



**MJ, MJZ**  
Self-priming  
Sewage Pump, 50Hz

# Approvals



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## General data • MJ

### Pump

MJ series are self-priming, solids handling, resistant to abrasion.

This pumps can handle liquids up to a viscosity of about 50mm<sup>2</sup>/s.

They are designed with the advanced device maintenance hole and wear plate, easy to clean and flush.

MJ pumps have wide applications in industry, marine and waste treatment.

### Operating Condition

Flow Rate(Q) : 2-130 l/s

Head(H) : 4-60 m

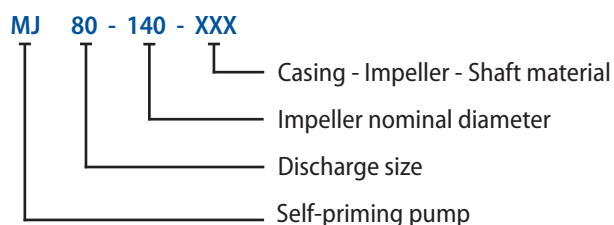
Speed : 1450-3500 rpm

Temperature : -10°C to 105°C standard

Work pressure: 0.6 MPa

Max. solid size: 76 m

### Definition of Model



<b>C</b>	Cast iron	<b>S</b>	Stainless steel 420
<b>Q</b>	Ductile iron	<b>45</b>	Stainless steel 1045
<b>B</b>	Bronze	<b>S304</b>	Stainless steel 304
<b>M</b>	Mechanical seal	<b>S316</b>	Stainless steel 316

### Applications

- Waste water treatment plant.
- Portable emergency fire fighting.
- Marine, Ballasting and Bilge.
- Liquid transfer: clean or dirty water, mixed liquids, abrasive or corrosive liquids.
- Civil engineering.
- Smoke scrubbing.
- Cooling and Circulation.

### Design

Performance and dimesions refering to the european standard.

- Structure:** Semi-open impeller, single-suction, self-priming, water plate.
- Flange:** Pump casing are casted with flanges; Screw flanges for discharge < 100 m.
- DN:** 40 - 200 mm

- Material:**
- Casing:** Cast Iron, optional: Ductile Iron.
- Impeller:** Ductile Iron, optional: Bronze, Stainless Steel.
- Wear Plate:** Cast Iron, optional: Bronze, Stainless Steel.
- Shaft:** SS 1045, optional: SS 304, SS 316, SS420
- Shaft Seal:** Mechanical Seal

# General data • MJZ

## Pump

MJZ series are monoblock type of MJ pumps.  
Motor shaft is plugged into pump shaft to ensure connectricity and shorten the axial length.

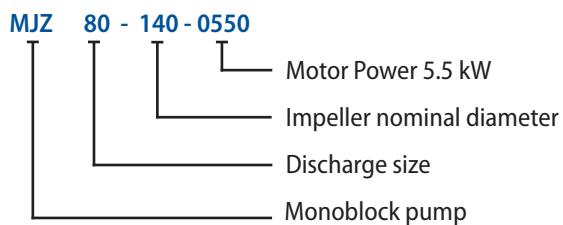
They are very useful when required:

self-priming, solids handling, resistance to abrasion or corrosion, limited installation space.

## Operating Condition

Flow Rate(Q) : 2-53 l/s  
Head(H) : 4-40 m  
Speed : 1450-3500 rpm  
Temperature : -10°C to 105°C  
Work pressure: 0.6 MPa  
Max. solid size: 50 m

## Definition of Model



<b>C</b>	Cast iron	<b>S</b>	Stainless steel 420
<b>Q</b>	Ductile iron	<b>45</b>	Stainless steel 1045
<b>B</b>	Bronze	<b>S304</b>	Stainless steel 304
<b>M</b>	Mechanical seal	<b>S316</b>	Stainless steel 316

## Applications

- Waste water treatment plant.
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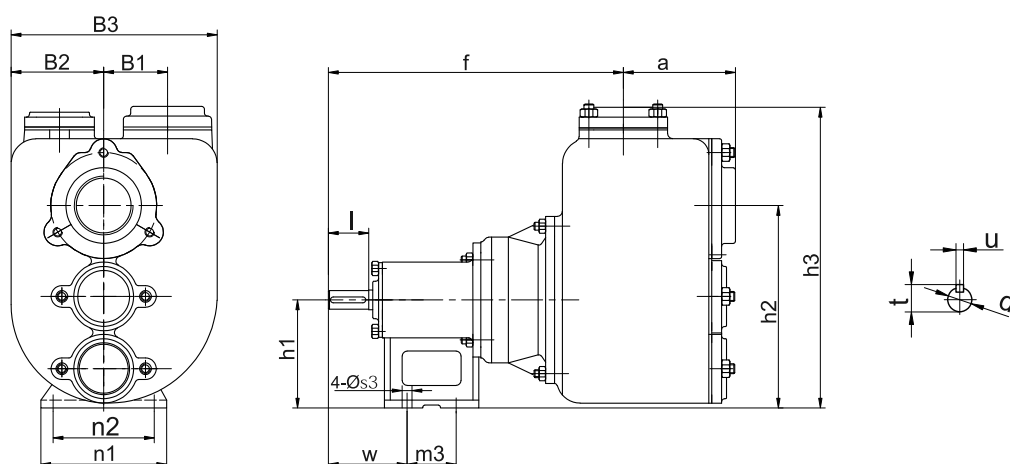
## Design

Performance and dimesions refering to the european standard.

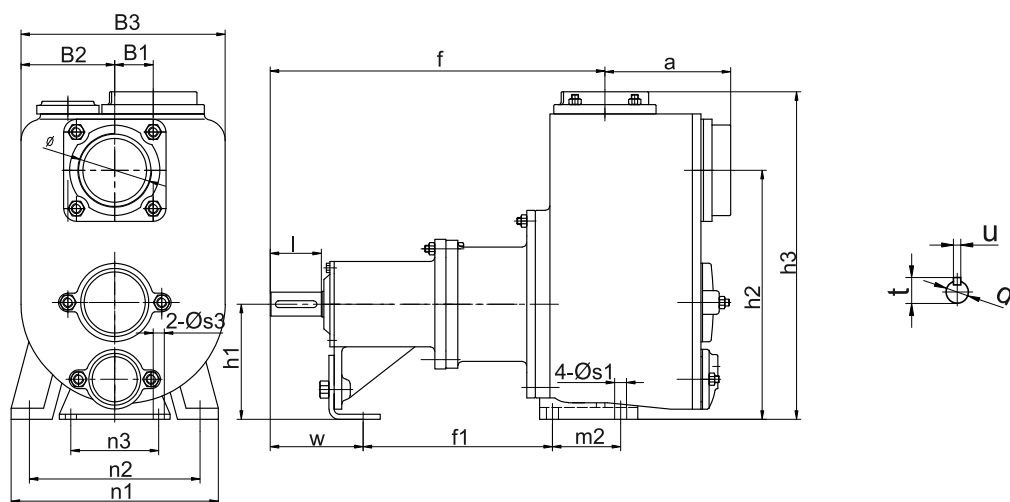
**Structure:** Semi-open impeller, close-coupled, self-priming, water plate.  
**Flange:** Pump casing are casted with flanges; Screw flanges for discharge < 100 m.  
**DN:** 40 - 100 mm

**Material:**  
**Casing:** Cast Iron, optional: Ductile Iron.  
**Impeller:** Ductile Iron, optional: Bronze, Stainless Steel.  
**Wear Plate:** Cast Iron, optional: Bronze, Stainless Steel.  
**Shaft:** SS 1045, optional: SS 304, SS 316, SS 420  
**Shaft Seal:** Mechanical Seal

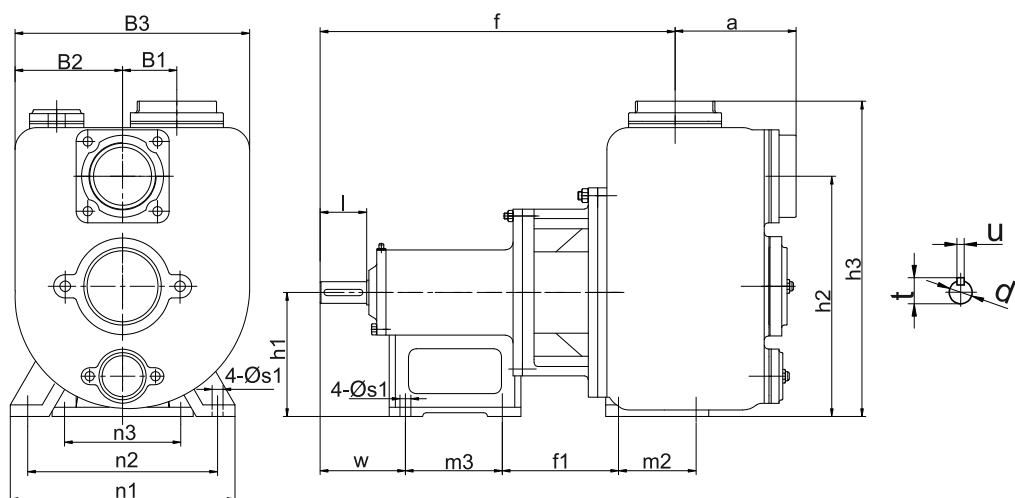
# Installation dimensions • MJ



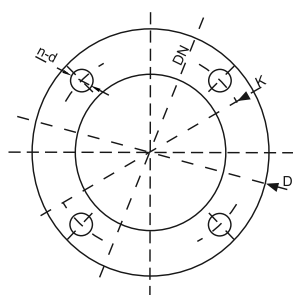
Model	B1	B2	B3	h1	h2	h3	n2	n1	f	a	l	w	m3	t	u	d	s3
MJ40-110	30	80	173	90	163	237	80	102	263	75	40	70	50	21.5	6	19	10
MJ50-120	36	94	210	110	206	326	103	128	300	114	40	80	50	21.5	6	19	12
MJ100-160	37	150	300	160	341	462	150	182	442	180	60	110	125	31	8	28	14



Model	B1	B2	B3	h1	h2	h3	n3	n2	n1	f	a	l	w	f1	m2	t	u	d	s1	s3
MJ80-140	45	110	240	135	292	384	90	200	245	392	148	60	109	222	80	31	8	28	14	14
MJ100-250	160	179	420	200	350	485	110	295	340	469	275	80	137.5	347	95	35	10	32	14	15
MJ150-250	90	220	480	250	454	609	110	350	410	565.5	291.5	80	137.5	322	170	35	10	32	18	15
MJ150-400	280	280	700	350	645	801	150	450	510	700	374	110	180	477.5	200	59	16	55	18	18
MJ200-300	75	288	575	315	535	720	150	450	510	822	246	110	165	498.5	200	45	12	42	18	18

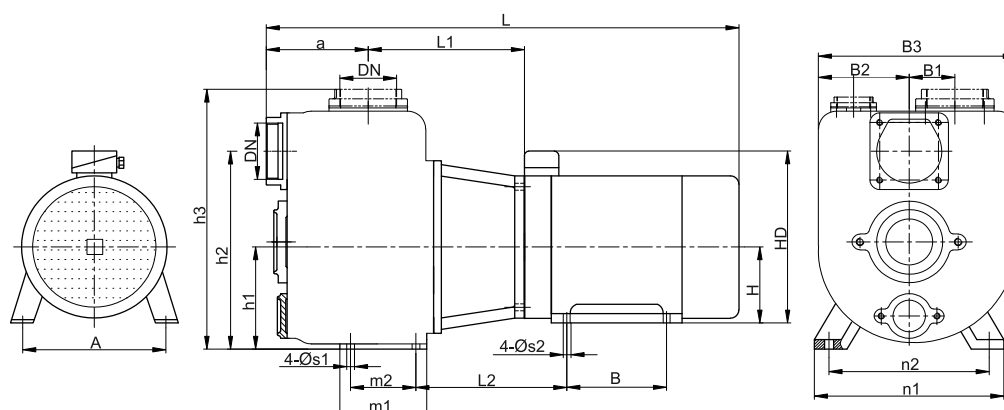


Model	B1	B2	B3	h1	h2	h3	n3	n2	n1	f	a	l	w	m3	f1	m2	t	u	d	s1	s3
MJ80-215	70	139	302	160	310	410	150	245	290	458	155	60	110	125	150	100	31	8	28	14	14



Flange Standard Dimensions for MJ series								
Model	Inlet Flange(mm)				Outlet Flange(mm)			
	DN	D	K	n-d	DN	D	K	n-d
MJ40-110	RP1 1/2	-	-	-	RP1 1/2	-	-	-
MJ50-120	RP2	-	-	-	RP2	-	-	-
MJ80-140	RP3	-	-	-	RP3	-	-	-
MJ80-215	RP3	-	-	-	RP3	-	-	-
MJ100-160	RP4	-	-	-	RP4	-	-	-
MJ100-250	RP4	-	-	-	RP4	-	-	-
MJ150-250	150	276	240	6-Φ18	150	276	240	6-Φ18
MJ150-400	150	276	240	6-Φ18	150	276	240	6-Φ18
MJ200-300	200	320	280	8-Φ18	200	320	280	8-Φ18

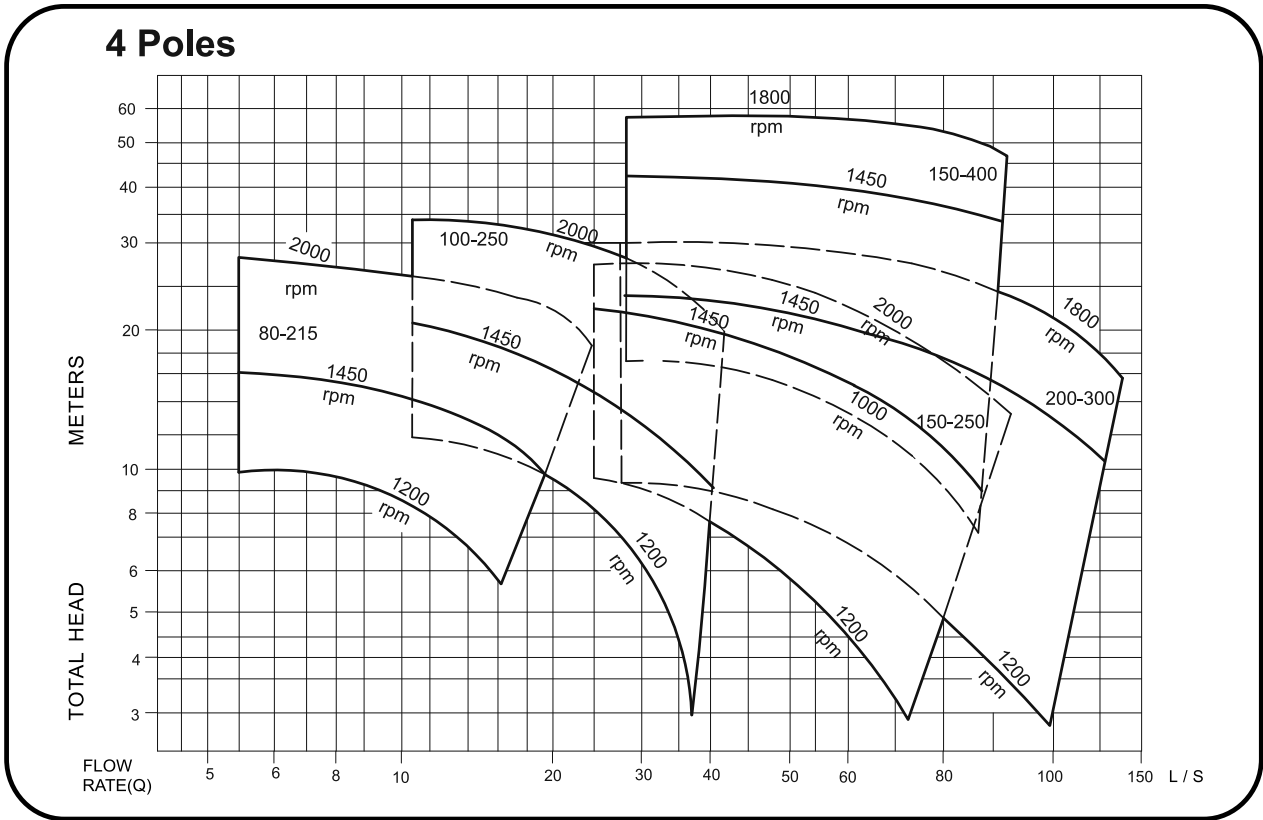
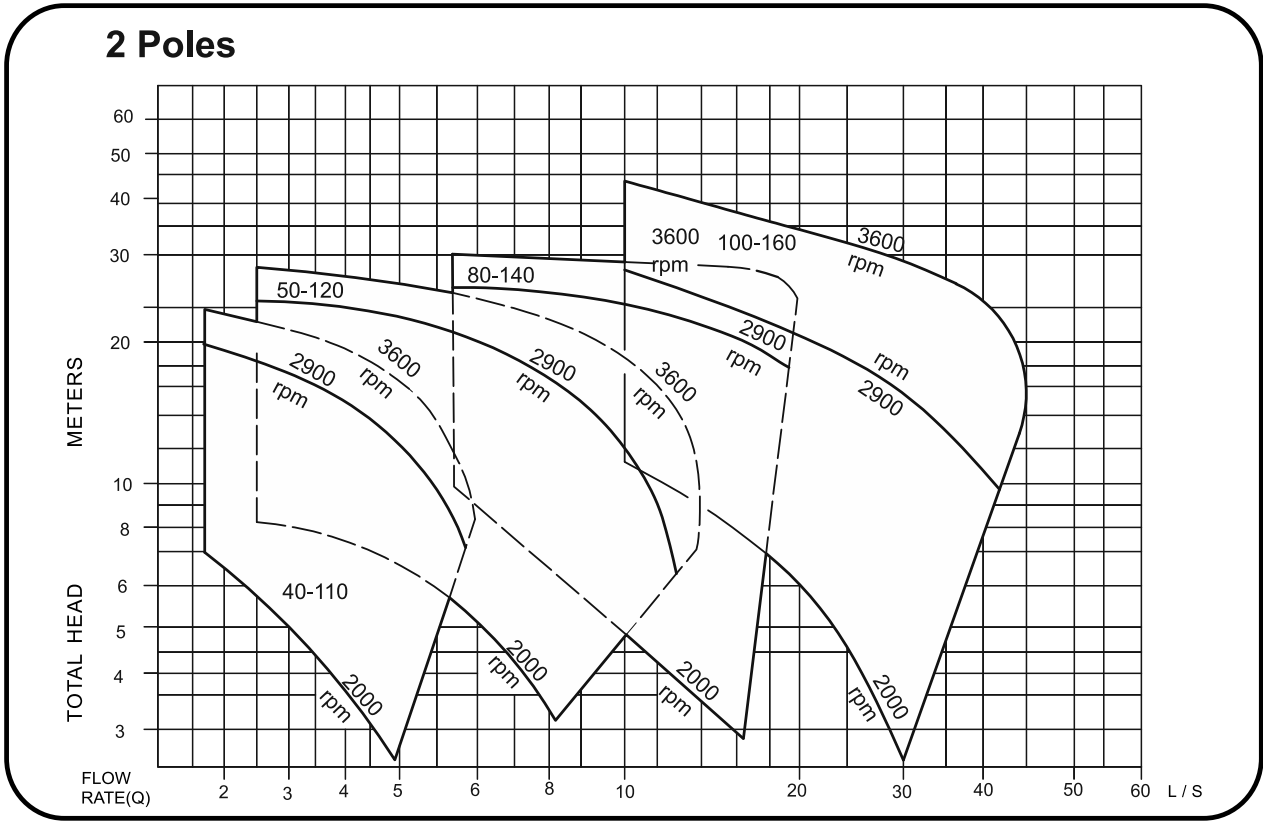
# Installation dimensions • MJZ



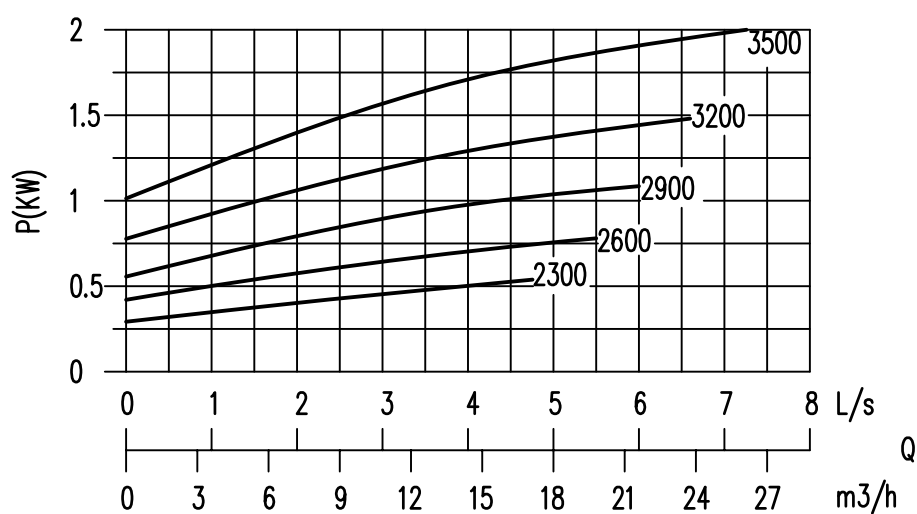
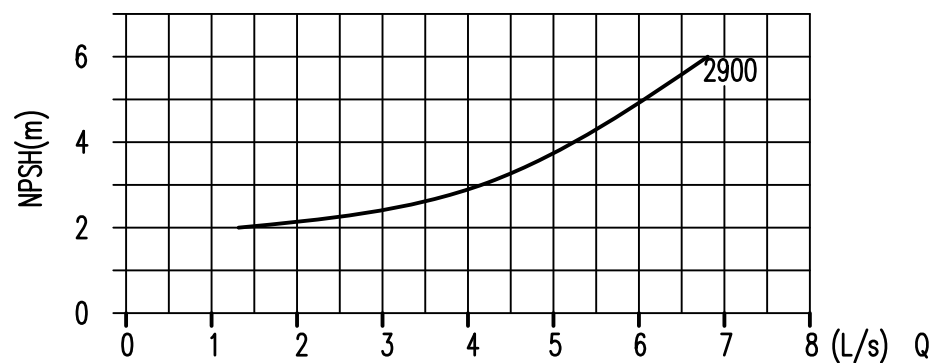
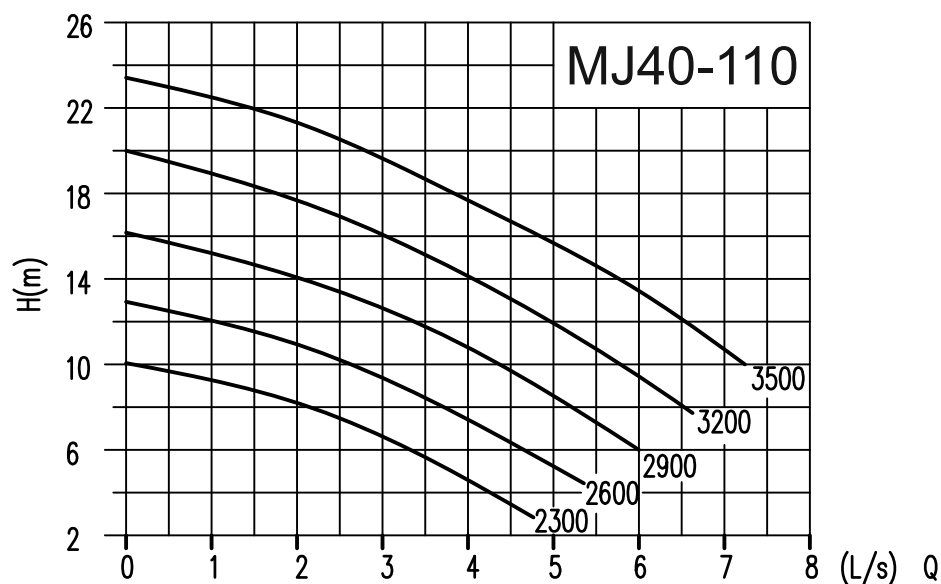
Model	DN	B1	B2	B3	h1	h2	h3	H	HD	m1	m2	n1	n2	A	B	a	L1	L2	L	s1	s2
MJZ40-110-01102	1 1/2"	30	80	173	95	167.5	242	80	220	—	—	—	—	125	100	75	153.5	—	485	—	10
MJZ40-110-03002	1 1/2"	30	80	173	95	167.5	242	100	270	—	—	—	—	160	140	75	173.5	—	575	—	12
MJZ50-120-02202	2"	36	94	210	105	201	321	90	250	—	—	—	—	140	125	114	185	—	595	—	10
MJZ50-120-05502	2"	36	94	210	105	201	321	132	345	—	—	—	—	216	140	114	216	—	720	—	12
MJZ80-140-04002	3"	45	110	240	135	292	384	112	300	115	80	243	243	190	140	148	202.5	211	690	14	12
MJZ80-140-05502	3"	45	110	240	135	292	384	132	345	115	80	243	243	216	140	148	225.5	253	763	14	12
MJZ80-140-11002	3"	45	110	240	135	292	384	160	420	115	80	243	200	254	210	148	255.5	302	908	14	15
MJZ80-215-04004	3"	70	139	302	160	310	410	112	285	133	100	290	245	190	140	156	239	226	735	14	12
MJZ80-215-07504	3"	70	139	302	160	310	410	132	345	133	100	290	245	216	178	156	268	284	854	14	12
MJZ100-160-15002	4"	37	150	300	160	341	462	160	420	—	—	—	—	254	210	180	283.5	—	969	—	15
MJZ100-160-22002	4"	37	150	300	160	341	482	180	455	—	—	—	—	279	241	180	285.5	—	1056	—	15
MJZ100-250-07504	4"	160	179	420	200	355	485	132	325	145	95	340	295	216	178	275	226.5	331.5	932	14	12
MJZ100-250-15004	4"	160	179	420	200	355	485	160	420	145	95	340	295	254	254	275	262	385.5	1098	14	15



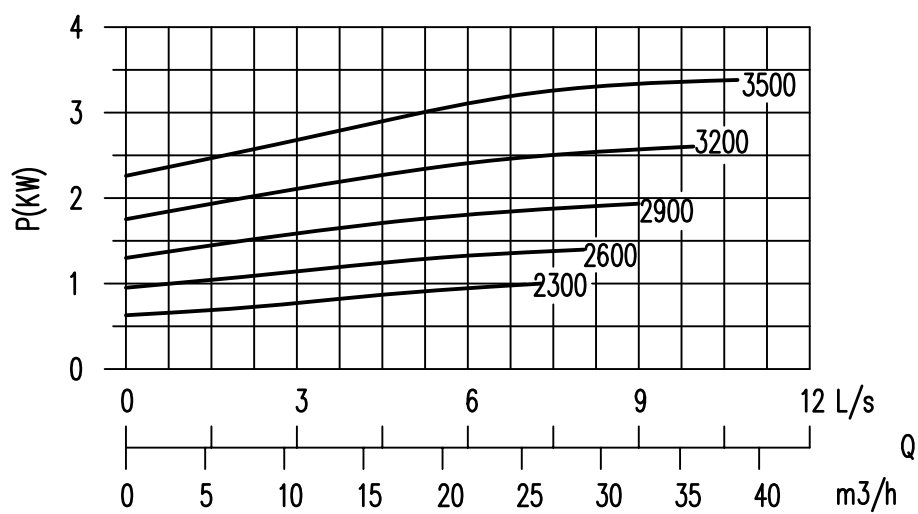
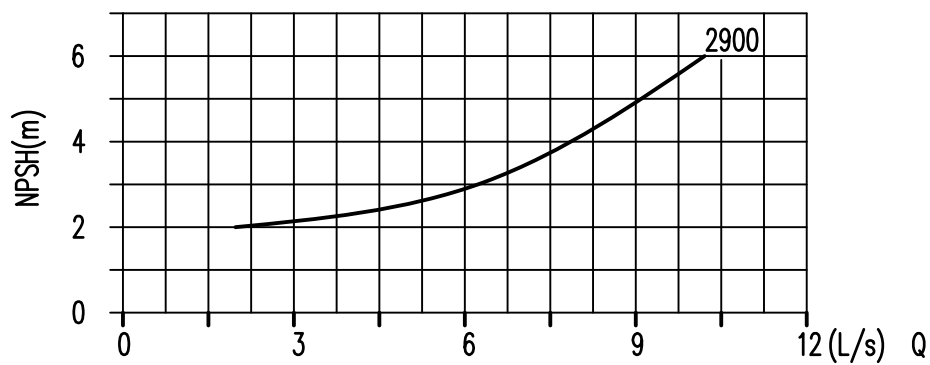
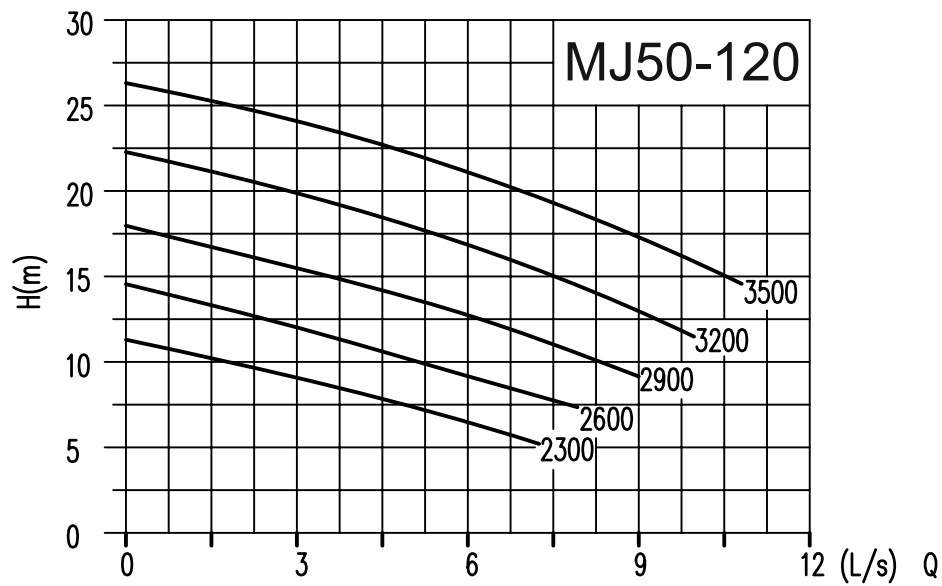
# Performance scope



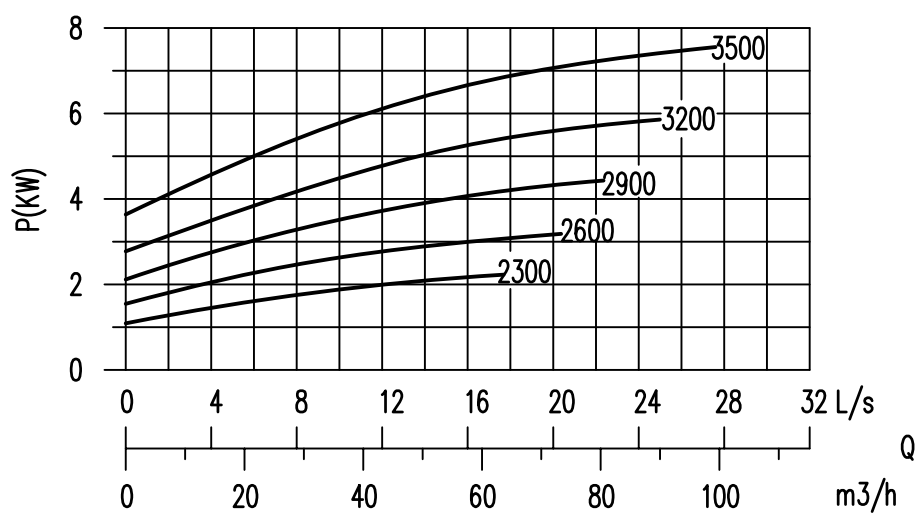
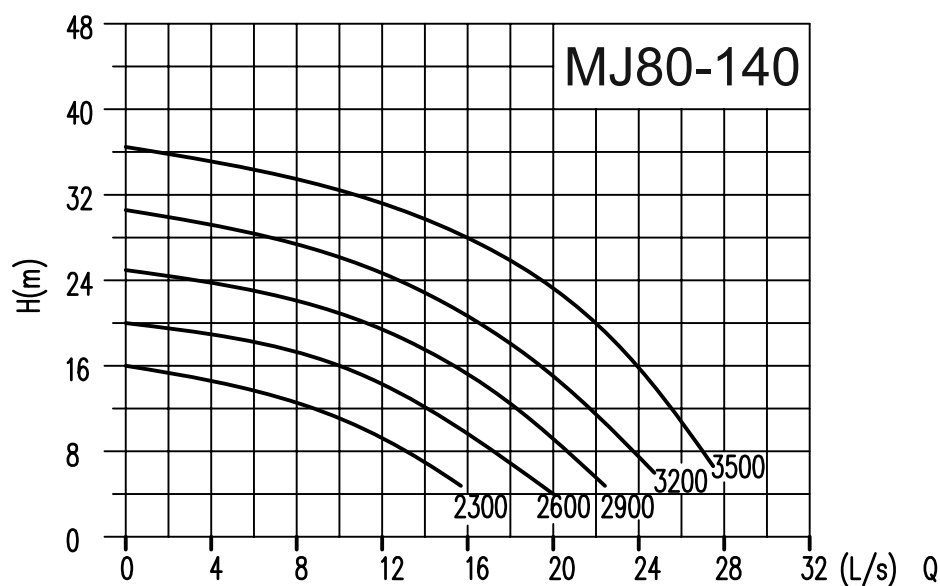
# Performance curves



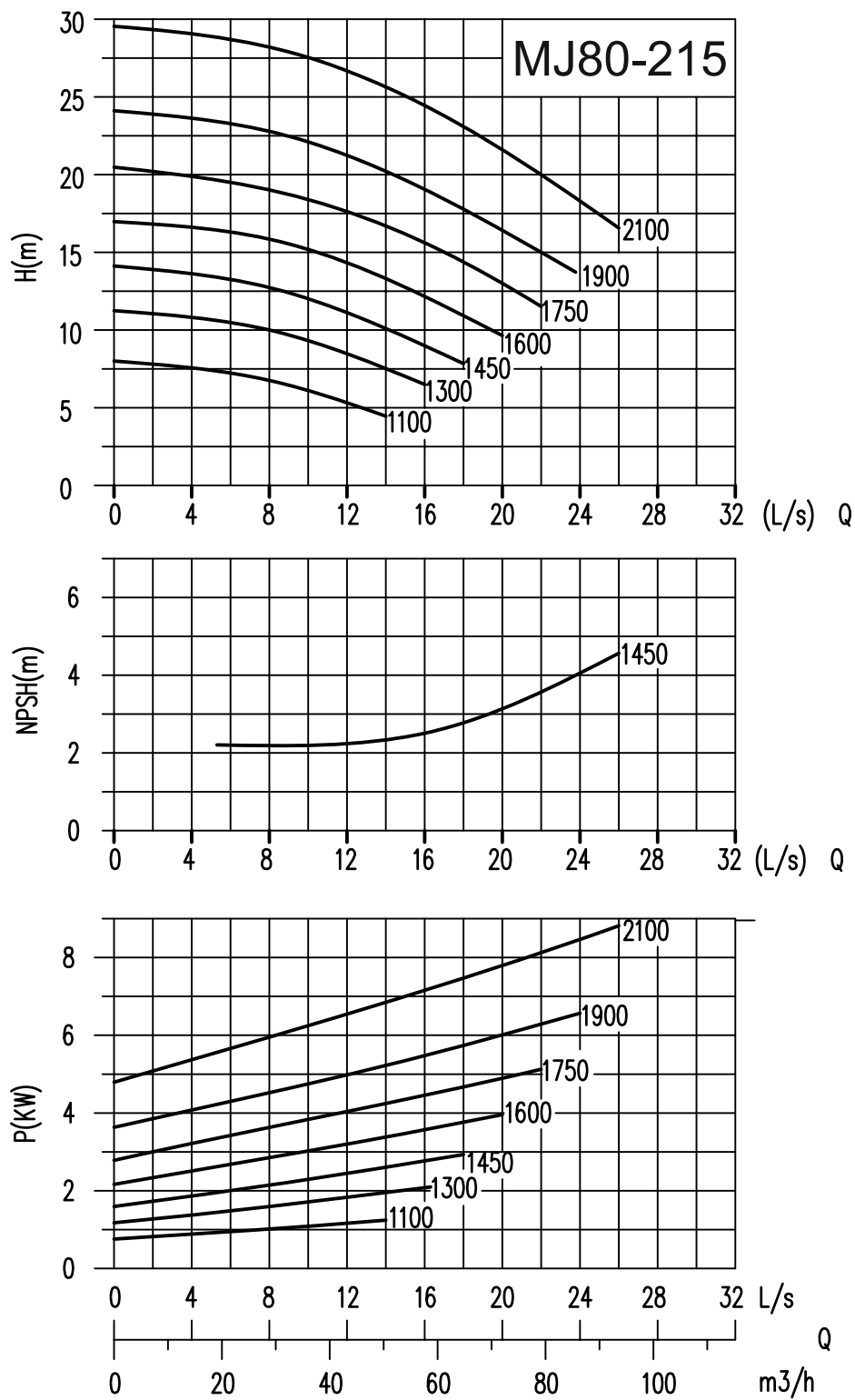
## Performance curves



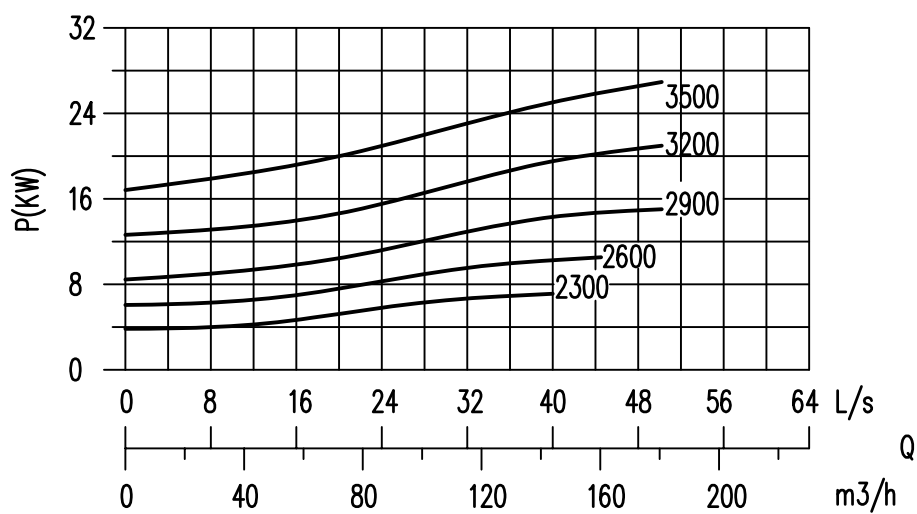
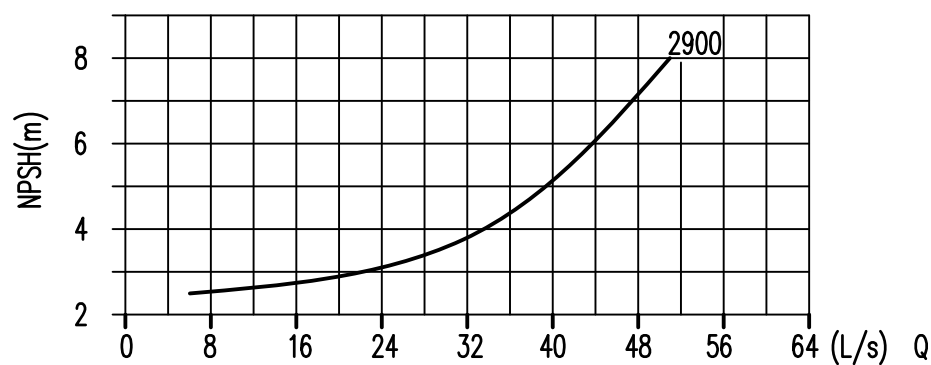
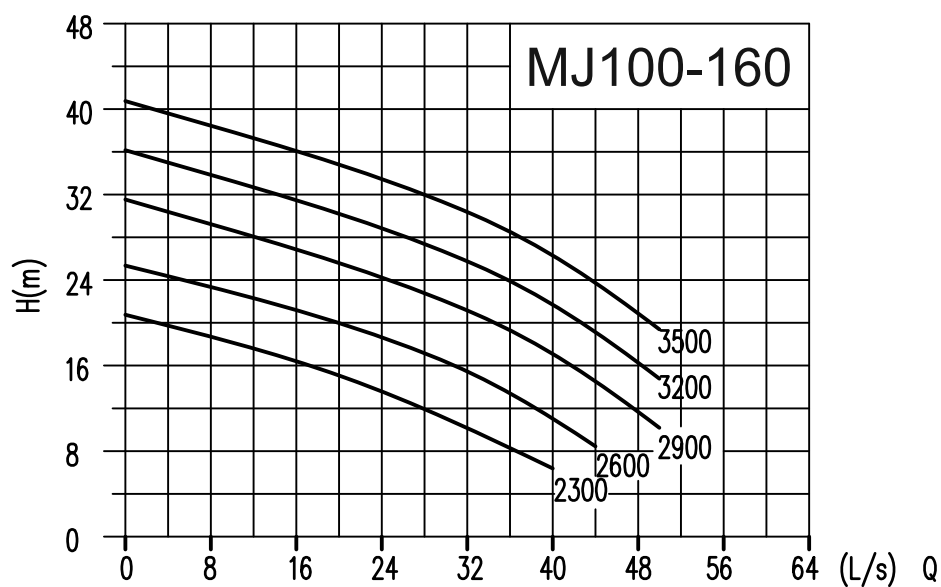
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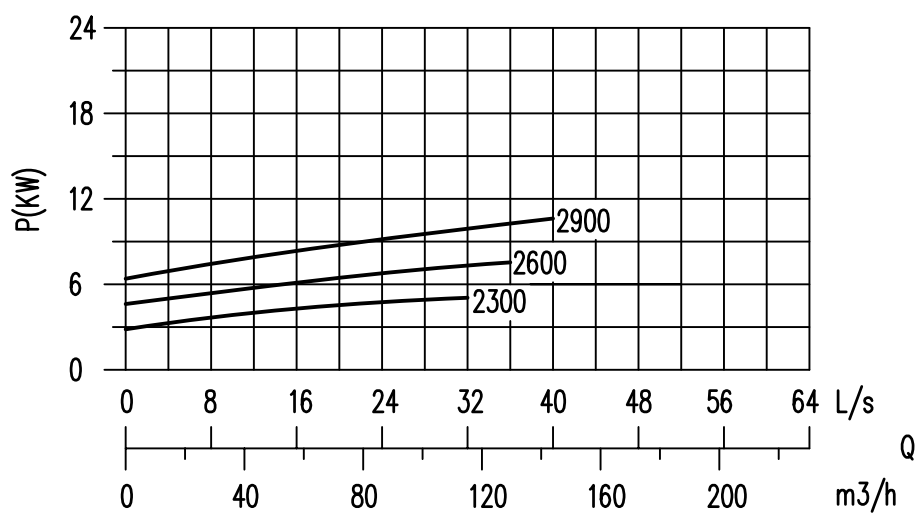
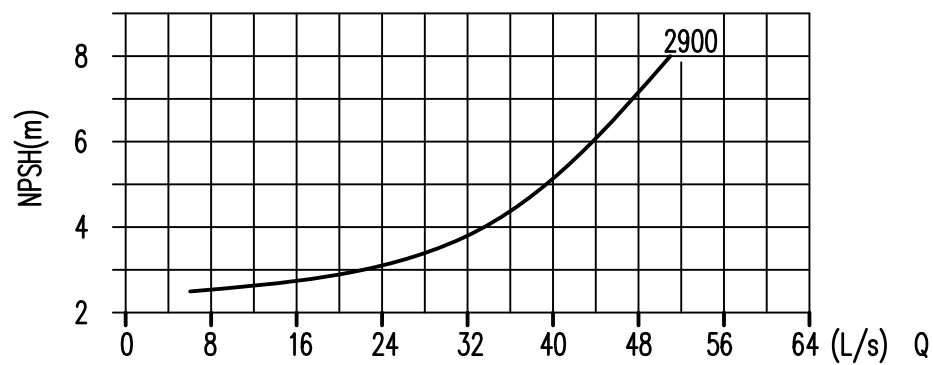
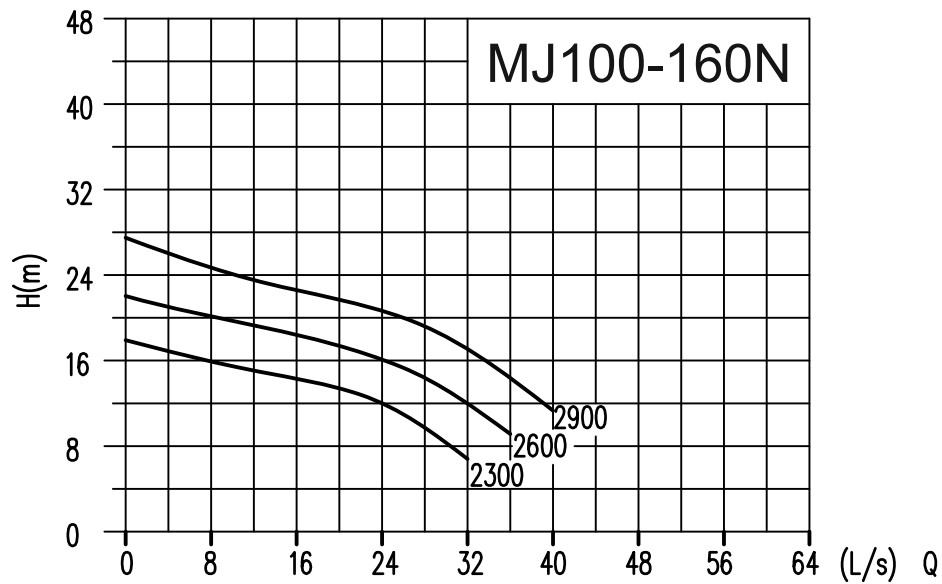
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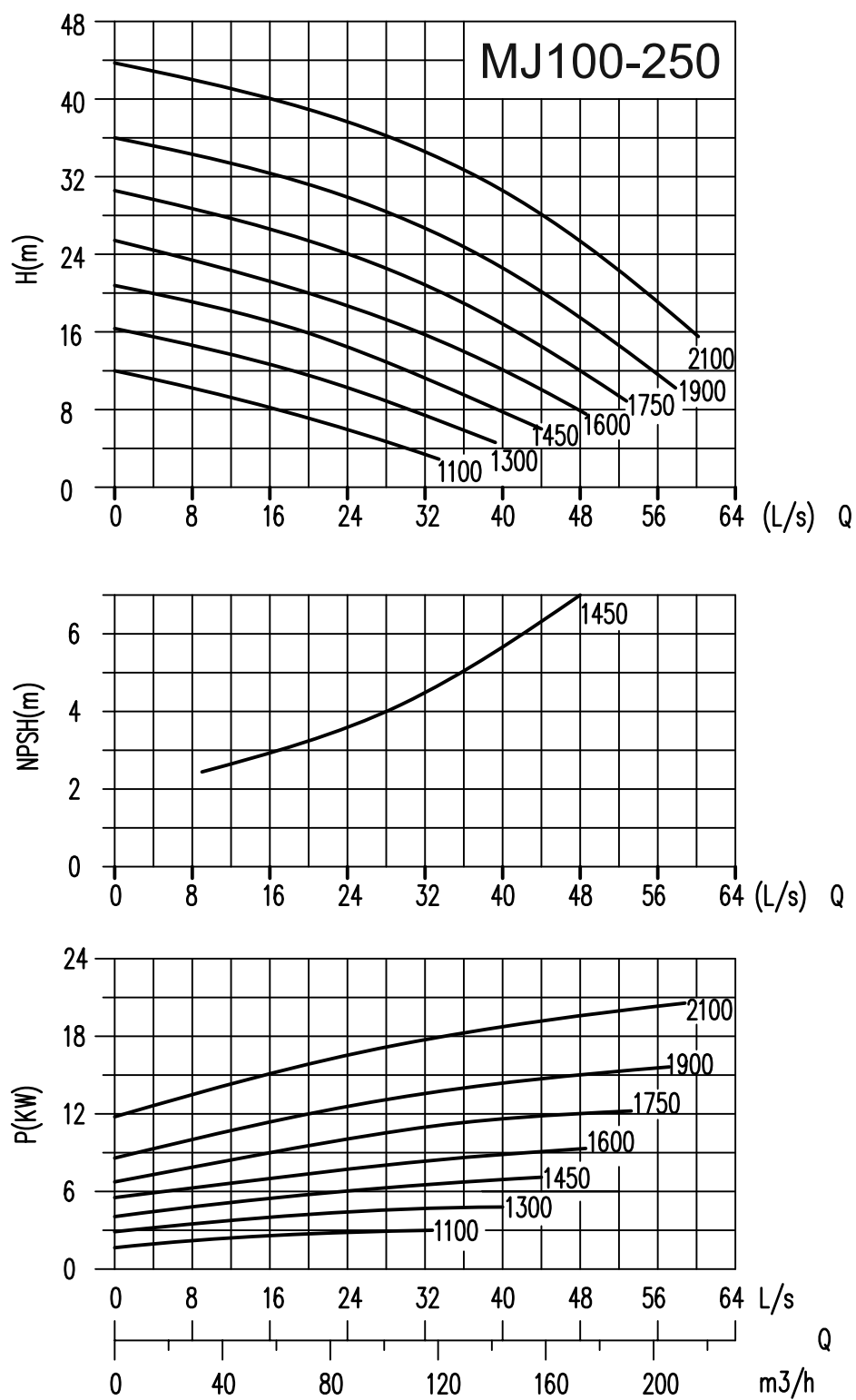
# Performance curves



## Performance curves

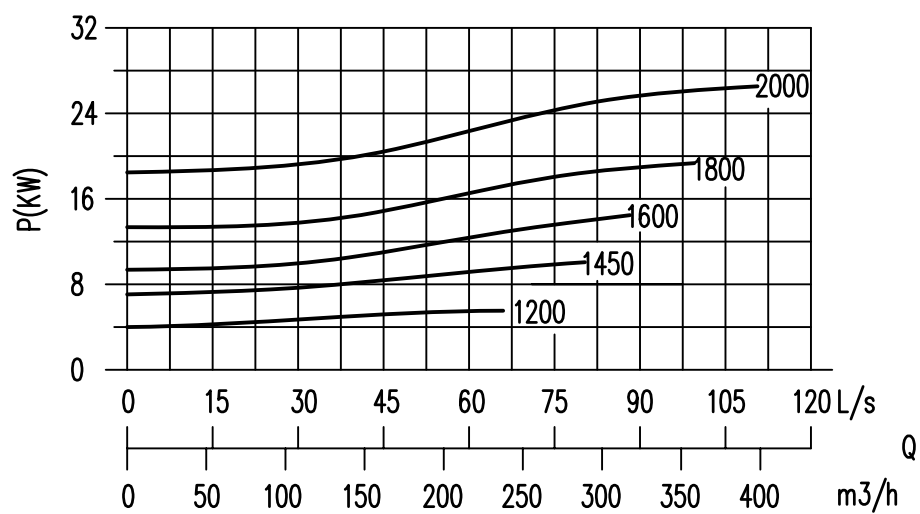
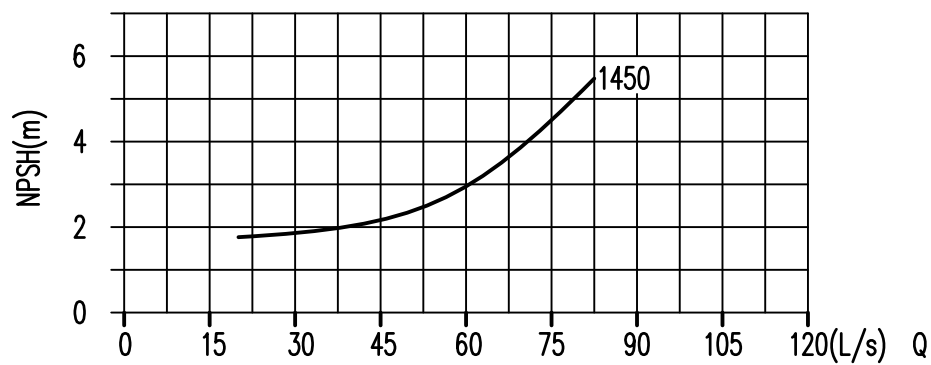
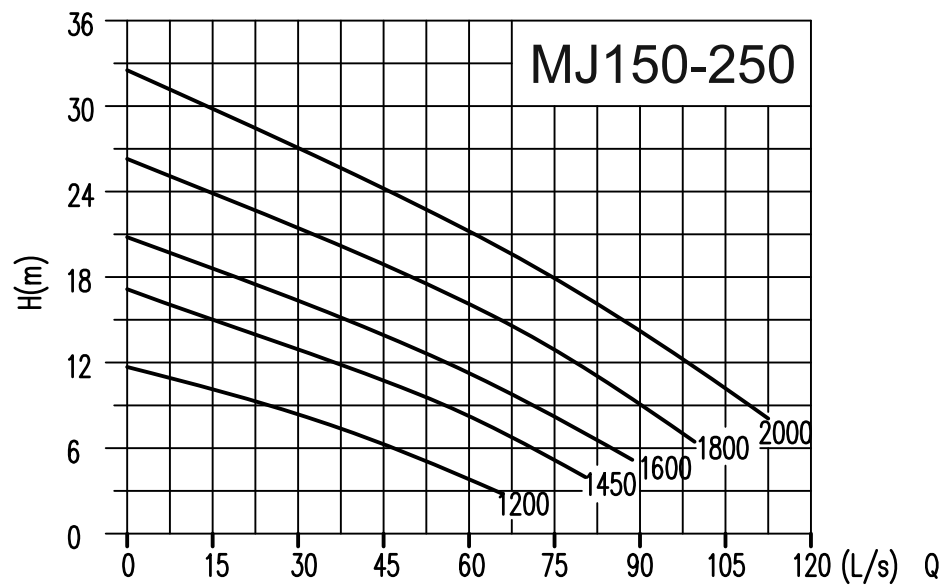


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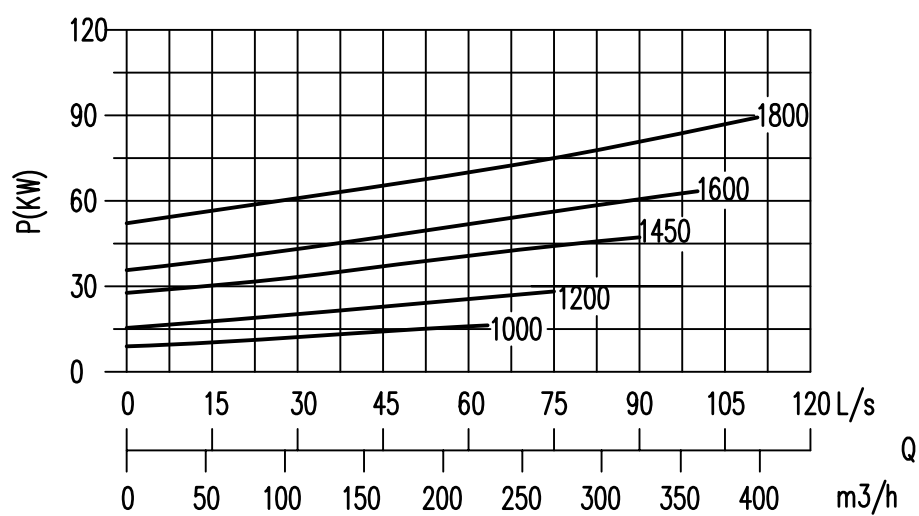
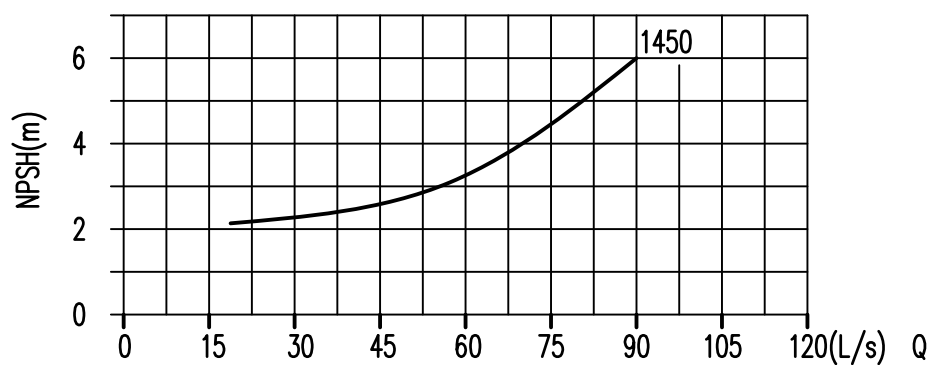
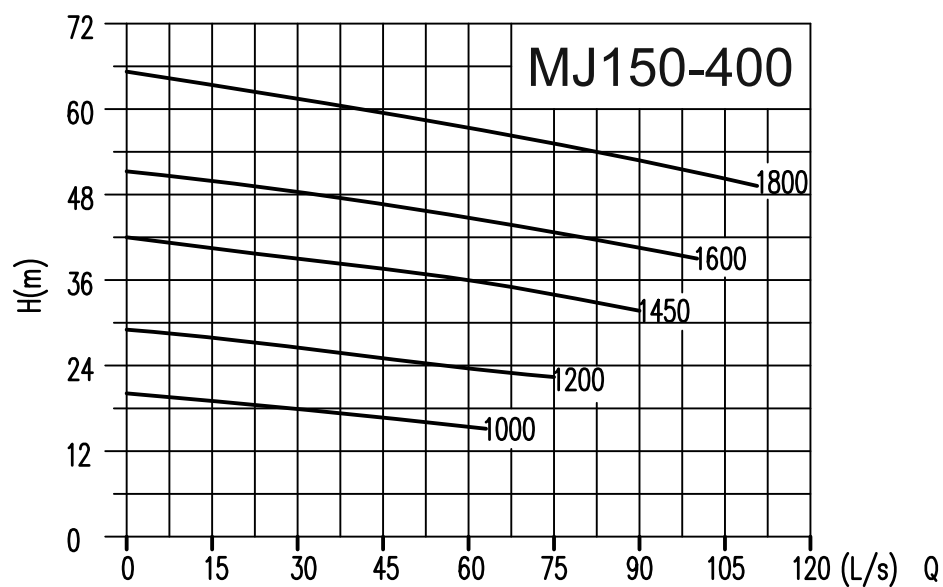




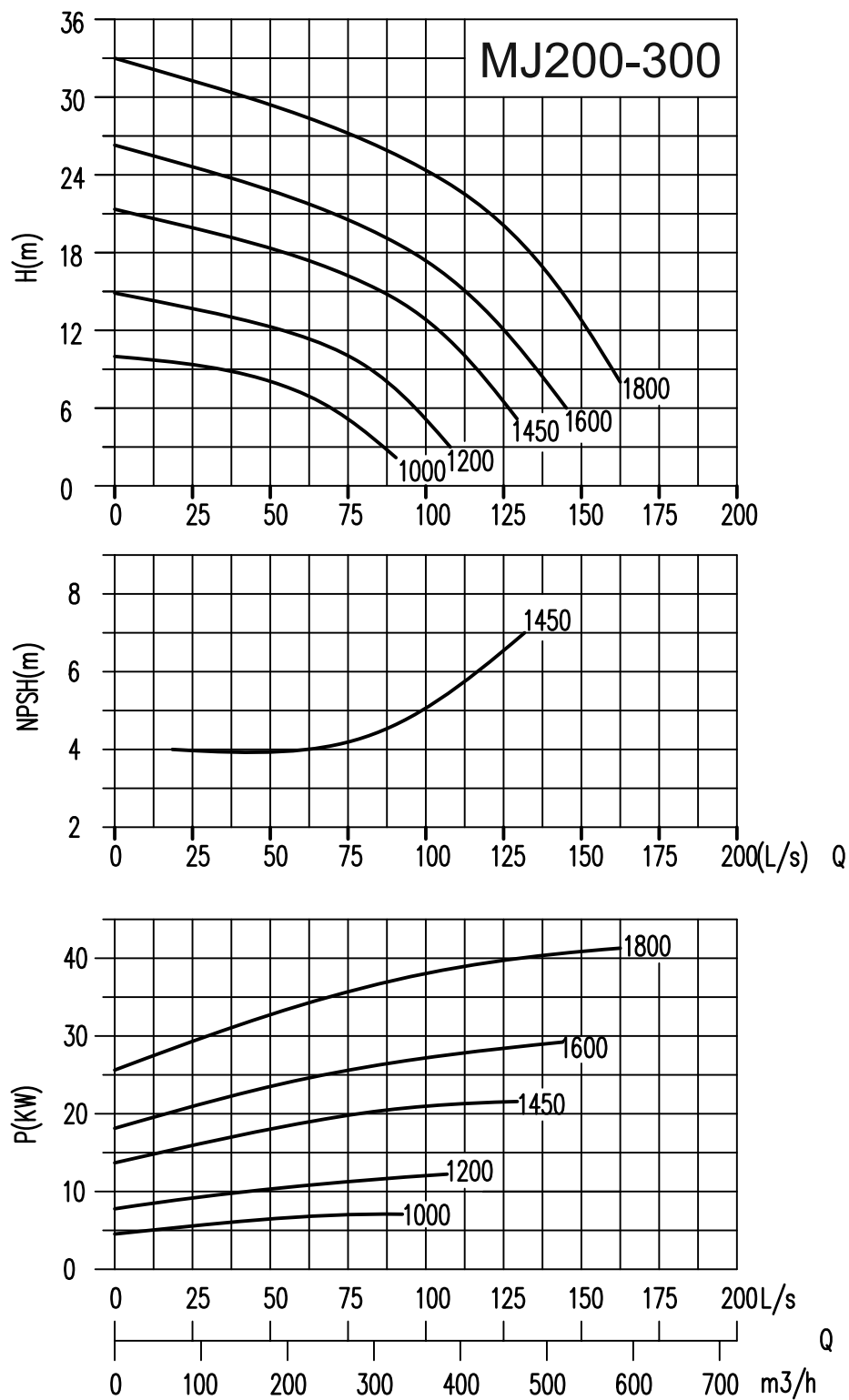
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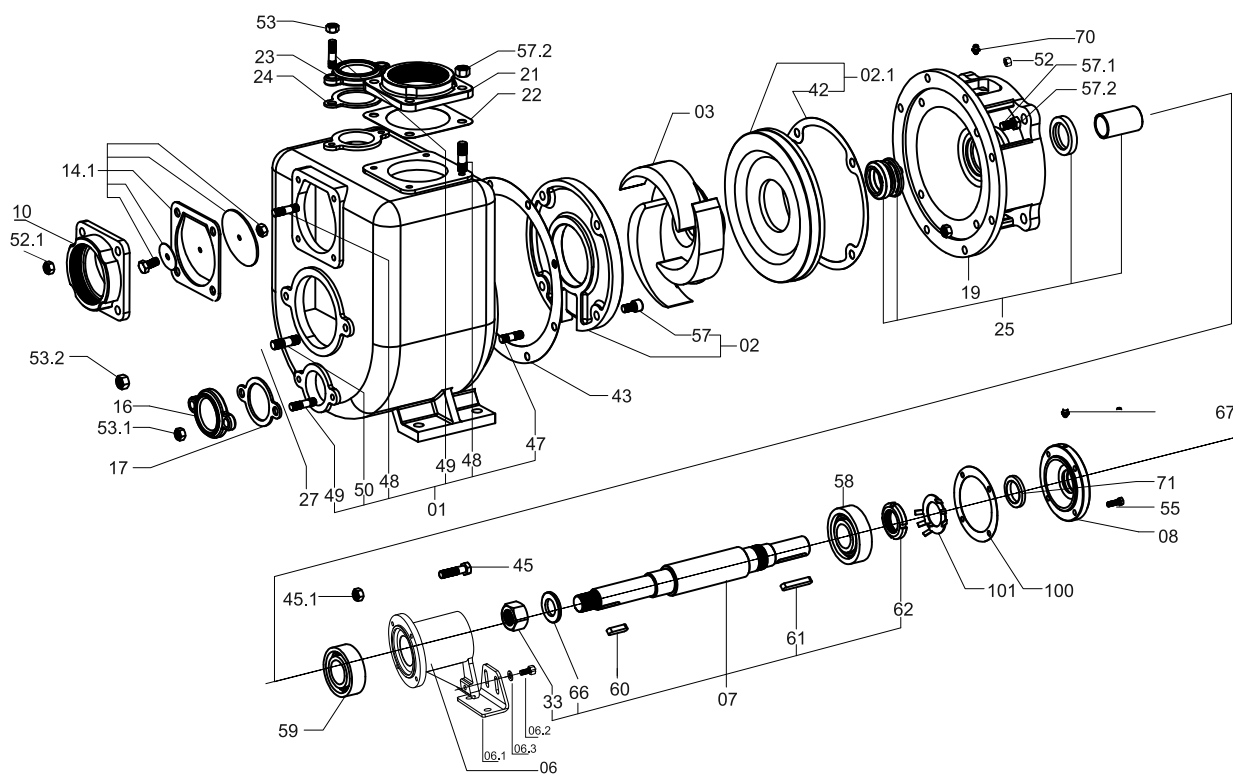
# Performance curves



## Performance curves



# Spare parts • MJ

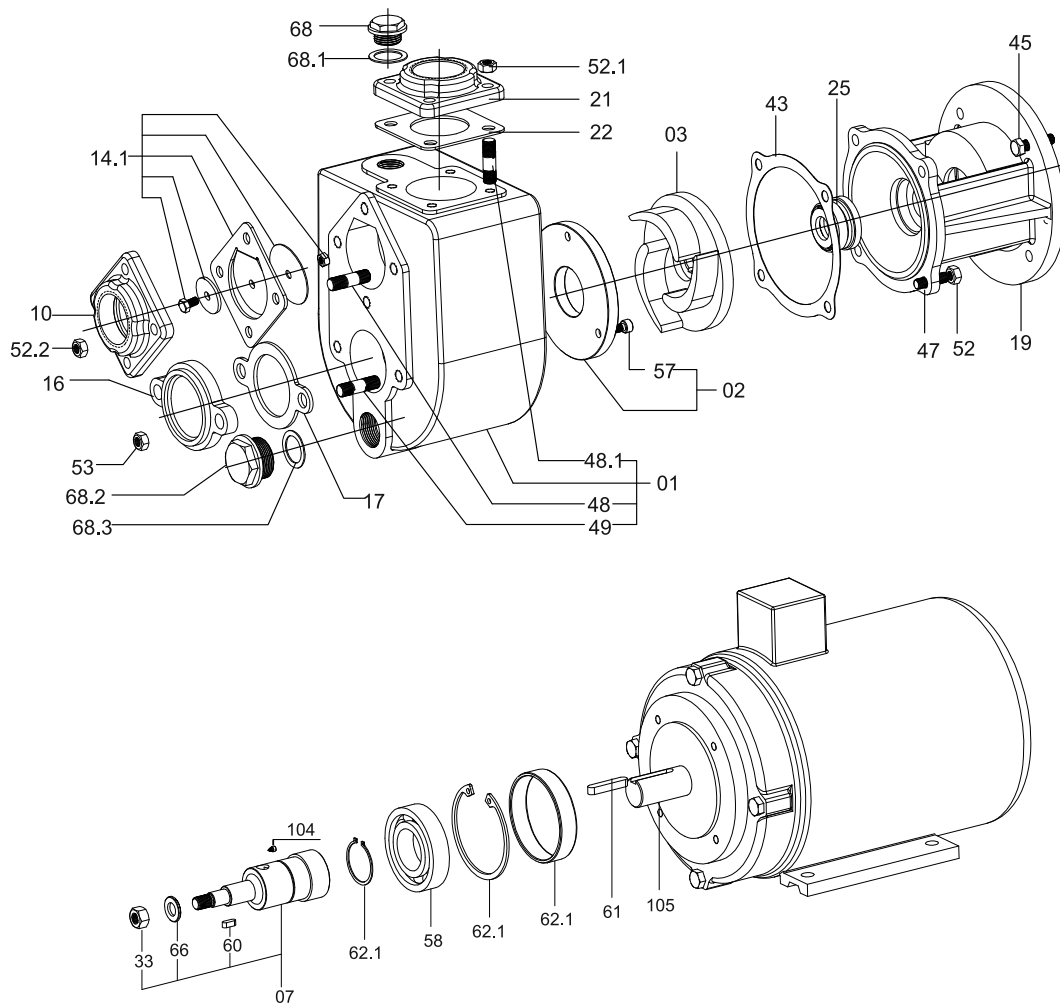


Code	Name
01	Casing
02	Wear Plate-Front
02.1	Wear Plate-Back
03	Impeller
06	Bearing Frame
06.1	Support Foot
06.2	Bolt
06.3	Flat Washer
07	Shaft
08	Bearing Cover
10	Suction Flange
14.1	Rubber Check
	Front Plate - Check Valve
	Back Plate - Check Valve
	Bolt
	Nut
16	Inspection Cover
17	Inspection Cover Gasket

Code	Name
19	Pump Cover
21	Discharge Flange
22	Discharge Gasket
23	Inspection Cover
24	Inspection Cover Gasket
25	Shaft Sleeve
	Oil Seal
25	Mechanical Seal
33	Impeller Nut
42	Back Wear Plate Gasket
43	Casing Gasket
45	Bolt
45.1	Nut
47	Stud
48	Stud
49	Stud
50	Stud
52	Nut

Code	Name
53	Nut
53.1	Nut
55	Bolt
57	Screw
57.1	Stud
57.2	Nut
58	Ball Bearing
59	Ball Bearing
60	Key (Impeller)
61	Key (Shaft)
62	Bearing Lock Nut
66	Flat Washer
67	Grease Nipple
70	Grease Nipple
100	Bearing Lock Nut Washer
101	Bearing Lock Nut Washer

# Spare parts • MJZ



Code	Part Name
01	Casing
02	Wear Plate
03	Impeller
07	Shaft
10	Suction Flange
14.1	Rubber Check
	Check Valve Plate (Front)
	Check Valve Plate (Back)
	Screw Bolt
	Screw Nut
16	Inspection Cover
17	Inspection Cover Gasket
19	Adapter

Code	Part Name
21	Discharge Flange
22	Discharge Gasket
23	Inspection Cover
24	Inspection Cover Gasket
25	Mech. Seal
26	Inspection Cover
27	Inspection Cover Gasket
33	Impeller Nut
43	Casing Cover Gasket
45	Screw Bolt
47	Double-screw Stud
48	Double-screw Stud
48.1	Double-screw Stud
49	Double-screw Stud

Code	Part Name
52	Screw Nut
53	Screw Nut
57	Screw
58	Ball Bearing
60	Key
61	Key
62.1	External Circlip
	Rubber Pad
	Internal Circlip
66	Flat Washer
68	Plug Screw
68.1	O-ring
68.2	Plug Screw
68.3	O-ring
104	Set Screw
105	Motor

Remark: Code 52, 52.1, 52.2 are screw nuts







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