

Relative pressure transmitter for mobile hydraulic type 550

Pressure range
0 ... 40 – 600 bar



The pressure transmitters type 550 fulfil highest demands for hydraulic applications. The compact and rugged construction allows the use in hardest conditions.

The pressure transmitter is based on the Huba Control developed thick film technology, the pressure measuring cell is fully welded.

- Compact, rugged construction for high operating reliability
- Welded construction – no elastomer seals
- Negligible temperature influence on accuracy
- Excellent EMC capacity
- Large selection of connections available

Technical Overview

Pressure range

Relative	0 ... 60 – 600 bar
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Operating conditions

Medium		Liquids
Temperature	Medium	-40 ... +125 °C
	Ambient	-40 ... +100 °C
	Storage	-50 ... +100 °C
Tolerable overload	≤ 400 bar	3 x fs
	600 bar	2.5 x fs
Rupture pressure	≤ 400 bar	6 x fs
	600 bar	4 x fs

Materials

Case		Stainless steel 1.4404 / AISI 316 L
Plug accommodation		Polyarylamide 50% GF V-0
Materials in contact with the medium	Pressure connection	Stainless steel 1.4404 / AISI 316 L
	Sensor	Stainless steel

Elektrical overview

3 wire	Output ratiom. 10 ... 90%	Power supply 5 VDC ± 10%	Load >10 kOhm / < 100 nF	Current consumption < 7 mA
Polarity reversal protection	Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.			

Protection class

Protection class III

Dynamic response

Response time	< 2 ms (10... 90%, typ. 1 ms)
Load cycle	< 100 Hz

Protection standard

IP 69K

Elektrical connection

Kostal SLK 2,8 coding A
AMP-JPT
AMP Superseal 1.5
Deutsch DT04-3P
Metri Pack 150 P2S Series

Pressure connection

Outside thread	7/16 - 20 UNF
	1/4 - 18 NPT
	G1/4 sealed at back DIN 3852-E with profile seal FPM spec. (-30 ... +135 °C)
	M14x1.5 sealed at back DIN 3852-E with profile seal FPM spec. (-30 ... +135 °C)
	R 1/4 acc. EN 10226

Installation arrangement

Unrestricted

Tests / Admissions

Electromagnetic compatibility	Noise resistantcy / Noise emission	Noise resistantcy automotive guideline	Noise emission automotive guideline
	ISO 13766: 2006 - earth-moving equipment	ISO 11452-2, HF (Field), 100 V/m (200 ... 2000 MHz)	CISPR25
	DIN EN 13309:2010 - construction equipment	ISO 11452-4, HF (BCI), 100 mA (20 ... 400 MHz)	
	DIN ISO 14982:2009 - agriculture and forestry	ISO 10605, ESD, ±8 kV contact, ±15 kV air	
	Automotive guideline ECE R10 ¹⁾	ISO 7637-2, puls ²⁾ , test level 4 ³⁾	
	Automotive guideline 2004/104/EG ¹⁾	ISO 16750-2, Load Dump, 155 V (1 Ω, 300 ms)	
Shock acc. IEC 68-2-27	EN 61326-2-3 - pressure transducer		
Vibration acc. IEC 68-2-6	50 g, 11 ms, half sine wave, 1000x / axis		
cULus	ISO 16750-3		
	acc. 61010-1		

Weight

~ 90 g

Packaging (Please state on order)

Single packaging in cardboard	accessories integrated
Multiple packaging in cardboard (25 pcs)	

Accuracy

Parameter	Unit	
Characteristic line ⁴⁾	% fs	± 0.5
Resolution	% fs	0.1
Thermal characteristic ⁵⁾	max. % fs/10K	± 0.2
Long term stability acc. IEC EN 60770-1	max. % fs	± 0.5

Test conditions: 25 °C, 45% rF, power supply 24 VDC

¹⁾ E1 approval for customer specific type on request

²⁾ Puls 1, 2a, 2b, 3a, 3b

²⁾ Pressure sensor for 12 V and 24 V power system (0 ... 5 V, 0 ... 10 V / 1 ... 6 V and 4 ... 20 mA)

⁴⁾ incl. zero point, full scale, linearity, hysteresis and repeatability

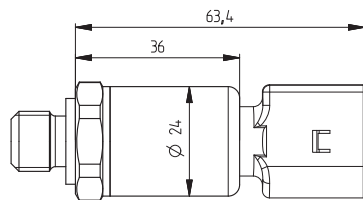
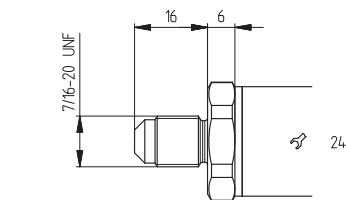
⁵⁾ -15 ... 85 °C

		1	2	3	4	5	6	7	8	9	10	11
Order code selection table in bar		550.	X	X	X	X	X	X	X	X	X	X
Pressure range ¹⁾	0 ... 60 bar	9	4	0	S	0						
	0 ... 100 bar	9	4	1	S	0						
	0 ... 160 bar	9	4	2	S	0						
	0 ... 250 bar	9	4	3	S	0						
	0 ... 400 bar	9	5	4	S	0						
	0 ... 600 bar	9	5	5	S	0						
▲ Full scale signal at these pressure												
Output / power supply	10 ... 90% ratiom. 5VDC ±10%						7					
Electrical connection ²⁾	Kostal SLK 2,8 coding A							1				
	AMP-JPT							2				
	AMP Superseal 1.5							3				
	Deutsch DT04-3P							4				
	Metri Pack 150 P2S Series ³⁾							5				
Pressure connection ¹⁾	7/16 -20 UNF								2	2	1	
	1/4 -18 NPT								3	2	1	
	Outside thread								4	2	1	
	G 1/4 sealed at back DIN 3852-E with profile seal FPM spec.								6	2	1	
	M14x1.5 sealed at back DIN 3852-E with profile seal FPM spec.								7	2	1	
Pressure range variation (optional)	R 1/4 acc. EN 10226											
	Indicate W and state range on order (e.g.: W0... + 50bar/Out1...8V)											W

		1	2	3	4	5	6	7	8	9	10	11
Order code selection table in psi		550.	X	X	X	X	X	X	X	X	X	X
Pressure range ¹⁾	0 ... 750 psi	9	D	0	S	0						
	0 ... 1000 psi	9	D	1	S	0						
	0 ... 2000 psi	9	D	2	S	0						
	0 ... 3000 psi	9	D	3	S	0						
	0 ... 5000 psi	9	E	4	S	0						
	0 ... 7500 psi	9	E	5	S	0						
▲ Full scale signal at these pressure												
Output / power supply	10 ... 90% ratiom. 5VDC ±10%						7					
Electrical connection ²⁾	Kostal SLK 2,8 coding A							1				
	AMP-JPT							2				
	AMP Superseal 1.5							3				
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Pressure connection ¹⁾	7/16 -20 UNF								2	2	1	
	1/4 -18 NPT								3	2	1	
	Outside thread								4	2	1	
	G 1/4 sealed at back DIN 3852-E with profile seal FPM spec.								6	2	1	
	M14x1.5 sealed at back DIN 3852-E with profile seal FPM spec.								7	2	1	
Pressure range variation (optional)	R 1/4 acc. EN 10226											
	Indicate W and state range on order (e.g.: W0... + 650psi/Out1...8V)											W

		1	2	3	4	5	6	7	8	9	10	11
Order code selection table in MPa		550.	X	X	X	X	X	X	X	X	X	X
Pressure range ¹⁾	0 ... 6 MPa	9	K	0	S	0						
	0 ... 10 MPa	9	K	1	S	0						
	0 ... 16 MPa	9	K	2	S	0						
	0 ... 25 MPa	9	K	3	S	0						
	0 ... 40 MPa	9	L	4	S	0						
	0 ... 60 MPa	9	L	5	S	0						
▲ Full scale signal at these pressure												
Output / power supply	10 ... 90% ratiom. 5VDC ±10%						7					
Electrical connection ²⁾	Kostal SLK 2,8 coding A							1				
	AMP-JPT							2				
	AMP Superseal 1.5							3				
	Deutsch DT04-3P							4				
	Metri Pack 150 P2S Series ³⁾							5				
Pressure connection ¹⁾	7/16 -20 UNF								2	2	1	
	1/4 -18 NPT								3	2	1	
	Outside thread								4	2	1	
	G 1/4 sealed at back DIN 3852-E with profile seal FPM spec.								6	2	1	
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Pressure range variation (optional)	R 1/4 acc. EN 10226											
	Indicate W and state range on order (e.g.: W0... + 5MPa/Out1...8V)											W

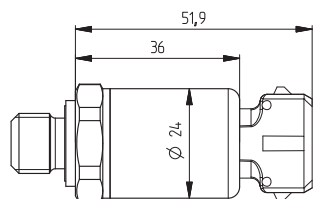
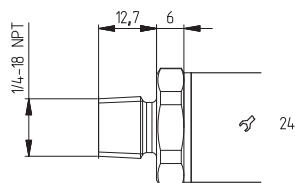
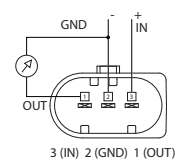
¹⁾ Other pressure ranges and pressure connections on request ²⁾ Delivery without female connector ³⁾ For pressure ranges ≤ 16 bar (200psi, 1.6 MPa) only possible if deaeration through the cable is assured



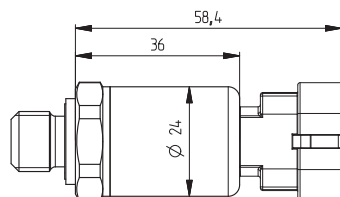
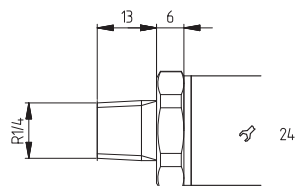
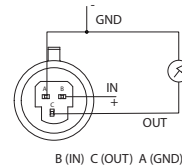
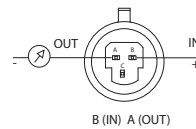
Kostal SLK 2.8

2 wire

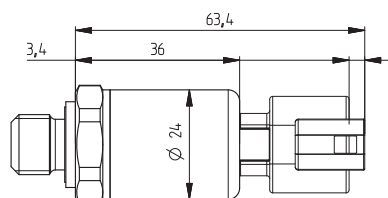
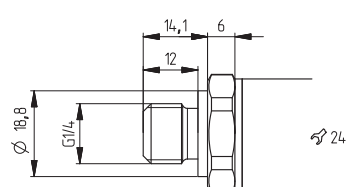
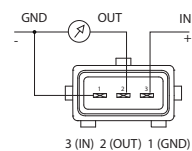
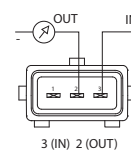
3 wire



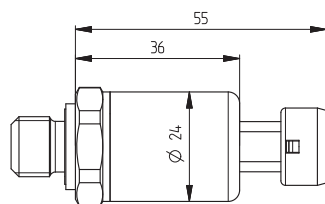
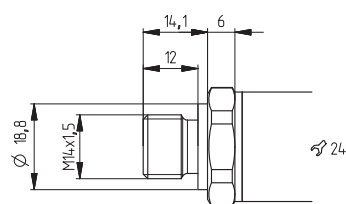
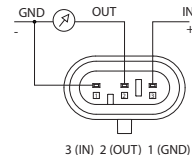
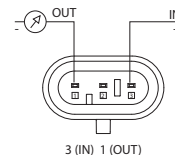
AMP JPT



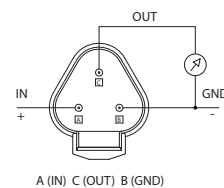
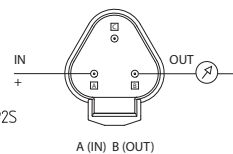
AMP Superseal 1.5



Deutsch DT04-3P



Metri Pack Series 150 P2S



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