

Kémiai ipari alkalmazások









PERIPHERAL REGENERATIVE TURBINE PUMPS

and

- Low flow

- High head
- SiC bearings
- Self balanced

CENTRIFUGAL PUMPS

- Closed impeller
- High efficiency
- SiC bearings
- Modular construction

SLIDING VANE PUMPS

- Volumetric
- Self adjustable pressure
- Phenolic Graphite/ Metallized Graphite Stators and vanes
- Sampling and metering



SIDE CHANNEL PUMPS

- Self priming
- Low NPSHr
- Heavy Duty Centerline
- Barrel construction,
 No intermediate gaskets
- Pumps entrained gas

OSCILLATING HOLLOW DISC PUMPS

- Self priming
- Hig viscosity pumping
- Reversibles
- Provided by bidirectional Bypass valve



GEAR PUMPS

- Strong construction
- Self priming
- Hig viscosity pumping
- Reversibles



METALLIC PUMP RANGE



PLASTIC PUMP RANGE



CM MAG-M

Field assembling of the product lubricated bearing arrangement does not require special tools. The bearing materials are available in different materials to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC), Carbon to allow accidental dry running transitory and PTFEC/G or PEEK compound (for any applications where the Carbon cannot be used.) The use of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.



CF8M Pump Casing & Impeller high quality casting components. Other materials: - Hastelloy® C276, - Incoloy® 825, - Duplex, - Others materials available on request.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. AISI 316 is the standard construction, Hastelloy® C276 and titanium alloy upgrade when higher pressure ratings And increased efficiency are required.



High power synchronous magnetic coupling designed By our Technical Office and with rare earth magnetic Elements mechanically locked. The high performance magnets can operate at liquid temperatures of up to 662°F (350 °C) without external cooling.



The sealing system with fl at gaskets prevents from leaking in the atmosphere – different materials available: - Asbestos free (standard) - PTFE/R - Graphoil® - GYLON® - Other on request

CN MAG-M BF Version

CF8M Pump Casing & Impeller High quality casting components, Other materials:

- Hastelloy® C276,
- Incoloy® 825,
- Duplex,
- Titanium,
- Other materials available on request.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Bearing materials available are of three different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC).

Special configuration with PEEK composite compound for improoved cavitation transitory resistance. The use of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to a minimum, to guarantee many years of maintenance-free operation.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



Closed impeller statically and dinamically balanced. The axial thrusts are balanced by back vanes. This allows the best balancing of axial trusts without regards of suction pressure.



Rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Hastelloy® C276 is standard isolation shell material – providing a safe and efficient solution – system pressure max 16 bar. Hybrid rear casing technology available for energy saving configuration. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required. Double rear shell on request.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling. Installed power over 500 kW / 700 HP.



CN MAG-M CC Version

Centrifugal Pumps for the Chemical Industry

- According to DIN-EN 22858 - According to ANSI B 73.3

> CN MAG-M ANSI B 73.3 Version

CC MAG-M HT

Rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Hastelloy® C276 is standard isolation shell material – providing a safe and efficient solution – system pressure max 16 bar. Hybrid rear casing technology available for energy saving configuration. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling. Installed power over 500 kW / 700 HP.



Sealing system with flat gaskets prevents from leaking in the atmosphere – different materials available: - Asbestos free - PTFE - Graphoil - GYLON®

CF8M or WCB Pump Casing & Impeller High quality casting components, Other materials: available on request.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Bearing materials available are of three different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC).

Special configuration with PEEK composite compound for improoved cavitation transitory resistance. The use of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to a minimum, to guarantee many years of maintenance-free operation.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



Closed impeller statically and dinamically balanced. The axial thrusts are balanced by back vanes. This allows the best balancing of axial trusts without regards of suction pressure. Shaft support achieved by precision casting, With a special configuration that allowes break down of temperature between hydraulic end and mag-coupling

CN MAG-MV

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



Particular design of the hydraulic, with self balancing impeller to improve the wear ring life.

CF8M or WCB Pump Casing & Impeller High quality casting components. Other materials : - Hastelloy® C276, - Incoloy® 825, - Duplex, - Others available on request.

The sealing system with flat gaskets prevents product from leaking in the atmosphere different materials available: - Asbestos free - PTFE - Graphoil

- GYLON®
- Others on request



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one.

Available two versions, AISI 316 the standard construction, and Hastelloy® C276 for high pressure version - providing a safe and efficient solution - system pressure max 150bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked.

The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling.

Field assembling of the product lubricated bearing arrangement does not require special tools.

Bearing materials are available in four different types to provide the best solution for each application: Silicon Carbide (SSIC),

Tungsten Carbide (TC), Special Carbon to allow a dry running situation and PEEK COMPOUND for any

applications where the Special Carbon cannot be used. The adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.

CNV MAG-M

Custom design base plate, stainless steel, carbon steel, other materials available.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



Particular design of the hydraulic, with self balancing impeller to improve the wear ring life.



CF8M or WCB Pump Casing & Impeller High quality casting components. Other materials: - Hastelloy® C276 - Incoloy® 825 - Duplex - Others available on request.

The sealing system with flat gaskets prevents product from leaking in the atmosphere – different materials available: - Asbestos free (standard) - PTFE - Graphoil - VITON® - GYLON®



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions, AISI 316 the standard construction, and Hastelloy® C276 for high pressure version - providing a safe and efficient solution – system pressure max 150bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.

High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling.

Field assembling of the product lubricated bearing arrangement does not require special tools. Bearing materials are available in four different types to provide the best solution for each application: Silicon Carbide (SSIC),

Tungsten Carbide (TC), Special Carbon to allow a dry running situation and PTFEC/G for any applications where the Special Carbon cannot be used. The adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.

CR MAG-M API

Rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand

higher pressures than the traditional one. Hastelloy® C276 is standard isolation shell material - providing a safe and efficient solution – system pressure max 50 bar. Hybrid rear casing technology available for energy saving configuration. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required

Double rear shell on request.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperatures of up to 662 °F (+350 °C) without external cooling. Transmittable horsepower exceeds 520 kW / 700 HP.

Special bare frame design allows the adoption of secondary containment and secondary control systems, in full comply to API 685 latest edition.

Sealing system with flat gaskets prevents from leaking in the atmosphere – different materials available: - Asbestos free - PTFE - Graphoil - GYLON®

Internal Mechanical Seal separate hydraulyc end from magnetic coupling, this feature allowes critical low viscosity, dirty and high temperature handling without any desease.

CF8M Pump Casing & Impeller High quality

- casting components.
- Other materials:
- Hastelloy® C276,
- Incoloy® 825,
- Duplex,
- Titanium,
- Others materials available on request.



Field assembling of the product lubricated bearing arrangement does not require special tools. The bearing materials available are of three different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC) and Special Carbon. The use of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to a minimum, to guarantee many years of maintenance-free operation.

RWP QUICK CARTRIDGE KIT to guarantee an easy and fast maintenance.

Closed impeller statically and dinamically balanced. The axial thrusts are balanced by back vanes, for the best axial balancing independently from suction pressure.

CN MAG-MS API

Casing Cover - Flanged Head, studs/nuts - O-ring or spiral wound gaskets

Axial Thrust Balance Opposed impeller and diffuser configuration to minimize axial and radial hydraulic thrusts.



Wearing parts can be supplied in a variety of materials and hardness depending on pump material and application. 0

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32

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Diffusers / Impellers

Allow replacement of individual stage piece instead of entire volute. Number of stages from 2 to 8. Blank stages can be supplied for future conditions.

Barrel Centerline casing mounting for high temperature stability and maximum nozzle loading capability. One piece casting with nozzles and flanges. Jacketing system available. <u>Other options on request</u> Top-Top suction and discharge nozzles integrally cast on barrel casing. Side-side or top-side nozzles available on request.



Rear shell Titanium Alloy made designed to withstand high pressures applications. Hybrid rear casing technology available for energy saving configuration.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling. Installed power up to 1000 kW / 1450 HP

> Robust Shaft and Rotor, designed for low stress level, fully machined and dynamically balanced.

First stage impeller Low Nss and Improoved NPSHr design available.

Internal Cartridge assembly Pull out construction Internal bolts for assembly/ disassembly Single stages sealing system.

CN SEAL-M Acc. To API 610 11th ed.

Centerline Mounted Casing

OH2 Heavy duty mounting feets accept ISO 13709/API-610 nozzle loads and maintain pump alignment under hard conditions.

Pump shaft

The pump shaft is sized to transmit the full driver output and is machined by CNC throughout his entire length and has a proper finish on bearing mating surfaces. To obtain satisfactory seal performance, proper shaft stiffness limits the deflection. This is the result of the combination between shaft diameter, shaft span or overhang and casing design. The shaft design guarantees that the first try bending critical speed is at least 20% above the pump's maximum continuous operating speed.

Outer ball bearings

The outer magnet shaft is fitted in generously dimensioned antifriction bearings. The bearings are L10 rated for an average life in excess of 5 years. The oil bath is protected against atmosphere by labyrinth oil seal. The oil level is controlled by a constant level oiler and additionally by a bull's eye sight glass. Oilmist lubrication can be supply.

Labyrinth oil seals

Labyrinth seal design prevents oil leakage out and contaminants from intruding. Material adopted is nonsparking metal. **Nozzles** Suction and discharge connections are flanged CLASS 300 RF. Other classes and facings on request.

Radial balance Radially balanced for minimum shaft deflection.

CF8M Pump Casing & Impeller High quality casting components. Materials: - Hastelloy® C276, - Incoloy® 825, - Duplex, - Titanium, - Others materials available on request.

Renewable wear rings

Full comply to ISO 13709/API-610 running clearances. Positively locked.

Impeller

Multiple closed impellers for most casings to meet specific hydraulic requirements. Balanced to stringent requirements of API-610/ISO 13709.

Mechanical shaft seals

The CN SEAL-M pumps will be equipped with mechanical seals and sealing systems in accordance with API 682 category 2/3 -ISO 21049.

The seal chamber dimensions conform with API 610



T MAG-M

Particular design of the hydraulic, with self balancing impeller to improve the the wear ring life.

CF8M Pump Casing & Impeller High quality casting components. Other materials: - Hastelloy® C276, - Incoloy® 825, - Duplex, -Others available on request.

RWP QUICK CHANGE CARTRIDGE

KIT to guarantee an easy and fast maintenance.



The sealing system with flat gaskets prevents product from leaking in the atmosphere – different materials available: - Asbestos free (standard) - PTFE - Graphoil - GYLON® - Other on request



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. AISI 316 is the standard construction, Hastelloy® C276 and titanium alloy upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked

The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Bearing materials are available in four different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC), Tungsten Carbide in combination

with metallized Carbon to allow accidental dry running transitory and PTFEC/G or PEEK compound for any applications where Special Carbon cannot be used. The adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to

guarantee many years of maintenance-free operation.

T ECO MAG-M

Particular design of the hydraulic, with self balancing impeller to improve the wear ring life. Field assembling of the product lubricated bearing arrangement does not require special tools. The Volute/Bearing materials are available in two different types to provide the best solution for each application: Carbon graphite volutes with stainless steel shaft and Antimony carbon volutes with Silicon Carbide shaft.



CF8M Pump Casing & Impeller High quality casting components, CNC machined with high accuracy, for the best performance.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



The sealing system with O-ring gaskets prevents product from leaking in the atmosphere – different materials available: - VITON® (standard) - GRAPHOIL - ARAMIDIC

- FEP

The rear shell is made of one single piece, no welding, special profile that has been studied to withstand higher pressures than the traditional one. The material is AISI 316; system pressure max 16 bar.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked.

High temperature version available up to +662°F (+350°C).

Epoxy primer and polyacrylic enamel waterbased painting for the best quality resistance linked to the environmental respect.

Quick maintenance:

repair the pump is very easy and fast, in three simple steps:

3/ Introduce the new cartridge and reassembly the pump.

1/ Unscrew pump cover;\

2/ Extract the cartridge, using one of the cover screw;

CT MAG-M

The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand

higher pressures than the traditional one. AISI 316 is the standard construction, Hastelloy® C276 and titanium alloy upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Bearing materials are available in four different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC), Tungsten Carbide in combination with metallized Carbon to allow accidental

dry running transitory and PTFEC/G or PEEK Compound for any applications where Special Carbon cannot be used. The adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.

Particular design of the hydraulic, with self balancing impeller to improve the wear ring life.



CF8M or WCB Pump Casing & Impeller High quality casting components. Materials: - Hastelloy® C276, - Incoloy® 825, - Duplex, - Others available on request.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast



The sealing system with flat gaskets prevents product from leaking in the atmosphere different materials available: - Asbestos free (standard)

- PTFE
- Graphoil
- Garlock®
- GYLON®
- Other on request

CT MAG-MS

"Barrel" construction with back inserted volute rings, to have the best hydraulic alignment and the longest wear rings life. Available in 2 or 4 stages.

The hydraulic barrier between two stages is made of a special intermediate bushing.

Particular design of the hydraulic, with self balancing impeller to improve the wear ring life.



The range includes the construction with two and four stages, with or without centrifugal inducer to minimize the required NPSH up to 0,6 m, to allows the pumping of condensed and generally all low available NPSH installations.

CF8M or WCB pump casing, cover & impellers High quality casting components. Materials:

- Hastelloy® C276
- Incoloy® 825
- Duplex
- Others available on request

Drain plug (1/2" NPT) on standard construction

Sealing system with flat gaskets prevents product from leaking to the atmosphere – different materials available:

- Asbestos free
- PTFE
- Graphoil
- GYLON®

- Other on request

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions. AISI 316 the standard construction, and Hastelloy® C276 for high pressure version providing a safe and efficient solution system pressure max 150 bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 662 °F (350 °C) without external cooling.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Bearing materials are available in four different types to provide the best solution for each application: Silicon Carbide (SSIC), Tungsten Carbide (TC), Tungsten Carbide in combination with metallized Carbon to allow accidental dry running transitory and PTFEC/G or PEEK compound for any applications where

Special Carbon cannot be used. The Adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.



VINLINE

The sealing system with O-Rings prevents product from leaking in the atmosphere – different materials available: - Viton® (standard) - EPDM - FEP

CF8M Pump Casing & Cover High quality casting components. Other materials: - Hastelloy® C276, - Incoloy® 825, - Duplex, - Others available on request.

QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



STANDARD VERSION: CARTRIDGE PHENOLIC GRAPHITE, ROTOR SS316. "1 SiC" VERSION (For low viscosity or fot chemical resistance): CARTRIDGE METALLIZED CARBON, ROTOR SS316 W/SiC BEARINGS. "2 SiC" VERSION (extreme differential pressure): CARTRIDGE METALLIZED CARBON or PHENOLIC GRAPHITE, ROTOR SS316 W/SiC BEARINGS VS SiC STATIONARY BEARINGS.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions, AISI 316 the standard construction, and Hastelloy® C276 for high pressure version-providing a safe and efficient solution–system pressure max 150bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 392 °F (200 °C).



Many different connections are available: Threaded BSP(GAS) or NPT. DIN Flanges PN25, ANSI Class 150 and 300lbs. Assembling foot permit to have the two versions available for motor B3B5 or B5.

VANEMAG

The sealing system with O-Rings prevents from leaking in the atmosphere different materials available: - Viton® (standard) - EPDM - FEP

CF8M Pump Casing & Cover High quality casting components. Other material: - Hastelloy® C276, - Incoloy® 825, - Duplex,

- Others available on request.

QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



STANDARD VERSION: CARTRIDGE PHENOLIC GRAPHITE,ROTOR SS316. "1 SiC" VERSION (For low viscosity or for chemical resistance): CARTRIDGE METALLIZED CARBON, ROTOR SS316 W/SiC BEARINGS. "2 SiC" VERSION (extreme differential pressure): CARTRIDGE METALLIZED CARBON or PHENOLIC GRAPHITE, ROTOR SS316 W/SiC BEARINGS VS SiC STATIONARY BEARINGS.

The integrated by-pass allowes to adjust the differential pressure, it is possible to set-up the preferred limit to avoid over-pressure conditions. Pump port on the top for a very compact design.

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The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions, AISI 316 the standard construction, and Hastelloy® C276 for high pressure version- providing a safe and efficient solution – system pressure max 150bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 392 °F (200 °C).

> Connections available: Threaded BSP(GAS) or NPT. Assembling foot allowes to have the two versions available for motor B3B5 or B5.

V MODULAR

Different connections are available: Threaded BSP(GAS) or NPT. DIN Flanges PN25, PN40, ANSI Class 150, 300 and 600 lbs. Mounting feet allows to have B3B5 or B5 motor version available.



Between two stages is placed an elastic coupling to absorb unexpected shocks. This device will also guarantee a longer life for the cartridges. The two Stainless Steel components are achieved by the CNC machining to have the best dimensional accuracy, while the material for the elastomer component used is selected according to the application.

Pump Casing & Cover are made in Stainless Steel 316 solid bar to obtain high quality components within strict tolerances

A special HP Lip Seal is used to contain the pressure between the two stages.

The sealing system with flat gaskets prevents from leaking to the atmosphere – different materials available: - Asbestos free - PTFE (standard) - Graphoil - GYLON®



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Two versions available, AISI 316 as standard construction, and Hastelloy® C276 for high pressure version – providing a safe and efficient solution – system pressure max 150bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. High performance magnets can operate at liquid temperature of up to 392 °F (200°C).

QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.



STANDARD VERSION "1 SiC" (For low viscosity): CARTRIDGE METALLIZED CARBON, ROTOR SS316 W/SiC BEARINGS.

CV MAG-M

AISI 316L Pump Casing & Cover achieved from solid. Other materials: - Hastelloy® C276 - Incoloy® 825 - Duplex - Others available on request

STANDARD VERSION: CARTRIDGE PHENOLIC GRAPHITE, ROTOR SS316. "1 SiC" VERSION (for low viscosity or for chemical resistance): CARTRIDGE ANTIMONY CARBON or PHENOLIC

GRAPHITE, ROTOR SS316 W/SiC BEARINGS. "2 SiC" VERSION (extreme differential pressure): CARTRIDGE ANTIMONY CARBON or PHENOLIC GRAPHITE, ROTOR SS316 W/SiC BEARINGS VS SiC STATIONARY BEARINGS.

QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance.

Sealing system with flat gaskets prevents product from leaking to the atmosphere – different materials available: - Asbestos free - PTFE (standard) - Graphoil - GYLON®

Standard connections available: DIN Flanges PN25, ANSI Class 150 and 300lbs. Others standard available on request.

The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions, AISI 316 the standard construction, and Hastelloy® C276 for high pressure version - providing a safe and efficient solution – system pressure max 150 bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



SC MAG-M

The hydraulic barrier between two stages is made of special bushing.

"Barrel" construction, with back inserted volute rings, to have the best hydraulic alignment and the longest wear rings life. Available from 1 to 8 stages.

Particular design of the hydraulic, with self balancing impeller.



The range includes the construction from 1 to 8 stages, with inducer to minimize the required NPSH up to 0,5m, to allows the pumping of condensate and generally all low available NPSH installations. CF8M high quality casted pump casing, suction, discharge volutes and impellers. Materials:

Hastelloy®,
Incoloy®,
Duplex,
Others available on request.

Field assembling of the product lubricated bearing arrangement does not require special tools. Available bearing materials in different types to provide the best solution for each application:

Silicon Carbide (SSIC), Tungsten Carbide (TC), Metallized Carbon. The adoption of elastic rings reduces the sleeve bearing loads and the thrust bearing loads to the minimum, to guarantee many years of maintenance-free operation.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Standard construction with Hastelloy® C276 for pressure up to 50 bar. Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our technical office and with rare earth magnetic elements mechanically locked. The high performance magnets can be operated at liquid temperatures of up to 572°F (300 °C) without external cooling.

Sealing system with flat gaskets prevents product from leaking to the atmosphere. Different materials available: - Asbestos free (standard) - PTFE

- Graphoil
- GYLON®
- Other on request

MHV MAG-M

Can be supplied with optional by pass valve, bidirectional, accessible, to protect the pump and the installation of dangerous overpressures.

Pump head, base and cover made of ductile cast iron. Internal components made of stainless steel. High manufacturing precision, assures best volumetric efficiency as well as maximum reliability.

Available with BSP (GAS) and NPT threaded connections, And DIN PN 16, PN25, ANSI 150 lbs, ANSI 300 lbs flanged.

Available sizes

Туре	Nozzles mm	Pipes	rpm	Flow up mc/h	Vol. I/rev
M35	36	1"1/4	320	4	0,21
M55	52	2"	320	8	0,44
M65	62	2"1/2	310	15	0,94
M85	84	3"	280	29	1,80

The maximum speed is permitted with lubricating liquids and viscosity lower than 200 mPa.s (cP).



The hollow disc is eccentrically mounted in the rotor shaft and turns around the suction and discharge cameras separator vane. In this way the piston is obliged to follow the trajectory around the vane and externally to the pump head, where it is pushed via an elastic device internally inserted. A silent and reliable pumping is achieved, without vortexes nor liquid breakages, for viscous fluids even above 10000 cst.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. AISI 316 is the standard construction.



High power synchronous magnetic coupling are designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 200 °C without external cooling.

Shaft supports are sized to withstand heavy loads, made up of metallized carbon stationary and rotating part tungsten carbide surface hardened. Special versions are developed to meet the different requests.

Rear casing sealing is ensured by O-ring, available in different materials, to satisfy the different needs: - Viton® (standard) - EPDM - FEP

Static sealing system with flat gaskets prevents product leakage to the atmosphere – different

materials available:

- Asbestos free (standard)

- PTFE - GYLON®

GS MAG-M

Housing & Cover are machined from rolled bar forging that is cut turned, machined and ground into its final shape, thus ensuring maximum hardness as apposed to using cast parts. Materials:

- AISI 316L (standard)
- Ghisa G25 (standard)
- Hastelloy® C276,
- Incoloy® 825,
- Duplex,
- Other on request.

The bearings are aided by a metal backing to increase resistance especially for corrosive environments. A PTFE lining is coated into the ID of the bearings forming a solid lubricant film.

PTFE plates are installed to reduce wear.

QUICK REPLACE KIT

to guarantee an easy and fast maintenance.

Rotors are achieved from rolled bar forging that is cut, turned and ground into its final shape as opposed to using cast parts, thust ensuring maximum hardness. The material adopted in standard executions are S31803 Duplex for AISI 316L construction and 39NiCrMo3 for cast iron construction. Other materials on request.

The sealing system with O-Rings prevents from leaking in the atmosphere different materials available: - Viton® (standard) - EPDM - FEP



The rear shell is made of one single piece, no welding ellipsoidal profile that has been studied to withstand higher pressures than the traditional one. Available two versions, AISI 316 the standard construction and Hastelloy® C276 for high pressure version – providing a safe and efficient solution – system pressure max 150bar, Titanium Alloy is an upgrade when higher pressure ratings and increased efficiency are required.



High power synchronous magnetic coupling designed by our Technical Office and with rare earth magnetic elements mechanically locked. The high performance magnets can operate at liquid temperature of up to 200 °C (392 °F).

The pump can be supply with alluminium bracket with IEC B3-B5 motor or with a robust WCB foot mounted bracket that allows IEC B5 standard motor.

Connections available: Threaded BSP(GAS) or NPT. Flanged acc. to ANSI 150#, 300#, DIN PN16.

CM MAG-P

Making a comparison between this range of pumps and the other two M PUMPS series C MAG-P and C MAG-PL, the correct definition becomes few components (extremely easy maintenance), competitive prices, guaranteed chemical compatibility.



Pump casing shall be one single piece, injection moulded designs, made of GFR PP and CFR PVDF.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, materials PP and PVDF.



The sealing system with O-Rings prevents from leaking in the atmosphere – different materials available: - EPDM - VITON®



The rear shell is made of thermoplastic materials ellipsoidal profile, zero magnetic losses, GFR PP or GFR PVDF materials.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.

Rare earth guarantee the magnetic-balancing to avoid the thrust bearings wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in two different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard)

- CARBON – ALLUMINA 99,7%

CMV MAG- P

Simple, robust construction, made out of few components, extremely easy maintenance, guaranteed chemical compatibility at competitive prices, extension of CM MAG-P series.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, materials PP and PVDF.



Pump casing in one single piece, injection moulded designs, made of GFR PP and CFR PVDF.

Sealing system with O-Rings prevents from leaking to the atmosphere. Different materials available: - EPDM - VITON®



Rear shell made of thermoplastic materials, ellipsoidal profile, zero magnetic losses, GFR PP or GFR PVDF materials.

High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked. Rare earth guarantee magnetic-balancing to avoid thrust bearings wear and heat generation.

Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in two different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard) - CARBON – ALLUMINA 99,7%

C MAG-P

Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against corrosion.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, materials PP and PVDF.



Standard Version

CFR Version

The sealing system with O-Rings prevents from leaking to the atmosphere. Different materials available: - EPDM - VITON®



The rear shell is made of thermoplastic materials, as PP GFR or PVDF FCR with zero magnetic losses. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.

Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard); - CARBON – ALLUMINA 99,7%; - Silicon Carbide (SSIC) – Silicon Carbide (SSIC)



CSP MAG-P

Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, materials: PP and PVDF.



Standard Version



CFR Version

The sealing system with O-Rings prevents from leaking in the atmosphere. Different materials available: - EPDM - VITON® - FEP





The rear shell is made of thermoplastic materials, as PP GFR or PVDF FCR with zero magnetic losses. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.

Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard); - CARBON – ALLUMINA 99,7%; - Silicon Carbide (SSIC) – Silicon Carbide (SSIC)



CV MAG- P

Strong carbon steel CNC machined construction, protected by an high tickness thermoplastic shell, to reach the best compromise between mechanical and corrosion resistance.

High thickness thermoplastic barrier to avoid any possibility of corrosion.

Special PVDF FCR screws for external parts in contact with the liquid.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, PP and PVDF materials.



Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion. Ball bearings sealed for life (Lh=30000 hours) to support the shaft line, smart additional modules that allowes arrive up to 7 m depth.

The rear shell is made of thermoplastic materials, as PP GFR or PVDF FCR with zero magnetic losses. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.

Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard)

- CARBON – ALLUMINA 99,7% - Silicon Carbide (SSIC) – Silicon Carbide (SSIC)

C MAG-PL



Non-metallic, lined magnetic drive pumps utilize ductile cast iron outer shell, the front casing liners shall be one single piece, transfer moulded designed with flat faced flanges, made of PFA 5mm minimum thickness.

RWP QUICK CARTRIDGE KIT

to guarantee an easy and fast maintenance, materials PP and PVDF.



Particular of the drain plug



The sealing system with O-Rings prevents from leaking in the atmosphere – different materials available:

- EPDM

- VITON®

- FEP



The rear shell is made of thermoplastic materials, zero magnetic losses, as PP GFR or PVDF CFR. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked. Rare earth guarantee the magnetic-balancing to avoid the thrust bearing wear and heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard); - CARBON – ALLUMINA 99,7%, - Silicon Carbide (SSIC) – Silicon Carbide (SSIC).

CMP ARMORED

Epoxy primer and polyacrylic enamel waterbased painting for the best quality resistance linked to the environmental respect.

The pump casing consist of an external strong carbon steel armour, achieved from casting and an internal casing, achieved from solid bar, it is made of very high tickness PP or PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion.



RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, materials PP or PVDF.



The sealing system with O-Rings prevents from leaking in the atmosphere Different materials available: - EPDM - VITON® - FEP





The rear shell is made of thermoplastic materials, zero magnetic losses, materials are PP or PVDF. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked. Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are: - Silicon Carbide (SSIC) – Silicon Carbide (SSIC) (Standard) - Metallized Carbon - Silicon Carbide (SSIC)

T MAG-P

Epoxy primer and polyacrylic enamel water-based painting for the best quality resistance linked to the environmental respect.

Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, PP and PVDF materials.



The sealing system with O-Rings prevents from leaking in the atmosphere. Different materials available: - EPDM - VITON® - FEP



The rear shell is made of thermoplastic materials as PP GFR or PVDF FCR with zero magnetic losses. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked. Rare earth guarantees the magneticbalancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application: - PTFEC – ALLUMINA 99,7% (standard) - CARBON – ALLUMINA 99,7% - Silicon Carbide (SSIC) – Silicon Carbide (SSIC).

T MAG-MP

Epoxy primer and polyacrylic enamel waterbased painting for the best quality resistance linked to the environmental respect.

The pump casing consist of an external strong carbon steel armour, achieved from precise casting, and an internal casing, achieved from solid bar, that is made of very high tickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion.

RWP QUICK CHANGE CARTRIDGE KIT to guarantee an easy and fast maintenance, PP and PVDF materials.



The sealing system with O-Rings prevents from leaking in the atmosphere – different materials available: - EPDM - VITON® - FEP



The rear shell is made of thermoplastic materials, as PP GFR or PVDF FCR with zero magnetic losses. Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.

Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools.
 The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application:
 PTFEC – ALLUMINA 99,7% (standard)
 CARBON – ALLUMINA 99,7%
 Silicon Carbide (SSIC) – Silicon Carbide (SSIC)

TSP MAG-P

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Epoxy primer and polyacrylic enamel water-based painting for the best quality resistance linked to the environmental respect.

Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a guaranteed long life against the corrosion.

RWP QUICK CHANGE CARTRIDGE

to guarantee an easy and fast maintenance, PP and PVDF materials.



The sealing system with O-Rings prevents from leaking in the atmosphere – different materials available: - EPDM - VITON® - FEP



The rear shell is made of thermoplastic materials as PP GFR or PVDF FCR with zero magnetic losses Outside rear shell cover ellipsoidal profile made of fiber reinforced composite material.



High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked. Rare earth guarantees the magnetic-balancing to avoid the thrust bearing wear and the heat generation.



Field assembling of the product lubricated bearing arrangement does not require special tools. The Shaft / Bearing materials are available in three different configurations to provide the best solution for each application:

- PTFEC – ALLUMINA 99,7% (standard) - CARBON – ALLUMINA 99,7%

- Silicon Carbide (SSIC) – Silicon Carbide (SSIC)

VP SERIES

Epoxy primer and polyacrylic enamel water-based painting for the best quality resistance linked to the environmental respect.

The sealing system with flat gaskets prevents from leaking in the atmosphere. Different materials available: - VITON® - EPDM - FEP - GYLON®

Pump casing shall be one single piece, achieved from solid bar, made of very high thickness PP and PVDF to have a good mechanical resistance and a long life against the corrosion.

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Quick change cartridge kit to guarantee an easy and fast maintenance. Materials available: cartridge phenolic graphite, rotor FCR-PVDF W/SiC bearings.





High power synchronous magnetic coupling designed by our Technical Office and with magnetic elements mechanically locked.



The pump casing is available in different connections Threaded BSP(GAS) or NPT. Connections Universal Flanged that meet both DIN and ANSI150#.





PROBC Kft.

H-3532 Miskolc, Böngér utca 3/a. H-3515 Miskolc, Pf.: 46. probc@probc.hu www.probc.hu





