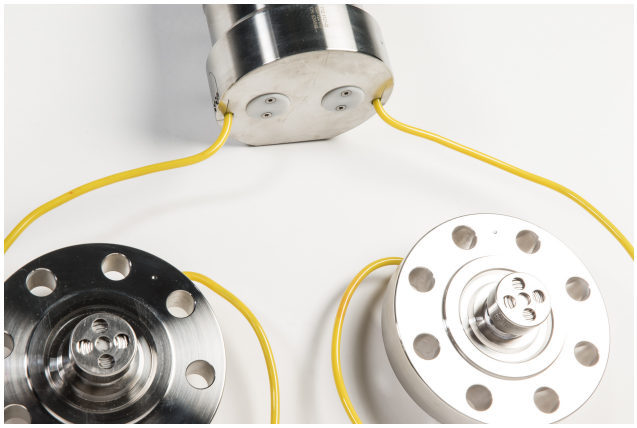
SDP-6 dP Sensors

1. SDP-6 dP Sensors

The remote seal system is designed to provide you with the most robust unit and to make measurements resistant against process pollution. It also incorporates a robust remote seal pressure transfer system, and the configuration provides unrivaled stability and excellent hydrate formation resistance. The SDP-6 meets the demanding subsea market requirement for flow measurement and tank level monitoring.



Specifications

Description	Specifications	Note
Pressure		
Sensing element	Silicon	
Differential Pressure Range (URL)	0-0.32 bar/ 0-1.3 bar / 0-5 bar / 0-30 bar	
Maximum Line Pressure	690 Bar (10000 PSI)	
Test pressure	1035 Bar (15000 PSI)	
Accuracy	± 0.065 % Span (CR)	Note 1
Stability (drift)	± 0.1% Of URL for 24 months	
Line pressure effect, Zero, 0-1035Bar	± 0.2% of URL/100 Bar	Note 2
Line pressure effect, Span, 0-1035 Bar	- 0.2% of cal. Span(CR)/100 Bar	Note 3
Temp. effect, 0-1035 Bar	± (0.25xSpan + 0.05xURL)/1400 [mBar/°C]	Note 4

Definitions

URL: Upper Range Limit (max. value)
Zero: Lowest value of the dP-range
Span: The difference between highest and lowest calibrated differencial pressure
Accuracy: Includes hysteresis, linearity, repeatability

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Electrical Specifications

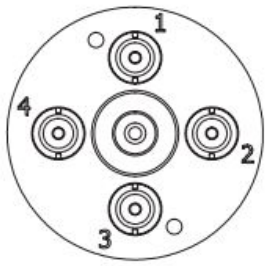
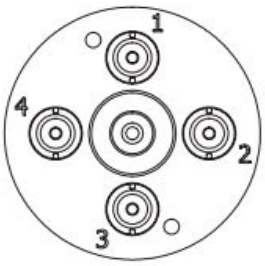
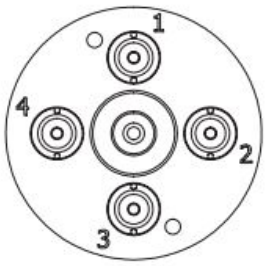
Mechanical		Note
Process Interface:	Remote seals – Design to be agreed Acc. to NACE MR-0175/API PSL3, NORSOK M-630	
Flange/Housing Material	Acc. to NACE MR-0175/API PSL3, NORSOK M-630 For project specific info, ref drawing	
Wetted parts material	Inconel 625/Hastelloy C276/S-Duplex/ Acc. to NACE MR-0175/API PSL3, NORSOK M-630 For project specific info, ref drawing	
EB Welding	According to ASME IX/Norsok M-601	
General		
Ambient temperature	-20 to +50 °C (-4 to 122 °F)	
Operating temperature	-40 to 120°C (-40 to 248 °F)	Note 5
Storage temperature	-20 to + 30 °C (-4 to 86 °F)	
Design Lifetime	> 30 Year	
Shock	30 g, half sine 11 msec	Note 6
Vibration	± 5 g, 25 - 1000 Hz	Note 6
Hyperbaric pressure, sensor	3000 m (Cable assy not included)	
Hyperbaric pressure, sensor w/cable	Acc to manufacture's specification	
High pressure containment	1550 Bar	
Painting	According to NORSOK M501, System 7 (on request only) (Variation on request)	
Electrical/Protocols	See Item 2	

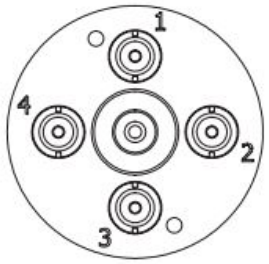
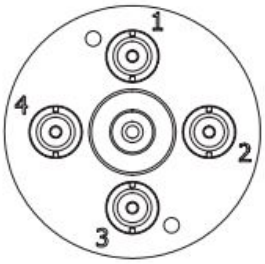
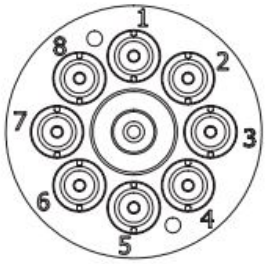
Notes

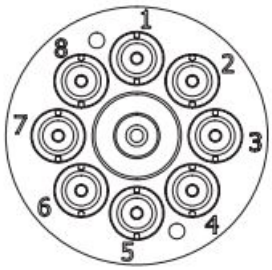
No	Description
Note 1	For spans greater than 1/10 of URL.
Note 2	Zero shift, if calibrated at actual line pressure the zero effect can be neglected.
Note 3	Span shift
Note 4	–40 to +85 °C < 1035 Bar Line pressure
Note 5	Upper Operating Temp. Can be increased to +180 °C if temperature analysis proves that the temperature around the electronic board does not exceed +40 °C
Note 6	Other values for shock and vibration may be agreed upon if these values are achievable for the SDP-6 sensor.

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Pin configurations

4-20 mA	HART	RS485 KOS
		
PIN 1: Power Supply 24 VDC +	PIN 1: Power Supply 24 VDC +	PIN 1: Power Supply 24 VDC +
PIN 2: Power Supply 24 VDC -	PIN 2: Power Supply 24 VDC -	PIN 2: Power Supply 24 VDC -
PIN 3: Not Connected	PIN 3: Not Connected	PIN 3: RS485 A
PIN 4: Not Connected	PIN 4: Not Connected	PIN 4: RS485 B

CANOpen * FT/HS	RS 485 Modbus RTU	CanOpen/Hart
		
PIN 1: Power Supply 24 VDC +	PIN 1: Power Supply 24 VDC +	PIN 1: Power Supply 24 VDC +
PIN 2: Power Supply 24 VDC -	PIN 2: Power Supply 24 VDC -	PIN 2: Power Supply 24 VDC -
PIN 3: CANH	PIN 3: RS485 A	PIN 3: CANH
PIN 4: CANL	PIN 4: RS485 B	PIN 4: CANL
		PIN 5: Hart +
		PIN 6: Hart -
		PIN 7: Not Connected
		PIN 8: Not Connected

RS485 KOS

PIN 1: Power Supply 24 VDC +
PIN 2: Power Supply 24 VDC -
PIN 3: RS485 A
PIN 4: RS485 B
PIN 5: Not Connected
PIN 6: Not Connected
PIN 7: Not Connected
PIN 8: Not Connected

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