7A.161-E
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SENSILEVEL - Series S6600 Displacer Operated Level Controls with Horizontal Chamber

Version with opening chamber

Description

This series is designed for external mounting on vessels with a float with a counter-balancing arm, enabling control of liquids with very low densities (down to 0.4 kg/dm³).
In the standard model the opening float chamber is in carbon steel, the float is in AISI 316 L, the attraction sleeve is in AISI 446, and the other internal elements are in AISI 316. The standard model comes in-line vertical 1" NPT-F process connections; Flanged or weld (S.W. or B.W.) models are also available on request. This series is fitted with a single switch mechanism, and the differential calibration is factory set so that high and low level switchings are symmetrical with respect to the device's horizontal axis.

Use

This device should be considered an accessory under pressure used to control level, and can be considered a safety device. The device complies with the requirements of the European Directive on Pressure Equipment 2014/68/EU **category IV**, and can be used with group 1 or group 2 fluids.

Switch selection

To select the correct model according to the operating conditions and nature of the liquid to be controlled, please refer to the table below. To select the switch mechanisms and switch housings, consult specification 7A.100.

Options and special features (3)

- AISI 316 stainless steel chamber or other special corrosion-resistant materials
- Attraction sleeve with anti-corrosion coating
- Compliance with standard NACE MR 01 - 75.
- Interface control setting

(3) Note: request confirmation of pressure limits and minimum specific gravity.

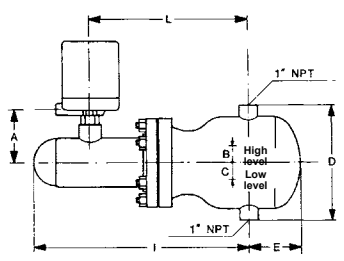
How to request or order

Each instrument is identified by an alphanumeric code describing the construction specifications in part only. This code is formed of three components, each of which defines part of the instrument: the first identifies the sensing unit model (chamber and float), the second identifies the type and quantity of switch mechanisms, and the third identifies the type of switch housing. It is therefore necessary to specify the material used for the chamber and internal elements, the type and orientation of the connections, and any other special requests.

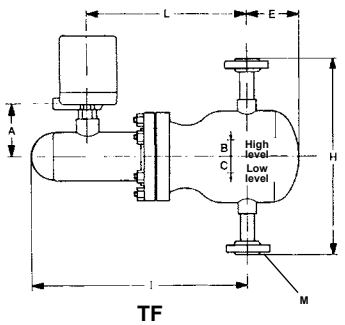
Example: Mod. S6605 - 210 - 4 - S

- S — Options (connections, interface, etc.)
- 4 — Flameproof switch housing (see specification 7A.100)
- 210 — SPDT micro switch standard mechanisms (see specification 7A.100)
- S6605 — Sensing unit model

Specifications



Connections: standard



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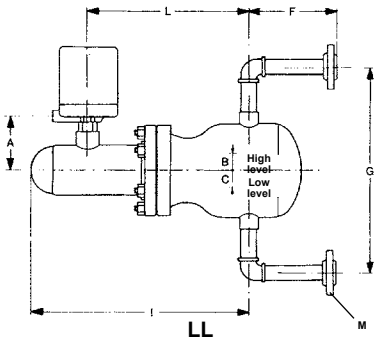

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Model	Minimum Specific Gravity (kg/dm³)		Maximum Pressure (bar) (1)		Switching level (mm)		Installation dimensions (mm)								
	Type 1, 2, 3 mechanism	Type 4 and 5 mechanism	40°C	400°C	B	C	A (2)	D	E	F	G	H	I	L	M 1"
S6605	0.40	0.44	50	42	10	10	108	230	146	150	356	350	450	335	ANSI 300 RF
S6606	0.40	0.44	80	45	10	10	108	230	146	150	356	350	450	335	ANSI 600 RF

Notes:
(1) The values shown above apply to standard devices, with S.W. or B.W. weld connections, in carbon steel construction for use with non-corrosive liquids or with water and steam for boiler applications. For bodies with flanged connections (standard 1" ANSI 300 RF or 1" ANSI 600 RF) the maximum pressure can be determined by the rating for the flanges.
(2) For process temperatures above the maximum permitted for each type of switch (see spec. 7A.100), a **cooling extension** is required between body and housing. Height "A" will therefore be raised by 100 mm.

Version with sealed chamber

Description

Designed for external mounting on the tank, this series of models feature a float chamber that is fully welded and is of low cost construction.
The standard model comes with 1" B.W. weld process connections; 1" S.W. connections are also available, to which flanges can be applied in the configurations and face-to-face dimensions shown below.
In the standard model the float chamber is in carbon steel, the internal elements are in AISI 316 stainless steel, the float is in AISI 316 L and the attraction sleeve is in AISI 446. Since it was designed particularly for applications on high-pressure cylindrical boiler bodies, the standard model for this series comes already fitted with a cooling extension.

Use

This device should be considered an accessory under pressure used to control level, and can be considered a safety device.
The device complies with the requirements of the European Directive on Pressure Equipment 2014/68/EU **category IV**, and can be used with group 1 or group 2 fluids.

Switch selection

To select the correct model according to the operating conditions and nature of the liquid to be controlled, please refer to the table below.
To select the switch mechanisms and switch housings, consult specification 7A.100.

Options and special features (2)

- AISI 316 stainless steel chamber or other special corrosion-resistant materials
- Attraction sleeve with anti-corrosion coating

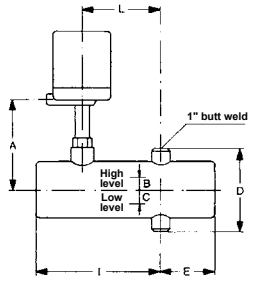
(2) Note: request confirmation of pressure limits and minimum specific gravity.

How to request or order

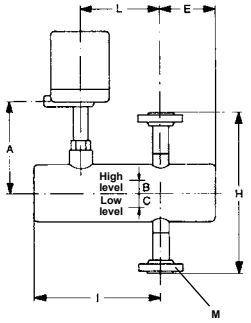
Each instrument is identified by an alphanumeric code describing the construction specifications in part only. This code is formed of three components, each of which defines part of the instrument: the first identifies the sensing unit model (chamber and float), the second identifies the type and quantity of switch mechanisms, and the third identifies the type of switch housing. It is therefore necessary to specify the material used for the chamber and internal elements, the flange type (for flanged device), and any other special requests.

Example: Mod. S6608 - 212 - 4 - S
- S — Options (connections, interface, etc.)
- 4 — Flameproof switch housing (see specification 7A.100)
- 212 — SPDT micro switch mechanism for high temperature (see specification 7A.100)
- S6608 — Sensing unit model

Specifications



Connections: standard



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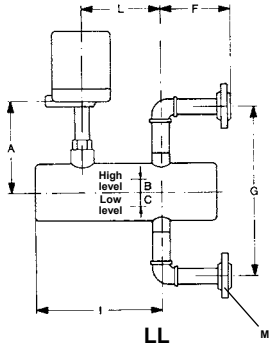

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Model	Minimum Specific Gravity (kg/dm³)		Maximum Pressure (bar) (1)		Switching level (mm)		Installation dimensions (mm)								
	Type 1, 2, 3 mechanism	Type 4 and 5 mechanism	40°C	400°C	B	C	A	D	E	F	G	H	I	L	M 1"
S6608	0.65	-	100	87	10	10	235	200	170	240	356	350	280	185	ANSI 600 RF

Notes: (1) The values shown above apply to standard devices, with S.W. or B.W. weld connections, in carbon steel construction for use with non-corrosive liquids or with water and steam for boiler applications. For bodies with flanged connections (standard 1" ANSI 600 RF) the maximum pressure is determined by the rating for the flanges.

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