

Type 61214 Bellows pressure and under-pressure regulator



Characteristics

Range: -80 kPa to 4 MPa in 11 ranges
Contact load: ~ 250V/10A, cos 1
 ~ 250V/2A, cos ϕ 0.6-0.3
 = 250V/0,1A
 = 48V/0,2A

Protection class: IP 65

Compact design

Connection by means of terminals on the switch or connector (except for Ex and switch B)

Description - use

The main use is for regulating and signalling the pressure of gas and liquids to the temperature of regulated medium up to maximum -40°C to $+120^{\circ}\text{C}$. The regulator type can be selected according to the regulated medium (it is possible to use stainless expansion for gas fuels and aggressive medium).

Accessories for ordering include the connection screws M12 or M20x1,5 see. "Accessories".

According to the opinion of ITI Praha pr. no. 2940/05.02/99/15.07/2 the pressure regulator with stainless expansion type 61214 as a component of the specified pressure device complies with the operating safety conditions for boiler devices.

0 kPa = atmospheric pressure
0,1 MPa = 100 kPa = 1 bar

Technical data

Ambient temperature: temperature range -40 to $+60^{\circ}\text{C}$
 temperature range $-20 \leq T_a \leq +40^{\circ}\text{C}$
 (Ex)

Specification environment Ex: 

Vibration during operation: 

Min. service life:

$f = 10$ to 55 Hz, $s_a =$ to $0,15$ mm
 at load by rated values according to the manual and max. speed of cycling up to 6 cycles/min is min. 100 000 cycles
 cable: $\varnothing 9 \div 13$ mm,
 wires: 0,75 at 2,5 mm²

Connection:

Order No. 405 xxxxx xxxx*)		Range	Unstability	Min. difference		Max. difference		Operating pressure [p_{max}/p_{min}] ^{**)}	Hydraulic test pressure	Units	L/D [min] see dimension table	Weight [kg]		
Design	Microswitch			Microswitch										
	A			B	A	B	A,B							
T Ex	61214	6011 9011	6111 9111	-80 to 250	15	15	30	100	350/N	800	kPa	169/34	0,6	
T Ex	61214	6021 9021	6121 9121	4 to 63	2	2	4	25	190/0	400		187/63	0,8	
T Ex	61214	6022 9022	6122 9122	10 to 100	3	3	6	40						
T Ex	61214	6023 9023	6123 9123	16 to 160	4	10	20	63						460/N
T Ex	61214	6031 9031	6131 9131	25 to 250	10	20	40	250	1700/N	2500				
T Ex	61214	6032 9032	6132 9132	40 to 400	15	0,03	0,06	0,4	1,7/N	2,5		MPa	169/34	0,6
T Ex	61214	6041 9041	6141 9141	63 to 630	20	0,04	0,18	1	3,5/N	5				
T Ex	61214	6042 9042	6142 9142	0,1 to 1	0,03	0,12	0,3	1	5/N	7,2				
T Ex	61214	6043 9043	6143 9143	0,16 to 1,6	0,04	0,2	0,3	1	5/N	7,2				
T Ex	61214	6051 9051	6151 9151	0,25 to 2,5	0,05	0,2	0,3	1	5/N	7,2	160/OK24 ***)			
T Ex	61214	6052 9052	6152 9152	0,4 to 4	0,06	0,2	0,3	1	5/N	7,2				

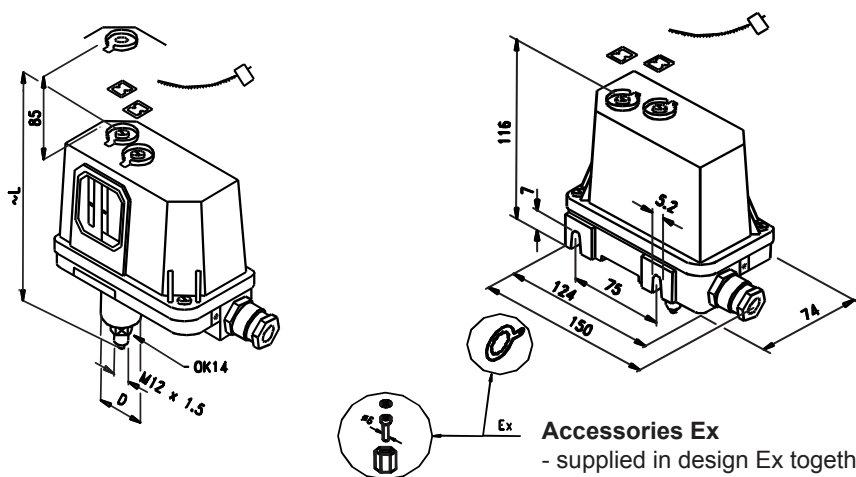
*) Order number for devices with stainless bellows or connector comprises of basic ordering number according to the table and additional number 10 (stainless bellows), 11 (stainless bellows + connector), 01 (connector)

***) N - underpressure unlimited

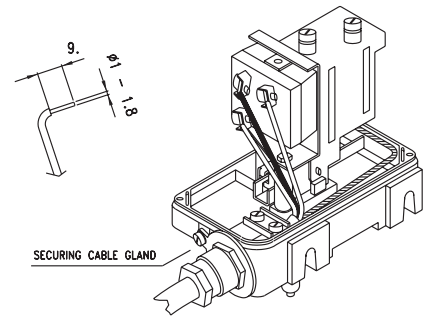
***) Dimension drawing as type 61218

Due to continual technical development the manufacturer reserves the right to change parameters without prior notification.

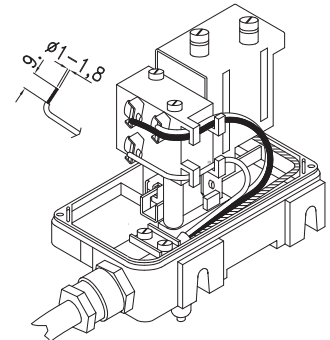
Dimension drawing



Switch connection in design Ex

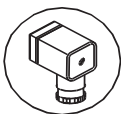


Switch connection in design T



Accessories Ex

- supplied in design Ex together with regulator
- in design T it is necessary to order separately (see. Accessories)



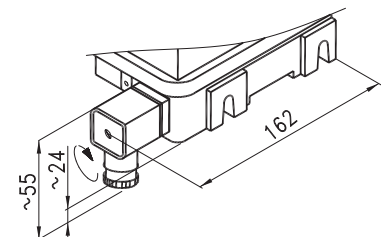
Connector - ordered with additional number **01** after ordering number of the regulator

Height above regulator necessary for removing cover is approx 85 mm.

Ordering devices

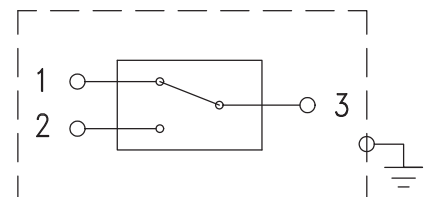
Code	Name
405 61214	Bellows pressure and underpressure regulator
Code	Design
6	T
9	Ex
Code	Switch type
0	A
1	B
Code	Range
11	-80 to 250 kPa
21	4 to 63 kPa
22	10 to 100 kPa
23	16 to 160 kPa
31	25 to 250 kPa
32	40 to 400 kPa
41	63 to 630 kPa
42	0,1 to 1 MPa
43	0,16 to 1,6 MPa
51	0,25 to 2,5 MPa
52	0,4 to 4 MPa
Code	Custom made
10	stainless bellows
11	stainless bellows + connector
01	connector

Design with connector

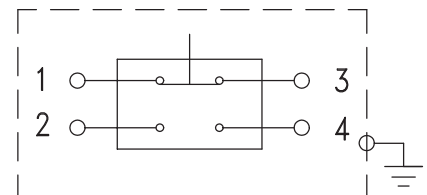


Connecting switches (type A, B)

A



B



Switches 2-3 (2-4) at increasing pressure. Switches 1-3 at decreasing pressure.

405 61214	6	0	22	01	Ordered No.
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Order example: bellows pressure regulator, design T, switch A, range 10-100 kPa, custom made with connector

Warranty

24 months warranty is provided from the delivery date unless specified otherwise in the purchase contract.