



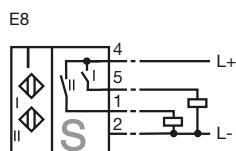
### Model Number

NBN3-F31K-E8-Y114754

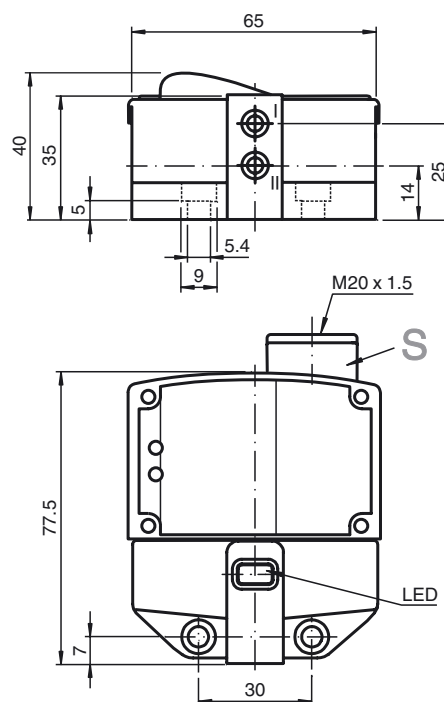
### Features

- Direct mounting on standard actuators
- Fixed setting
- Satisfies machinery directive

### Connection



## Dimensions



## Technical Data

### General specifications

Switching element function	PNP	Dual NO
Rated operating distance	$s_n$	3 mm
Installation		flush mountable
Output polarity		DC
Assured operating distance	$s_a$	0 ... 2.43 mm
Reduction factor $r_{AI}$		0.5
Reduction factor $r_{Cu}$		0.4
Reduction factor $r_{V2A}$		1
Reduction factor $r_{SI37}$		1.2

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 500 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protected		all connections
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A
No-load supply current	$I_0$	$\leq 25$ mA
Operating voltage display		LED, green
Indication of the switching state		LED, yellow

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
---------------------	--------------------------------

### Mechanical specifications

Connection (system side)	Screw terminals, tightening torque min. 0.5Nm Stripped length 7 mm
Core cross-section (system side)	rigid: 0.14 ... 2.5 mm <sup>2</sup> flexible: 0.14 ... 1.5 mm <sup>2</sup> flexible with core-end sleeve: 0.25 ... 1.5 mm <sup>2</sup>
Housing material	PBT
Sensing face	PBT
Protection degree	IP67
Tightening torque, housing screws	1 Nm
Tightening torque, cable gland	M20 x 1.5 ; $\leq 7$ Nm

### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

### Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose