

## IM SERIES >>>

IMMERSION MULTISTAGE  
CENTRIFUGAL PUMPS



## Application

IM is used for conveying cooling liquid, lubricating liquid and condensation water of machine tools, industrial cleaning equipment or other cases that application of immersed pump is suitable, and is applicable to various temperature, flow and pressure ranges. IM is applicable to low-corrosive liquid.

• Concretely, it is applicable to electric spark, lathe, grinding machine, processing centre, cooling devices, industrial cleaning equipment, filtering system etc.

## Operation conditions

• Thin, clean non-explosive liquid with without solid grains and fibres; can be used for conveying of water, cooling water solution and cutting lubricating liquid.

• Liquid temperature:

Normal temperature type:  $-15^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Warm water type:  $+70^{\circ}\text{C} \sim 120^{\circ}\text{C}$

## Pump

IM is non-self priming multi-stage centrifugal pump install with standard motor. The motor shaft is directly connected with the pump shaft through coupling. According to the requirement, the pump can be equipped with intelligent protector, which effectively protects pump from dry rotation, phase lack, overload etc. In order to meet the requirement of installation depth of the water tank or vessel, it is possible to install cavity body for changing length of the pump. Length for different number of stages is shown in the dimensions & weight table and the table of products supplying scope.

## Motor

• The motor is fully-sealed, air-cooling standard motor 2 poles

• protection class: IP55

• insulation class: F

• Standard voltage, 50Hz  $1 \times 220-230/240\text{v}$

$3 \times 200/346\text{v}$

$3 \times 220-240/380-415\text{v}$

$3 \times 220-255/380-440\text{v}$

• Standard voltage, 60Hz  $3 \times 220-230/346-440\text{v}$

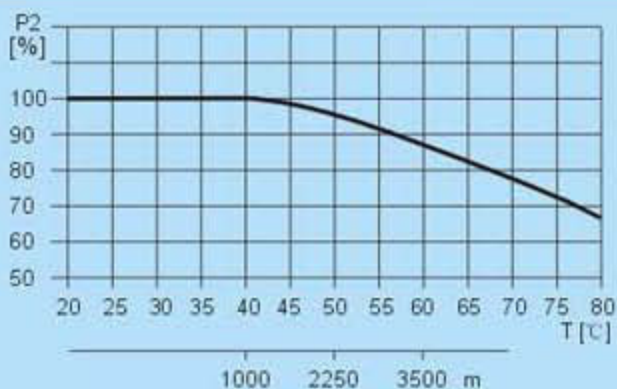
$3 \times 220-255/380-440\text{v}$

$3 \times 220-277/380-480\text{v}$

Motors for other voltages can be supplied according to the requirement.

Single phase motors with 0.37~2.2KW are available.

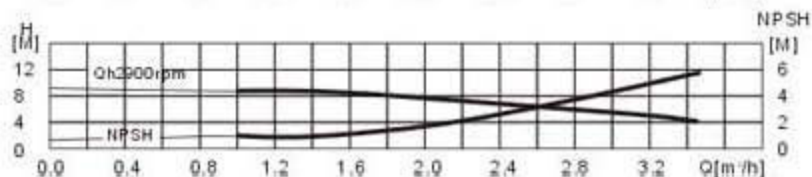
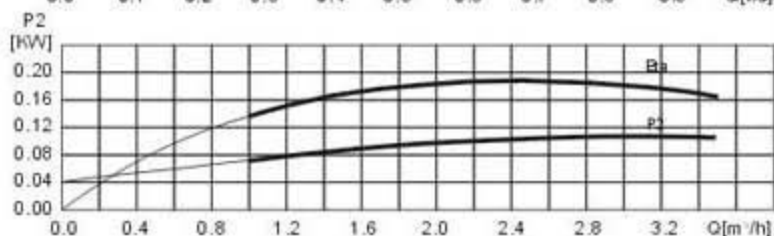
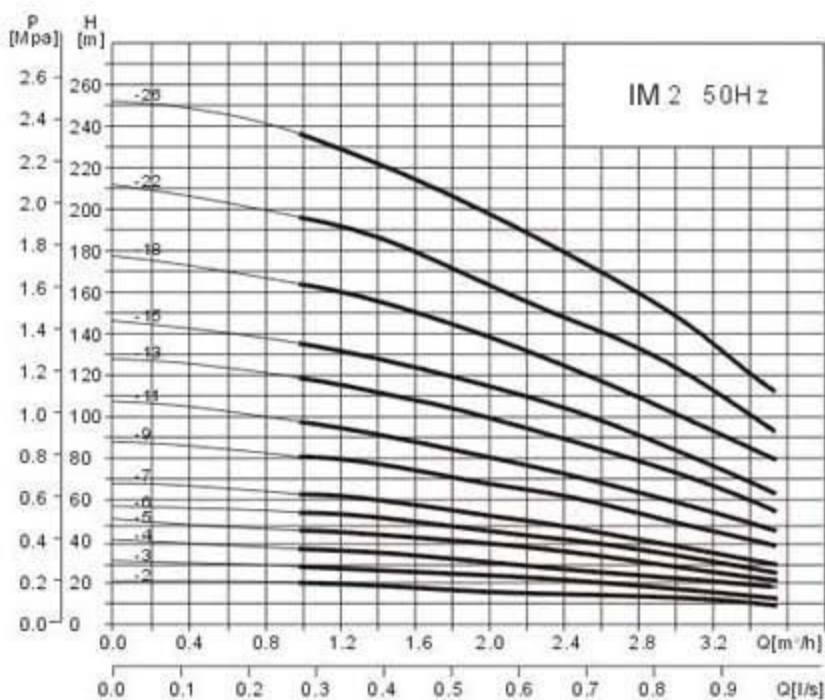
## Max. Ambient temperature



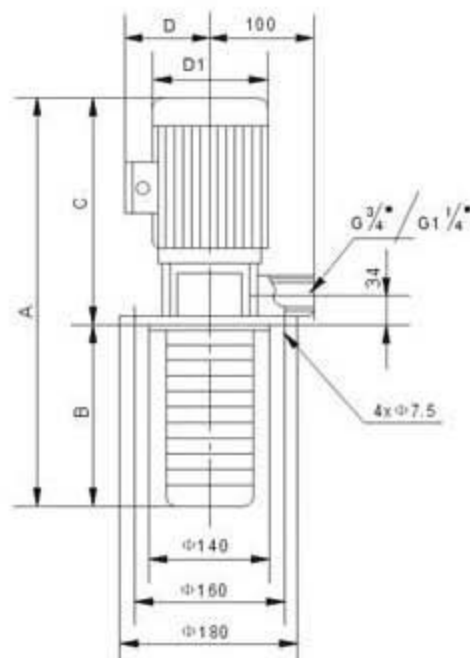
When the pump operates under ambient temperature higher than 40°C or under altitude higher than 1000m. Because of low air density and poor cooling effects, the motor output power P2 will be decreased to certain extent. If the pump is operated under the above-said conditions, it should be equipped with motor of higher power.

## IM2,50Hz

### Performance curve



### Installation sketch



## Performance table

Model	Driving motor (kW)	Q (m <sup>3</sup> /h)	H (m)							
			1.0	1.2	1.6	2.0	2.4	2.8	3.2	3.5
IM2-20/2	0.37		18	17	16	15	13	12	10	8
IM2-30/3	0.37		27	26	24	22	20	18	15	12
IM2-40/4	0.55		36	35	33	30	28	24	20	16
IM2-50/5	0.55		45	43	40	37	33	30	24	20
IM2-60/6	0.75		53	52	50	45	40	36	30	24
IM2-70/7	0.75		63	61	57	52	47	41	35	28
IM2-90/9	1.1		80	78	73	67	61	54	45	37
IM2-110/11	1.1		98	95	89	82	73	64	54	44
IM2-130/13	1.5		116	114	106	98	89	78	65	52
IM2-150/15	1.5		134	130	123	112	100	91	73	60
IM2-180/18	2.2		161	157	148	136	121	108	91	76
IM2-220/22	2.2		197	192	180	165	148	130	110	90
IM2-260/26	3.0		232	228	214	198	179	158	130	110

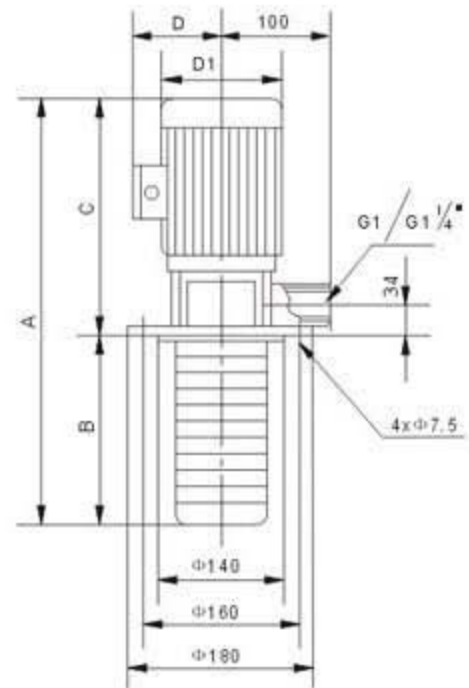
## Size and weight

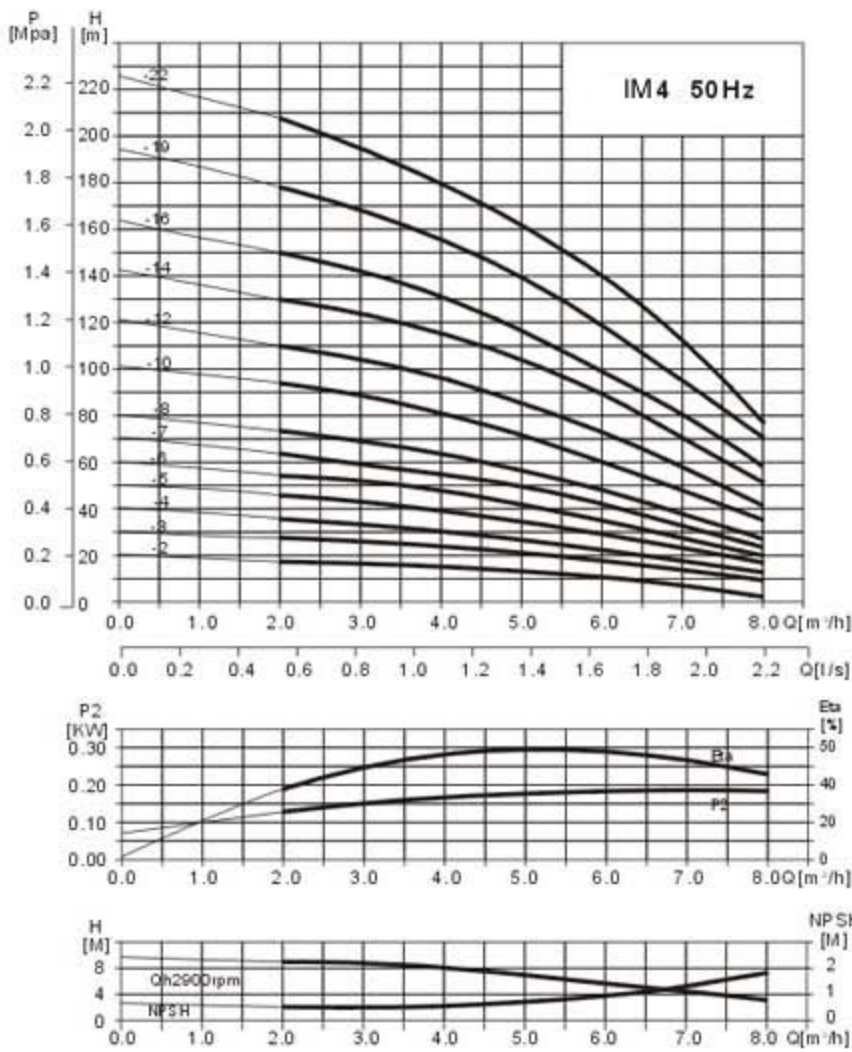
Model	Size(mm)				Weight (Kg)
	A	B	C	D	
IM2-20/2	375	123	252	117	12
IM2-30/3	393	141	252	117	12
IM2-40/4	411	159	252	117	14
IM2-50/5	429	177	252	117	14
IM2-60/6	447	195	252	142	15
IM2-70/7	571	213	358	142	17
IM2-90/9	607	249	358	142	20
IM2-110/11	643	285	358	142	20
IM2-130/13	734	321	413	155	26
IM2-150/15	770	357	413	155	28
IM2-180/18	824	411	413	155	32
IM2-220/22	896	483	413	155	32
IM2-260/26	1003	555	448	165	41

## IM4,50Hz

### Performance curve

### Installation sketch





### Performance table

Model	Driving motor (kW)	Q (m³/h)	H (m)							
			1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0
IM 4-20/2	0.37		19	18	17	15	13	12	8	6
IM 4-30/3	0.55		28	27	26	24	20	18	13	10
IM 4-40/4	0.75		38	36	34	32	27	24	19	13
IM 4-50/5	1.1		47	45	43	40	34	31	23	17
IM 4-60/6	1.1		56	54	52	48	41	37	28	20
IM 4-70/7	1.5		66	63	61	56	48	43	33	24
IM 4-80/8	1.5		74	72	70	64	55	50	38	27
IM 4-100/10	2.2		96	90	87	81	71	62	48	34
IM 4-120/12	2.2		114	108	104	95	85	75	58	41
IM 4-140/14	3.0		136	126	122	112	101	89	68	48
IM 4-160/16	3.0		152	144	140	129	115	101	78	55
IM 4-190/19	4.0		183	171	168	153	137	122	93	67
IM 4-220/22	4.0		211	200	192	178	160	138	108	79

### Size and weight

Model	Size (mm)					Weight (Kg)
	A	B	C	D	D1	
IM4-20/2	384	148	252	117	145	13
IM4-30/3	411	175	252	117	145	13
IM4-40/4	438	202	252	117	145	15
IM4-50/5	465	229	252	117	145	18
IM4-60/6	492	256	252	117	145	18
IM4-70/7	696	283	413	150	170	21
IM4-80/8	723	310	413	150	170	21
IM4-100/10	777	364	413	150	170	25
IM4-120/12	831	418	413	155	180	26
IM4-140/14	920	472	448	155	180	30
IM4-160/16	974	526	448	155	180	32
IM4-190/19	1102	607	495	180	210	35
IM4-220/22	1183	688	495	180	210	39