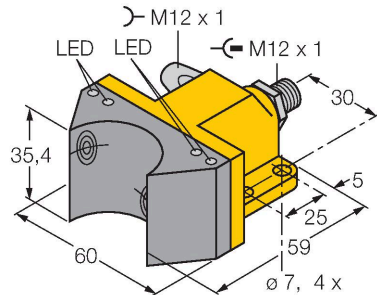


NI4-DSU35-2ASI2X4-H1140

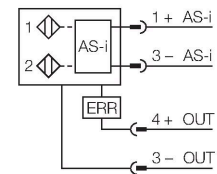
Inductive Sensor – For Rotary Actuators



Features

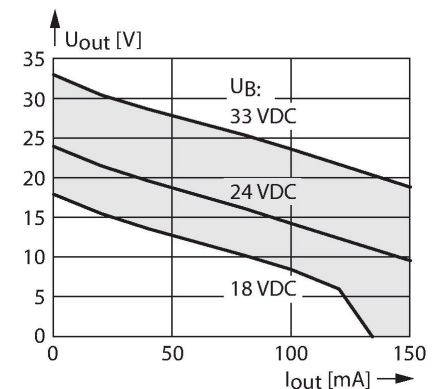
- Rectangular, housing DSU35
- Plastic, PP-GF30-VO
- Two outputs for monitoring the position of rotary actuators
- Mounting on all standard actuators
- AS-Interface V3.0 certified
- Valves can be connected
- 2 x M12 connector
- 18...33 VDC

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.



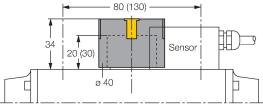
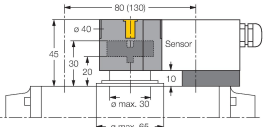
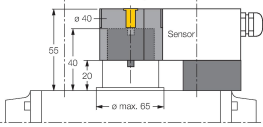
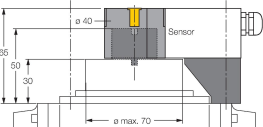
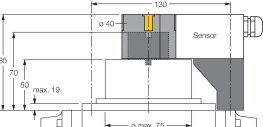
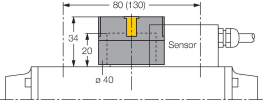
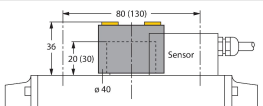
Technical data

| | |
|--|--|
| Type | NI4-DSU35-2ASI2X4-H1140 |
| Ident. no. | 1902013 |
| Rated switching distance | 4 mm |
| Mounting conditions | Non-flush |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 18...33 VDC |
| No-load current | ≤ 40 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Communication protocol | AS-Interface |
| Output function | 2-wire, 2 normally open contact |
| I/O configuration (HEX) / ID code (HEX) | IO code 7 / ID code A / ID2 code 7 |
| I/O matrix input | 0 = upper sensor S01 1 = lower sensor S02 2 = wire-break at output 3 = not used |
| I/O matrix output | 0 = output 1 1 - 3 = not used |
| Rotary actuators output current | ≤ 80 mA, grounding is not allowed, residual current ≤ 0.5 mA |
| Short-circuit protection / output watchdog | yes / yes |

Technical data

| | |
|---------------------------------------|---|
| Wire breakage protection | ≤ 0.1 mA |
| Output LEDs | yellow: output / red: Wire-break |
| Switching frequency | 0.03 kHz |
| Design | Dual sensor for valve monitoring, DSU35 |
| Dimensions | 59 x 60 x 35.4 mm |
| Housing material | Plastic, PP-GF30, Yellow |
| Active area material | Plastic, PP-GF30, black |
| Max. tightening torque of housing nut | 3 Nm |
| Electrical connection | Connector, M12 × 1 |
| Valve connection | Connector, M12 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 272 years |
| Switching state | 2 × LEDs, Yellow/Yellow |

Accessories

| | | | |
|---|---|---|--|
| BTS-DSU35-EB1  | 6900225 Actuation kit (puck) for dual sensors; end position damped; hole pattern on receptacle surface: 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height: 20 mm (30 mm)/Ø: max. 30 mm | BTS-DSU35-Z01  | 6900229 Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 65 mm; hole pattern on receptacle surface: 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height: 20 mm/Ø: max. 30 mm |
| BTS-DSU35-Z02  | 6900230 Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 65 mm; hole pattern on receptacle surface: 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height: 20 mm (30 mm)/Ø: max. 40 mm | BTS-DSU35-Z03  | 6900231 Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 110 mm; hole pattern on receptacle surface: 30 x 130 mm; connection shaft (shaft extension) height: 30 mm/Ø: max. 70 mm |
| BTS-DSU35-Z07  | 6900403 Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 110 mm; hole pattern on receptacle surface: 30 x 130 mm; connection shaft (shaft extension) height: 50 mm/Ø: max. 75 mm | BTS-DSU35-EBE3  | 6901070 Actuation kit (puck) for dual sensors; end position damped; "open" and "closed" switchpoint adjustable; hole pattern on receptacle surface: 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height: 20 mm/Ø: max. 30 mm |
| BTS-DSU35-EU2  | 6900455 Actuation kit (puck) for dual sensors; end position undamped for clockwise and counter-clockwise drives; hole pattern on flange surface 80 x 30 mm and 130 x 30 mm; connection shaft (shaft stud) height 20 (30) mm / Ø max. 30 mm | | |