


ENERGIZING YOU TO  
YOUR *limitless* POTENTIAL.



**karloskar**  
Oil Engines



INDUSTRIAL  
PUMPING  
SOLUTIONS

# kirloskar

## Oil Engines


### **A RICH TRADITION OF ENGINEERING EXCELLENCE**

Incorporated in 1946, KOEL is the flagship company of the Kirloskar group. We have four state-of-the-art manufacturing units in India that offer world-class products & service. The company has a sizable presence in international markets, with offices in Dubai, South Africa, Kenya & the United States with representatives in Indonesia and Nigeria.

KOEL also has a strong distribution network throughout the Middle East and Africa.

Today KOEL is an acknowledged leader in the manufacturing of highway diesel engines, agricultural pumpsets, power tillers and generating sets.

We're an international manufacturing conglomerate with offices and deliveries across multiple continents. With a vast product line that includes energy efficient compressors and various kinds of heavy-duty pumps, the Kirloskar Group has built a worldwide reputation for reliability, professionalism and innovation.

The image shows a row of industrial monoblock pumps (IMB Series) in a factory setting. The pumps are large, cylindrical units with multiple stages, mounted on a concrete base. They are connected to a network of pipes and valves. The scene is overlaid with a teal color filter. The text "INDUSTRIAL MONOBLOCK PUMPS (IMB Series)" is centered over the image in white, bold, sans-serif font. A vertical pipe on the left has the text "46 CHILL WATER" written on it.

INDUSTRIAL  
MONOBLOCK  
PUMPS  
(IMB Series)

# INDUSTRIAL MONOBLOCK PUMP (IMB Series)

2 POLE 3PH 50 Hz AC POWER SUPPLY

## TECHNICAL SPECIFICATIONS

Head Range	: Upto 76 meters
Discharge Range	: Upto 39 LPS
Power Ratings	: 3 to 30 HP
Voltage Range	: 350 to 440 Volts
Phase	: Three phase
Insulation	: F Class
Protection	: IP 55
RPM	: 2900



## MATERIALS OF CONSTRUCTION

Impeller	: Cast Iron / Bronze / Stainless Steel
Delivery Casing	: Cast Iron
Motor Body	: Cast Iron
Pump Shaft	: Stainless Steel
Sealing	: Gland seal / Mechanical Seal

## APPLICATIONS

- Fire fighting systems
- Cooling towers
- Air conditioning and refrigeration systems
- Irrigation in horticulture & agriculture
- Clear water handling at high pressure in industries

## FEATURES

- High Efficiency**  
Capability of run through variable conditions with a minimum variation in the efficiency during the entire operating range.
- Wide Voltage Range**  
From 350 to 440 Volts the motor is designed to withstand the fluctuation and reduce the possibility of burning to a great extent.
- User friendly design**  
The standard mounting design will empower the user for an easy replacement between mechanical and gland seal models.
- Overload Protection**  
Lesser chances of motor burning as the motor does not get overloaded even if the pump is operated at a head lower than recommended, thus ensuring substantial cost savings due to low maintenance and breakdown.
- Ease of spare replacement**  
All pump parts are easily accessible and repairable with ease.
- Premium Quality Bearing**  
These pumps come with SKF / Equivalent premium quality of bearings.
- Dynamically Balanced Parts**  
Minimal vibrations and consistent performance by maintaining concentricity.
- Minimum Manual Intervention**  
To ensure a swifter operation the pump comes with an "Automatic air releasing" mechanism which eliminates the manual intervention.
- Mechanical Seal**  
The high end quality of mechanical seal will ensure lower friction loss, zero leakage and protects the shaft from wearing.

## INDUSTRIAL MONOBLOCK PUMP WITH MECHANICAL SEAL

<b>PUMP SELECTION GUIDE</b>	IMB	6550	03	3	MS
<b>CODE DESCRIPTION</b>	INDUSTRIAL MONOBLOCK	CONNECTION SIZE (SUC & DEL) MM	HP	PHASE	MECH. SEAL TYPE

SR. NO.	PUMP MODEL	PIPE SIZE (SUC & DEL) MM	HP - kW	PHASE	HEAD-Mtrs.	6	8	10	12	14	16	18	20	
1	IMB.6550.03.3.MS	65X50	3 - 2.2	3	DISCHARGE - LPS		10.6	9.9	9.6	9.4	9.0	8.7	8.2	
2	IMB.5040.03.3.MS	50X40	3 - 2.2	3				8.2	8.1	8.0	7.9	7.8	6.7	
3	IMB.8065.05.3.MS	80X65	5 - 3.7	3							18.0	17.2	16.0	
4	IMB.6550.05.3.MS	65X50	5 - 3.7	3								9.8	9.6	
5	IMB.1010.05.3.MS	100X100	5 - 3.7	3			32.5	28	25.9	24.1	21.5	17.9		
6	IMB.6565.75.3.MS	65X65	7.5 - 5.5	3										
7	IMB.6550.75.3.MS	65x50	7.5 - 5.5	3										
8	IMB.1010.10.3.MS	100x100	7.5	3						34.3	32.7	31.5	30	28.8
9	IMB.8065.10.3.MS	80X65	10 - 7.5	3				23.0	23.5	22.9	22.7	22.5	22.0	21.8
10	IMB.1010.75.3.MS	100x100	10	3						26.8	25	23.3	21.3	19.3
11	IMB.8065.12.3.MS	80X65	12.50 - 9.3	3										.
12	IMB.1010.15.3.MS	100x100	15 - 11	3				42.8	43.0	42.3	41.7	41.1	40.2	39.2
13	IMB.8065.15.3.MS	80X65	15 - 11	3										
14	IMB.6550.15.3.MS	65x50	15 - 11	3										

## INDUSTRIAL MONOBLOCK PUMP WITH GLAND SEAL

<b>PUMP SELECTION GUIDE</b>	IMB	6550	03	3	GS
<b>CODE DESCRIPTION</b>	INDUSTRIAL MONOBLOCK	CONNECTION SIZE (SUC & DEL) MM	HP	PHASE	GLAND SEAL TYPE

SR. NO.	PUMP MODEL	PIPE SIZE (SUC & DEL) MM	HP - kW	PHASE	HEAD-Mtrs.	6	8	10	12	14	16	18	20	
1	IMB.6550.03.3.GS	65X50	3 - 2.2	3	DISCHARGE - LPS		10.6	9.9	9.6	9.4	9.0	8.7	8.2	
2	IMB.5040.03.3.GS	50X40	3 - 2.2	3				8.2	8.1	8.0	7.9	7.8	6.7	
3	IMB.8065.05.3.GS	80X65	5 - 3.7	3							18.0	17.2	16.0	
4	IMB.6550.05.3.GS	65X50	5 - 3.7	3								9.8	9.6	
5	IMB.1010.05.3.GS	100X100	5 - 3.7	3			32.5	28	25.9	24.1	21.5	17.9		
6	IMB.6565.75.3.GS	65X65	7.5 - 5.5	3										
7	IMB.6550.75.3.GS	65x50	7.5 - 5.5	3										
8	IMB.1010.10.3.GS	100x100	7.5	3						34.3	32.7	31.5	30	28.8
9	IMB.8065.10.3.GS	80X65	10 - 7.5	3				23.0	23.5	22.9	22.7	22.5	22.0	21.8
10	IMB.1010.75.3.GS	100x100	10	3						26.8	25	23.3	21.3	19.3
11	IMB.8065.12.3.GS	80X65	12.50 - 9.3	3										.
12	IMB.1010.15.3.GS	100x100	15 - 11	3				42.8	43.0	42.3	41.7	41.1	40.2	39.2
13	IMB.8065.15.3.GS	80X65	15 - 11	3										
14	IMB.6550.15.3.GS	65x50	15 - 11	3										

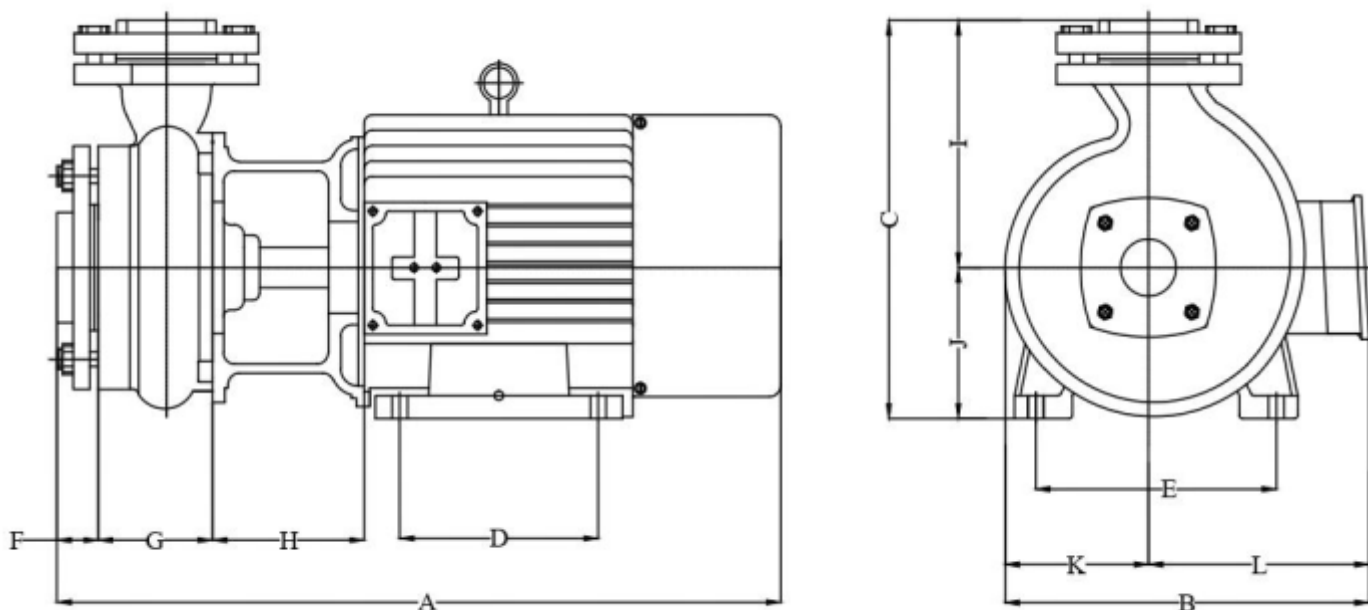


22	24	26	28	30	32	34	36	40	42	44	48	50	52	56	60	64	68	72	76	
7.4	5.5	4.1																		
6.5	6.4	6.2	5.9	4.6	3.6															
14.5	12.0	10.4																		
9.0	8.7	8.2	7.7	7.1	6.4	5.7	4.8													
			13.7	13.5	13.3	12.8	12.2	10.2	8.2	6.1										
					8.3	8.1	7.9	7.7	7.3	7.5	7.2	6.4								
27.2	25.5	23	19.7	14																
21.5	21.1	20.7	20.4	20.1	19.9	19.7	19.3	17												
16.8	10																			
20.0	19.8	19.5	18.8	18.7	18.7	19.2	18.4	18.2	17.6	17	13.4									
38.3	37.5	36.5	35.0	33.3	31.5	29.2	23.8													
23.3	21.7	22.7	22.0	21.7	21.5	21.5	21.5	21.3	21.2	21.1	17.9	15.3								
														12.5	12.5	12.4	12.1	10.5	7.6	5.4



22	24	26	28	30	32	34	36	40	42	44	48	50	52	56	60	64	68	72	76	
7.4	5.5	4.1																		
6.5	6.4	6.2	5.9	4.6	3.6															
14.5	12.0	10.4																		
9.0	8.7	8.2	7.7	7.1	6.4	5.7	4.8													
			13.7	13.5	13.3	12.8	12.2	10.2	8.2	6.1										
					8.3	8.1	7.9	7.7	7.3	7.5	7.2	6.4								
27.2	25.5	23	19.7	14																
21.5	21.1	20.7	20.4	20.1	19.9	19.7	19.3	17												
16.8	10																			
20.0	19.8	19.5	18.8	18.7	18.7	19.2	18.4	18.2	17.6	17	13.4									
38.3	37.5	36.5	35.0	33.3	31.5	29.2	23.8													
23.3	21.7	22.7	22.0	21.7	21.5	21.5	21.5	21.3	21.2	21.1	17.9	15.3								
														12.5	12.5	12.4	12.1	10.5	7.6	5.4

## Overall Pump Dimensions (GAD)



The overall dimensions of the pump is same for Gland / Mechanical Seal Pumps.

SR.NO	KOEL MODEL	POWER RATING		PUMP SIZE (MM)		A	B	C	D	E	F	G	H	I	J	K	L
		HP	KW	SUC.	DEL.	DIMENSION ARE IN MM											
1	IMB.6550.03.3.GS	3	2.2	65	50	525	250	290	132	167	35	80	125	182	108	106	144
2	IMB.5040.03.3.GS	3	2.2	50	40	525	250	290	132	167	35	80	125	182	108	106	144
3	IMB.8065.05.3.GS	5	3.7	80	65	550	260	350	152	172	30	103	125	229	121	104	156
4	IMB.6550.05.3.GS	5	3.7	65	50	550	260	350	152	172	30	103	125	229	121	104	156
5	IMB.1010.05.3.GS	5	3.7	100	100	550	260	350	152	172	30	103	125	229	121	104	156
6	IMB.6550.75.3.GS	7.5	5.5	65	50	640	315	365	178	216	38	97	143	244	121	128	187
7	IMB.6565.75.3.GS	7.5	5.5	65	65	640	315	365	178	216	38	97	143	244	121	128	187
8	IMB.8065.10.3.GS	10	7.5	80	65	627	315	360	178	216	35	84	143	244	116	128	187
9	IMB.8065.12.3.GS	12.5	9.3	80	65	790	340	390	235	216	35	105	190	230	160	140	200
10	IMB.1010.15.3.GS	15	11	100	100	790	340	390	235	216	35	105	190	230	160	140	200
11	IMB.8065.15.3.GS	15	11	80	65	790	340	390	235	216	35	105	190	230	160	140	200
12	IMB.6550.15.3.GS	15	11	65	50	790	340	390	235	216	35	105	190	230	160	140	200



The image shows a large industrial mud pump in a factory or workshop. The pump is a vertical machine with a large flywheel on the left side. It is surrounded by various pipes, hoses, and mechanical components. The floor is covered with a layer of sand or mud. The entire image has a teal color overlay.

INDUSTRIAL  
SELF PRIMING  
MUD PUMPS  
(IMH-IMS Series)

# Wastewater Submersible Pumps



**X-PEL C**  
1 Phase



**X-PEL C**  
3 Phase



**X-PEL S**  
1 Phase



**X-PEL S**  
3 Phase



## TECHNICAL CONSTRUCTION

### CUTTER

Head Range-mtrs. : 4-22  
 Power Rating : 1 to 2 HP  
 Discharge Range-lpm : 400-20  
 Voltage Range : 180-240 (1PH) 360-415 ( 3PH)  
 Pipe Size : 50 mm

### SEWAGE

Head Range-mtrs. : 5-16  
 Power Rating : 1 to 2 HP  
 Discharge Range-lpm : 480-30  
 Voltage Range : 180-240 (1PH) 360-415 ( 3PH)  
 Pipe Size : 32 & 50 mm

## MATERIAL OF CONSTRUCTION

Impeller : Cast Iron  
 Casing : Cast Iron  
 Motor Body : SS  
 Pump Shaft : SS 410  
 Rotor : Aluminium  
 Sealing : Double Ended Mech. Seal

## APPLICATIONS

- Drainage sewage water from hotels, houses, commercial buildings, complexes, hospitals, restaurants, etc.
- Pumping water in industries, pumping municipal sewage water & septic tanks.

## FEATURES

- SS body with heavy construction and shock proof
- Motor is designed with self-cooling effect  
Corrosion resistant stainless steel grade pump parts ensures longer life
- SS Cutter designed yields fine solids for non-clogging operations
- Non clogging impellers ensures free flow of solids size up to 35mm
- All casting parts are CED coated  
Efficient pumps with more energy savings
- Prevention from dry run
- Automatic ON/OFF operation enabled by adjustable float switch (single phase only)
- Double ended mechanical seal
- Fitted with thermal overload protector

## PERFORMANCE CHART FOR SEWAGE PUMP

KOEL MODEL NAME	KOEL Part No	kW	HP	PHASE	VOLTAGE RANGE-V	DELIVERY SIZE	MAX. SOLID HANDLING SIZE (mm)	STARTING METHOD	HEAD RANGE-Mtrs.	HEAD -Mtrs.	4	5	6	7	8	10	12	14	16
X-PEL S 051	ESP.3232.05.01.FS	0.37	0.5	1	180-240	32mm	20	CSR	5-8	Flow in LPM		95	75	55	30				
X-PEL S 101	ESP.5050.01.01.FS	0.75	1	1	180-240	50mm	35	CSR	4-10		330		240		150	80			
X-PEL S 103	ESP.5050.01.03.00	0.75	1	3	360-415	50mm	35	DOL	4-10		330		240		150	80			
X-PEL S 201	ESP.5050.02.01.FS	1.5	2	1	180-240	50mm	35	CSR	4-16		480		420		360	280	190	120	50
X-PEL S 203	ESP.5050.02.03.00	1.5	2	3	360-415	50mm	35	DOL	4-16		480		420		360	280	190	120	50

## PERFORMANCE CHART FOR CUTTER PUMP

KOEL Model Name	KOEL Part No	Kw	HP	Phase	Voltage Range (V)	Delivery size	Starting method	Head range-Mtrs.	Head in mtr	4	6	8	10	12	14	16	18	20	22
X-PEL C 101	ECP.5050.01.01.FS	0.75	1	1	180-240	50mm	CSR	4-16	Flow in LPM	350	300	250	200	150	100	50			
X-PEL C 103	ECP.5050.01.03.00	0.75	1	3	360-415	50mm	DOL	4-16		350	300	250	200	150	100	50			
X-PEL C 201	ECP.5050.02.01.FS	1.5	2	1	180-240	50mm	CSR	4-22		400	350	300	260	220	180	140	100	60	20
X-PEL C 203	ECP.5050.02.03.00	1.5	2	3	360-415	50mm	DOL	4-22		400	350	300	260	220	180	140	100	60	20

# SELF PRIMING MUD PUMPS (IMH-IMS Series)

## TECHNICAL CONSTRUCTION

Types	: Bare Shaft Pumps (Gland & Seal Type) Motor Coupled Pump Sets (Gland & Seal Type) Engine Coupled Pump Sets (Gland & Seal Type) Monoblock Pump Sets (Gland & Seal Type)
Motor Hp (Kw)	: 1.00 (0.75) to 25.00 (18.70)
Pipe Size (Mm)	: 40 X 40 to 150 X 150
Speed (Rpm)	: 1440 & 2800
Head (Mtrs)	: Up to 44
Discharge (Lps)	: Up to 71
Solid Handling Size (Mm)	: Up to 40



## MATERIAL OF CONSTRUCTION

### REGULAR SUPPLY

Pump / Motor Body	: C. I. Gr. FG 200
Impeller	: C. I. Gr. FG 200
Wear Plate	: C. I. Gr. FG 200
Impeller Ring	: C. I. Gr. FG 200
Shaft	: SS-410
Shaft Sleeve	: SS-410
Stamping	: CRNGO, M-45 Grade
Gland Packing	: Graphite asbestos
Bearings	: SKF / Equivalent

### OPTIONAL SUPPLY

Impeller	: SS-304 (CF 8) / SS-316 (CF 8M) / Bronze
Impeller Ring	: SS-304 (CF 8) / SS-316 (CF 8M) / Bronze
Wear Plate	: SS-304 (CF 8) / SS-316 (CF 8M) / Bronze
Shaft	: SS-304 (CF 8) / SS-316 (CF 8M)
Shaft Sleeve	: SS-304 (CF 8) / SS-316 (CF 8M)
Gland Packing	: Teflone

## APPLICATIONS

### MARINE

- Loading and unloading, bilge pumping, washing, fire fighting, stripping, sanitary duty and circulation.

### CONSTRUCTION INDUSTRY

- Dewatering excavation, canals or ponds, ground water dewatering with well point system or drains, water supply from wells or canals, hosing down concrete castings.

### AGRICULTURE

- Surface irrigation, liquid manure oxygenation, transfer and spraying liquid manure or fertilizers, distribution of liquid animal feed, transfer of must, washing.

### INDUSTRY

- Transfer of clean or dirty neutral, acid or alkali liquids containing sand, mud or solids in suspension, clean or dirty low viscosity petroleum product or solvents, milk of lime, caustic soda.
- Washing, cooling, circulation, smoke scrubbing, emergency duty.
- Pumping light chemical, sewage, ash water.
- Tiles, marble & ceramic factories, effluent plants.
- Industries for clear water handling at high pressures.

### MOBILE MACHINERY

- Cooling water for marine engines and shovels.
- Any application where priming is to be avoided.










### WASTE TREATMENT

- Pumping polluted, hot or corrosive waste water containing sand, mud or solids in suspension, dosing neutralizing liquids, pumping out settled sludge.

### PUBLIC UTILITIES

- For pumping muddy water, sewage, polluted liquids, solid and in swimming pool.
- Dewatering basements, trenches and construction sites.
- Dewatering from basements, multi storey, shopping malls, godowns etc.
- Flood drainage, sewage pumping, fire fighting and recovery of dangerous liquids.

## FEATURES

-  Standard design and performance as per **international market.**
-  Less manual intervention with **automatic air release mechanism.**
-  **Replacing foot valve** by modern technologies. Easy availability of Spares.
-  Impeller is designed **semi opened / opened for handle contamination.** Can handle solid particles up to 40 mm.
-  **Back pull out design** for ease of repair without disturbing the pipe lines.
-  **Dynamically balanced rotating parts.**
-  **Long product life**  
Motors of mono block pumps are designed to **withstand voltage fluctuation.**  
(From 180 to 240 volts for single phase pumps)  
(From 350 to 450 volts for three phase pumps)
-  All pumps are available with both **Gland Packing and Mechanical Seal variants.**
-  Our portfolio includes **bare shaft, mono block, motor coupled and engined coupled pumps.**

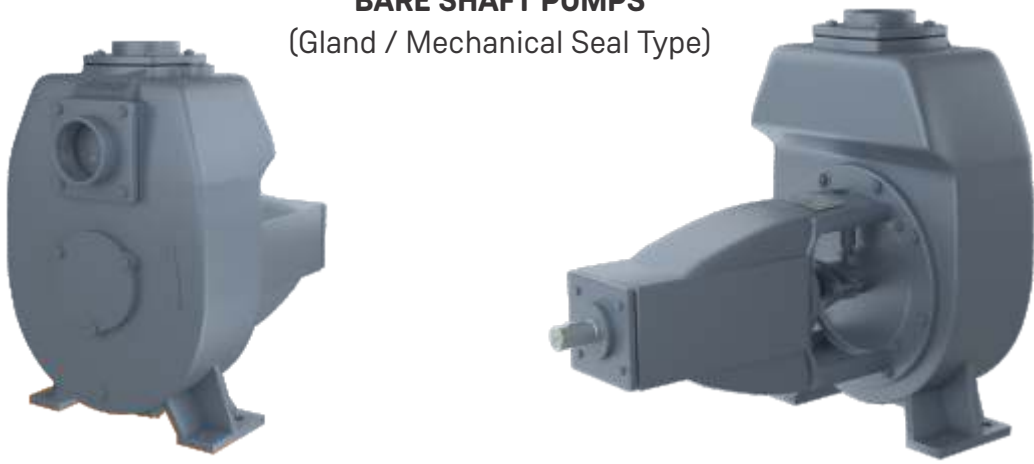
### The performance of the pump is same for Gland / Mechanical Seal Pumps.

PUMP SELECTION GUIDE	IM	S/H	4040	01	3	GS
CODE DESCRIPTION	INDUSTRIAL MUD PUMP	SLOW (1440) / HIGH (2800) SPEED (RPM)	CONNECTION SIZE (MM) SUC X DEL	HP	PHASE	GLAND SEAL

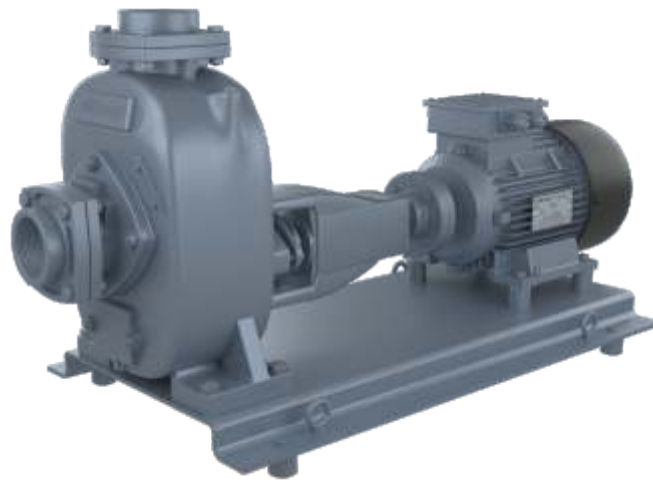
SR. NO.	PUMP MODEL	MOTOR (HP - KW)	DIRECTION OF ROTATION FROM SUCTION SIDE.	PHASE	PIPE SIZE SUC X DEL (MM)	SPEED (RPM)	SOLID HANDLING SIZE (MM)	HEAD (MTRS)	10	12
1	IMH.4040.01.3.GS	1.00 - 0.75	ANTI CLOCK WISE	3	40X40	2800	7	DISCHARGE LPS	4	3.4
2	IMH.4040.02.3.GS	2.00 - 1.50	ANTI CLOCK WISE	3	40X40	2800	8.5		5.5	
3	IMH.5050.03.3.GS	3.00 - 2.20	ANTI CLOCK WISE	3	50X50	2800	10.5		9	
4	IMH.8080.05.3.GS	5.00 - 3.70	ANTI CLOCK WISE	3	80X80	2800	7			
5	IMH.8080.75.3.GS	7.50 - 5.50	ANTI CLOCK WISE	3	80X80	2800	14.5			
6	IMH.8080.12.3.GS	12.50 - 9.30	ANTI CLOCK WISE	3	80X80	2800	14.5			
7	IMS.8080.05.3.GS	5.00 - 3.70	CLOCK WISE	3	80X80	1440	15.5		18.3	16
8	IMS.1010.10.3.GS	10.00 - 7.50	CLOCK WISE	3	100X100	1440	18.5		33	32
9	IMS.1010.12.3.GS	12.50 - 9.30	CLOCK WISE	3	100X100	1440	23		40	38
10	IMS.1515.20.3.GS	20.00 - 5.00	ANTI CLOCK WISE	3	150X150	1440	34		66	64
11	IMS.1515.25.3.GS	25.00 - 18.70	ANTI CLOCK WISE	3	150X150	1440	40		71	69

GS- GLAND SEAL / MS- MECHANICAL SEAL

**BARE SHAFT PUMPS**  
(Gland / Mechanical Seal Type)



**MOTOR COUPLED PUMP SETS**  
(Gland / Mechanical Seal Type)



14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44
2.4	1														
4.5	3.3	2.1	0.6												
8.8	7.6	6.3	4.9	3											
			8.3	7.5	6	5	3.8	2.5	1.3						
			14	13.5	12.5	10.8	9.2	7.3	5.5	3.3	1.6				
					20	19.2	18.3	17.8	17	16	13.3	12	9.5	7.1	5.8
14	10.8	6.5	2												
30	26.8	24.7	22	17.8	12.5										
35.7	31	29	25	22	18.3										
60	54.2	48	40	33.3	23										
67.5	63.5	58	52	45	35	23									

# SELF PRIMING MUD MONOBLOCK PUMP

<b>PUMP SELECTION GUIDE</b>	I	M	H	4040	M	1	01-03	GS / MS
<b>CODE DESCRIPTION</b>	INDUSTRIAL	MUD	HIGH SPEED	PIPE SIZE (mm) SUC X DEL	MONOBLOCK	HP	PHASE	MECH. SEAL / GLAND SEAL

## INDUSTRIAL MONOBLOCK PUMP WITH GLAND SEAL

SR.NO	KOEL MODEL	MOTOR (HP - KW)	PHASE	PIPE SIZE SUC X DEL (MM)	SPEED (RPM)	SOLID HANDLING SIZE (MM)	HEAD - (MTRS.)	10	12
1	IMH.4040M.01.1.GS	1 - 0.75	1	40X40	2800	7	DISC. LPS	4.0	3.4
2	IMH.4040M.01.3.GS	1 - 0.75	3	40X40	2800	8.5		4.0	3.4
3	IMH.4040M.02.3.GS	2 - 1.5	3	40X40	2800	10.5			5.5
4	IMH.5050M.03.3.GS	3 - 2.2	3	50x50	2800	7			9.0
5	IMH.8080M.05.3.GS	5 - 3.7	3	80x80	2800	14.5			
6	IMH.8080M.75.3.GS	7.5 - 5.5	3	80x80	2800	14.5			
7	IMS.8080M.05.3.GS	5 - 3.7	3	80x80	1400	15.5		18.3	16.0

## INDUSTRIAL MONOBLOCK PUMP WITH MECHANICAL SEAL

SR.NO	KOEL MODEL	MOTOR (HP - KW)	PHASE	PIPE SIZE SUC X DEL (MM)	SPEED (RPM)	SOLID HANDLING SIZ (MM)	HEAD - (MTRS.)	10	12
1	IMH.4040M.01.1.MS	1 - 0.75	1	40X40	2800	7	DISC. LPS	4.0	3.4
2	IMH.4040M.01.3.MS	1 - 0.75	3	40X40	2800	8.5		4.0	3.4
3	IMH.4040M.02.3.MS	2 - 1.5	3	40X40	2800	10.5			5.5
4	IMH.5050M.03.3.MS	3 - 2.2	3	50X50	2800	7			9.0
5	IMH.8080M.05.3.MS	5 - 3.7	3	80X80	2800	14.5			
6	IMH.8080M.75.3.MS	7.5 - 5.5	3	80X80	2800	14.5			
7	IMS.8080M.05.3.MS	5 - 3.7	3	80X80	1400	15.5		18.3	16.0

IMH - INDUSTRIAL MUD HIGH SPEED

MS - INDUSTRIAL MUD SLOW SPEED

# SELF PRIMING MINI MUD MONOBLOCK PUMP

<b>PUMP SELECTION GUIDE</b>	I	M	M	4040	05	01-03	MS
<b>CODE DESCRIPTION</b>	INDUSTRIAL	MINI	MUD	PIPE SIZE (mm) SUC X DEL	HP	PHASE	MECH. SEAL

SR. NO.	KOEL MODEL	MOTOR (HP - KW)	PHASE	PIPE SIZE SUC X DEL (MM)	SPEED (RPM)
1	IMM.4040.05.1.MS	0.5 - 0.37	1	40X40	2800
2	IMM.4040.05.3.MS	0.5 - 0.37	3	40X40	2800



14	16	18	20	22	24	26	28	30	32	34	36
2.4	1.0										
2.4	1.0										
4.5	3.3	2.1	0.6								
8.8	7.6	6.3	4.9	3.0							
			8.3	7.5	6.0	5.0	3.8	2.5	1.3		
			14.0	13.5	125.0	10.8	9.2	7.3	5.5	3.3	1.6
14.0	10.8	6.5	2.0								

14	16	18	20	22	24	26	28	30	32	34	36
2.4	1.0										
2.4	1.0										
4.5	3.3	2.1	0.6								
8.8	7.6	6.3	4.9	3.0							
			8.3	7.5	6.0	5.0	3.8	2.5	1.3		
			14.0	13.5	125.0	10.8	9.2	7.3	5.5	3.3	1.6
14.0	10.8	6.5	2.0								



SOLID HANDLING SIZE (MM)	HEAD - (MTRS.)	6	8	10	12
6	DISC-LPS	3.3	2.5	1.8	1
6		3.3	2.5	1.8	1

The image shows a complex industrial piping system with several large vertical cylindrical tanks and numerous horizontal and vertical pipes. The system is densely packed with machinery, including pumps and electrical control boxes. The entire scene is overlaid with a semi-transparent teal color. The text 'INDUSTRIAL END SUCTION PUMP (IES SERIES)' is centered in white, bold, sans-serif font.

INDUSTRIAL  
END SUCTION PUMP  
(IES SERIES)



# INDUSTRIAL END SUCTION PUMP (Back Pullout Design)

## TECHNICAL CONSTRUCTION

Types	: Bare Shaft Pumps (Gland / Mech. Seal Type) Motor Coupled Pump Sets (Gland / Mech. Seal Type)
Motor Hp (Kw)	: 0.34 (0.25) to 194.37 (145.00)
Pipe Size (Mm)	: 50 X 32 to 200 X 150
Speed (Rpm)	: 1450 & 2900
Head (Mtrs)	: Up to 145
Discharge (Lps)	: Up to 150



**BARE SHAFT PUMPS**  
(Gland / Mech. Seal Type)



**MOTOR COUPLED PUMP SETS**  
(Gland / Mech. Seal Type)

## MATERIAL OF CONSTRUCTION

### REGULAR SUPPLY

Pump body	: C. I. Gr. FG 200
Impeller	: C. I. Gr. FG 200
Neck ring	: Bronze
Stuffing housing	: C. I. Gr. FG 200
Bearing housing	: C. I. Gr. FG 200
Shaft	: SS-410
Shaft sleeve	: SS-410

Gland packing	: Graphitic Asbestos
Mechanical seal	: Carbon Ceramic
Bearings	: SKF / Equivalent

### OPTIONAL SUPPLY

Impeller	: Bronze
Shaft	: SS-316 (CF 8M)
Gland Packing	: Teflone

## APPLICATIONS

- Chemicals, petrochemicals, refineries, sugar, paper, laminates.
- Drip irrigation, water supply and building services.
- Condensate handling, fire fighting systems, environmental.
- Thermic fluid, jet dyeing, volatile fluids.
- Corrosive and abrasive process chemicals like acids, alkalis, solvents, slurries, hydrocarbons, crystallizing liquids, nitric, ammonia, phosphate, chemical effluents etc.
- Engineering, marine, refrigeration and cooling tower installation etc.
- Circulation of water in industries, air conditioning plants, power stations, mine water, lift irrigation, sprinkler systems, pumping brines, booster services, oils etc.
- Industries, rubber, handling of hydrocarbons, organic and inorganic chemicals, dm water, food industries, salt, textiles etc.
- Hot and cold water circulation, cooling water circulation.

## FEATURES

- The back pull-out design** enables removal of the motor, coupling, bearing housing and impeller without hampering the existing pump housing or pipe work.
- The pumps are of **single stage, single suction, and horizontal shaft type**. The rpm operation range is 1450 rpm and 2900 rpm at 50 Hz.
- This has volute type, end suction casing with **top centerline discharge**. Suction, discharge nozzles and the supporting feet are cast integral with the casing.
- Impeller is enclosed type **dynamically balanced**.
- Shaft MOC is high tensile steel and supported with **anti friction bearings**.
- Pumps with both **Mechanical and Gland seal** is available.
- Direction of rotation is clockwise when viewed from the driving end.
- These pumps can be coupled with **electric motors and engines either directly or by belt drives**.
- Pumps are available in bare shaft, motor coupled and **close coupling z type design**.

# PERFORMANCE AT 1450 RPM

The performance of the pump is same for Gland / Mechanical Seal Pumps.

PUMP SELECTION GUIDE		IES		5032		130		MS / GS	
CODE DESCRIPTION		INDUSTRIAL END SUCTION		CONN. SIZE SUC X DEL (mm)		IMP. DIA		MECH. SEAL / GLAND SEAL	
S.NO	PUMP MODEL	PIPE SIZE SUC X DEL MM	SPEED RPM	DIA.- IMPELLER- MM	DUTY POINT		HEAD RANGE - (MTRS)	DISC. RANGE	MOTOR
					HEAD (MTRS)	DISC (LPS)		LPS	HP (KW)
1	IES.5032.130.3.GS	50 X 32	1450	139	5.5	2.01	3.00 - 6.00	2.78 - 1.39	0.13 (0.10) - 0.34 (0.25)
2	IES.5032.160.3.GS	50 X 32	1450	174	8.5	2.57	5.00 - 10.00	3.06 - 1.11	0.27 (0.20) - 0.67 (0.50)
3	IES.5032.200.3.GS	50 X 32	1450	214	14	2.5	8.00 - 15.50	3.61 - 1.67	0.40 (0.30) - 1.07 (0.80)
4	IES.5032.260.3.GS	50 X 32	1450	264	20.5	2.73	14.00 - 24.00	3.70 - 1.29	1.34 (1.00) - 2.35 (1.75)
5	IES.6540.130.3.GS	65 X 40	1450	139	5.75	4.17	3.00 - 6.00	5.56 - 3.89	0.27 (0.20) - 0.67 (0.50)
6	IES.6540.160.3.GS	65 X 40	1450	174	8.5	4.31	5.00 - 9.50	5.56 - 2.78	0.40 (0.30) - 0.94 (0.70)
7	IES.6540.200.3.GS	65 X 40	1450	214	13	4.31	8.00 - 15.00	5.28 - 2.78	0.67 (0.50) - 1.61 (1.20)
8	IES.6540.260.3.GS	65 X 40	1450	264	21.5	3.89	14.00 - 24.00	5.83 - 1.67	1.34 (1.00) - 3.35 (2.50)
9	IES.6540.130.3.GS	65 X 50	1450	139	5.75	8	3.00 - 6.50	11.11 - 4.17	0.40 (0.30) - 1.07 (0.80)
10	IES.6550.160.3.GS	65 X 50	1450	174	9	9.03	5.00 - 10.50	11.11 - 2.78	0.67 (0.50) - 1.88 (1.40)
11	IES.6550.200.3.GS	65 X 50	1450	214	14	8.33	8.00 - 15.50	11.11 - 4.86	1.34 (1.00) - 2.68 (2.00)
12	IES.6550.260.3.GS	65 X 50	1450	264	23	8.68	14.00 - 25.50	11.11 - 3.47	2.68 (2.00) - 5.36 (4.00)
13	IES.8065.130.3.GS	80 X 65	1450	139	5.75	13.33	3.00 - 6.50	16.31 - 7.64	0.87 (0.65) - 1.41 (1.05)
14	IES.8065.160.3.GS	80 X 65	1450	174	8.5	15.28	5.00 - 10.00	19.44 - 8.33	1.34 (1.00) - 2.51 (1.88)
15	IES.8065.200.3.GS	80 X 65	1450	214	14	15.56	8.00 - 16.00	20.83 - 8.33	2.01 (1.50) - 5.36 (4.00)
16	IES.8065.260.3.GS	80 X 65	1450	264	22	17.36	14.00 - 24.50	23.61 - 7.64	3.35 (2.50) - 9.39 (7.00)
17	IES.8065.320.3.GS	80 X 65	1450	329	32.5	18.47	20.00 - 36.00	25.00 - 12.5	6.03 (4.50) - 14.08 (10.5)
18	IES.1080.160.3.GS	100 X 80	1450	174	9	21.53	5.00 - 10.40	27.78 - 5.56	1.67 (1.25) - 4.02 (3.00)
19	IES.1080.200.3.GS	100 X 80	1450	214	14	25	8.00 - 15.50	37.50 - 13.89	3.35 (2.50) - 6.71 (5.00)
20	IES.1080.260.3.GS	100 X 80	1450	264	19.5	25	14.00 - 23.50	31.48 - 9.26	4.69 (3.50) - 9.39 (7.00)
21	IES.1080.320.3.GS	100 X 80	1450	329	32.5	27.78	20.00 - 36.00	40.28 - 16.67	8.04 (6.00) - 20.11 (15.00)
22	IES.1210.200.3.GS	125 X 100	1450	214	13.8	38.89	8.00 - 15.50	50.00 - 22.22	4.69 (3.50) - 9.39 (7.00)
23	IES.1210.260.3.GS	125 X 100	1450	264	22	41.67	14.00 - 24.50	52.78 - 27.78	8.05 (6.00) - 17.43 (13.00)
24	IES.1210.320.3.GS	125 X 100	1450	329	34	38.89	20.00 - 36.00	50.00 - 30.56	10.05 (7.50) - 25.47 (19.00)
25	IES.1210.400.3.GS	125 X 100	1450	409	52.5	41.67	38.00 - 57.50	55.56 - 25.00	20.11 (15.00) - 45.58 (34.00)
26	IES.1512.260.3.GS	150 X 125	1450	264	20	65.97	14.00 - 23.00	86.11 - 34.72	10.73 (8.00) - 24.14 (18.00)
27	IES.1512.320.3.GS	150 X 125	1450	329	33	52.08	20.00 - 36.00	71.18 - 34.72	16.76 (12.50) - 33.53 (25.00)
28	IES.1512.400.3.GS	150 X 125	1450	409	51	69.44	38.00 - 57.50	94.44 - 34.72	40.23 (30.00) - 70.40 (52.50)

# PERFORMANCE AT 2900 RPM

The performance of the pump is same for Gland / Mechanical Seal Pumps.

PUMP SELECTION GUIDE		IES		5032		130		MS / GS	
CODE DESCRIPTION		INDUSTRIAL END SUCTION		CONN. SIZE SUC X DEL (mm)		IMP. DIA		MECH. SEAL / GLAND SEAL	
S.NO	PUMP MODEL	PIPE SIZE SUC X DEL MM	SPEED RPM	DIA.- IMPELLER- MM	DUTY POINT		HEAD RANGE - (MTRS)	DISC. RANGE	MOTOR
					HEAD (MTRS)	DISC (LPS)			
1	IES.5032.130.3.GS	50 X 32	2900	139	21	4.17	10.00 - 24.00	5.56 - 3.06	1.34 (1.00) - 2.35 (1.75)
2	IES.5032.160.3.GS	50 X 32	2900	174	36	4.86	20.00 - 40.00	6.11 - 3.19	2.01 (1.50) - 4.69 (3.50)
3	IES.5032.200.3.GS	50 X 32	2900	214	53	4.86	30.00 - 62.50	6.39 - 2.78	4.02 (3.00) - 7.38 (5.50)
4	IES.5032.260.3.GS	50 X 32	2900	264	87	6.11	60.00 - 97.00	34.87 - 3.89	12.07 (9.00) - 18.77 (14.00)
5	IES.6540.130.3.GS	65 X 40	2900	139	23	8.06	10.00 - 25.00	10.42 - 5.83	1.34 (1.00) - 4.02 (3.00)
6	IES.6540.160.3.GS	65 X 40	2900	174	34	8.33	20.00 - 39.00	11.11 - 4.86	2.68 (2.00) - 6.70 (5.00)
7	IES.6540.200.3.GS	65 X 40	2900	214	55	8.06	30.00 - 61.00	10.56 - 5.14	5.36 (4.00) - 11.40 (8.50)
8	IES.6540.260.3.GS	65 X 40	2900	264	83	8.33	60.00 - 95.00	11.11 - 4.44	10.73 (8.00) - 21.46 (16.00)
9	IES.6540.130.3.GS	65 X 50	2900	139	24	15.97	10.00 - 26.00	20.83 - 8.33	2.68 (2.00) - 8.72 (6.50)
10	IES.6550.200.3.GS	65 X 50	2900	214	56	16.67	30.00 - 63.00	22.22 - 8.33	9.39 (7.00) - 20.12 (15.00)
11	IES.6550.260.3.GS	65 X 50	2900	264	92	17.36	60.00 - 98.00	22.22 - 12.50	20.12 (15.00) - 43.58 (32.50)
12	IES.8065.130.3.GS	80 X 65	2900	139	22.5	26.67	10.00 - 25.50	35.42 - 15.28	6.03 (4.50) - 11.06 (8.25)
13	IES.8065.160.3.GS	80 X 65	2900	174	35	30.56	20.00 - 41.00	38.89 - 15.28	9.38 (7.00) - 18.77 (14.00)
14	IES.8065.200.3.GS	80 X 65	2900	214	55	31.25	40.00 - 63.50	41.67 - 18.06	16.76 (12.50) - 36.88 (27.50)
15	IES.8065.260.3.GS	80 X 65	2900	264	89	34.72	60.00 - 98.00	41.67 - 13.89	26.82 (20.00) - 60.35 (45.00)
16	IES.1080.160.3.GS	100 X 80	2900	174	36	43.06	20.00 - 40.00	55.56 - 26.39	13.41 (10.00) - 36.82 (25.00)
17	IES.1080.200.3.GS	100 X 80	2900	214	55	51.39	40.00 - 63.00	65.28 - 22.22	20.12 (15.00) - 53.64 (40.00)
18	IES.1080.260.3.GS	100 X 80	2900	264	77.5	47.22	60.00 - 93.00	58.33 - 16.67	26.82 (20.00) - 67.05 (50.00)
19	IES.1210.200.3.GS	125 X 100	2900	214	53	76.39	40.00 - 60.00	93.75 - 45.14	33.53 (25.00) - 73.76 (55.00)
20	IES.1210.260.3.GS	125 X 100	2900	264	87	76.39	60.00 - 98.00	104.17 - 34.72	60.35 (45.00) - 134.10 (100.00)



# VERTICAL INLINE PUMP

# VERTICAL INLINE PUMP

## TECHNICAL CONSTRUCTION

Head Range	: Upto 305 meters
Discharge Range	: Upto 240 m <sup>3</sup> /h
Power Ratings	: Upto 110 kW
Voltage Range	: 415 Volts - 3Phase
Protection	: IP 55
Insulation	: F Class
pH Value	: 4 to 10
Altitude	: Up to 1000 metres
Liquid medium	: Clean clear liquid free from suspended solids
Liquid Temperature Range	: -15° C to 120°C
Motors	: All motors are designed under Ie2 & IE3 specification
Maximum Operating Pressure	: 25 bar
Frequency	: 50 HZ
Connecting Flange	: PN 25/ DN 40
Negative Section	: Maximum 3 meters with foot wall






## MATERIAL OF CONSTRUCTION

Base Plate/Pump Casing	: Cast Iron
Drainage Plug Assembly	: SS 304
Diffuser	: SS 304
Diffuser Bearing/Support Diffuser	: SS 304
Diffuser	: SS 304
Impeller	: SS 304
Impeller Sleeves	: SS 304
Motor Base/Pump Head	: Cast Iron
Vent Plug Assembly	: SS 304
Pump Shaft	: SS 304
Pump Casing (Suc & Del)	: Cast Iron

## APPLICATIONS

- Building & construction segment - Booster, Fire fighting, Hydro pneumatic systems, Heating, Ventilation and Air conditioning systems, Machine tools.
- Water Treatment - Reverse osmosis systems (RO), softening, Ion exchange, demineralizing systems, distillation systems
- Dairy, Food Processing and Beverage Industries - Supply of clean water.
- Industrial - Boiler feed, condensate & other liquid transfer. Long range pipe lines.
- Agriculture - Irrigation - Field irrigation (flooding), sprinkler irrigation, drip-feed irrigation.

## FEATURES

- 
**Standard quality material**  
 Parts are made up of high class standard quality materials.
- 
**Superior Pump Hydraulics**  
 Superior pump hydraulics Performance due to latest & advanced manufacturing processes coupled with IE2 motor facilitate higher efficiency at par with international standard.
- 
**Cartridge Type Mechanical Seal**  
 Superior quality cartridge type mechanical seal better heat resistance wear resistance capacity, zero leakage and lower friction loss. This protects the shaft from wearing. World class design easy maintenance without opening the pump for a longer life.

- 
**Easy Replaceable Wearing Parts**  
 All wearing parts within the pumps are easily accessible and replaceable which facilitates ease of maintenance. Interchangability due to high class & precision manufacturing processes.
- 
**Precisely manufactured Parts**  
 Long life of pumps due to Very low vibrations during working.
- 
**Easy Maintainable Designs**  
 Easy maintainable design and better interchangeability of components
- 
**High Head Applications**  
 The pump has been designed to discharge & handle large volumes of water for high head applications.

## PERFORMANCE DATA

<b>PUMP SELECTION GUIDE</b>	IVI	5050	03	03	06
<b>CODE DESCRIPTION</b>	Ind.vert.inline	SUC. X DEL.	HP	Phase	No.of stages

KOEL CODE	SUCX DEL. size mm	M3/HR	POWER Kw.	POWER HP	STAGE	DISC. m3/Hr.	5	6	8	10	12	13
IVI.5050.03.03.06	DIN 40	8	2.2	3.0	6	Head-Mtrs.	62	60	54	48	39	34
IVI.5050.04.03.08	DIN 40	8	3	4.0	8		83	80	73	65	52	45
IVI.5050.06.03.10	DIN 40	8	4	5.5	10		104	100	92	81	65	58
IVI.5050.06.03.12	DIN 40	8	4	5.5	12		124	120	111	92	78	68
IVI.5050.75.03.14	DIN 40	8	5.5	7.5	14		145	141	130	113	92	81





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- All the details in this publication is based on the performance applicable to liquid of specific gravity 1 and viscosity same as water.
- The performance data are at rated power supply and only indicative.
- Direction of rotation, marked with an arrow on the casting of each pump, check before coupling with the prime mover.
- Subject to technical modification without prior notice.
- Technical details mentioned above may vary as per site condition / situation. As continuous improvements are contemplated the description and illustrations are not binding.
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