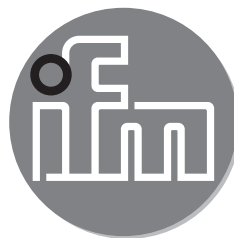


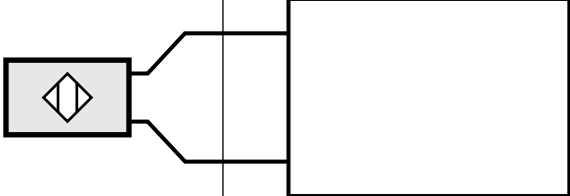
ifm electronic

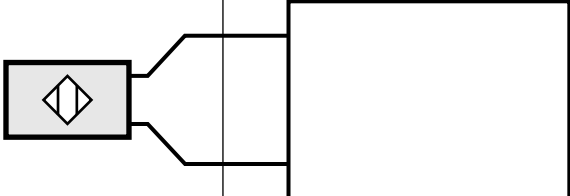


FM Installation Drawing N7***A
Ring and Slot Sensors Type I7*2***-N
Div 1 Intrinsic safety
Div 2 Nonincendive

efector100®

UK

HAZARDOUS (CLASSIFIED) LOCATION	NON-HAZARDOUS AREA
<p>CLASS I, DIV. 1, GROUPS A, B, C and D</p> <p>CLASS II, DIV. 1, GROUPS E, F and G</p> <p>CLASS III, DIV. 1</p> <p>Or</p> <p>CLASS I, Zone 0, Group IIC</p>	
<p>ifm electronic NAMUR Sensor, Type No. I7*2***-N...</p>	
<p>INTRINSICALLY SAFE</p>	<p>FM APPROVED BARRIER / ASSOCIATED INTRINSICALLY SAFE WIRING APPARATUS</p>
<p>ENTITY PARAMETERS SEE TABLE 1 AND TABLE 2</p>	<p>SEE NOTE 1</p>

HAZARDOUS (CLASSIFIED) LOCATION	NON-HAZARDOUS AREA
<p>CLASS I, DIV. 2, GROUPS A, B, C and D</p> <p>CLASS II, DIV. 2, GROUPS E, F and G</p> <p>CLASS III, DIV. 2</p> <p>Or</p> <p>CLASS I, Zone 2, Group IIC</p>	
<p>ifm electronic NAMUR Sensor, Type No. I7*2***-N...</p>	
<p>ENTITY PARAMETERS</p> <p>$V_{\max}(U_i) = 16 \text{ V}$</p> <p>$I_{\max}(I_i) = \text{SEE NOTE 7}$</p> <p>$C_i = \text{SEE TABLE 2}$</p> <p>$L_i = \text{SEE TABLE 2}$</p>	<p>FM APPROVED BARRIER / ASSOCIATED NONINCENDIVE FIELD WIRING APPARATUS</p>
	<p>SEE NOTE 1</p>

NOTES:

- 1) The barrier / associated equipment must be FM approved and meet the following requirements:
 - A) V_{OC} (OR U_O) $\leq V_{MAX}$ (OR U_i)
 - B) I_{SC} (OR I_O) $\leq I_{MAX}$ (OR I_i)
 - C) $P_O \leq P_i$
 - D) C_A (OR C_O) $\geq C_i + \text{Cable}$
 - E) L_A (OR L_O) $\geq L_i + \text{Cable}$
- 2) Install in accordance with the Canadian Electrical Code in Canada; National Electrical Code in U. S.
- 3) Maximum non hazardous area voltage must not exceed 250 V
- 4) For Canadian purposes, this device is Ex ia (intrinsically safe).
- 5) Enclosure: IP67
- 6) Ambient temperatures: in accordance to table 1
- 7) For this current controlled circuit, the parameter I_{max} is not required and need not be aligned with parameters of the barrier or associated nonincendive field wiring apparatus.
- 8) Use sockets and cables, rated at least 5°C above the ambient temperature
- 9) *** in type number indicates options, not affecting safety.
- 10) Under certain circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. Additionally, the equipment shall not be cleaned with a dry cloth.
- 11) Protect the units and the cables efficiently against damage.

Table 1:

Characteristic values	U _i = 15 V I _i = 50 mA P _i = 120 mW	U _i = 16 V I _i = 25 mA P _i = 34 mW
Type number	Max. Permissible operating temperature in °C for use in temperature class (Gas) or max. surface temperature (Dust)	
	T6 / 85°C	T6 / 85°C
I7S2***-N...	60	72
I7R2***-N...	60	75
I7R2***-NL	70	75

Characteristic values	U _i = 16 V I _i = 25 mA P _i = 64 mW	U _i = 16 V I _i = 52 mA P _i = 169 mW	
Type number	Max. Permissible operating temperature in °C for use in temperature class (Gas) or max. surface temperature (Dust)		
	T6 / 85°C	T6 / 85°C	T5 / 100°C
I7S2***-N...	70	55	70
I7R2***-N...	70	55	70
I7R2***-NL	75	70	85

Table 2:

Type number	Li (μH)	Ci (nF)
I7S2002-N	120	150
I7S23,5-N	150	150
I7R2010-N*** I7R2015-N***	100	150
I7R2010-NL***	90	90
I7R2015-NL***	65	90