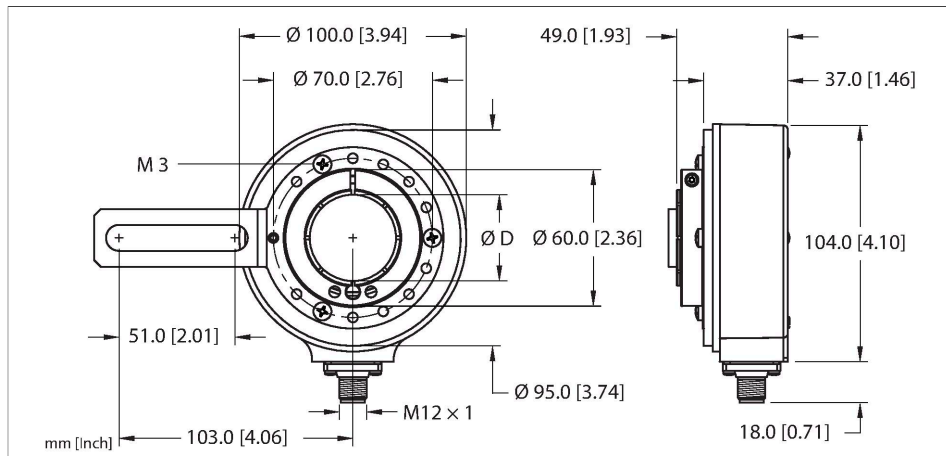


# RI-43HA4S8-2F1000-H1181/N33/N42

## Incremental Hollow Shaft Rotary Encoder

### Industrial Line



#### Technical data

Type	RI-43HA4S8-2F1000-H1181/N33/N42
ID	1545872
Measuring principle	Optical
<b>General data</b>	
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
<b>Electrical data</b>	
Operating voltage $U_B$	5...30 VDC
No-load current	$\leq 100 \text{ mA}$
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. $U_B - 2 \text{ V}$
Signal level low	max. 0.5 V
Output function	8-wire, Push-Pull 7272, with inverted signals
<b>Mechanical data</b>	
Flange type	Flange with mounting element
Flange diameter	Ø 100 mm

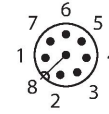
#### Features

- Flange with long arm bracket, Ø 100 mm
- (N42) Isolation insert 1545818 RSA-A4 included
- Code (N33) A leads B, Z gated with B+. Z is 180 deg wide.
- Hollow shaft, Ø 5/8"
- Optical measuring principle
- Shaft material, stainless steel
- Protection class IP65 on the shaft side
- -40 ... +80°C
- max. 6000 rev / min
- 5...30 VDC
- Male connector, M12 x 1, 8-pole
- Push-pull 7272, with 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

Shaft Type	Blind hole shaft
Shaft diameter D (mm)	15.875
Shaft diameter D	0.625 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector, M12 × 1
	8-pin
Axial shaft load	100 N
Radial shaft load	200 N
<b>Environmental conditions</b>	
Ambient temperature	-40...+80 °C
Vibration resistance (EN 60068-2-6)	10 g (100 m/s <sup>2</sup> ), 10...2000 Hz
Shock resistance (EN 60068-2-27)	200 g (1000 m/s <sup>2</sup> ), 6 ms
Protection class	IP65
Protection class shaft	IP65
Included in delivery	Mounting arm, long

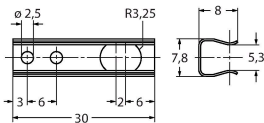


## Accessories

RA-43-S4

1545911

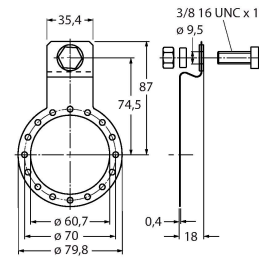
Stainless steel long anti-rotation spring 110 mm reference diameter



RA-43-E2

1545912

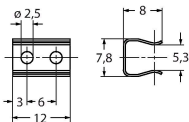
Stainless steel 4 1/2" C-face tether 149 mm reference diameter



RA-43-S5

1545910

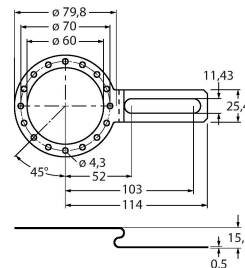
Stainless steel short anti-rotation spring 76 mm reference diameter



RA-43-S8

1545909

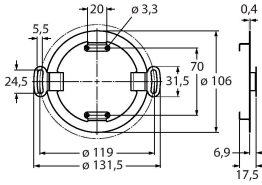
Stainless steel long tether arm 104 - 206 mm reference diameter



RA-43-E

1545946

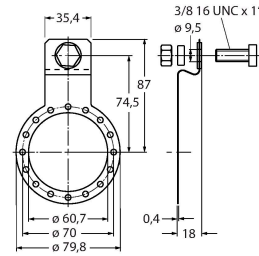
Stainless steel slotted fexmount  
119mm reference diameter



RME-5

1544616

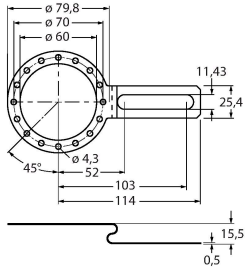
Stainless steel mounting panel for hollow shaft encoders, reference diameter 149 mm, for applications with axial play



RME-6

1544617

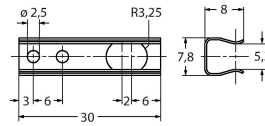
Stainless steel mounting panel for hollow shaft encoders, reference diameter 104...206 mm, for applications with fixing points on adjustable reference diameter



RME-10

1544621

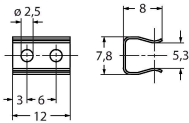
Stainless steel mounting element for hollow shaft encoders, pitch diameter 110 mm, for applications with high axial play



RME-11

1544622

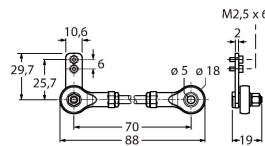
Stainless steel mounting element for hollow shaft encoders, pitch diameter 76 mm, for applications with limited mounting space



RME-15

1544626

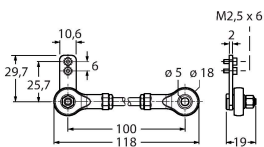
Metal arm bracket, for hollow shaft encoders, length 70 mm; for applications with little axial and radial play; flexibly adjustable



RME-16

1544627

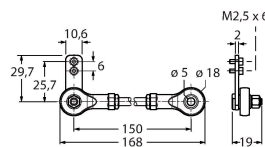
Metal arm bracket, for hollow shaft encoders, length 100 mm; for applications with little axial and radial play; flexibly adjustable



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

