



HERION & RAU
Fluidtechnik GmbH

Pressure Transmitter Series HDT

Analogue, Electronic Signal Converter

Measuring Range: 0 to 800 bar relative

Hydraulics



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Features

The pressure transmitter series HDT converts the pressure level in fluids into analogue electric signals. The fluid pressure generates, depending on configuration, an analogue current signal of 4-20mA or an analogue voltage of 0-10V.

The measuring cell is a high quality thin-film measuring element without oil filling. The output signal is linearised and temperature-compensated using internal downstream electronics.

A stainless steel housing and connectors allow the pressure transmitter series HDT to be used universally in hydraulic systems, in hydraulic test benches as well as in chemical and processing plants for process control.

The pressure transmitter series HDT is constructed for industrial applications under normal environmental conditions. Units for special applications, upper measurement ranges, other fluids and electrical connections are available on request.

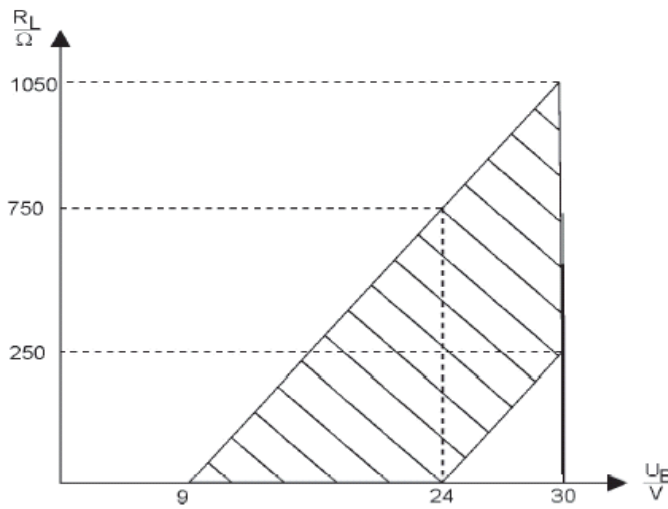
Sockets assembled with cable are available as optional accessories.



Technical Data

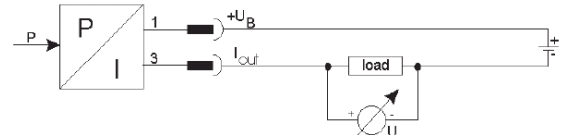
Operating fluid:	neutral and low aggressive fluids, compatible with the substance 1.4571, 1.4548 and 1.4568
Fluid connection:	G1/4" nipple with Emerto-Seal (alternatives on request)
Mounting position:	optional
Measuring range / overload pressure:	3bar/6bar; 5/10;7/14;10/20;20/40;60/100;160/300;400/600 (other on request)
Output Signal:	4...20mA for two-wire connection 0...10V for three-wire connection
Linearity:	≤ 0,2% of maximum operating pressure range
Repeatability:	≤ 0,1% of maximum operating pressure range
TK-Zero:	≤ 0,2% of maximum operating pressure range / 10 Kelvin
TK-Measurement span:	≤ 0,1% of maximum operating pressure range / 10 Kelvin
Temperature range:	-25°C to +85°C
Supply voltage:	9 to 30V DC for current output; supply frequency 50 Hz: 10% 14 to 30V DC for voltage output; supply frequency 50 Hz: 10%
Electrical connection:	M12x1 (sockets not included); other constructions on request
Measuring cell:	thin-film measuring element without oil filling
EMV:	EN 50 081-1 ; EN 50 082-2
Degree of protection	
EN 60529:	IP 67
Material:	Housing: stainless steel V4A (1.4542) ; membrane: V4A (1.4548) Seals: Perbunan (other on request)
Weight:	0,070kg

Electrical connection; Operating range for current output

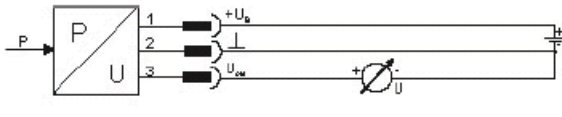


$$\text{Current output load } R_L = \frac{U_B - 9V}{0.02A}$$

Electrical connection for 2-wire-technique



Electrical connection for 3-wire-technique



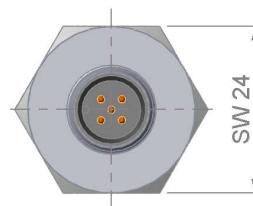
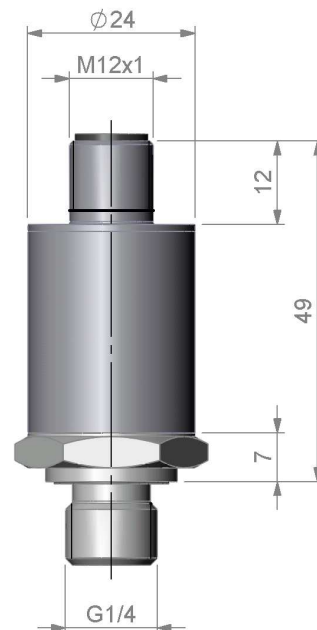
Scale drawing; pin assignment

Connector configuration HDT Pressure Transmitter

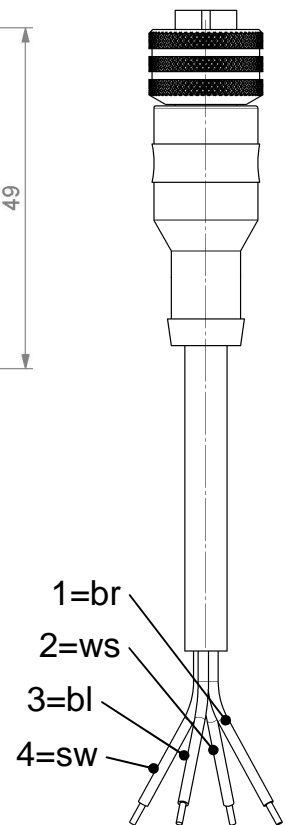
	Stecker	
	4-20mA	0-10V
+UB	1	1
GND	-	2
Signal	3	3

Do not use programming pins 4 and 5

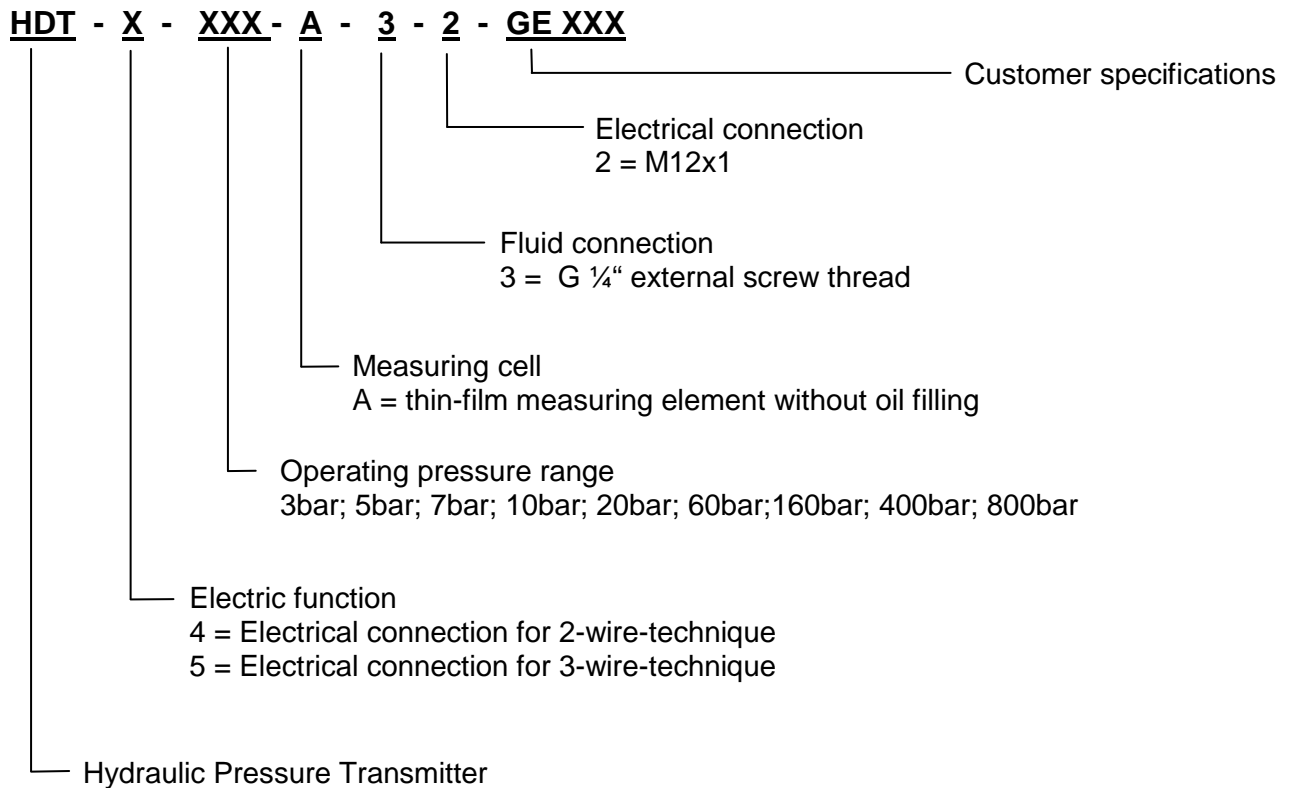
Pin configuration M12-Connector



Socket with cable in accessories



Order - Code



Order example

HDT- 4 - 400 - A - 3 - 2

- Hydraulic Pressure Transmitter
- 2-wire-technique
- Operating pressure range 0 ... 400 bar, overload pressure 600bar
- thin-film measuring element without oil filling
- Fluid connection G1/4 external screw thread
- Electrical connection M12x1

Accessories

Socket M12x1 with cable L =1,5m

order number: 011041

Technical subject to change without notice!