuring wheel (cross knurled) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	RA-MW-300-12-PS1-10	100038307	Aluminum measuring wheel (smooth PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	RA-MW-300-12-RT1-10	100038308	Aluminum measuring wheel (studded PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	RA-MW-300-12-PC1-10	100038309	Aluminum measuring wheel (grooved PU) for encoders; circumference 0.3 m, width 12 mm, D = 10 mm
	RA-SAB-15-36	100038251	Spring arm for encoders with a 58-mm flange; recommended contact pressure 15 N; maximum contact pressure 30 N

Dimension drawing	Type	ID	
mm [inch]	RA-SAB-30-36	100038294	Spring arm for encoders with a 58-mm flange; recommended contact pressure 30 N; maximum contact pressure 40 N