

- Pressure range from 2000 to 5000 bar
- High strength, rugged Titanium design
- Excellent accuracy and long stability



The **EPT31HP (High Pressure)** is a high quality all stainless steel pressure transducer with wetted parts made from Titan. This way he is ideally suited for use in the measurement of gases and liquids with high pressures.

The sensor is suitable for industrial hydraulics, off-road, construction and agricultural applications.

With additional EMI / RFI protection, low static and thermal errors and high resistance to shock and vibration as standard, the **EPT31HP** assures trouble free operation at temperatures up to 125°C. The piezo resistive sensing element coupled with the latest ASIC circuitry, assures excellent accuracy, choice of high level outputs and long stability, protected within a rugged, stainless steel housing.

Specification

Performance

Accuracy @ RT	% of the range (gauge and vacuum sensors) < 1.0 BFSL ≤ 0.5	(incl. nonlinearity, hysteresis, repeatability, zero-offset and final offset acc. to IEC 61298-2)
Non-linearity	% of the range ≤ 0.30	
Repeatability	% of the range ≤ 0.20	
Stability/year	% of the range ≤ 0.20	
Response time	(10..90%) t(ms)1	
Pressure cycles	> 10 million	

Range	p (bar)	2000	2500	4000	5000
Overrange pressure	p (bar)	2400	3600	4800	6000
Burst pressure	p (bar)	3000	4500	6000	7000

Environment

Temperature [°C]:	
Measuring medium	-40...125
Ambience	-40...105
Storage	-40...125
Compensated range	-20...85
Temperature coefficient within the compensated range:	
Mean TC offset	% of the range ≤ 0,15 / 10K
Mean TC range	% of the range ≤ 0,15 / 10K
Shock	1000 G, 11 msec., 1/2 Sine
Vibration	25 G peak, 20 to 2000 Hz
Sealing	IP 66, optional IP69K

Electronics

Output → Supply	0 - 10 V → 12 - 32 VDC 0 - 5 V → 8 - 32 VDC non ratiometric 1 - 5 V → 8 - 32 VDC non ratiometric 0.5 - 4.5V → 5V ratiometric 4 - 20 mA → 10 - 32 VDC I ² C → 5 VDC
Output impedance	< 100 Ω
Current consumption	< 10 mA
Reverse voltage protection	Yes

Mechanics

Housing	304 stainless steel
wetted parts	titanium
Pressure port	see select table
Electrical connection	see select table
Weight	ca. 60 g

Ordering Information

(Please use the characters in the chart below to construct your product code)

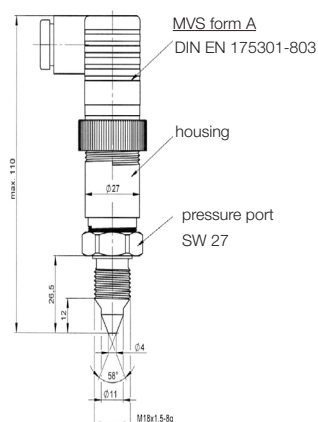
Sample Code: **EPT31HP - A - 200000 - B - 4 - A**

Series	Port Configuration	Pressure Range	Pressure Unit	Output Signal	Electrical Interface
EPT 31HP	M18 - M18 x 1.5 (up to 4000 bar) J- 9/16 - 18 UNF Female (up to 5000 bar)	200000 = 2000 bar 250000 = 2500 bar 400000 = 4000 bar 500000 = 5000 bar	B - gauge pressure	1 = 0 - 10 V 2 = 4..20 mA 3 = 1..5 V 4 = 0..5 V 5 = 0.5..4.5 V - (with 5V supply voltage) 6 = I ² C, digital (only with electrical interface A or F)	A - 600 mm cable B - Miniature EN175301-803-C connector C - Packard Metripac connector D - Standard EN175301-803-A connector F - M12x1 Round connector K** - Moulded cable * Standard option ** Sealing IP69K




Custom options available on request

The EPT31HP series is backed by a 1 Year Warranty. The purchaser is responsible for compatibility of the media, functional adequacy and correct installation of the transmitter.

Dimensions



Wiring

Type	Output	PIN 1	PIN 2	PIN 3	PIN 4
 DIN EN 175301-803-A and C	0.5 - 4.5V , 1 - 5 V , 0 - 10 V	+ Supply	- Supply	Output +	-
	4..20mA	+ Supply	Current output -	N/A	-
	I°C	N/A	N/A	N/A	-
 Round connector M12x1 A	0.5 - 4.5V , 1 - 5 V , 0 - 10 V	+ Supply	N/A	- Supply	Output +
	4..20mA	+ Supply	N/A	Current output -	N/A
	I°C	1 V+	2 V-	3 SCL	4 SDA
 Packard Metripac	Output	PIN A	PIN B	PIN C	-
	0.5 - 4.5V , 1 - 5 V , 0 - 10 V	- Supply	+ Supply	Output +	-
	4..20mA	Current output -	+ Supply	N/A	-
	I°C	N/A	N/A	N/A	-
Cable assembly	Output	Red	Black	White	Green
	0.5 - 4.5V , 1 - 5 V , 0 - 10 V	+ Supply	- Supply	Output +	-
	4..20mA	+ Supply	Current output -	N/A	-
	I°C	V+	V-	SCL	SDA