

# OEM Pressure Transmitters

## Type MH-2

### Applications

Mobile hydraulic systems  
Automotive industry  
Compressor systems

### Special Features

Pressure ranges from 1000 psi to 8000 psi  
4-20 mA, 1-5V, 0-10V, 0.5-4.5V ratiometric outputs available  
Durable thin film sensor technology  
CDS system for protection from pressure spikes and cavitation  
IP 69K high pressure steam wash down protection available



MH-2 pressure transmitters

### Description

MH-2 pressure transmitters are precision engineered for off road and mobile hydraulic applications where performance and durability are critical. Extreme shock and vibration resistance, available high pressure steam wash down protection, and the WIKA CDS system (cavitation dampening system) provide one of the most rugged pressure transmitters available today. Pressure ranges from 1000psi to 8000psi meet all standard mobile hydraulic pressure applications.

The all welded thin film measuring cell eliminates the need for additional soft sealing materials that may deteriorate over time. The thin film sensor uses sputtered technology that provides excellent long-term stability in applications producing frequent pressure cycles. The rugged glass reinforced PBT plastic case has been used in under hood automotive applications for many years.

A metal sleeve inside the case provides excellent EMI protection to 100v/m. Several NEMA 4 / IP 67 electrical connections are available. The cable version provides environmental protection to IP 69K for resistance to high-pressure steam wash down cleaning procedures.

The MH-2 is specifically designed for OEM applications in the mobile hydraulics and automotive industry. It is manufactured on a fully automated production line to provide large quantities of transmitters with consistent quality and highly competitive pricing.

Custom modifications are available for large quantity requirements.

**Datasheet: [MH-2](#)**

**Specifications**
**Model MH-2**

<b>Pressure range</b>	1000psi	1500psi	2000psi	3000psi	5000psi	7500psi	8000psi
<b>Maximum pressure*</b>	1740psi	2900psi	4600psi	7200psi	11,600psi	17,400psi	17,400psi
<b>Burst pressure**</b>	7970psi	11,600psi	14,500psi	17,400psi	24,650psi	34,800psi	34,800psi

\*Pressure applied up to the maximum rating will cause no permanent change in specifications but may lead to zero and span shifts

\*\*Exceeding the burst pressure may result in destruction of the transmitter and possible loss of media

<b>Materials:</b>		Stainless steel	
<ul style="list-style-type: none"> <li>■ Wetted parts</li> <li>■ Case</li> </ul>		Fiberglass-reinforced polybutylene terephthalate (PBT)	
Power supply $U_B$		Signal output	Power supply $U_B$   Maximum load $R_A$
Signal output and		4 ... 20 mA, 2-wire	10 ... 36 DC V   $R_A \leq (U_B - 10 V) / 0.02 A$ with
Maximum load $R_A$		1 ... 5 V, 3-wire	8 ... 36 DC V   $R_A$ in Ohm and $U_B$ in Volt
		0 ... 10 V, 3-wire	14 ... 36 DC V   $R_A > 2.5 k\Omega$
		0.5 ... 4.5 V, ratiometric	5 ± 0.5 DC V   $R_A > 5 k\Omega$
		Others on request	
Response time (10 ... 90 %)	ms	≤ 2	
Isolation voltage	DC V	500	
Accuracy	% of span	≤ 0.5 (BFSL)	
	% of span	≤ 1.0 (limit point calibration)	
		(Includes linearity, hysteresis and repeatability.)	
Non-repeatability	% of span	≤ 0.2	
1-year stability	% of span	≤ 0.3 (at reference conditions)	
Permissible temperature of:			
<ul style="list-style-type: none"> <li>■ Media *)</li> <li>■ Ambient *)</li> <li>■ Storage *)</li> </ul>		-40 ... +257 °F	-40 ... +125 °C
		-40 ... +212 °F	-40 ... +100 °C
		-40 ... +248 °F	-40 ... +120 °C
		*) Also complies with EN 50178, Tab. 7, Operation (C) 4K4H, Storage (D) 1K4, Transport (E) 2K3	
Compensated temperature range		+32 ... +176 °F	0 ... + 80 °C
Temperature coefficients (TC) within compensated temperature range:			
<ul style="list-style-type: none"> <li>■ Mean TC of zero</li> <li>■ Mean TC of range</li> </ul>	% of span	≤ 0.15 / 10K (special pressure ranges may have increased zero TC)	
	% of span	≤ 0.15 / 10K	
<b>CE conformity</b>		89/336/EWG interference emission and immunity see EN 61 326	
		interference emission limit class A and B	
		97/23/EG Pressure equipment directive	
Shock resistance	g	500 according to IEC 60068-2-27 (mechanical shock)	
Vibration resistance	g	20 according to IEC 60068-2-6 (vibration under resonance)	
Wiring protection		Protected against short circuiting signal+ to $U_B$ - / 0V	
		Protected against reverse polarity except ratiometric output signals	
Weight	oz	Approximately 2.1	

## Dimensions in inches (mm)

### Electrical connections

Circular connector  
M12 x 1, 4 pin,  
NEMA 4 / IP 67  
Order code: M4

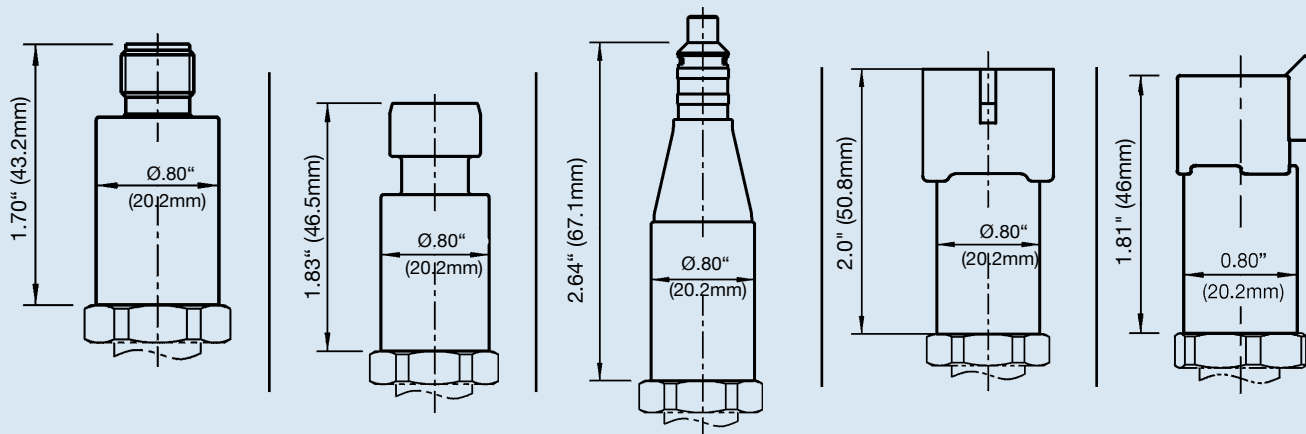
Metri Pack Connector  
Series 150  
NEMA 4 / IP 67  
Order code: R3

Cable with free ends  
IP69K high pressure  
steam washdown  
Order code: FN

### Ingress Protection (IP) per IEC 60 529

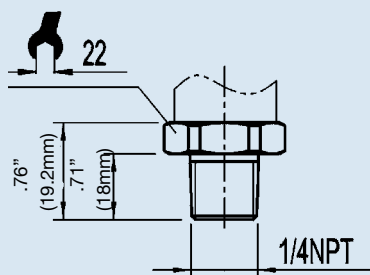
Connector  
AMP Superseal 1.5  
NEMA 4 / IP 67  
Order code: S3

Deutsch 3-Pin  
DT04-3P  
Order Code: G3

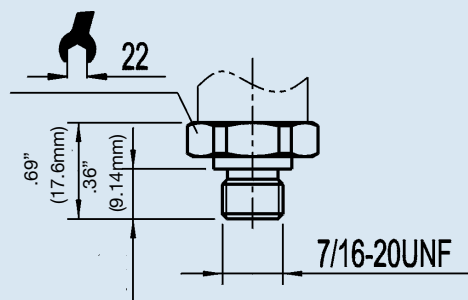


### Pressure connections \*)

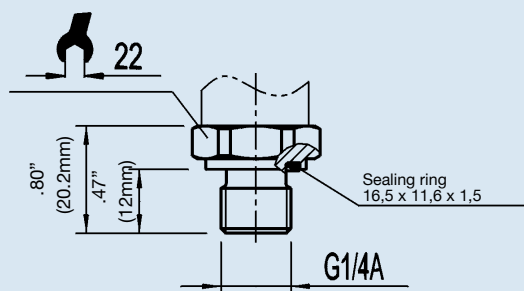
1/4 NPT male  
Order code: NB



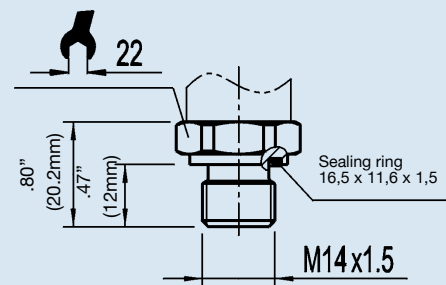
SAE #4 7/16-20 UNF-2A  
male o-ring boss  
Order code: UA



G 1/4 per DIN 3852-E  
Order code: HD

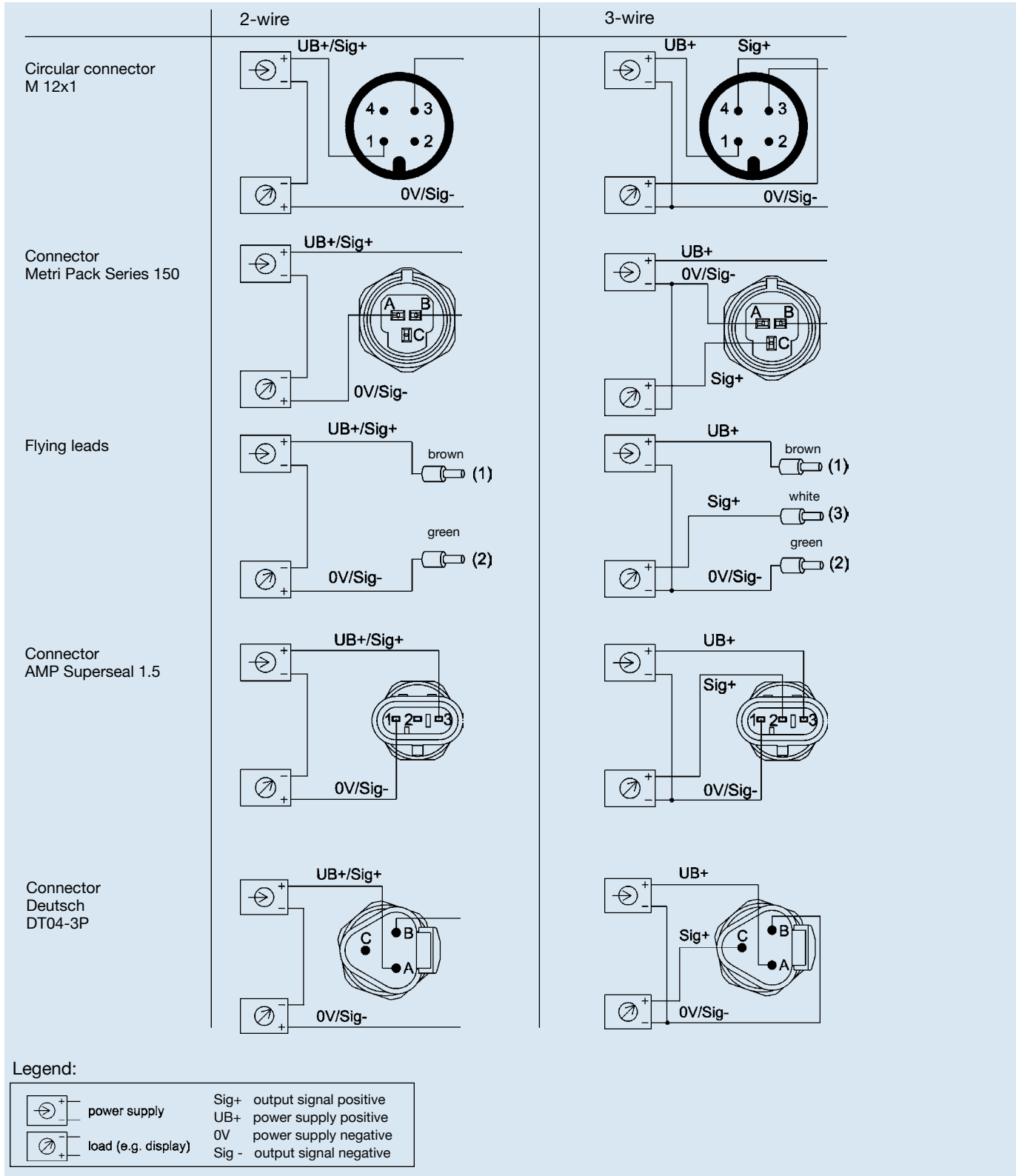


M 14 x1.5 per DIN 3852-E  
Order code: HN



\*) pressure connections incorporate the WIKA CDS system. This includes a reduced diameter pressure port for protection against pressure spikes and cavitation.

## Electrical connection



# Type MH-2 OEM Mobile Hydraulic Pressure Transmitter

## 1000 psi to 8000 psi

Standard Features: See Datasheet MH-2



Note: 300 piece minimum order quantity applies.

### MH-2 Option List

Feature
<b>Signal Output</b>
4-20mA 2-wire
1-5V 3-wire
0-10V 3-wire
0.5-4.5V 3-wire Ratiometric
On inquiry
<b>Unit</b>
psi
On inquiry
<b>Pressure Range</b>
0 psi ... 1000 psi
0 psi ... 1500 psi
0 psi ... 3000 psi
0 psi ... 5000 psi
0 psi ... 8000 psi
On inquiry
<b>Process Connection</b>
1/4" NPT
7/16-20 UNF SAE #4 J514 male
G 1/4 B
G 1/4 B DIN 3852-E
M 14x1.5 DIN 3852-E
On inquiry
<b>Case Material</b>
Fiberglass reinforced ABC plastic (PBT)
Stainless steel

Feature
<b>Electrical Connection</b>
4 Pin locking plug M12 x 1 (NEMA 5 / IP 65)
Connector Metri Pack Series 150, 3-pin
bayonet locking plug per DIN 72 585, 4-pin
connector Deutsch DT04-3P, 3-pin
connector AMP Superseal 1.5, 3-pin
Cable with free ends (NEMA 4 / IP 69K high pressure steam protection)
On inquiry
<b>Cable Length</b>
Without
0.5 meters
2 meters
5 meters
On inquiry
<b>Quality Certificates</b>
Without
Other - please specify
<b>Digital display</b>
Without
Digital display
<b>Additional order details</b>
Without
Additional text

Datasheet: MH-2