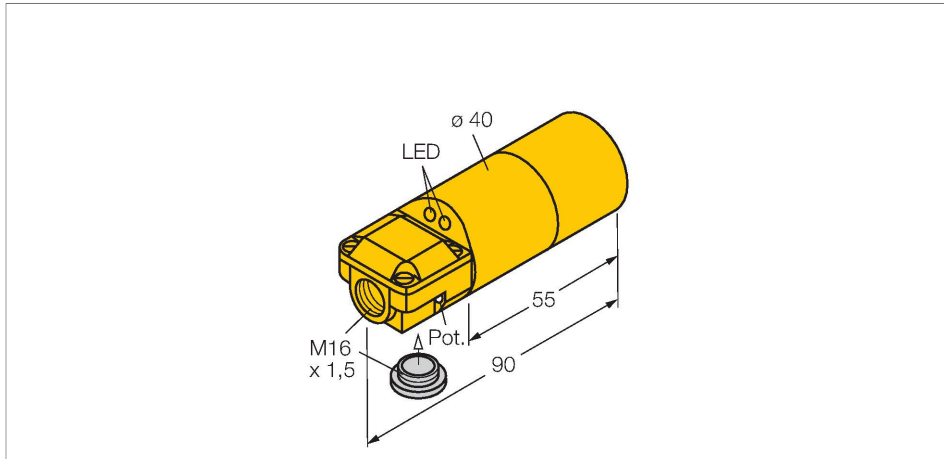


DNI30U-K40SR-AP4X2

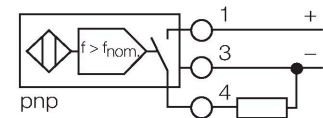
Inductive Sensor – Rotation speed monitor



Features

- 2 cable entries (axial, radial)
- Smooth barrel, Ø 40 mm
- Plastic, ABS
- Large monitoring range of 60 to 3000 1/min
- Fixed start-up time delay 5 s
- Switchpoint adjustable via potentiometer
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- Terminal chamber

Wiring diagram

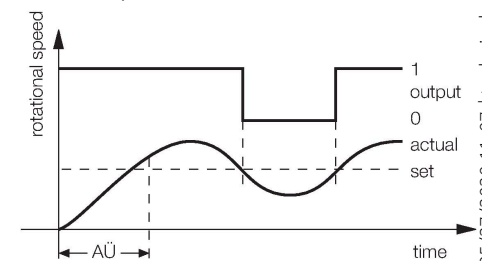


Technical data

Type	DNI30U-K40SR-AP4X2
Ident. no.	1500202
Rotational speed range, adjustable	1...50 Hz
Hysteresis (rotational-speed range)	3...15 %
Rated switching distance	30 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × S _n) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 % ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I _e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Insulation class	□

Functional principle

The rotational speed is detected by periodic damping of the integrated inductive sensor. This can be accomplished via metal targets or teeth on the monitored shaft. The pulse sequence generated is compared to an adjustable reference value in a comparator circuit. If the rotational speed is below the reference value, the output is switched off (0). If the reference value is exceeded, the output is switched on (1). The start-up time delay (AÜ) is triggered by applying voltage to the device and closes the output for 5 s (start-up time of the drive).



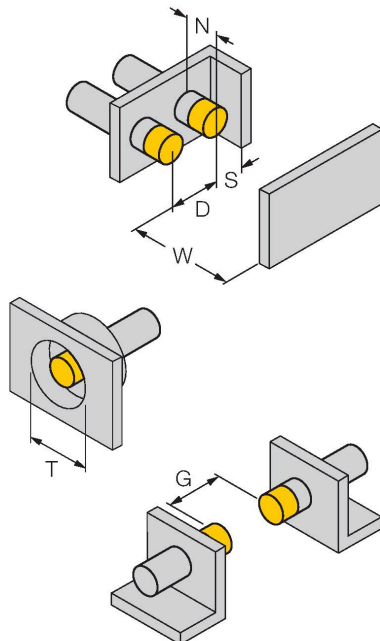
DNI30U-K40SR-AP4X2 | 05/27/2020 11-07 | technical changes reserved

Technical data

Design	Smooth barrel, 40 mm
Dimensions	90 mm
Housing material	Plastic, ABS, Yellow
Active area material	Plastic, ABS, yellow
Electrical connection	Terminal chamber
Clamping ability	$\leq 2.5 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Included in delivery	BS40, cable gland, blanking plug

Mounting instructions

Mounting instructions/Description



Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	$\varnothing 40 \text{ mm}$