

General description

Hydratronics thin film pressure sensors with 0-5 Volt DC signal output is designed to be used with Hydratronics CANmaster® control systems to measure hydraulic pressure for monitoring and regulation in systems for mobile applications.

The sensors have an O-ring sealed bayonet connector, a protection class IP 69K, can work with ambient temperatures in the range, -40 to + 100 °C, withstands high mechanical shocks, continuous vibrations and high pressure peaks.

The housing is made of highly resistant, fiberglass enforced plastic and the thin film measuring cell is made of high quality stainless steel.

The hydraulic side is fitted with a sealing ring, conn. type G1/4A.

The sensor is delivered in 3 pressure ranges: 0-60 bar, 0-250 and 0-600 bar. The sensor is connected to the control system with a 3 wire cable.

Application areas

- Mobile hydraulics; working hydraulics, hydrostatic transmissions
- Automotive industry
- Stationary industry



Technical data

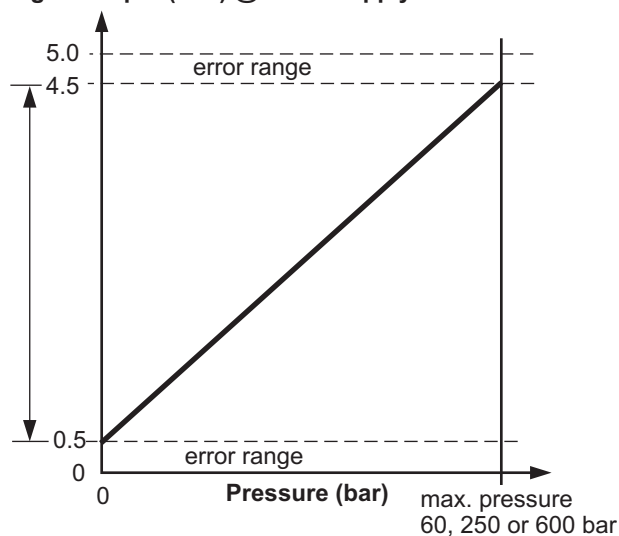
	0-60 bar	0-250 bar	0-600 bar
Pressure range	0-60 bar	0-250 bar	0-600 bar
Over pressure, max permitted	120 bar	500 bar	1200 bar
Burst pressure	550 bar	1200 bar	2400 bar
Powersupply U _B	5.0 ± 0.5 Volt DC		
Signal output, ratiometric @5V	min. 0.5 - max 4.5 Volt DC		
Error levels, signal output	< 0.5 V and > 4.5 volt		
Response time	< 2 ms		
Accuracy (IEC 61298-2)	better than 1%, incl. non-linearity, hysteresis, repeatability, zero point & full scale error		
Max. load, R _A	> 4.5 kOhm		
Temperature range:			
- ambient, operating	-40 °C to + 100 °C		
- hydraulic oil inlet	-40 °C to +125 °C		
- storage	-40 °C to +120 °C		
CE conformity acc. to	89/336/EEC; EN 61326; 97/23/EG		
Mechanical shock	500 g (IEC60068-2-27)		
Vibration, resonance	20 g (IEC60068-2-6)		
IP protection class	IP 69K		
Weight	70 gr.		
Overall dimensions, height x diam.	60 x 25 mm (excl. connector)		
Electric connector	O-ring sealed bayonet 4-way, DIN 72585		
Hydraulic connection	G 1/4A, DIN 3852-E, incl. sealing ring 16.5x11.6x1.5.		

Ordering Information

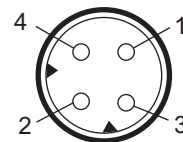
Pressure range	0-60 bar	0-250 bar	0-600 bar
Pressure sensor Part No.	5010 9016	5010 9020	5010 9030

Signal output range

Signal output (Volt) @ 5VDC supply

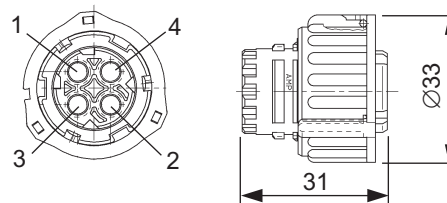


Electric connector pin location



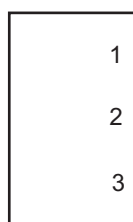
Pin No.	Designation	Function
1	UB+	Supply voltage +5V
2	0 V	GND
3	S+	Signal +/- 0.5 - 4.5 V
4	not used	-

Mating connector - Bayonet DIN 72585



Electric connection to control unit

Pressure sensor



U_B+

GND/ 0V

Signal +

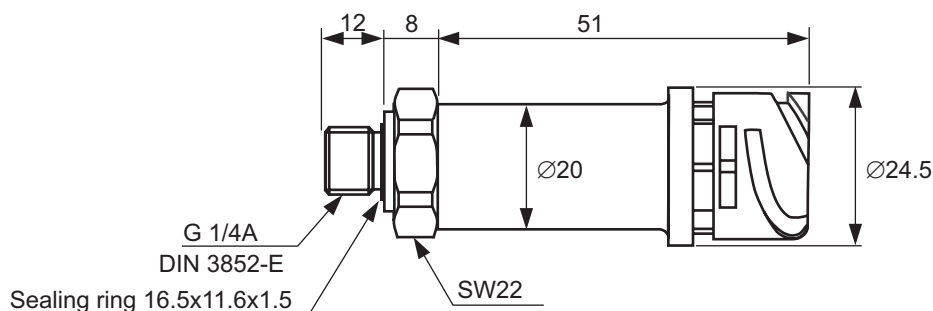
Control unit (ECU)

+5 VDC output

Sensor ground / GND 0V

Sensor input (0-5V)

Dimensions (mm)



Accessories

Name

Part No.

AMP part no.

Cable kit, 0.5m
Bayonet connector, DIN72585
Contact 2.5mm
Wire seal
Seal plug (wire filler)
Connector cover, right angle
Connector cover, straight
Crimp tool

5010 9032
1500 1002
1500 1004
1500 1006
1500 1008
1500 1010
1500 1012
1500 1014

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1-967325-1
962982-1
828921-1
828922-1
965783-1
965786-1
734289-2

Connector covers for
corrugated tubes NW10

