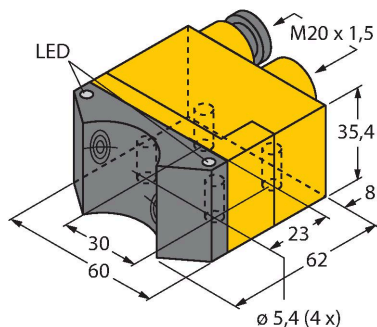


# NI4-DSU35TC-2AD4X2

## Inductive Sensor – For Rotary Actuators



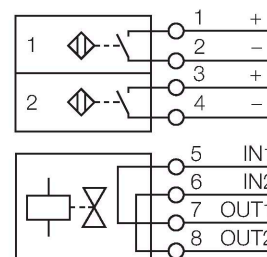
### Technical data

|                                           |                                                     |
|-------------------------------------------|-----------------------------------------------------|
| Type                                      | NI4-DSU35TC-2AD4X2                                  |
| ID                                        | 4430130                                             |
| General data                              |                                                     |
| 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 %                                            |
| Electrical data                           |                                                     |
| Operating voltage                         | 10...65 VDC                                         |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>                              |
| DC rated operational current              | ≤ 100 mA                                            |
| Residual current                          | ≤ 0.6 mA                                            |
| Isolation test voltage                    | ≤ 0.5 kV                                            |
| Short-circuit protection                  | yes / Cyclic                                        |
| Voltage drop at I <sub>o</sub>            | ≤ 5 V                                               |
| Wire breakage/Reverse polarity protection | Complete                                            |
| Output function                           | 4-wire, NO contact, 2-wire                          |
| Smallest operating current                | ≥ 3 mA                                              |
|                                           | for each sensor                                     |
| Valve control                             | ≤ 2,5 A / ≤ 250 V                                   |
| Switching frequency                       | 0.05 kHz                                            |
| Mechanical data                           |                                                     |
| Design                                    | Dual sensor for rotary actuators, DSU35             |
| Dimensions                                | 62 x 60 x 35.4 mm                                   |

### Features

- Rectangular, housing DSU35
- Plastic, PP-GF30-VO
- Two outputs for monitoring the position of rotary actuators
- Mounting on all standard actuators
- DC 2-wire, 10...65 VDC
- 2 x NO contact
- Terminal chamber

### Wiring diagram

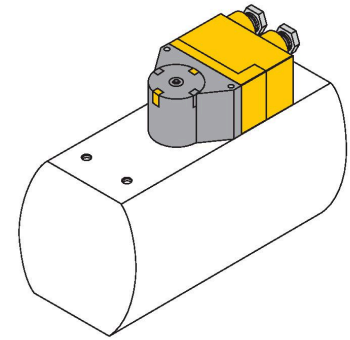


### Functional principle

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

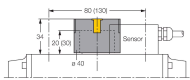
|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Housing material                      | Plastic, PP-GF30, Yellow                   |
| Active area material                  | Plastic, PP-GF30, black                    |
| Max. tightening torque of housing nut | 3 Nm                                       |
| Electrical connection                 | Terminal chamber                           |
| Clamping ability                      | ≤ 2.5 mm <sup>2</sup>                      |
| <b>Environmental conditions</b>       |                                            |
| Ambient temperature                   | -25...+70 °C                               |
| 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                       | 2 × LEDs, Yellow/red                       |
| Included in delivery                  | 2 cable glands (black), 1 blanking plug    |



## Accessories

### BTS-DSU35-EB1

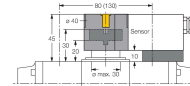
6900225



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

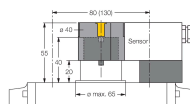
6900229



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

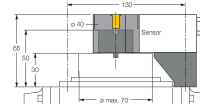
6900230



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

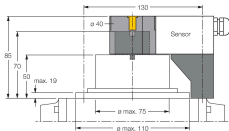
6900231



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

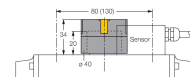
6900403



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

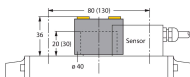
6901070



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