

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
Switching element function	PNP Dual NO
Installation	flush mountable
Operating voltage	10 ... 30 V DC
No-load supply current	≤ 25 mA
Reverse polarity protection	all connections
Switching frequency	0 ... 500 Hz
Operating current	0 ... 100 mA
Off-state current	0 ... 0.5 mA, typically 0.1 µA
Short-circuit protection	pulsing
Operating voltage display	LED, green
Indication of the switching state	LED, yellow
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Housing material	PBT
Protection degree	IP67

Model Number		NBN3-F31K-E8	NBN3-F31K-E8-K	NBN3-F31K-E8-V1-V1
Valve status indication	LED, yellow		●	●
Connection (system side)	Cage tension spring terminals	●	●	●
Connection (valve side)	4-pin, M12 x 1 socket			●
	Cage tension spring terminals		●	

Approvals and Certificates				
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.			

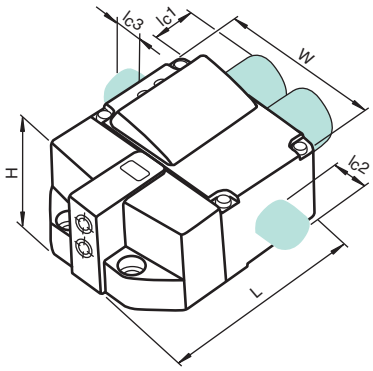
Dimensions			
Length L [mm]	77.5		
Width W [mm]	65		
Height H [mm]	35		
Connector area l_c1 [mm]	10		
Connector area l_c2 [mm]	-	10	
Connector area l_c3 [mm]		-	10

Properties

- F31K housing
- 3 mm, flush mountable
- DC, dual 3-wire switching output
- Terminal compartment
- Connector and cable gland versions

Your Benefit

- 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

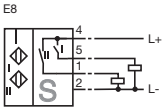
See pages from 974 ... for cordsets See pages 1074 ... for mounting aids

BT65A	Activator for F31 series
BT65X	Activator for F31 series
BT115A	Activator for F31 series
BT115X	Activator for F31 series
BT65B	Activator for F31 series
BT115B	Activator for F31 series
VMA-2+P/Z2-0,3M-PVC-V1-W-Y	Valve connector, Form A on M12, 2+PE, LED, Z diode, PVC cable
VMB-2+P/Z2-0,3M-PVC-V1-W-Y	Valve connector, Form B on M12, 2+PE, LED, Z diode, PUR cable
VMC-2+P/Z2-0,3M-PVC-V1-W-Y	Valve connector, model C on M12, 2 + PE, LED, zener diode, PVC cable
VMCI-2+P/Z2-0,3M-PVC-V1-W-Y	Valve connector, model C (ind) on M12, 2 + PE, LED, zener diode, PVC cable
VMBI-2+P/Z2-0,3M-PVC-V1-W-Y	Valve connector, Form B (Ind) on M12, 2+PE, LED, Z-Diode, PVC cable

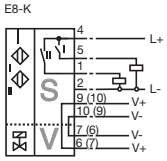
Electrical Connection

NBN3-F31K-E8

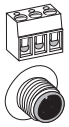


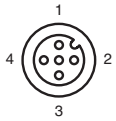


NBN3-F31K-E8-K



NBN3-F31K-E8-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: 08/01/2012

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

Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776-4411 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
PEPPERL+FUCHS SENSING YOUR NEEDS