



VERTICAL INLINE MULTI STAGE PUMP

VERTICAL INLINE PUMP

TECHNICAL DETAILS

Head range	: Upto 305 mtrs
Discharge range	: Upto 240 M3/Hr.
Power ratings	: Upto 150 HP
Voltage range	: 415 Volts - 3Phase
Protection	: IP 55
Insulation	: F Class
pH Value	: 4 to 10
Altitude	: Up to 1000 mtrs
Liquid medium	: Clean clear liquid free from suspended solids
Liquid temperature range	: Up to 75°C
Motors	: All motors are designed under IE2 & IE3 specification
Maximum operating pressure	: UPTO 32 Bar
Frequency	: 50 HZ
Connecting flange	: PN 25/ DN 40
Negative section	: Maximum 3 meters with foot valve3

Also Available in 60Hz



MATERIAL OF CONSTRUCTION

Base plate/Pump casing	: Cast Iron
Drainage plug assembly	: SS 304
Diffuser	: SS 304
Diffuser bearing/Support 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/ : SS304/SS316
MOC Optional	: SS316/SS316L
Sp. Mech. Seal	: -15° C to +120° C

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, demineralizing systems, distillation systems
- Dairy, food processing and beverage industries - supply of clean water.
- Industrial - condensate & other liquid transfer. Long range pipe lines.

FEATURES



Superior pump hydraulics

The superior performance of our pump hydraulics is achieved through the latest and most advanced manufacturing processes. Coupled with an IE2/IE3 motor, this ensures higher efficiency.



Cartridge type mechanical seal

The pump comes with a heat and wear resistance mechanical seal with zero leakage and frictional loss



Easy replaceable wearing parts

The internal components of the pumps are easily accessible and in easy maintenance.



Precisely manufactured parts

The extended lifespan of pumps is attributed to minimal vibrations experienced during operation.



Easy maintainable designs

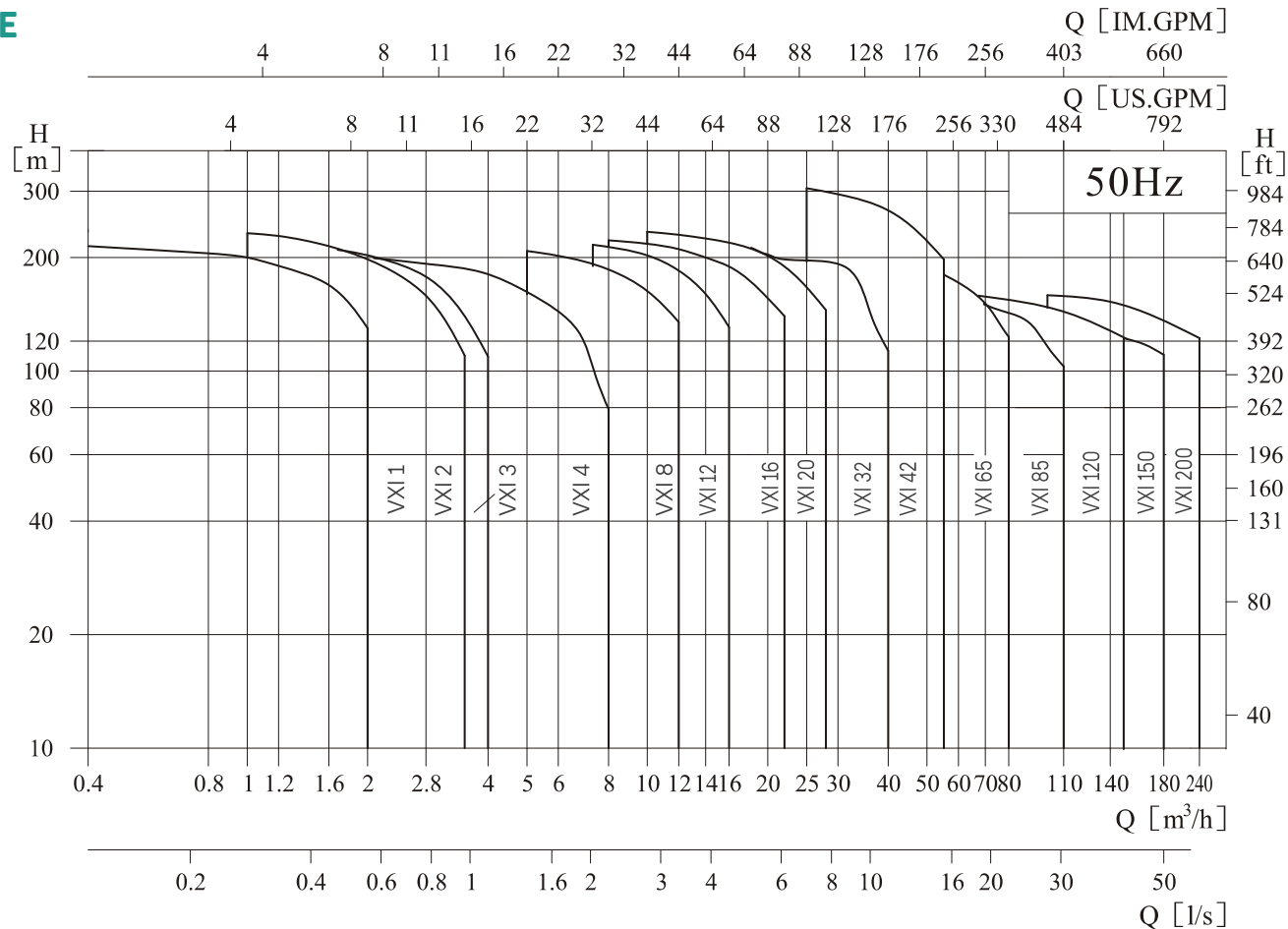
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High head applications

The pump has been engineered to effectively manage and expel substantial amounts of water, particularly for applications requiring high pressure.

PEROFRMANCE SCOPE

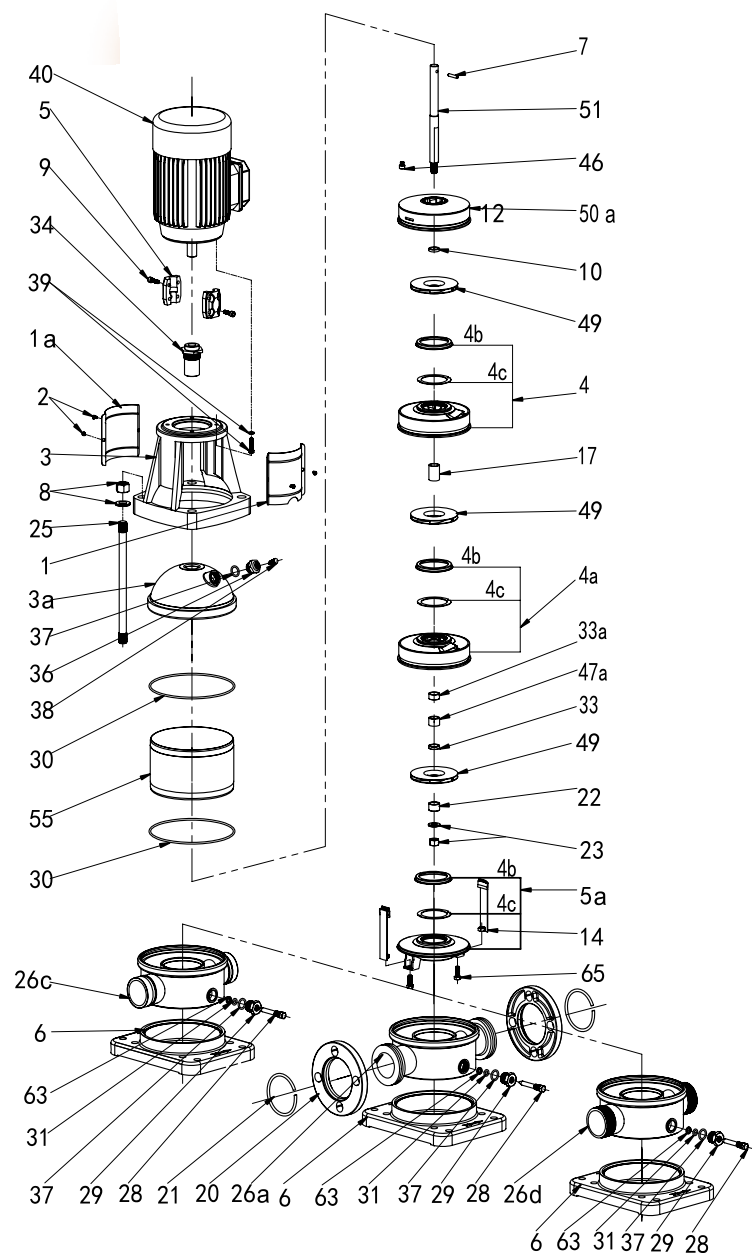


PERFORMANCE DATA

Pump selection guide	IVI	5050	03	03	06
Code description	Industrial vertical inline	Pipe size (mm) Suc x Del	HP	Phase	No. of stages

Sr. No.	KOEL Code	Pipe size (mm) Suc x Del	Power kw.	Power HP	Stage	Disc. M3/Hr.	5	6	7	8	9	10	11	12
1	IVI.5050.01.03.02	DIN 40	0.75	1	2	Head-Mtrs.	20	20	19	18	17	16	14	13
2	IVI.5050.15.03.03	DIN 40	1.1	1.5	3		30	30	29	27	25	24	21	19
3	IVI.5050.02.03.04	DIN 40	1.5	2	4		41	40	38	36	34	32	28	26
4	IVI.5050.03.03.05	DIN 40	2.2	3	5		52	50	48	45	42	40	36	32
5	IVI.5050.03.03.06	DIN 40	2.2	3.0	6		62	60	57	54	51	48	43	39
6	IVI.5050.04.03.08	DIN 40	3	4.0	8		83	80	77	73	69	65	58	52
7	IVI.5050.06.03.10	DIN 40	4	5.5	10		104	100	97	92	87	81	73	65
8	IVI.5050.06.03.12	DIN 40	4	5.5	12		124	120	116	111	104	92	87	78
9	IVI.5050.75.03.14	DIN 40	5.5	7.5	14		145	141	136	130	122	113	102	92
10	IVI.5050.75.03.16	DIN 40	5.5	7.5	16		166	161	156	148	139	130	118	106
11	IVI.5050.10.03.18	DIN 40	7.5	10	18		187	182	175	167	157	146	137	120
12	IVI.5050.10.03.20	DIN 40	7.5	10	20		208	202	195	186	175	163	150	135

Exploded View of Vertical Inline Multi Stage Pump



PART NO	PART NAME
1	COUPLING GUARD
2	SCREW M4*8
3	PUMP HEAD
3a	LINING
4	DIFFUSER
4a	SUPPORT DIFFUSER
4b	NECK RING COVER
4c	NECK RING
5	COUPLING
5a	INDUCER
6	BASE PLATE
7	SHAFT PIN
8	NUT M16 WASHER 16
9	HEXAGON SOCKET HEAD SCREW
10	CIRCLIP COVER
14	STRAP
17	IMPELLER SLEEVE
20	FLANGE
21	CIRCLIP
22	FIRST IMPELLER COVER
23	NUTM12, WASHER 12
25	STAY BOLT
26a	FLANGE TYPE INLET & OUTLET CHAMBER

PART NO	PART NAME
26c	CUTTING FERRULE TYPE INLET & OUTLET CHEMBER
26d	PIPE THREAD TYPE INLET & OUTLET CHEMBER
28	DRAINAGE SCREW M10
29	DRAINAGE NUT
30	O RING 169* 3.3
31	O RING 8* 2.65
33	IMPELLER SLEEVE - S
33a	IMPELLER SLEEVE - L
34	MECHANICAL SEAL
36	AIR VENT NUT
37	O RING 16* 2.65
38	AIR VENT SCREW
39	SCREW, WASHER
40	MOTOR
46	ADJUSTING RUBBER
47a	BEARING
49	IMPELLER
50a	TOP DIFFUSER
51	SHAFT
55	CYLINDER
63	O RING RETAINER
65	SCREW M8* 20

INDUSTRIAL VERTICAL INLINE PUMPS

Salient Features

- IP 55 protection
- CED coated CI components.
- 'F' class insulation
- Voltage range : 1 Phase – 180-240 Volts & 3 Phase – 370-440 Volts
- Method of starting : 1Ph – CSCR type and 3Ph – D.O.L
- Working fluid & it's Temperature – Water & -15° to 95° C

Please find below the brief specifications for your reference:

Impeller	Diffuser	Pump Base	Pump Housing	Flange	Pump Shell
SS-304	SS-304	CI	CI	CI	SS-304

Mechanical seal	Pump Shaft	Motor body	Motor shaft
Cartridge type (SS 304/SiC-SiC/EPDM)	SS-316	CI/ADC-12	EN 8D

Pump selection guide	IVI	3232	1P5	1S	P7
Code description	Industrial vertical inline	Pipe size (mm) Suc x Del	1.5 HP	1 - Phase & S - SS diffuser	P- Random alphabet & 7 - No. of stages

Sr. No.	Product code	Disc. M3/Hr.	Flow in M3/Hr							
			1	1.2	1.6	2	2.4	2.8	3.2	3.5
1	IVI.3232.1.1S.P7	Head in Meters	61	59	55	50	45	39	33	26
2	IVI.3232.1.3S.P7		61	59	55	50	45	39	33	26
3	IVI.3232.1P5.1S.P11		95	92	86	79	70	61	51	41
4	IVI.3232.1P5.3S.P11		95	92	86	79	70	61	51	41
5	IVI.3232.2.1S.P13		113	111	103	94	86	75	62	49
6	IVI.3232.2.3S.P13		113	111	103	94	86	75	62	49
7	IVI.3232.2.1S.P15		130	126	119	108	96	86	69	56
8	IVI.3232.2.3S.P15		130	126	119	108	96	86	69	56
9	IVI.3232.3.1S.P18		156	152	143	130	116	103	86	71
10	IVI.3232.3.3S.P18		156	152	143	130	116	103	86	71
11	IVI.3232.3.1S.P22		192	187	175	160	143	125	105	85
12	IVI.3232.3.3S.P22		192	187	175	160	143	125	105	85



INDUSTRIAL VERTICAL INLINE PUMPS

Salient Features

- Suction from BOTTOM
- Delivery from TOP
- IP 44 protection
- CED coated CI components.
- 'F' class insulation
- Voltage range : 1 Phase – 180-240 Volts & 3 Phase – 370-440 Volts
- Method of starting : 1Ph – CSCR type and 3Ph – D.O.L
- Working fluid & it's Temperature – Water & upto 90° C

Please find below the brief specifications for your reference:

Impeller	Diffuser	Pump Base	Pump Housing	Pump Shell
SS-304	Noryl	CI	CI	SS-304

Mechanical seal	Pump Shaft	Motor body	Motor shaft	Suction & delivery	Connection type
Carbon & Ceramic	SS-410	ADC-12	EN 8D	Round type	Threaded type

Pump selection guide	IVI	2525	1P5	1 N	P10
Code description	Industrial Vertical Inline	Pipe size (mm) Suc x Del	1.5 HP	1 - Phase & N – Noryl diffuser	P - Random alphabet & 10 - No. of stages

Sr. No.	Product code	Disc. M3/Hr.	Flow in M3/Hr						
			1	1.5	2	2.5	3	3.5	4
1	IVI.2525.1.1N.P8	Head in Meters	62	59	55	52	47	42	35
2	IVI.2525.1.3N.P8		62	59	55	52	47	42	35
3	IVI.2525.1P5.1N.P10		80	77	70	62	53	45	37
4	IVI.2525.1P5.3N.P10		80	77	70	62	53	45	37
5	IVI.2525.1P5.1N.P12		97	90	83	74	63	50	38
6	IVI.2525.1P5.3N.P12		97	90	83	74	63	50	38
7	IVI.2525.2.1N.P14		117	109	100	88	73	58	42
8	IVI.2525.2.3N.P14		117	109	100	88	73	58	42
9	IVI.2525.2.1N.P16		130	123	113	100	85	68	48
10	IVI.2525.2.3N.P16		130	123	113	100	85	68	48
11	IVI.2525.3.1N.P19		163	154	141	126	108	88	63
12	IVI.2525.3.3N.P19		163	154	141	126	108	88	63
13	IVI.2525.3.1N.P22		190	180	165	150	128	100	70
14	IVI.2525.3.3N.P22		190	180	165	150	128	100	70



INDUSTRIAL VERTICAL INLINE PUMPS

Salient Features

- Suction from BOTTOM
- Delivery from TOP
- IP 55 protection
- CED coated CI components
- 'F' class insulation
- Voltage range : 1 Phase – 180-240 Volts & 3 Phase – 380-440 Volts
- Method of starting : 1Ph – CSCR type and 3Ph – D.O.L
- Working fluid & it's Temperature – Water & up to 90° C

Please find below the brief specifications for your reference:

Impeller	Diffuser	Pump Base	Pump Housing	Pump Shell
Noryl	Noryl	CI	SS-202	SS-304

Mechanical seal	Pump Shaft	Motor body	Motor shaft	Flange
Carbon & Ceramic	SS-431	AL	SS-431	Oval type

Pump selection guide	IVI	2525	1P5	1N	S9
Code description	Industrial Vertical Inline	Pipe size (mm) Suc x Del	1.5 HP	1- Phase & N – Noryl diffuser	S- Random alphabet & 9 - No. of stages

Sr. No.	Product code	Disc. M3/Hr.	Flow in M3/Hr						
			0.3	0.8	1.5	2.1	2.9	3.9	4.8
1	IVI.2525.1P5.1N.S9	Head in Meters	94	89	82	75	66	45	26
2	IVI.2525.1P5.3N.S9		94	89	82	75	66	45	26
3	IVI.2525.2.1N.S11		110	105	95	85	74	50	30
4	IVI.2525.2.3N.S11		110	105	95	85	74	50	30

