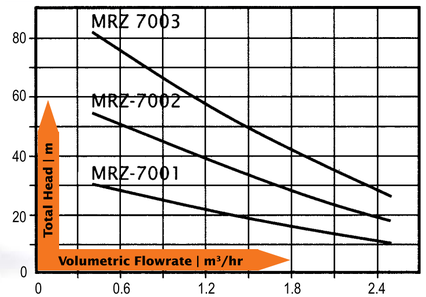
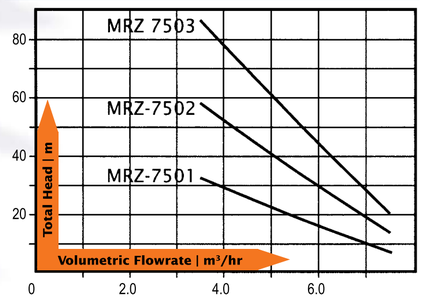
Performance Curves

Test water temperature of 20°C

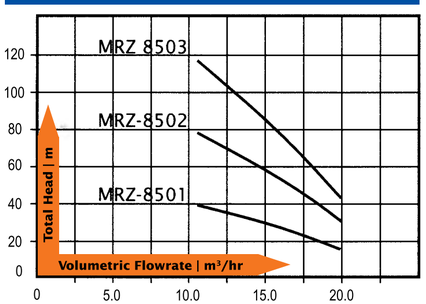
MRZ 7000
50Hz | 4-pole | 1500 rpm



MRZ 7500
50Hz | 4-pole | 1500 rpm



MRZ 8500
50Hz | 4-pole | 1500 rpm



Marinz

M R Z

Multistage Side Channel Pump

General

MONOFLO 'Marinz' is a range of side channel pumps developed for various needs in liquid handling. They are horizontal, segmental multistage type construction, with open vane wheel ('star') type impeller. It is designed for relatively low flow, high head and in handling thin liquid and liquefied gas transfer.

Several features of Marinz characterised this unique pump. Mainly,

- *Self-priming capability.*
- *Capability to handle gas-entrained liquid (that does not contain any solid matters or abrasives admixtures); hence eliminating possible air or vapor locked that can occur in other pump design.*
- *Ability to handle liquids near to boiling point.*

Typical Marinz's open-type, 'star' design impeller

Design Features

CASINGS | The pump casing is divided into sections perpendicular to the shaft axis. The radial fits of the vertically split sections gives ease in disassembly & reassembly of pumps during maintenance. External tie-rods holds together the suction & discharge casings, the intermediate casings, and are sealed by means of gaskets.

The mounting feet are integrally cast on at the bottom of the suction casing for MRZ-7000 and MRZ-7500 models; while for model MRZ-8500, mounting feet are integrally cast on both the suction & delivery casings.

IMPELLERS | The impellers are open-type, 'star-shaped' design. Axial thrust forces are effectively balanced by 'balancing holes' on the impellers.

SHAFT | The particularly rigid stainless steel shaft ensures trouble-free operation at various load phases.

BEARINGS | At the drive end of the shaft, it is supported by a grease-lubricated deep grooved ball bearing, pre-packed with grease at the factory; while the other end is by sleeve bearing flushed by the liquid handled.

FLANGES | Counter-flanges are provided with female pipe threads.

Applications

Several features characterised this unique pump, which is why this versatile pump is used widely in industrial applications.

INDUSTRIAL | Hot & cold water circulation; pumping condensate & boiler feeding; machine cooling; process water and other manufacturing processes.

MARINE & SHIPBUILDING | General water supply and pressure boosting.

AGRICULTURAL & FARMING | Horticultural irrigation & sprinkler system; watering & drainage.

Model 7000 & 7500 | Version with oval suction and discharge flange

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Cat:marinz/revA/08

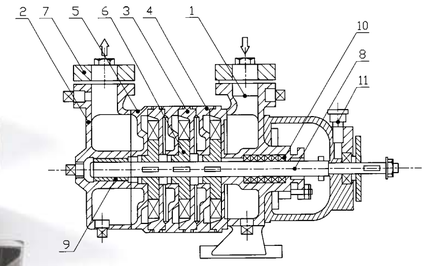
“Marinz... the industries’ choice.”

Operating limits & data

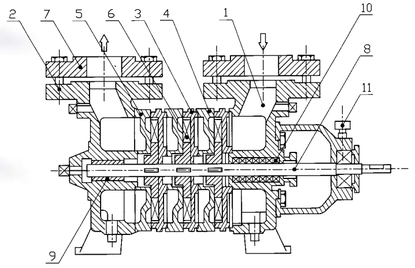
Liquid handled	Clean water; gas-entrained liquid; or slightly-aggressive liquid (compatible to pump material of construction), that does not contain any solid matters or abrasives admixtures. Typical liquid handled includes distillate, fuel oil, boiler feed water, lubricants, hydrocarbons, seawater...
Working pressure	**12 bar (12 kg/cm²)**
Flowrate	**0.5 to 20 m³/hr (500 to 20,000 LPH)**
Discharge head	**6 to 115 metres (0.6 to 11.5 bar)**
Operating temperature	**Range from 0 to 100°C**
Operating speed	**Nominal operating speed up to 1,500 r.p.m. at 50Hz (1,800 r.p.m at 60Hz)**
Viscosity	**0.3 to 230 mPas**
Gas content	**Up to 50%**
Flanges	**Model 7000 & 7500**	Oval flanges with BSP female pipe thread **Model 8500**	Round flanges

Description

■ MRZ 7000 | 7500



■ MRZ 8500

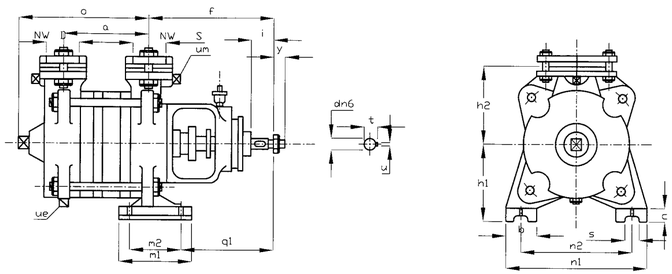


Material of construction

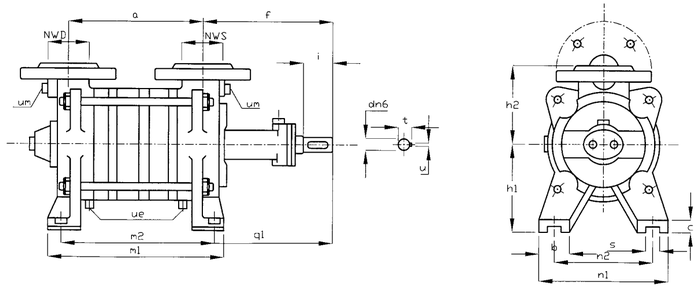
Item no.	Part Description	Material
1	Suction casing	**Cast iron GG25**	AS 1830/T260	BS 1452Gr260
2	Discharge casing	**Cast iron GG25**	AS 1830/T260	BS 1452Gr260
3, 4, 5	Intermediate casings	**Cast iron GG25**	AS 1830/T260	BS 1452Gr260
6	Impellers	**High tensile brass**
8	Shaft	**Stainless steel AISI 410**
9	Bearing bush	**Bronze**
10	Shaft seal	**Threaded graphite cotton**
11	Grease cap	**Mild steel**

Dimensions

■ MRZ 7000 | 7500



■ MRZ 8500



Pump models	Stages	Connection NW_D	Connection NW_S	f	h1	n2	b	c	m1	m2	n1	n2	s	d	i	t	u	y	q1	a	o	Motor kW	Wt kg
7001	01	1"	1"	140	90	90	36	12	86	50	156	120	13	12	21	15	4	14	122	78	118	**0.4**	10
7002	02	1"	1"	140	90	90	36	12	86	50	156	120	13	12	21	15	4	14	122	112	152	**0.75**	11
7003	03	1"	1"	140	90	90	36	12	86	50	156	120	13	12	21	15	4	14	122	146	186	**1.1**	13
7501	01	1.5"	1.5"	154	112	112	36	15	106	70	196	160	13	16	27	18	5	16	104	83	140	**1.1**	14
7502	02	1.5"	1.5"	154	112	112	36	15	106	70	196	160	13	16	27	18	5	16	104	123	180	**2.2**	17
7503	03	1.5"	1.5"	154	112	112	36	15	106	70	196	160	13	16	27	18	5	16	104	163	220	**3.0**	21
8501	01	50	50	217	150	140	47	20	220	185	218	160	13	24	50	27	7	-	210	170	-	**3.7**	36
8502	02	50	50	217	150	140	47	20	295	260	218	160	13	24	50	27	7	-	210	245	-	**7.5**	46
8503	03	50	50	217	150	140	47	20	370	335	218	160	13	24	50	27	7	-	210	320	-	**11.0**	55

Remarks | Above dimensions are for reference only. Dimension of actual pumps may deviate slightly. Dimensions in millimetres (mm)

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