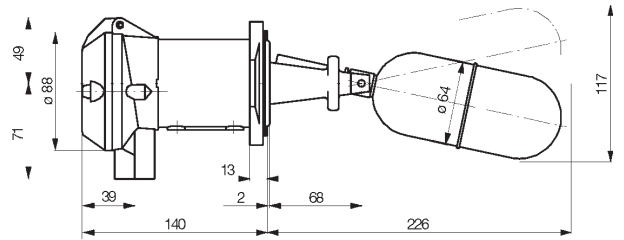
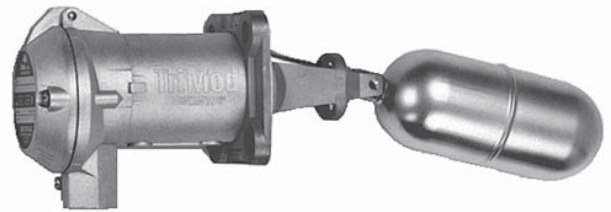
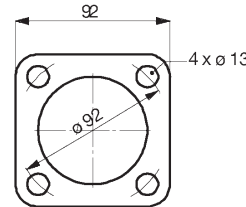


### Side mounted switches for high or low alarm duties

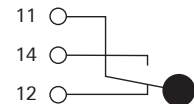
Nominal pressure	PN 25 max. 25 bar to 300°C
Operating temperature	0 to 300°C
Ambient temperature	0 to 70°C
Density of liquid	min. 0.70 kg/dm <sup>3</sup>
Operating differential	fixed 12 mm
Rod extensions	only with type A0104
Wet side material	stainless steel (316 equiv.)
Flange material	stainless steel (316 equiv.)
Switch housing material	seawater resistant die cast aluminium
Flange dimensions	92 x 92 mm P.C.D. 92 mm
Counterflange	see overleaf
Switch element	microswitch change-over (SPDT) with silver contacts
Switch rating	5A/250 VAC 5A/30 VDC
Cable gland	M20 x 1.5
Enclosure	IP65
Weight	approx. 1.8 kg
Approvals	ABS, BV, DNV, GL, LRS, PRS, RINA, MRS



#### Flange dimension



#### Connection diagram



#### Rod extensions for type A 01 04

Depending on the tank design the level switch type A0104 can be equipped with rod extension Type G1 or G2 for side mounted switches.

For top mounting type G3 is used.

Since rod extensions add-on weight to the float, the minimum value for the density will change according to the following tables:

Type: G1	Type: G2	Type: G3
A max.: 1000	A + B max.: 1000	A + B max.: 1000
	A/B: ≤ 4	A/B: ≤ 4
	A min.: 100	A min.: 50
	B min.: 100	B min.: 50

#### Minimum density for the float module 04G1

Rod length A (mm)	100	200	300	400	500	600	700	800	900	1000
Min. density (kg/dm <sup>3</sup> )	0.66	0.66	0.67	0.69	0.71	0.74	0.76	0.79	0.81	0.84

#### Minimum density for the float module 04G2 in kg/dm<sup>3</sup>

A (mm) \ B (mm)	100	200	300	400	500	600	700	800
100	0.69	0.68	0.70	0.71	0.72	0.74	0.75	--
200	0.67	0.67	0.68	0.69	0.70	0.71	0.72	0.73
300	0.68	0.69	0.69	0.70	0.71	0.71	0.72	
400	0.70	0.70	0.71	0.71	0.72	0.73		
500	0.72	0.73	0.73	0.73	0.74			
600	0.74	0.75	0.75	0.75				
700	0.77	0.77	0.77					
800	0.79	0.80						
900	0.82							

#### Minimum density for the float module 04G3 in kg/dm<sup>3</sup>

A (mm) \ B (mm)	50 to 500	600	700	800
50	0.71	--	--	--
100	0.69	--	--	--
200	0.68	0.68	0.68	0.68
300	0.69	0.69	0.69	
400	0.71	0.71		
500	0.73			
600	0.75			
700	0.77			
800	0.80			
900	0.82			
950	0.83			

### Options

- Dual SPDT microswitches
- Microswitches with gold plated contacts
- Self checking proximity switches acc. to NAMUR
- Enclosure IP67, or IP68 for submersible applications
- 5A/380 VAC 0,3A/440 VDC (Type AE26)
- Flameproof switches, BASEEFA-, PTB-, SAA- and SEV-approved
- Pneumatic switches ON/OFF or controllers with 0.2 to 1 bar proportional output
- High and low temperature versions
- Cable gland M24 x 1,5
- Cable entry with 3/4" NPT internal thread

- Switchhousing: -chromated  
-stainless steel (316 equiv.)  
-epoxy painted
- Flangemodules: - acc. to DIN PN 16 to PN 315  
- acc. to ANSI cl. 150 to cl. 2500  
- acc. to BS10 table E to T  
- acc. to JIS PN 5 to PN 63
- Floatmodules: -top mounting  
-interface control  
-with protective bellows  
-min. density 0.35 kg/dm<sup>3</sup>
- Versions acc. to NACE and in Hastelloy C or MONEL

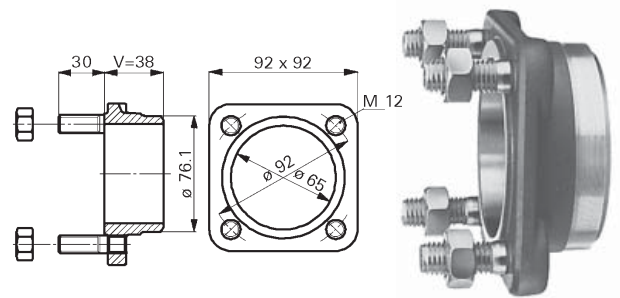
### Counterflanges

The simplest method of installing the Trimod Besta level switches with the square flange (standard range) is to use the Besta standard weld-on counterflanges.

These are available in two different nozzle and/or stud lengths in carbon steel (C22.8) or in stainless steel 1.4401 (316 equiv.).

Temperature range: Material C22.8: -10° C bis +300° C  
Material 1.4401: -196° C bis +400° C

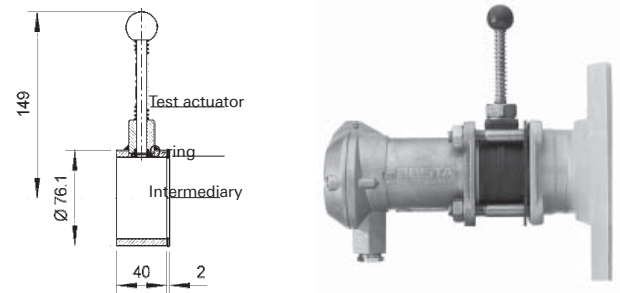
Type	Specification	Flange-material	Stud-material
2829.1	Counterflange	C22.8	5.8
2831.3	Counterflange	1.4401	A2
2829.1V80	Extended Counterflange V = 80 mm	C22.8	5.8
2831.3V80	Extended Counterflange V = 80 mm	1.4401	A2



### Test actuator

The test actuator allows aperiodic, on-line manual function check of the level switch.

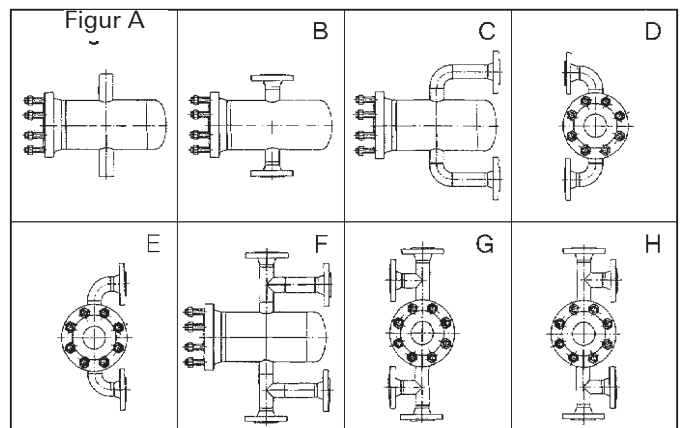
Type	Specification	Material	Temperatur
2382	Test actuator	CrNiMo FPM	0 - +150°C
2383	Test actuator	CrNiMo EPDM	-30 - +150°C



### Float chambers

Wherever it is not possible or desirable to install float switches directly to the vessel, horizontal Trimod Besta level switches can be mounted externally in a float chamber. This type of installation allows functional checks and servicing to be carried out without interrupting operation, provided that isolation and drain valves are included in the process connections.

Materials: carbon steel, high and low temp. carbon steel, stainless steel. Manufactured according to RL97/23/EG : PED/ DGR Procedure Qualification Record: SVTI505, AD-HP2/1, ASME CodeSec. IX.



### Certificates

- Material certificates acc. to EN 10204-2.2 and EN10204-3.1
- Test record: hydraulic pressure test and functional tests
- Test records of material tests: x-ray, ultrasonic, Charpy, hardness etc.

### Quality Assurance

- Besta AG is certified according to ISO 9001.

With reservation of technical modifications

LTDS01E / 2007.01

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