

FRONTIERA

TMF

ISO 2858 CENTRIFUGAL PUMPS

FOR CORROSIVE LIQUIDS

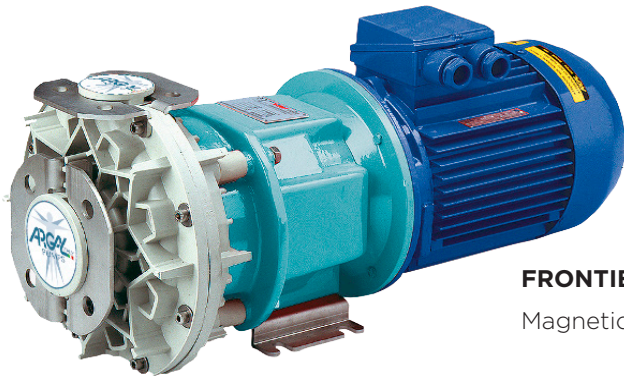
MAG-DRIVEN

PP · E-CTFE



ISO 2858 CENTRIFUGAL PUMPS

FOR CORROSIVE AND DANGEROUS LIQUIDS



FRONTIERA TMF

Magnetic-driven close-coupled pump, integral version.

The **FRONTIERA** pumps are compliant with **ISO 2858** conformity, available in magnetic-driven close-coupled version.

MAIN APPLICATIONS

The **FRONTIERA** pumps are ideal for pumping chemicals, acids and solvents in the following sectors:

- Water & waste water treatments
- Chemical & Pharmaceutical processes
- Scrubbers
- Cooling towers
- Stripping processes
- Electroplating processes

And they can operate as:

- Transfer pumps
- Recirculation pumps
- Injection pumps
- Load/Unload pumps
- Filtration pumps
- Pipeline cleaning pumps

LONGER LIFE CYCLE ENSURED

To support the radial charges, the rolling bearing is intentionally located in the lantern junction to the electric motor. It also reduces the charge carried by the motor bearing by reducing the cantilever extremity of the shaft. TMF models ensure a longer life cycle.

ACCESSORIES

- Drain plug connection
- Dry run protector
- Temperature control
- Vibration control
- Support losses check control

MATERIALS

STANDARD VERSIONS	WW	PP	Static elastomers	V	FPM
	GF	E-CTFE		E	EPDM
	WF	PP / E-CTFE		K	FFPM
ATEX VERSIONS	WX	PP			
	GX	E-CTFE			

GUIDING SYSTEMS

	R2	P2	X2
SHAFT	SiC	SiC	SiC
ROTATING BEARINGS	CARB.	PEEK	SiC

*R2 - standard conditions
P2 - critical conditions
X2 - extreme conditions*

ATEX

The **FRONTIERA** centrifugal pumps made of pure PP or E-CTFE in the armoured version can operate in the ATEX zones. They are used in the **surface applications (Group II)** and are part of the category 3, level of protection 2. **FRONTIERA** pumps can operate in gaseous atmospheres (**Zone 1, Zone 2**).

MAGNETIC-DRIVEN VERSION

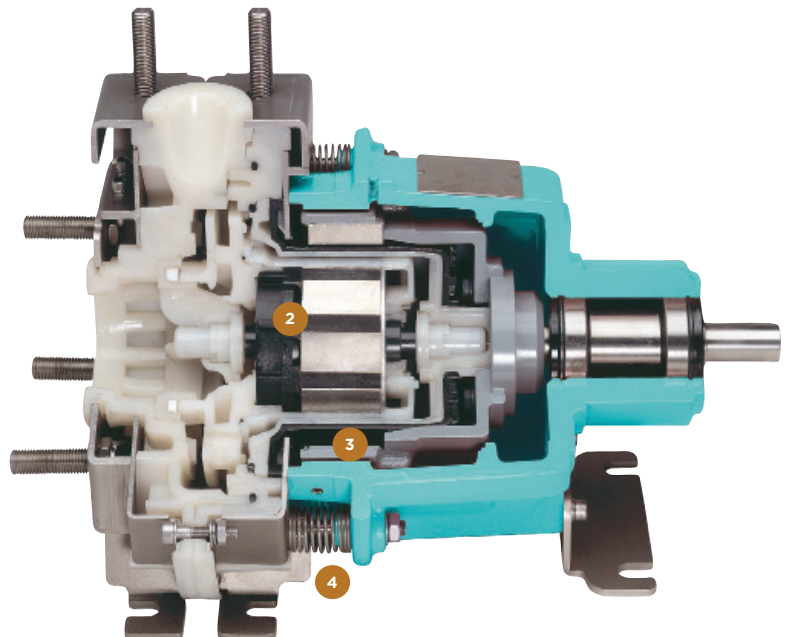
The motor shaft connects the external magnet with the internal one which is linked to the impeller. This allows the moving of the liquid and it also prevents from liquid leakage.

✓ It is ideal for pumping:

- cleaned liquids (**R2**)
- slightly abrasive (**P2**)
- moderately abrasive liquids (**X2**)

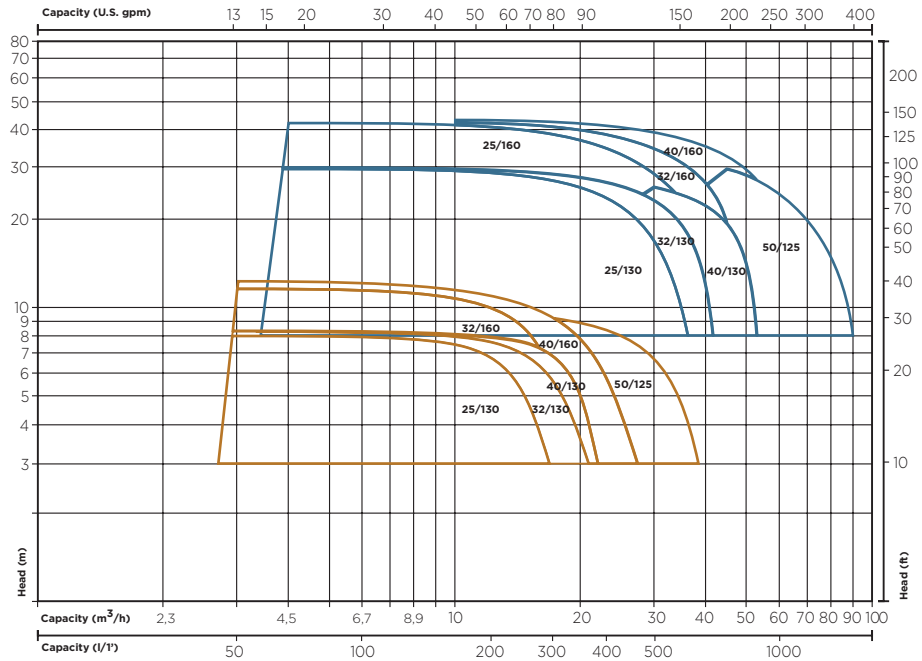
✗ It is not recommended for liquids laden with solids.

- impeller's hydrodynamic balancing 2
- magnets housing and protection
- double rear chamber for the volute casing: one for the chemical resistance and the other to increase the mechanical strength 3
- the use of springs is precious to gradually weaken the attraction of the magnet pairs to prevent danger 4



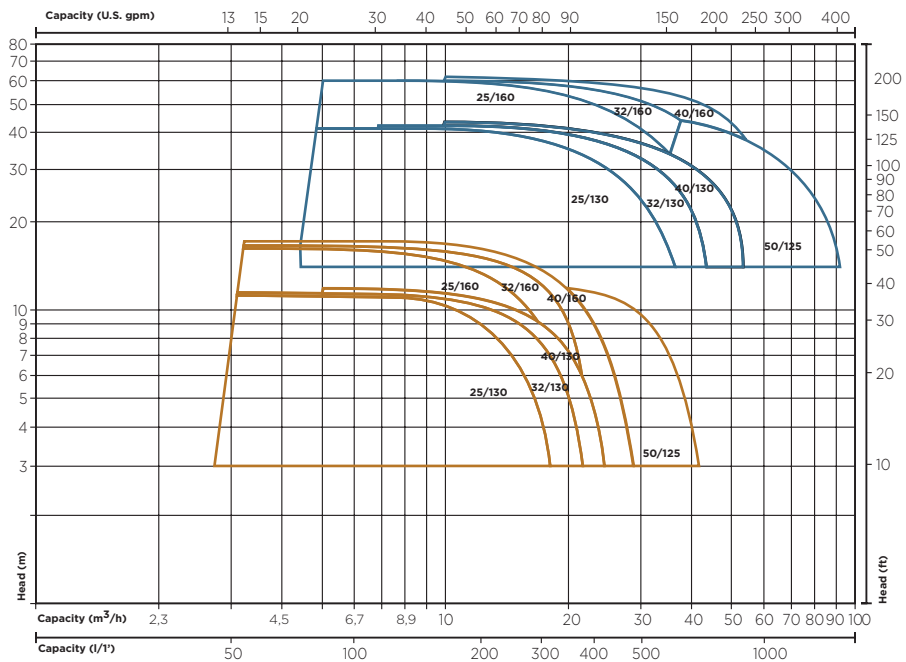
CURVES 50Hz

- 1450 rpm
- 2900 rpm



CURVES 60Hz

- 1740 rpm
- 3480 rpm



MOTOR POWER 50Hz

- 1450 rpm
- 2900 rpm

Model	kW									
	1,1	2,2	3	4	5,5	7,5	11	15	18,5	22
25/130	●	●	●	●	●	●	●	●	●	●
25/160	●	●	●	●	●	●	●	●	●	●
32/130	●	●	●	●	●	●	●	●	●	●
32/160	●	●	●	●	●	●	●	●	●	●
40/130	●	●	●	●	●	●	●	●	●	●
40/160	●	●	●	●	●	●	●	●	●	●
50/125	●	●	●	●	●	●	●	●	●	●

MOTOR POWER 60Hz

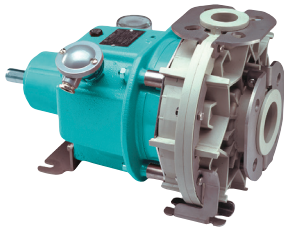
- 1740 rpm
- 3480 rpm

Model	kW							
	1,5	2,2	3	4	5,5	7,5	11	15
25/130	●	●	●	●	●	●	●	●
25/160	●	●	●	●	●	●	●	●
32/130	●	●	●	●	●	●	●	●
32/160	●	●	●	●	●	●	●	●
40/130	●	●	●	●	●	●	●	●
40/160	●	●	●	●	●	●	●	●
50/125	●	●	●	●	●	●	●	●

INNOVATIVE EXTERNAL STRUCTURE

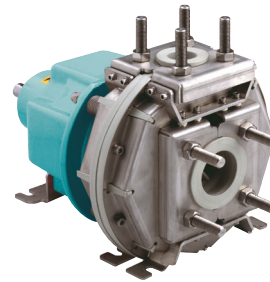
"N" INTEGRAL STRUCTURE

The external structure named "N" is made of stainless steel and replaces the traditional plastic flanges. The special design of the fastening fittings minimises the mechanical load pressure on the volute casing.



"R" ARMoured SERIES

In the "R" series, the stainless steel sheeting replaces the cast iron armour that is often damaged quickly. The new armour supports both the loads on the inlet/outlet fittings and protects the volute casing from internal liquid hammers or accidental external blows.

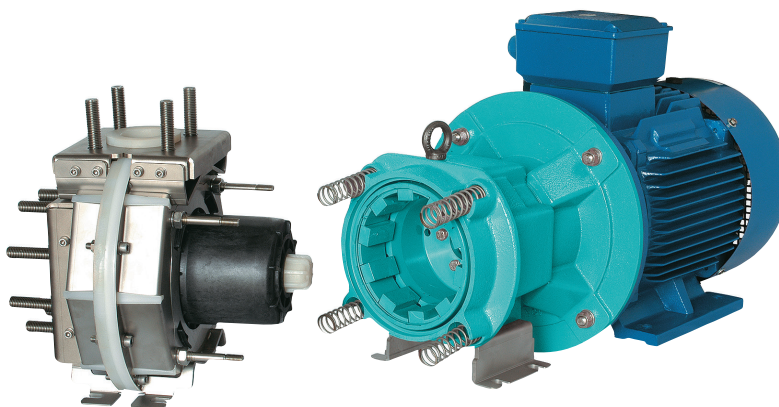


WET-END

The complete casing (or wet-end) of any mag-driven **FRONTIERA** pump can be easily detached from the other parts, without opening it. This is a remarkable technical alternative for spare parts.

STAINLESS STEEL ARMOUR

The stainless steel armour embeds while the pump casing the rear casing - made of PP or E-CTFE - is strengthened with an additional chamber made of polyamide.



TECHNICAL BASEPLATE

The base plate is the outcome of advanced techniques offering complete modularity obtained thanks to smart reinforcements, robustness and stability.



MECH-SEALED
& MAG-DRIVEN
CENTRIFUGAL
PUMPS

AIR-METERING
& AODD PUMPS
PULSATION
DAMPENERS

SELF-PRIMING
PUMPS

SUMP
PUMPS



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cod. 01-23 · EN