

Catalog

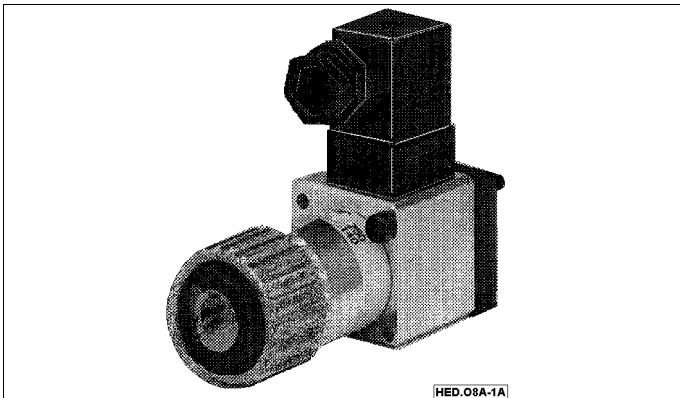


Fig.: Pressure Switch No. 234-13162-8 with plug

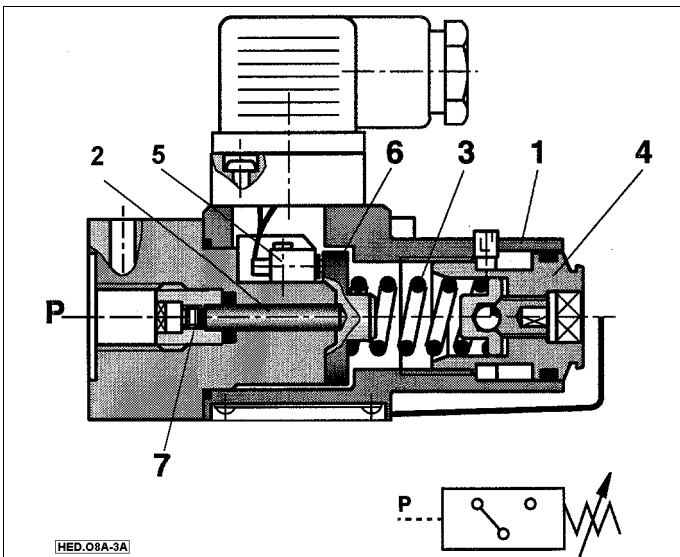
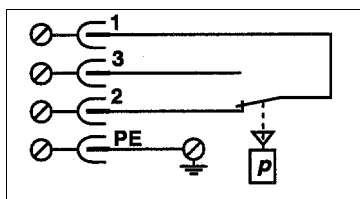


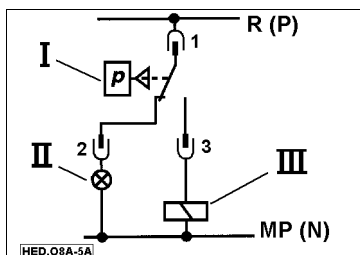
Illustration for function description

Legend:

Item	Description
1	Housing
2	Piston & cartridge
3	Compression spring
4	Setting element
5	Micro switch
6	Spring plate
7	Orifice



Terminal connection
Electrical connection of the pressure switch.



Typical circuit:
The figure on the left shows a simple circuit for example.

- I Pressure switch
- II Control lamp
- III Service relay

Hydraulic-electric Pressure Switch No. 234-13162-8

- Pressure range settings 4-100 bar
 - for pipe installation
 - Setting element: Rotary knob with scale

Function description

The hydraulic-electric pressure switch type HED 8 OA is a piston type pressure switch. It basically consists of housing (1), cartridge with piston (2), compression spring (3), setting element (4) and micro switch (5).

If the pressure to be monitored is below the set value the micro switch is operated. The pressure to be monitored acts via the orifice (7) at the piston (2). The piston (2) supported by the spring plate (6) works against the infinite adjustable force of the compression spring (3). The spring plate (6) transfers the movement of the piston (2) to the micro switch (5) and releases the same on reaching the set pressure. Through this the electric circuit is switched on or off according to circuitry. The mechanical stop of the spring plate (6) protects the micro switch (5) during sudden pressure loss from mechanical destruction and prevents the compression spring (3) from blocking if overpressure occurs.

The knob with scale of the setting element (4) permits the required pressure setting.

For the switching pressure difference at the lower switching pressure, refer to figure on next page.

Technical Data	
Operating pressure	max. 350 bar
Setting range	4 bar to 100 bar
Seals	NBR
Pressure fluid	Mineral oil (HL, HLP) to DIN 51 524
Viscosity range	10 to 800 mm ² /s
Temperature (fluid)	-30° C to +80° C
Degree of cleanliness	Maximum permissible degree of contamination of pressure fluid to NAS 1638 Class 9
Switching accuracy (repeatability)	< ± 1 % of setting range
Switching frequency	up to 80 operations/minute
Electr. connection	Plug connection to DIN 43 650, type A, 3-pin + PE
Cross sectional area of connection, max.	1,5 mm ²
Contact load	max.
Alternating voltage	250 V; 5 A
Direct voltage	50 V/1 A, 250 V/0,02 A
Insulation to DIN 40 050	IP 65
Weight	0,8 kg
Fluid inlet	G ¼ female

Important. The pressure fluid must be compatible with the NBR material of the seals.

Note

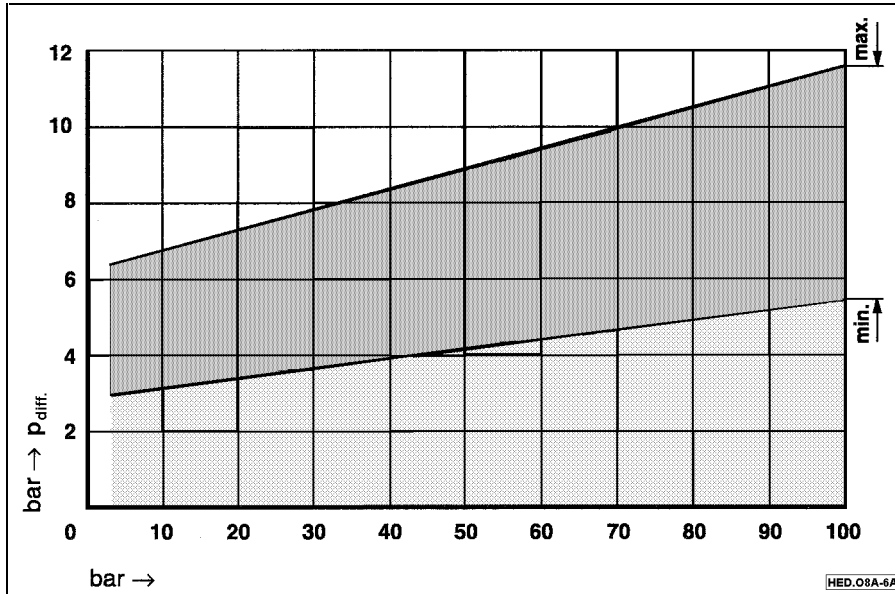
Electr. connection: Order plug DIN 43650 / ISO 4400 separately if not on hand.

To increase the lifetime the pressure switch should be

- mounted vibration proof,
- protected from hydraulic pressure peaks.
- If using DC inductive load a spark extinguisher must be used in order to increase service life.

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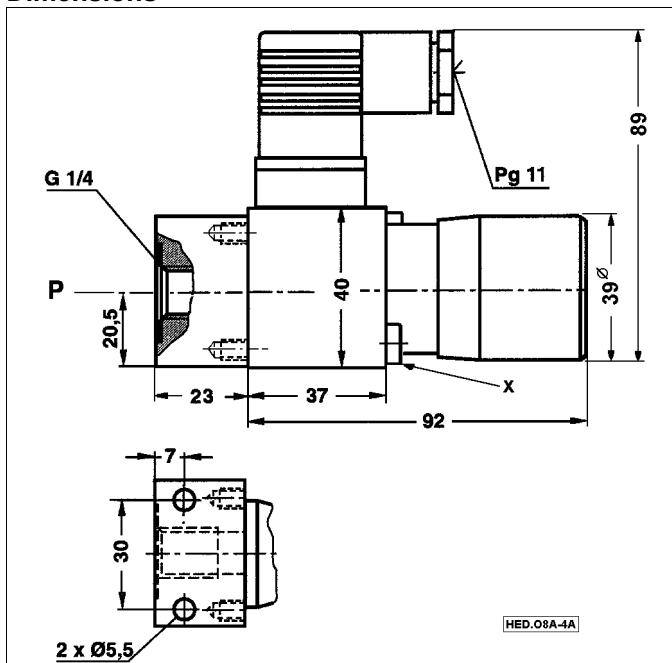
Pressure Switch No. 234-13162-8



The figure on the left illustrates the switching pressure difference with dispersion (min. to max.) at lower switching pressure between 4 bar to 100 bar.

Switching pressure difference

Dimensions



Remark: Pressure switch illustrated with plug DIN 43 650
Electr. plug not included in scope of supply.

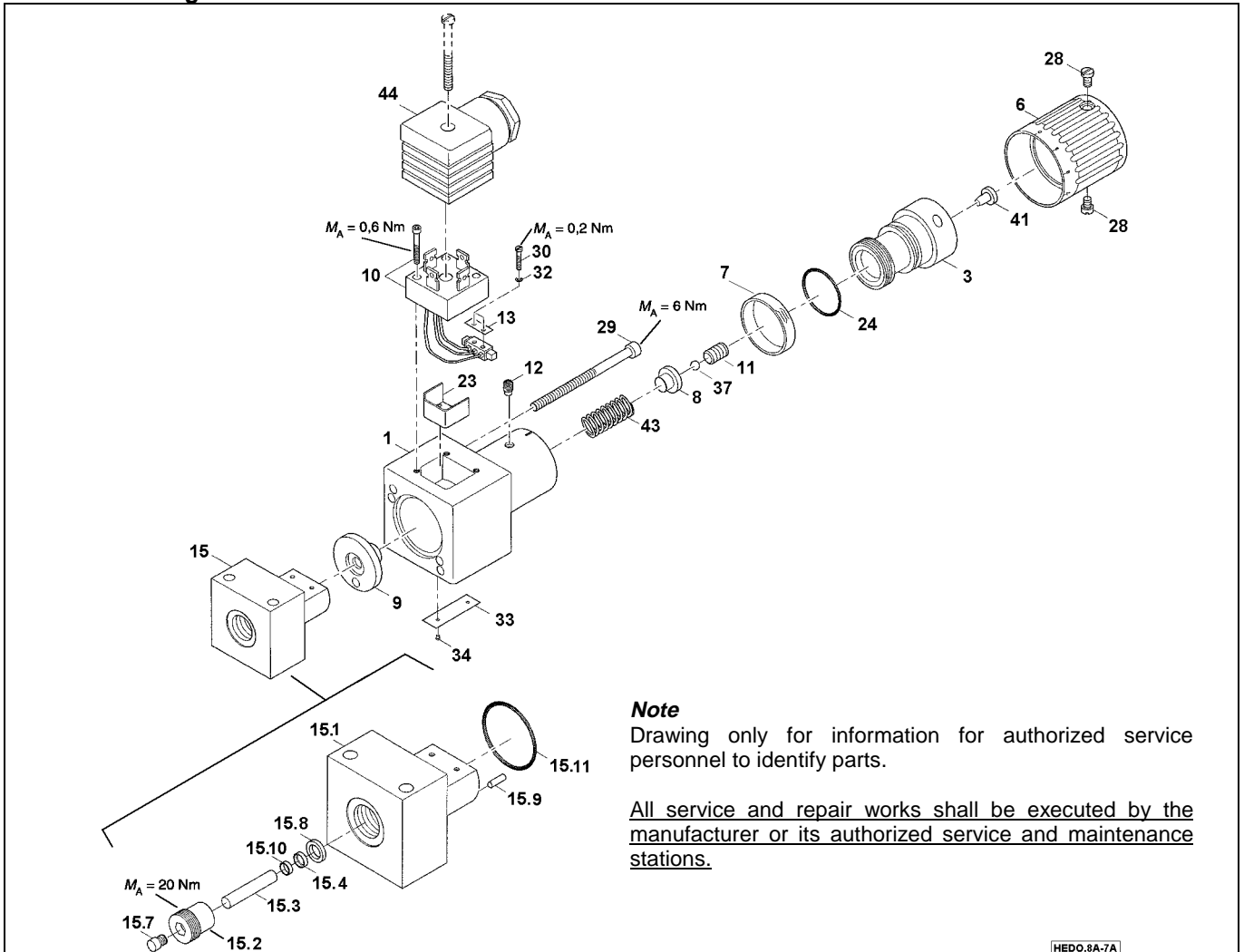
Note:

Two screws M5x50 DIN912-10.9 required for fixing the valve.
Tightening torque $M_A = 8,9 \text{ Nm}$

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Pressure Switch No. 234-13162-8, setting range 4-100 bar

Service Drawing & Parts List



Note
Drawing only for information for authorized service personnel to identify parts.

All service and repair works shall be executed by the manufacturer or its authorized service and maintenance stations.

HEDO.8A-7A

Item	Description	Qty.	
1	Housing	1	
3	Setting screw	1	
6	Rotary knob	1	
7	Scale ring	1	
8	Spring retainer	1	
9	Spring retainer	1	
10	Switch	1	
11	Grub screw M8x10	DIN 916	1
12	Grub screw M5x8	DIN 916	1
13	Plate	PVC	1
15	Cartridge OA-100	1	
15.1	Flange, Conn. G¼ female	1	
15.2	Cartridge	1	
15.3	Rod	1	
15.4	Rod seal	NBR	1
15.7	Jet	Ø 0,3 mm	1
15.8	Quadring 7,65x1,78	NBR	1
15.9	Clamping-sleeve 2,5x8	DIN1481	1
15.10	Ring	NBR	1
15.11	O-Ring 26,7x1,78	NBR	1

Item	Description	Qty.	
23	Cartridge	1	
24	O-Ring 18,72x2,62	NBR	1
28	Cyl. head screw M4x4	DIN84	2
30	Cyl. head srew M2x12	DIN84	2
32	Washer A2.5 St	DIN125	2
33	Identification plate	1	
34	Grooved pin 2x4 St	DIN1446	2
37	Ball Ø 5 Kl. III	DIN5401	1
41	Locking screw	U0 PA	1
43	Compression spring	1	
44	Plug DIN 43 650 Type A	*	

* Plug 3-pin + PE No. 236-13277-9

Safety Instructions



Any electrical installation works shall be carried out by skilled electrician only. Observe 'User Manual' of the controller when connecting.



Warning
Do not remove/disassemble pressure switch when lines are pressurized.