

Electric level control switch

Model WPS SR4

WIKA datasheet SR4

Application

High and low liquid level control; WP 1,500 psig to 5,000 psig

- Float-actuated pneumatic switch for high or low level control or to operate control valves
- Provides electric switch input for control systems, alarms and other switch operations
- Use on production separators, heaters/treaters, scrubbers, liquid accumulators and process vessels
- 316 Stainless Steel construction for use with most liquids or liquid interfaces
- Low specific gravity of 0.4 and above
- Direct mounting inside vessel or external float cage

Features

- 316 Stainless Steel wetted components for corrosion resistance
- Explosion proof certification by CSA to US and Canada standards
- Single seal application approved
- Hermetically sealed switch cartridge to protect integrity of switch contacts
- SPST and SPDT switch cartridge in standard and light load readings
- No internal seal used - eliminates the possibility of process fluid leakage (not available on manual override model)
- Few moving parts for reduced maintenance and long term performance
- Excellent serviceability including quick replacement of electric switch cartridge
- Displacer options for various pressure, specific gravity and interface applications
- Normally open or normally closed operations by simply inverting the level control unit (not available on manual override model)
- Relay assemblies in explosion proof enclosures for DTPDT and higher average service
- CSA Class 1, Div 1, Groups A, B, C, D. Class II, Div 1, Groups E, F, G. Class III, Div 1 to USA and Canada standards. (Rating with relay enclosure Class 1, Div 1 and 2, Groups C, D. Class II, Div 1, Groups E, F, G. Class II, Div 2, Groups F, G. Class III) CSA: Single seal applications per ANSI/ISA 12.27.01-2003



Standard body



Extended body



Manual override

Specifications

Materials of construction

316 Stainless Steel wetted components. Hermetically sealed reed switch

Working pressure

1,500 psig; available up to 5,000 psig; 1,500 maximum with manual override

Temperature

-40°F to 392°F

Specific gravity

0.4 minimum; interface 0.1 differential minimum

Switch ratings

SPST and SPDT 205V - 0.04A resistive, 120V - 0.83A resistive, 24V - 3.0A resistive, 3.0A maximum in-rush capability. 4watts minimum for proper switching. SPST and SPDT light load 150V - 0.17A resistive, 110V - 0.23A resistive, 24V - 1.0A resistive, 1.0A maximum in-rush capability. 0.1 watts minimum for switching

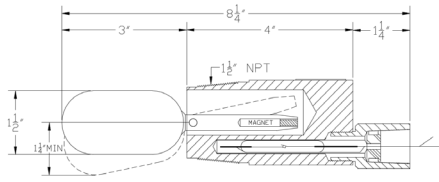
Process connection

1 1/2" NPT standard, 2" NPT, ring bolt, 3" flanged or larger

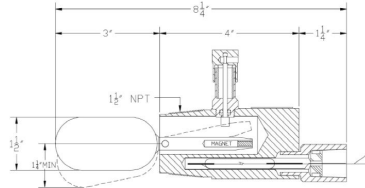
Electrical connection

1/2" NPT Conduit

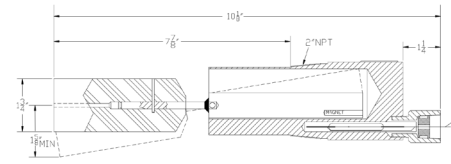
Dimensions



Standard body



Manual override



Extended body

Ordering chart

WPS SR4 - - - -
 1 2 3 4

1	Body style
0	1 1/2" NPT standard body
1	2" NPT
2	1 1/2" NPT, manual override*
3	Extended body, 2" NPT, vertical displacer (Type 3 or 9)
4	2" NPT, manual override*
6	Extended body, 2" NPT, manual override*, vertical displacer (Type 3 or 9)
7	Extended body, 2" NPT, horizontal displacer (Type 3 or 9)
8	Extended body, 2" NPT, manual override*, horizontal displacer (Type 3 or 9)
C	Ring bolted for use with WPC-EC8 or EC4
2	Displacer type
1	316 SS Standard float, WP 1,500 psig, 0.4 SG min (body style 0, 1, 2, 4)
2	Polypropylene high pressure displacer, WP 5,000 psig standard, 3,000 psig on SR4C, 180°F max temp; 0.6 SG min (body style 0, 1, 2, 4)
3	Interface Polypropylene displacer, WP 5,000 psig standard, 3,000 psig on SR4C, 180°F max temp; upper fluid < 0.87 SG, lower fluid > 0.97 SG
4	Customer defined SG for upper and lower fluid interface
9	Polypropylene high pressure displacer, WP up to 5,000 psig, 180°F max temp; 0.5 SG min (extended body style 3, 6, 7, 8)
3	Switch selection
0	SPST standard load
1	SPDT standard load
2	SPST light load
3	SPDT light load
4	Other
0	No other options
2	Annulus plug
3	Relay assembly general purpose plug-in, 24VDC DPDT 12Amp
4	Relay assembly general purpose plug-in, 120VAC DPDT 12Amp
7	Relay assembly general purpose plug-in, 240VAC DPDT 12Amp
8	Relay assembly hermetically sealed plug-in, 24VDC DPDT 12Amp
9	Relay assembly hermetically sealed plug-in, 120VAC DPDT 12Amp
5	Customer specified requirements (See SR4 common options)

*WP 1,500 psig on manual override

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

