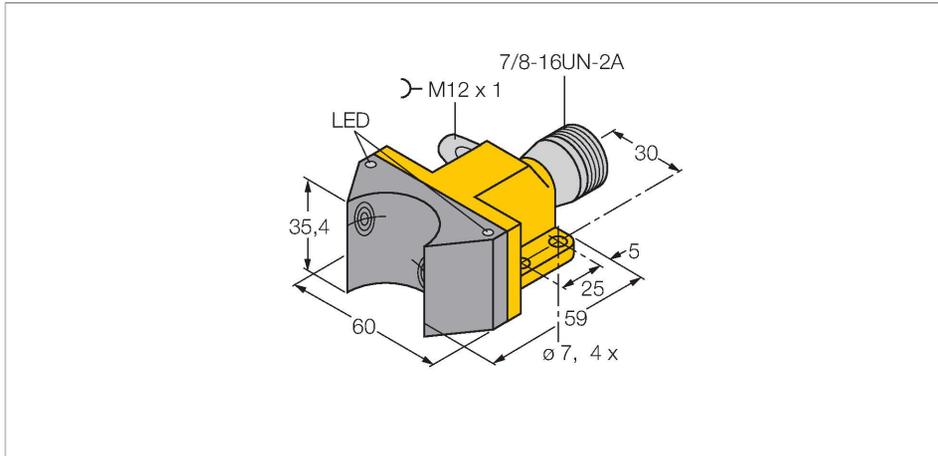


# NI4-DSU35-2ADZ30X2-B1160-FKE4.5

## Inductive Sensor – For Rotary Actuators



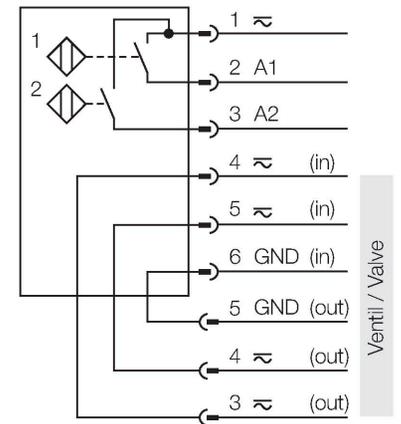
### Features

- Rectangular, housing DSU35
- Plastic, PP-GF30-VO
- Two outputs for monitoring the position of rotary actuators
- All metal housing parts are made of stainless steel
- Mounting on all standard actuators
- Valves can be connected
- 2 x NO contact
- AC 3-wire, 20...250 VDC
- DC 3-wire, 10...300 VDC
- 7/8" male connector

### Technical data

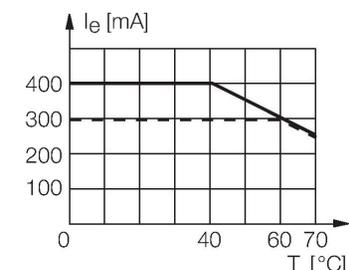
Type	NI4-DSU35-2ADZ30X2-B1160-FKE4.5
ID	4290011
<b>General data</b>	
Rated switching distance	4 mm
Mounting conditions	Non-flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage $U_b$	20...250 VAC
Operating voltage $U_b$	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current $I_e$	≤ 300 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Isolation test voltage	1.5 kV
Surge current	≤ 3 A (≤ 20 ms max. 5 Hz)
Short-circuit protection	yes/Latching
Voltage drop at $I_e$	≤ 6 V
Wire break/reverse polarity protection	yes/Complete
Output function	6-wire, 2 x NO contact, 2-wire
Smallest operating current	≥ 3 mA

### 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.

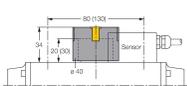


## Technical data

Valve control	max. 250 VAC/DC 4 A
Short-circuit protection / output watchdog	no / no
Switching frequency	0.02 kHz
<b>Mechanical data</b>	
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
Plug adapter	metal, 1.4401 (AISI 316)
Max. tightening torque of housing nut	3 Nm
Electrical connection	Connector, 7/8"
Valve connection	Connector, M12 x 1
<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

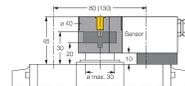
## Accessories

**BTS-DSU35-EB1** 6900225



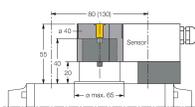
Actuation kit (puck) for dual sensors; end position damped; hole pattern on receptacle surface: 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height: 20 mm (30 mm)/Ø: max. 30 mm

**BTS-DSU35-Z01** 6900229



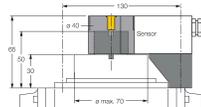
Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 65 mm; hole pattern on receptacle surface: 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height: 20 mm/Ø: max. 30 mm

**BTS-DSU35-Z02** 6900230



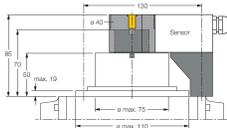
Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 65 mm; hole pattern on receptacle surface: 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height: 20 mm (30 mm)/Ø: max. 40 mm

**BTS-DSU35-Z03** 6900231



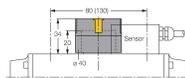
Mounting kit for dual sensors for larger rotary actuators; Ø spacer plate and snap ring: max. 110 mm; hole pattern on receptacle surface: 30 x 130 mm; connection shaft (shaft extension) height: 30 mm/Ø: max. 70 mm

**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

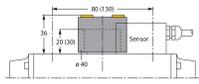
**BTS-DSU35-EBE3** 6901070



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**

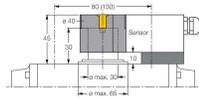
6900455



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

**BTS-DSU35-Z04**

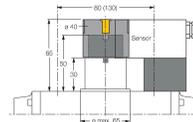
6900286



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-Z06**

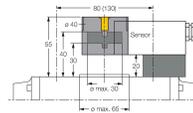
6900402



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. 40 mm

**BTS-DSU35-Z05**

6900287



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