



Model Number

RC15-14-N3

Features

- 15 mm inside diameter
- Bistable
- Direction detection
- High passage speed
10 m/s

Technical Data

General specifications

Switching function	Normally closed (NC)
Output type	NAMUR, bistable
Inside diameter	15 mm
Measuring cylinder	Fe-metal
Diameter	3 mm
Length	4 mm
Passage speed	v ≤ 10 m/s
Output type	2-wire

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Operating voltage	U_B	5 ... 25 V
Hysteresis	H	typ. 1 %
Reverse polarity protection		reverse polarity protected

Design data

Current consumption		
Traverse B		3 mA
Traverse A		1 mA
Time delay before availability	t_v	≤ 5 ms

Functional safety related parameters

MTTF _d	2240 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

Ambient temperature	-20 ... 70 °C (-4 ... 158 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

Mechanical specifications

Connection type	cable PVC , 2 m
Core cross-section	0.14 mm ²
Housing material	PBT
Degree of protection	IP67
Cable	
Bending radius	> 10 x cable diameter

General information

Use in the hazardous area	see instruction manuals
Category	2G

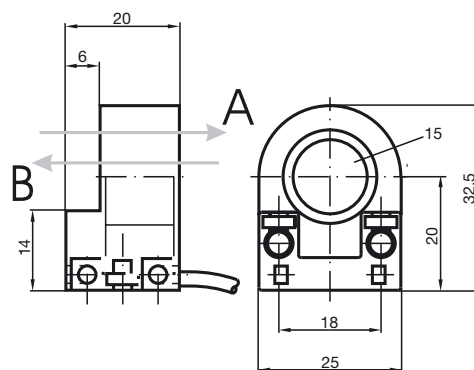
Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

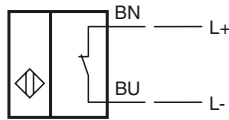
Approvals and certificates

FM approval	
Control drawing	116-0165
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

Dimensions



Electrical Connection



Equipment protection level Gb

CE marking	CE 0102	
ATEX marking	Ⓜ II 2G Ex ia IIC T6...T1 Gb The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	RC15-...-N3...	
Effective internal capacitance	C_i	$\leq 90 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 70 \text{ }\mu\text{H}$; a cable length of 10 m is considered.
Maximum permissible ambient temperature T_{amb}	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.	

Special conditions

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