

# TriMod BESTA Level Switches Horizontal Line



# Table of contents

<b>World-wide in use</b>	Introduction	3
<b>Modular flexibility</b>	Switch — flange — and float modules	4
<b>Numerous combinations</b>	Mounting examples	5
<b>Various TriMod BESTA applications</b>	Application examples	6
<b>Typical switch combinations to handle most applications</b>	Standard Range electric	7
	Standard Range pneumatic	11
	Industrial Range	13
	Plastic Range	15
<b>Specifying your own particular TriMod BESTA level switch...</b>	Switch modules electric	17
	Switch modules explosion-proof	20
	Switch modules pneumatic	22
	Flange modules standard	23
	Flange modules industrial	24
	Flange modules plastic	26
	Float modules	27
	Float rod extensions	31
<b>...or how we can do it for you</b>	Specification sheet	32
<b>Accessories which save time, labour and expense</b>	Counterflanges	33
	Test actuators	34
	Float chambers	35
<b>TriMod BESTA in hazardous areas</b>	Explosion-proof level switches	37
<b>Electrical switch ratings to assist type selection</b>	Micro and proximity switch specifications	38
<b>World-wide approved</b>	Approvals	39
<b>Quality for your safety</b>	Certificates and test reports	40



# TriMod BESTA Level Switches are used world-wide in many industries



BESTA LTD has many years experience in the [Offshore Industry](#). Some important features of the TriMod BESTA product range for Offshore applications include; NACE compliance, stainless steel explosion-proof housings and custom-made float chamber design.



TriMod BESTA level switches are specified by the worlds major shipyards and owners. Much of BESTA's product development and design has evolved from experience within the [Marine Industry](#) such as fully submersible housings, captive terminal components and IP 67 ratings for deck mounting switches. Certification includes LRS, DNV, ABS, GL, BV, RINA, MRS-Register and many national approvals.

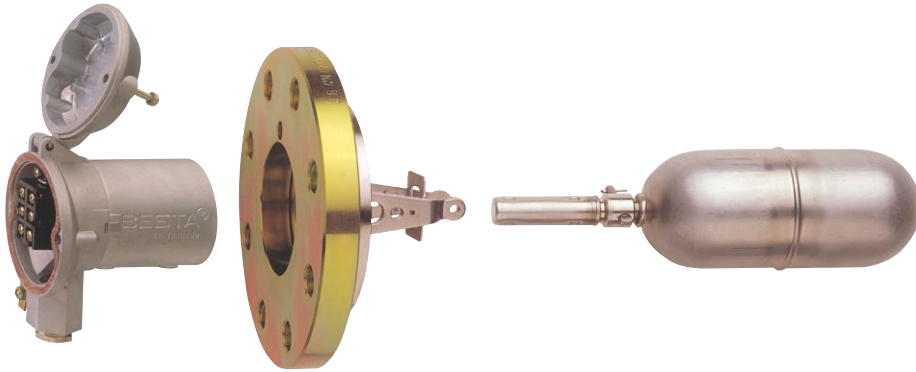


In the [Chemical- and Petrochemical Industry](#) TriMod BESTA's modular design can solve many special application problems which may require high pressure components, self checking switch elements, corrosion resistant wet-side parts, including plastics, intrinsically safe circuits and exotic materials for chamber fabrication.



Extreme reliability is vital in some of the applications in [Power Plants](#). Shock and vibration resistant TriMod BESTA level switches are used for critical turbine trip duties on HP/LP Heater Plants, at temperatures and pressures up to 400°C/ 315 bar (cl. 2500).

# The unique modular level switch system



## What you need...

BESTA's modular design is a unique deviation from conventional level switch construction. This modular system allows individual and numerous combinations of float, flange and switch modules to suit your specific requirements.

Switch modules are available with electric, electronic or pneumatic output signals.

Switch housings are standard to IP 65 (Ingress Protection class), but depending on environmental conditions IP 67 or IP 68 must be chosen.

For hazardous areas, hermetically sealed microswitches, flameproof housings or pneumatic switch modules can be used.



## ...is quickly installed...

TriMod BESTA flange modules are available acc. to various standards. The most commonly used square flange and some special sizes are covered by the Standard Range. The Industrial and Plastic Flange Ranges are manufactured acc. to international standards such as DIN, ANSI, BS or JIS.

The benefit of the hinged cover, the captive screws and the selflifting terminal clamps is an easy installation. For convenience of wiring, the connection diagram is shown on the inside of the hinged lid.

The interchangeability of the single modules allows high flexibility regarding maintenance or changing application requirements. The glandless design permits on-line maintenance of all dry side components whilst the wet side is subjected to full process conditions.



## ...and lasts forever.

So far, hundreds of thousands of TriMod BESTA level switches have been sold worldwide.

The float movement caused by the raise and fall of the liquid level is transmitted by two repelling, permanent AlNiCo magnets.

The sturdy design and the double snap effect as a result of the magnetic repulsion and the snap action of the microswitch guarantee a virtually unlimited lifetime.

The float modules, like all wetted parts, are made of stainless steel, Hastelloy C or high quality plastics. A wide range of floats is available to suit various densities and pressure ranges for almost any process condition.

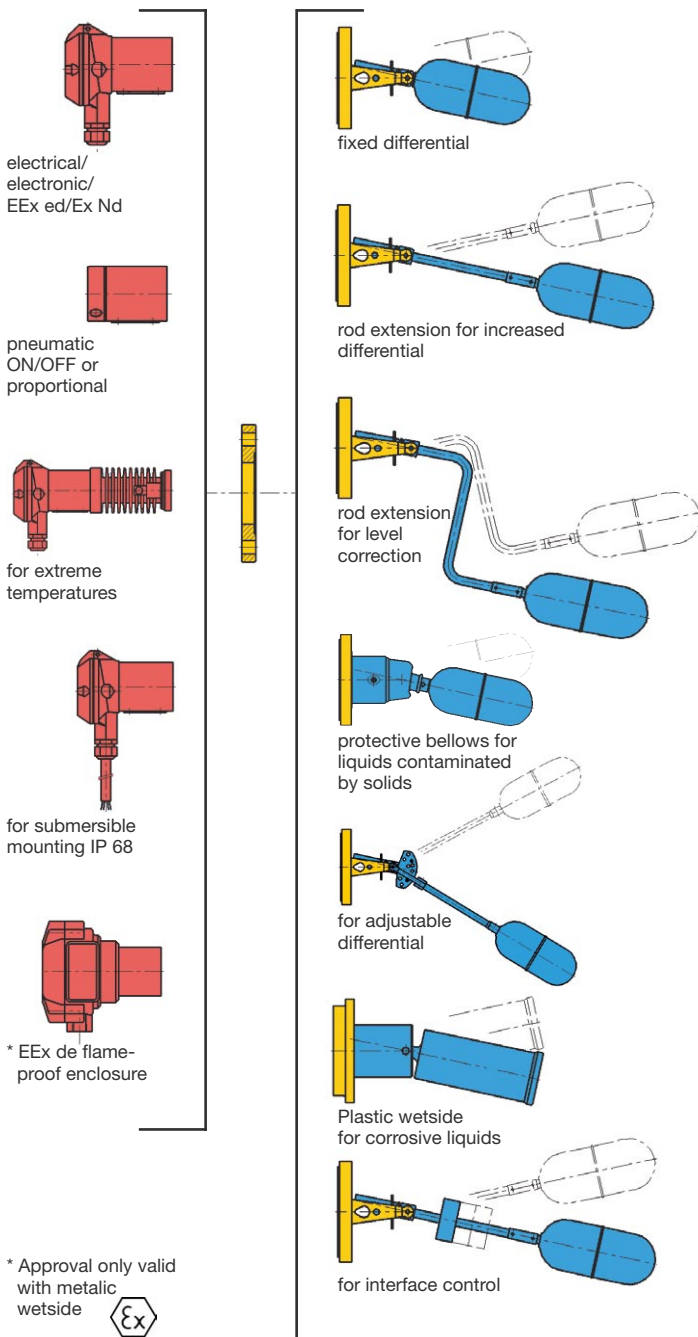


# With modular compatibility all options are open

## Side mounted

Side mounted level switches are available with fixed or adjustable differential between 12 to 557 mm.

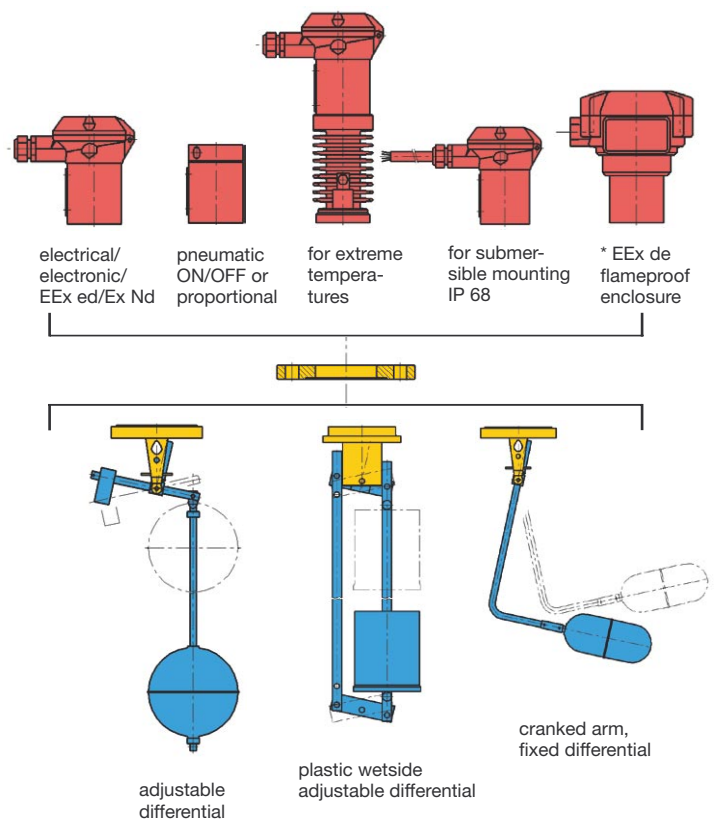
All switch modules may also be used in the vertical position.



## Top mounted

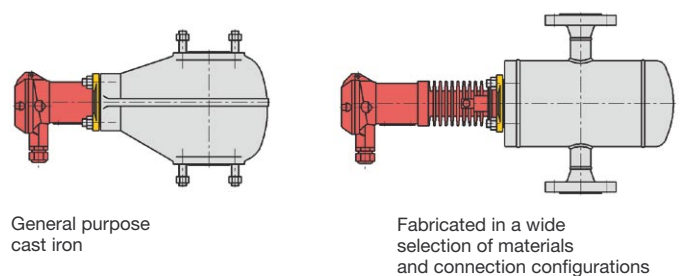
Top vertical mounting in open sumps on a support bracket or in the case of sealed vessels on the manhole cover or an intermediate flange.

Various rod lengths and cranked arm combinations are available which give either a fixed or adjustable differential from 12 to 2840 mm. For pump control or alarm.



## External

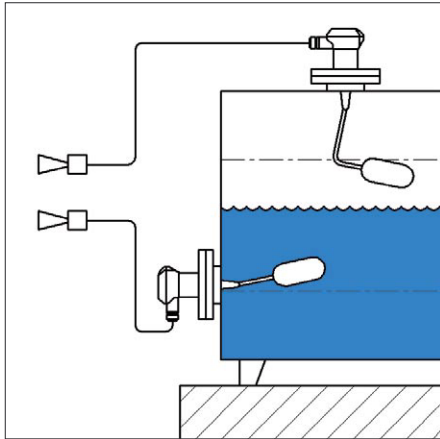
A range of chambers for applications where space in the vessel is restricted or process isolation is required for maintenance or testing.



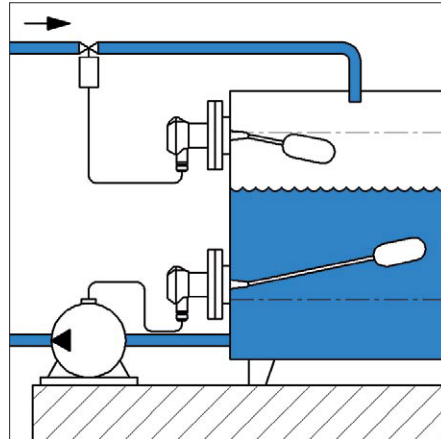


# Application examples

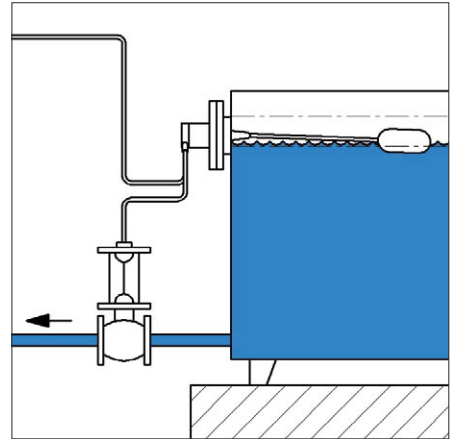
High/Low Alarms



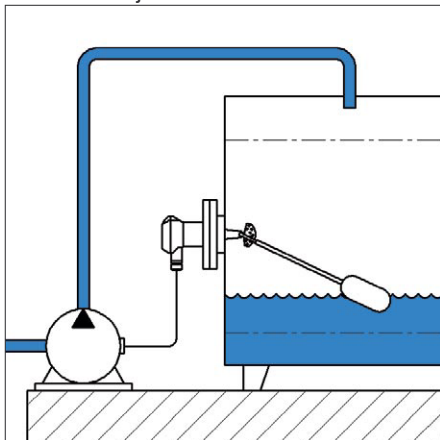
Pump Shutdown + High Alarm



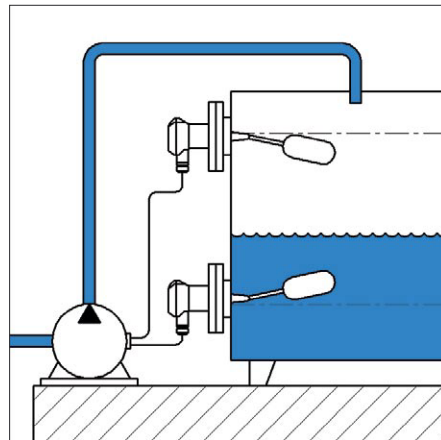
Pneumatic liquid level control



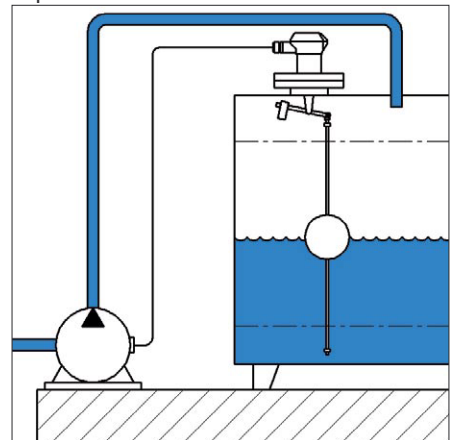
Control of pumps or valves:  
with one adjustable switch



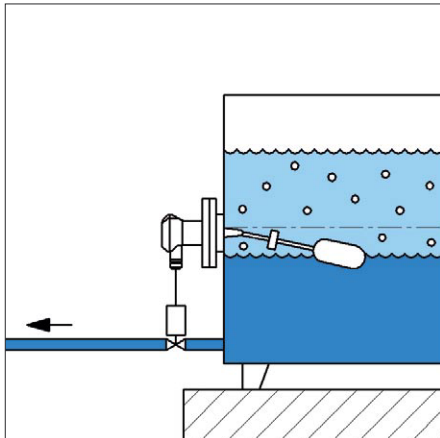
Control of pumps or valves:  
with two switches



Control of pumps or valves:  
top mounted



Interface control



External liquid level control

