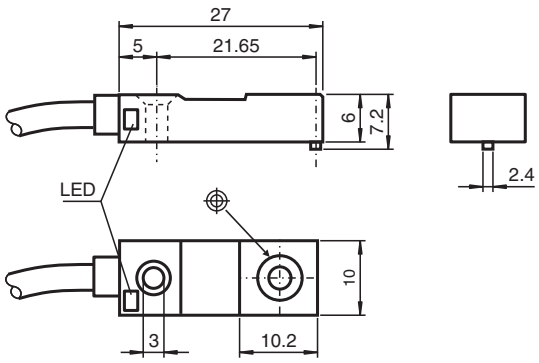


Inductive sensor

NBB2-F29-A2

- 2 mm flush
- 4-wire DC

Dimensions



Technical Data

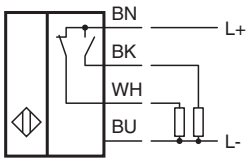
General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.15
Reduction factor r_{304}		0.7
Output type		4-wire
Nominal ratings		
Operating voltage	U_B	4.75 ... 30 V DC
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 µA at 25 °C

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Technical Data

No-load supply current	I_0	≤ 15 mA
Switching state indicator		LED, yellow
Safety-relevant product characteristics		
$MTTF_d$		1680 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed Load Type: Resistive Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 100 mA
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable
Housing material		Ryton R4
Sensing face		Ryton R4
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3 mm + 0.3 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm^2
Length	L	2 m
Dimensions		
Height		6 mm
Width		10 mm
Length		27 mm

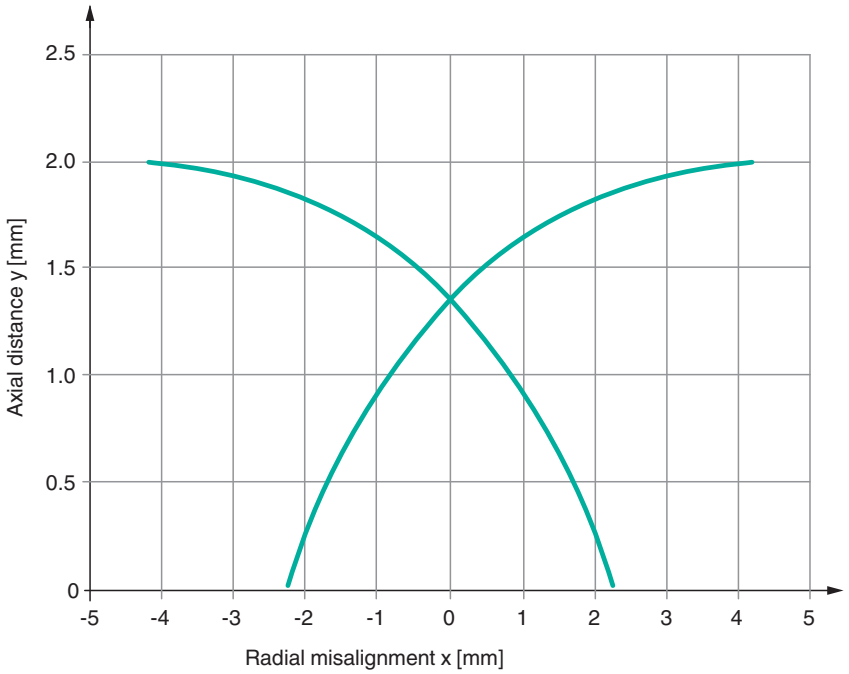
Connection Assignment

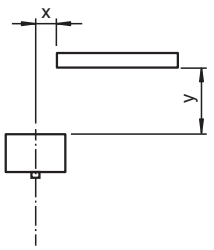


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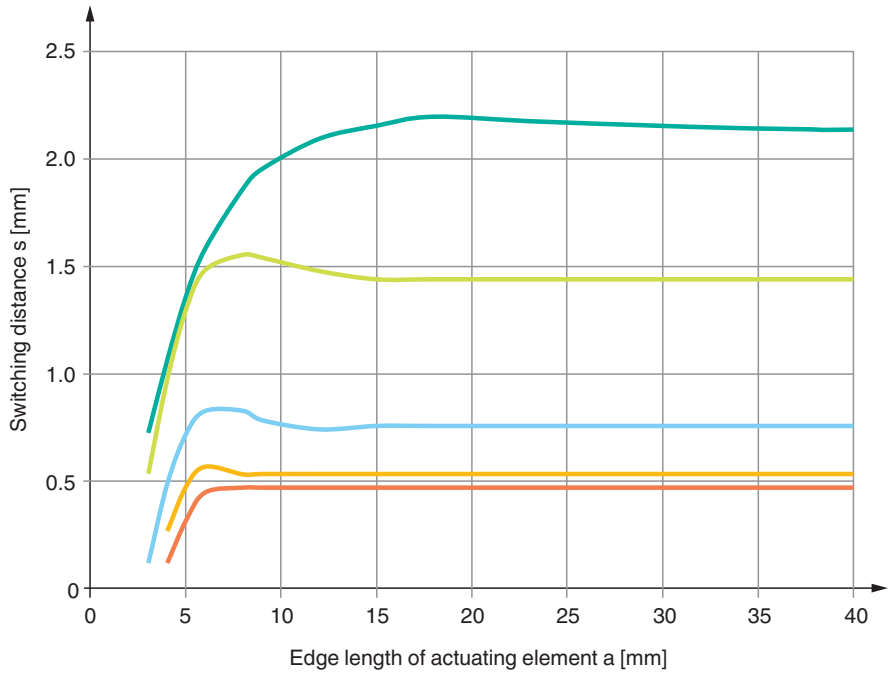
Characteristic Curve

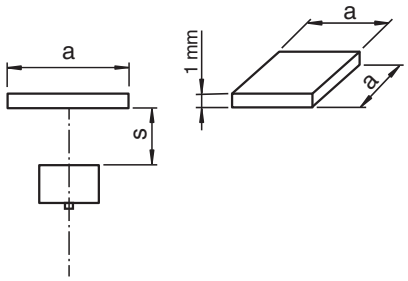
Actuation by radial approach (standard target)





Switching distance depending on the actuating element







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