

Technical Data

*For detailed data and product description refer to the data sheets at **www.pepperl-fuchs.com***

General Data	
Rated operating distance	3 mm
Installation	flush mountable
Switching element function	DC Dual NC
Nominal voltage	8.2 V (R_i approx. 1 kΩ)
Reverse polarity protection	✔
Current consumption	
Measuring plate not detected	≥ 3 mA
Measuring plate detected	≤ 1 mA
Switching frequency	0 ... 100 Hz
Indication of the switching state	LED, yellow
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Housing material	PBT
Protection degree	IP67

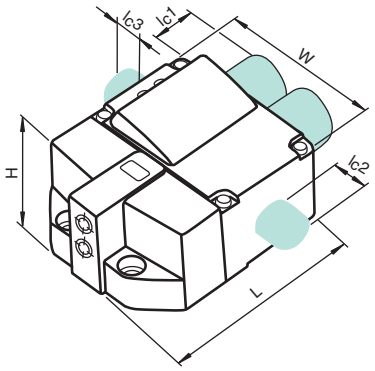
Model Number		NCN3-F31K-N4	NCN3-F31K-N4-K	NCN3-F31K-N4-K-S	NCN3-F31K-N4-S	NCN3-F31K-N4-V1-V1
Suitable for 2:1 technology	✔, Reverse polarity protection diode not required	●	●			●
Valve status indication	LED, yellow		●	●		●
Connection (system side)	Cage tension spring terminals	●	●			●
	Screw terminals, tightening torque min. 0.5Nm Stripped length 7 mm			●	●	
Connection (valve side)	4-pin, M12 x 1 socket					●
	Cage tension spring terminals		●			
	like connection (system side)			●		
Use in the Hazardous Area						
Use in the hazardous area	see instruction manuals	●	●	●	●	●
Category	1G; 2G; 3G	●	●	●	●	●
Approvals and Certificates						
FM control drawing	116-0165F	●				
UL approval	cULus Listed, General Purpose	●	●	●	●	●
CSA approval	cCSAus Listed, General Purpose	●	●	●	●	●
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.					
Dimensions						
Length L [mm]		77.5				
Width W [mm]		65				
Height H [mm]		35				
Connector area l_c1 [mm]		10				
Connector area l_c2 [mm]		-	10	10	-	10
Connector area l_c3 [mm]		-	-	-	-	10

Properties

- F31K housing
- 3 mm, flush mountable
- DC, dual NAMUR interface
- Terminal compartment and connector versions

Your Benefit

- EX approval 1G applicable up to zone 0
- Usable up to SIL2 acc. to IEC 61508
- LED indicators for switching state and valve output
- Direct mounting without additional mounting aids on NAMUR bore holes 30 x 80 and 30 x 130



Accessories

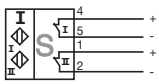
This and more accessories can be found in chapter 10
See pages from 974 ... for cordsets
See pages 1074 ... for mounting aids

BT65A	Activator for F31 series
BT65X	Activator for F31 series
BT115A	Activator for F31 series
BT115X	Activator for F31 series

Electrical Connection

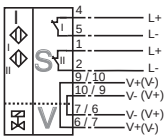
NCN3-F31K-N4
NCN3-F31K-N4-S

N4



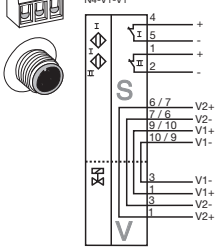
NCN3-F31K-N4-K
NCN3-F31K-N4-K-S

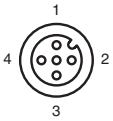
N4-K



NCN3-F31K-N4-V1-V1

N4-V1-V1





Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)

Date of issue: 08/06/2012

Consider the General Notes on the Information in the Pepperl+Fuchs Product Catalogs
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