PS4 ATEX

Pressure controls

General information

PS4 ATEX Pressure Controls with fixed settings for various applications

Features

- High- and low-pressure controls
- Precise settings and repeatability
- Cable version with IP67
- Normally open/closed electrical contacts (under standard operating conditions)
- TÜV approved versions
- Compatible with RoHS directive

Markings

- ⟨Ex⟩ II3 3G **Ex ec nC IIC Gc** according to ATEX 2014/34/EU

- CE 0035 according to Pressure Equipment Directive 2014/68/EU

- **ENEC05** according to Low Voltage Directive 2014/35/EU

(A1) (A2L) (**A3**)

PS4
molded cable
brazing connection 1/4" / 6 mm

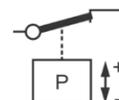*NOTE: Product types for safety class A1 and A2L, please refer to separate documents.*

Type code

PS4 - ⬚ ⬚ - **ATEX**

Product Name

Function		
W	Pressure limiters, automatic	
	type approval acc. EN 12263,	**Type of contact**
	(EN 12263 & EN 378: PSL/ PSH)	**1** silver contact, closed at normal operation
		5 gold-plated contact, closed at normal operation

Selection Table - Low Pressure Controls
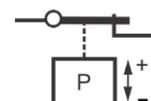
(Automatic Reset; Open on Falling Pressure)

NOTE: *) molded cable

Type	Part No.		Setting		Cable length*	P_MAX / PS	EN 12263	Type of contact	Pressure Connection
	Single-pack	Multi-pack	Cut-out	Cut-in					
PS4-W1-ATEX	808308	808306	0.2 bar	1.4 bar	3.0 m		PSL	silver	6 mm
PS4-W5-ATEX	808333	808333M	0.2 bar	1.4 bar	3.0 m		PSL	gold-plated	6 mm
PS4-W5-ATEX	808314	808314M	0.35 bar	1.8 bar	1.5 m	25 bar	PSL	gold-plated	1/4"
PS4-W5-ATEX	808327	808327M	0.35 bar	1.8 bar	1.5 m		PSL	gold-plated	6 mm
PS4-W1-ATEX	808303	808301	0.6 bar	1.8 bar	3.0 m		PSL	silver	6 mm
PS4-W5-ATEX	808311	808312	0.6 bar	1.8 bar	1.5 m		PSL	gold-plated	1/4"

(Part No. incl.)	Multi- pack*	Cut-out	Cut-in	Cable length**	P_MAX / PS	EN 12263	Type of contact	Pressure Connection
PS4-W5-808334 ATEX	808334M	1.9 bar	3 bar	1.5 m		PSL	gold-plated	6 mm

Selection Table – High Pressure Controls
(Automatic Reset; Open on Rising Pressure)

Type	Part No.		Setting		Cable length*	P_MAX / PS	EN 12263	Type of contact	Pressure Connection
	Single-pack	Multi-pack	Cut-out	Cut-in					
PS4-W1-ATEX	808304	808305	24 bar	18 bar	5.0 m	41 bar	PSH	silver	6 mm
PS4-W5-ATEX	808315	808315M	24 bar	16 bar	1.5 m		PSH	gold-plated	1/4"
PS4-W1-ATEX	808302	808300	26 bar	20 bar	3.0 m		PSH	silver	6 mm
PS4-W5-ATEX	808309	808310	26 bar	20 bar	1.5 m		PSH	gold-plated	1/4"
PS4-W5-ATEX	808316	808316M	32 bar	24 bar	1.5 m	55	PSH	gold-plated	1/4"
PS4-W5-ATEX	808329	808329M	32 bar	24 bar	1.5 m		PSH	gold-plated	6 mm
PS4-W5-ATEX	808317	808317M	49 bar	38 bar	1.5 m	69	PSH	gold-plated	1/4"
PS4-W5-ATEX	808318	808318M	51.5 bar	40 bar	1.5 m		PSH	gold-plated	1/4"

NOTE: *) molded cable

Technical Data

Fluid group / Refrigerants (ASHARE)	Fluid group: I / (A3) R290, R1270, Mineral-. Synthetic-. POE-Lubricant
Life time	> 100.000 cycles
Vibration resistance	4 g (10…250 Hz)
Temperature range	Medium: -40 °C…+135 °C Ambient: -40 °C…+65 °C Service: -40 °C…+80 °C Storage / Transportation: -40 °C…+80 °C
Hazard Category (PED 2014/68/EU)	PS4-W.. versions: IV / Module B + D
Weight	~ 100 g
Connection material	Copper-clad stainless steel
Markings	C E 0035 (PED), ENEC05 (LVD) ⟨Ex⟩ II 3G **Ex ec nC IIC Gc**
Applied harmonized standards	EN IEC 60079-0:2018, EN 60079-7:2015 + A1:2018 EN 60730-1:2016, EN 60730-2-6:2016, EN 60335-1:2012/(Clause 30) EN 12263:1998

Electrical Data

Electrical rating	120V/240V. 6A, pf 0.8 28Vdc, 2 A, pf 0.8 Gold-plated contacts: 30VDC, 100mA
Protection class (IEC 529 / DIN 40050)	IP67
Cable Version Cable Colour	18 AWG 0.8 mm², 600 V (max. 125 °C) Low pressure: (0…8.5 bar): blue High Pressure: (>8.5 bar): black

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Pressure setting (Cut-out) drifting:

PS4 factory setting is at 23 °C room temperature however, the setting will drift by other ambient and fluid temperatures. The table indicates the amount of drift in function of ambient and media temperature.
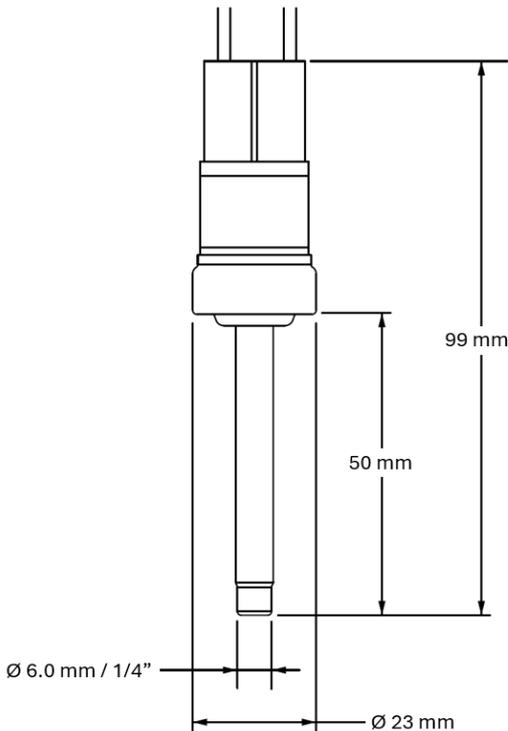
PS4 safety pressure cut-out
Brazing connection

Media temp. (°C)	Ambient temperature (°C)									
	0	10	23	25	30	35	40	45	50	55
	Total drift of cut-out set point (%)									
80	+5	+2.8	*	*	*	*	-3.7	-4.8	-5.9	-7.0
85	+5	+2.8	*	*	*	*	-3.8	-4.9	-6.0	-7.1
90	+5	+2.8	*	*	*	*	-3.9	-5.0	-6.1	-7.2
95	+5	+2.8	*	*	*	*	-4.0	-5.1	-6.2	-7.3
100	+5	+2.8	*	*	*	*	-4.1	-5.2	-6.3	-7.4
105	+5	+2.8	*	*	*	-3.1	-4.2	-5.3	-6.4	-7.5
110	+5	+2.8	*	*	*	-3.2	-4.3	-5.4	-6.5	-7.6
115	+5	+2.8	*	*	*	-3.3	-4.4	-5.5	-6.5	-7.6
120	+5	+2.8	*	*	*	-3.4	-4.5	-5.5	-6.6	-7.7
125	+5	+2.8	*	*	*	-3.4	-4.5	-5.6	-6.7	-7.8
130	+5	+2.8	*	*	*	-3.5	-4.6	-5.7	-6.8	-7.9
135	+5	+2.8	*	*	*	-3.6	-4.7	-5.8	-6.9	-8.0

NOTE: European standard for high safety pressure switches permits maximum +0% / -8% of the setting at extreme operating conditions.

*) The device will cut-out anywhere from 0 to -3% from the cut-out.

For low pressure switches with settings between 0 to 6.9 bar according to EN 12263: -0 / +1 bar

Dimension (mm)

99 mm

50 mm

Ø 6.0 mm / 1/4"

Ø 23 mm

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