

**VERTICAL MULTISTAGE  
PUMPS - TYPE WXH - IL**



**WPIL Limited**

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# VERTICAL MULTISTAGE PUMPS - TYPE WXH - IL

## APPLICATIONS

**WPIL** Vertical Multistage Centrifugal Pumps Type **WXH-IL** are Designed for a wide range of applications

- Water Supply Systems
- Water Circulation / Transfer
- Agriculture
- Boiler Feeding
- Ship Building
- Water Treatment Plants
- And many other applications

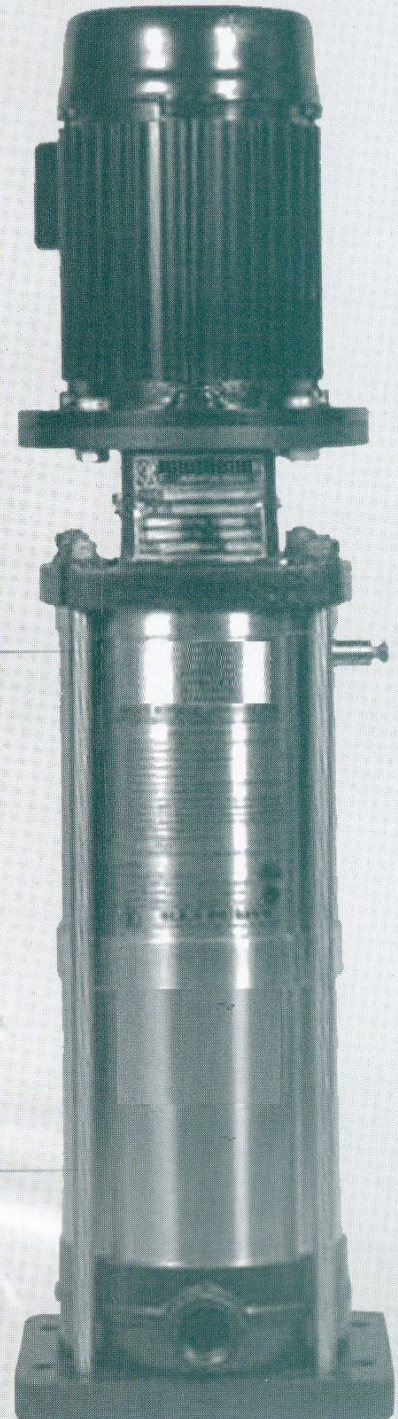
## PUMPS

The pumps are non-self priming Vertical Multistage Centrifugal pumps designed to occupy minimum floor Space. Un-like other pumps with sheet metal and plastic fabricated components, our Pumps have components all cast in various metals like Cast Iron, Bronze, Stainless Steel 304 & 316

Excessive Axial thrust is balanced by assembling the Pump stages with equal number of opposed Impellers. Balancing of axial thrust allows the use of standard Flange Mounted Motor Without special bearings. Pressure on Mechanical Seal reduces to half the working pressure due to opposed Impellers. The Shaft is well supported in bush Bearings making operation noise less. The Maintenance is easy & in expensive.

## PUMPED LIQUIDS

The Pumps are primarily designed to handle water and are suitable for handling hot & cold water in water Supply systems for Domestic and Industrial use.



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# WPIL VERTICAL MULTISTAGE PUMPS - WXH-IL

## DESIGN DETAILS

### Direction of Rotation

Clock wise looking from the motor at the pump.

### Shaft Sealing

The Shaft is sealed by means of a Mechanical Seal.

### Carbide Bushes

The Bottom casing is fitted with T. C. Bushes

### Casing Gasket

The Outer Shell is sealed by means of flat gaskets.

## MOTOR

The pumps is coupled with a Electric Motor, which is totally enclosed, fan cooled Squirrel-cage motor.

Nominal Speed : 2900rpm

Enclosure Class : IP 55.

Standard Voltages : 1 X 220 240V  
3 X 380 415V

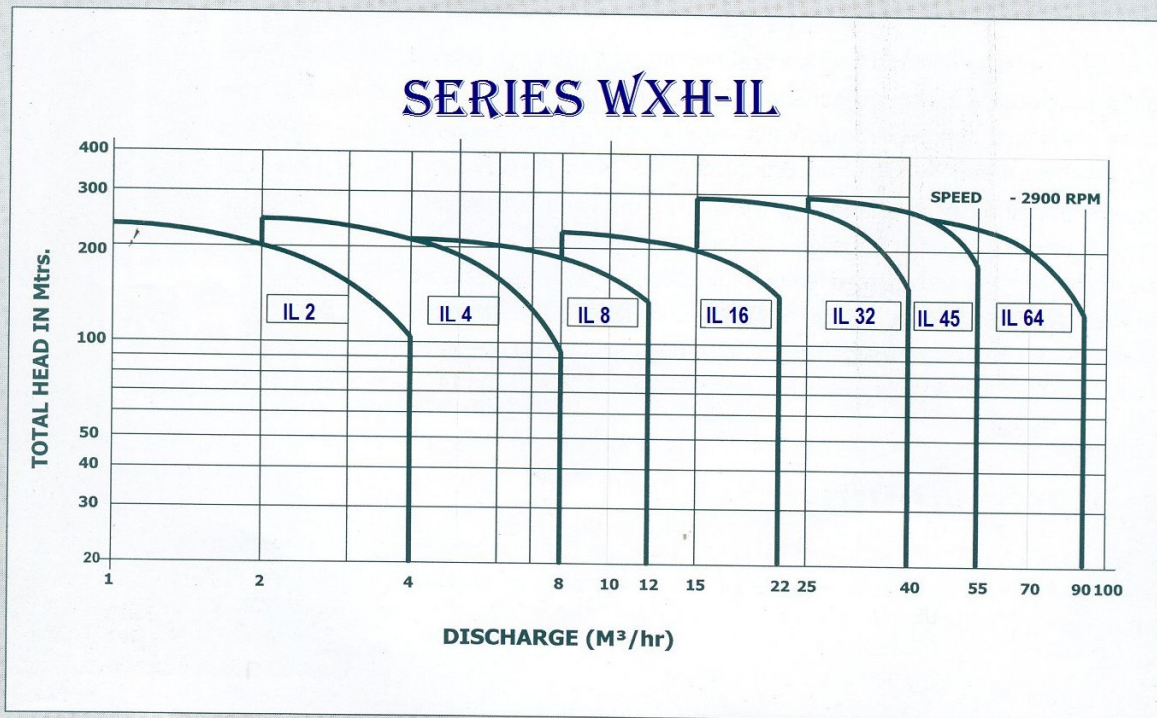
Single-phase Motors have a built in thermal overload protection.

Three phase Motors should be protected by a suitable Motor starter as per local regulations.

## MOTOR OPTIONS

Standard pumps are fitted with Motor adaptor suitable for mounting Vertical Flange Mounting V-1 frame Motor, Special motor adaptor can be provided to suite other specification.

## FAMILY CURVE

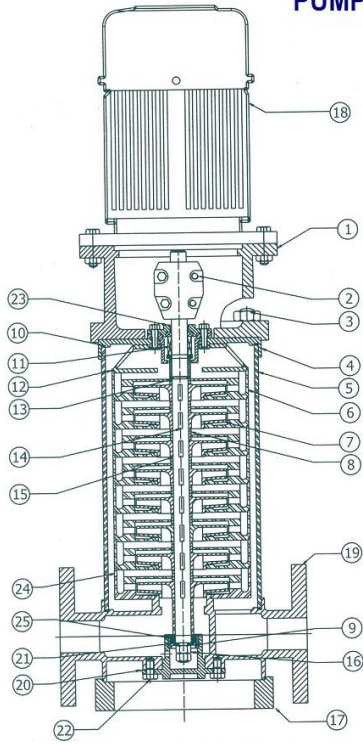


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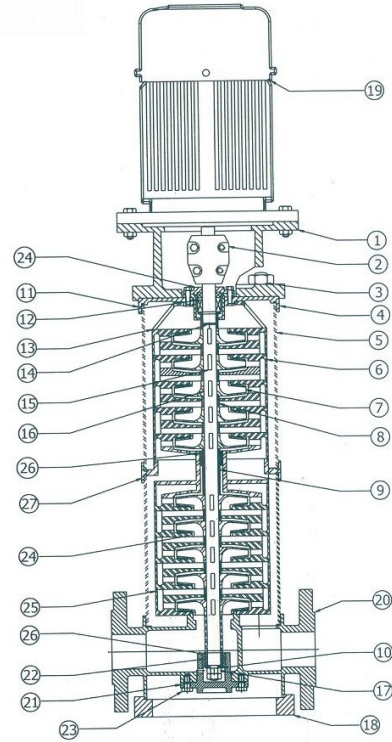
# WPIL VERTICAL MULTISTAGE PUMPS - WXH-IL

## PUMP COMPONENTS



**PUMP WITH BOTTOM BUSH**

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	LOCK WASHER
10	RUBBER GASKET
11	MECHANICAL SEAL
12	TOP DIFFUSER
13	LOCK RING
14	KEY
15	SHAFT
16	LOCK NUT
17	BASE PLATE
18	MOTOR
19	BOTTOM CASING(BASE)
20	BUSH HOUSING
21	BOTTOM BUSH
22	HOUSING BOLTS
23	MECH.SEAL JACKET
24	BOTTOM DIFFUSER
25	T C BUSH

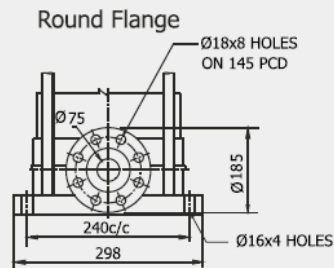
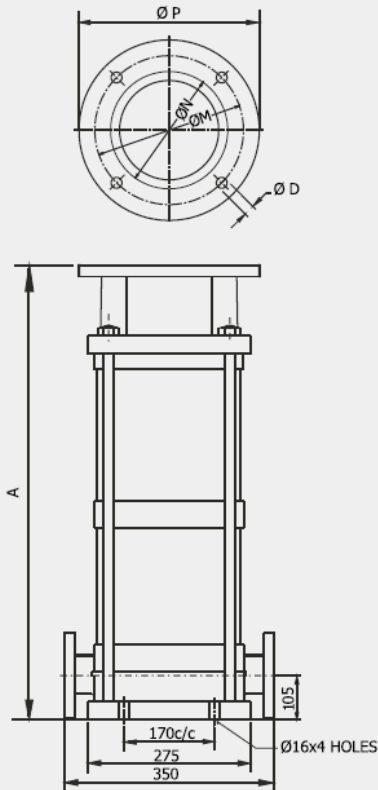


**PUMP WITH REVERSE FLOW STAGE**

ITEM NO	DESCRIPTION
1	MOTOR ADAPTOR
2	RIGID COUPLING
3	TIE ROD & NUT
4	TOP PLATE
5	OUTER SHELL
6	DIFFUSER
7	IMPELLER
8	SHAFT SLEEVE
9	BUSH SPACER
10	LOCK WASHER
11	RUBBER GASKET
12	MECHANICAL SEAL
13	TOP DIFFUSER
14	LOCK RING
15	KEY
16	SHAFT
17	LOCK NUT
18	BASE PLATE
19	MOTOR
20	BOTTOM CASING
21	BUSH HOUSING
22	BOTTOM BUSH
23	HOUSING BOLTS
24	MECH. SEAL JACKET
25	BOTTOM DIFFUSER
26	T C BUSH
27	REVERSE FLOW STAGE

## MATERIALS:

PUMP COMPONENTS	MATERIALS			
	CAST IRON (RCP)	CI / SS (RCPS)	SS - 304 (RCSS)	SS - 316 (RCSSN)
MOTOR ADAPTOR	CI	CI	CI	CI
TOP COVER	CF8(e)	CF8(e)	CF8(e)	CF8M
DIFFUSER	CI	CF8(e)	CF8(e)	CF8M
IMPELLER	CF8(e)	CF8(e)	CF8(e)	CF8M
SHAFT	SS-410	SS-410	SS-304	SS-316
BOTTOM CASING	CI	CI	CF8(e)	CF8M
OUTER SLEEVE	SS-304	SS-304	SS-304	SS-316
BASE PLATE	CI	CI	CI	CI



## TECHNICAL DATA

### VERTICAL MULTISTAGE CENTRIFUGAL PUMPS SERIES

PUMP	MOTOR			PUMP DIMENSIONS IN MM					VOLUME
	TYPE	FRAME SIZE	KW	HP	A	D	M	N	
32-10	90	2.2	3.0	358	14	165	130	200	0.087
32-20	132	5.5	7.5	430	16	265	230	300	0.102
32-30	132	5.5	7.5	472	16	265	230	300	0.110
32-40	132	7.5	10.0	514	16	265	230	300	0.119
35-50R	160	11.0	15.0	629	16	300	250	350	0.142
32-60R	160	11.0	15.0	671	16	300	250	350	0.151
32-70R	160	15.0	20.0	713	16	300	250	350	0.159
32-80R	160	15.0	20.0	755	16	300	250	350	0.168
32-90R	160	18.5	25.0	797	16	300	250	350	0.176
32-100R	160	18.5	25.0	839	16	300	250	350	0.185
16-110R	180	22.0	30.0	881	16	300	250	350	0.193
32-120R	180	22.0	30.0	923	16	300	250	350	0.202
32-130R	200	30.0	40.0	965	19	350	300	400	0.260
32-140R	200	30.0	40.0	1007	19	350	300	400	0.270
32-150R	200	30.0	40.0	1049	19	350	300	400	0.280
32-160R	200	33.0	45.0	1091	19	350	300	400	0.290

Pumps with opposed Impellers



- ▶ One dedicated factory at Ghaziabad (near delhi) having 54,000 sq.mtr. area.
- ▶ Committed in-house grey iron and non-ferrous foundry with Two Induction Furnaces of Crucible sizes 2MT and 3MT Capacity under installation. Foundries in 3 locations in India capable for producing range of ferrous, non-ferrous and other alloy steel castings
- ▶ Three Specific Test facilities to test pumps upto 10,000 M<sup>3</sup>/Hr capacity of 1 MW power, LT and HT power and 230 kw VFD at Ghaziabad plant. Test facility to test pumps upto 40,000 M<sup>3</sup>/Hr capacity of 4 MW power at Kolkata plant.
- ▶ Fully automatic machining centres for large casings/ impellers & dynamic balancing setups for rotating assemblies.
- ▶ Specialised fabrication areas for steel welding.
- ▶ WPIL Research & Development wing recognised by Govt. of India, Ministry of Science with in-house design and development facilities



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