



KLINGER INDUCTIVE - SENSORS



Inductive sensor

NBN3-F25-E8-V1-3D



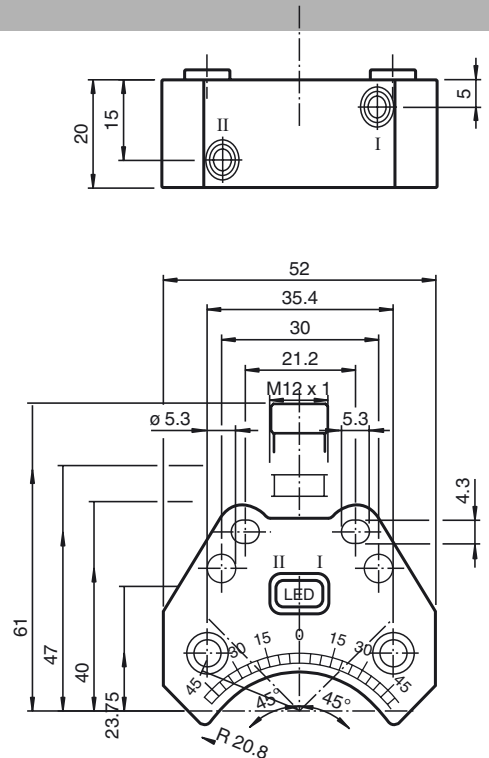
Model Number

NBN3-F25-E8-V1-3D

Technical Data

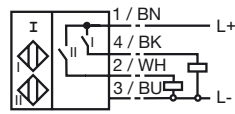
General specifications	
Switching function	2 x normally open (NO)
Output type	PNP
Rated operating distance	s_n 3 mm
Installation	flush mountable
Output polarity	DC
Assured operating distance	s_a 0 ... 2.43 mm
Actual operating distance	s_r 2.7 ... 3.3 mm typ.
Reduction factor r_{AI}	0.5
Reduction factor r_{Cu}	0.4
Reduction factor r_{304}	1
Reduction factor r_{St37}	1.1
Output type	3-wire
Nominal ratings	
Operating voltage	U_B 10 ... 30 V
Switching frequency	f 0 ... 500 Hz
Hysteresis	H typ. 5 %
Reverse polarity protection	all connections
Short-circuit protection	pulsing
Voltage drop	U_d \leq 3 V
Design data	
Operating current	I_L 0 ... 200 mA
Off-state current	I_r 0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0 \leq 25 mA
Time delay before availability	t_v \leq 500 ms
Operating voltage indicator	LED, green
Switching state indicator	LED, yellow
Standard conformity	
EMC in accordance with	IEC / EN 60947-5-2:2004
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Connection type	Connector plug M12 x 1, 4-pin
Housing material	PBT
Sensing face	PBT
Degree of protection	IP67
Note	Mounted on mechanical drive
General information	
Use in the hazardous area	see instruction manuals
Category	3D
Compliance with standards and directives	
Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

Dimensions



Electrical Connection

E8



Equipment protection level Dc

CE marking	CE
ATEX marking	Ⓔ II 3D IP67 T 122 °C (251.6 °F) X
Directive conformity	94/9/EG
Standards	EN 50281-1-1 Protection via housing Use is restricted to the following stated conditions

Special conditions

Maximum heating (Temperature rise) dependant of the load current I_L and the max. operating voltage U_{Bmax} . Information can be taken from the following list. The maximum surface temperature at maximum ambient temperature is given in the Ex identification of the apparatus.

at $U_{Bmax}=30$ V, $I_L=200$ mA	52 K
at $U_{Bmax}=30$ V, $I_L=100$ mA	40 K
at $U_{Bmax}=30$ V, $I_L=50$ mA	35 K
at $U_{Bmax}=30$ V, $I_L=25$ mA	34 K



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