

- Up to 1000 Bar pressure range
- High strength, rugged stainless steel design
- With EC79 and EC406 approval for use with Hydrogen

The **EPT31H2** is a high quality all stainless steel pressure transducer, intended for applications around the measurement of hydrogen. With additional EMI / RFI protection, low static and thermal errors and high resistance to shock and vibration as standard, the **EPT31H2** assures trouble free operation at temperatures up to 125° C. Its 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.

The **EPT31H2** high strength stainless steel construction contains no silicone oil and no internal O-rings. Measurements are available in gauge, with ranges up to 1,000 bar and are backed by a one-year warranty.



EC79

EC406



## Specification

Performance		
Accuracy @ RT	% of the range (gauge and vacuum sensors) < 0.5 BFSL ≤ 0.125	(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)†	
Overrange pressure	up to 2x rated pressure	
Burst pressure	up to 5x rated pressure	
Pressure cycles	> 10 million	
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 67, optional IP69K	

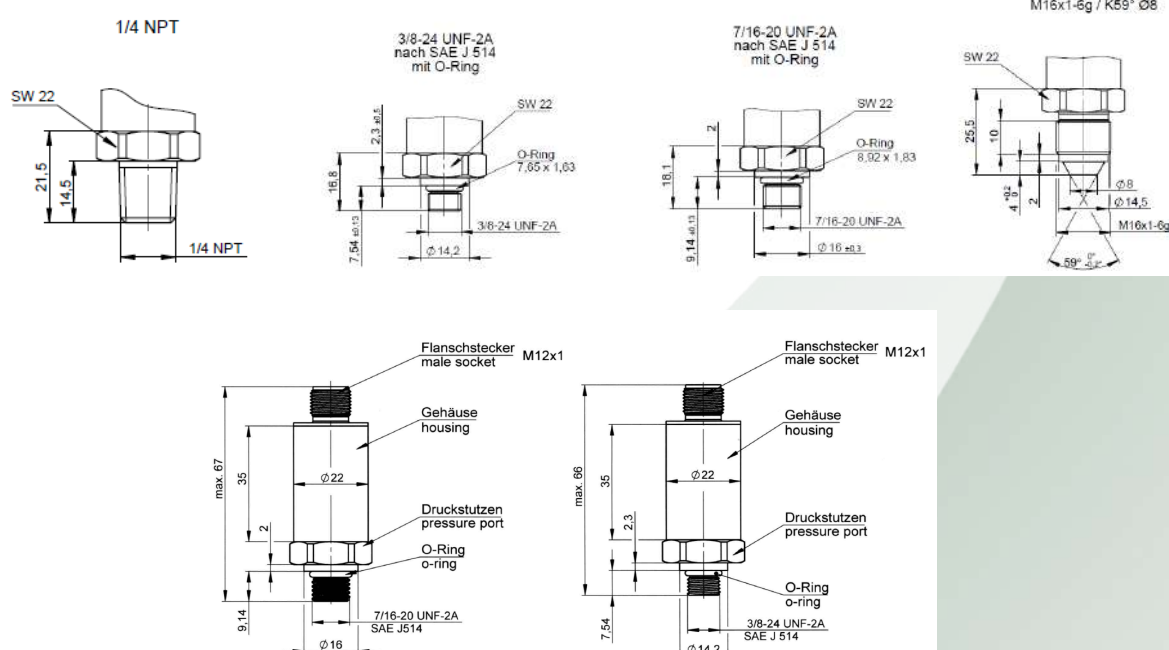
Electronics	
Output → Supply	0.5 - 4.5V → 5V ratiometric 4 - 20 mA → 10 - 32 VDC
Output impedance	< 100 Ω
Current consumption	< 10 mA
Reverse voltage protection	Yes
Mechanics	
Material	stainless steel
Pressure port	see select table
Electrical connection	see select table
Weight	ca. 60 g

## PITCH TECHNOLOGIES

Votre contact VARIOHM en France  
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### Dimensions in mm



# Pressure Sensor - EPT31H2



## Ordering Information

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

Standard models: EPT31H2-M16-44800-B-5-C EPT31H2-N-44800-B-5-C  
(in stock) EPT31H2-M16-70000-B-5-C

Sample Code: **EPT31H2 - M16 - 01000 - B - 5 - A**



Series	Port Configuration	Pressure Range	Pressure Unit	Output Signal	Electrical Interface
EPT31H2	<b>M16</b> - M16x1 male up to 1000 bar (EC79 is limited to 700 bar)	Please use code from table below	B - gauge pressure V - vacuum pressure	2 = 4..20 mA 5 = 0.5..4.5 V - (with 5V supply voltage)	A - 600 mm cable C - Packard Metripac connector F - M12x1 Round connector
	<b>B</b> - 1/4 NPT max. 500 bar (EC79 is limited to 500 bar)				
	<b>D</b> - 7/16" - 20 UNF 2A Male up to 1000 bar (EC79 bis limited to 700 bar)				
	<b>N</b> - 3/8"-24 UNF2A up to 1000 bar (EC79 is limited to 700 bar)				

Custom options available on request

Pressure Range																
Bar	1.0	1.6	2.5	4	6	10	16	25	40	50	60	100	160	250	400	1000
Order Code	00100	00160	00250	00400	00600	01000	01600	02500	04000	05000	06000	10000	16000	25000	40000	100000

The EPT31H2 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.

## Wiring

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

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Subject to change without notice