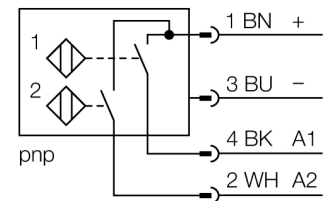


**Inductive
dual sensor for rotary actuators
NI4-DS20-2AP6X2-H1141**

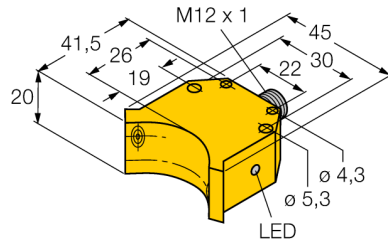
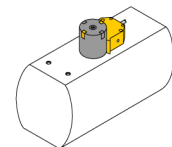
- Rectangular, housing DS20
- Plastic, PBT-GF30-VO
- Two switching outputs for monitoring the position of rotary actuators
- Mounting on all standard actuators
- 2 x NO contacts, PNP output
- DC 4-wire, 10...30 VDC

Wiring diagram



Functional principle

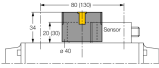
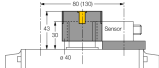
Inductive sensors detect metal objects contactless and wear-free. Dual sensors are especially designed for position detection in rotary actuators. They combine the reliability of non-contact inductive sensors with the flexibility of a modular housing system.



Type code	NI4-DS20-2AP6X2-H1141
Ident no.	1650020
Rated operating distance Sn	4 mm
Mounting condition	non-flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, NO contact, PNP
Switching frequency	0.05 kHz
Design	dual sensor for valve monitoring, DS20
Dimensions	42x 45x 20 mm
Housing material	Plastic, PBT
Material active face	Plastic, PBT
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	●● yellow / red

**Inductive
dual sensor for rotary actuators
NI4-DS20-2AP6X2-H1141**

Accessories

Type code	Ident no.	Description	Dimension drawing
BTS-DS20-TP1	6900155	Actuation kit (puck); end position damped; 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 damped; 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 damped; hole pattern on flange surface 80 x 30 mm (130 x 30 mm); connection shaft (shaft extension) height 20 / Ø max. 22 mm	