

High-Precision Digital Pressure Switch



*The ISE78G is not in compliance with UL standards.



An analog voltage output specification has been added to the ISE77G/78G series.

Air 1.0^{ISE71}MPa/1.6^{ISE71}MPa

General Fluids 1.0^{ISE70G}MPa/2.0^{ISE75G}MPa

5.0^{ISE76G}MPa/10^{ISE77G}MPa

16^{ISE78G}MPa/50^{ISE79S}MPa

It is possible to change the settings while checking the measured value.

Main screen

Measured value (Current pressure value)

Sub screen

Label (Display item), Set value (Threshold value)

Visualization of Settings

Set value (Threshold value)	P.1
Hysteresis value	H.1
Peak value	H.H.1
Bottom value	H.Lo

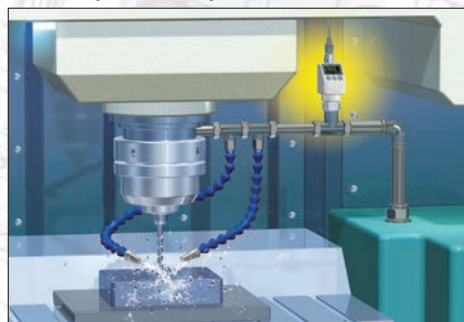


Application Examples

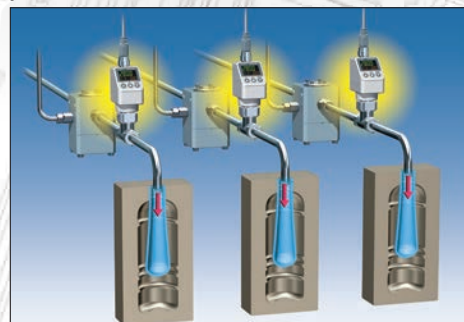
For High pressure For the high-pressure main spindle drill pressure control











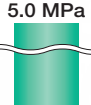
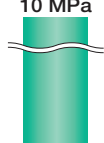
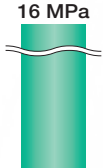
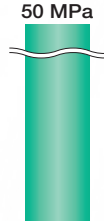
For the liquid coolant pressure control



For the PET bottle molding machine pressure control



ISE7□/7□G/79S Series

ISE70/71		ISE70G/75G/76G/77G/78G79S					
							
 Air		 General fluids					
ISE70	ISE71	ISE70G	ISE75G	ISE76G	ISE77G	ISE78G	ISE79S
							
1.5 MPa	2.4 MPa	3.0 MPa	5.0 MPa	12.5 MPa	30 MPa	48 MPa	75 MPa
12 to 24 VDC ±10% with 10% voltage ripple or less							
18 to 30 VDC, including ripple (p-p) 10%							
±2% F.S. (25°C standard)		±3% F.S. (ISE70G)/±5% F.S. (ISE75G/76G/77G/78G/79S)					
±0.5% F.S.							
Hysteresis mode: Variable Window comparator mode: Variable Select from NPN or PNP open collector.							
3-screen/2-color display							
IP67							
Sensor pressure receiving area: Silicon Piping port: C3604 (Electroless nickel plating) Sensor seal: HNBR		Sensor pressure receiving area: Al2O3 (Alumina 96%) Piping port: C3604 (Electroless nickel plating) Sensor seal: FKM + Grease (ISE70G) FKM (ISE75G/76G/77G/78G)					Sensor pressure receiving area, Piping port: Equivalent to stainless steel 630
Rc1/4, NPT1/4, G1/4 (ISO 1179-1 compliant)							Rc1/4, G1/4 (ISO 1179-1 compliant)
Lead wire with M12 connector, Bracket							
Selectable pressure unit, Anti-chattering function, Display calibration function, Power saving mode, Sub screen setting function							
Analog voltage output*1							

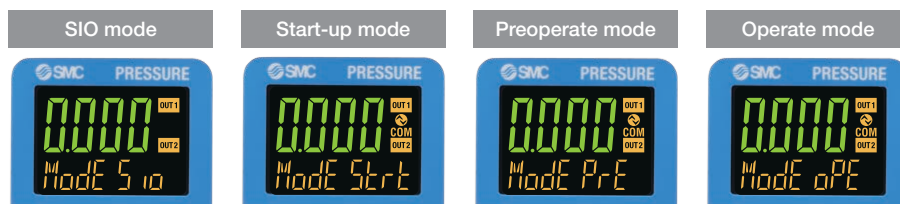
IO-Link Compatible



IO-Link is an open communication interface technology between the sensor/actuator and the I/O terminal that is an international standard, IEC 61131-9.

- Visualization of operation and equipment status/Remote monitoring and control by communication
- Implement diagnostic bits in the process data.

Display Function



Displays the output communication status and indicates the presence of communication data



© 2025 SMC Corporation of America, All Rights Reserved.

All reasonable efforts to ensure the accuracy of the information were made at the time of publishing. However, SMC can in no way warrant the information herein contained as specifications are subject to change without notice.