

RI-43H20S4-1B1000-H1181

Incremental Hollow Shaft Rotary Encoder

Industrial Line

Technical data

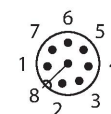
Type	RI-43H20S4-1B1000-H1181
ID	100024248
Measuring principle	Optical
General data	
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	$220 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.2 Nm
Output type	Incremental
Resolution incremental	1000 ppr
Electrical data	
Operating voltage U_B	10...30 VDC
No-load current	$\leq 125 \text{ mA}$
Output current	$\leq 30 \text{ mA}$
Short-circuit protection	yes
Wire break/reverse polarity protection	yes
Pulse frequency max.	300 kHz
Signal level high	min. $U_B - 3 \text{ V}$
Signal level low	max. 2.5 V
Output function	8-wire, Push-Pull/HTL, non-invertable
Mechanical data	
Flange type	Flange with mounting element
Flange diameter	$\varnothing 100 \text{ mm}$
Shaft Type	Blind hole shaft
Shaft diameter D (mm)	20
Shaft diameter D	0.787 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 x 1
	8-pin
Axial shaft load	100 N
Radial shaft load	200 N
Environmental conditions	
Ambient temperature	-40...+80 °C



Features

- Flange with long spring element(S4), $\varnothing 100 \text{ mm}$
- Hollow shaft, $\varnothing 20 \text{ mm}$
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP65 on the shaft side
- -40 ... +80°C
- max. 6000 rev / min
- 10...30 VDC
- Male connector, M12 x 1 , 8-pole
- Push-pull, without inverted signals
- Pulse frequency max. 300 kHz
- 1000 pulses per revolution

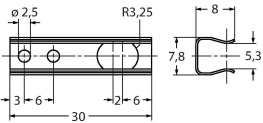
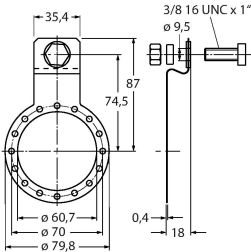
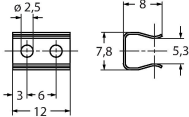
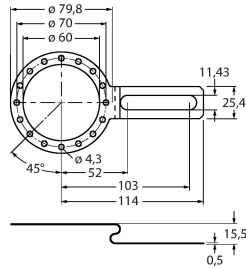
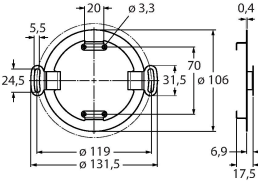
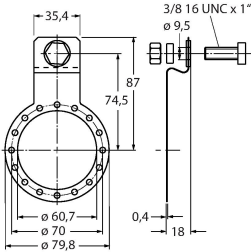
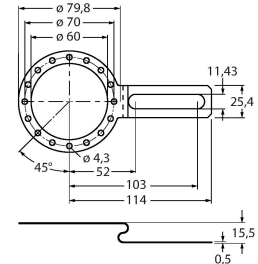
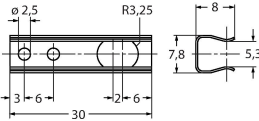
1	GND
2	U_B +
3	A
4	A inv.
5	B
6	B inv.
7	0
8	0 inv.
PH	shield



Technical data

Vibration resistance (EN 60068-2-6)	10 g (100 m/s ²), 10...2000 Hz
Shock resistance (EN 60068-2-27)	200 g (1000 m/s ²), 6 ms
Protection class	IP65
Protection class shaft	IP65
Included in delivery	Spring element, long

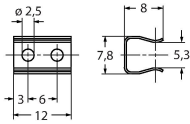
Accessories

RA-43-S4 1545911 Stainless steel long anti-rotation spring 110 mm reference diameter 	RA-43-E2 1545912 Stainless steel 4 1/2" C-face tether 149 mm reference diameter 
RA-43-S5 1545910 Stainless steel short anti-rotation spring 76 mm reference diameter 	RA-43-S8 1545909 Stainless steel long tether arm 104 - 206 mm reference diameter 
RA-43-E 1545946 Stainless steel slotted fexmount 119mm reference diameter 	RME-5 1544616 Stainless steel mounting panel for hollow shaft encoders, reference diameter 149 mm, for applications with axial play 
RME-6 1544617 Stainless steel mounting panel for hollow shaft encoders, reference diameter 104...206 mm, for applications with fixing points on adjustable reference diameter 	RME-10 1544621 Stainless steel mounting element for hollow shaft encoders, pitch diameter 110 mm, for applications with high axial play 

RME-11

1544622

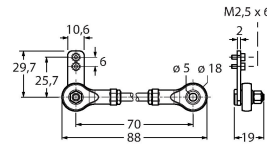
Stainless steel mounting element for hollow shaft encoders, pitch diameter 76 mm, for applications with limited mounting space



RME-15

1544626

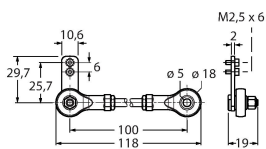
Metal arm bracket, for hollow shaft encoders, length 70 mm; for applications with little axial and radial play; flexibly adjustable



RME-16

1544627

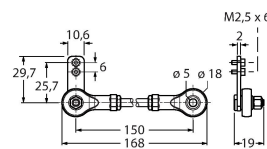
Metal arm bracket, for hollow shaft encoders, length 100 mm; for applications with little axial and radial play; flexibly adjustable



RME-17

1544628

Metal arm bracket, for hollow shaft encoders, length 150 mm; for applications with little axial and radial play; flexibly adjustable



RME-18

1544629

Stainless steel stator coupling for hollow shaft encoders, reference diameter 119 mm, for highly dynamic applications with axial and radial play

