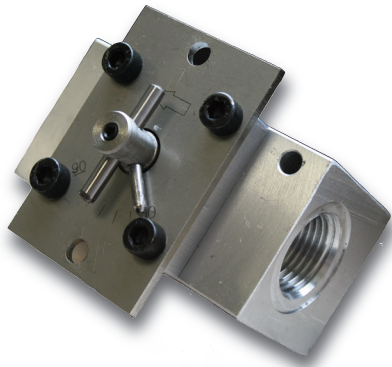


Series ITRE



CHARACTERISTICS

Applications:

- For electronic cam.
- Low starting torque less than 2 Nm.
- Possibility to modify the open area of the application changing the disk.
- Linear relation capacity-pressure.
- Possibility to link together one actuator with oil. regulator and butterfly gas valve (for mixed burner).

FUNCTION

The regulator can be used in two different configurations: SPILLBACK and METERING. Inside the regulator is installed a disk-plate with progressive opening, the rotation of the regulator shaft varies the quantity of oil which passes through it.

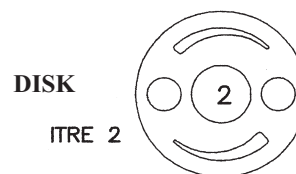
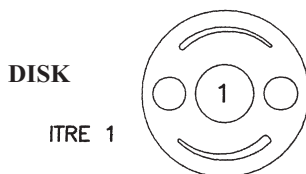
The internal disk-plate is divided in two different calibrated open areas which allow to obtain the desired capacity range. Opening the regulator and rotating the disk plate of 180° it is possible to change the requested capacity range.

The regulator is provided in the following configuration: ITRE 1 with disk plate 1 and open area 1 or ITRE 2 with disk 2 and open area 3. The disk-plates are interchangeable and can be rotated or substituted even after the installation.

On request: it is possible to manufacture special disks with customized open areas.

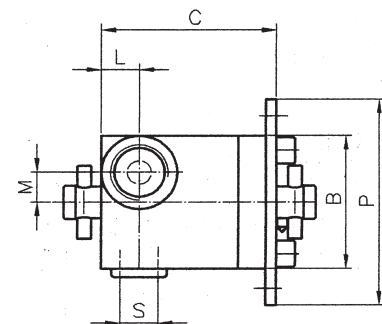
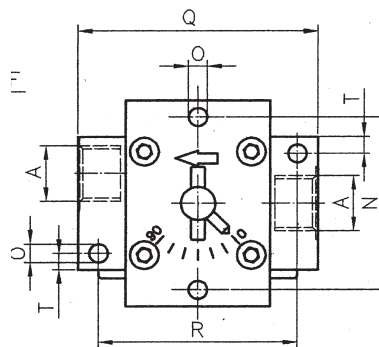
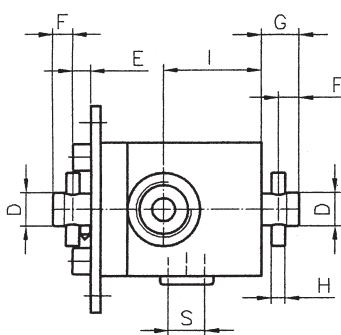
(1) open area 11,2 mm²

(3) open area 22 mm²



(2) open area 19 mm²

(4) open area 26,5 mm²



TYPE	DIMENSIONS																	
	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T
ITRE1	G3/8	40	50.5	10	6	6	11	4	29	11	9	52	5.5	62	70	58	G1/8	5
ITRE2	G1/2	40	50.5	10	6	6	11	4	25	15	5	52	5.5	62	76	58	G1/8	5

SPILLBACK version

Once selected the nozzle capacity and the minimum pressure in the return line, with the regulator in “0” position (completely open), verify on the nozzle capacity diagram the capacity on the return line at the selected pressure. On the disk plate diagrams select the most suitable one and the desired open area.

EXAMPLE: With a nozzle 500 kg/h, return line pressure 5bar, if there are not diagrams available, you can consider that with the indicated pressure the capacity in the return line is approximately 1,6 times the max nominal capacity of the nozzle (1,6 x 500= 800 kg/h). Using the regulator diagrams the requested solution is “ITRE 1 with open area 1”. In case is requested a lower pressure on the return line is possible to rotate the disk-plate on the open area 2 obtaining approximately 3 bar.

How to install the actuator on the regulator

Fix the actuator with a joint and plate holder using the holds on the plate. The holes on the body can be used to block the regulator on a plane. On request the graduated upper plate can have different dimensions (specific for the customer).

METERING version

In a steam air pulverization burner the maximum working pressure is approximately 6 bar. The pressure in the line must be 2-3 bar higher of the working pressure (approximately 9 bar). Once selected the requested pressure choose from the diagrams the curves at 6 bar suitable for the application. Please note that on the METERING version the maximum capacity on the nozzle is obtained when with the index in “0” position (completely open).

EXAMPLE: maximum capacity 800 kg/h, looking to the curves at 6 the result obtained is ITRE 1 with open area 1, approximately 870 kg/h. If it is requested a lower max capacity it will be necessary to work with a partially closed regulator.

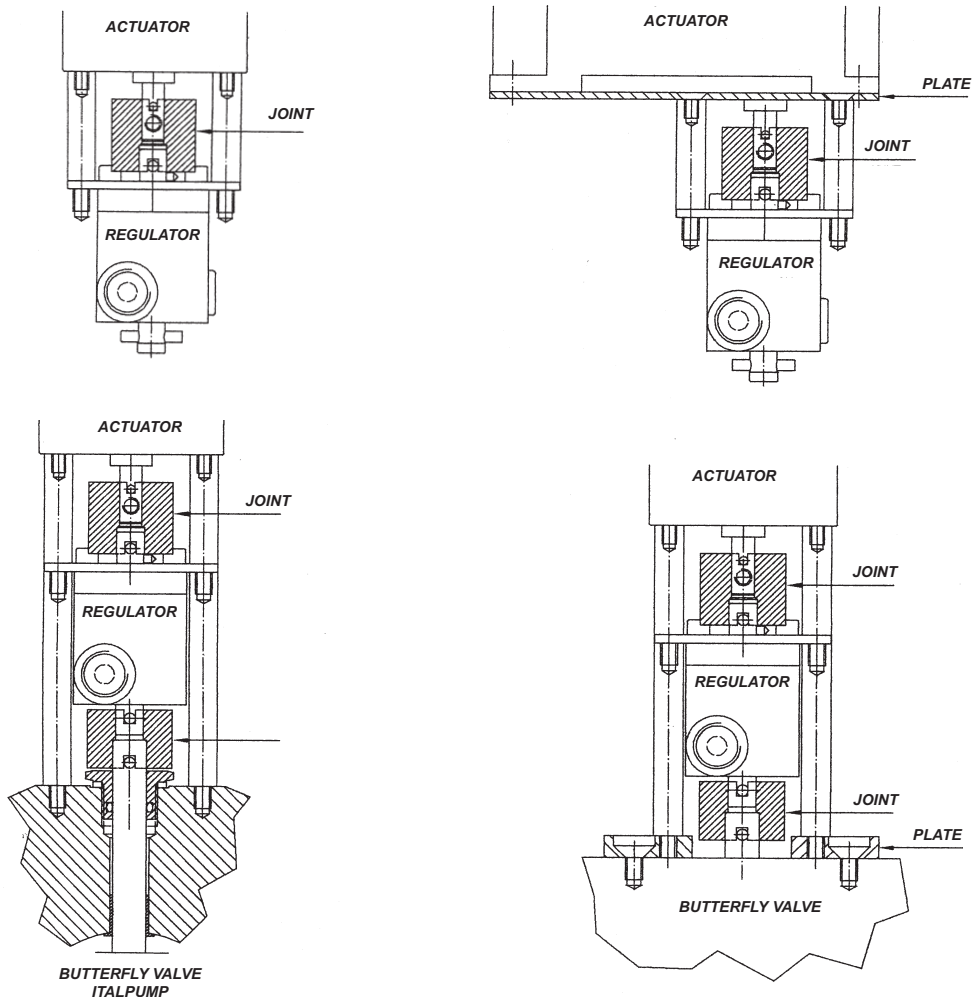
How to fix the regulator on the butterfly gas valve

If the holes of the butterfly do not match with the holes of the regulators it will be necessary to put a plate in the middle and fix it with a joint and a plate holder.

IMPORTANT:

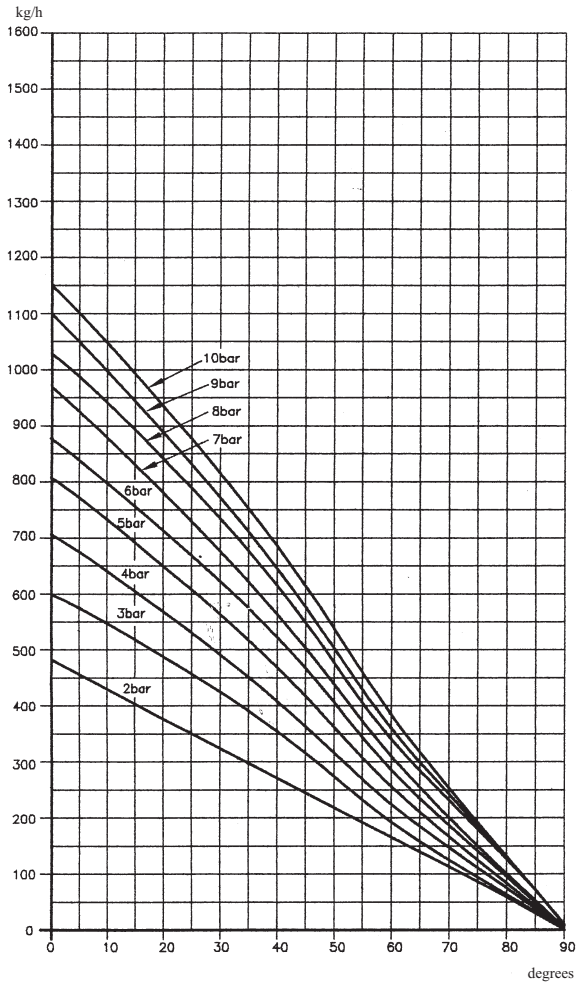
ITALPUMP manufactures butterfly gas valve too and on request can supply the regulator directly mounted on the butterfly gas valve (please specify the size of the butterfly

ACTUATOR APPLICATIONS

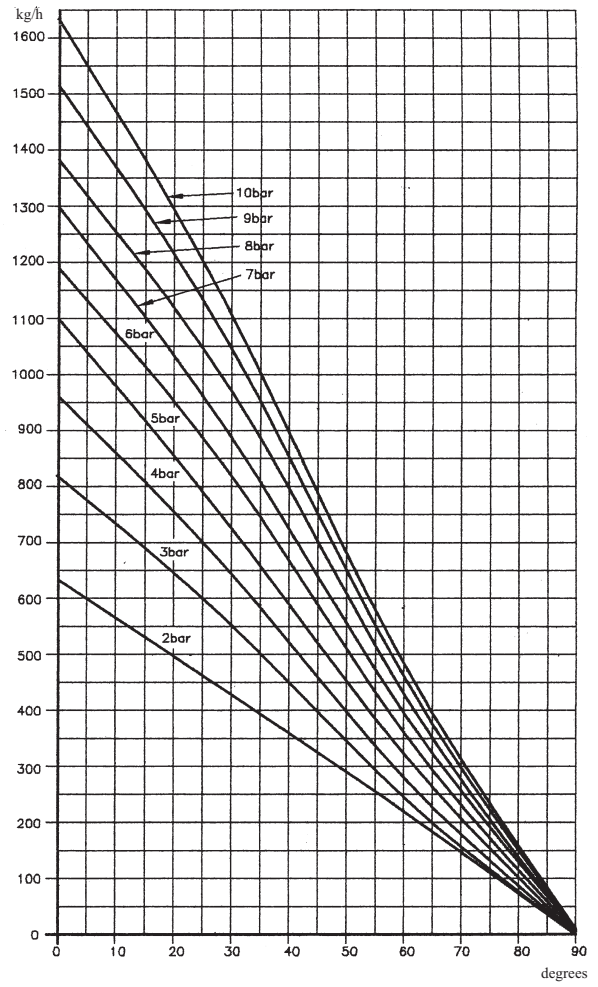


OPENING PRESSURE DIAGRAM

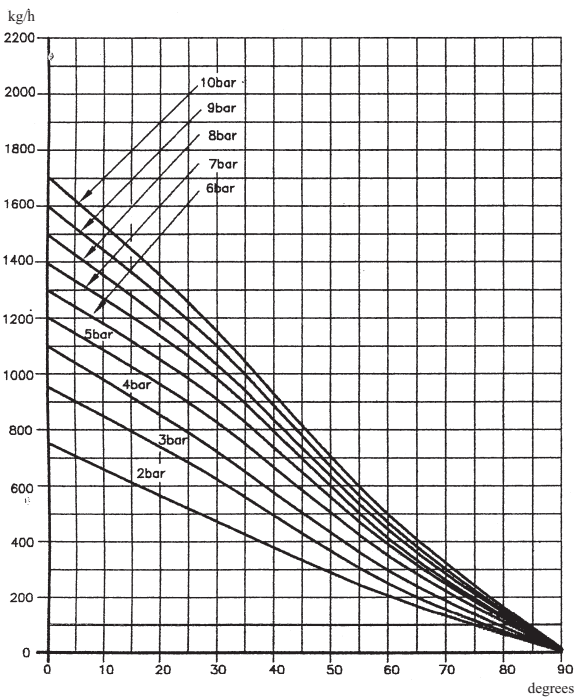
DISK 1 (1)



DISK 1 (2)



DISK 2 (3)



DISK 2 (4)

