GEM Pump

(Green Engineering and Management Co.,Ltd)

CATALOGUE

Horizontal Single-stage End-Suction Centrifugal Pump

APPLICATION

For Handling Pure, Raw and Waste Water as well as Seawater in

- Water Works
- Irrigation and Drainage
- Pumping Stations
- Power Stations
- Industrial Water Supply
- Fire Fighting Systems







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Series description

Product series

GMH Series pumps are Horizontal Single-stage End-suction Centrifugal Pump,with application of transferring clean water and the liquid with similar physical and chemical characters as water but without solid particle,and widely used in water supply and drainage for factory,mine,city and also fire-fighting and field irrigation system.

The hydraulic performance can be adjusted by impeller cutting for different requests.Normal rotation speed is 980 RPM, 1450RPM & 2900RPM.If pumps need to be operated on maximum rotation speed 3550RPM(50Hz power supply or connected with gasoline or diesel engine),technical support on impeller diameter change is available.

GMH Pump has simple structure,reliable performance,compact size,low weight,excellent anti-cavitation,low power consumption and convenient maintenance.

Operating properties		
Caracteristic value		
Flow	Q	15-2000 m^3/h
Head	H	10-140 m
Pressure	P	16 bar
Fluid temperature	t	-10-85°C
Outlet	Dia.	32 – 350 mm

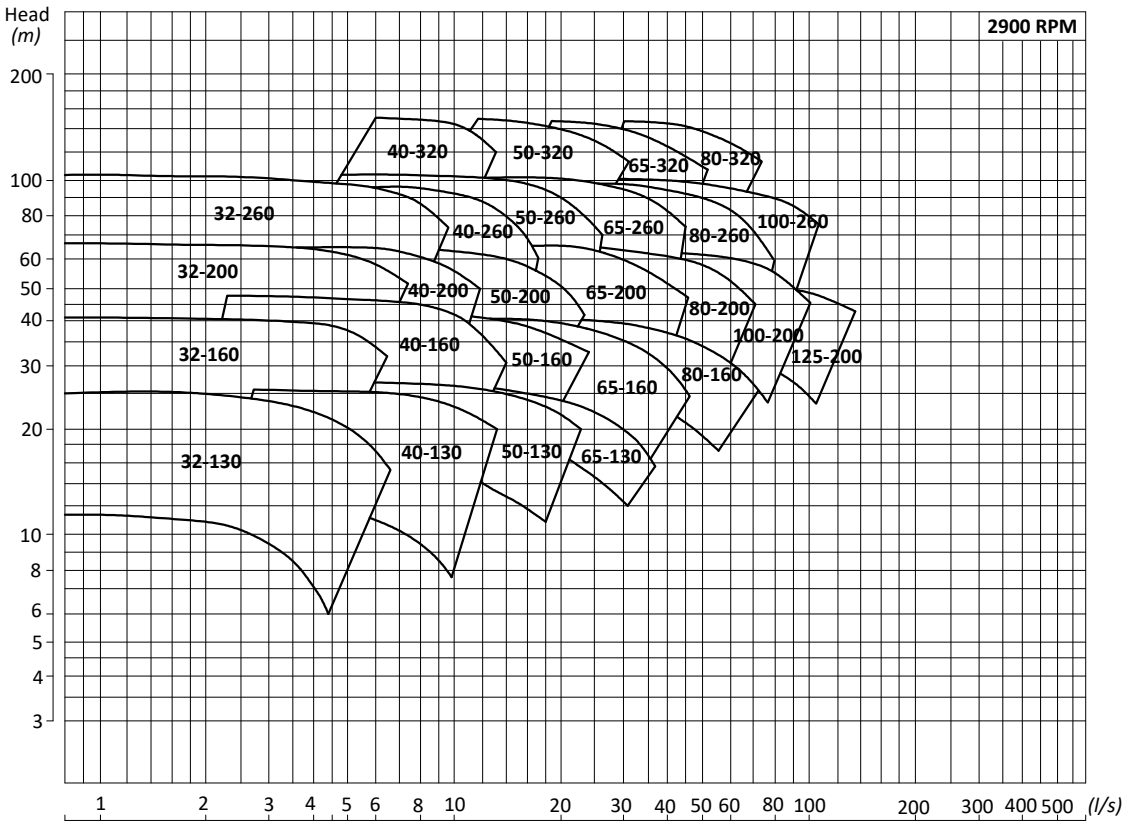
Structure description

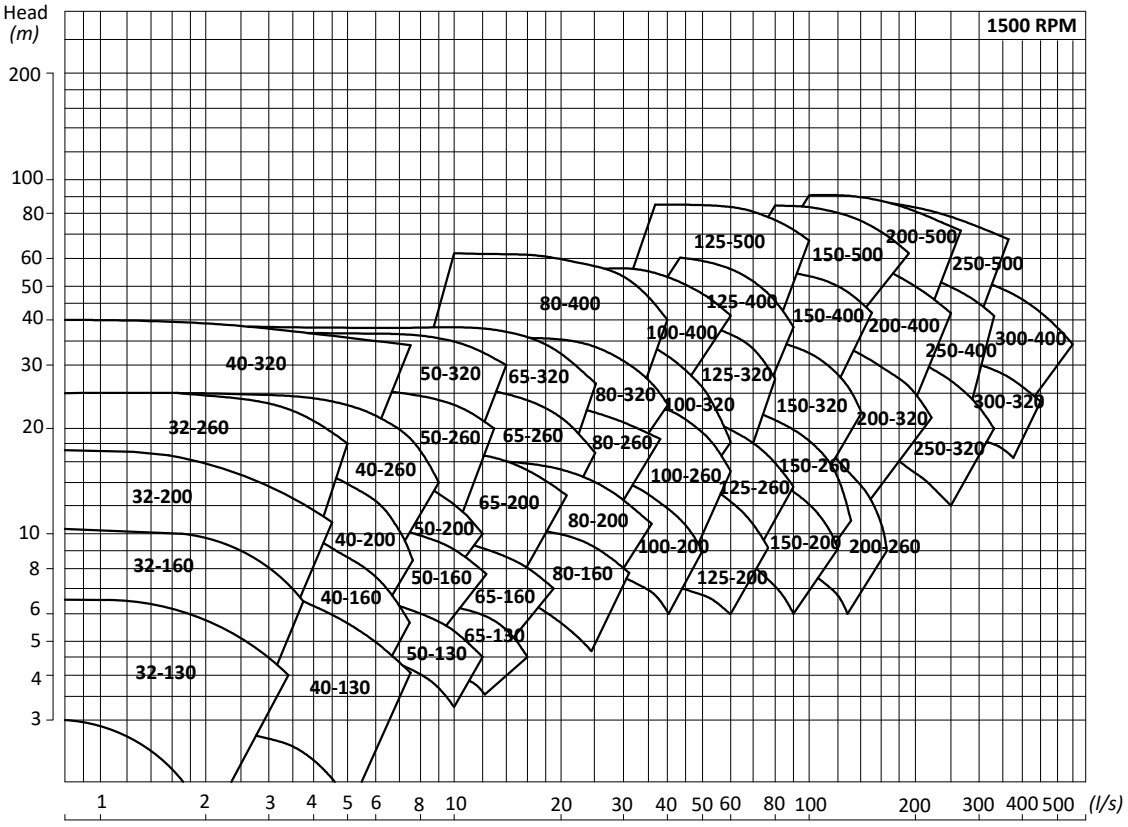
- The pump casing is casted with volute chamber,support foot and inlet/outlet flange
- Back pull-out design enables to dismantle cover and impeller with connection of pipe works both of suction and discharge.Pumps are droved directly by motor or inner combustion engine(diesel engine or gasoline engine) via connection of flexible coupling.
- Pump is sealed with packing seal(P)or Mechanical seal(M).Three types of Mechanical seal used:M1,M2,M3.Among them,M2 is balanced mechanical seal which used for working pressure over 1.0MPa.

Series Code

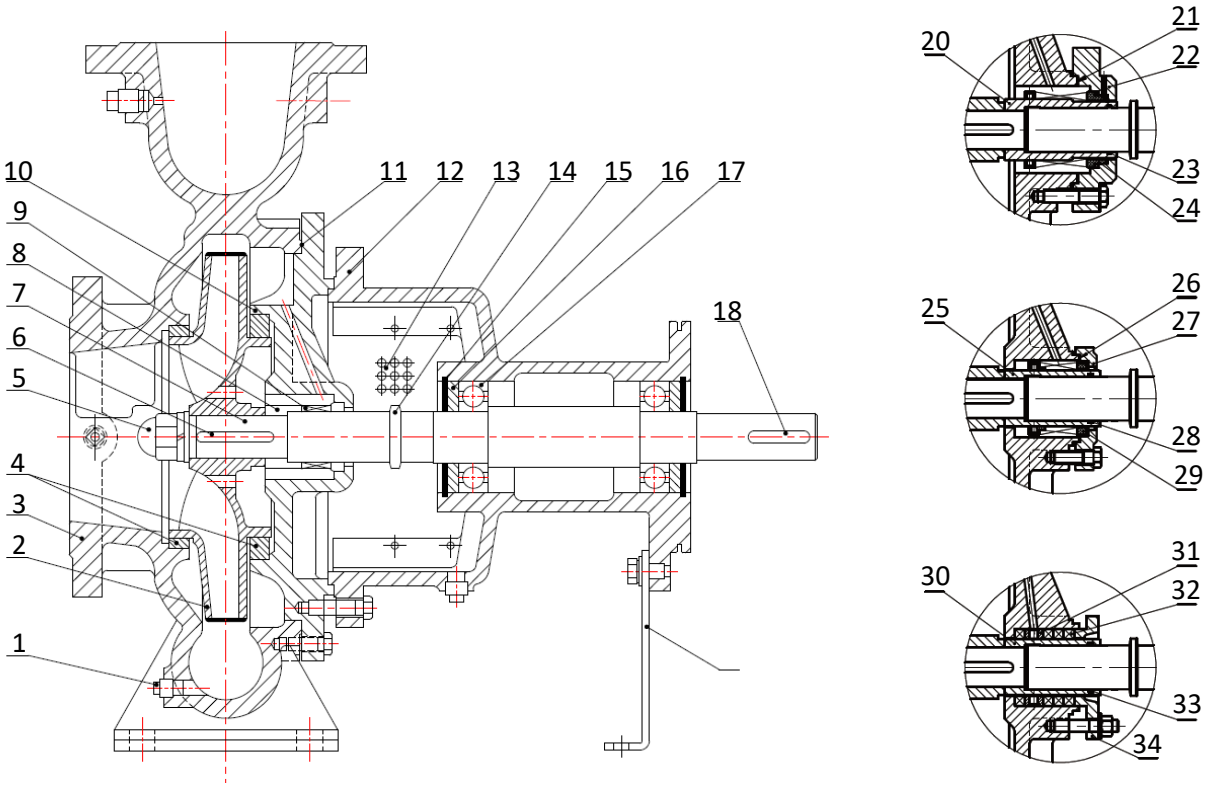
Example:
GMH125-200
GMH : Single-stage End-Suction Centrifugal Pump
125 : Pump outlet nominal diameter
200 : Impeller nominal diameter

Selection model drawing



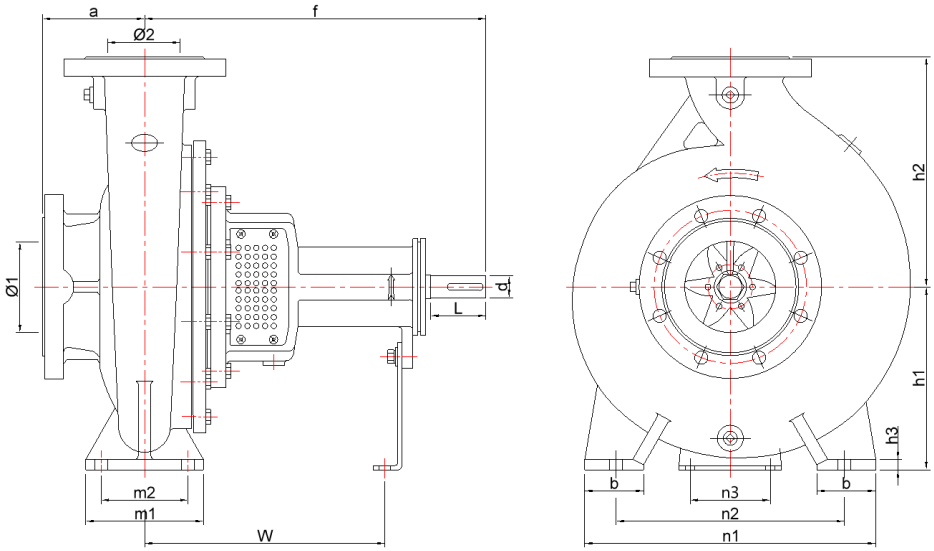


Pump Sectional Drawing



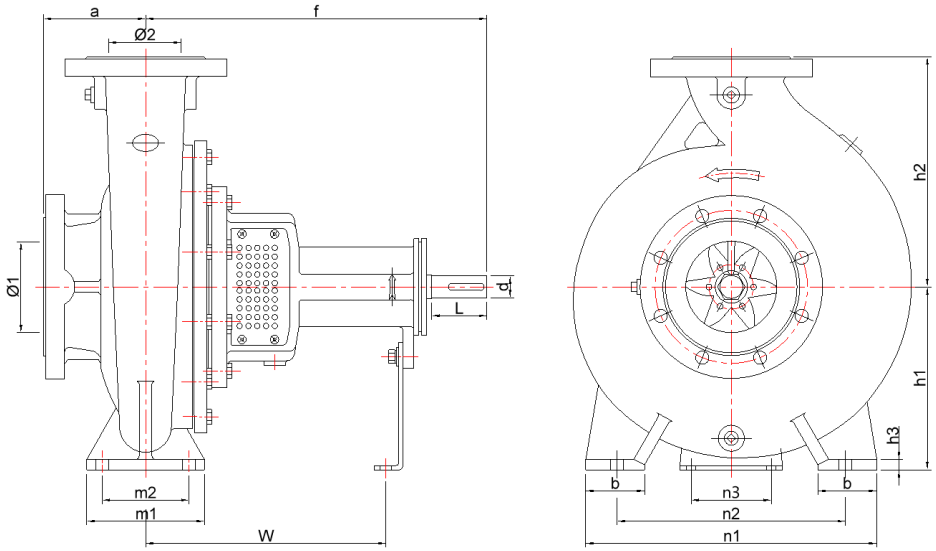
1	Screw plug	18	Coupling key
2	Impeller	19	Pump foot
3	Pump housing	20	Shaft sleeve(M2 type)
4	Wear ring	21	Gasket
5	Impeller nut	22	Mechanical seal cover(M2 type)
6	Key for impeller	23	O-ring
7	Shaft	24	Mechanical seal(M2 type)
8	Distance ring	25	Shaft sleeve(M3 type)
9	Mechanical seal(M1 type)	26	Gasket
10	Pressure cover	27	Mechanical seal cover (M3 type)
11	Housing seal	28	O-ring
12	Bearing bracket	29	Mechanical seal(M3 type)
13	Protection cover	30	Shaft sleeve(P type)
14	Thrower	31	Gland ring
15	Lock ring	32	Gland packing
16	Cover(bearing)	33	O-ring
17	Bearing		

Dimension drawing and dimension sheet of pump



Pump specification	shaft Ø	Inlet	Outlet	Pump dimension				Dimension of pump foot								Shaft terminal Shaft dimension	
		Ø1	Ø2	a	f	h1	h2	b	m1	m2	n1	n2	n3	h3	w	d	L
GMH32-130	25	50	32	80	360	112	140	50	100	70	190	140	100	14	250	24	50
GMH32-160	25	50	32	80	360	132	160	50	100	70	240	190	100	14	250	24	50
GMH32-200	25	50	32	80	360	160	180	50	100	70	240	190	110	14	250	24	50
GMH32-260	25	50	32	100	360	180	225	65	125	95	320	250	110	14	250	24	50
GMH40-130	25	65	40	80	360	112	140	50	100	70	210	160	100	14	250	24	50
GMH40-160	25	65	40	80	360	132	160	50	100	70	240	190	100	14	250	24	50
GMH40-200	25	65	40	100	360	160	180	50	100	70	265	212	110	14	250	24	50
GMH40-260	25	65	40	100	360	180	225	65	125	95	320	250	110	14	250	24	50
GMH40-320	35	65	40	125	470	200	225	65	125	95	345	280	110	14	328	32	80
GMH50-130	25	65	50	100	360	132	160	50	100	70	240	190	100	14	250	24	50
GMH50-160	25	65	50	100	360	160	180	50	100	70	265	212	110	14	250	24	50
GMH50-200	25	65	50	100	360	160	200	50	100	70	265	212	110	14	250	24	50
GMH50-260	25	65	50	100	360	180	225	65	125	95	320	250	110	14	250	24	50
GMH50-320	35	65	50	125	470	225	280	65	125	95	345	280	110	16	328	32	80
GMH65-130	25	80	65	100	360	160	180	65	125	95	280	212	110	14	250	24	50
GMH65-160	25	80	65	100	360	160	200	65	125	95	280	212	110	14	250	24	50
GMH65-200	25	80	65	100	360	180	225	65	125	95	320	250	110	14	250	24	50
GMH65-260	35	80	65	100	470	200	250	80	160	120	360	280	110	16	328	32	80
GMH65-320	35	80	65	125	470	225	280	80	160	120	400	315	110	16	328	32	80
GMH80-160	25	100	80	125	360	180	225	65	125	95	320	250	110	14	250	24	50
GMH80-200	35	100	80	125	470	180	250	65	125	95	345	280	110	14	328	32	80
GMH80-260	35	100	80	125	470	200	280	80	160	120	400	315	110	16	328	32	80
GMH80-320	35	100	80	125	470	250	315	80	160	120	400	315	110	16	328	32	80
GMH80-400	45	100	80	125	520	280	355	85	160	120	400	355	110	16	355	42	110
GMH100-200	35	125	100	125	470	200	280	80	160	120	360	280	110	16	328	32	80
GMH100-260	35	125	100	140	470	225	280	80	160	120	400	315	110	16	328	32	80
GMH100-320	35	125	100	140	470	250	315	80	160	120	400	315	110	16	328	32	80
GMH100-400	45	125	100	140	530	280	355	100	200	150	500	400	110	18	355	42	110
GMH125-200	35	150	125	140	470	250	315	80	160	120	400	315	110	16	328	32	80
GMH125-260	35	150	125	140	470	250	355	80	160	120	400	315	110	16	328	32	80
GMH125-320	45	150	125	140	530	280	355	100	200	150	500	400	110	18	355	42	110
GMH125-400	45	150	125	140	530	315	400	100	200	150	500	400	110	18	355	42	110
GMH125-500	60	150	125	180	670	375	500	120	200	150	550	450	140	25	495	55	110

Dimension drawing and dimension sheet of pump



Pump specification	shaft Ø	Inlet	Outlet	Pump dimension				Dimension of pump foot								Shaft terminal Shaft dimension	
		Ø1	Ø2	a	f	h1	h2	b	m1	m2	n1	n2	n3	h3	w	d	L
GMH150-200	35G	200	150	160	495	280	400	100	200	150	550	450	110	20	328	32	80
GMH150-260	45	200	150	160	530	250	355	100	200	150	450	350	110	18	355	42	110
GMH150-320	45	200	150	160	530	280	400	100	200	150	550	450	110	18	355	42	110
GMH150-400	45	200	150	160	530	315	450	100	200	150	550	450	110	18	355	42	110
GMH150-500	60	200	150	180	670	375	500	120	200	150	550	450	140	25	495	55	110
GMH200-260	45	250	200	180	550	280	400	100	200	150	550	450	110	25	389	42	110
GMH200-320	55	250	200	200	670	355	450	100	200	150	550	450	110	20	495	48	110
GMH200-400	55	250	200	200	670	355	500	120	200	150	550	450	110	20	495	48	110
GMH200-500	60	250	200	210	675	400	500	160	300	240	720	600	140	30	495	55	110
GMH250-320	55	300	250	200	670	355	525	100	250	175	600	500	110	24	495	48	110
GMH250-400	60	300	250	250	670	400	500	120	300	250	710	600	140	25	495	55	110
GMH250-500	75	300	250	240	875	425	545	160	300	200	720	600	140	30	655	70	140
GMH300-400	75	350	300	280	875	500	600	150	300	200	800	660	140	40	655	70	140
GMH30-320	70	510	300	260	875	400	560	140	300	200	750	600	140	32	655	70	140

Material

Part	Material	Standards		
		ASTM	**DIN**	**JISS**
Pump casing	Gray iron casing	A-Gr 30	GG 20	FC 200
		A-Gr 35	GG 25	FC 250
		A-Gr 40,45	GG 30	FC 300
		A-Gr 50	GG 35	FC 350
		A-Gr 55,60	GG 40	
Impeller	Stainless steel	A-TYPE 329	1.4460	SUS 304
		A-TYPE 410	1.4006	SUS 316
		A-TYPE 420	1.4021	SUS 329
		A-TYPE CF8	1.4028	SUS 410
		A-TYPE CF8M	1.4308	SUS 420
			1.4408	SCS 13
			1.4409	SCS 14
	Bronze	B 61 Alloy 4A	2.1050.01/G CuSN10	H5111 Gr BC2
		B 62 Alloy 4A	2.1052.01/G CuSn12	H5120 CAC406
		B 584-90500	2.1086.01/G CuSn10Zn	
		B - C90700		
Shaft/Shaft sleeve	Stainless steel	A-TYPE 316	1.4301	SUS 304
		A-TYPE 329	1.4460	SUS 316
		A-TYPE 403	1.4000	SUS 329
		A-TYPE 410	1.4006	SUS 410
		A-TYPE 416	1.4005	SUS 420
		A-TYPE 420	1.4021	SCS 13
		A-TYPE 431	1.4028	SCS 14
			1.4057	
Wear ring	Stainless steel	A-TYPE 316	1.4301	SUS 304
		A-TYPE 329	1.4460	SUS 316
		A-TYPE 403	1.4000	SUS 329
		A-TYPE 410	1.4006	SUS 410
		A-TYPE 416	1.4005	SUS 420
		A-TYPE 420	1.4021	SCS 13
		A-TYPE 431	1.4028	SCS 14
		A-TYPE CF8	1.4308	
		A-TYPE CF8M	1.4408	
	Bronze	B 61 Alloy 4A	2.1050.01/G CuSN10	H5111 Gr BC2
		B 62 Alloy 4A	2.1052.01/G CuSn12	H5120 CAC406
		B 584-90500	2.1086.01/G CuSn10Zn	
		B - C90700		

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