

PRESSURE AND FLOW REGULATING VALVE



Series ITRP



CHARACTERISTICS

Applications:

- Light and heavy oil
- Oil burners with spill-back nozzles.
- Adjustment 5-25 bar.
- Capacity up to 2500 l/h.

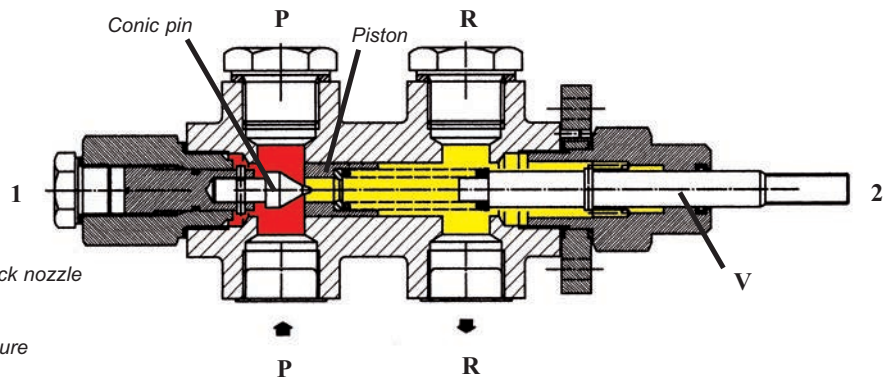
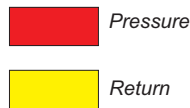
ITRP valve are designed to control pressure and flow on a modulating oil burner. The oil pressure varies proportionally to plunger movement.

FUNCTION

ITRP valve works between two different pressure values. The minimum pressure value is set by the minimum output setting pressure screw under the plug 1; it is suggested a value around 6 bar because this is the minimum rate to have an acceptable pulverization. The maximum pressure value is set by the plunger stroke "V" and the modulation is obtained with the movement of the piston in-out.

The valve also control the flow in the following way: the higher pressure in the valve has, as consequences, the less flow through it and also the lower pressure in the valve is, the higher flow through it.

On the other side in the nozzle return line the higher pressure has like consequence the more oil pulverized in the nozzle.

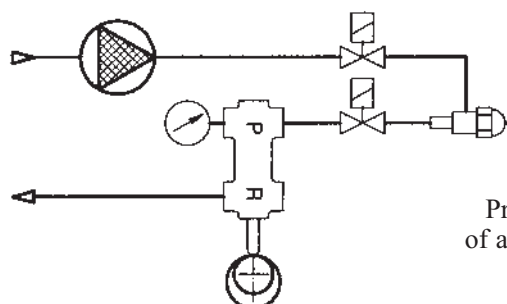


Legend:

- P* = Return pressure from spill-back nozzle
- R* = Return to tank
- V* = Plunger
- 1* = Minimum output setting pressure
- 2* = Modulation: 8-9 stroke

INSTALLATION NOTES

Spill-back nozzle



Pressure regulation on return line of a modulating oil burner

TECHNICAL DATA

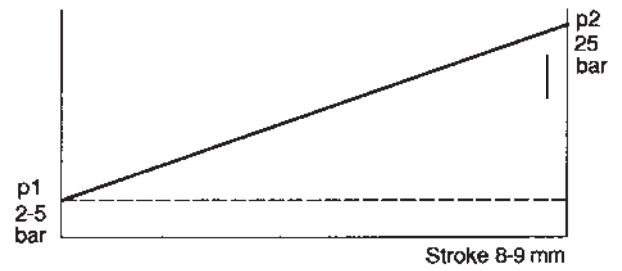
ITRP 3/8"

Viscosity range	2 - 800 cSt
Pressure range	5 - 25 bar
Weight	1,5 kg
Max oil temperature	150°C
Max flow rate	1000 l/h
Factory settings	min. pressure

ITRP 3/4"

Viscosity range	2 - 800 cSt
Pressure range	5 - 25 bar
Weight	2,3 kg
Max oil temperature	150°C
Max flow rate	2500 l/h
Factory settings	min. pressure

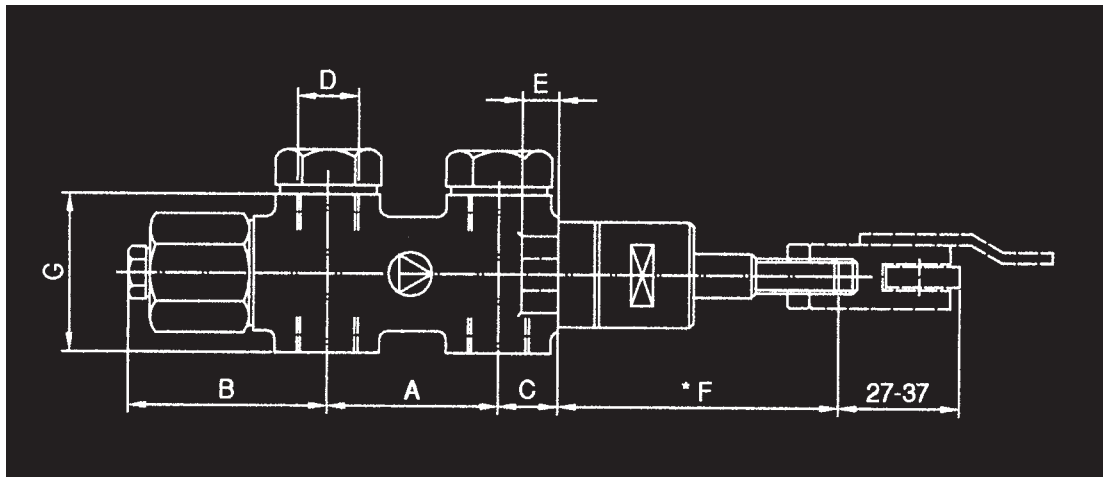
PRESSURE - STROKE DIAGRAM



SERIES	PRESSURE		STROKE
ITRP	p1 2-5 bar	p2 25 bar	8 - 9 mm

The oil pressure varies proportionally to plunger movement.

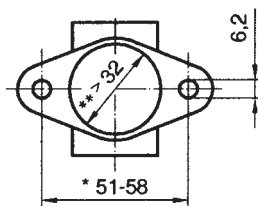
DIMENSIONS



* On request 51 mm or 58 mm

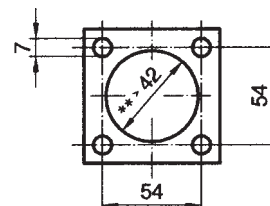
** Prearranged hole

BRACKET



ITRP 3/8"

BRACKET



ITRP 3/4"

SERIES	MAX FLOW RATE l/h	DIMENSIONS						
		A	B	C	D	E	F*	G
ITRP 3/8"	1.000	55	71	16	G 3/8	10	82	52
ITRP 3/4"	2.500	63	76	43	G 3/4	10	72	83
ITRP 3/4"L	3.500	63	76	43	G 3/4	10	72	83

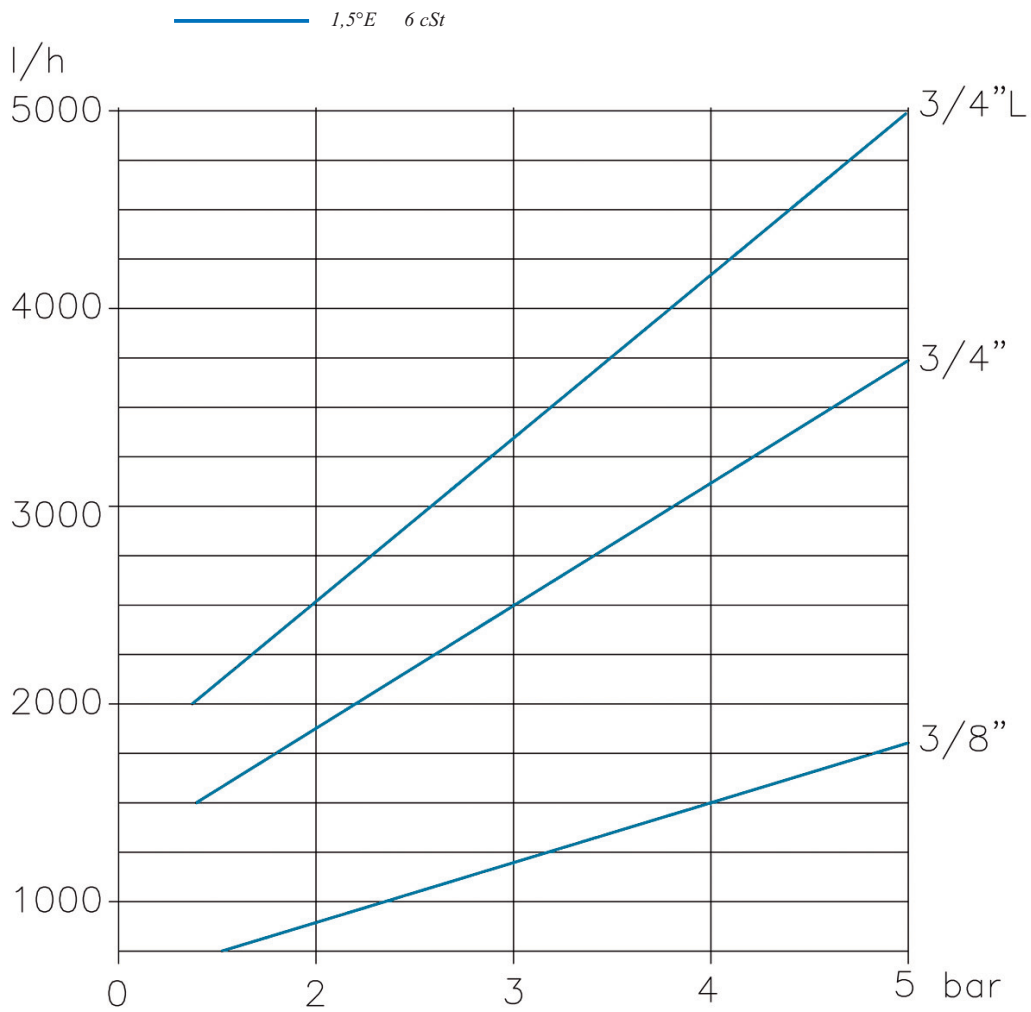
* F = depending on regulation

PRESSURE-CAPACITY DIAGRAM

Regulator's capacity with minimum output setting pressure depends on adjustment of the conic pin. The diagram is obtained with an intermediate setting.



Avoid a piston stroke higher than 10mm. In this peculiar case with a high value of minimum output setting pressure set at high value can cause the block of the piston - conic pin and break the pin.



IDENTIFICATION

