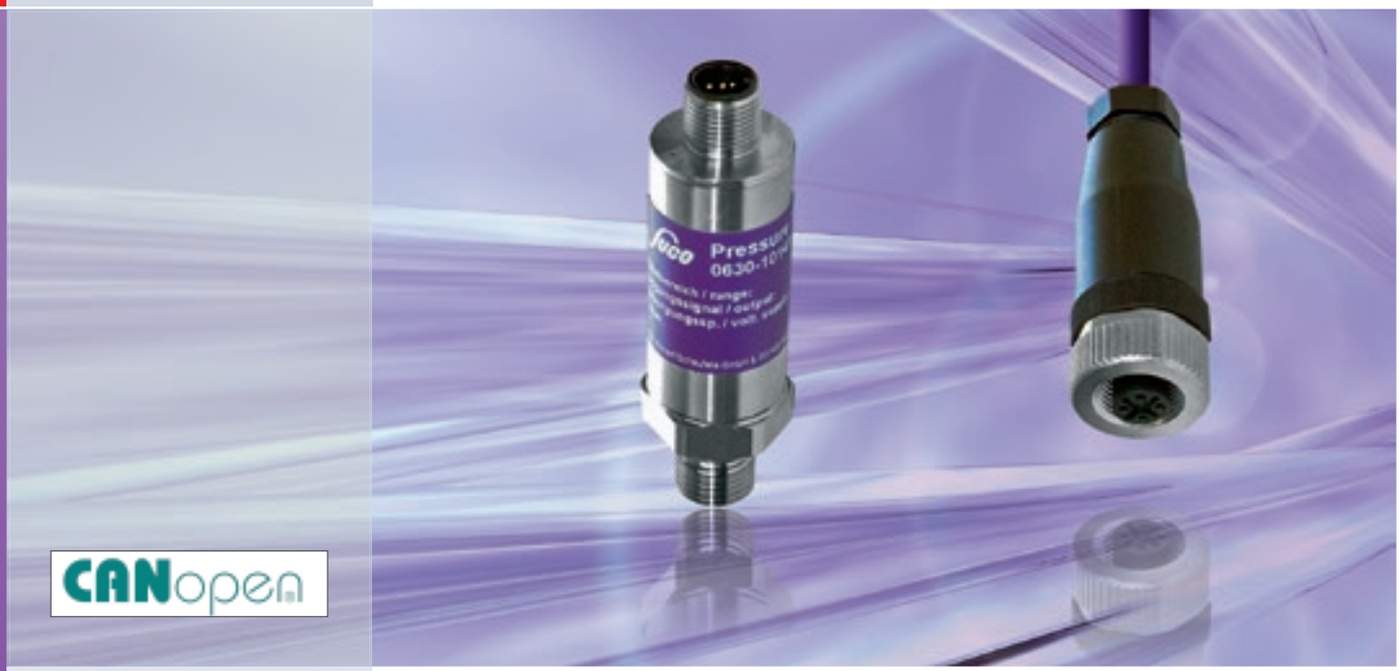
Digital Pressure Transmitter with CANopen / CAN J1939 Interface

Hex 22



- Type 0630: CANopen protocol according to CiA DS-301, Device profile according to CiA DS-404
- Type 0631: CAN J1939 protocol according to SAE J1939
- Robust stainless steel construction with high reliability, even in very rough environments
- Completely welded measuring cell made of stainless steel 1.4542 ensures excellent media compatibility
- Measuring ranges from 0 - 1 bar to 0 - 600 bar

Digital Pressure Transmitter with CANopen / CAN J1939 Interface

Technical data

Type:	**0630**	**0631**
Output protocol:	CANopen DIN EN 50325-4 [1) 2)]	SAE J1939 [1)]
Supply voltage U_B:	10 V - 32 VDC	10 V - 32 VDC
Idle power consumption:	< 30 mA	< 30 mA
CAN Interface:	acc. to DIN ISO 11898-2 CAN 2.0 A	acc. to DIN ISO 11898-2 CAN 2.0 B

Type:	**0630 / 0631**						
Standard pressure ranges p_{nom}:	0 - 1 bar	0 - 2,5 bar	0 - 4 bar	0 - 6 bar	0 - 10 bar	0 - 16 bar	0 - 25 bar
Overpressure protection p_u [3)]:	6 bar	6 bar	10 bar	20 bar	20 bar	40 bar	100 bar
Burst pressure [3)]:	9 bar	9 bar	15 bar	30 bar	30 bar	60 bar	150 bar
Standard pressure ranges p_{nom}:	0 - 40 bar	0 - 60 bar	0 - 100 bar	0 - 160 bar	0 - 250 bar	0 - 400 bar	0 - 600 bar
Overpressure protection p_u [3)]:	100 bar	200 bar	200 bar	400 bar	750 bar	750 bar	840 bar
Burst pressure [3)]:	150 bar	300 bar	300 bar	600 bar	1000 bar	1000 bar	1050 bar
Mechanical life expectancy:	10.000.000 pulsations at rise rates to 1 bar/ms at p_{nom}						
Permitted pressure change rate:	≤ 1 bar/ms						
Accuracy:	±0,5 % of full scale (FS) at room temperature [4)], ±0,25 % BFSL						
Long-term stability:	< ±0,1 % of full scale (FS) per year						
Repeatability [5)]:	±0,1 % of full scale (FS)						
Temperature error [5)]:	1,5 % of full scale (FS)						
Compensated temperature range:	-20 °C ... +85 °C						
Temperature range ambient:	-40 °C … +105 °C						
Temperature range media:	-40 °C … +125 °C						
Wetted parts material – Housing:	Stainless steel 1.4301 / AISI 304						
Wetted parts material – Measuring cell:	Stainless steel 1.4542						
Electric strength:	50 VDC						
Response time 10 - 90 %:	< 1 ms						
Vibration resistance:	20 g acc. to IEC 68-2-6 and IEC 68-2-36						
Shock resistance:	1000 g acc. to IEC 68-2-32						
Protection class:	IP67 (IP00 without mating plug)						
Electromagnetic compatibility:	EN 61326						
Weight	80 g - 120 g (dependent on version)						

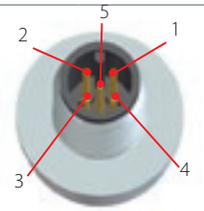
[1)] Further information and the standard setting can be found in the Technical Documentation CANopen (1-6-30-628-058) as well as CAN J1939 (1-6-30-628-059) on our homepage at: https://www.suco.de/en/downloads.
[2)] The EDS (Electronic Data Sheet) of our CANopen device can be downloaded from our homepage at: https://www.suco.de/en/downloads.
[3)] Static pressure. Dynamic value is 30% to 50% lower. Values refer to the hydraulic/pneumatic part of the pressure transmitter.
[4)] Including non-linearity, hysteresis, repeatability, zero error and full scale (FS) according to IEC 61298-2.
[5)] Within the compensated temperature range.

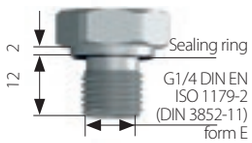
T.5

hex 22
Stainless steel

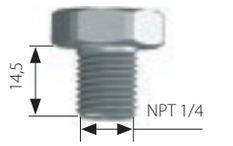
0630 / 0631

Electrical connectors and threads

M12 DIN EN 61076 - 2-101 A CiA-DR303-1

0630 / 0631
1: nc
2: Uv+
3: Gnd
4: CAN-High
5: CAN-Low
x ~ 60 mm
d ~ Ø 22 mm
Order number: 032



Thread code: 41



Thread code: 09

0630 / 0631

Order matrix for digital pressure transmitters

	Type	Pressure range	Pressure connection	Pressure unit	Electrical connection
	↓	↓	↓	↓	↓

CANopen, CAN 2.0 A	**0630**
CAN J1939, CAN 2.0 B	**0631**

Pressure range [1]	Max. overpressure [2]	
0 - 1.0 bar (approx. 14 PSI)	6 bar	**100**
0 - 2.5 bar (approx. 36 PSI)	6 bar	**250**
0 - 4.0 bar (approx. 58 PSI)	10 bar	**400**
0 - 6.0 bar (approx. 87 PSI)	20 bar	**600**
0 - 10 bar (approx. 145 PSI)	20 bar	**101**
0 - 16 bar (approx. 232 PSI)	40 bar	**161**
0 – 25 bar (approx. 362 PSI)	100 bar	**251**
0 – 40 bar (approx. 580 PSI)	100 bar	**401**
0 – 60 bar (approx. 870 PSI)	200 bar	**601**
0 – 100 bar (approx. 1.450 PSI)	200 bar	**102**
0 – 160 bar (approx. 2.320 PSI)	400 bar	**162**
0 – 250 bar (approx. 3.620 PSI)	750 bar	**252**
0 – 400 bar (approx. 5.800 PSI)	750 bar	**402**
0 – 600 bar (approx. 8.700 PSI)	850 bar	**602**

Pressure connection

G1/4 - (DIN 3852), form E, male thread	**41**
1/4 NPT	**09**

Pressure unit

bar	**B**

Electrical connection

M12x1 - DIN EN 61076-2-101 A, CiA-DR303-1	**032**

	↓	↓	↓	↓	↓
Order number:	**063X**	**XXX**	**XX**	**B**	**032**

[1] The proprietary PGN and SPN of the respective pressure range can be found in the Technical Documentation CAN J1939 (1-6-30-628-059) on our homepage at: https://www.suco.de/en/downloads.
[2] Static pressure. Dynamic value is 30 to 50% lower. Values refer to the hydraulic/pneumatic part of the pressure transmitter.