



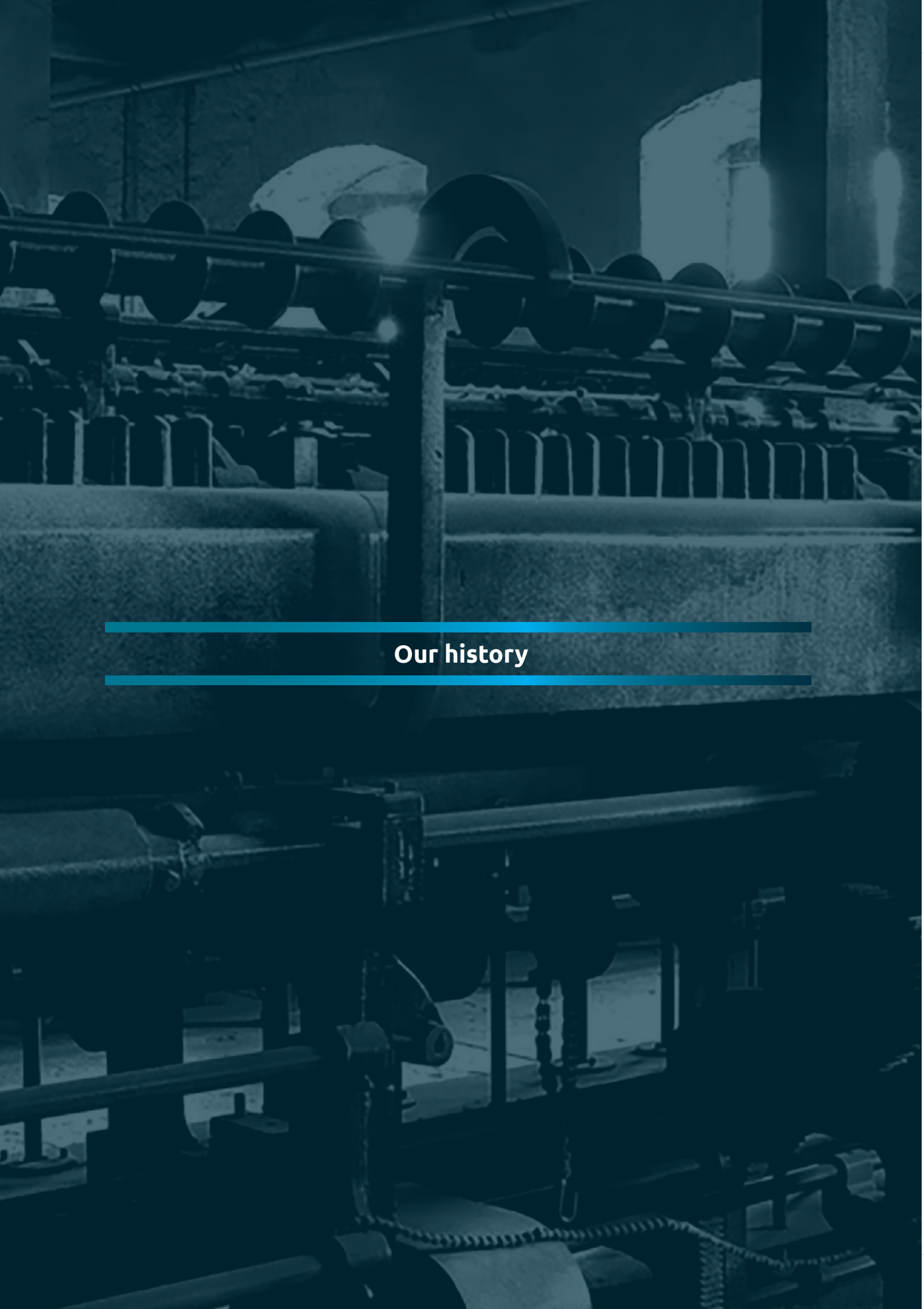
*WE PUMP YOUR CHEMICALS* 

# PRODUCTS CATALOGUE

## Magnetic Drive and Mechanical Seal Centrifugal Pumps

**Our philosophy is simple, we never rest on our laurels.**





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## Our history

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### ***C.D.R. Pompe e Motori origins are dated before WW II.***

Beginning in the early 50' s, Mr.Ferdinando Abordi acquired "**ARI Pompe**", a family business company,whose production was based on cast iron pumps designed for domestic, agricultural and industrial uses. In the mid 60' s the evolving market was requiring new and sophisticated product, and its founder transformed the Company into a flexible structure, dedicated to special constructions and began to manufacture stainless steel and special alloy pumps.

Later on, it was also started the production of horizontal and vertical single stage pumps in accordance with **DIN 24256** standards for the chemical industry. In the early 70's, CDR decided to extend its production to pumps made from plastic materials.

CDR's remarkable growth during the years has been driven by genuine word-of-mouth and recommendations based on our product excellence, prices fairness and the successful service reliability in thousand applications.

The continuous growth of **CDR has been possible thanks to the solid experience of 50 years** that every day gives us the chance to look forward at the future, meeting the challenges in a constantly evolving market.



# STN

## Plastic Magnetic Drive Centrifugal Pumps

### Application Fields:

- Basic Chemical Services
- Paper Industry
- Water Treatment (ion exchange resins)
- C.I.P.
- Galvanic Industry



### Standard Design:

Shaft seal type:	Magnetic Drive
Casing material:	ETFE-CFR - PP
Journal Bearing \ Shaft Material:	Graphite/SSIC/Ceramic
Type of casing:	Radially split-Volute Casing
Impeller material:	ETFE - PP
Type of impeller:	Closed
Nozzle position:	End suction
Type of Execution:	Horizontal - Close-Coupled
Pull-out design:	Yes
Heatable:	No
Type of connection:	GAS
Flange:	Optional
Suction characteristics:	Non-priming
Type of lubrication:	NA
Maximum rated pressure @20°C:	PN 6
Max. permissible fluid temperature:	PP: 0°C ➤ +60°C ETFE: - 10°C ➤ +70°C
Maximum head @ 2900 RPM:	22 m
Maximum flow rate @ 2900 RPM:	28 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	4 kW



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#### Additional Arrangements:

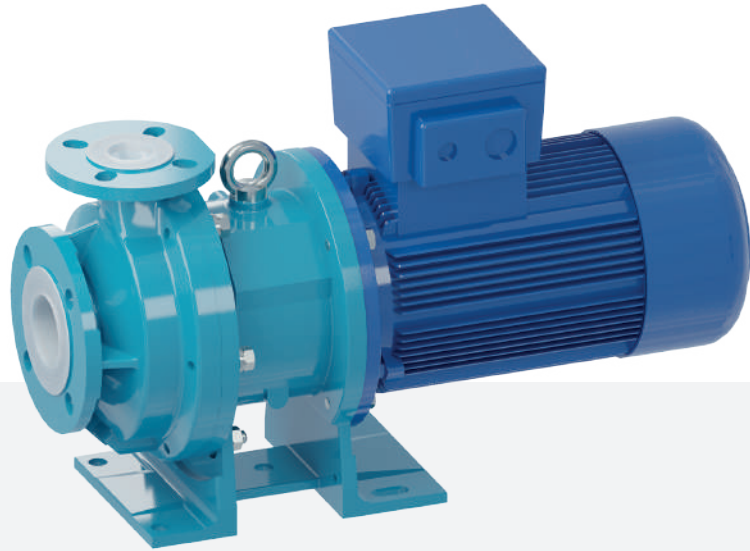
Type of casing: *Drained*  
Flange: *UNI PN10RF or ANSI 150RF*

# ETN EVO

## Lined Magnetic Drive Centrifugal Pumps

### Application Fields:

- ⊗ Basic Chemical Services
- ⊗ Basic Chemical Processing
- ⊗ Batch Fine Chemical services
- ⊗ Air Treatment - Scrubber
- ⊗ Detergents Industry
- ⊗ Paper Industry
- ⊗ Water Treatment  
(ion exchange resins)
- ⊗ C.I.P.



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	EN 22858; ISO 2858
<b>Casing material:</b>	ETFE Lined - PP Lined
<b>Journal Bearing \ Shaft Material:</b>	Graphite/SSIC/Ceramic
<b>Type of casing:</b>	Radially split-Volute Casing
<b>Impeller material:</b>	ETFE Lined - PP Lined
<b>Type of impeller:</b>	Closed
<b>Nozzle position:</b>	End suction
<b>Type of Execution:</b>	Horizontal - Close-Coupled
<b>Pull-out design:</b>	Yes
<b>Heatable:</b>	No
<b>Type of connection:</b>	Flange
<b>Flange:</b>	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
<b>Suction characteristics:</b>	Non-priming
<b>Type of lubrication:</b>	NA
<b>Maximum rated pressure @20°C:</b>	PN 6
<b>Max. permissible fluid temperature:</b>	PP: 0°C ▶ +65°C ETFE: -15°C ▶ +95°C
<b>Maximum head @ 2900 RPM:</b>	35 m
<b>Maximum flow rate @ 2900 RPM:</b>	56 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	7,5 kW



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#### Additional Arrangements:

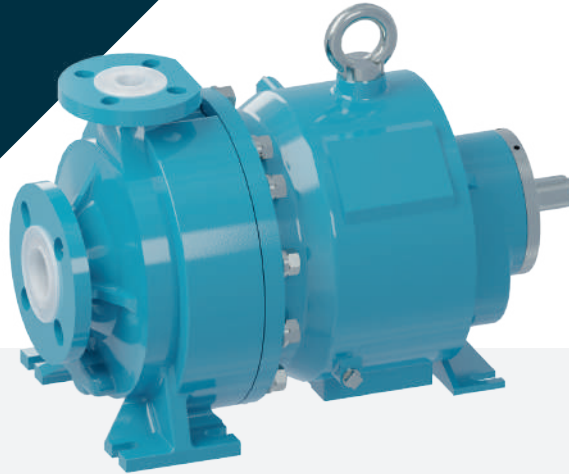
Bushings: *Diamond SSIC*  
Type of casing: *Drained*

# UTN-L

## Lined Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Fine Chemical Processing
- ☞ Basic Chemical Processing
- ☞ Petrochemical Services



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	EN 22858; ISO 2858
<b>Standard:</b>	ISO 15783
<b>Casing material:</b>	PFA Lined - PVDF Lined - PP Lined
<b>Journal Bearing \ Shaft Material:</b>	Graphite\SSIC\Ceramic
<b>Type of casing:</b>	Radially split-Volute Casing
<b>Impeller material:</b>	PFA Lined - PVDF Lined PP Lined
<b>Type of impeller:</b>	Closed
<b>Nozzle position:</b>	End suction
<b>Type of Execution:</b>	Horizontal - Long-Coupled
<b>Pull-out design:</b>	Back pull-out
<b>Heatable:</b>	No
<b>Type of connection:</b>	Flange
<b>Flange:</b>	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
<b>Suction characteristics:</b>	Non-priming
<b>Type of lubrication:</b>	Grease
<b>Maximum rated pressure @20°C:</b>	PN 16
<b>Max. permissible fluid temperature:</b>	PP: - 10°C ▶ +70°C PVDF: - 30°C ▶ +100°C PFA: - 30°C ▶ +120°C
<b>Maximum head @ 2900 RPM:</b>	60 m
<b>Maximum flow rate @ 2900 RPM:</b>	150 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	37 kW



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#### Additional Arrangements:

Bushings: *Diamond SSIC*

Type of casing: *Drained*

Max. permissible fluid  
temperature:

*PFA: - 50°C ▶ +160°C*

Conductive PFA execution  
on request

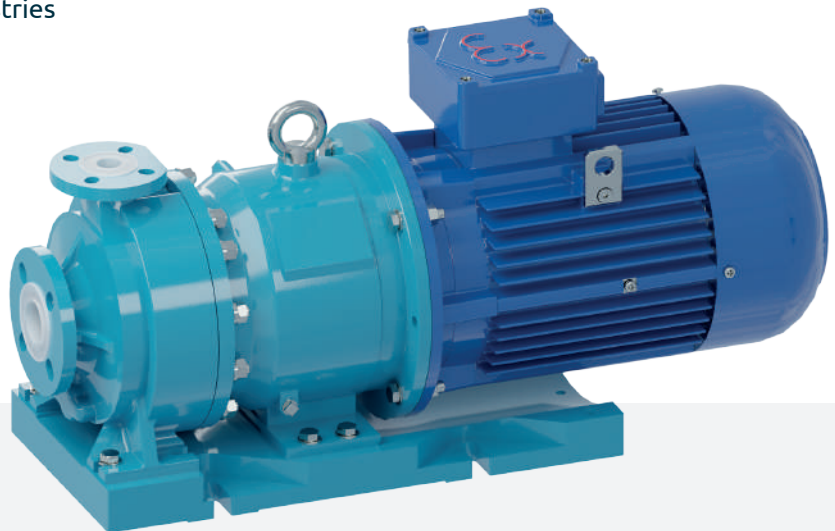


# UTN-BL

## Lined Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Basic Chemical Processing
- ☞ Fine Chemical Processing
- ☞ Air Treatment - Scrubber
- ☞ Detergents Industry
- ☞ Petrochemical Services



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	EN 22858; ISO 2858
<b>Standard:</b>	ISO 15783
<b>Casing material:</b>	PFA Lined - PVDF Lined - PP Lined
<b>Journal Bearing \ Shaft Material:</b>	Graphite\SSIC\Ceramic
<b>Type of casing:</b>	Radially split-Volute Casing
<b>Impeller material:</b>	PFA Lined - PVDF Lined PP Lined
<b>Type of impeller:</b>	Closed
<b>Nozzle position:</b>	End suction
<b>Type of Execution:</b>	Horizontal - Close-Coupled
<b>Pull-out design:</b>	Yes
<b>Heatable:</b>	No
<b>Type of connection:</b>	Flange
<b>Flange:</b>	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
<b>Suction characteristics:</b>	Non-priming
<b>Type of lubrication:</b>	NA
<b>Maximum rated pressure @20°C:</b>	PN 16
<b>Max. permissible fluid temperature:</b>	PP: - 10°C ▶ +70°C PVDF: - 30°C ▶ +100°C PFA: - 30°C ▶ +120°C
<b>Maximum head @ 2900 RPM:</b>	60 m
<b>Maximum flow rate @ 2900 RPM:</b>	150 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	18,5 kW (37Kw only on bracket II)



ATEX 100  
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#### Additional Arrangements:

Bushings: *Diamond SSIC*

Type of casing: *Drained*

Max. permissible fluid  
temperature:

*PFA: - 50°C ▶ +160°C*

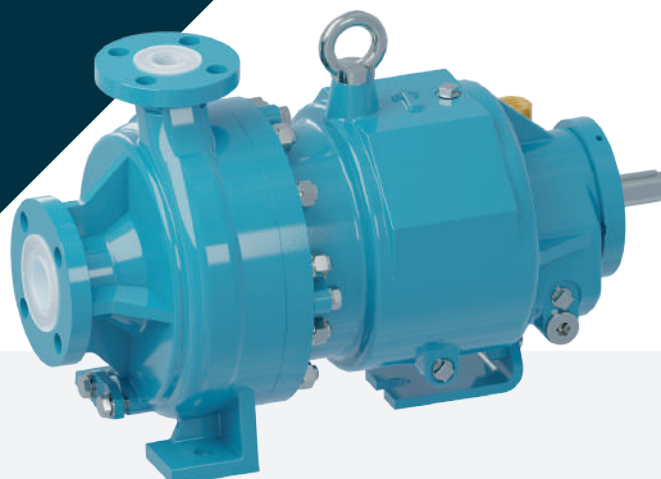
Conductive PFA execution  
on request

# DTN-L

## Lined Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Fine Chemical Processing
- ☞ Basic Chemical Processing
- ☞ Petrochemical Processing



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	ASME B73.3-2015
<b>Standard:</b>	ASME B73.3-2015
<b>Casing material:</b>	ETFE Lined
<b>Journal Bearing \ Shaft Material:</b>	SSIC
<b>Type of casing:</b>	Radially split-Volute Casing
<b>Impeller material:</b>	ETFE Lined
<b>Type of impeller:</b>	Closed
<b>Nozzle position:</b>	End suction
<b>Type of Execution:</b>	Horizontal - Long-Coupled
<b>Pull-out design:</b>	Back pull-out
<b>Heatable:</b>	No
<b>Type of connection:</b>	Flange
<b>Flange:</b>	ASME B16.5 Class 150
<b>Suction characteristics:</b>	Non-priming
<b>Type of lubrication:</b>	Oil lubrication
<b>Maximum rated pressure @20°C:</b>	PN 16
<b>Max. permissible fluid temperature:</b>	-30°C ▶ +120°C
<b>Maximum head @ 2900 RPM:</b>	105 m
<b>Maximum flow rate @ 2900 RPM:</b>	100 m <sup>3</sup> /h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	30 kW



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#### Additional Arrangements:

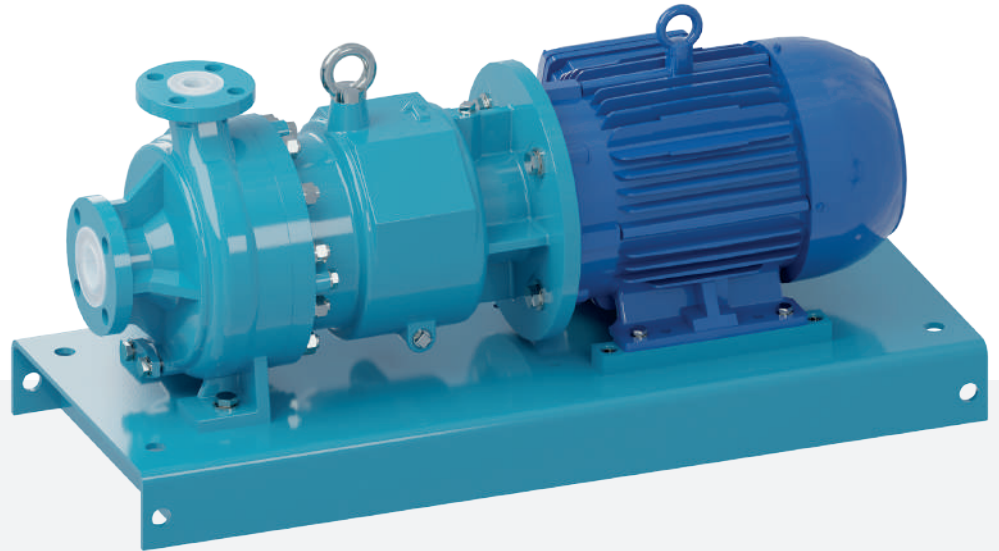
Bushings: *Diamond SSIC*  
Type of casing: *Drained*

# DTN-BL

## Lined Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ☉ Active Pharmaceutical Ingredients Industries
- ☉ Basic Chemical Processing
- ☉ Fine Chemical Processing
- ☉ Air Treatment - Scrubber
- ☉ Detergents Industry
- ☉ Petrochemical Services



### Standard Design:

Shaft seal type:	Magnetic Drive
Design:	ASME B73.3-2015
Standard:	ASME B73.3-2015
Casing material:	ETFE Lined
Journal Bearing \ Shaft Material:	SSIC
Type of casing:	Radially split-Volute Casing
Impeller material:	ETFE Lined
Type of impeller:	Closed
Nozzle position:	End suction
Type of Execution:	Horizontal - Close-Coupled
Pull-out design:	Back pull-out
Heatable:	No
Type of connection:	Flange
Flange:	ASME B16.5 Class 150
Suction characteristics:	Non-priming
Type of lubrication:	No
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	-30°C ▶ +120°C
Maximum head @ 2900 RPM:	105 m
Maximum flow rate @ 2900 RPM:	100 m <sup>3</sup> /h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	30 kW



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#### Additional Arrangements:

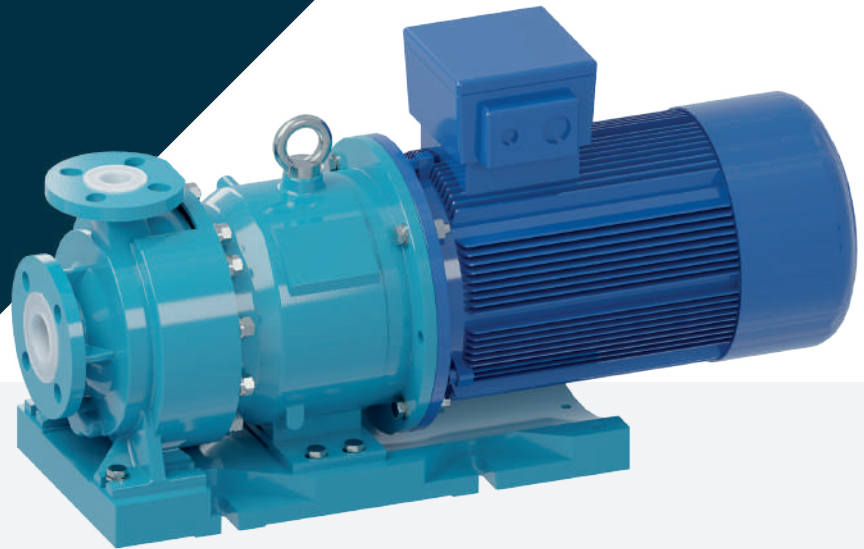
Bushings: *Diamond SSIC*  
Type of casing: *Drained*

# XTN-BL

## Lined Magnetic Drive Process Centrifugal Pumps with Open Impeller

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Basic Chemical Processing
- ☞ Fine Chemical Processing
- ☞ Air Treatment - Scrubber
- ☞ For fluids with solid particles
- ☞ Petrochemical Services



### Standard Design:

Shaft seal type:	Magnetic Drive
Design:	EN 22858; ISO 2858
Standard:	ISO 15783
Casing material:	PFA Lined
Journal Bearing \ Shaft Material:	Diamond SSIC
Type of casing:	Radially split-Volute Casing
Impeller material:	PFA Lined
Type of impeller:	Open
Nozzle position:	End suction
Pull-out design:	Back pull-out
Heatable:	No
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
Suction characteristics:	Non-priming
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	PFA: - 30°C ▶ +120°C
Maximum head @ 2900 RPM:	60 m
Maximum flow rate @ 2900 RPM:	70 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	18,5 kW



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#### Additional Arrangements:

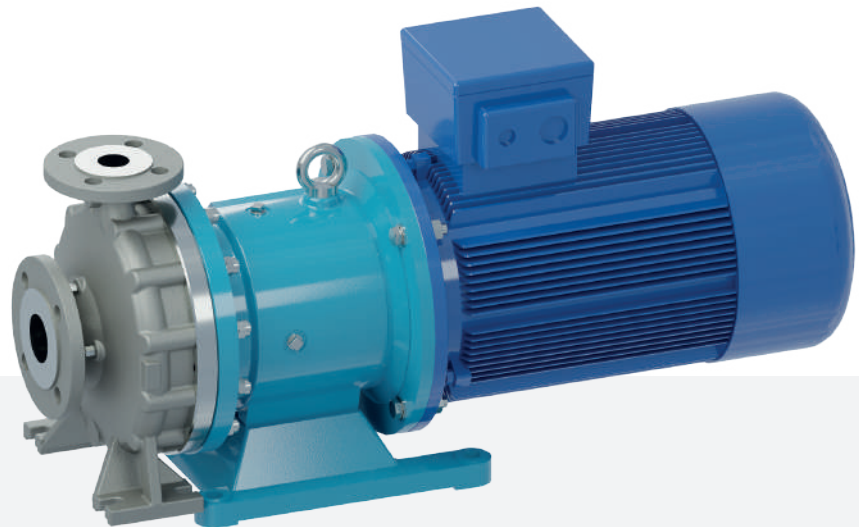
Type of casing: *Drained*  
Flange: *Asolate ANSI 150*  
Max. permissible fluid temperature:  
*PFA: - 50°C ▶ +160°C*  
Horizontal - Long-Coupled

# XTS-B

## Metallic Magnetic Drive Process Centrifugal Pumps with Open Impeller

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Basic Chemical Processing
- ☞ Fine Chemical Processing
- ☞ Fibre Processing
- ☞ Petrochemical Processing
- ☞ Agro-pharma Processing
- ☞ For fluids with solids particles



### Standard Design:

Shaft seal type:	Magnetic Drive
Design:	EN 22858; ISO 2858
Standard:	EN 15783
Casing material:	1. 4408
Journal Bearing \ Shaft Material:	Diamond SSIC
Type of casing:	Radially split-Volute Casing
Impeller material:	1. 4408
Type of impeller:	Open
Nozzle position:	End suction
Type of Execution:	Horizontal - Close-Coupled
Pull-out design:	Yes
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF
Suction characteristics:	Non-priming
Type of lubrication:	NA
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	- 40°C ▶ +180°C
Maximum head @ 2900 RPM:	65 m
Maximum flow rate @ 2900 RPM:	70 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	18,5 kW



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#### Additional Arrangements:

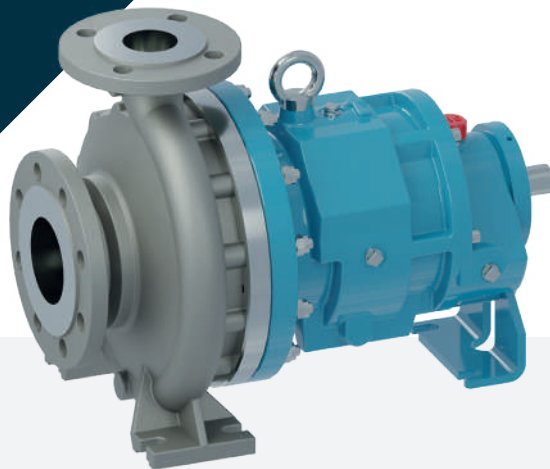
Type of casing: *Drained*  
Flange: *Asolate ANSI 150*  
Max. permissible fluid temperature:  
*PFA: - 100°C ▶ +300°C*  
Horizontal - Long-Coupled

# UTS EVO

## Metallic Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Distillation Processing
- ☞ Basic Chemical Processing h24
- ☞ Fine Chemical Processing
- ☞ Thermoregulation Circuits
- ☞ Tankers Loading/Unloading
- ☞ Pharmaceutical-Chemical Industries



### Standard Design:

Shaft seal type:	Magnetic Drive
Design:	EN 22858; ISO 2858
Standard:	EN 15783
Casing material:	1. 4408
Journal Bearing \ Shaft Material:	Graphite/SSIC
Type of casing:	Radially split-Volute Casing
Impeller material:	1. 4408
Type of impeller:	Closed
Nozzle position:	End suction
Type of Execution:	Horizontal - Long-Coupled
Pull-out design:	Back pull-out
Heatable:	Yes, optional
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF
Suction characteristics:	Non-priming
Type of lubrication:	Oil lubrication
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	- 40°C ▶ +180°C
Maximum head @ 2900 RPM:	100 m
Maximum flow rate @ 2900 RPM:	300 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	90 kW



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#### Additional Arrangements:

Bushings: *Diamond SSIC*

Isolation shell:

*Zirconium Oxide*

Type of casing: *Drained*

Heatable:

*-Jacketed Hydraulic Casing*

*-Jacketed Bushing Support*

Flange: *Drilling slotted  
to ANSI 150*

Max. permissible fluid  
temperature:

*-100°C ▶ +300 °C*

Lantern: *Flushed*

Bearing bracket:

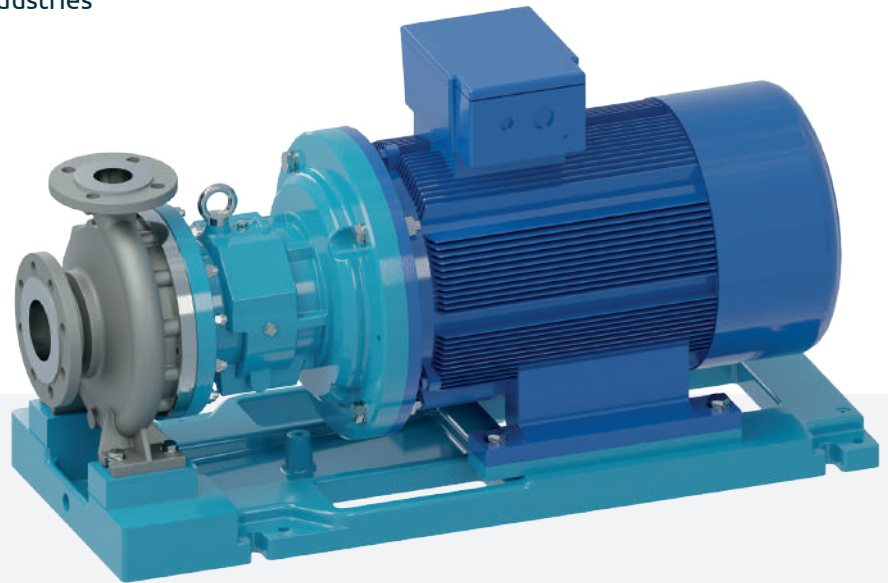
*Non Contacting Labyrinth Seal*

# UTS-B EVO

## Metallic Magnetic Drive Process Centrifugal Pumps

### Application Fields:

- ⊗ Active Pharmaceutical Ingredients Industries
- ⊗ Distillation Processing
- ⊗ Basic Chemical Processing
- ⊗ Fine Chemical Processing
- ⊗ Thermoregulation Circuits
- ⊗ Petrochemical Processing
- ⊗ Fibre Processing
- ⊗ Agro-pharma Processing



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	EN 22858; ISO 2858
<b>Standard:</b>	EN 15783
<b>Casing material:</b>	1. 4408
<b>Journal Bearing \ Shaft Material:</b>	Graphite/SSIC
<b>Type of casing:</b>	Radially split-Volute Casing
<b>Impeller material:</b>	1. 4408
<b>Type of impeller:</b>	Closed
<b>Nozzle position:</b>	End suction
<b>Type of Execution:</b>	Horizontal - Close-Coupled
<b>Pull-out design:</b>	Yes
<b>Heatable:</b>	Yes, optional
<b>Type of connection:</b>	Flange
<b>Flange:</b>	UNI 1092-2 (ISO 7005-2) PN16RF
<b>Suction characteristics:</b>	Non-priming
<b>Type of lubrication:</b>	NA
<b>Maximum rated pressure @20°C:</b>	PN 16
<b>Max. permissible fluid temperature:</b>	- 40°C ▶ +180°C
<b>Maximum head @ 2900 RPM:</b>	100 m
<b>Maximum flow rate @ 2900 RPM:</b>	150 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	45 kW



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#### Additional Arrangements:

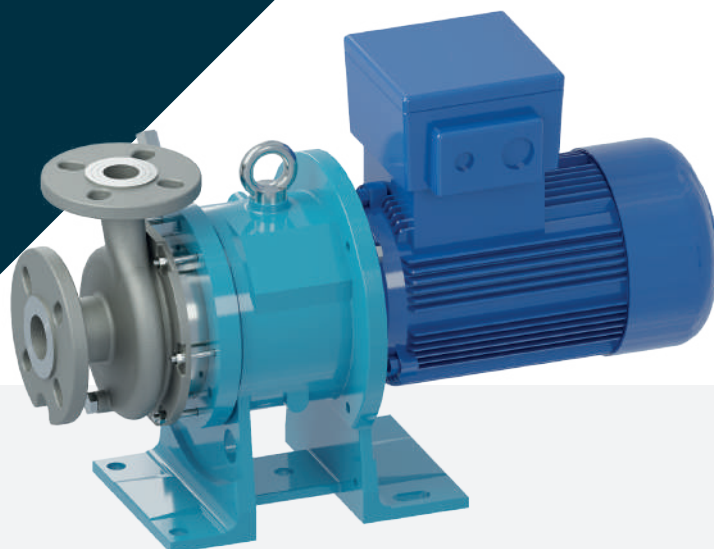
Bushings: *Diamond SSIC*  
Isolation shell:  
*Zirconium Oxide*  
Type of casing: *Drained*  
Heatable:  
*-Jacketed Hydraulic Casing*  
*-Jacketed Bushing Support*  
Flange: *Drilling slotted*  
*to ANSI 150*  
Max. permissible fluid  
temperature:  
*-100°C ▶ +250 °C*  
Lantern: *Flushed*

# ETS

## Metallic Magnetic Drive Centrifugal Pumps

### Application Fields:

- Basic Chemical Services
- Batch fine chemical Processing
- Detergents Industry
- Thermoregulation Circuits
- Petrochemical Services



### Standard Design:

Shaft seal type:	Magnetic Drive
Design:	EN 22858; ISO 2858
Casing material:	1. 4408
Journal Bearing \ Shaft Material:	Graphite\SSIC
Type of casing:	Radially split-Volute Casing
Impeller material:	1. 4408
Type of impeller:	Closed
Nozzle position:	End suction
Type of Execution:	Horizontal - Close-Coupled
Pull-out design:	Yes
Heatable:	No
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
Suction characteristics:	Non-priming
Type of lubrication:	NA
Maximum rated pressure @20°C:	PN 10
Max. permissible fluid temperature:	-20°C ▶ +140°C
Maximum head @ 2900 RPM:	42 m
Maximum flow rate @ 2900 RPM:	45 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	7,5 kW



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#### Additional Arrangements:

Type of casing: *Drained*  
Heatable:

#### Available on 50-70 Series:

*-Jacketed Hydraulic Casing*  
*-Jacketed Bushing Support*  
Max. permissible fluid temperature:  
*-40°C ▶ +180°C*



# Options Available

## Dry run protection: RUN SAFE SSIC (Diamond coated SSIC)

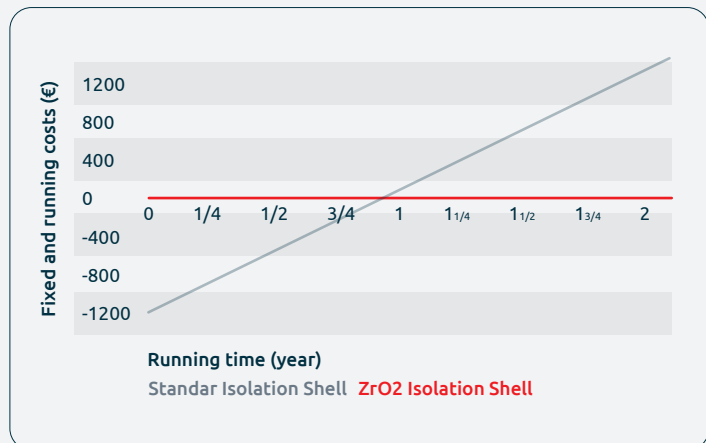
RunSafe SSIC: the solution to protect magnetic driven pumps from dry run. CDR developed a solution to prevent pump failures in case priming failure or wrong start up, giving chance to stop the pump before rising of catastrophic damages. **Tank unloading simulation test on UTS 80-50-200 HE:** Bushes failure happened after 46' 30" from pump unpriming with diamond coated bushes!

Available CDR pumps with Run Safe SSIC:  
**ETN, UTN, UTS, XTN, XTS and DTN**



## Energy Efficiency

Thanks to zirconium oxide isolation shell, instead of traditional Hastelloy-C isolation shell, Eddy-current losses are eliminated and magnetic driven pump efficiency increases significantly.



## RUN SAFE SSIC + Zirconium Oxide Isolation Shell

The same tank unloading test has been done on UTS 80-50-200 HE with zirconium oxide isolation shell and diamond coated bushes.

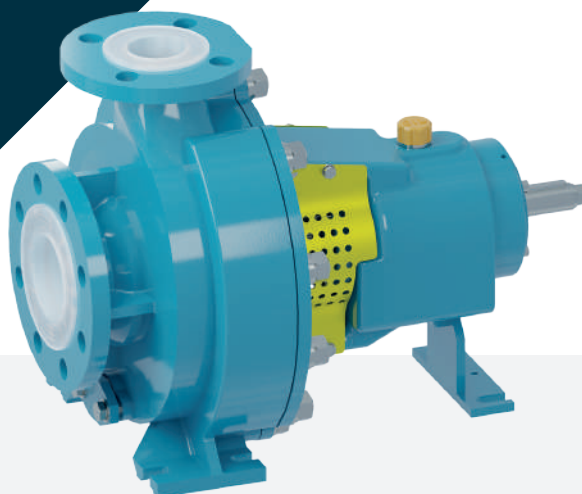
The test showed a surprising result, the pump run "dry" for 534 minutes after pump unpriming before failure! With zirconium oxide isolation shell, temperature inside the pump is significantly lower, therefore the remaining fluid inside the pump do not completely vaporize, permitting bushes lubrication and long running time in critical conditions.

# UCL

## Lined Mechanical Seal Centrifugal Pumps

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Basic Chemical Processing
- ☞ Fine Chemical Processing (recirculation of catalyst solution)
- ☞ Air Treatment - Scrubber
- ☞ Petrochemical Services
- ☞ Waste Water Treatment



### Standard Design:

Shaft seal type:	Mechanical seal
Design:	EN 22858; ISO 2858
Standard:	ISO 5199
Casing material:	PFA Lined - PVDF Lined - PP Lined
Type of casing:	Radially split-Volute Casing
Impeller material:	PFA Lined PVDF Lined PP Lined
Type of impeller:	Closed; Radial
Nozzle position:	End suction
Type of Execution:	Horizontal - Long-Coupled
Pull-out design:	Back pull-out
Heatable:	No
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
Suction characteristics:	Non-priming
Type of lubrication:	Oil lubrication
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	PP: - 10°C ➤ +70°C PVDF: - 30°C ➤ +100°C PFA: - 30°C ➤ +120°C
Maximum head @ 2900 RPM:	68 m
Maximum flow rate @ 2900 RPM:	200 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	55 kW



ATEX 100  
Directive: 2014/34/EU

#### Additional Arrangements:

Type of casing: *Drained*  
Max. permissible fluid temperature: *On Request*

#### Mechanical Seal:

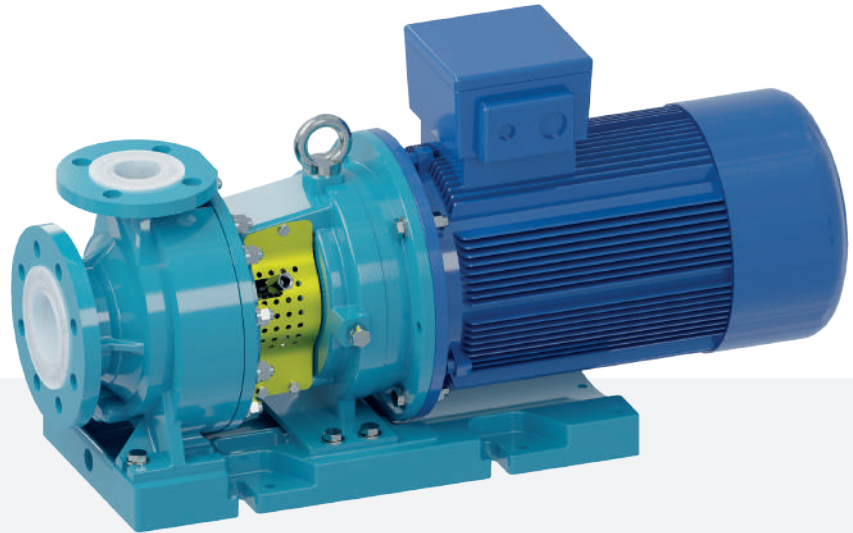
CDR Mechanical Seal:  
- *CSS Single Mechanical Seal*  
- *CDC Double Cartridge Mechanical Seal*  
All standard-compliant makes EN ISO 12756 (ex DIN 24960):  
- *Single/Double Mechanical Seals*  
- *Single/Double Cartridge Mechanical Seals*

# UCL-B

## Lined Mechanical Seal Centrifugal Pumps

### Application Fields:

- ⊗ Basic Chemical Processing
- ⊗ Air Treatment - Scrubber
- ⊗ Petrochemical Services
- ⊗ Waste Water Treatment



### Standard Design:

Shaft seal type:	Mechanical seal
Design:	EN 22858; ISO 2858
Standard:	ISO 5199 (where applicable)
Casing material:	PFA Lined - PVDF Lined - PP Lined
Type of casing:	Radially split-Volute Casing
Impeller material:	PFA Lined PVDF Lined PP Lined
Type of impeller:	Closed; Radial
Nozzle position:	End suction
Type of Execution:	Horizontal - Close-Coupled
Pull-out design:	Yes
Heatable:	No
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
Suction characteristics:	Non-priming
Type of lubrication:	NA
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	PP: - 10°C ▶ +70°C PVDF: - 30°C ▶ +100°C PFA: - 30°C ▶ +120°C
Maximum head @ 2900 RPM:	68 m
Maximum flow rate @ 2900 RPM:	70 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	18,5 kW



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#### Additional Arrangements:

Type of casing: *Drained*  
Max. permissible fluid temperature: *On Request*

#### Mechanical Seal:

CDR Mechanical Seal:  
- *CSS Single Mechanical Seal*  
- *CDC Double Cartridge Mechanical Seal*  
All standard-compliant makes EN ISO 12756 (ex DIN 24960):  
- *Single/Double Mechanical Seals*  
- *Single/Double Cartridge Mechanical Seals*

# CCL

## Mechanical Seal Centrifugal Pumps

### Application Fields:

- Basic Chemical Processing
- Air Treatment - Scrubber
- Petrochemical Services
- Waste Water Treatment



### Standard Design:

Shaft seal type:	Mechanical seal
Design:	EN 22858; ISO 2858
Standard:	ISO 5199
Casing material:	PP Lined
Type of casing:	Radially split-Volute Casing
Impeller material:	PP Lined
Type of impeller:	Closed; Radial
Nozzle position:	End suction
Pull-out design:	Back pull-out
Heatable:	No
Type of connection:	Flange
Flange:	UNI 1092-2 (ISO 7005-2) PN16RF Drilling slotted to ANSI 150
Suction characteristics:	Non-priming
Type of lubrication:	Oil lubrication
Maximum rated pressure @20°C:	PN 16
Max. permissible fluid temperature:	PP: -10°C ▶ +70°C
Maximum head @ 2900 RPM:	68 m
Maximum flow rate @ 2900 RPM:	200 m³/h
Allowable Medium Viscosity Range:	1cSt - 100cSt
Maximum drive rating:	55 kW

#### Mechanical Seal:

CDR Mechanical Seal: *CSE*  
*Single Mechanical Seal*

Mechanical Seal:

- *TSI Single Internal*

- *TSE Single External*

- *Double Tandem Mechanical  
Seals*

CCL-B Close-Coupled  
Version

# CSS

## Single Mechanical Seal

### CHARACTERISTICS:

Suitable to work with low/moderate dirty corrosive liquids. Easy maintenance thanks to the semi-cartridge design. Extremely abrasion-resistant SSIC seats, no metal parts in contact with the processed liquid and a wide range of options allow the CSS seals to be the best solution for every application. In case of liquid crystallization due to air contact, CDR offers plan 62.

#### CSS AND CSS-Q - product side:

**Static Face:**

Graphite

SSIC

Diamond SSIC

**Rotating Face:**

SSIC

SSIC

Diamond SSIC



#### CSS-Q - ambient side PLAN62:

**Static Face:**

SSIC

**Rotating Face:**

Graphite

# CDC

## Double Mechanical Seal

### CHARACTERISTICS:

Applications where no leakage can be tolerated e.g. hazardous, toxic, inflammable media. For dirty, abrasive or polymerizing products and where media is unsuitable as a lubricant for inboard seal faces. When pump is operating under cavitation or low flow. Pumping ring as standard.

#### CDC - product side:

**Static Face:**

Graphite

SSIC

Diamond SSIC

**Rotating Face:**

SSIC

SSIC

Diamond SSIC

#### CDC - ambient side

**Static Face:**

SSIC

**Rotating Face:**

Graphite

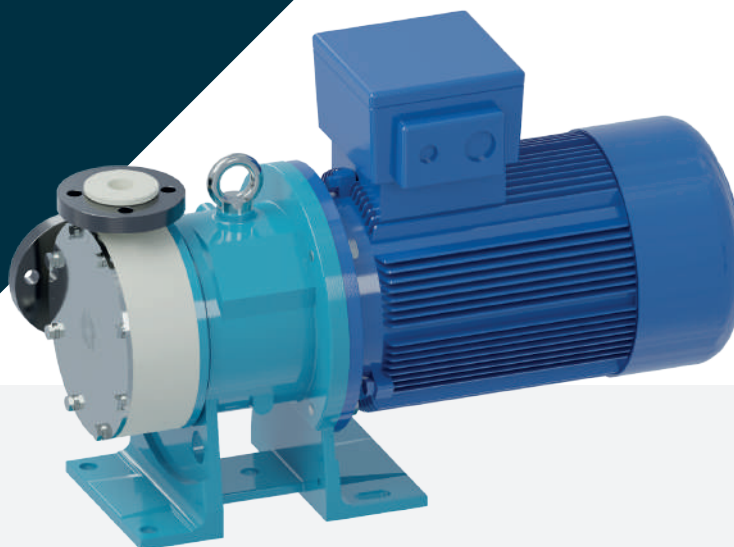


# HTN

## Plastic Magnetic Drive Peripheral Pump

### Application Fields:

- ☞ Active Pharmaceutical Ingredients Industries
- ☞ Pharmaceutical Industries
- ☞ Petrochemical Services
- ☞ General Industry
- ☞ Low Flow Applications



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	Standard Manufacturer
<b>Standard:</b>	Standard Manufacturer
<b>Casing material:</b>	PP - PVDF
<b>Journal Bearing:</b>	SSIC / Graphite / Ceramic / PTFE-Carbon
<b>Type of casing:</b>	Positive displacement
<b>Impeller material:</b>	PVDF
<b>Type of impeller:</b>	Side Channel Impeller
<b>Nozzle position:</b>	Side suction
<b>Type of Execution:</b>	Orizzontale - Close Coupled
<b>Pull-out design:</b>	Back pull-out
<b>Heatable:</b>	No
<b>Type of connection:</b>	GAS - Flange
<b>Flange:</b>	UNIPN16RF ANSI150RF
<b>Suction characteristics:</b>	No
<b>Type of lubrication:</b>	No
<b>Maximum rated pressure @20°C:</b>	10bar
<b>Max. permissible fluid temperature:</b>	- 10°C ▶ +80°C
<b>Maximum head @ 2900 RPM:</b>	75 m
<b>Maximum flow rate @ 2900 RPM:</b>	5 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	7,5 kW



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#### Additional Arrangements:

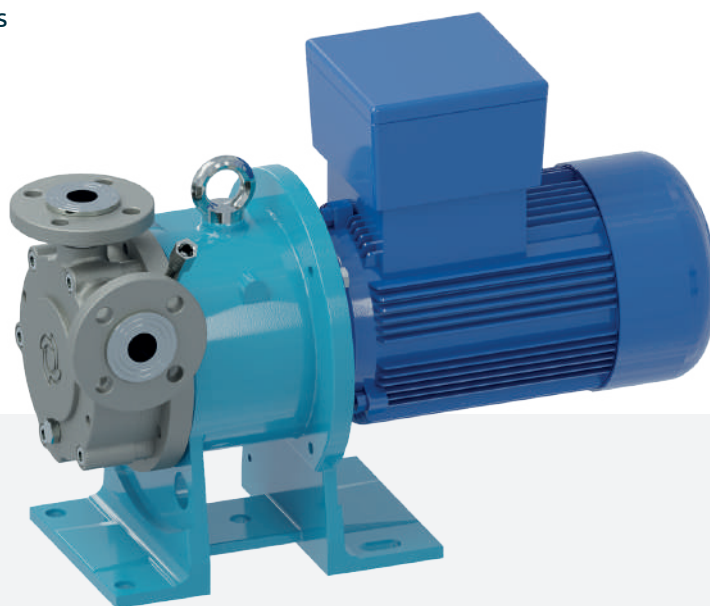
Bushings: *Diamond SSIC*  
Type of casing: *Drained*

# HTS

## Metallic Magnetic Drive Peripheral Pump

### Application Fields:

- ⊗ Active Pharmaceutical Ingredients Industries
- ⊗ Pharmaceutical Industries
- ⊗ Petrochemical Services
- ⊗ General Industry
- ⊗ Low Flow Applications



### Standard Design:

<b>Shaft seal type:</b>	Magnetic Drive
<b>Design:</b>	Standard Manufacturer
<b>Standard:</b>	Standard Manufacturer
<b>Casing material:</b>	1. 4408
<b>Journal Bearing:</b>	SSIC / Graphite / Peek / PTFE-Carbon
<b>Type of casing:</b>	Positive displacement
<b>Impeller material:</b>	1. 4408
<b>Type of impeller:</b>	Side Channel Impeller
<b>Nozzle position:</b>	Side suction
<b>Type of Execution:</b>	Orizzontale - Close Coupled
<b>Pull-out design:</b>	Back pull-out
<b>Heatable:</b>	No
<b>Type of connection:</b>	GAS - Flange
<b>Flange:</b>	UNIPN16RF ANSI150RF
<b>Suction characteristics:</b>	No
<b>Type of lubrication:</b>	No
<b>Maximum rated pressure @20°C:</b>	20bar
<b>Max. permissible fluid temperature:</b>	- 30°C ▶ +140°C
<b>Maximum head @ 2900 RPM:</b>	170 m
<b>Maximum flow rate @ 2900 RPM:</b>	5 m³/h
<b>Allowable Medium Viscosity Range:</b>	1cSt - 100cSt
<b>Maximum drive rating:</b>	7,5 kW



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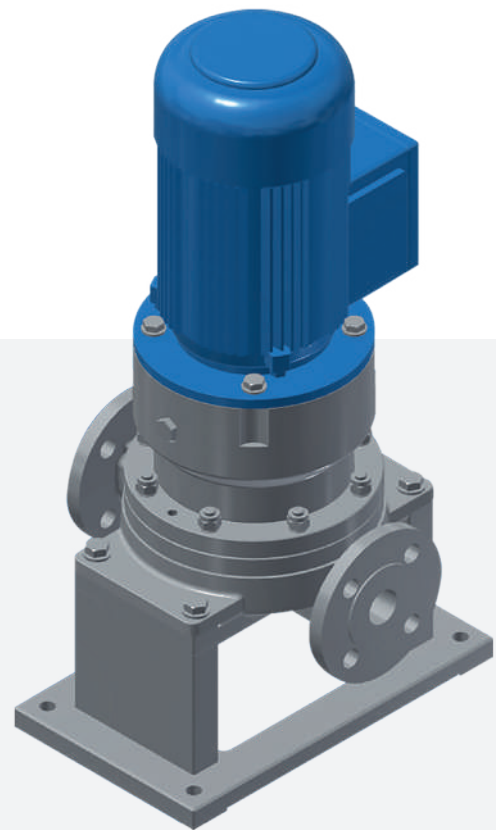
#### Additional Arrangements:

Type of casing: *Drained*

# Special Pumps

## Customizations:

- ⊗ Special arrangement on flanges
- ⊗ Magnetic Drive Upgrade of Existing Mechanical Seal Pumps
- ⊗ Taylor made design and construction of Vertical Pumps
- ⊗ Pumps with PN40 Casing



## UTS-B IN LINE

Magnetic drive single stage centrifugal pumps in close coupled execution.

Wetted parts in stainless steel. These pumps may be installed directly on the pipelines.

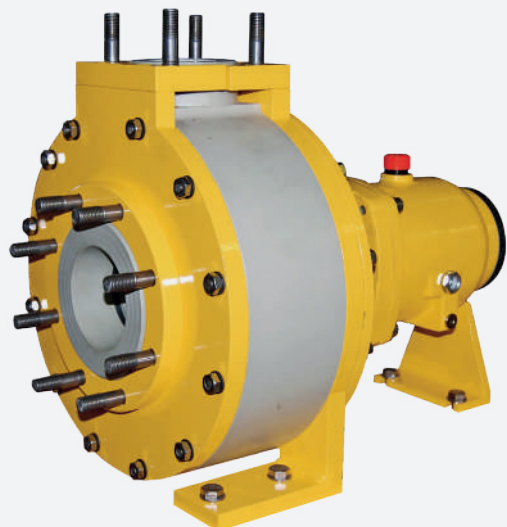
Suction and discharge connections are in line.

## CCN

Mechanical seal single stage horizontal centrifugal pumps in bare shaft execution.

Wetted parts in thermoplastic materials, like PP, PVDF, PEHD, to guarantee dimensional stability and mechanical resistance.

Suitable for industrial applications with corrosive liquids, liquids charged with solid particles, mother liquors and chemical waste water.



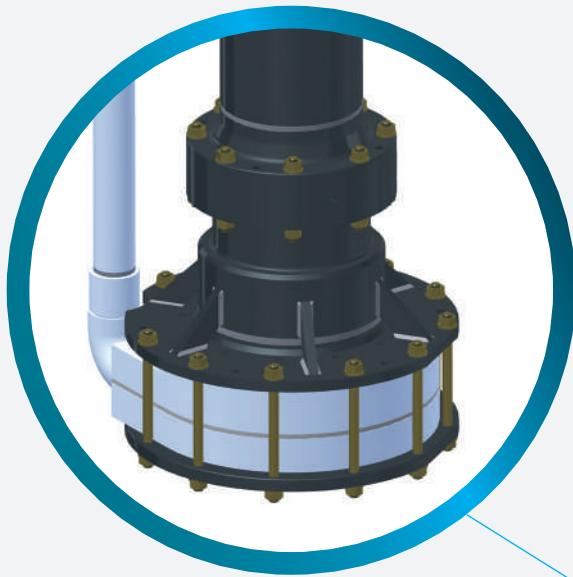


# TMVN

Magnetic drive single stage centrifugal pumps in vertical execution.

Taylor made on Customer needs, wetted parts in PVDF. These pumps may be installed on the top of the hermetic vessel.

Suitable for applications with extremely dangerous liquids and with low NPSHA.



**Detail of PVDF pump casing.**



# Service

## The advantages of CDR Pumps

### ■ PROMPT DELIVERY SERVICE:

Thanks to its long experience and its focus to the customer, CDR implemented a prompt delivery service that minimizes the impacts of an unexpected plant shutdown.

- ⌚ CDR is one of the very few players on the market able to offer a prompt delivery service of mag drive pumps.
- ⌚ CDR can provide, for a range of products and sizes, prompt delivery products within 3 working days from the order.
- ⌚ The prompt delivery service is recommended for those companies that need to reconvert or expand their production plants in a short time, in order to meet the customer demand and support their growth.

### ■ FLEXIBILITY:

CDR flexibility, as well as its technical department know-how, allows the company to develop projects based on customer needs. In fact, CDR can design customized solutions that meet customer specifications.

Flexibility and responsiveness to the market needs, combined with the careful management of the after-sales process, make CDR one of the top players in its sector.

### ■ SERVICE:

Thanks to our “customer oriented” culture, during the last years CDR decided to invest a lot on customer service operations. CDR focuses on 4 essentials points:

- ⌚ Solve all the problems the customer may face in the use and maintenance of the pumps in the fastest way possible and with the due accuracy.
- ⌚ Create a confidential relationship between supplier and customer to get a non-stop growing of the company know-how. CDR designs and produces pumps, but the continuous improvement is possible only thanks to our customers' feedback.
- ⌚ Make our workshop more and more efficient thanks to a continuous training of our specialized workers. Reparation timing are very short thanks to a strategic spare parts stock.
- ⌚ Availability of a strategic spare parts stock to solve possible emergencies and avoid unpleasant downtimes.

Furthermore, for each single customer CDR can study a specific preventive maintenance program with the aim of reducing maintenance costs and plant shutdown.

Our Sales Office can reply within 24 hours to spare parts inquiries to provide quick responses and deliveries to all our customers, anywhere in the world.

Thanks to its technicians, CDR can provide any kind of technical consultancy as well as assistance and support.





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*WE PUMP YOUR CHEMICALS* 

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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.