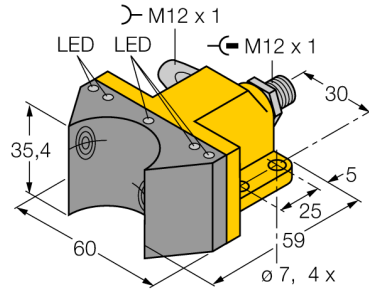
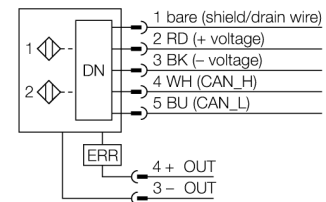


**Inductive
dual sensor for rotary actuators
NI4-DSU35-2DNETX5-H1150**



- Rectangular, housing DSU35
- Plastic, PP-GF30-VO
- Two outputs for monitoring the position of rotary actuators
- Direct connection to DeviceNet™ networks
- Valves can be connected
- 5-wire DC, 11...25 VDC
- Male M12 x 1

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

We offer special versions for temperatures of -60 °C up to +250 °C.

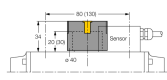
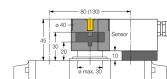
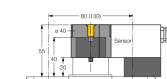

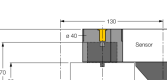
LED meaning

LED	Colour	State	Status
S01	YE	on	target detected
S02	YE	on	target detected
out	YE	off	output off
		on	output on
ERR	RD	on	output on/off: wirebreak detected
status	RD/GN	off	sensor not powered
		GN on steady	sensor active and allocated by a master
		GN flashing	sensor active but not allocated by a master
		RD flashing	recoverable fault (open output, invalid input state, low bus voltage, I/O timeout)
		RD on steady	major fault (duplicate address, baud rate, bus off comm.)
		GN+RD on	autobaud detect
		GN+RD flashing	power-up test

Type code	NI4-DSU35-2DNETX5-H1150
Ident no.	1569908
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
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	11...25VDC
No-load current I₀	≤ 60 mA
Rated insulation voltage	≤ 0.5 kV
Output function	5-wire, 2x NO, DeviceNet™
Address (MacID)	0 - 63, via EDS file
Baud rate	via EDS file
DeviceNet input data	Bit 0 S01 input/ Bit 1 S02 input/ Bit 2 output error/ Bit 7 input error
DeviceNet output data	Bit 3 - Bit 6, not used Bit 0 valve output Bit 1 - Bit 7, not used
Output voltage U_{out}	U _b - 3 V, PNP
Short-circuit protection / output watchdog	yes/ no
Wire breakage protection I_{out}	≤ 0.1 mA
Switching frequency	0.05 kHz
Design	dual sensor for valve monitoring, DSU35
Dimensions	59 x 60 x 35.4 mm
Housing material	plastic, PP, yellow
Material active area	Plastic, PP, Black
Connection	male, M12 x 1
Valve connection	Connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Switching state	LED yellow / yellow

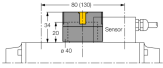
**Inductive
dual sensor for rotary actuators
NI4-DSU35-2DNETX5-H1150**

Accessories

Type code	Ident no.	Description	Dimension drawing
BTS-DSU35-EB1	6900225	Actuation kit (puck) for dual sensors; end position damped; hole pattern on flange surface 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height 20 mm / Ø max. 30 mm	
BTS-DSU35-Z01	6900229	Mounting kit dual sensors, for larger rotary actuators: Spacer plate and snap ring max. Ø 65 mm; hole pattern on flange surface 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height 30 mm / Ø max. 30 mm	
BTS-DSU35-Z02	6900230	Mounting kit dual sensors, for larger rotary actuators: Ø disc and snap ring max. 65 mm; hole pattern on flange surface 30 x 80 mm (30 x 130 mm); connection shaft (shaft extension) height 20 (30) mm / Ø max. 40 mm	
BTS-DSU35-Z03	6900231	Mounting kit dual sensors, for larger rotary actuators: Ø disc and snap ring max. 110 mm; hole pattern on flange surface 30 x 130 mm; connection shaft (shaft extension) height 30 mm / Ø max. 70 mm	
BTS-DSU35-Z07	6900403	Mounting kit dual sensors, for larger rotary actuators: Ø disc and snap ring max. 110 mm; hole pattern on flange surface 30 x 130 mm; connection shaft (shaft extension) height 50 mm / Ø max. 75 mm	

**Inductive
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NI4-DSU35-2DNETX5-H1150**

Accessories

Type code	Ident no.	Description	Dimension drawing
BTS-DSU35-EBE3	6901070	Actuation kit (puck) for dual sensors; end position damped; "open" and "closed" switchpoint adjustable; hole pattern on flange surface 80 x 30 mm and 130 x 30 mm; connection shaft (shaft extension) height 20 / 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	