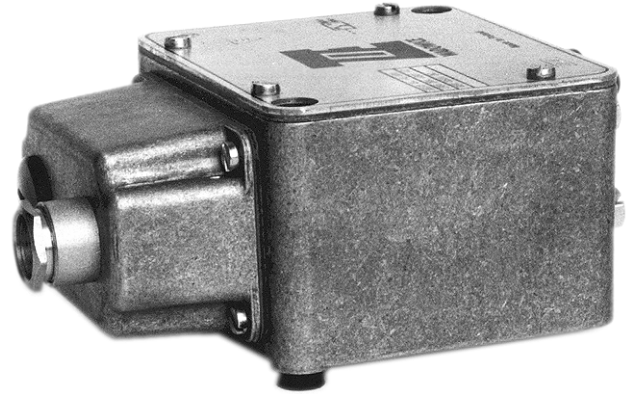
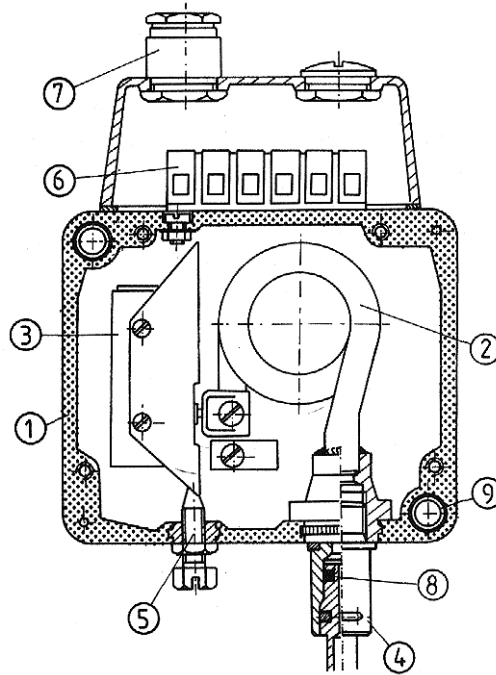


## APPLICATION

Pressure switch type HED 3 is used to switch an electrical circuit on and off in relation to the given pressure value of an oil or another operating medium.



## DESCRIPTION OF OPERATION



Increasing pressure is supplied by a dumping tube via connector Stecko 4 sealed with the rubber ring 8. This pressure affects the bourdon tube 2 causing its deformation. As soon as the set pressure is reached, the bourdon tube actuates the micro switch 3 by means of the attached operating lever. The pressure switch is equipped with two micro switches. Position of each micro switch and than time of its action may be adjusted steplessly by means of the adjustment screw. Connection of the pressure switch with an external electrical equipment is made by conductors attached to the terminal strip 6 and the gland 7 - in basic version.

The switch is susceptible to vibration and for that reason it is mounted with the buffers 9.

The pressure switches are design for the following pressure ranges : 2.5, 6.3, 10, 20, 40 MPa.

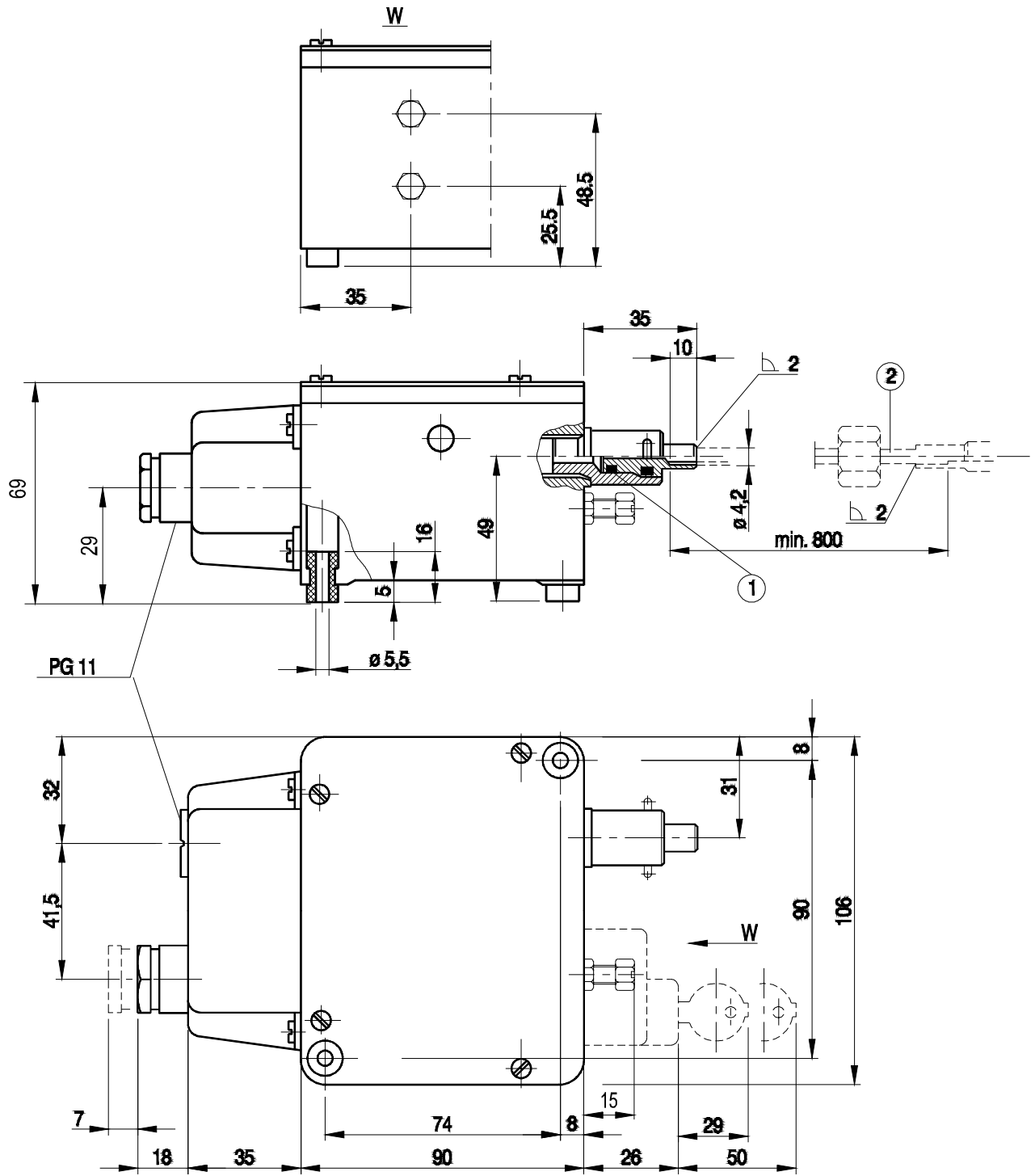
## TECHNICAL DATA

Operatin medium	Mineral oil, phosphate ester, gas, air		
Electrical connection with a gland	PG 11 ; max conductor dia = 8		
Insulation	Electrical connection with a gland		
	IP 55	IP 54	
Mounting position	Optional Fixing by 2 bolts M5 x 20 - 5.8 per PN-85/M - 82215 ( DIN 384 )		
Switching accuracy	± 1 %		
Switching frequency	30/min		
Contact loading	AC voltage		DC voltage
	[ V ]	[ A ]	[ V ] [ A ]
	460	10	25 1.0 125 0.2 250 0.1
Weight	~ 0.8 kg		

Setting ranges [ MPa ]				Fixed switching pressure difference [ MPa ]	Pressure rating [ MPa ]	Maximum operating pressure [ MPa]
Decreasing pressure		Increasing pressure				
min	max	min	max			
0.15	2.5	0.25	2.6	0.1 - 2.35	2.5	3
0.4	6.3	0.6	6.5	0.2 - 5.9	6.3	7
0.6	10	0.9	10.3	0.3 - 9.4	10	11
1.0	20	1.8	20.8	0.8 - 19	20	21
2.0	40	3.2	41.2	1.2 - 38	40	42

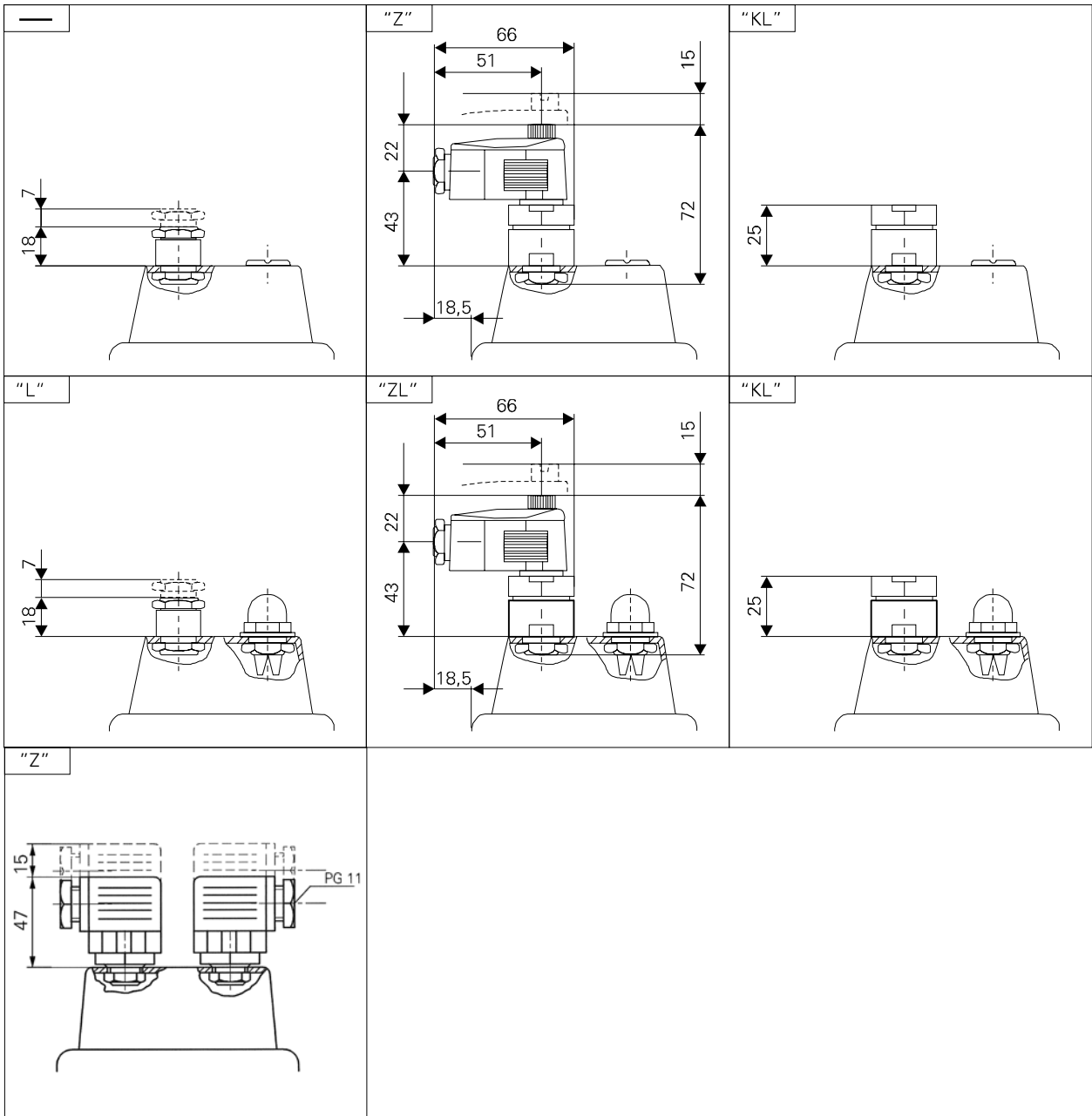
Note : Fixing bolts have to be ordered separately.

# OVERALL AND CONNECTION DIMENSIONS

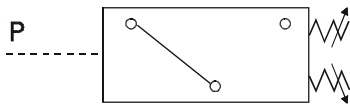


Overall dimensions and connector  
 Item 1 - o-ring 5.3 × 2.4 - 1 piece  
 Item 2 - Dumping tube ( not included )

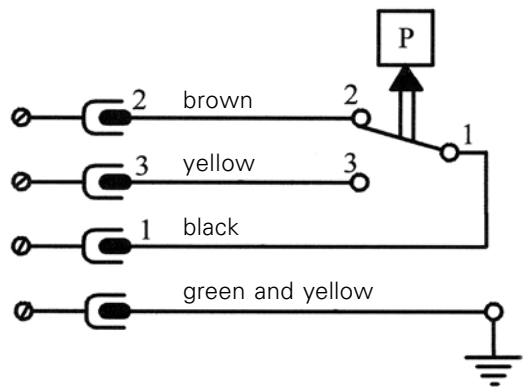
Electrical connection



**SCHEMES**

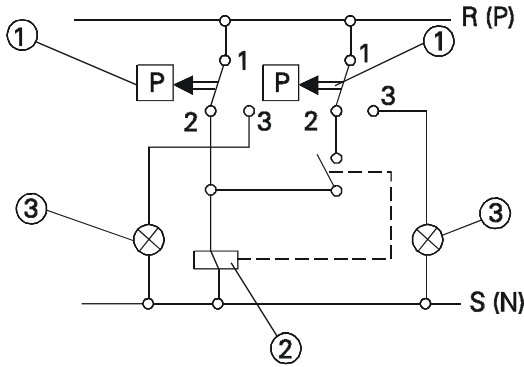


Graphical symbol

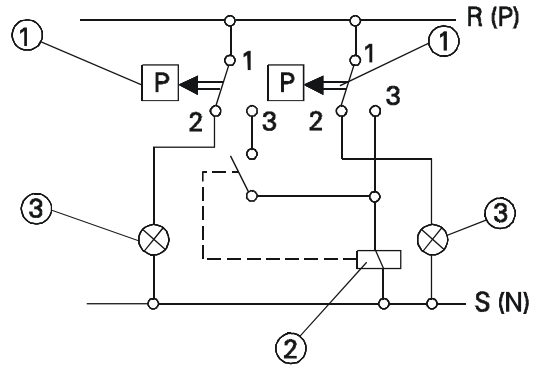


Symbol of electrical connections for version Z4L

Example of application



Differential switching with normally open contacts  
(2 x HED)



Differential switching with normally closed contacts  
(2 x HED)

- 1 - Pressure switch HED 3
- 2 - Working relay
- 3 - Control light

**HOW TO ORDER**

Orders coded in the way showed below should be forwarded to the manufacturer.

HED	3	0	A	/					*
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**Series number**  
 40 = 40  
 ( 40 - 49 ) - installation and connection dimensions remain unchanged

**Maximum set pressure**  
 2.5 MPa = 25  
 6.3 MPa = 63  
 10 MPa = 100  
 20 MPa = 200  
 40 MPa = 400

**Electrical connection**  
 Standard version = no designation  
 Angled plug = Z  
 Angled plug with light = ZL  
 Central connector = K  
 Central connector with light = KL  
 Control light = L  
 Plug with light = Z4L

Further requirements in clear text  
 ( to be agreed upon with the manufacturer )

**Voltage of control light**  
 24 V = 24  
 110 V = 110  
 220 V = 220

**Lockable cap**  
 Without lockable cap = no designation

Coding example : HED 30 A 40/100ZL 110

PONAR WADOWICE S.A.  
ul. Wojska Polskiego 29  
34-100 Wadowice  
tel. 033/ 823 39 43, 823 30 41  
fax 033/ 873 48 80  
e-mail: [ponar@ponar-wadowice.pl](mailto:ponar@ponar-wadowice.pl)

