

## GENERAL CHARACTERISTICS



The pressure switches 901 series have a diaphragm sensing element and the adjustable measuring range. Suitable for monitoring pressure, vacuum and differential pressure of both liquid and gasses, also aggressive. The calibration is made easy by a knob that allows the gradual adjustment of the alarm threshold and the reset time of the electrical contact.

The electrical contact is SPDT. There are several mounting brackets and electrical protection degree IP44, IP54 or IP65.

- Pressure ranges from 5 ... 20 mbar to 7 ... 12 bar.
- Vacuum pressure ranges from 5 ... 20 mbar to 300 ... 700 mbar.
- Ranges of differential pressure from 5 ... 20 mbar to 10 ... 100 mbar.
- Mechanical and electrical life, minimum 10<sup>6</sup> cycles.
- Working temperature from 85 °C to 130 °C depending on diaphragm material and process connection.
- Easy calibration.
- Calibration to customer specification on request.
- Executions ATEX 1/2G Exia IIB T4, 2G Exia IIC T4, on request.



## PRESSURE SETTING RANGES – 901.60/90 Tab.1

Code	Setting range		Tolerance value %	Hysteresis of the electrical contact		Max. positive pressure bar				Max. negative pressure bar				
	from	to				standard	extended			standard	extended			
901.61	5	20	mbar	± 10	3	mbar	0,5	1	4	2	-	1	-1	2
901.62	10	50	mbar	± 10	5	mbar	0,5	1	4	2	-	1	-1	2
901.63	25	100	mbar	± 10	10	mbar	0,5	1	4	2	-	1	-1	2
901.64	50	250	mbar	± 10	20	mbar	1	1	4	2	-	1	-1	2
901.65	100	500	mbar	± 10	50	mbar	1	1	4	2	-	1	-1	2
901.66	250	1000	mbar	± 10	150	mbar	10	1	-	-	-1	1	-	-
901.67	500	1500	mbar	± 10	250	mbar	10	1	-	-	-1	1	-	-
901.68	1000	3000	mbar	± 10	500	mbar	10	1	-	-	-1	1	-	-
901.91	1,0	6,0	bar	± 10	0,5 - 2,0	bar	25	1	-	-	-1	1	-	-
901.92	4,0	9,0	bar	± 10	0,5 - 2,0	bar	25	1	-	-	-1	1	-	-
901.93	7,0	12,0	bar	± 10	0,5 - 2,0	bar	25	1	-	-	-1	1	-	-

## VACUUM SETTING RANGES – 901.70 Tab.2

Code	Setting range		Tolerance value %	Hysteresis of the electrical contact		Max. positive pressure bar				Max. negative pressure bar				
	from	to				standard	extended			standard	extended			
901.71	-5	-20	mbar	± 10	3	mbar	0,5	1	4	2	-1	1	-	-
901.72	-10	-50	mbar	± 10	5	mbar	0,5	1	4	2	-1	1	-	-
901.73	-25	-100	mbar	± 10	10	mbar	0,5	1	4	2	-1	1	-	-
901.74	-50	-125	mbar	± 10	20	mbar	0,5	1	4	2	-1	1	-	-
901.75	-75	-200	mbar	± 10	25	mbar	1	1	4	2	-1	1	-	-
901.76	-100	-300	mbar	± 10	30	mbar	1	1	4	2	-1	1	-	-
901.77	-200	-500	mbar	± 10	75	mbar	1	1	4	2	-1	1	-	-
901.78	-300	-700	mbar	± 10	75	mbar	1	1	4	2	-1	1	-	-

## PRESSURE ΔP SETTING RANGES – 901.80 Tab.3

Code	Adjustable range		Tolerance range %	Differential switching		Max. positive pressure mbar				Max. negative pressure mbar				
	from	to				standard	extended			standard	extended			
901.81	5	20	mbar	± 10	3	mbar	100	1	-	-	-100	1	-	-
901.82	10	50	mbar	± 10	5	mbar	100	1	-	-	-100	1	-	-

## INSTALLATION POSITION – ALL MODELS

Optional, to be specified for calibration below 100 mbar.

## TECHNICAL DATA Tab.4

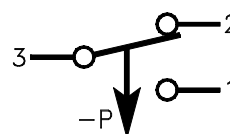
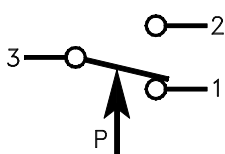
Description	Type									Code
	901.60/90 Pressure			901.70 Vacuum			901.80 Differential pressure - ΔP			
Accuracy	± 10% - standard			± 10% - standard			± 10% - standard			1
	± 5% - on request			± 5% - on request			± 5% on request			2
Diaphragm	NBR			NBR			-			1
	EPDM			EPDM			-			2
	Silicon			Silicon			Silicon			3
	Viton			Viton			-			4
Process connection	See Tab.5			See Tab.5			See Tab.5			-
Ambient temperature	-20 / +85 °C			-20 / +85 °C			20 / +85 °C			-
Standard electrical contact	250Vac	6A	SPDT	250Vac	6A	SPDT	250Vac	6A	SPDT	4
	110Vdc	0,03A		110Vdc	0,03A		110Vdc	0,03A		
Electrical contact on request	250Vac	10A	SPDT	250Vac	10A	SPDT	250Vac	10A	SPDT	5
	12Vdc	0,1A	SPDT	12Vdc	0,1A	SPDT	12Vdc	0,1A	SPDT	1
Electrical connection	Faston 6,3 x 0,8 mm.			Faston 6,3 x 0,8 mm.			Faston 6,3 x 0,8 mm.			-

Description	Accessories - options									Code
	901.60/90 Pressure			901.70 Vacuum			901.80 Differential pressure - ΔP			
Protection See Tab.6	Plastic - Cap <b>IP44</b>			Plastic - Cap <b>IP44</b>			Plastic - Cap <b>IP44</b>			6329
	Rubber - Cap <b>IP54</b>			Rubber - Cap <b>IP54</b>			Rubber - Cap <b>IP54</b>			6365
	Plastic - Cap <b>IP54</b>			Plastic - Cap <b>IP54</b>			Plastic - Cap <b>IP54</b>			6371
	Plastic - Cap <b>IP65</b>			Plastic - Cap <b>IP65</b>			Plastic - Cap <b>IP65</b>			6372
	Plastic - DIN plug <b>IP54</b>			Plastic - DIN plug <b>IP54</b>			Plastic - DIN plug <b>IP54</b>			6374
	Plastic - DIN plug <b>IP65</b>			Plastic - DIN plug <b>IP65</b>			Plastic - DIN plug <b>IP65</b>			6375
Mounting bracket Type L - See Tab.6	30x54x22 mm – Ø <sub>i</sub> 14,0 mm.			30x54x22 mm – Ø <sub>i</sub> 14,0 mm.			30x54x22 mm – Ø <sub>i</sub> 14,0 mm.			6403
	30x54x22 mm – Ø <sub>i</sub> 10,5 mm.			30x54x22 mm – Ø <sub>i</sub> 10,5 mm.			30x54x22 mm – Ø <sub>i</sub> 10,5 mm.			6404
	30x54x22 mm – Ø <sub>i</sub> 16,0 mm.			30x54x22 mm – Ø <sub>i</sub> 16,0 mm.			30x54x22 mm – Ø <sub>i</sub> 16,0 mm.			6405

## PROCESS CONNECTIONS Tab.5

Type	Hose connections						Threaded connections							
	5,0 mm		6,5 mm		10,0 mm		M 10x1		G 1/8		G 1/4		G 1/2	
901.61-65	PA	A	PA	B	PA	C	PA	E	PA	D	Brass	L	Brass	S
	-	-	PPS	F	PPS	G	PVDF	H	PVDF	J	-	-	-	-
	-	-	-	-	-	-	Brass	N	Brass	M	-	-	-	-
	-	-	-	-	-	-	S. Steel	P	S. Steel	Q	-	-	-	-
901.66-68	-	-	-	-	-	-	Brass	N	Brass	M	Brass	L	Brass	S
	-	-	-	-	-	-	S. Steel	P	S. Steel	Q	S. Steel	R	-	-
901.71-76	PA	A	PA	B	PA	C	PA	E	PA	D	Brass	L	Brass	S
	-	-	PPS	F	PPS	G	PVDF	H	PVDF	J	S. Steel	R	-	-
	-	-	-	-	-	-	Brass	N	Brass	M	-	-	-	-
901.77-78	-	-	-	-	-	-	V <sub>2</sub> A	P	S. Steel	Q	-	-	-	-
	-	-	-	-	-	-	Brass	N	Brass	M	Brass	L	Brass	S
901.81-82	-	-	PA	B	-	-	S. Steel	P	S. Steel	Q	S. Steel	R	-	-
901.91-93	-	-	-	-	-	-	Brass	N	Brass	M	Brass	L	-	-
	-	-	-	-	-	-	-	-	S. Steel	Q	S. Steel	R	-	-

## WIRING



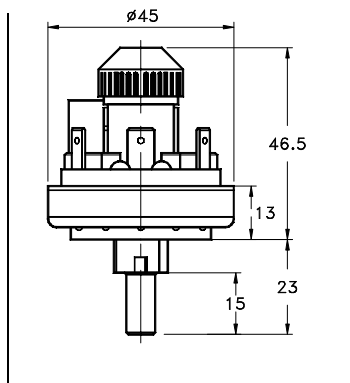
901.60

901.80

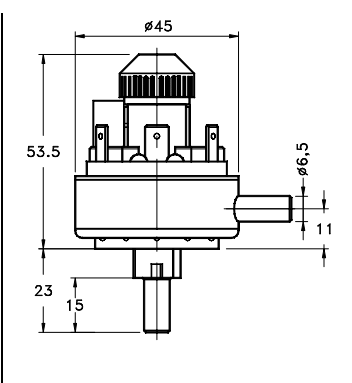
901.90

901.70

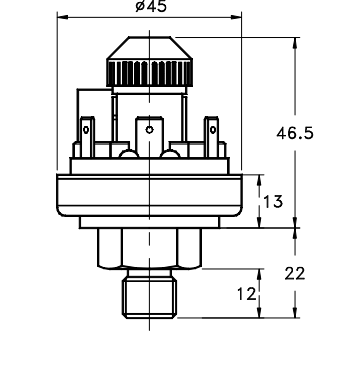
**DIMENSIONS mm. Tab.6**



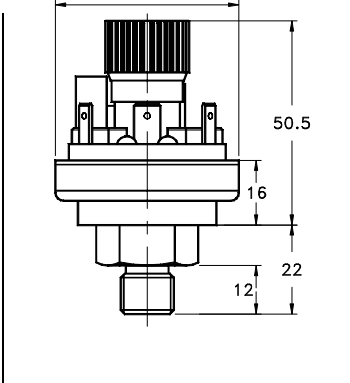
901.60 - 901.70



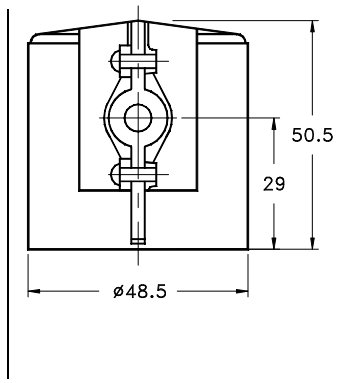
901.80



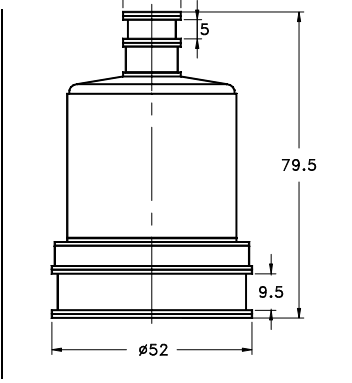
901.60 - 901.70



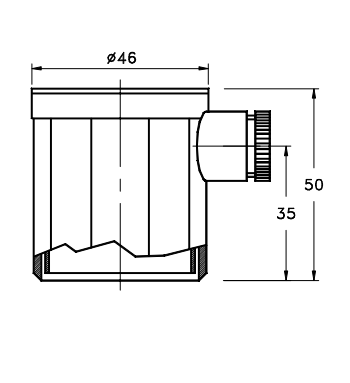
901.90



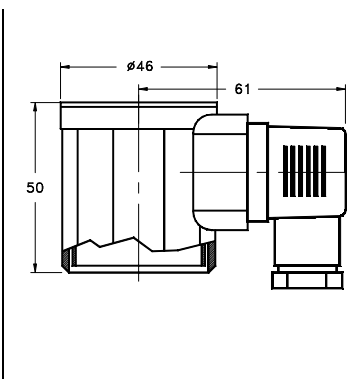
6329 IP44



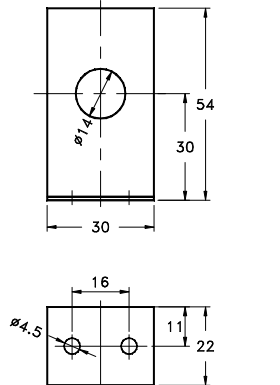
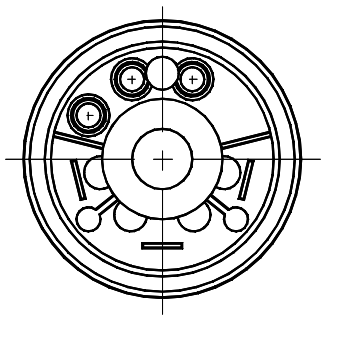
6365 IP54



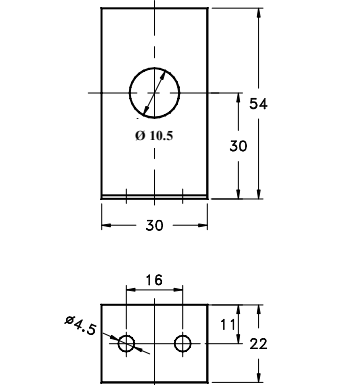
6371 IP54 / 6372 IP65



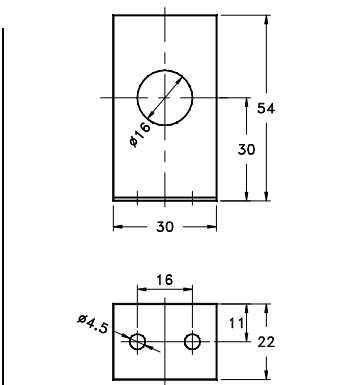
6374 IP54 / 6375 IP65



6403



6404



6405

**NOMENCLATURE**

901	91	1	1	4	L	4
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Tab.1	Type
Tab.1-2-3	Setting range
Tab.4	Accuracy
Tab.1-2-3	Max. pressure - standard or extended
Tab.4	Diaphragm material
Tab.5	Process connection material
Tab.4	Electrical contact

6329 IP44	6365 IP54	6371 IP54	Protection cap
6372 IP65	6374 IP54	6375 IP65	Mounting bracket
6403	6404	6405	

Tab.4-6	Accessories – options
Tab.4-6	Accessories – options