

# **OEM Pressure Sensors "MobilTrans"**

For mobile hydraulics

# Accuracy 1% Standard output: 4...20mA; or 1...5VDC; or 0...10VDC;

or 0.5...4.5VDC;

2-wire 3-wire 3-wire ratiometric



### Description

Our new pressure sensor MobilTrans is designed for rough environments and extreme applications e.g. mobile hydraulics systems where shock and vibration but also pressure peaks or steam jet cleaning are daily routine. All of these effects have no impact on the accuracy and reliability of our measurements. Due to fully automated production we can offer very attractive prices and high quantities.

A high degree of automation is used to produce the MobilTrans pressure transducer, which enhances consistency and reliability.

### Features

- o Measuring ranges from 0...60bar to 0...600bar
- o Highly resistant to shock and vibrations
- o High EMC-protection (100V/m) according to EN 61 326
- o Compact design
- o Protection up to IP69K
- Excellent temperature performance (-40°C to 125°C)
- o Resistance to pressure peaks (CDS system)

### Applications

Mobile hydraulics Hydraulics Pumps Machine and plant construction

#### Model: P3354

tecsis GmbH Carl-Legien Str. 40-44 D-63073 Offenbach / Main Tel.: +49 69 5806-0

Sales national Fax: +49 69 5806-7788 Sales international Fax: +49 69 5806-7788 e-Mail: info@tecsis.de Internet: www.tecsis.de DE 762 f

01/2013

# **Technical data**

Model P3354

Pressure type	Positive guage pressure					
- Ranges [bar]	60	100	160	250	400	600
- Overload limit [bar]	120	200	320	500	800	1200
- Burst pressure [bar]	550	800	1000	1200	1700	2400
Sensor element	Thin film	000	1000	1200	1100	2100
Output signal	420mA	2-wire				
1 0	15VDC 3-wire					
	010VDC 3-wire					
	0.54.5VDC ratiometric					
	other signals on request					
Accuracy <sup>1)</sup>	≤ 1.0% of F.S. (≤ 0.5% BFSL)					
Non linearity <sup>2)</sup>	≤ 0.4% of F.S. BFSL					
Repeatabilty	$\leq \pm 0.3\%$ of F.S.					
Stability (annual)	$\leq \pm 0.3\%$ of F.S. (in rated condition)					
Material,		<b>`</b>				
Case	Fibre reinforced plastic (PBT)					
Wetted parts	stainless steel 1.4435 and 1.4542					
Pressure connection	G 1/4 according to DIN 3852-E					
	M14x1,5 according to DIN 3852-E					
	7/16-20 UNF-2A, male O-Ring					
	1/4 NPT					
Electrical connection	other pressure connections on request connector Metri Pack Serie 150					
Electrical connection	round connector M12x1 (4-pin)					
	cable outlet with 1.5m cable					
	AMP Superseal connector 1.5 (3-pin)					
	Deutsch connector					
	other electrical connections on request					
Power supply / load						
420mA	1036VDC $R_{A}[\Omega] \leq (U_{B}[V] - 10V) / 0,02A$					
15V	836VDC $R_A > 2,5k\Omega$					
010V	1436VDC $R_A > 5k\Omega$					
0.54.5V ratiometric	$5\pm0.5$ VDC	R <sub>A</sub> > 4				
Response time	$\leq$ 2ms within 10% to 90% of F.S.					
Protection type	according to EN 60529					
Packard Metri Pack 150	IP67					
Round connector M12x1	IP67					
Cable outlet AMP Superseal connector	IP69K (steam jet cleaning) IP67					
EMC	11 07					
Interference	according to EN 61 326					
Resistance	according to EN 61 326					
Electrical protection type	reverse polarity, overload and short-circuit protection except ratiometric output signals					
Temperature influence	1				l .	
Median TC zero point	$\leq \pm 0.15\% / 10K^{3)}$					
Median TC measuring range	$\leq \pm 0.15\% / 10K$					
Temperature ranges						
Compensated range	080°C					
Storage	-40120°C					
Media	-40125°C					
Ambient	-40100°C					
Loading capacity	500-		0.0.07			
Shock (mechanical shock)	500g according to IEC 60068-2-27 20g according to IEC 60068-2-6					
Vibration (under resonance)		9 to 1EC 60068	0-2-0			
Weight	approx. 70g					
					BESI = Bes	st fitt straight l

<sup>1)</sup> Including non-linearity, hysteresis, non-repeatability, zero point and full scale error (corresponds to error of measurement per IEC 61298-2).
<sup>2)</sup> According to IEC 61298-2
<sup>3)</sup> For special pressure ranges increased TC of zero

BFSL = Best fitt straight line of F.S. = of full scale value

# **Dimensions (mm)**

#### Housing

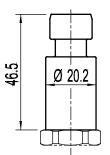
Connector Metri Pack 150

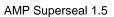
Round connector M12x1

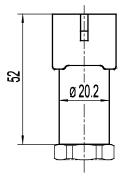
Cable outlet

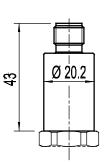
ø 20.2

70.5

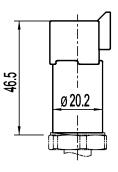














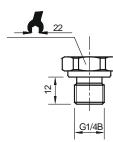
#### Pressure connections

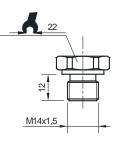
G 1/4B according to DIN 3852-E

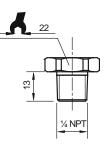
M14x1.5

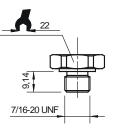
1/4 NPT

7/16-20 UNF-2A





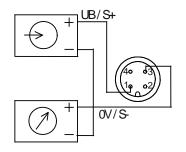




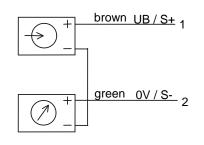
### **Electrical connection**

### Two-wire system

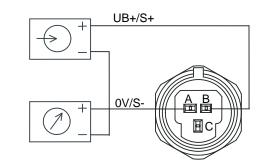
Round connector M12x1



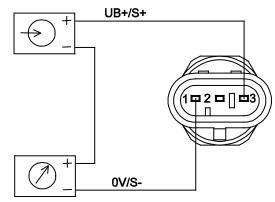
Cable outlet



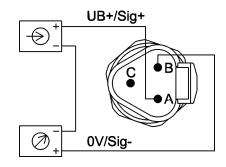
Connector Metri Pack 150



AMP Superseal

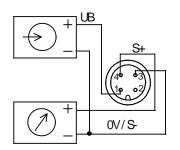


Deutsch connector

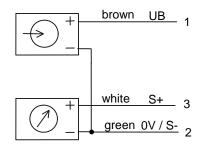


#### Three-wire system

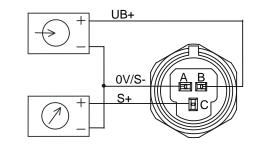
Round connector M12x1



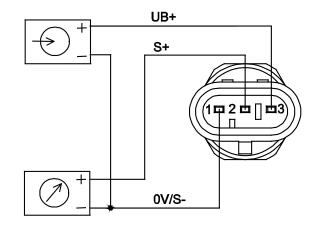
Cable outlet



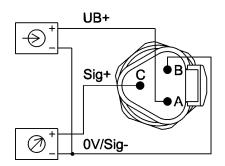
Connector for Metri Pack150



AMP Superseal



Deutsch connector



Subject to technical alternations

DE **7**62 f