FS-2533

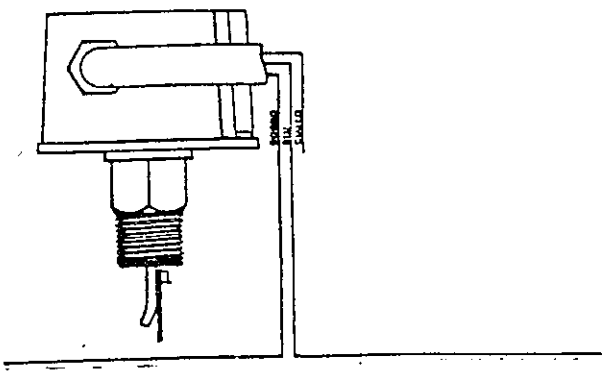
SINCERT

ITALTHERMO s.r.l.

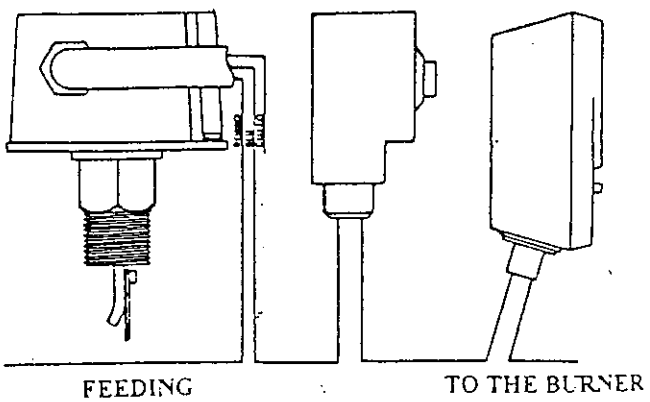
ELECTRICAL DATA

- Current rating of the contacts: 16A 250V
- unipolar-commutator-switch
- red-blue closes when flow pressure increases
- red-yellow closes when flow pressure decreases

CONTROL THROUGH THE BURNER' S LINE

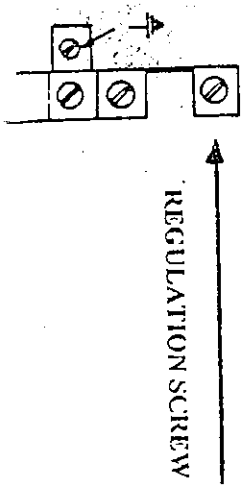


CONTROL THROUGH THE LINE OF THE FLOWSWITCHES



TECHNICAL FEATURES

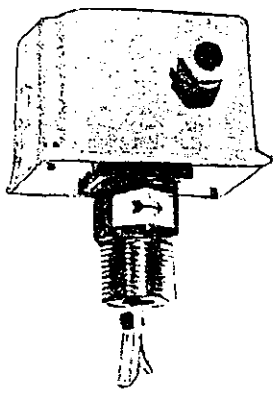
- Connection Ø 1"
- dust-ticht micro-switch
- protection IP 64
- nominal pressure 10 KG/Cm^2
- maximum fluid temperature + 120°C
- maximum room temperature +80°C
- the flowswitch is set ex factory at the minimum of sensitivity
- the adjustments of the setting are made by means of the regulating screw as indicated here at the left side



SIZE OF THE PIPING	MINIMUM SETTING FLOW IN M^3/H		MAXIMUM SETTING FLOW IN M^3/H	
	OPENS	CLOSES	OPENS	CLOSES
Ø 1" with paddle mm. 34	0,55	0.95	1.95	2.05
Ø 1 1/4 with paddle mm. 57	0.70	1.20	2.70	2.90
Ø 1 1/2 with paddle mm. 57	1.00	1.60	3.60	3.90
Ø 2" with paddle mm. 57	2.10	3.00	5.60	6.00
Ø 2 1/2 with paddle mm. 88	2.50	3.80	6.30	6.80
Ø 3" with paddle mm. 88	4.10	6.00	10.50	11.20
Ø 4" with paddle mm. 88	11.1	14.40	27.40	28.70
Ø 4" with paddle mm. 167	5.80	7.70	17.00	18.10
Ø 5" with paddle mm. 88	22.50	28.00	52.90	55.20
Ø 5" with paddle mm. 167	8,90	12.50	24.80	26.40
Ø 6" with paddle mm. 88	35.40	42.60	81.20	84.60
Ø 6" with paddle mm. 167	11.80	16.30	30.10	32.20
Ø 8" with paddle mm. 88	72.00	84.50	165.10	171.90
Ø 8" with paddle mm. 167	38.00	45.90	90.20	92.60

SINCERT

ITALTHERMO s.r.l.



FLOWSWITCH ART. 2533.04

Safety-flow-control-device, against liquiflow interruptions.
Suitable for non-corrosive liquids such as : water, oil etc.

INSTRUCTIONS FOR THE INSTALLATION.

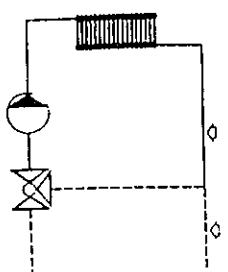
- It can be employed indifferently for pipings with diameters from 1" up to 8", by using the right-sized paddle for each single diameter as herebelow indicated
- for pipe of Ø 1" lenght of the paddle : 34 mm.
- for pipe of Ø 1.1/4", 1.1/2" , -2" legnht of the paddle : 57 mm.
- for pipe of Ø 2.1/2" - 3" lenght of the paddle : 88 mm.
- for pipe of Ø 4" to 8" lenght of the paddle : 167 mm.
- pay attention to the direction of the liquid-flow, as indicated by the red-arrow.
- to balance for the paddle-weight : the flowswitch must be positioned vertically
- on the front and rear of the flowswitch there must be left a rectilinear pipe section equivalent to at least five diameters of the pipe itself
- caution : the paddle should be completely and well immersed in the pipe and must not rub against the inner-walls of the pipe.

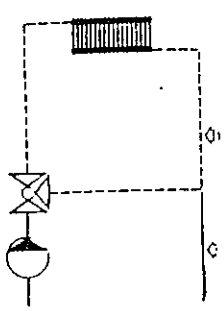
-It is advisable to fit the flowswitch on the return tube of the heating water near the boiler, thus the lower temperature present allows a longer life for the flowswitch. because of a minor thermic stress. It is however of paramount importance, at the installation stage, to be very careful, since the presence of a three-or four - way-thermoregulating valve may cause an erroneous intervention of the flowswitch in case of a variable, incostanti water-flow.

This inconvenience occurs specially under conditions of maximum work of the whole plant, during the less cold season and it causes the burner to stop.

The reactivation of the combustion can be made only by a subsequent moving of the valve, this way a continuous pendular functioning of the valve along with the whole hydraulic system will result.

Here at the left-side we have sketched some of the most popular circuit-patterns that at the same time do require a particular care from the fitters during the installations phase.





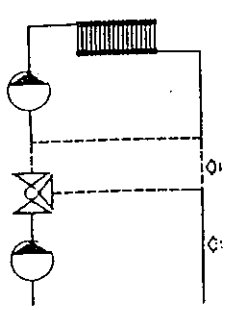


Fig. 1 - Mono-circuit-layout with a three-way-valve and mixing function.
Fig. 2 - Mono-circuit-layout with a three-way-valve with deviation function
Fig, 3 - Mono-circuit-layout with a three-way-valve and functions of injection
Fig. 4 - Multi-circuit-layout with a three-way-valve with mixing functions
In this situation the operation, even partial, of the sections independently feeded, may cause the blocking of the relevant burner when the flowswitch is fitted on the main-return-pipe. It is therefore highly advisable to set up more flowswitches on every independent circuit, connecting them electrically in series.
Fig. 5 - Multi-circuit-layout with a four-way-valve.
In all sketches we have marked, for clarity's sake, with a continuous line.