KANAGAWA INSTRUMENTS

Pressure Switch

Model: KPS



Overwiew

The Kanagawa Instruments KPS Series represents the next generation of industrial pressure monitoring, engineered for high-precision and mission-critical applications. By integrating our proprietary, high-reliability sensing cores with advanced digital signal conditioning, the KPS Series ensures a seamless transition from mechanical pressure to precise electronic switching.

Designed for versatile performance, these units provide real-time indication, monitoring, and automated control across a wide range of industrial environments. For operations in hazardous locations, the series also offers Explosion-Proof (Ex-proof) certified models, ensuring uncompromising safety and compliance in volatile atmospheres. With its signature compact stainless steel architecture, the KPS Series combines rugged durability with a refined aesthetic, delivering long-term stability even in the most demanding conditions

Applications

Industrial Site

Fire & Water

Deep Well Oil & Gas

Chemical Energy

Pipe Network Monitoring

Hydrological Surveys

-Defence Industry

KANAGAWA
INSTRUMENTS

Features

The KPS Series is meticulously engineered to provide superior performance and reliability in demanding industrial environments. Below are the core technical specifications that define the KPS series:

Versatile Pressure Forms: Supports both Gauge Pressure and Absolute Pressure configurations to suit various system requirements.

Broad Measurement Range: Offers extensive flexibility, ranging from -0.1 kPa to 0 kPa and up to 60 MPa, covering both low-pressure monitoring and high-pressure industrial applications.

High-Precision Accuracy: Available in precision grades of ±0.25% FS and ±0.5% FS, ensuring tight control over your process variables.

Rapid Switching Performance: Engineered for mission-critical response, providing a response time of ≤ 3 ms (10%–90%).

Robust Overload Capacity: Built to withstand pressure surges with an overload capacity of ≤200% FS (for systems <10 MPa) and ≤150% FS (for systems ≥10 MPa).

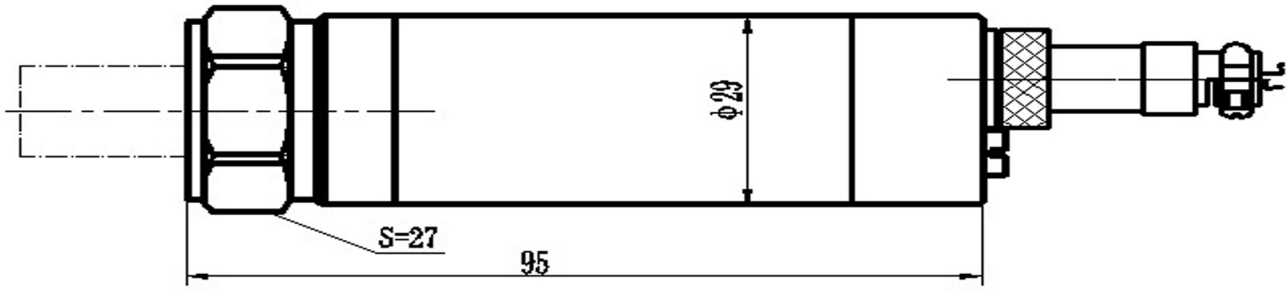
Wide Operating Environment: Designed for stability in challenging temperature conditions, with a medium temperature tolerance of -30°C to 60°C.

Flexible Power Input: Operates reliably on a standard voltage range of 12V DC to 30V DC.

Reliable Output: Features stable Relay Contact output for seamless integration with PLC/HMI control loops.

Material Compatibility: Engineered with high-grade SS304, SS316L, or Ceramic wetted parts, ensuring compatibility with a wide range of industrial fluids and gases.

Typical appearance structure drawing (unit: mm)



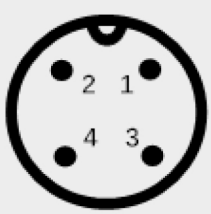
KANAGAWA INSTRUMENTS

Operating Conditions

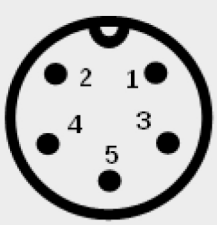
Items	Parameter range
Protection level	IP66
Atmospheric pressure	86kPa ~ 106kPa
Vibration environment	10g (@10Hz ~ 500Hz)
Shock resistance	100g/11ms

Physical Structure & Design Overview

4-pin Round Aviation Socket

Structure diagram	Wiring post	Definition
	1	V+
	2	V-
	3	Normally open or closed
	4	Centre

5-pin Round Aviation Socket

Structure diagram	Wiring post	Definition
	1	V+
	2	V-
	3	Normally open
	4	Normally closed
	5	Centre

Important Precautions | KPS Series

To ensure optimal safety and performance, please follow these guidelines:

Factory Customization: Switching points are factory-configured. Please specify your requirements clearly at the time of order.

Compatibility Check: Consult Kanagawa Instruments technical support before installation to ensure the measured media is compatible with our wetted parts and seals.

Site Protection: For long-term reliability, ensure the unit is shielded from lightning, extreme weather, and excessive moisture.

Handle with Care: The isolation diaphragm is a precision-engineered component. Do not touch or apply pressure to the diaphragm to prevent permanent damage.

Unauthorized Modification: Do not disassemble or attempt self-repair. Contact your Kanagawa Instruments representative immediately for any maintenance or technical support.

Operational Limits: Use the product strictly within specified parameters. For steam or high-temperature media applications, please consult our sales team for specialized configurations prior to ordering.