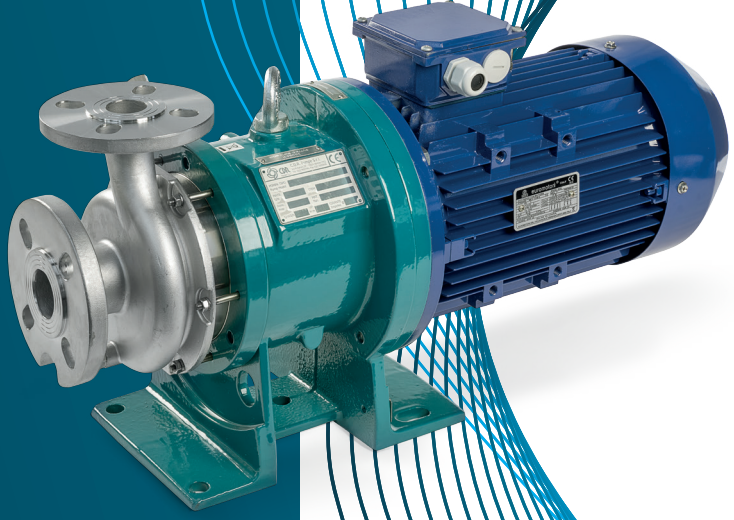
CDR® Pompe

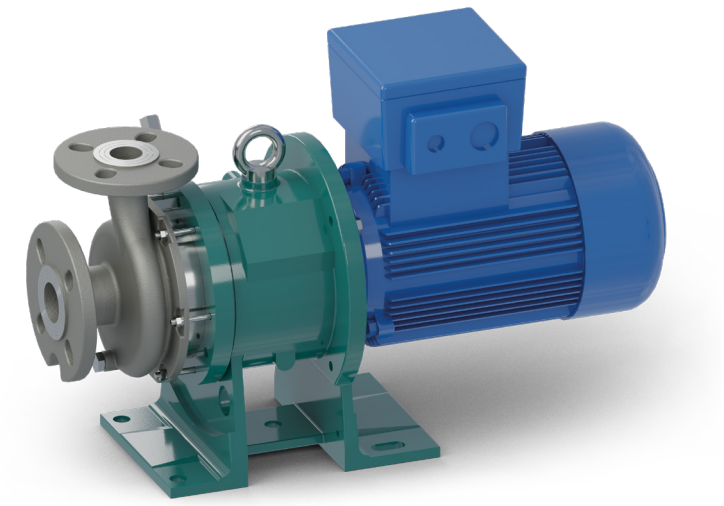
WE **PUMP** YOUR **CHEMICALS**



ETS SERIES

MAGNETIC STEEL
CENTRIFUGAL
DRIVE PUMP

ETS 30-40
close coupled



Range of applications

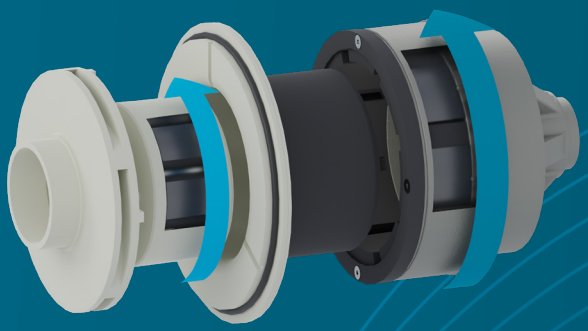
_ Basic Chemical Services
_ Fine Chemical Batch Services
_ Thermoregulation

in compliance with:
2006/42/CE

ATEX 100
Directive: 2014/34/EU

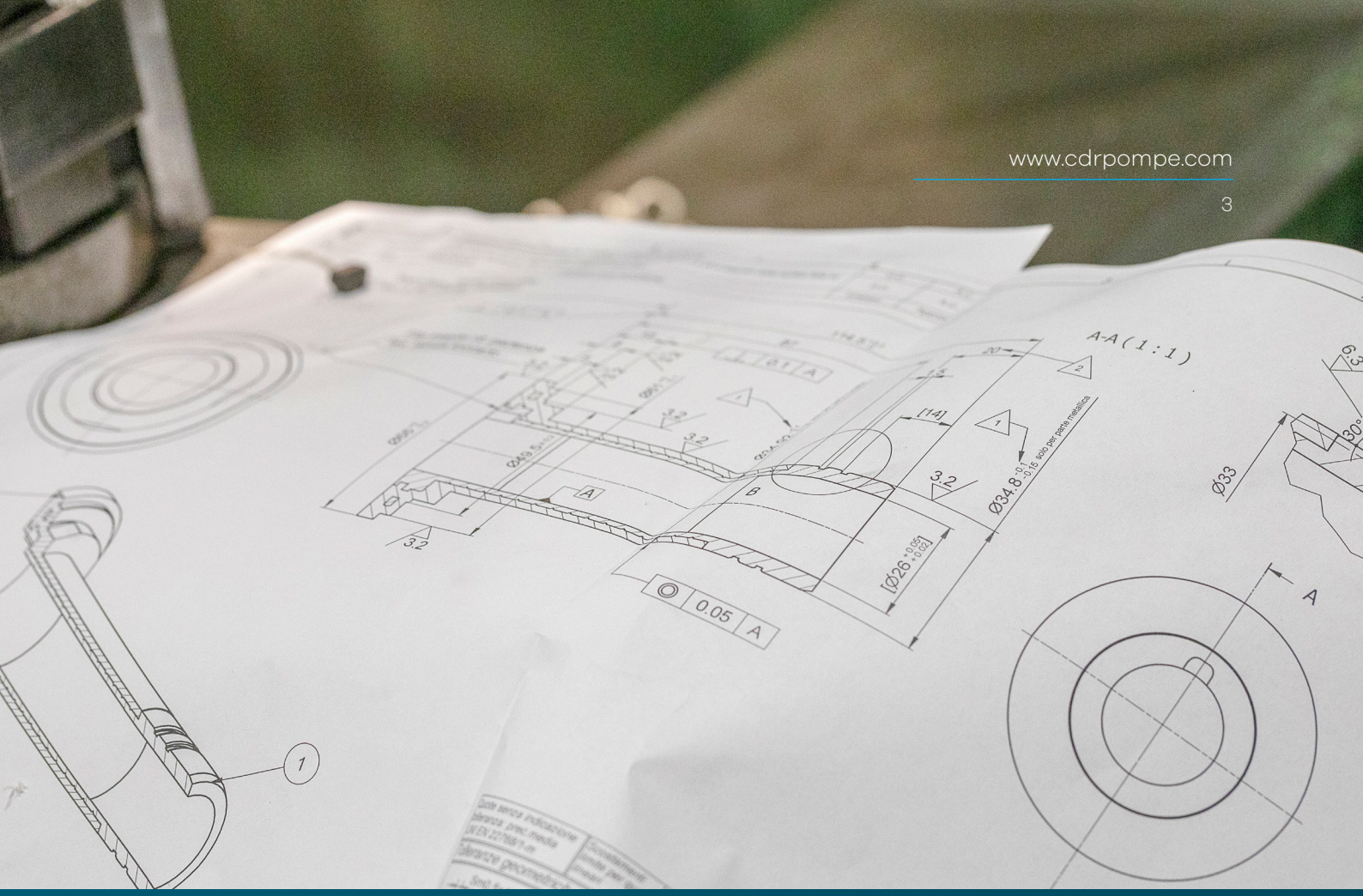
Mag drive concept

The synchronous drive configuration is based on an outer magnet ring assembly built to magnetically couple with an inner magnet ring assembly. These two magnet rings are locked together by the flux of attracting magnet poles flowing through the containment isolation shell.



Design

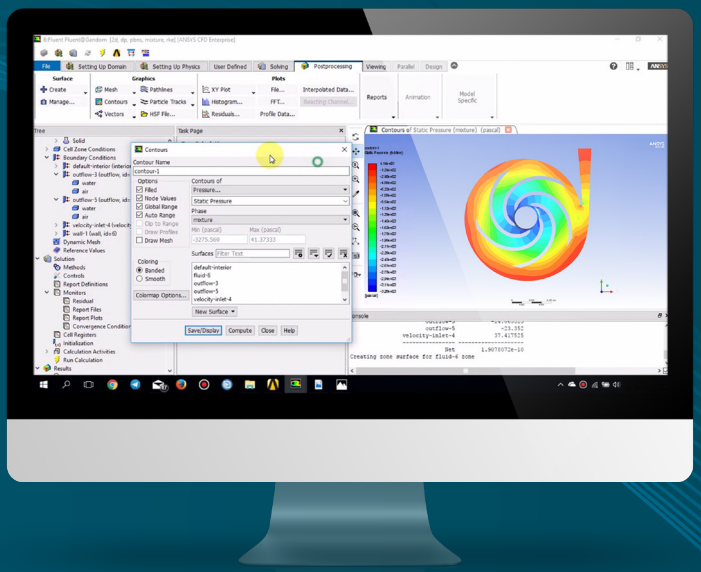
Simplicity, lightness and economy are the 3 strong points of this pump in cases of occasional handling of chemical products.



R&D with Fluidodinamic Simulation

Designed with an innovative simulation software, that permits to obtain high hydraulic performances and efficiency levels near to the physical possible values.

Simulated with Ansys



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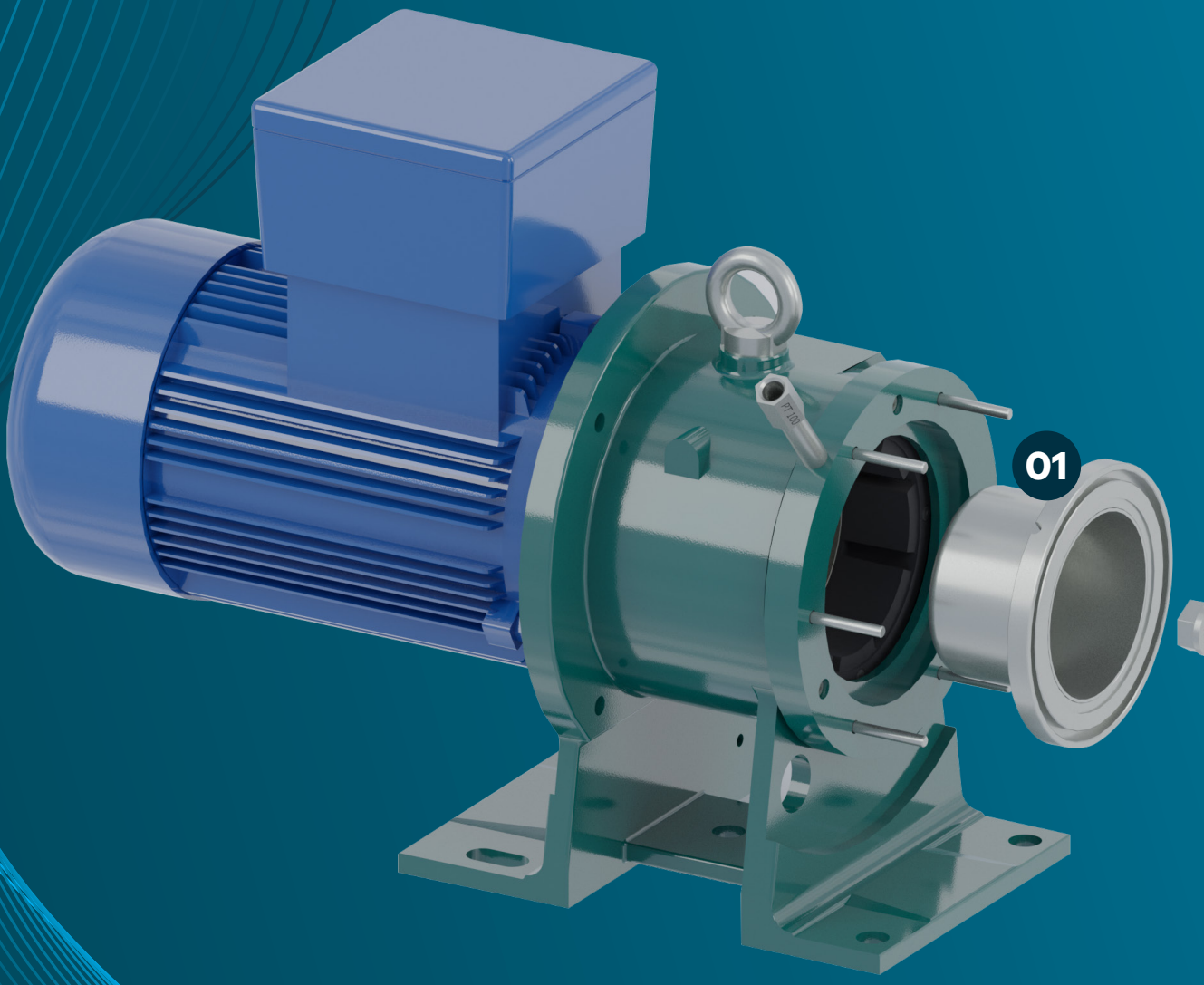
ETS Series Main features and 3d view



01. Isolation shell
Made by flow forming in Hastelloy-C to guarantee minimal energy dispersion due to eddy currents.
Predisposition for temperature instrument supplied as standard.
A flow-breaker on the bottom of the shell prevents the formation of vortex.

02. Inner magnet
Made entirely of AISI 316L.
It is coupled to the impeller by a shaft with a locking system using a key, nut and washer.

03. Bushes
Static and rotating SiC bushes guarantee long life even with continuous use.
Axial thrust compensation rings guarantee reliability even in the event of strong axial thrusts (water hammer).

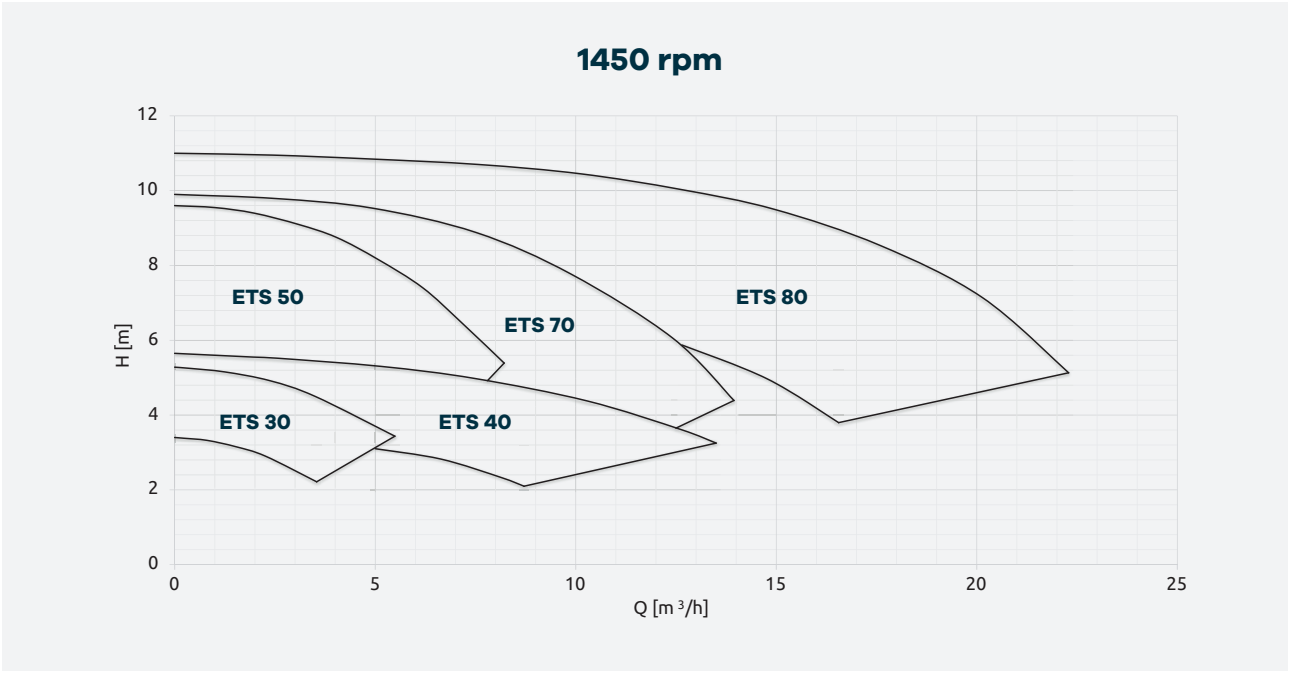
04. Bushing support
Machined from bar, it guarantees the stability of the static bushes.
A flushing channel guarantees correct lubrication of the bushes.
A heating jacket is available on request for the ETS 50 and 70 models.

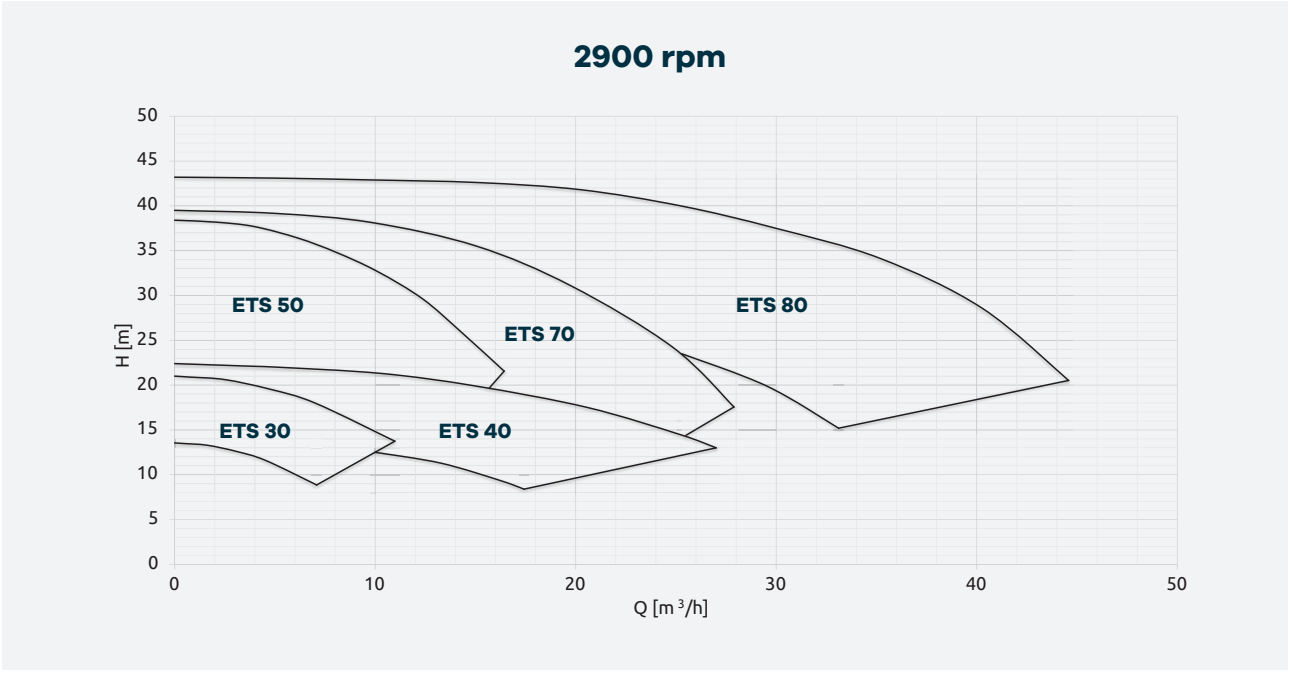
05. Impeller
Made of investment casting in AISI 316, it guarantees an excellent blade profile and resistance to corrosion. A locking key guarantees maximum stability.

06. Casing
Made of investment casting AISI 316, it guarantees excellent resistance to corrosion.
Standard casing drainage.
A heating jacket is available on request for the ETS 50 and 70 models.

Performance Curves

50 Hz

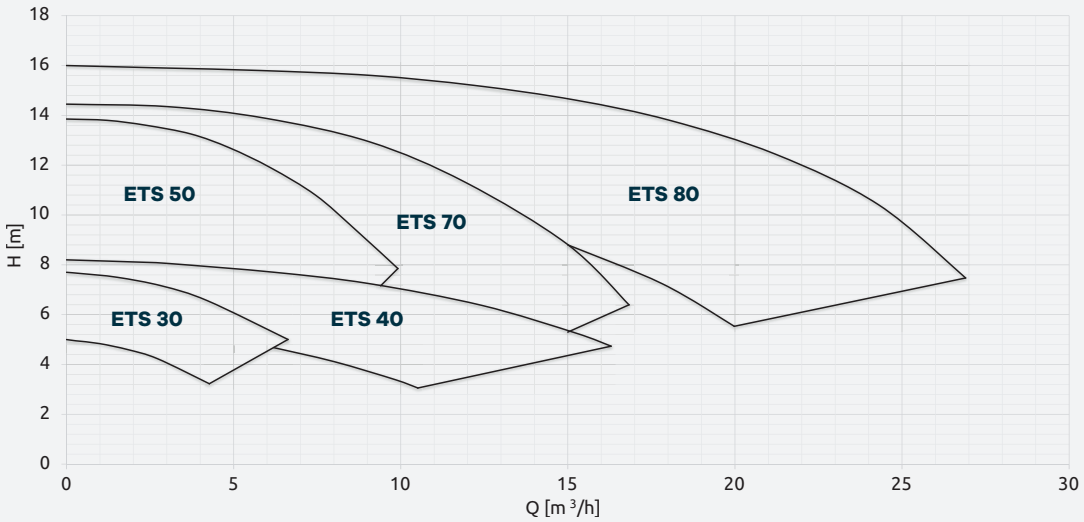




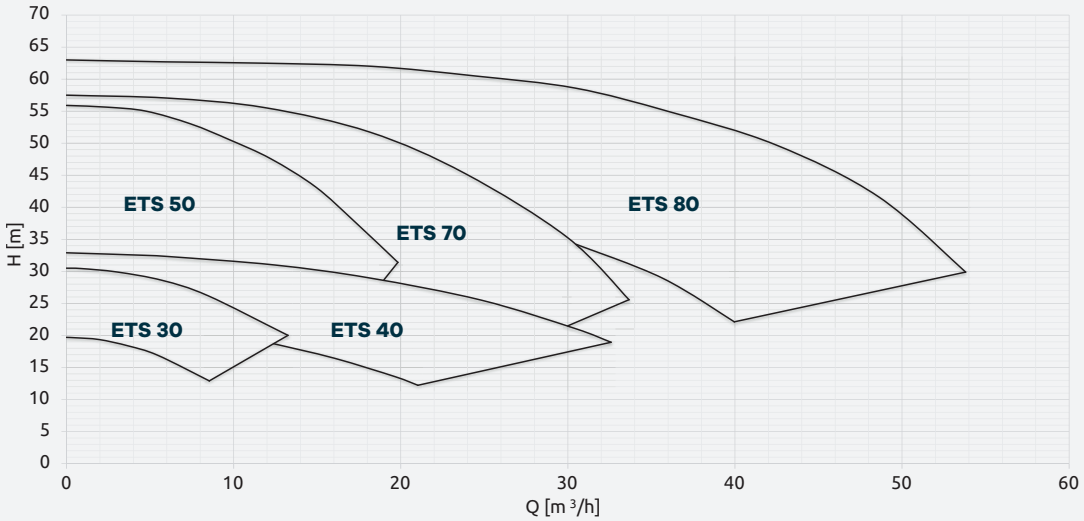
Not binding data refers to water at room temperature.
For specific performance curve contact CDR Pompe S.R.L.

60 Hz

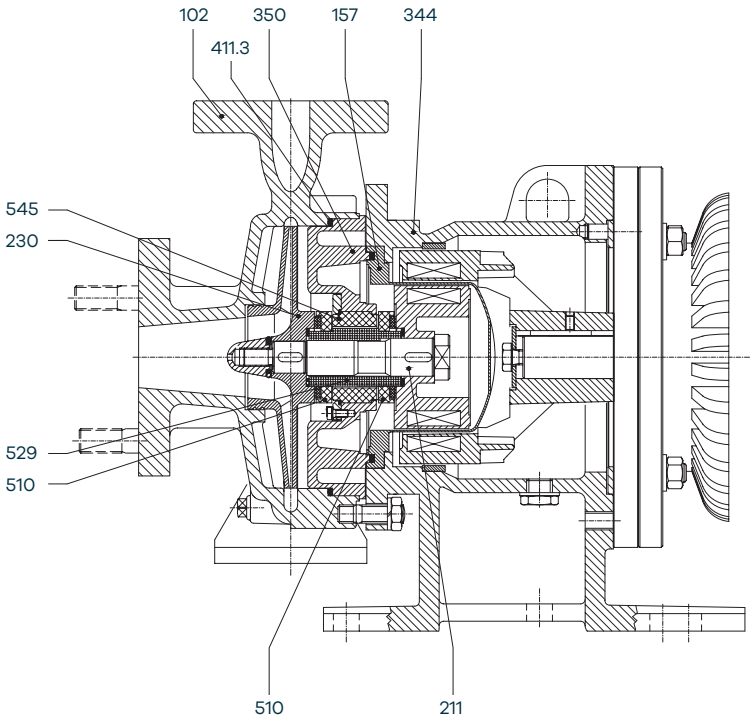
1750 rpm



3500 rpm



ETS
Section drawings



Technical specifications

Performance at 2900 rpm

Q max = 45 m³/h
H max = 42 mlc

Motors

0.75 kW (motor size 80)
7,5 kW (motor size 132)

Allowable temperatures

-30°C > +140°C
(on request) -40°C > +180°C

Allowable pressures

ETS 30/40: from 6 bar (20°C)
ETS 50/70: from 6 bar (20°C)

Suction/discharge

ETS 30: DN32/DN25
ETS 40: DN40/DN32
ETS 50: DN40/DN25
ETS 70: DN50/DN32

Connections

ETS 30/40 Flanged ISO 1092-1 PN10RF
ETS 50/70 Flanged ISO 1092-1 PN16RF
(slotted ANSI 150 RF)

Viscosity

min: 0,5 cSt
max: 180 cSt

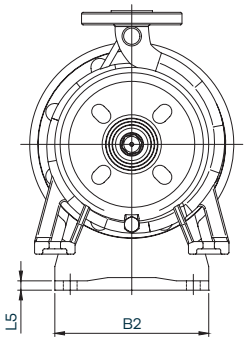
Allowable solids

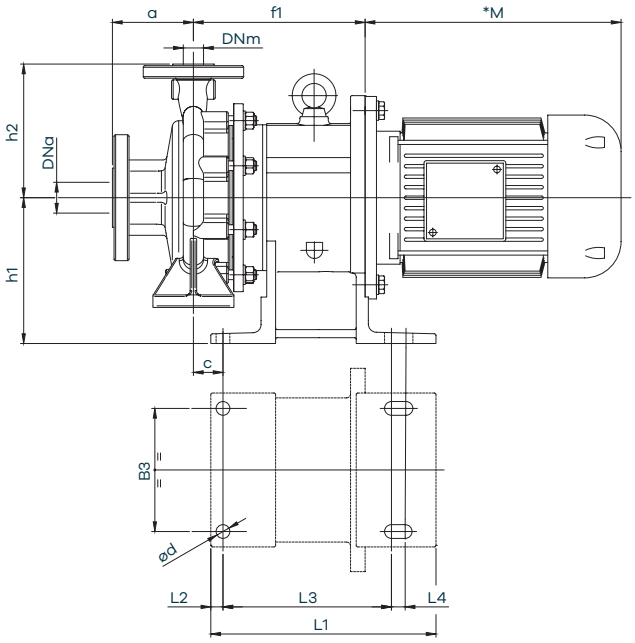
Max concentration: 2% by weight
Max size: 0.10 mm

Internal components

DIN	Components	Materials
102	Casing	AISI 316 (1.4408-CF8M)
157	Isolation Shell	Hastelloy C + AISI 316L
211	Pump shaft	AISI 316 (1.4401)
230	Impeller	AISI 316 (1.4408-CF8M)
344	Lantern	GS400 (C40 / AISI 316 as special execution)
350	Bushing Support	AISI 316L (1.4409-CF3M)
411.3	Joint ring (Casing)	PTFE / Armored Grafoil
411.4	Joint ring (Casing)	PTFE / Armored Grafoil
504.x	Spacer Ring	PTFE / Armored Grafoil
510	Thrust Bearing	SiC
529	Bearing Sleeve	SiC
545	Bearing Bush	SSiC / Graphite
855	Inner Magnet	AISI 316L (1.4404)
856	Outer Magnet	GS400
723.1	Suction flange	PP-Steel / AISI 304
723.2	Discharge flange	PP-Steel / AISI 304
740.1	Suction joint	PP / ETFE-AISI 304
740.2	Discharge joint	PP / ETFE-AISI 304

ETS
Overall dimensions





Pump dimensions

Model	ETS 30	ETS 40	ETS 50	ETS 70
DNa**	32	40	40	50
DNm**	25	32	25	32
a (mm)	52	78	100	80
B2 (mm)	190	190	190	190
B3 (mm)	152	152	152	152
C (mm)	20	22	36.5	36.5
Ød (mm)	17	17	17	17
h1 (mm)	180	180	180	180
h2 (mm)	121	146	165	160
L1 (mm)	277	277	277	277
L2 (mm)	15	15	15	15
L3 (mm)	208	208	208	208
L4 (mm)	17	17	17	17
L5 (mm)	11,5	11,5	11,5	11,5

Base dimensions

Model	ETS 30	ETS 40	ETS 50	ETS 70
80 mm	196	196	212	212
90 mm	196	196	212	212
100 mm	214	214	212	212
112 mm	214	214	212	212
132 mm	-	-	230	230
Motor shape	**B5**	**B5**	**B5**	**B5**
Pump weight (without motor)	35	38	45	45

*The M dimension depends on the motor installed
**UNI EN 1092-1 PN 16RF slotted to ANSI 150

Note

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Technical characteristics:
The data and technical characteristics shown in the General Catalogue are not binding. CDR Pompe SRL reserves the right to implement changes without notice. Therefore the data , the size, performance and any other information reported are indicative and not binding. For any technical details you can request the product update form.