

Caquaplus

**Series MD
Magnetic Drive Pumps**



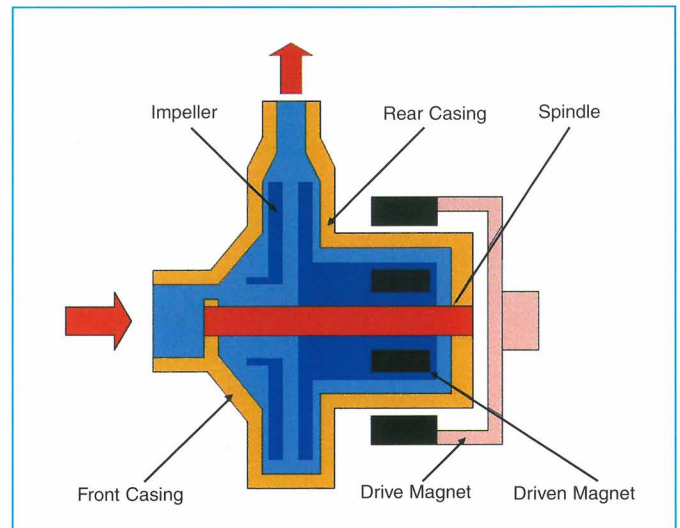
MD Series – Magnetic Drive Pumps

The AQUAPLUS MD series offers total operator safety and environmental protection.

These pumps can be used with confidence wherever aggressive, corrosive or hazardous chemicals need to be transferred leak free and contamination free.

OPERATING PRINCIPLE

Aquaplus magnetic drive pumps feature a sealless design, with power transmission taking place through magnetic fields generated by permanent magnets fixed to the impeller and the motor shaft. The driven magnet is attached directly to the impeller and encapsulated in the same corrosion resistant material as the rest of the pump wetted parts. This in turn is housed in a similarly constructed casing around which rotates the drive magnet. The field thus generated ensures rotation of the two magnets in synchronisation with no loss of magnetism, giving many years of trouble free performance. As the drive power is transmitted to the completely sealed chambers with no mechanical contact, zero leakage pumping is assured.



FEATURES

Zero Leakage

The sealless design of the Aquaplus magnetic drive pump ensures leak free operation. With the possibility of external contamination by hazardous fluids removed, any danger to operators, adjacent equipment or the environment is effectively eliminated under normal operating conditions.

Excellent Chemical Resistance

PP, ETFE, SS and Hastelloy C construction teamed with high quality ceramics or carbides and suitably matched elastomers provide total resistance to a broad range of chemicals and ensure long term reliability.

Easy Maintenance

The simplified design and absence of any rotating sealing parts contributes to the ease of maintenance, disassembly and inspection. Downtime is reduced to absolute minimum.

TYPICAL INDUSTRIES

- Chemical and Petrochemical
- Photographic and X-Ray Processing
- Medical
- Galvanising
- Electroplating
- Anodising
- Etching
- Fertiliser Plants
- Water Treatment
- Food and Beverage
- Refrigeration
- Aquaculture

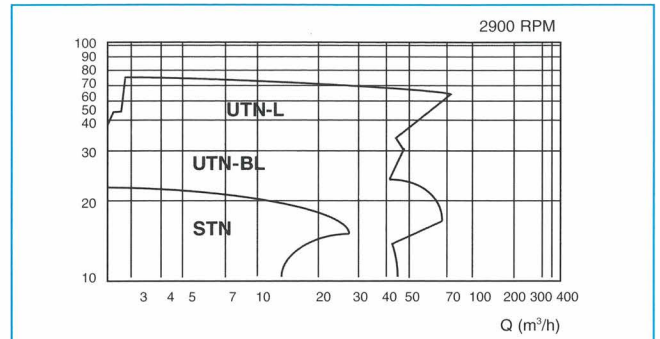
TYPICAL LIQUIDS

- Sulphuric Acid
- Hydrochloric Acid
- Chromic Acid
- Nitric Acid
- Acetic Acid
- Phosphoric Acid
- Seawater
- Alkaline Liquids
- Organic Compounds
- Photographic Developing Solutions
- Plating Solutions
- Beverages and Ice Making Machines
- Demineralised Water

Non - Metallic Range



STN Model



Small, compact, close coupled pump designed with FTC™ system to enable periods of dry running. Built with optimum parts interchangeability and material options. Suited to a wide range of applications with low NPSH requirements, increased flow, head and efficiency.

CHARACTERISTICS

Maximum capacity	30m³/h.
Maximum head	24 m
Materials	PPV, ETFE
Power	0.55 - 5.5 kW
Maximum temperature	80°C
Viscosity	400 cSt max

UTN-L Model



Process pump for corrosive media and heavy duty applications. Designed to international standards DIN 24256, ISO 2858. Pump casing lined with thermoplastic resins using ILS™ technology. Provides excellent resistance to both high pressure and vacuum.

CHARACTERISTICS

Maximum capacity	80m³/h.
Maximum head	65 m
Materials	PP, ETFE
Power	0.75 - 30 kW
Maximum temperature	120°C
Viscosity	400 cSt max

UTN-BL Model



Process pump for corrosive media and heavy duty applications. Same properties as for the UTN-L, features an enclosed one piece impeller/magnet assembly. Reliable and simple, no pump/motor alignment required with close-coupled design.

CHARACTERISTICS

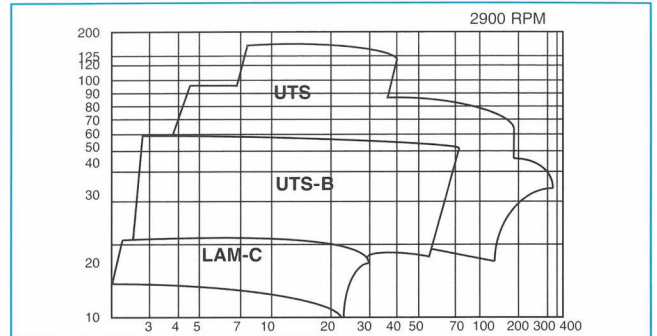
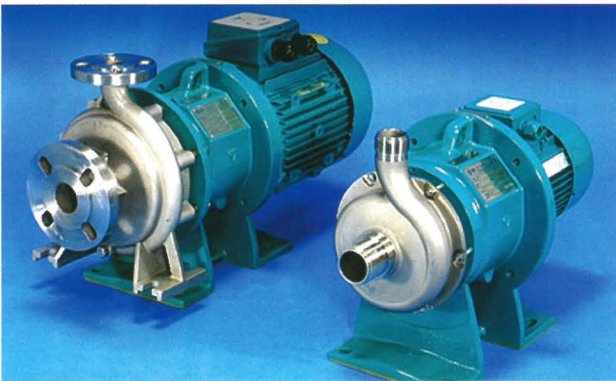
Maximum capacity	80m³/h.
Maximum head	65 m
Materials	PP, ETFE
Power	0.75 - 18.5 kW
Maximum temperature	120°C
Viscosity	400 cSt max

Metallic Range



Made in Italy by CDR

ETS Model



Exceptional value close coupled pump, with compact design which complies with the ATEX 100A directive. SiC bearing assembly as standard. Ideal for heavy duties, vacuum or pressurised systems.

CHARACTERISTICS

Maximum capacity	35m ³ /h.
Maximum head	64 m
Materials	AISI 316, Hastelloy C
Power	0.75 - 7.5 kW
Maximum temperature	-30°C - 140°C
Pressure	PN16 - PN 40
Viscosity	450 cSt max

UTS-B Model



Close-coupled version of the heavy duty UTS range. It offers the same features and performance adding the advantage of a compact, space saving set up with optimum alignment. Quick and easy to install. Hastelloy C construction is also available.

CHARACTERISTICS

Maximum capacity	180m ³ /h.
Maximum head	130 m
Materials	AISI 316L, Hastelloy C
Power	0.55 - 18.5 kW
Maximum temperature	-30°C - 200°C
Viscosity	450 cSt max

UTS Model



Heavy duty, metallic chemical process pump, designed to international standards DIN 24256, ISO 2858. Pressure rating up to PN40. Reliable and tireless with optimised radial bearing lubrication. Axial thrust is always under control with the 'on board' LSC™ system, and very low NPSH requirements due to impeller manufacturing technology.

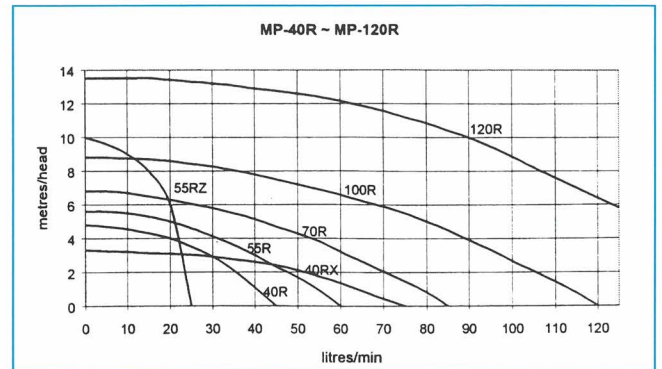
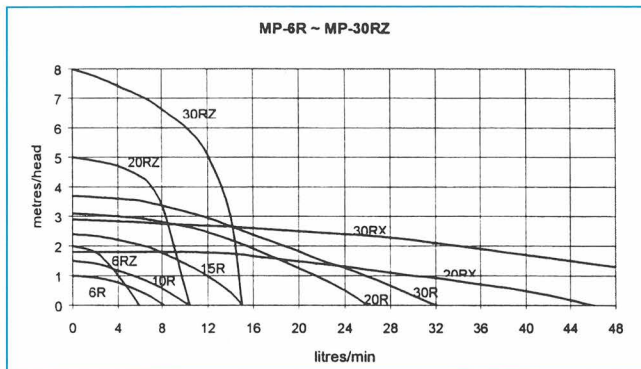
CHARACTERISTICS

Maximum capacity	300m ³ /h.
Maximum head	130 m
Materials	AISI 316L, Hastelloy C
Power	1.1 - 75 kW
Temperature range	-30°C - 320°C
Viscosity	450 cSt max

MP Compact Range

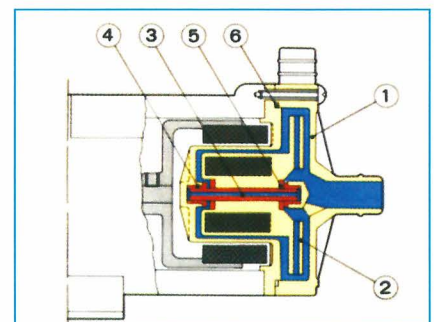


PERFORMANCE CURVES



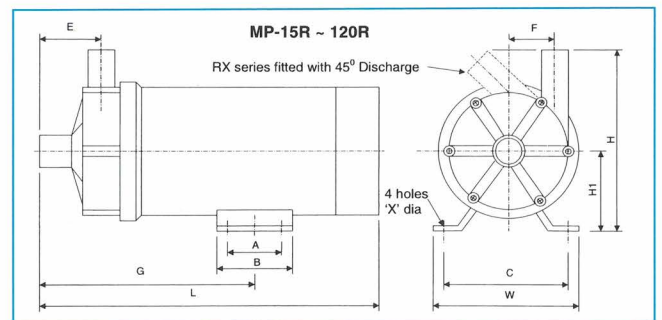
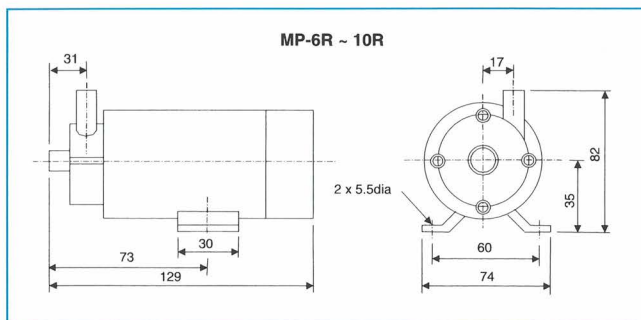
SPECIFICATIONS

Model	Inlet mm	Outlet mm	Max flow l/min	Max Head metres	Standard Output		Liquid S.G.	Power Watts	Phase
					l/min	metres			
MP-6R	14	14	8.0	1.0	4.0	0.6	<1.2	3	1
MP-6RZ	14	14	5.5	2.1	3.4	1.5	<1.1	3	1
MP-10R	14	14	10.0	1.5	5.0	1.0	<1.1	6	1
MP-15R	16	16	15.0	2.4	9.0	1.0	<1.3	10	1
MP-20R	18	18	26.0	3.1	17.0	2.0	<1.2	20	1
MP-20RX	26	26	46.0	1.8	30.0	1.0	<1.3	20	1
MP-20RZ	18	18	10.0	5.0	6.0	4.0	<1.1	20	1
MP-30R	20	20	32.0	3.7	15.0	2.5	<1.3	45	1
MP-30RX	26	26	62.0	2.9	33.0	2.0	<1.1	45	1
MP-30RZ	18	18	15.0	8.0	9.5	6.0	<1.1	45	1
MP-40R	20	20	45.0	4.8	20.0	4.0	<1.1	65	1
MP-40RX	26	26	75.0	3.3	40.0	2.5	<1.1	65	1
MP-55R	26	26	60.0	5.6	30.0	4.0	<1.2	90	1
MP-55RZ	26	26	25.0	10.0	15.0	8.0	<1.1	90	1
MP-70R	26	26	86.0	6.7	40.0	5.0	<1.1	150	1
MP-100R(FL)	26	26	120.0	8.8	55.0	7.0	<1.3	370	1 or 3
MP-120R(FL)	28	28	150.0	13.5	90.0	10.0	<1.2	550	1 or 3



Part	Material
1. Casing	Glass fibre reinforced PP
2. Impeller	Glass fibre reinforced PP
3. Spindle	Aluminium oxide ceramic
4. Bearing	Al. oxide ceramic or rulon
5. Thrust ring	Aluminium oxide ceramic
6. O-ring	FKM (Viton) or EPDM

DIMENSIONS



Model	L	W	H	H1	A	B	C	E	F	G	X
15R	180	95	108	55		50	68	40	21.5	117	5.5
20R	210	116	108	48	27	46	92	39		100	6.0
20RX	220	86	130	57	30	50	67	45		143	5.5
20RZ	211	86	126	56	30	50	67	41	40	132	6.5
30R	252	120	130	60	40	64	100	49	30	169	9.0
30RX	254	120	136	61	40	64	100	48		172	8.0
30RZ	236	120	130	60	40	64	100	42	40	151	9.0

Model	L	W	H	H1	A	B	C	E	F	G	X
40R	277	122	130	60	40	64	102	50	30	172	8.0
40RX	278	122	136	61	40	64	102	48		174	8.0
55R	277	120	159.5	65.5	40	64	100	56.5	43	198.5	9.0
55RZ	277	120	153.5	65.5	44	64	100	56.5	43	198.5	9.0
70R	265	142	162	66	70	96	108	55	44	176.5	9.5
100R	322	150	175	75	70	100	110	66	44	194.5	9.0
120R	340	150	182	75	70	100	110	76	53	225	9.0

Other Products in the Aquaplus Range

- **AD Series** Air Operated Diaphragm Pumps
- **DC Series** Drive Couplings
- **DP Series** Submersible Drainage Pumps
- **ES Series** End Suction Pumps
- **Heliflo Series** Progressive Cavity Pumps
- **HP Series** Peristaltic Pumps
- **MD Series** Magnetic Drive Pumps
- **MS Series** Single Spring and Cartridge Mechanical Seals
- **PC Series** Progressive Cavity Pumps
- **SC Series** Split Casing Pumps

For information on these products or for any specialised requirements please contact your local Aquaplus distributor.

All specifications subject to change without notice.

AVAILABLE FROM