

## Digital Pressure Gauges (DPGS-70)

- The industry's first digital pressure gauge with CE marking.
- One digital pressure gauge alone can function as both pressure display and pressure switch.
- The one-touch keys on the body allow easy operation. The key lock is also provided to prevent operator errors.
- The kN display is also available as a special function. (The display range is from 0 to 1999.)
- Universal joint models allow users to select the desired display orientation.



### Model code structure

**DPGS - 70 - G4 - U**

Maximum operating pressure (MPa)	Joint type
Digital pressure gauge	U : Universal joint
Connection thread size	F : Fixed joint
G4 : G1/2	*G1/2 thread is available only for universal joints.
R3 : R3/8	
N3 : NPT3/8	

### Specifications

Model	Maximum operating pressure MPa	Rated voltage Allowable voltage	Factory setting	Output contact	Display accuracy R.C.	Conformed standard
DPGS-70-G4-U	70	Rated voltage 100 to 240 VAC 50/60 Hz Allowable voltage 85 to 264 VAC 47 to 440 Hz	Preset pressure: 70 MPa Dead band: 5 MPa Output operation: B contact	250 VAC 3 A (resistive load) 1A, 1B	±1 % (Note 1)	RoHS Directive Low Voltage Directive EMC Directive (industrial electromagnetic environment)
DPGS-70-R3-U						
DPGS-70-R3-F						
DPGS-70-N3-U						
DPGS-70-N3-F						

\*If an inverter is used, install the power supply for the DPGS-70 to the primary side.

### Mounting method

Model	Mounting method
DPGS-70-G4-U	Mount the gauge on a pressure gauge mounting bracket (page 163). The S-111 packing is required.
DPGS-70-R3-U	After securing the T-4 mounting bracket (accessory), mount the gauge using the S-111 packing (accessory).
DPGS-70-R3-F	After wrapping seal tape around the R3/8 joint, mount the gauge directly. (Note 2)
DPGS-70-N3-U	After securing the T-4-NPT mounting bracket (accessory), mount the gauge using the S-111 packing (accessory).
DPGS-70-N3-F	After wrapping seal tape around the NPT 3/8 joint, mount the gauge directly. (Note 2)

(Note 1) Because the measurement range of the sensor is 100.0 MPa, R.C. is 100 MPa.

(Note 2) A radius of about 70 mm from the center of the joint is required for the rotation of the DPGS-70.

#### Hydraulic symbol

#### Image diagram of output operation

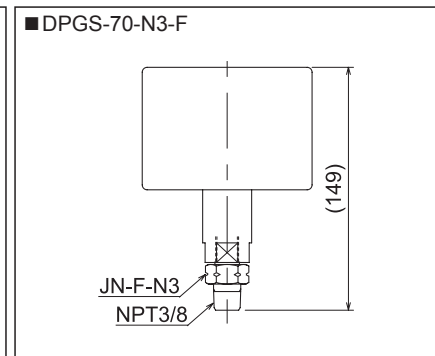
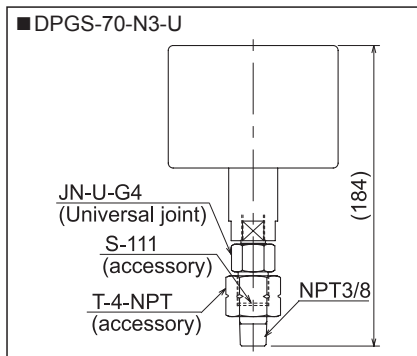
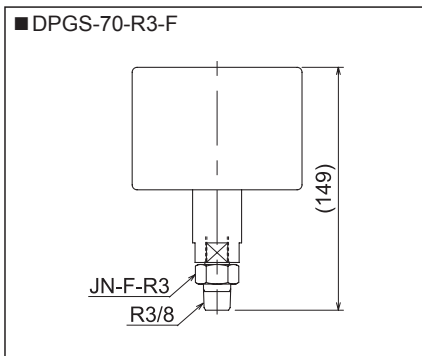
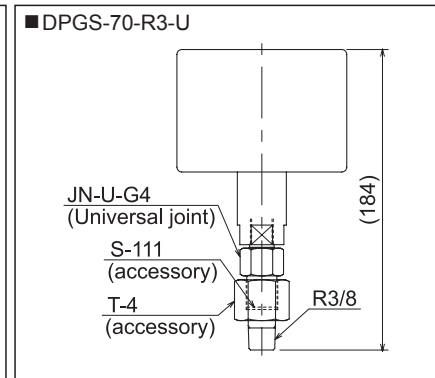
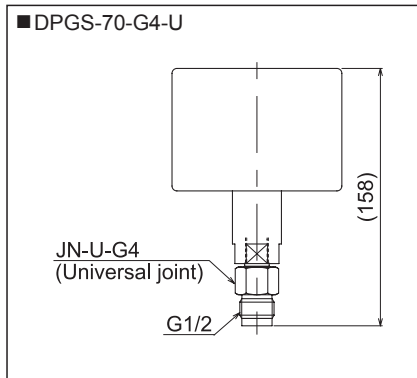
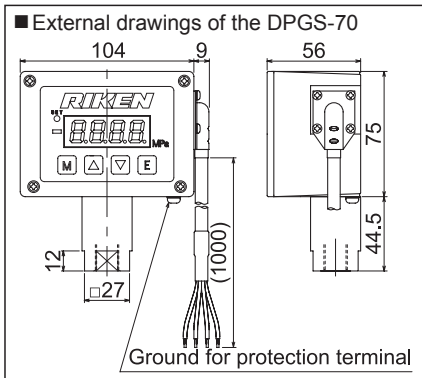
Setting pressure (Default-setting : 70MPa)

Pressure value

Dead band (Default-setting : 5MPa)

Relay contact (Time of shipping: B contact)

ON OFF ON



## Pressure Gauge Mounting Brackets

- Various mounting brackets for pressure gauges are available for various applications.
- The T-1 to T-5 are used for mounting Riken pressure gauges and pressure switches.  
(Except the DPGS-70-R3-U, DPGS-70-R3-F, DPGS-70-N3-U, DPGS-70-N3-F, and SPS-7A)
- S-111 pressure gauge packing is included.  
(Except the T-6)
- Some standard pumps include a pressure gauge mounting bracket. Check the details on the pump.

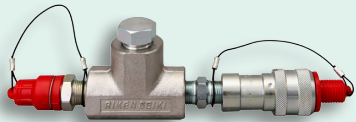
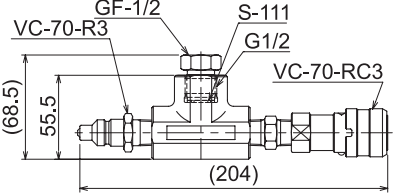
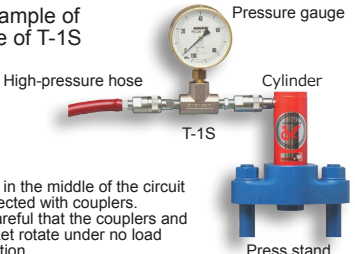

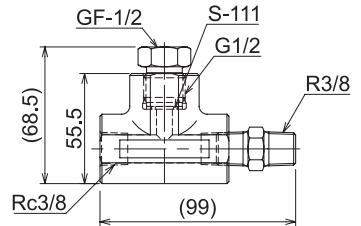
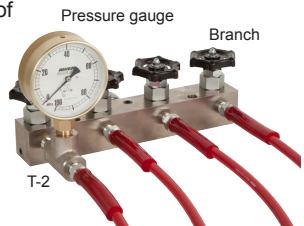
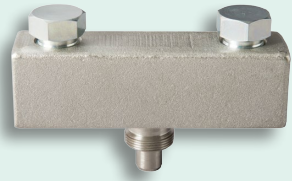
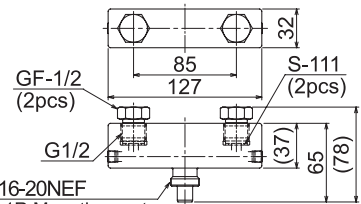
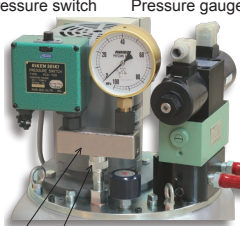

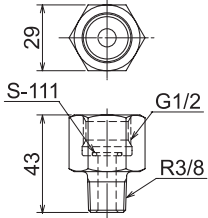
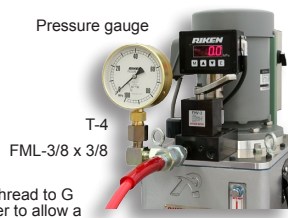

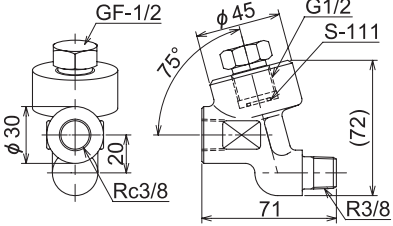
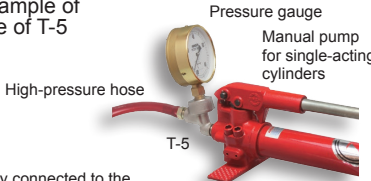

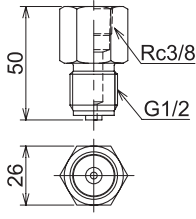
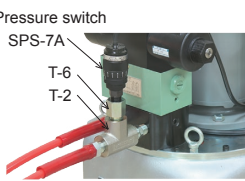
### Model code structure



Pressure gauge mounting bracket

Type  
 1 : T-1  
 2 : T-2  
 3 : T-3

Attached coupler (T-1 only)  
 VC : With VC-70-R3 and RC3  
 S : With S-1R and 1H  
 T : With ROC-13R and 13H

<p>■ T-1VC</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 0.9 kg</p>	<p>■ Example of use of T-1S</p>  <ul style="list-style-type: none"> <li>• Used in the middle of the circuit connected with couplers.</li> <li>• Be careful that the couplers and bracket rotate under no load condition.</li> </ul>
<p>■ T-2</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 0.7 kg</p>	<p>■ Example of use of T-2</p>  <ul style="list-style-type: none"> <li>• Used in a circuit with Rc3/8 connection ports.</li> </ul>
<p>■ T-3</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 1.1 kg</p>	<p>■ Example of use of T-3</p>  <ul style="list-style-type: none"> <li>• Mainly used for electric pumps and allows a pressure gauge and a switch to be mounted in parallel.</li> <li>• When mounting a T-3 mounting bracket, be sure to use the special coupler for the T-3 (GS-1R).</li> </ul>
<p>■ T-4</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 0.2 kg</p>	<p>■ Example of use of T-4</p>  <ul style="list-style-type: none"> <li>• Converts Rc3/8 thread to G 1/2 thread in order to allow a pressure gauge and a switch to be mounted.</li> </ul>
<p>■ T-5</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 0.6 kg</p>	<p>■ Example of use of T-5</p>  <ul style="list-style-type: none"> <li>• Mainly connected to the outlet port of manual pumps for single-acting cylinders. The display of the pressure gauge inclines at an angle of 105° to the axis of the pump's outlet port.</li> </ul>
<p>■ T-6</p> 	 <p>Maximum operating pressure: 70 MPa Approx. weight: 0.2 kg</p>	<p>■ Example of use of T-6</p>  <ul style="list-style-type: none"> <li>• Converts G1/2 thread to Rc3/8 thread.</li> <li>• Use for mounting pressure switches and pressure gauges with an Rc 3/8 connection port.</li> </ul>