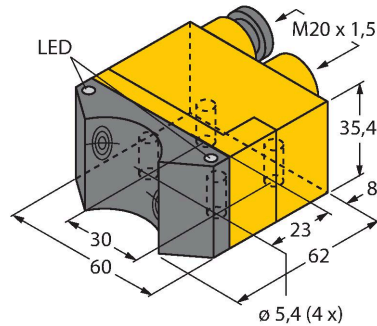


# NI4-DSU35TC-2AP4X2

## Inductive Sensor – For Rotary Actuators



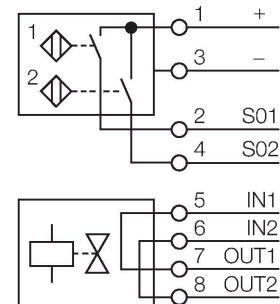
### Technical data

Type	NI4-DSU35TC-2AP4X2
ID	1569902
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 $U_B$	10...65 VDC
Ripple $U_{ss}$	≤ 10 % $U_{Bmax}$
DC rated operating current $I_o$	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, NO contact, PNP
Valve control	≤ 2,5 A / ≤ 250 V
Switching frequency	0.05 kHz

### Features

- Rectangular, housing DSU35
- Plastic, PP-GF30-VO
- Two outputs for monitoring the position of rotary actuators
- Mounting on all standard actuators
- 2 x NO contact, PNP output
- DC 4-wire, 10...65 VDC
- Terminal chamber

### Wiring diagram

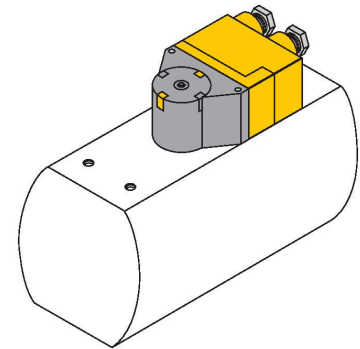


### Functional principle

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

Mechanical data	
Design	Dual sensor for valve monitoring, DSU35
Dimensions	62 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	Terminal chamber
Clamping ability	≤ 2.5 mm <sup>2</sup>
Environmental conditions	
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

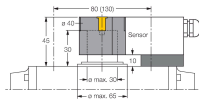
<b>BTS-DSU35-EB1</b>	<b>6900225</b>	Actuation kit (puck) for dual sensors; end position damped; hole pattern on receptacle surface: 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height: 20 mm (30 mm)/Ø: max. 30 mm
<b>BTS-DSU35-Z01</b>	<b>6900229</b>	Mounting kit for dual sensors for 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
<b>BTS-DSU35-Z02</b>	<b>6900230</b>	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
<b>BTS-DSU35-Z03</b>	<b>6900231</b>	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
<b>BTS-DSU35-Z07</b>	<b>6900403</b>	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
<b>BTS-DSU35-EU2</b>	<b>6900455</b>	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
<b>BTS-DSU35-EBE3</b>	<b>6901070</b>	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
<b>BTS-DSU35-Z06</b>	<b>6900402</b>	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 stud) height 20 (30) mm / Ø  
max. 30 mm

shaft (shaft extension) height: 30 mm/  
Ø: max. 40 mm

BTS-DSU35-Z04

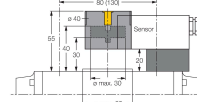
6900286



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: 30 mm/ Ø: max. 30 mm

BTS-DSU35-Z05

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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: 30 mm/ Ø: max. 30 mm