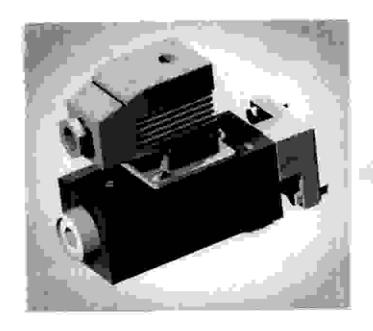


# Hydro-electric pressure switch Type HED 8

Series 1X Maximum operating pressure 350 bar-



Type HED 8 OH 1X/Z15 -IN003

#### Contents

Description	Page	
Features	1	
Ordering details	2	
Function, section, symbol	3	
Technical data	4	
Characteristic curves	5	
Unit dimensions	6	
Connection allocation	7	
Circuit examples	7	
Ordering code : available seals	8	
Ordering details volug-in connectors	8	

### Features

- For subplate mounting
- For pipe installation
- For vertical stacking
- 4 pressure ranges
- Plug-in connector with circuitry (indicator lamp)



Max setting pressure 200 bar  Max setting pressure 350 bar  Without plug-in connector  With small plug-in connector  With large plug-in connector  without light  Elight for 6 to 14V  Hight for 16 to 36V  Light for 90 to 130V  =	200 200 350 = K14 = Z14 = Z15				
Pipe installation Vertical stacking  Series 10 to 19  = 1X  10 to 19 unchanged installation & connection dimensions)  Max setting pressure 50 bar  Max setting pressure 100 bar  Max setting pressure 200 bar  Max setting pressure 350 bar  Without plug-in connector  With small plug-in connector  With large plug-in connector  With large plug-in connector  Without light  ight for 6 to 14V  ight for 36 to 60V  ight for 36 to 60V  ight for 180 to 240V  ight may only be used for large plug in connector Z15  Spindle (without scale)  without scalering  VER seals	200 200 350 = K14 = Z14 = Z15				
Vertical stacking	200 200 350 = K14 = Z14 = Z15				
Series 10 to 19 = 1X  (10 to 19: unchanged installation & connection dimensions)  Max setting pressure 50 bar = :  Max setting pressure 200 bar = :  Max setting pressure 350 bar = :  Max setting pressure 350 bar = :  Without plug-in connector  With small plug-in connector  With large plug-in connector  without light = :  Light for 6 to 14V = :  Light for 36 to 60V = :  Light for 90 to 130V = :  Light for 180 to 240V = :  Light may only be used for large plug in connector Z15  Spindle (without scale)  with scalering  WBR seals	200 200 350 = K14 = Z14 = Z15				
Max setting pressure 50 bar  Max setting pressure 100 bar  Max setting pressure 200 bar  Max setting pressure 350 bar  Max setting pressure 350 bar  Without plug-in connector  With small plug-in connector  With large plug-in connector  Without light  Light for 6 to 14V  Light for 16 to 36V  Light for 90 to 130V  Light for 90 to 130V  Light may only be used for large plug in connector Z15  Spindle (without scale)  with scalering  WBR seals	200 200 350 = K14 = Z14 = Z15				
Max setting pressure 50 bar  Max setting pressure 200 bar  Max setting pressure 200 bar  Max setting pressure 350 bar  Without plug-in connector  With small plug-in connector  With large plug-in connector  without light  light for 6 to 14V  light for 16 to 36V  light for 36 to 60V  light for 90 to 130V  light for 180 to 240V  light may only be used for large plug in connector Z15  Spindle (without scale)  without scalering  with scalering	200 200 350 = K14 = Z14 = Z15				
Max setting pressure 200 bar  Max setting pressure 350 bar  Max setting pressure 350 bar  Without plug-in connector  With small plug-in connector  With large plug-in connector  without light  light for 6 to 14V  light for 36 to 60V  light for 90 to 130V  light for 180 to 240V  light may only be used for large plug in connector Z15  Spindle (without scale)  without scalering  with scalering	200 200 350 = K14 = Z14 = Z15				
Max. setting pressure 200 bar = :  Max. setting pressure 350 bar = :  Without plug-in connector  With small plug-in connector  With large plug-in connector  without light = :  Light for 6 to 14V = :  Light for 16 to 36V = :  Light for 90 to 130V = :  Light for 180 to 240V = :  Light may only be used for large plug in connector Z15  Spindle (without scale)  without scalering  with scalering	200 350 = K14 = Z14 = Z15			1	
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Without plug-in connector With small plug-in connector With large plug-in connector  without light =  light for 6 to 14V =  light for 16 to 36V =  light for 36 to 60V =  light for 180 to 240V =  light may only be used for large plug in connector Z15  Spindle (without scale)    without scalering    with scalering    WBR seals      WBR seals      WBR seals      WBR seals      WBR seals      WER	= K14 = Z14 = Z15				
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light for 36 to 60V = light for 90 to 130V = light for 180 to 240V = light may only be used for large plug in connector Z15  Spindle (without scale) without scalering with scalering	L 12				
light for 90 to 130V = light for 180 to 240V = light may only be used for large plug in connector Z15  Spindle (without scale) without scalering with scalering	L 24				
light for 180 to 240V  light may only be used for large plug in connector Z15  Spindle (without scale)  without scalering  with scalering	L 48				
ight may only be used for large plug in connector Z15  Spindle (without scale) without scalering with scalering  VBR seals	L110				
Spindle (without scale) without scalering with scalering NBR seals	L220				
without scatering with scalering WBR seals					
WBR seals	= No d	esig.			
NBR seals	:= N	Vo des	ig.		
- 374 -	= 4	<b>A</b>			
-PM seals		= No	desig.		
		= V			
Attention					
The compatibility of seals and					
hydraulic fluid has to be taken					
into account					
dodification number					

Hydro-electric pressure switches type HED 8 are piston type pressure switches.

They basically consist of the housing (1), piston (9), compression spring (19), adjustment element (2) and micro switch (5).

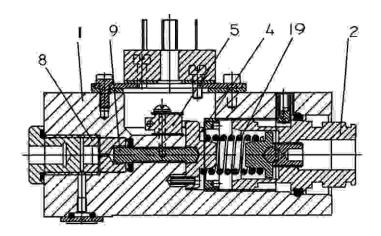
If the pressure to be monitored is below the set value, the micro switch (5) is operated. The pressure to be monitored is applied to the piston (9) via screw jet (8). The piston (9) supported by the spring seat (4) acts against the infinitely variable force of the compression spring (19). The spring seat (4) transfers the movement of the piston (9) 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 the circuitry. The mechanical stop of the spring seat (4) protects the micro switch(5) during sudden pressure loss from mec-

#### Note

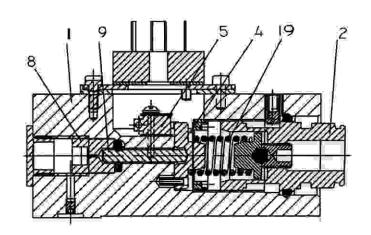
To increase the service life, the pressure switch should be

hanical destruction and prevents the compression spring (19) from blocking if overpressure occurs.

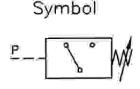
mounted vibration proof,

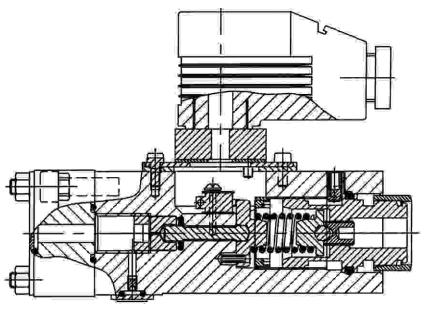


Type HED 8 OP 1X/... - IN003



Type HED 8 OA 1X/... - IN003





Type HED 8 OH 1X/Z15..A..-IN003

protected from hydraulic pressure shocks.

# Technical data (For application outside these parameters, please consult us!)

#### General

WEIGHT	Ká	143			
		ris		 	

## Hydraulic

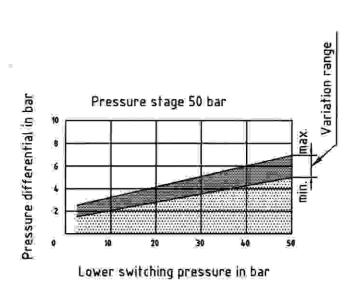
Hydraulic fluid		Mineral oil (HL,HLP) to DIN 51 524  Fast bio-degradable hydraulic fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic esters); other fluids on request
Hydraulic fluid temperature range	*6	-30 fo +80 (for NBR seals)
Viscosity range	mm/s²	10 to 800
Cleanliness		Max. permissible degree of contamination of the pressure fluid is to NAS 1638 class 9. We, therfore recommend a filter with a minimum retention rate of β≥75

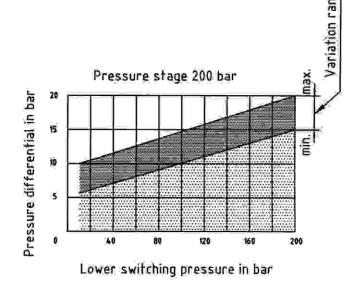
# Pressur setting range

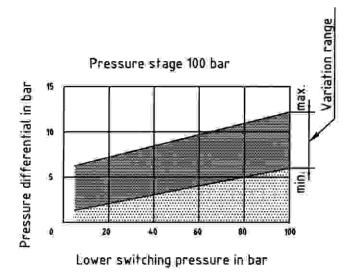
Pressure stage (Max. settable pre.) in bar	Max, operating pressure in bar	Pressure sefting range in bar	
5.0	350	2 to 50	
100	350	5 to 100	
200	350	7 to 200	
350	500	10 to 350	_

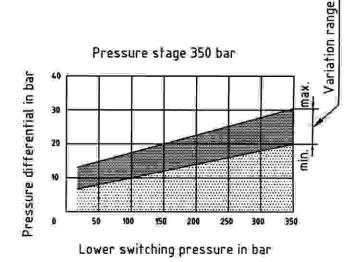
# Electrical technical data

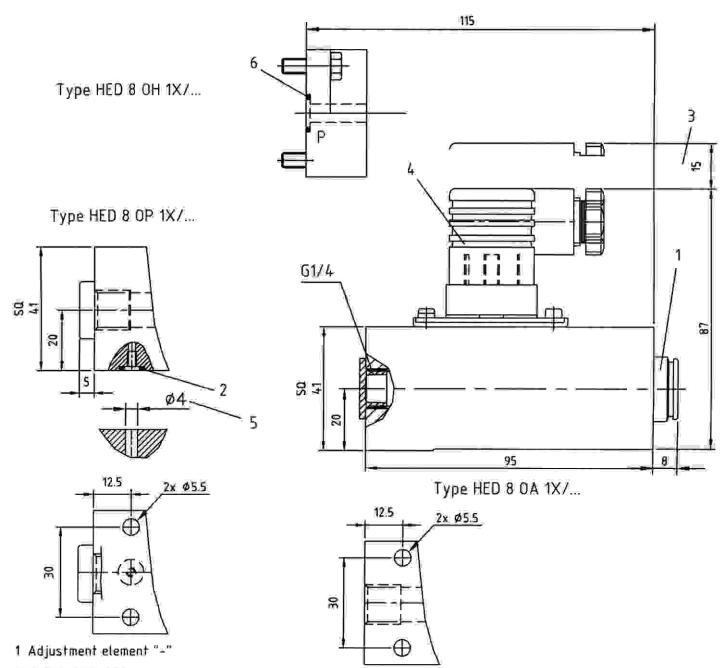
Electrical connection		Plug-in connection to DIN 43 650, form A, 3-pin + PE
Max, connection cross sectional area	mm <sup>2</sup>	1.5
Contact load, max.	-AC	250 V ; 5A
	-DC	50 V/1 A, 125 V/0.03 A, 250 V/0.02 A



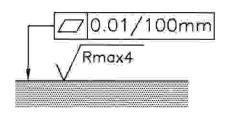






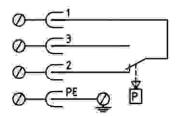


- 2 O-Ring 5.28x1.78
- 3 Space required to remove the plug-in connector
- 4 Plug-in connector to DIN 43 650
- 5 Maximum diameter of the mounting surface of the mating piece
- 6 R-Ring: 9.81x1.5x1.78
  Pressure switch fixing screws
  M5x50 DIN 912-10.9,
  tightening torque M<sub>A</sub>=8.9Nm
  must be ordered seperately
  Pipe thread "BSP" (G) to ISO 228/1



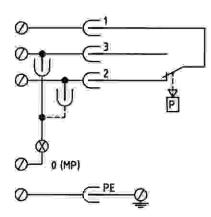
Required surface finish of mating part with version "OP" & "OH"

#### Without indicator lamp



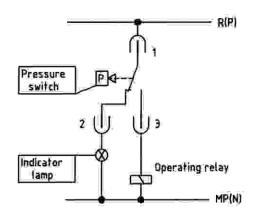
#### With Indicator lamp

The indicator lamp can either be plugged into the N/O contact (3) or N/C contact (2)



# Circuit example

# Simple circuit (1 x HED 8)



# Differential connection with normally open

(2 x HED 8)

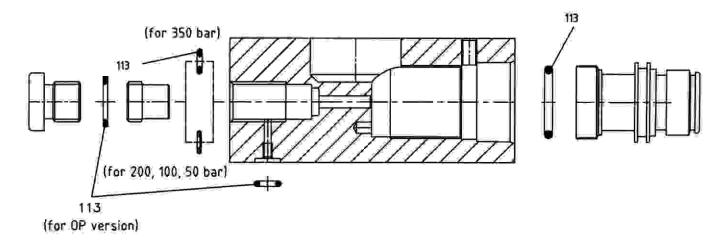
R(P)

min.

Poperating relay

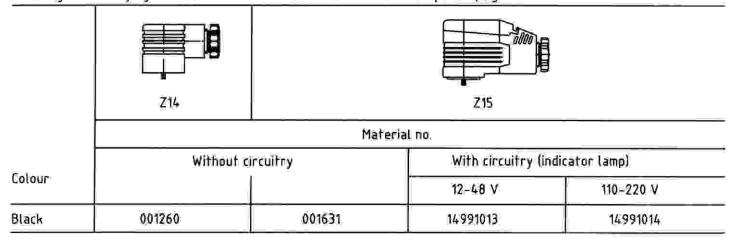
MP(N)

## Ordering code: available seals



	Order no.: seal kit, Pos. no.113		
Туре	NBR seals	FPM seals	
HED8/50,100,200	01581383	01581385	
HED8/350	01581384	01581386	

Ordering details: plug-in connectors to DIN 43 650 A and ISO 4400 for component plug "K14"



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