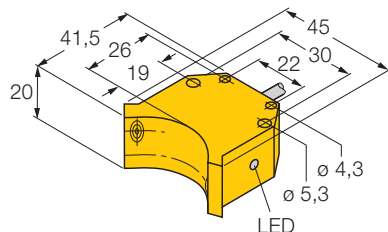


inductive dual sensor for rotary actuators Ni4-DS20-2AP6X2

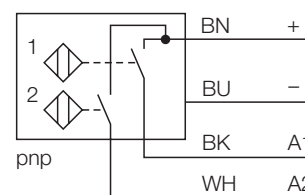
TURCK

Industrial
Automation



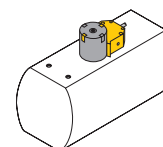
- rectangular, housing style DS20
- plastic, PBT-GF30-VO
- two switching outputs for monitoring the position of rotary actuators
- Mounting on all standard actuators
- 2 x normally open, pnp output
- 4-wire DC, 10...30 VDC

Wiring diagram



Functional principle

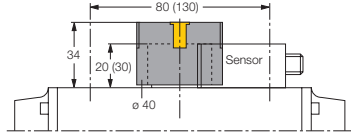
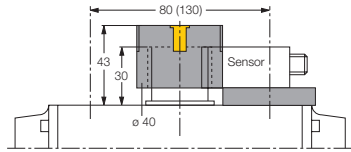
Inductive sensors are designed for wear-free and non-contact detection of metal objects. Dual sensors are especially designed for position detection in rotary actuators. They combine the reliability of non-contact inductive sensors with the flexibility of a modular housing system.



Type	Ni4-DS20-2AP6X2
Ident-No.	1650022
Rated operating distance S_n	4 mm
Mounting condition	non-flush
Correction factors	$St_{37} = 1$, $V_{2A} \sim 0.7$, $M_s \sim 0.4$, $Al \sim 0.3$
Repeatability	$\leq 2\%$
Temperature drift	$\leq \pm 10\%$
Hysteresis	3... 15 %
Ambient temperature	-25... + 70 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 200\text{ mA}$
No-load current I_0	$\leq 15\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Rated insulation voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes / cyclic
Voltage drop at I_e	$\leq 1.8\text{ V}$
Wire breakage / Reverse polarity protection	yes / complete
Output function	4-wire, normally open, pnp
Switching frequency	$\leq 0.05\text{ kHz}$
Housing	dual sensor for valve monitoring, DS20
Dimensions	42 x 45 x 20 mm
Housing material	plastic, PBT-GF30-VO
Material active face	plastic, PBT-GF30-VO
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	4 x 0.34mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	2 x LED yellow / red

inductive dual sensor for rotary actuators Ni4-DS20-2AP6X2

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BTS-DS20-TP1	6900155	actuation kit (puck); end position dampened; hole pattern on flange surface 80 x 30 mm; connection shaft (shaft extension) height 20 mm / Ø max. 30 mm	
BTS-DS20-TK1	6900156	actuation kit (puck); end position dampened; hole pattern on flange surface 80 x 30 mm (130 x 30 mm); connection shaft (shaft extension) height 30 mm / Ø max. 30 mm	
BTS-DS20-KEY	6900136	actuation kit (puck), end position dampened and adjustable switch point; hole pattern on flange surface 80 x 30 mm (130 x 30 mm); connection shaft (shaft extension) height 20 / Ø max. 22 mm	