Pressure Sensor - EPT31CN with CAN Signal

VARIOHM EUROSENSOR

- Up to 5000 bar pressure range
- High strength, rugged stainless steel design
- CAN - Protocol: CANopen (CiA 404), J1939 (SAE-J1939)
- Temperature range from -40°C to + 125°C
- IP65 up to IP69K rating

The **EPT31CN pressure transducer** offers intelligent sensing capabilities that can be adjusted and managed within the switching circuit. The robust housing is resistant to shock and vibration and assures trouble free operation even in harsh environments.

The integrated **CAN Controller** meets the CAN-Protocol CANopen (CiA 404) and J1939 (SAE-J1939), which specifically allows the use in the automotive industry. Other applications are general and heavy duty industries, hydraulics and pneumatics, OEM, automation, environmental engineering, air-conditioning and agricultural.

Specifications

Pressure ranges									
Measuring range*	p [bar]	**0,6**	**1,0**	**1,6**	**2,5**	**4,0**	**6,0**	**10,0**	**16,0**
Pressure overload	p [bar]	0,5	6	6	6	10	20	20	40
Burst pressure	p [bar]	1,0	9	9	9	15	30	30	60
Measuring range*	p [bar]	**20**	**25**	**40**	**60**	**100**	**160**	**200**	**250**
Pressure overload	p [bar]	40	100	100	200	200	400	400	750
Burst pressure	p [bar]	60	150	150	300	300	600	600	1000
Measuring range*	p [bar]	**400**	**600**	**1000**	**1600**	**2000**	**4000**	**5000**	
Pressure overload	p [bar]	750	840	1200	2400	2400	5000	6000	
Burst pressure	p [bar]	1000	1050	1500	3000	3000	6000	7000	
(Pressure ranges e.g. -1...0 bar, -1..9/24 bar and absolute pressure available.>1000 bar with thread M18x1,5)									

Mechanics		
Wetted parts*		stainless steel
Housing*		stainless steel
Weight	m[g]	80-120 depending on model
Shock resistance	g	1000 acc. to DIN EN 60068-2-32 (free fall)
Vibration resistance	g	20 acc. to DIN EN 60068-2-6 (swinging)
Shock load	g	50 acc. to DIN EN 60068-2-27 (permanent shock)
Certifications		CE-Richtlinien 2014/30/EU, 2014/68/EU
IP Sealing (IEC60529) bis IP69K		The listed IP ratings are only valid with fitted connector and vary depending on specification

* Custom options available on request

Electronics		
		4-conductors
Output*		
Supply voltage	U [V_{DC}]	10...32
CAN Interface		acc. DIN ISO 11898: CAN; SAE J1939
CAN Protocol		CANopen
Set-up time	t [ms]	< 1
Max. current comsumption	**I [mA]**	**< 30**
Elektrical Strength*	U [V_{DC}]	50

Accuracies			
Accuracy only valid for up to 2000 bar; above 2000 bar is 1%			
Accuracy @ RT	% of range	≤ 0,50***	Option ≤ 0,25
	BFSL	≤ 0,125	
Non-linearity	% of range	≤ 0,15	
Stability / year	% of range	≤ 0,10	
*** incl. Non-linearity, Hysteresis, Repeatability, deviation from zero and end value (acc. IEC 61298-2)			

Temperature range		
Medium to be measured	T[°C]	-40...125
Environment	T[°C]	-40...105
Storage	T[°C]	-40...125
Compens. range*	T[°C]	-20...85
Med. TK Offset	% of range	≤ 0,15 / 10K
Med. TK Range	% of range	≤ 0,15 / 10K
Total Error	% of range	-40°C 2,00%
Electric Strength	% of range	105°C 2,00%

Ordering Information

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

Sample Code: EPT31CN - A - 01000 - B - 4 -A

Series	Port Configuration	Pressure Range	Pressure Unit	Output Signal	Electr. Interface
EPT 31CN	A* - G 1/4“ Male B* - 1/4” NPT Male C - 1/8” NPT Male D - 7/16” -20 UNF Male E - 9/16” -18 UNF Male F - M14x1.5 Male G - 1/4” SAE Female H - 3/8x24 UNF Male M10 - M10 x 1 male G1/4 front	Please use code from the table below	A - Absolute B - Relative / gauge V - Vakuum and bi-directional	7 = CANopen 8 = CAN J1939	A - 600 mm cable F - M12x1 Pin connector

Pressure Range																						
Bar	0,6	1,0	1,6	2,5	4	6	10	16	25	40	50	60	100	160	250	400	600	1000	1600	2000	4000
Code	00060	00100	00160	00250	00400	00600	01000	01600	02500	04000	05000	06000	10000	16000	25000	40000	60000	100000	160000	200000	400000

VARIOHM HOLDINGS

Dimensions and Connections