

# PRESSURE SENSOR / SWITCH TYPE 8311

Intelligent pressure Sensor/Switch - 1/2" Threads - Transistor / Relay output - 4-20 mA Input

This intelligent sensor/switch with an extra-large display is specifically designed to switch a valve and to establish a monitoring system or an ON/OFF control loop.

The switching points can be programmed with the 3 key pads or optionally from an external PLC over a 4...20 mA loop. Additionally the process value can be transmitted to the PLC (4...20 mA).

The connection to the process in the piping is done with standard fittings.

## Process specification

Pipe diameter	Any pipe with sensor connection See ordering fitting code Type S001 or S005
Measuring range	0 up to 2, 5, 10, 20 or 50 bar
Switching accuracy	± 1.5% full scale
Repeatability	max 1...0,25% full scale
Fitting	see ordering fitting code Type S001 or S005
Body material	PC + 20% glass fibre
Front panel foil	polyester
Sensor element	Ceramic cell (Al <sub>2</sub> O <sub>3</sub> )
Wetted parts	St. Steel, FPM seal (EPDM option)
Min. Service life of pressure cell	100 million cycles

## Electrical specification

Voltage supply	12...30 VDC protected
Reversed polarity of DC	NPN/PNP, open collector
Transistor output	5...30 VDC, 700 mA
Optional relay output	3 A, 230 VAC or 3 A, 30 VDC Programmable
Input external setpoint	4...20 mA
AS-Interface	
Current consumption	max. 80 mA (no load)
Short circuit protection	yes
Max cable length	10 m unshielded
Recommended	50 m shielded
For power supply	cross section 0.14 upto 0.5 <sup>2</sup> mm

## Electrical Connections

Ease On	On request cable plug 2511
Cable plug	DIN 43650A
Multipin	5 pin, Multipin PLUG M12
Connessione AS-i	On request

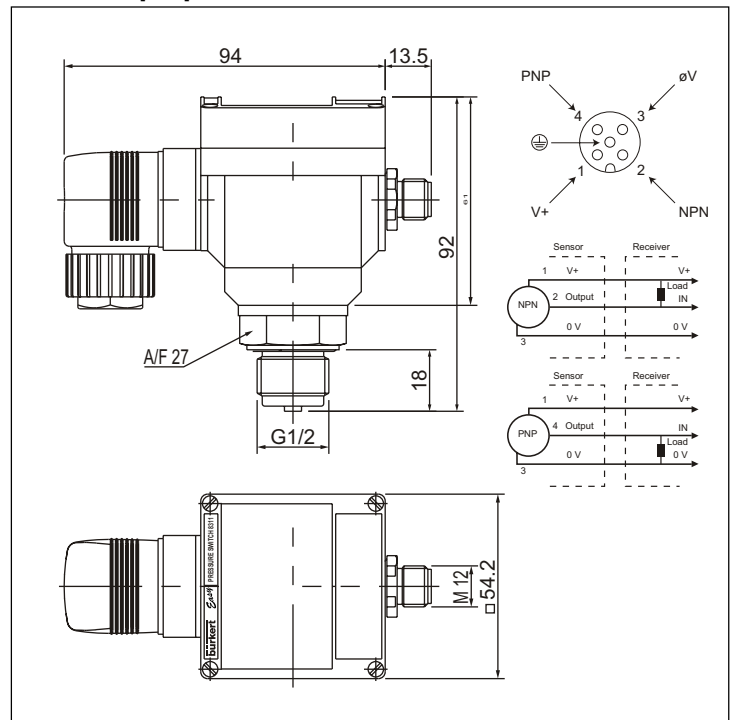
## Environment Specifications


Max fluid temperature	+ 100
Ambient temperature range	-20 up to +60 °C
Protection class	IP 65 with connector plugged
Chemical restrictions	(see manual)

## Standards

EMC	EN 50081-1, 50082-2, 61010-1
Vibration	EN 68-2-6
Shock	EN 68-2-27

## Dimensions [mm]



- ✓ **ALL IN ONE:**  
Indication, transmitting,  
monitoring and ON/OFF Control  
In One Device
- ✓ **Programmable Monitoring and ON/OFF**  
Control System for Easy Fluid Control  
System
- ✓ **Complete Communication due to**  
External Set-point,  
Easy LINK or AS Interface 

## Specifications

Pressure Range [bar]	Max. Pressure [bar]	Bursting Pressure [bar]	Power supply	Output Signal	Input Signal (Ext set point)	Electrical Connection
0- 2	4	7	12-30 VDC	NPN/PNP	---	M12 plug
0- 5	10	12	12-30 VDC	NPN/PNP	---	M12 plug
0-10	20	25	12-30 VDC	NPN/PNP	---	M12 plug

## Ordering Code

Code
For corresponding Sensor connection G 1/2
439 908 H
439 920 Y
439 932 Q

## Accessories and fittings for Type 8311 (separately ordered)

Description
M12 female cable connector with plastic threaded locking ring
5 pin M12 female connector moulded on cable (2m, shielded)
S001 fitting (brass or Stainless Steel)
S005 INLINE fitting with adapter plate (brass or Stainless Steel)

## Ordering Code

Code
917 116 D
438 680 F
See data sheet type S001
See data sheet type S005