

Kiwa KUK Reg4 Approved Pressure Transmitter

TPS-4841



Applications

- Potable water
- Water booster pumps
- Measurement & control technology
- Building Services / HVAC
- Energy & Water treatment

Features

- Various output signals to meet customer needs
- Modular design, specialized supply
- Cost-effective
- CE, RoHS approved
- Kiwa KUK Reg 4 approved

Introduction

TPS-4841 Pressure Transmitter features a high-stability piezoresistive pressure sensor and a dedicated conditioning circuit, providing standard current or voltage signal outputs. Its compact design ensures stable performance, making it highly suitable for various industrial applications with excellent cost-effectiveness. Customized solutions can be quickly provided based on specific customer requirements.

Specifications

Range	0-40Bar pressure range
	Other pressure ranges available on request
Overpressure	≤ 2 times FS
Pressure type	Gauge G, Absolute A, Sealed Gauge S, Positive/Negative N
Accuracy	Refer to "Measuring Range & Accuracy Table"
Long-term stability	±0.3%FS/year
Operating temperature	-30°C ~ 80°C (B1, B4)
	-20°C~ 70°C (B2, cable material: PE, PVC)
	-20°C~ 80°C(B2, cable material: PUR)
Storage temperature	-40°C ~120°C
	-20°C ~ 85°C (B2)
Vibration	10g, 20Hz ~ 2000Hz
Shock	100g, 11ms
IP rating	IP65
Weight (A)	≤ 200g
Weight (B)	≤ 250g

Measuring Range & Accuracy Table

1/4" BSP (M)						
Product	bar	kPa	mPa	psi	mbar	Output Signal
TPS-4841-1	0–1 bar	0–100 kPa	0–0.1 MPa	0–14.50 psi	0–1,000 mbar	4–20 mA
TPS-4841-2	0–2 bar	0–200 kPa	0–0.2 MPa	0–29.01 psi	0–2,000 mbar	4–20 mA
TPS-4841-3	0–3 bar	0–300 kPa	0–0.3 MPa	0–43.51 psi	0–3,000 mbar	4–20 mA
TPS-4841-4	0–4 bar	0–400 kPa	0–0.4 MPa	0–58.02 psi	0–4,000 mbar	4–20 mA
TPS-4841-5	0–5 bar	0–500 kPa	0–0.5 MPa	0–72.52 psi	0–5,000 mbar	4–20 mA
TPS-4841-6	0–6 bar	0–600 kPa	0–0.6 MPa	0–87.02 psi	0–6,000 mbar	4–20 mA
TPS-4841-7	0–7 bar	0–700 kPa	0–0.7 MPa	0–101.53 psi	0–7,000 mbar	4–20 mA
TPS-4841-8	0–8 bar	0–800 kPa	0–0.8 MPa	0–116.03 psi	0–8,000 mbar	4–20 mA
TPS-4841-9	0–9 bar	0–900 kPa	0–0.9 MPa	0–130.53 psi	0–9,000 mbar	4–20 mA
TPS-4841-10	0–10 bar	0–1,000 kPa	0–1.0 MPa	0–145.04 psi	0–10,000 mbar	4–20 mA
TPS-4841-16	0–16 bar	0–1,600 kPa	0–1.6 MPa	0–232.06 psi	0–16,000 mbar	4–20 mA
TPS-4841-20	0–20 bar	0–2,000 kPa	0–2.0 MPa	0–290.08 psi	0–20,000 mbar	4–20 mA
TPS-4841-25	0–25 bar	0–2,500 kPa	0–2.5 MPa	0–362.59 psi	0–25,000 mbar	4–20 mA
TPS-4841-30	0–30 bar	0–3,000 kPa	0–3.0 MPa	0–435.11 psi	0–30,000 mbar	4–20 mA
TPS-4841-35	0–35 bar	0–3,500 kPa	0–3.5 MPa	0–507.63 psi	0–35,000 mbar	4–20 mA
TPS-4841-40	0–40 bar	0–4,000 kPa	0–4.0 MPa	0–580.15 psi	0–40,000 mbar	4–20 mA

1/2" BSP						
Product	bar	kPa	mPa	psi	mbar	Output Signal
TPS-4841-1-1/2	0–1 bar	0–100 kPa	0–0.1 MPa	0–14.50 psi	0–1,000 mbar	4–20 mA
TPS-4841-2-1/2	0–2 bar	0–200 kPa	0–0.2 MPa	0–29.01 psi	0–2,000 mbar	4–20 mA
TPS-4841-3-1/2	0–3 bar	0–300 kPa	0–0.3 MPa	0–43.51 psi	0–3,000 mbar	4–20 mA
TPS-4841-4-1/2	0–4 bar	0–400 kPa	0–0.4 MPa	0–58.02 psi	0–4,000 mbar	4–20 mA
TPS-4841-5-1/2	0–5 bar	0–500 kPa	0–0.5 MPa	0–72.52 psi	0–5,000 mbar	4–20 mA
TPS-4841-6-1/2	0–6 bar	0–600 kPa	0–0.6 MPa	0–87.02 psi	0–6,000 mbar	4–20 mA
TPS-4841-7-1/2	0–7 bar	0–700 kPa	0–0.7 MPa	0–101.53 psi	0–7,000 mbar	4–20 mA
TPS-4841-8-1/2	0–8 bar	0–800 kPa	0–0.8 MPa	0–116.03 psi	0–8,000 mbar	4–20 mA
TPS-4841-9-1/2	0–9 bar	0–900 kPa	0–0.9 MPa	0–130.53 psi	0–9,000 mbar	4–20 mA
TPS-4841-10-1/2	0–10 bar	0–1,000 kPa	0–1.0 MPa	0–145.04 psi	0–10,000 mbar	4–20 mA
TPS-4841-16-1/2	0–16 bar	0–1,600 kPa	0–1.6 MPa	0–232.06 psi	0–16,000 mbar	4–20 mA
TPS-4841-20-1/2	0–20 bar	0–2,000 kPa	0–2.0 MPa	0–290.08 psi	0–20,000 mbar	4–20 mA
TPS-4841-25-1/2	0–25 bar	0–2,500 kPa	0–2.5 MPa	0–362.59 psi	0–25,000 mbar	4–20 mA
TPS-4841-30-1/2	0–30 bar	0–3,000 kPa	0–3.0 MPa	0–435.11 psi	0–30,000 mbar	4–20 mA
TPS-4841-35-1/2	0–35 bar	0–3,500 kPa	0–3.5 MPa	0–507.63 psi	0–35,000 mbar	4–20 mA
TPS-4841-40-1/2	0–40 bar	0–4,000 kPa	0–4.0 MPa	0–580.15 psi	0–40,000 mbar	4–20 mA

1/4" BSP (M)

Product	bar	kPa	mPa	psi	mbar	Output Signal
TPS-4841-1-V	0–1 bar	0–100 kPa	0–0.1 MPa	0–14.50 psi	0–1,000 mbar	0–10 V
TPS-4841-2-V	0–2 bar	0–200 kPa	0–0.2 MPa	0–29.01 psi	0–2,000 mbar	0–10 V
TPS-4841-3-V	0–3 bar	0–300 kPa	0–0.3 MPa	0–43.51 psi	0–3,000 mbar	0–10 V
TPS-4841-4-V	0–4 bar	0–400 kPa	0–0.4 MPa	0–58.02 psi	0–4,000 mbar	0–10 V
TPS-4841-5-V	0–5 bar	0–500 kPa	0–0.5 MPa	0–72.52 psi	0–5,000 mbar	0–10 V
TPS-4841-6-V	0–6 bar	0–600 kPa	0–0.6 MPa	0–87.02 psi	0–6,000 mbar	0–10 V
TPS-4841-7-V	0–7 bar	0–700 kPa	0–0.7 MPa	0–101.53 psi	0–7,000 mbar	0–10 V
TPS-4841-8-V	0–8 bar	0–800 kPa	0–0.8 MPa	0–116.03 psi	0–8,000 mbar	0–10 V
TPS-4841-9-V	0–9 bar	0–900 kPa	0–0.9 MPa	0–130.53 psi	0–9,000 mbar	0–10 V
TPS-4841-10-V	0–10 bar	0–1,000 kPa	0–1.0 MPa	0–145.04 psi	0–10,000 mbar	0–10 V
TPS-4841-16-V	0–16 bar	0–1,600 kPa	0–1.6 MPa	0–232.06 psi	0–16,000 mbar	0–10 V
TPS-4841-20-V	0–20 bar	0–2,000 kPa	0–2.0 MPa	0–290.08 psi	0–20,000 mbar	0–10 V
TPS-4841-25-V	0–25 bar	0–2,500 kPa	0–2.5 MPa	0–362.59 psi	0–25,000 mbar	0–10 V
TPS-4841-30-V	0–30 bar	0–3,000 kPa	0–3.0 MPa	0–435.11 psi	0–30,000 mbar	0–10 V
TPS-4841-35-V	0–35 bar	0–3,500 kPa	0–3.5 MPa	0–507.63 psi	0–35,000 mbar	0–10 V
TPS-4841-40-V	0–40 bar	0–4,000 kPa	0–4.0 MPa	0–580.15 psi	0–40,000 mbar	0–10 V

1/2" BSP (M)						
Product	bar	kPa	mPa	psi	mbar	Output Signal
TPS-4841-1-1/2-V	0–1 bar	0–100 kPa	0–0.1 MPa	0–14.50 psi	0–1,000 mbar	0–10 V
TPS-4841-2-1/2-V	0–2 bar	0–200 kPa	0–0.2 MPa	0–29.01 psi	0–2,000 mbar	0–10 V
TPS-4841-3-1/2-V	0–3 bar	0–300 kPa	0–0.3 MPa	0–43.51 psi	0–3,000 mbar	0–10 V
TPS-4841-4-1/2-V	0–4 bar	0–400 kPa	0–0.4 MPa	0–58.02 psi	0–4,000 mbar	0–10 V
TPS-4841-5-1/2-V	0–5 bar	0–500 kPa	0–0.5 MPa	0–72.52 psi	0–5,000 mbar	0–10 V
TPS-4841-6-1/2-V	0–6 bar	0–600 kPa	0–0.6 MPa	0–87.02 psi	0–6,000 mbar	0–10 V
TPS-4841-7-1/2-V	0–7 bar	0–700 kPa	0–0.7 MPa	0–101.53 psi	0–7,000 mbar	0–10 V
TPS-4841-8-1/2-V	0–8 bar	0–800 kPa	0–0.8 MPa	0–116.03 psi	0–8,000 mbar	0–10 V
TPS-4841-9-1/2-V	0–9 bar	0–900 kPa	0–0.9 MPa	0–130.53 psi	0–9,000 mbar	0–10 V
TPS-4841-10-1/2-V	0–10 bar	0–1,000 kPa	0–1.0 MPa	0–145.04 psi	0–10,000 mbar	0–10 V
TPS-4841-16-1/2-V	0–16 bar	0–1,600 kPa	0–1.6 MPa	0–232.06 psi	0–16,000 mbar	0–10 V
TPS-4841-20-1/2-V	0–20 bar	0–2,000 kPa	0–2.0 MPa	0–290.08 psi	0–20,000 mbar	0–10 V
TPS-4841-25-1/2-V	0–25 bar	0–2,500 kPa	0–2.5 MPa	0–362.59 psi	0–25,000 mbar	0–10 V
TPS-4841-30-1/2-V	0–30 bar	0–3,000 kPa	0–3.0 MPa	0–435.11 psi	0–30,000 mbar	0–10 V
TPS-4841-35-1/2-V	0–35 bar	0–3,500 kPa	0–3.5 MPa	0–507.63 psi	0–35,000 mbar	0–10 V
TPS-4841-40-1/2-V	0–40 bar	0–4,000 kPa	0–4.0 MPa	0–580.15 psi	0–40,000 mbar	0–10 V

Test Standard: GB/T 17614.1-2015/IEC60770-1:2010
 Ambient temperature: 20°C ±5°C
 Relative humidity: 45% ~ 75%

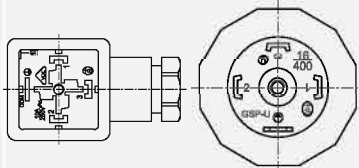
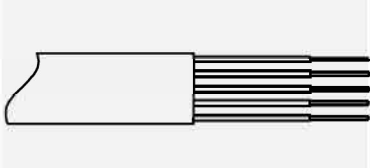
Output Signals

Dimensions

Unit: mm

Output signal	Supply voltage	Output type	Load resistance
4mA~20mA DC(E)	8V~30V DC	2-wire	$\leq (U-8)/0.02 \quad (\Omega)$
0V~10V DC(V)	12V~30V DC	3-wire	$\geq 10k\Omega$

Electrical Connection

Functional definition	4-pin connector (B1)		Cable(B2)		M12×1 4-pin connector(B4)	
						
	Current 2-wire	Voltage 3-wire	Current 2-wire	Voltage 3-wire	Current 2-wire	Voltage 3-wire
+V	1	1	Red	Red	1	1
+OUT	2	3	Black	White	3	3
GND	Null	2	Null	Black	Null	2

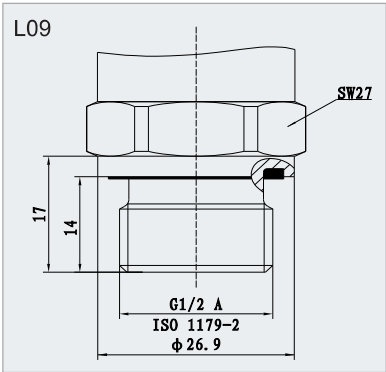
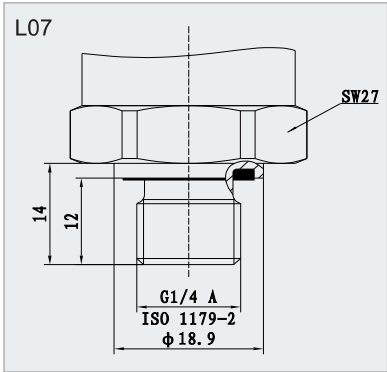
Process Connection

Options

Code	Pressure port	Standard
L07	G1/4 A Male	ISO 1179-2
L09	G1/2 A Male	ISO 1179-2

Dimensions

Unit: mm



Order Guide

TPS-4841 Pressure Transmitter

Part No.	Description
TPS-4841-1	0-1 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-2	0-2 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-3	0-3 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-4	0-4 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-5	0-5 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-6	0-6 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-7	0-7 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-8	0-8 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-9	0-9 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-10	0-10 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-16	0-16 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-20	0-20 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-25	0-25 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-30	0-30 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-35	0-35 bar KUKreg4 sensor, G1/4", 4-20mA
TPS-4841-40	0-40 bar KUKreg4 sensor, G1/4", 4-20mA

Part No.	Description
TPS-4841-1-1/2	0-1 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-2-1/2	0-2 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-3-1/2	0-3 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-4-1/2	0-4 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-5-1/2	0-5 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-6-1/2	0-6 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-7-1/2	0-7 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-8-1/2	0-8 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-9-1/2	0-9 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-10-1/2	0-10 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-16-1/2	0-16 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-20-1/2	0-20 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-25-1/2	0-25 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-30-1/2	0-30 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-35-1/2	0-35 bar KUKreg4 sensor, G1/2", 4-20mA
TPS-4841-40-1/2	0-40 bar KUKreg4 sensor, G1/2", 4-20mA

Part No.	Description
TPS-4841-1-V	0-1 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-2-V	0-2 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-3-V	0-3 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-4-V	0-4 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-5-V	0-5 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-6-V	0-6 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-7-V	0-7 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-8-V	0-8 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-9-V	0-9 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-10-V	0-10 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-16-V	0-16 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-20-V	0-20 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-25-V	0-25 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-30-V	0-30 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-35-V	0-35 bar KUKreg4 sensor, G1/4", 0-10v
TPS-4841-40-V	0-40 bar KUKreg4 sensor, G1/4", 0-10v

Part No.	Description
TPS-4841-1-1/2-V	0-1 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-2-1/2-V	0-2 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-3-1/2-V	0-3 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-4-1/2-V	0-4 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-5-1/2-V	0-5 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-6-1/2-V	0-6 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-7-1/2-V	0-7 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-8-1/2-V	0-8 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-9-1/2-V	0-9 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-10-1/2-V	0-10 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-16-1/2-V	0-16 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-20-1/2-V	0-20 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-25-1/2-V	0-25 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-30-1/2-V	0-30 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-35-1/2-V	0-35 bar KUKreg4 sensor, G1/2", 0-10v
TPS-4841-40-1/2-V	0-40 bar KUKreg4 sensor, G1/2", 0-10v

- 1、"①" refers to accuracy, see "Measuring Range & Accuracy Table" for details.
- 2、The cable material is PUR.
- 3、If a metrology verification certificate is required, or there are any other special requirements, please consult with Total Pressure Solutions and specify them in the order.



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