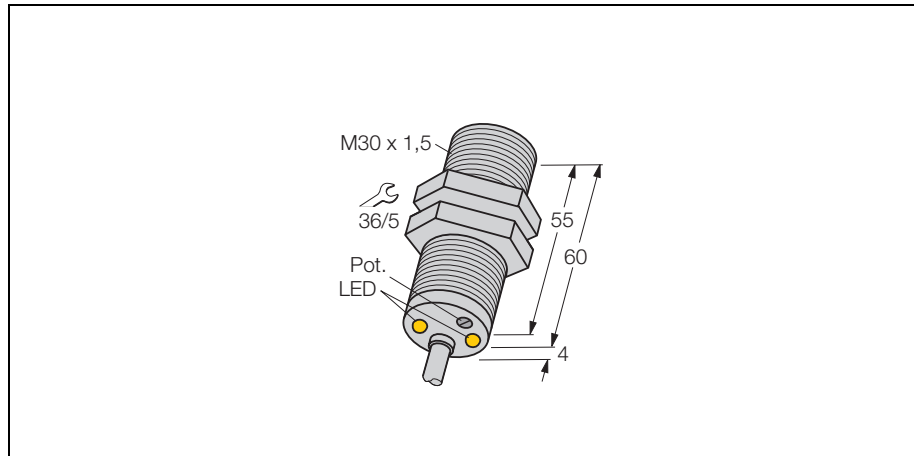
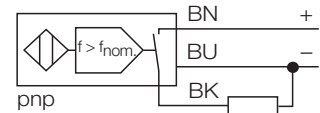


**inductive sensor
rotational speed monitor
DBi10U-M30-AP4X2**



- threaded barrel, M30 x 1,5
- chrome-plated brass
- large monitoring range of 3 to 3000 1/min
- adjustable via potentiometer
- fixed start-up time delay of 5 s
- magnetic field immune
- 3-wire DC, 10..0.65 VDC
- normally open, pnp output
- cable connection

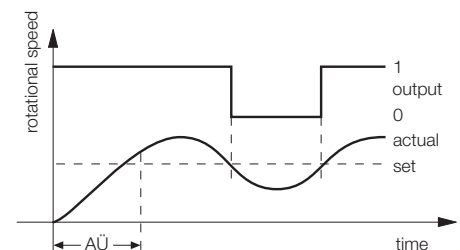
Wiring diagram



Function principle

The rotational speed is detected by periodic attenuation of the integrated inductive sensor. This can be accomplished via metal targets or teeth of 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 open (0). If the reference value is exceeded, the output closes (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).

Diagram



Type	DBi10U-M30-AP4X2
Ident-No.	1582231
Rotational speed range, adjustable	0.05... 50 Hz adjustable via potentiometer
Hysteresis (rotational speed range)	3... 15 %
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured switching distance	≤ (0,81 x Sn) mm
Repetition accuracy	≤ 2 %
Temperature drift	≤ ± 10 % ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis ambient temperature	3... 15 % -30 ... + 85 °C
Operating voltage	10... 65 V DC
Residual ripple	≤ 10 % U _{SS}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage dip at I _e	≤ 1.8 V
Wire breakage / reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Housing style	threaded barrel; M30 x 1,5
Dimensions	64 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, PBT
End cap	plastic, EPTR
Housing nut tightening torque	75 Nm
Connection	cable
cable quality	Ø 5.2, LiYY, PVC, 2 m
Cable cross section:	3 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection degree	IP67
Switch state display	LED green / yellow / blue