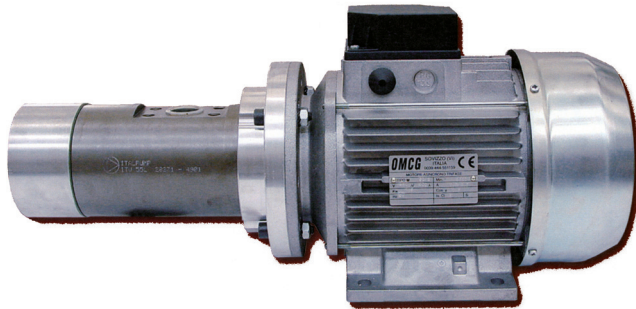


Series ITV



CHARACTERISTICS

Applications:

- Low pressure with 5-10 bar max.differential pressure.
- Max inlet pressure 2 bar.
- For fuel and lubricant without abrasive contents.
- High volumetric efficiency - hydraulically balanced.
- Very low noise (52 -53 dBA at 2800 rpm).
- Capacity from 480 l/h to 25200 l/h (light oil 2800 rpm).

FUNCTION

ITV pumps are positive displacement rotatory pumps with axial flow design suitable for different kinds of fluids: for light oil and heavy oil bunker oil.

The pump sucks the oil from a tank, it passes through the inlet port and arrive at the 3 screws, which compressed it and send it to the outlet.

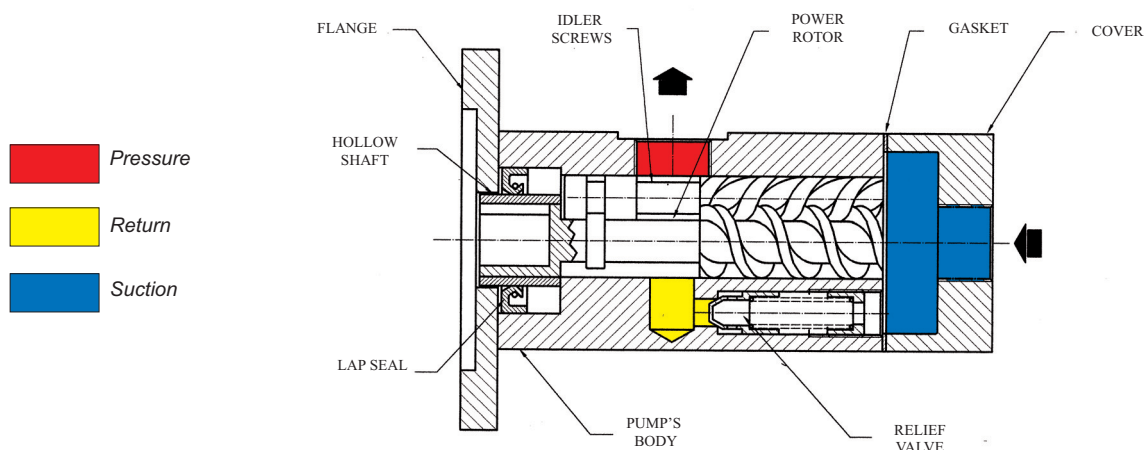
The pump is equipped with a pressure relief valve with internal return, which limit the differential pressure into the pump and protect the pump in case of block of the outlet line.

Standard version is 5 bar Relief valve. It is also available a special version RF2 with 10 bar set relief valve.

NOTE: For different fuels please consult ITALPUMP.



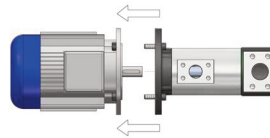
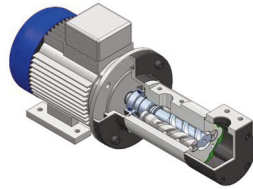
**Setting of relief valve must be done only by ITALPUMP.
Please consider that higher pressure means higher motor absorption.**



TECHNICAL DATA

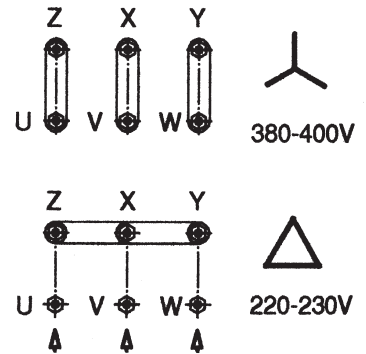
HYDRAULIC DATA

Suction inlet	see tables
Delivery outlet	see tables
Relief valve settings	5 bar (standard) 10 bar RF2 (on request)
Suction vacuum	0,45 bar/max
Viscosity range	6 - 800 cSt (1,5°E - 100°E)
Fluid temperature range	-20°C/+140°C
Speed	2800 rpm Light Oil 1400 rpm Heavy Oil
Noise level	52 - 53 dBA at 2800 rpm
Motors	220-240V 380-400V Three-phase 50Hz (standard) Three-phase 60Hz (on request)
Materials	Pump's body - cast iron Rotors - steel Shaft seal - viton

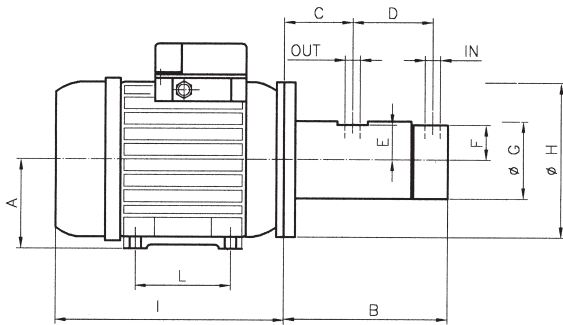


ROTATION

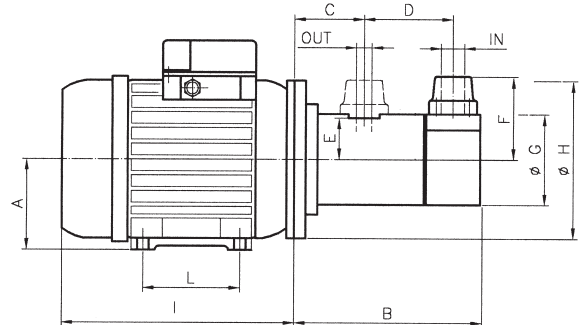
The pump is designed to operate with a clockwise rotation looking the shaft end.



DIMENSIONS OF THE PUMP



ITV 8 - 15 - 20 - 30



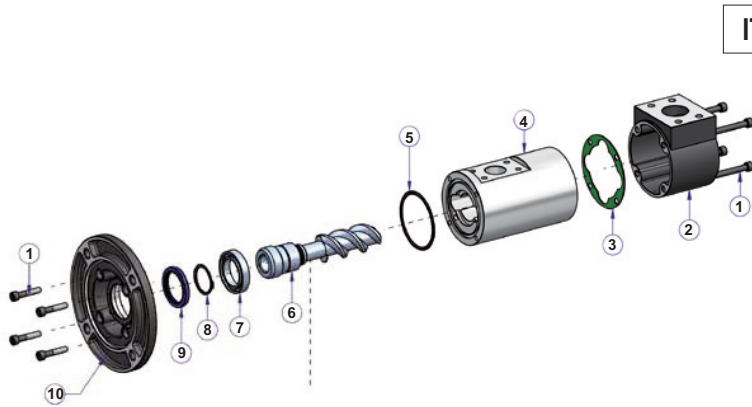
ITV 45 - 55 - 75 - 100 - 125 - 150 - 440

SERIES	HEAVY OIL		LIGHT OIL		IN	OUT	A	B	C	D	E	F	G	H	I	L
	1400 gpm CAPACITY l/h	MOTOR [W]	2800 gpm CAPACITY l/h	MOTOR [W]												
ITV 8	260	370	490	370	1/2"	1/2"	71	146	57	73	25	25	59	105	220	90
ITV 15	480	370	900	370	1/2"	1/2"	71	146	57	73	25	25	59	105	220	90
ITV 20	650	370	1200	550	1/2"	1/2"	71	146	57	73	25	25	59	105	220	90
ITV 30	970	370	1800	550	3/4"	1/2"	71	174	80	76	28	27	65	105	220	90
ITV 45	1450	750	2700	1500	1"1/4SAE	1"	80	243	86	123	40	95	96	143	242	100
ITV 55	1700	750	3200	1500	1"1/4SAE	1"	80	243	86	123	40	95	96	143	242	100
ITV 75	2400	750	4400	1500	1"1/4SAE	1"	80	243	86	123	40	95	96	143	242	100
ITV 100	3100	1500	5700	2200	1"1/2SAE	1"1/4SAE	90	294	104	150	87	105	110	155	290	125
ITV 150	4500	1500	8250	2200	1"1/2SAE	1"1/4SAE	90	294	104	150	87	105	110	155	290	125
ITV 440	13200	3000	25200	5500	3" SAE	2"1/2SAE	100/112	400	110	227	113	155	153	250	330	140

Use the pump at 2800 rpm motor with viscosity lower then 12cSt (2°E).

COMPONENTS OF THE PUMP

IDENTIFICATION OF THE PUMP



Legend:

- | | |
|-------------------|------------------|
| 1 - Screw | 6 - Main screw |
| 2 - Suction cover | 7 - Ball bearing |
| 3 - Plane gasket | 8 - Seeger |
| 4 - Pump body | 9 - Seal |
| 5 - O-ring | 10 - Flange |

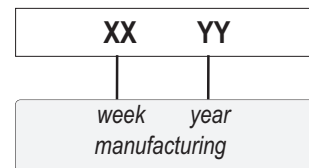
ITV 45 RF2

Relief valve

■ = 5 bar set
 RF2 = 10 bar set
 with RF2 motor type can be changed

Size

8 = 490 l/h	55 = 3200 l/h
15 = 900 l/h	75 = 4400 l/h
20 = 1200 l/h	100 = 5700 l/h
30 = 1800 l/h	150 = 8250 l/h
45 = 2700 l/h	440 = 25200 l/h



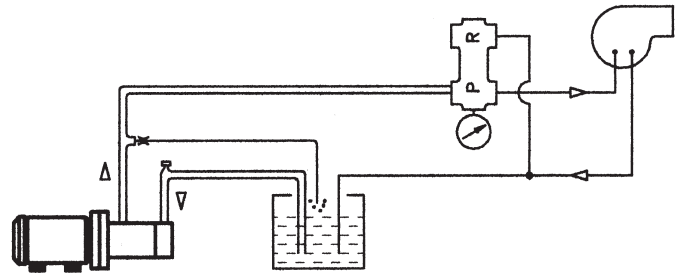
INSTALLATION NOTES



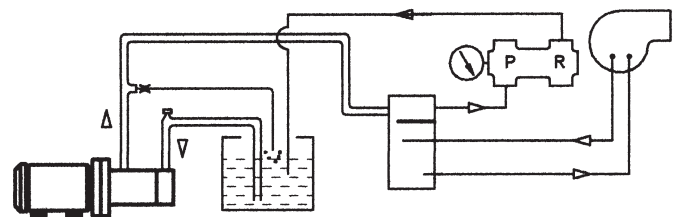
IMPORTANT

To make easier the priming please install the pump with the suction connection turned upword (see above application scheme).

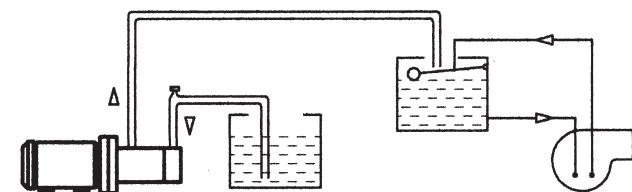
Before connecting the suction and delivery pipes fill the pump with fuel. We suggest to use a lamellar filter in suction line with filtering value 300-400 mm.



Burners feeding with under pressure ring mains



Burners feeding with under pressure ring mains and degassing unit with preheated oil recovery



Burners feeding with secondary oil tank

NOTES FOR CHOOSING THE CORRECT PUMP

Pump capacity must be:

- In ring mains, at least double of the sum of the capacities of the pumps of burner(s)
- In plants with service tank, 1.5 times the maximum consumption of the installation.

In absence of sure data about burner pumps capacity you can consider as follow:

- With modulation burner the pump capacity is 2 - 2.5 times the maximum burner capacity.
- With multistage burner the pump capacity is 1.2 - 1.5 times maximum burner capacity.

PRESSURE - CAPACITY DIAGRAMS OF THE PUMP

