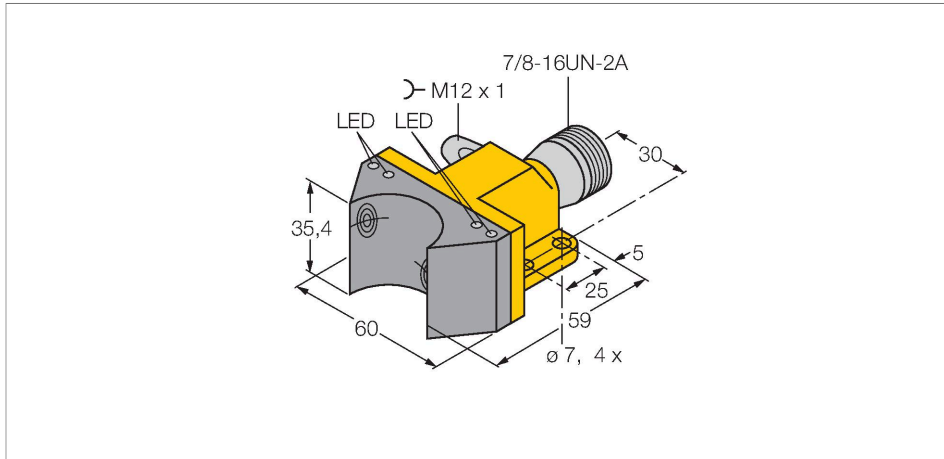


# NI4-DSU35-2ASI2X4-B1140-FKE4.3

## Inductive Sensor – For Rotary Actuators



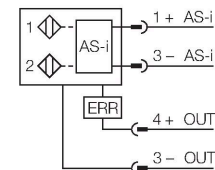
### Features

- 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
- AS-Interface V3.0 certified
- Valves can be connected
- AS-Interface, V2.1, 18...33 VDC
- Connector 7/8 "(ASi) and M12 connector (valve)

### Technical data

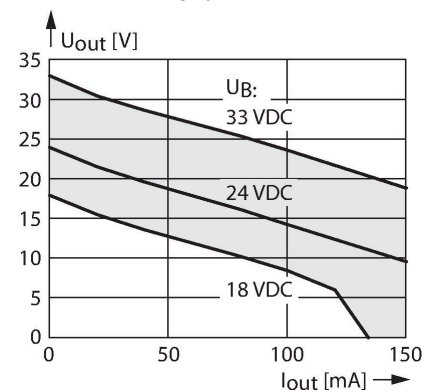
Type	NI4-DSU35-2ASI2X4-B1140-FKE4.3
ID	1902015
<b>General data</b>	
Rated switching distance	4 mm
Mounting conditions	Non-flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage	18...33 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

### Wiring diagram



### Functional principle

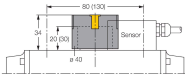
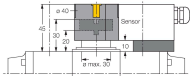
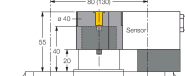
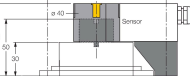

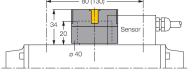
Inductive sensors detect metal objects contactless and wear-free. Dual sensors are especially designed for position detection in rotary actuators. They combine the reliability of non-contact inductive sensors with the flexibility of a modular housing system.



## Technical data

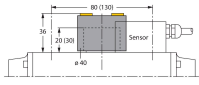
Wire breakage protection	≤ 0.1 mA
Output LEDs	yellow: output / red: Wire-break
Switching frequency	0.03 kHz
<b>Mechanical data</b>	
Design	Dual sensor for valve monitoring, DSU35
Dimensions	59 x 60 x 35.4 mm
Housing material	Plastic, PP-GF30, Yellow
Active area material	Plastic, PP-GF30, black
Plug adapter	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	272 years
Switching state	2 × LEDs, Yellow/yellow

## Accessories

<p><b>BTS-DSU35-EB1</b> 6900225</p>  <p>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</p>	<p><b>BTS-DSU35-Z01</b> 6900229</p>  <p>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</p>
<p><b>BTS-DSU35-Z02</b> 6900230</p>  <p>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</p>	<p><b>BTS-DSU35-Z03</b> 6900231</p>  <p>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</p>
<p><b>BTS-DSU35-Z07</b> 6900403</p>  <p>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</p>	<p><b>BTS-DSU35-EBE3</b> 6901070</p>  <p>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</p>

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