

Sensor Connection



This Sensor/Switch is specially designed to switch a valve and establish an on/off control loop. The switching point can be programmed with the 3 key pads on the display or can optionally be programmed externally from a programmable logic controller over a 4...20 mA loop. The connection to the process in the piping is done with standard fittings.

Process Specification

Pipe diameter	any pipe with sensor connection (see fitting ordering chart)
Measuring range	-40°F...257°F (with ambient temperature 32°F...104°F) 104°F...194°F (with ambient temperature above 104°F)
Switching accuracy	±1.0°F (32° - 176°F) ±3.0°F (outside of 32° - 176°F)
Repeatability	0.4%
Fitting	See ordering chart fitting
Housing material	PC+20% glass fibre
Front panel foil	Polyester
Sensor element	Pt100
Wetted parts	stainless steel, FPM standard (EPDM option)

Electrical Specification

Voltage Supply	12...30 VDC
Reversed polarity of DC	protected
Transistor output	NPN and PNP, open collector
or Relay output	5...30 VDC, 700 mA 3 A/250 VAC or 3 A/30 VDC; programmable
Input external Setpoint	4...20 mA
AS-Interface	Field bus
Current consumption	max. 80 mA (no Load)
Short circuit protection	yes
Recommended max. cable length	100 m shielded,
For voltage supply	section 0.14...0.5 mm ²

Electrical Connections

EaseOn	on request cable plug 2511
Cable plug	DIN 43650A
Multipin	5 pin, M12
ASI connection	on request

Environment Specifications

Fluid temperature max.	256°F
Ambient temperature range	32° - 140°F
Fluid pressure max.	230 psi
Type of protection	NEMA 4 with connector plugged in

Standards

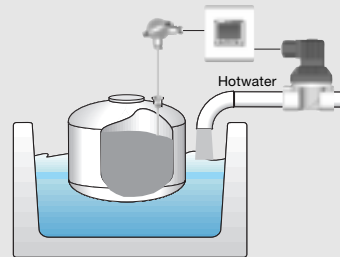
EMI	EN 50081-1, 50082-2, 61010-2
-----	------------------------------

Chemical restrictions (see manual)



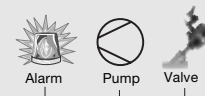
Advantages/Benefits

- ✓ **ON/OFF Control System for Switching Applications**
- ✓ **Programmable ON/OFF Control System for easy Fluid Control Systems**
- ✓ **Complete Communication thanks to external Setpoint Link or AS-Interface** 
- ✓ **CE Approval**



ON/OFF Control of temperature

Controls the temperature of wine processing in a programmable narrow band. (remote control)



Monitoring Min./Max. Values of temperature

Monitoring of min/max levels of temperature in a running process. (compact inline control)



Temperature Sensor/Switch for Easy On/Off Control

Type 8400

8400 Sensor/Switch for sensor connection G1/2, NPT1/2, RC1/2				Ordering Chart		
Voltage supply	Input	Output	Connector	Item-No.		
				G ¹ / ₂	NPT ¹ / ₂	RC ¹ / ₂
12-30 VDC	---	NPN	cable plug 2508 (DIN 43 650)	434 872 P	434 877 L	427 448 X
12-30 VDC	---	PNP	cable plug 2508 (DIN 43 650)	434 876 K	434 878 V	427 449 Y
12-30 VDC	---	NPN and PNP	M12 plug 5 pin	436 501 N	436 507 L	436 504 R
12-30 VDC	---	Relay	M12 plug, 5 pin and DIN plug	436 503 Q	436 509 N	436 506 K
12-30 VDC	4...20 mA ext. set point	Relay	Multipin plug and cable plug 2508 (DIN 43 650)	on request	on request	on request

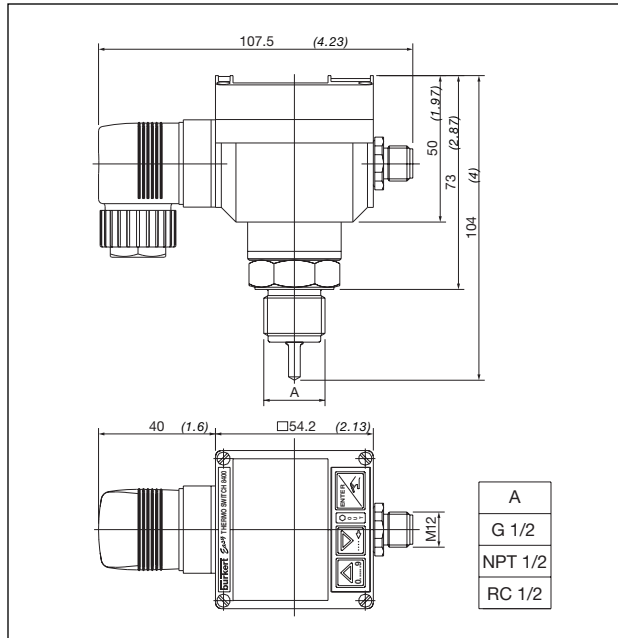
Accessory for ON/OFF Temperature Control System 8400		Ordering Chart
M12 female cable connector with plastic threaded locking ring		917 116 D
5 pin M12 female connector moulded on cable (2 m., shielded)		438 680 F

Has to be ordered separately

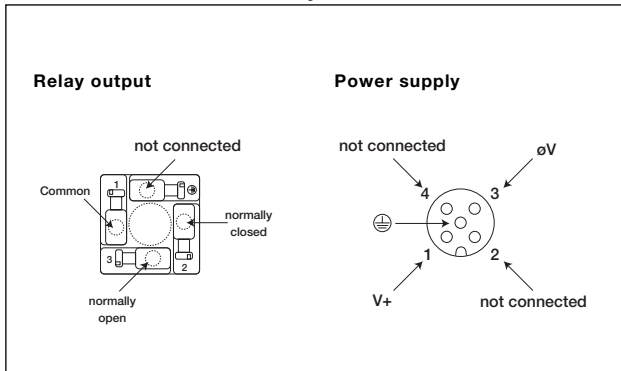
Fittings	
S005 INLINE fittings with adapter plate for 8400	
S001 fitting brass, stainless steel for 8400	

Has to be ordered separately

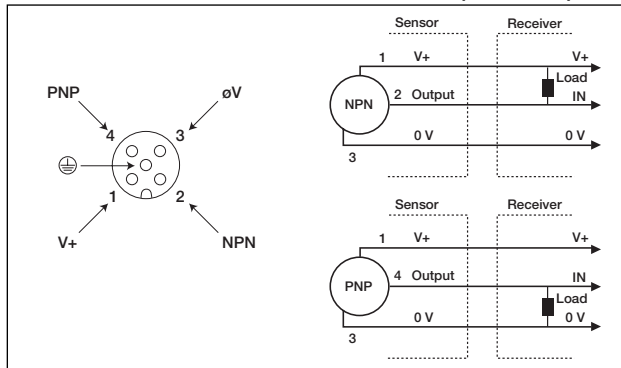
Dimensions [mm] / [inch]



Electrical connection - Relay version



Electrical connection - Transistor version (NPN/PNP)



Burkert Contromatic USA
 2602 McGaw Avenue
 Irvine, CA 92614
 Tel. 949.223.3100
 Fax 949.223.3198
 www.burkert-usa.com

Burkert Contromatic Inc.
 760 Pacific Road, Unit 3
 Oakville, Ontario, Canada
 L6L 6M5
 Tel. 905.847.5566
 Fax 905.847.9006

In case of special application requirements, please consult for advice.

We reserve the right to make technical changes without notice.
 USD 8400 4/00