

RI-10SA1Z4-2K512-10MIL

Incremental Shaft Encoder

Industrial Line

Technical data

Type	RI-10SA1Z4-2K512-10MIL
ID	200005709
Measuring principle	Optical
General data	
Max. Rotational Speed	6000 rpm
Moment of inertia of the rotor	$1.8 \times 10^{-6} \text{ kgm}^2$
Starting torque	< 0.05 Nm
Output type	Incremental
Resolution incremental	512 ppr
Electrical data	
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	Push-Pull 7272, with inverted signals
Mechanical data	
Flange type	Synchro flange
Flange diameter	$\varnothing 50.8 \text{ mm}$
Shaft Type	Solid shaft
Shaft diameter D	0.375 in
Shaft length (L)	0.625 in
Shaft material	Stainless steel
Housing material	Die-cast zinc
Electrical connection	Connector
	MIL, 10-pole
Axial shaft load	40 N
Radial shaft load	80 N
Environmental conditions	
Ambient temperature	-40...+85 °C

Features

- Square flange, $\varnothing 50.8 \text{ mm}$
- Solid shaft, $\varnothing 3/8" \times 5/8"$
- 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)
- 5...30 VDC
- Male connector MIL, 10-pole
- Push-pull 7272, with inverted signals
- Pulse frequency max. 300 kHz
- 512 pulses per revolution

Technical data

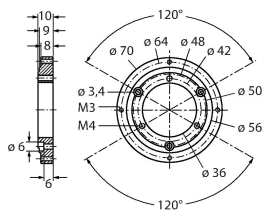
Vibration resistance (EN 60068-2-6)	300 m/s ² , 10...2000 Hz
Shock resistance (EN 60068-2-27)	3000 m/s ² , 6 ms
Protection class	IP67
Protection class shaft	IP67

Accessories

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

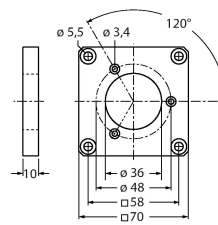
1544640



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