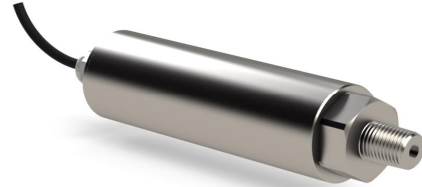




S401 Subsea Pressure Transmitter

Pressure feedback for Marine, offshore and submersible applications

- Pressure range set to customer's requirement
- Compact and self-contained
- High durability and reliability
- High accuracy and stability
- IP68 sealed to 10bar/IP69K
- Sealed gauge type



The S401 is a high quality 316 stainless steel subsea pressure transmitter intended for use in the measurement of gasses and liquids in submerged marine and offshore applications.

With additional EMI/ RFI protection, low static and thermal errors and high resistance to shock and vibrations as standard, the S401 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 with a rugged, stainless steel housing.

Measurements are available with ranges up to 2000bar and are backed by a one year warranty.

SPECIFICATION

Dimensions	
Body diameter	35 mm
Body length	119.5mm to 121.5mm (depending on option)
<i>For full mechanical details see drawing S401-11</i>	
Temperature Coefficients	
Mean TC Offset	≤0.15 % of the range
Mean TC Range	≤0.15 % of the range
Environment	
Measuring medium	-40...125°C
Ambience	-40...105°C
Storage	-40...125°C
Compensated range	-20...85°C
Sealing	IP68 10bar/ IP69K
Vibration	25 G peak, 20 to 2000 Hz
Shock	1000 G, 11 msec , 1/2 Sine
Performance	
Accuracy @ RT	<0.5% of the range
Non-linearity	% of the range ≤0.15
Repeatability	% of the range ≤0.10
Stability/year	% of the range ≤0.10
Response Time	(10..90%) t(ms)1
Overrange pressure	Up to 2x rated pressure
Burst pressure	Up to 5x rated pressure
Pressure cycles	> 10 million
Current consumption	< 10 mA

TABLE OF OPTIONS

Pressure Range (bar): 0.6, 1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 50, 60, 100, 160, 250, 400

For other pressure ranges please contact Positek

ELECTRICAL INTERFACE OPTIONS

OUTPUT SIGNAL	SUPPLY INPUT
0-10V	12-32V DC
0-5V	8-32V DC non ratiometric
1-5V	8-32V DC non ratiometric
0.5-4.5V	5V ratiometric
4-20mA	10-32V DC
I ² C DIGITAL	5V DC

Cable 50cm standard. Any length can be specified.

Mounting Option G1/4" Male or 1/4" NPT Male

For further information please contact:

www.positek.com sales@positek.com

Tel: +44(0)1242 820027 fax: +44(0)1242 820615

Positek, Andoversford Industrial Estate, Cheltenham GL54 4LB. U.K.



S401-17b

Part No. Configuration:

Model No.	Pressure Range	
S401	Order Code	bar
	000060	0.6
	000100	1.0
	000160	1.6
	000250	2.5
	000400	4
	000600	6
	001000	10
	001600	16
	002500	25
	004000	40
	005000	50
	006000	60
	010000	100
	016000	160
	025000	250
	040000	400

Output Code	Output
1	0 - 10V
2	4 - 20mA
3	1 - 5V
4	0 - 5V
5/5L	0.5 - 4.5V (5V supply)
6/6L	I ² C Digital (5V supply)
7L	0.5 - 4.5V (3V supply)
8L	I ² C Digital (3V supply)

L = Low Power Consumption Option

Cable Length in cm (Standard 50cm)
50

Port Configuration	
A	G1/4" Male
B	1/4" NPT Male

ELECTRICAL OPTIONS/ SPECIFICATIONS

OUTPUT CODE	OUTPUT	SUPPLY (NOM)	CABLE CONNECTIONS			
			RED	BLACK	WHITE	GREEN
1	0 - 10V	12 - 32Vdc	+ SUPPLY	- SUPPLY	OUTPUT	-
2	4 - 20mA	10 - 32 Vdc	+ SUPPLY	OUTPUT	-	-
3	1 - 5V	8 - 32 Vdc	+ SUPPLY	- SUPPLY	OUTPUT	-
4	0 - 5V	8 - 32 Vdc	+ SUPPLY	- SUPPLY	OUTPUT	-
5/5L ¹	0.5 - 4.5V	5 Vdc	+ SUPPLY	- SUPPLY	OUTPUT	-
6/6L ¹	I ² C DIGITAL	5 Vdc	V+	V-	SOL	SDA
7L ¹	0.3 - 2.7V	3 Vdc	+ SUPPLY	- SUPPLY	OUTPUT	-
8L ¹	I ² C DIGITAL	3 Vdc	V+	V-	SOL	SDA

¹ -LOW POWER CONSUMPTION OPTION FOR USE WITH BATTERY POWERED WIRELESS TRANSMITTING SYSTEMS

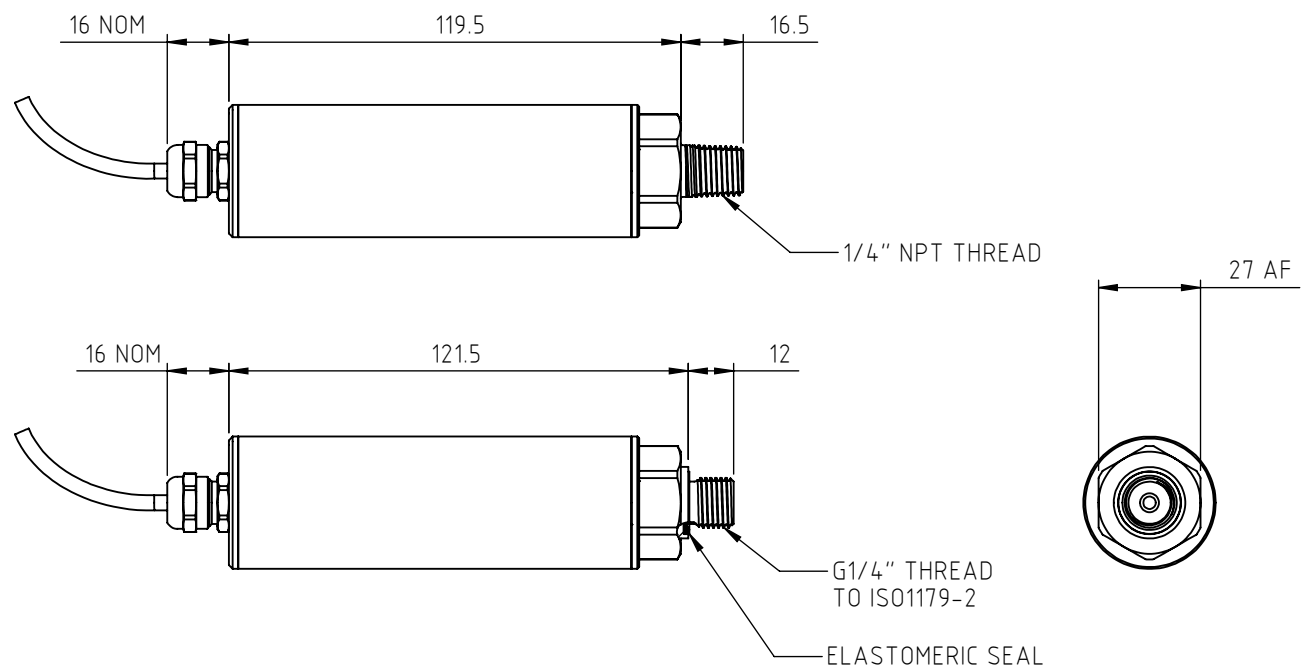
SENSOR TYPE: SEALED TO IP68 10bar, IP69K

CABLE: 3-CORE, 0.2mm², Ø4mm MAX, O/A SCREEN, PUR SHEATH BLACK

CABLE: 4-CORE, 0.23mm², Ø4.2mm MAX, TWO PAIR FOIL SCREEN, LSHF SHEATH GREY

BODY MATERIAL:- STAINLESS STEEL.

CUSTOM OPTIONS AVAILABLE ON REQUEST



DRAWINGS NOT TO BE CHANGED WITHOUT REFERENCE TO THE CHANGE PROCEDURE.
 CHANGES TO PARTS USED IN INTRINSICALLY SAFE PRODUCT MUST BE APPROVED BY THE AUTHORISED PERSON.
 THIS IS AN UNCONTROLLED PRINT AND WILL NOT BE UPDATED.

REV	CHANGE HISTORY	DR'WN	DATE	CHK'D
B	PRESSURE RANGE AVAILABILITY AMENDED	ASC	25/05/2022	ASC
A	FIRST RELEASE	ASC	20/01/2022	ASC



APPROVED BY RDM	REV B		X ±0.4 X.X ±0.2 X.XX ±0.1 DIMs mm
DESCRIPTION S401 - SUBSEA PRESSURE TRANSDUCER			
SCALE A4	1:1	DRAWING NUMBER S401-11	
			SHEET 1 OF 1