

# HTS

Metallic Magnetic Drive Turbine Peripheral Pumps



HTS  
WITHOUT MOTOR

Compact, metallic magnetic driven regenerative turbine pumps

Materials: AISI 316 (1.4401)

Close-coupled execution



Comply to :

2006/42/CE

Available upon request :

ATEX



Directive 94/9/EC

Flanges :

UNI 1092-2 PN16 type B

ANSI 150RF



# HTS range are Metallic Sealless Magnetic Drive horizontal turbine single-stage pumps

Inner and Outer magnets are equipped with NdFeB (neodymium iron boron) or SmCo (samarium cobalt) permanent magnets

Patented cage magnet attachment guarantee stability during the operation of the pump

## 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

## Sealless design

Total containment, essential for hazardous, aggressive or valuable product.

The design allows to the Isolation Shell to be self-venting

The standard execution made by Hastelloy C276 reduces drastically the Eddy Current Losses

## Inner Magnet - Pump Shaft

Magnets fully encapsulated with tough 316L sheath

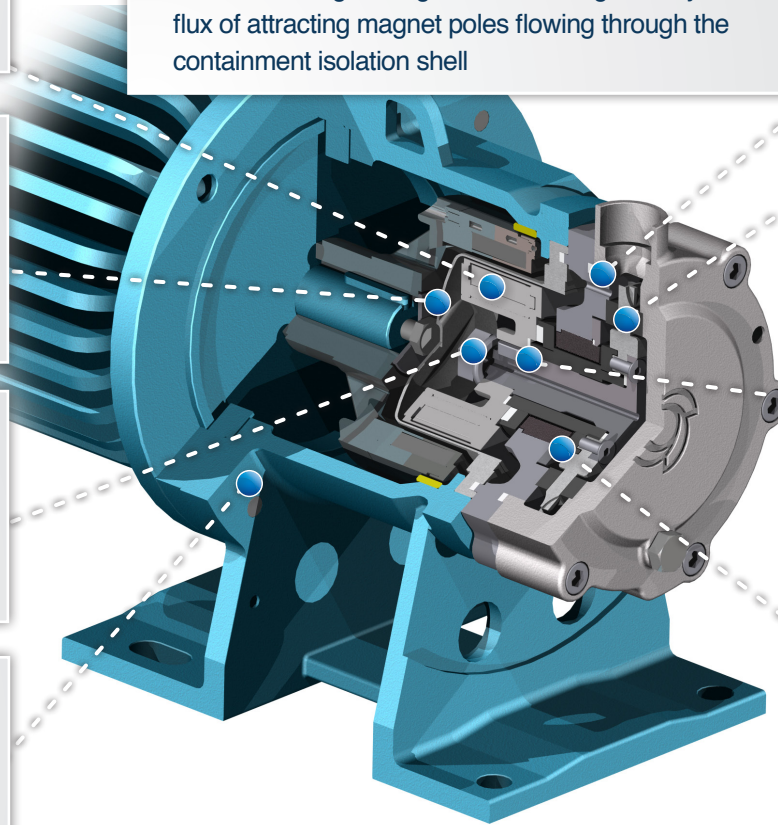
Coupled to the impeller by key, dome nut and locking tab washer

The HTS are available in close coupled execution, suitable to be coupled with standard electrical motors

Can operate without axial or radial thrusts thanks to the impeller design, eliminating wear on axial thrust bearing

The problem of reverse rotation during start-up has been eliminated thanks to the key driven system

The forced internal recirculation path design allows the pump to work properly along the whole performances  
Internal recirculation path adjustable to match low or high viscosity medium work curve



## Versatility

Metallic Sealless Magnetic Drive Pumps suitable for service up to 140°C. The HTS series is designed with a rotating metallic shaft supported by single static bushing

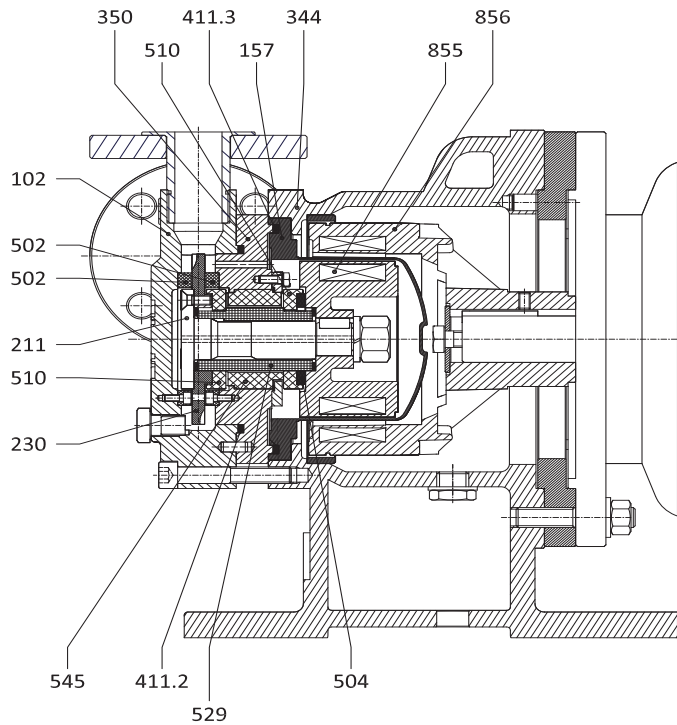
## Reliability

Suitable for handling aggressive, toxic and hazardous liquids (low viscosity, clean or slightly contaminated) in the chemical, petrochemical and pharmaceutical industries, where the need of high safety standards is the first requirement

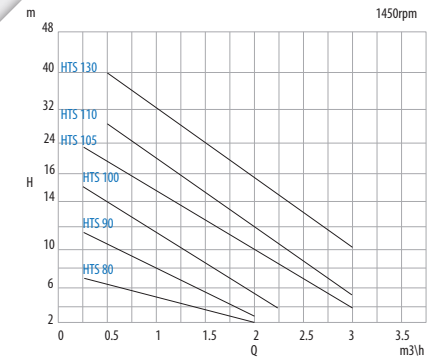
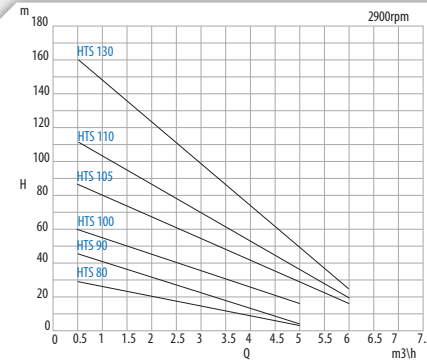
## Design

The regenerative pump produces large head at comparatively small flows : a performance range that is not usually covered by standard centrifugal pumps

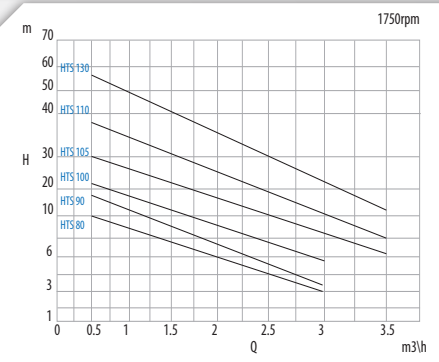
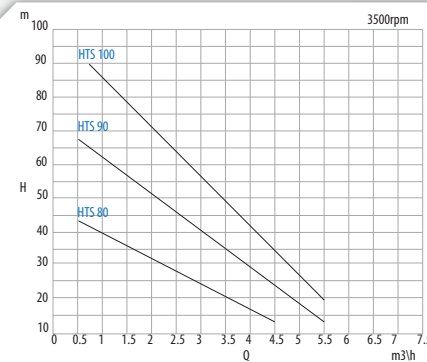
# TECHNICAL SPECIFICATIONS



50 Hz



60 Hz



Part list

DIN	Component	Material
102	Casing	AISI 316 (CF8M)
157	Isolation Shell	Hastelloy C + AISI 316L
211	Pump Shaft	AISI 316 (1.4401)
230	Impeller	AISI 316 (1.4401)
344	Lantern	GS400
350	Bushing Support	AISI 316L (CF3M)
411.x	Joint Ring (Casing)	PTFE
502	Casing Wear Ring	PTFE-CF \ PEEK
504	Spacer Ring	PTFE
510	Thrust Bearing	SiC
529	Bearing Sleeve	SiC
545	Bearing Bush	SiC \ PEEK
855	Inner Magnet	AISI 316L (1.4404)
856	Outer Magnet	GS400

Technical Specifications

<b>Performances 2900 rpm</b>	Q max = 5 m³/h -> H max = 160 mcl
<b>Electric Motors</b>	0.75 kW (motor size 80) -> 7.5 kW (motor size 132)
<b>Temperature range</b>	- 30°C -> +140°C
<b>Allowable Pressure Range</b>	20 bar @ 20 °C
<b>Threaded Connections</b>	HTS series G1" X G1" * as option : Flanges DN25 ISO 1092 PN16RF or ANSI 150 RF
<b>Viscosity</b>	1cSt min - 200 cSt max
<b>Allowable Solids</b>	No solids are allowed



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For further info, please visit  
**[www.cdrpompe.com](http://www.cdrpompe.com)**

#### Technical Characteristics

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