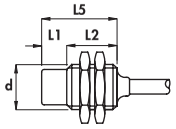
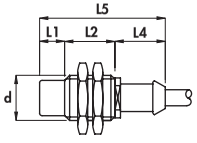
CYLINDRICAL INDUCTIVE ATEX SENSORS IN METAL HOUSING

- **NAMUR SERIES diameters 18 mm**
- **ATEX certified II 1GD for zone 0;20**
- Stainless steel housing
- Cable output

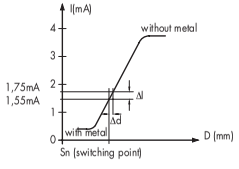
Housing B-1



Housing F-1



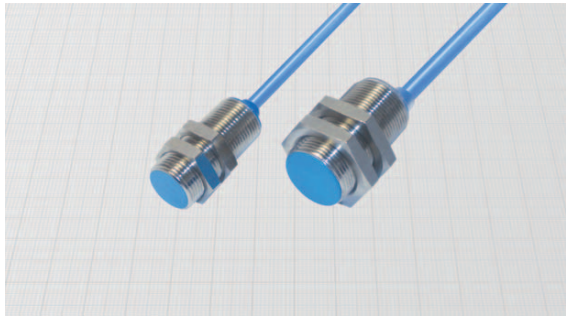
Typical curve



Diameter		M18 x 1
Nut	Size	SW24
	Thickness mm	4
Max tightening torque Nm		35

Materials:

- Cable: 2 m PVC CEI 20-22 II; 90°C; 300 V;O.R.
- Housing: stainless steel
- Sensing face: plastic



Technical data:

- Supply voltage according to NAMUR: 7,7 ÷ 9 Vdc
- Max ripple: 10%
- Consumption at 8,2 V with Rx = 1000 Ω
  with metal: ≤ 1 mA
  without metal: ≥ 3 mA
- Temperature range: - 20° ÷ + 60°C
- Max thermal drift of sensing distance S_r: ± 10%
- Repeat accuracy (R): 2%
- Degree of protection according to EN60529: IP67
- Cable conductor cross section: 0,75 mm²

- Marking: Ex II 1D Ex iaD 20 T80°C
  II 1G Ex ia IIC T6
- Certified IMQ 08 ATEX 010
- Electromagnetic compatibility (EMC) according to EN60947-5-2 CE
- According to: EN60947-5-6/EN60079-0/EN60079-11/EN60079-26
  EN61241-0/EN61241-11
- Shock and vibration resistance according to IEC 68-2-27 IEC 68-2-6

Safety parameters:

- Vi max: 13,5 V
- Ii max: 60 mA
- Ci max: 100 nF
- Li max: 100 µH
- Pi max: 200 mW

Use in hazardous area according to instruction manuals

Housing	Flush mounting / Non flush mounting	L1	L2	L3	L4	L5	Cable diameter	Body diameter (d)	Nominal sensing distance (S_n) ± 10%	Max switching frequency (f)	ORDERING REFERENCES
		mm	mm	mm	mm	mm	mm	mm	mm	KHz	
B-1	•	-	30	-	-	30	5	M18 x 1	5	1	**DC18/4600XA**
F-1	•	-	30	-	20	50	5	M18 x 1	5	1	**DC18/4700XA**
B-1	•	10	20	-	-	30	5	M18 x 1	8	0,5	**DC18/5600XA**
F-1	•	10	20	-	20	50	5	M18 x 1	8	0,5	**DC18/5700XA**

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Instruction manual electrical apparatus for hazardous areas

Inductive and capacitive proximity sensors complying with classification II 1G – II 1D

Directive conformity :	94/9/CE
Category 1G :	For use in hazardous areas with gas, vapor and mist
Standard Conformity :	EN 60079-0; EN 60079-11; EN 60079-26 Ignition protection “Intrinsic safety”
Category 1D :	For use in hazardous areas with non-conducting combustible dust
Standard Conformity :	EN61241-0; EN61241-11 Ignition protection “Intrinsic safety”
Use is restricted to the following stated conditions :	
CE Symbol	CE
Ex identification	Ex II 1G Ex ia IIC T6 II 1D Ex iaD 20 T80° C
EC-Type Examination Certificate	IMQ 08 ATEX 010
Assigned type	DC…; DF…; NKS…;BMSN…
Effective internal capacitance Ci	≤ 100 nF considering cable length 20m
Effective internal Inductance Li	≤ 100 µH considering cable length 20m
Maximum Voltage Vi	≤ 13,5 V
Maximum Current Ii	≤ 60 mA
Maximum Power Pi	≤ 200 mW
General :	The device must be operated by specialized personnel according to the appropriate data in the data sheet and in this instruction manual.
Maximum ambient temperature allowed:	Temperature ranges are given on the EU prototype test certificate.
Installation :	Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety. The associated apparatus must satisfy the requirements of category “ia” and have galvanic isolation between the power supply and signal circuits. The sensor must be protected from strong electromagnetic fields.
For models with connector:	Close strongly the nut of the female connector and be sure it is impossible to loosen it manually .
Maintenance :	No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.
Special conditions :	
Protection from mechanical danger:	The sensor must be protected from mechanical damages and excessive tractions on the cable.
Electrostatic charges:	Avoid dangerous electrostatic charges on housing. Metal parts and conductive plastic parts (black color) must be grounded. Back sides of epoxy filled housings must be fixed on metal support connected to ground : no more than 400 m^2 must be left exposed.

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