

MARKET INFORMATION
SHIPBUILDING



Trimod Besta

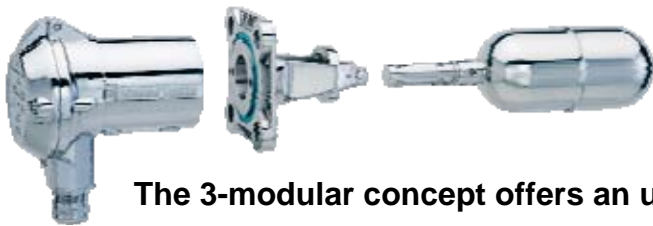
Solutions for Shipbuilding and
the Marine Industry



Since 1967 the Shipbuilding industry trusts the unique Trimod Besta level switches. Today, hundreds of thousands are installed on cargo vessels, tankers, cruise ships, fregattes, nuclear submarines, catamarans, crane- and container ships.



Electric and pneumatic level switches are available to the marine industry, in light, heavy duty and explosion proof versions.



The 3-modular concept offers an unlimited variety of switches

Modules

Standard range

Rod extensions

Switch modules

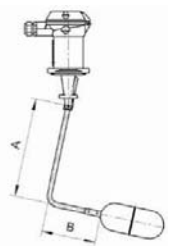
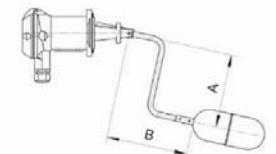
- Electric switch elements
- Electronic switch elements
- Pneumatic switch elements
- Explosion proof modules
- Housing in IP65, IP67 and IP68
- Aluminium and stainless steel housings

Flange modules

- Square flange, 92 x 92 mm
- Flanges to JIS, ANSI, DIN, BS
- Stainless steel, Hastelloy C and plastic
- Pressures up to ANSI cl. 2500, DIN 320

Float modules

- For low density liquids
- Stainless steel, Hastelloy C and plastic
- For high pressure applications
- For interface applications
- Horizontal and vertical use



4 typical Trimod Besta switches - robust, reliable and extremely user friendly

Type



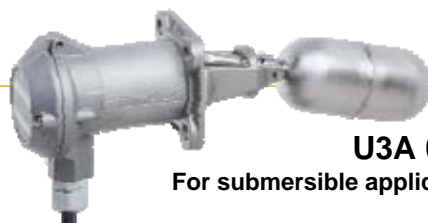
A 01 04 / A 01 041
For general purpose



A 01 051
For contaminated medias

Nominal pressure	PN 25	PN 25
Minimum density of liquid	0.7 kg/dm ³	0.7 kg/dm ³
Flange	92 x 92 mm, PCD 92 mm	92 x 92 mm, PCD 92 mm
Wetside material	Stainless steel (CrNiMo)	Stainless steel (CrNiMo)
Flange material	Stainless steel (1.4408)	Stainless steel (1.4408)
Housing material	Sea water resistant aluminium	Sea water resistant aluminium
Enclosure	IP 65	IP 65
Switch rating	250VAC, 5A/30VDC, 5A	250VAC, 5A/30VDC, 5A
Ambient temperature	0 to +70°C	0 to +70°C
Operating temperature	0 to +300°C	0 to +120°C
Bellow material		Perbunan/Buna
Switch element	Microswitch SPDT silver contacts	Microswitch SPDT silver contacts
Switch rating	250 VAC, 5 A / 30 VDC, 5 A	250 VAC, 5 A / 30 VDC, 5 A
Switching distance	12 mm, fixed	12 mm, fixed
Option of rod extension	Yes, with type A 01 04	Yes

Type



U3A 01 04
For submersible applications



P 01 04
For pneumatic control applications

Nominal pressure	PN 25	PN 25
Minimum density of liquid	0.7 kg/dm ³	0.7 kg/dm ³
Flange	92 x 92 mm, PCD 92 mm	92 x 92 mm, PCD 92 mm
Wetside material	Stainless steel (CrNiMo)	Stainless steel (CrNiMo)
Flange material	Stainless steel (1.4408)	Stainless steel (1.4408)
Housing material	Sea water resistant aluminium	Sea water resistant aluminium
Enclosure	IP 68	
Switch rating	250 VAC, 5 A / 30 VDC, 5 A	max. 1 MPa
Ambient temperature	-30 to 80°C	1 to +80°C
Operating temperature	-30 to 80°C	1 to +250°C
Switch element	Microswitch SPDT silver contact	3/2 way valve
Switch rating	250 VAC, 5 A / 30 VDC, 5 A	Max. 10 bar
Switching distance	12 mm, fixed	12 mm, fixed
Option of rod extension	Yes	Yes

Accessories

Counterflange



The simplest method of installing any Trimod Besta level switch of the Standard Range is to use our standard weld-on counterflanges, available in carbon steel (C22.8) and in stainless steel (1.4401). The 4 types shown on the right are also available with V = 80 mm instead of V = 38 mm.

Type	Specification	Material
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2829.1	Counterflange	C22.8
2831.3		1.4401



2829.2	Counterflange to	C22.8
2831.4	accommodate a	1.4401
	test actuator	



Test actuator

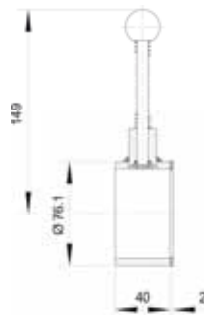


Test actuators can be used with all horizontal mounted level switches of the Standard Range and allow a periodic manual function check of the level switch in operating status. The following functions can be tested:

- Function of the switching element (microswitch, proximity switch, pneumatic valve).
- Movement of the float

Type	Specification	Material
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2382	Test actuator	CrNiMo (Gasket: FPM)
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Typical applications

Fresh & waste water tanks	Separation layer detection
Fuel oil tanks	Balance tanks
Bilge alarm	Inert gas production
Lubrication tanks	LPG tanks



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