



# PMS10.1

## Pressostati antideflagranti a membrana

### Diaphragm type explosion proof pressure switches

I pressostati antideflagranti della serie PMS10.1 sono particolarmente idonei per essere installati su tutti gli impianti chimici, petrolchimici applicazioni onshore e offshore e macchine, industria alimentare e farmaceutica o comunque dove è fondamentale l'uso di strumenti certificati per zona 0/1.

*Explosion proof pressure switches series PMS10.1 are particularly suitable to be installed on every chemical, petrochemical plants, onshore and offshore applications and machineries, food and pharmaceutical industry or however where is mandatory the use of instruments certified for zone 0/1.*



PED 2014/68/EU ATEX 2014/34/EU

#### CARATTERISTICHE TECNICHE

**Cassa e coperchio:** alluminio verniciato con coperchio avvitato  
**Grado di protezione:** IP65 (EN60529/IEC529), NEMA 4  
**Cablaggio:** morsettiera interna  
**Morsetti di terra:** 1 interno ed 1 esterno  
**Materiale parti interne:** acciaio inox  
**Elemento sensibile:** membrana  
**Materiale Elemento:** AISI 316 + o-ring in viton fino al campo 0±2,5 Bar  
 acciaio zincato rivestito in AISI 316 per campi da 0/4 Bar a 0/25 Bar  
**Materiale attacco al processo:** AISI 316  
**Dimensione attacco:** ½"NPTM o GASM; ½" NPTF  
**Ingresso cavi:** ½"NPTF, ½"GASF, M20x1,5  
**Montaggio:** diretto su presa, a parete o su palina da 2" (staffa in opzione)  
**Campi:** vedi tabella B  
**Microinterruttore:** 1 SPDT o 2 SPDT indipendenti con differenziale fisso, o con differenziale regolabile secondo tabella A  
**Regolazione del set:** vite di regolazione micrometrica interna  
**Ripetibilità:** migliore di 1% f.s.  
**Limite temperatura ambiente:** vedi tabella C  
**Limite temperatura del fluido:** -30/+100°C  
**Deriva termica:** ≤ 0,05%/°C  
**Esecuzione sec. direttiva 2014/34/EU** con modo di protezione antideflagrante Exd o a sicurezza intrinseca Ex ia  
**Certificato di tipo numero:** EPT 18 ATEX 3046X  
**Esecuzione secondo direttiva 2014/68/EU (PED).**

#### TECHNICAL DETAILS

**Case and cover:** aluminium painted, with screwed cover  
**Protection degree:** IP65 (EN60529/IEC529), NEMA 4  
**Electrical wiring:** internal terminal board  
**Ground terminal:** 1 internal and 1 external  
**Internal parts material:** st. st.  
**Sensing element:** diaphragm  
**Element material:** st. st. 316 + viton o-ring up to range 0±2,5 Bar Zinc Steel coated with st. st. 316 for ranges from 0/4 Bar to 0/25 Bar  
**Process connection material:** st. st. 316  
**Connection dimension:** ½"NPTM or BSPM; ½" NPTF  
**Cable entry:** ½"NPTF, ½"BSPF, M20x1,5  
**Mounting:** direct on tap, wall or 2" pipe mounting (optional bracket)  
**Ranges:** see table B  
**Microswitch:** 1 SPDT or 2 independent SPDT with fixed differential or with adjustable dead band according to table A  
**Set point adjustment:** internal micrometric screw  
**Repeatability:** better than 1% f.s.  
**Ambient temperature limit:** see table C  
**Fluid temperature limit:** -30/+100°C  
**Thermal drift:** ≤ 0,05%/°C  
**Construction acc.to ATEX directive 2014/34/EU** with Explosion proof protection mode Exd or intrinsically safe Ex ia  
**Certificate number:** EPT 18 ATEX 3046X  
**Construction according to 2014/68/EU (PED).**

#### TABELLA A: MICROINTERRUTORI / TABLE A: MICROSWITCHES

TIPO CONTATTO TYPE OF CONTACT	1 microinterruttore 1 microswitch	2 microinterruttori 2 microswitches	Portata contatti (carico resistivo) Electric rating (resistive load)
Contatti in argento, in aria In air, silver contacts	C	O	15 A 380 Vac - 2A 24 Vdc
Contatti in argento splash Splash proof silver contact	D	M	15 A 380 Vac - 2A 24 Vdc
Contatti dorati, in aria In air, golden plated contacts	Q	T	1 A 125 Vac - 0,5A 24 Vdc
Contatti in argento sigillati in gas inerte Silver contacts, sealed in inert gas	R	U	15 A 380 Vac - 2A 24 Vdc
Contatti dorati, sigillati in gas inerte Gold plated contacts, sealed in inert gas	S	Z	1 A 125 Vac - 0,5A 24 Vdc
Contatti in argento, in aria con differenziale regolabile In air, silver contacts with adjustable dead band	V		20 A 380 Vac - 2A 30 Vdc



**TABELLA C: MARCATURA ATEX / TABLE C: ATEX MARKING**

Label ID	<i>Equipment intended for use in potentially explosive gas atmosphere</i>	
M1	Ex db IIC T6 Gb	<i>Applies for ambient temperature -40°C ÷ +60°C. Equipment has EPL Gb with reference to the environment and process.</i>
M2	Ex ia IIC T6 Ga/Gb	<i>Applies for ambient temperature -40°C ÷ +40°C. Equipment has EPL Gb with reference to the environment and EPL Ga with reference to the process.</i>
M2A	Ex ia IIC T4 Ga/Gb	<i>Applies for ambient temperature -40°C ÷ +60°C. Equipment has EPL Gb with reference to the environment and EPL Ga with reference to the process.</i>

Label ID	<i>Equipment intended for use in potentially explosive gas and dust atmosphere</i>	
M3	Ex db IIC T6 Gb Ex tb IIIC T85° C Db	<i>Applies for ambient temperature -20°C ÷ +60°C. Equipment has EPL Gb and Db with reference to the environment and EPL Gb with reference to the process.</i>
M4	Ex ia IIC T6 Ga/Gb Ex ia IIIC T85° C Db	<i>Applies for ambient temperature -20°C ÷ +40°C. Equipment has EPL Gb and Db with reference to the environment and EPL Ga with reference to the process.</i>
M4A	Ex ia IIC T4 Ga/Gb Ex ia IIIC T85° C Db	<i>Applies for ambient temperature -20°C ÷ +60°C. Equipment has EPL Gb and Db with reference to the environment and EPL Ga with reference to the process.</i>

**COME ORDINARE:** Prego specificare: codice, campo di taratura, eventuali opzioni ed accessori, Marcatura Atex.  
**Esempio:** modello PMS10.1-0/4Bar - C - C01 - G05 - M3

**HOW TO ORDER:** Please specify: code, setting range, options and accessories, Atex Marking.  
**Example:** model PMS10.1-0/4Bar - C - C01 - G05 - M3