

APPLICATIONS AND USE

FG controllers are employed in civil and industrial systems with level control on steam generator, boiler or pressurized reservoir is required.

They haven't to be used as safety accessories.

MANUFACTURING CHARACTERISTICS

The level controller consists of an heavy duty body, containing a floating sensing element which through a transmission road acts the electric circuit.

The controller can be equipped with a sight glass for visualisation of the level.

The product is contained in a sturdy cast alluminium case.



TECHNICAL CHARACTERISTICS

Supply 24 V~
 Float stainless steel Diam. 95mm.
 Connections flanged - see dimensions
 Conduit opening compression fittings 1/2" gas
 Ambient temperature
 working T50
 storage -25T65
 Protection degree IP 55 (DIN 40050)

Two position control (200 line)						
Part number	Max working pressure Kpa	Max working temperature °C	Level sight glass	Proportional band	Electrical rating	Body
FG601	1600	120*	no	15÷60	10(1) A - 24 V~ resistive load	cast-iron
FG603	3000	230	no			cast-steel
FG604	3000	230	yes			cast-steel

Proportional control (300 line)						
Part number	Max working pressure Kpa	Max working temperature °C	Level sight glass	Proportional band	Electrical rating	Body
FG651	1600	120*	no	60	165 Ohm potentiometer	cast-iron
FG653	3000	230	no			cast-steel
FG654	3000	230	yes			cast-steel

* For working pressure lower than 13 Kg./cm²=200 °C

INSTALLATION AND MOUNTING

The controller must be installed on the boiler, or on the tank, where checking the level is necessary, in a zone where fluid fluctuation, steam or dripping water are minimized.

The reference line marked on the controller body must coincide with the medium water line level desired.

The controller must be mounted in vertical position as showed in the table.

The two connecting pipes must have the minimum inside diameter not lower than controller connections.

Install always two interception valves in order to allow the maintenance without excluding from the service the boiler.

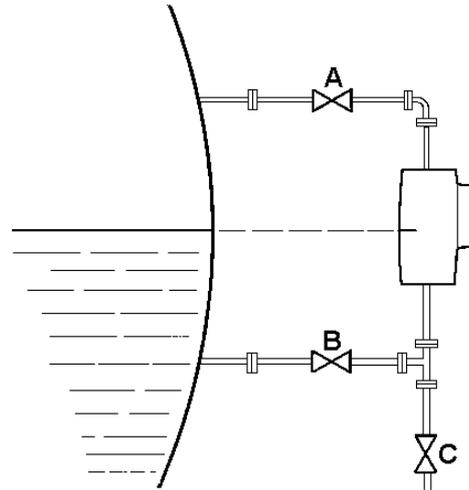
Place also a blow-off valve to avoid the accumulation of sediment or deposits, which could prejudice the normal working of controller.

It's advisable, periodically, to carry on the blow-off action as follows:

- disconnect the controller;
- intercept the controller lower part closing B valve;
- open the C blow-off valve.

After carrying on these actions, close C valve and open B valve.

All controllers are precision calibrated at the factory and normally will not require any calibration.



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- A** upper interception valve
- B** lower interception valve
- C** blow-off valve

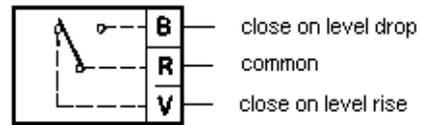
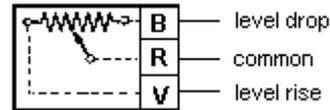
WIRING CONNECTIONS

Make all connections in accordance with the job wiring diagram and in compliance with the national and local electrical codes.

For connections use 1 mm² minimum section cables.

For terminal board connections it's necessary remove the cover and insert the cables into the conduit opening.

Once carried on the connections, replace the cover and screw tight to keep the protection degree.



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- Connection with actuators MVL3.-MVB3.
- B controller with M actuator
- R controller with Y actuator
- V controller with V+ actuator
- To invert rotation direction change B with V.

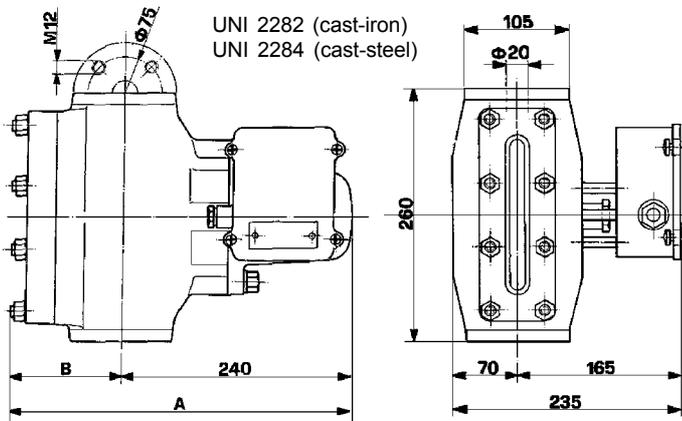
STARTING

The differential (if adjustable), in the two position controller, can be set by moving the two levers placed inside the leverage box.

To raise the differential move them towards the external edge of the box.

The controllers are normally furnished with the levers set at the minimum differential value.

DIMENSIONS (mm)



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The performances stated on this sheet can be modified without any prior notice due to design improvements

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07/07

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DBL060E

CONTROLLI

ISO 9000

Sistemi di regolazione automatica per:
condizionamento/riscaldamento/processo termico industriale.