UTN-L / UTN-BL II° frame

Lined Magnetic Drive Process Centrifugal Pumps

UTN-BL 125-80-160 PFA
CLOSE COUPLED EXECUTION

Plastic and Fluoroplastic Lined Magnetic drive Horizontal - Single Stage - Process Centrifugal pumps

Lining: PP (Polypropylene), PVDF (Polyvinylidene fluoride), PFA (Perfluoroalkoxy)

Close-coupled and Long-coupled executions

Comply to :
2006/42/CE

Design to :
ISO 2858 / EN 22858
(ex DIN 24256)

ISO 5199 - UNI 15783

ATEX 100
Directive 94/9/EC

Flanged
UNI 1092-2 (ISO 7005-2)
PN16RF type B
slotted ANSI 150RF

CDR® Pompe S.P.A.

UTN SERIES

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.

UTN-L

Long Coupled pumps use the back pull-out principle and a strong bearing housing with flexible coupling.

UTN-BL

Close coupled pumps are furnished with standard motors.

Versatility

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

Reliability

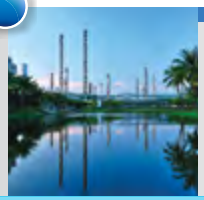
The pump is equipped with reliable grease lubricated bearing bracket, especially developed to be suitable even under heavy duty service.

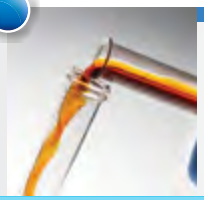
Design

UTN range share the same hydraulic design with the UCL series (mechanical seal pumps) which have been developed focusing on chemical Industry's requests.

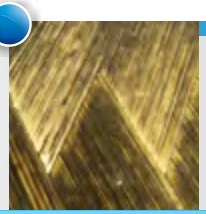
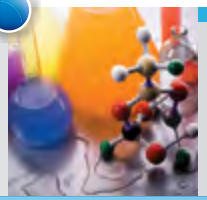
Application Fields

- Petrochemical Processing
- Fertilizer Processing
- Basic chemical Processing
- Air Treatment
- Fine Chemical Processing
- Detergents Processing
- Fibre Processing
- Active Pharmaceutical Ingredients







UTN 125-80-160

UTN 125-80-160 casing : new 125-80-160 casing is matching perfectly the impeller design , to achieve the best hydraulic efficiency.
The benefits of the lined technology are :

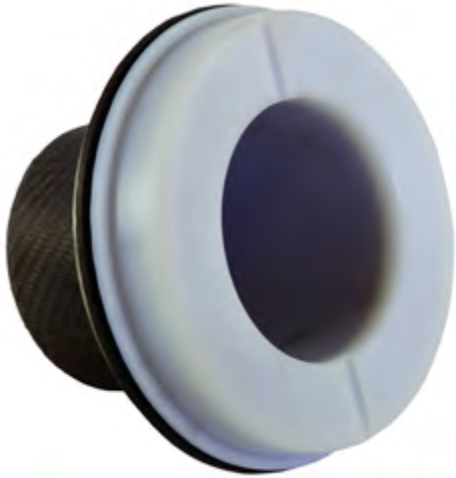
- stability to increased temperature
- under vacuum working capabilities
- constant coating layer thickness thanks to TM process
- high resistance to the permeation thanks to the TM process (for PFA and PVDF execution)

New Impeller 125-80-160 assembly made in one piece granting the maximum reliability and stability during the pump operation.

The closed impeller design, made around a sturdy metallic core surrounded by a minimum 4mm of fluoroplastic material, provides maximum efficiency and reliability.

New Suction Cover : using a static shaft design, the new UTN 125-80-160 will have also a new TM Lined suction cover.
The new Suction cover is able to hold the efforts caused on it by the shaft and the Axial Thrust Shoes, moreover 3 generous anti-rotating flat surfaces lock the suction cover into position on the casing.

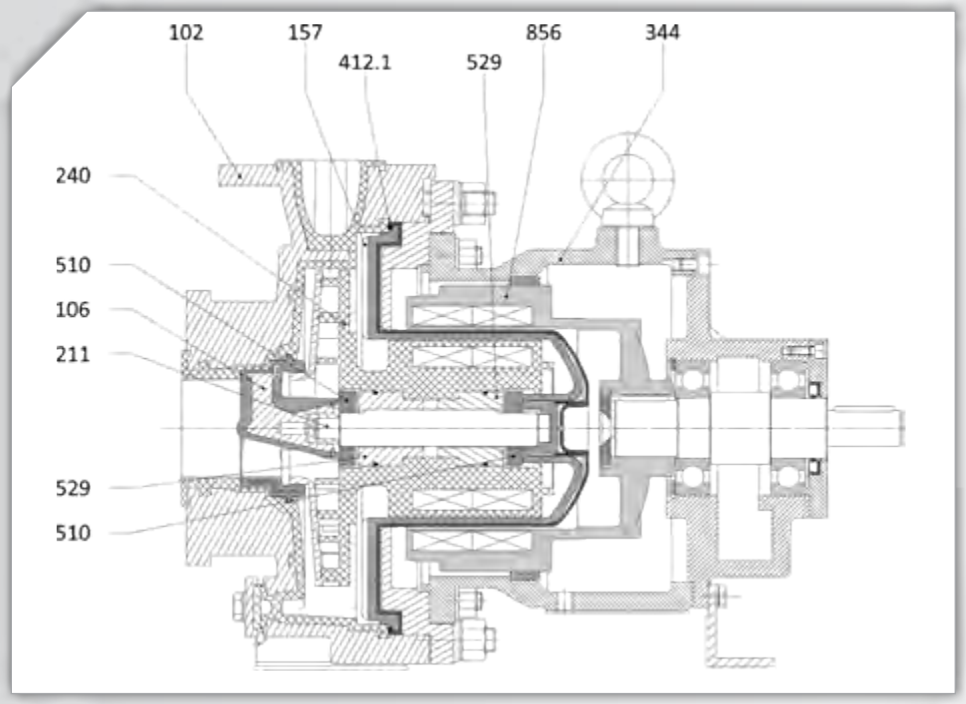
ISOLATION SHELL



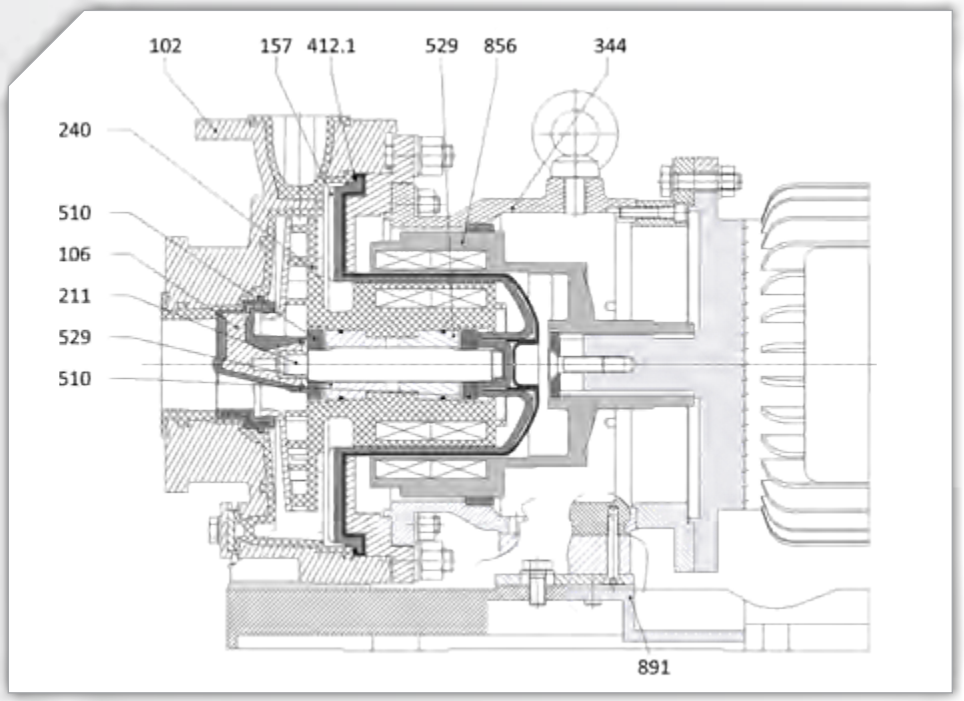
- Virgin unfilled PFA double Isolation Shell configuration : Virgin PFA on wet side externally reinforced by Carbon Fibre reinforcement.
- PP and PVDF: more than 4mm of thickness.
- Zero Eddy Current Losses thanks to non-metallic execution.

SECTIONAL DRAWING

UTN-L



UTN-BL



Technical Specifications

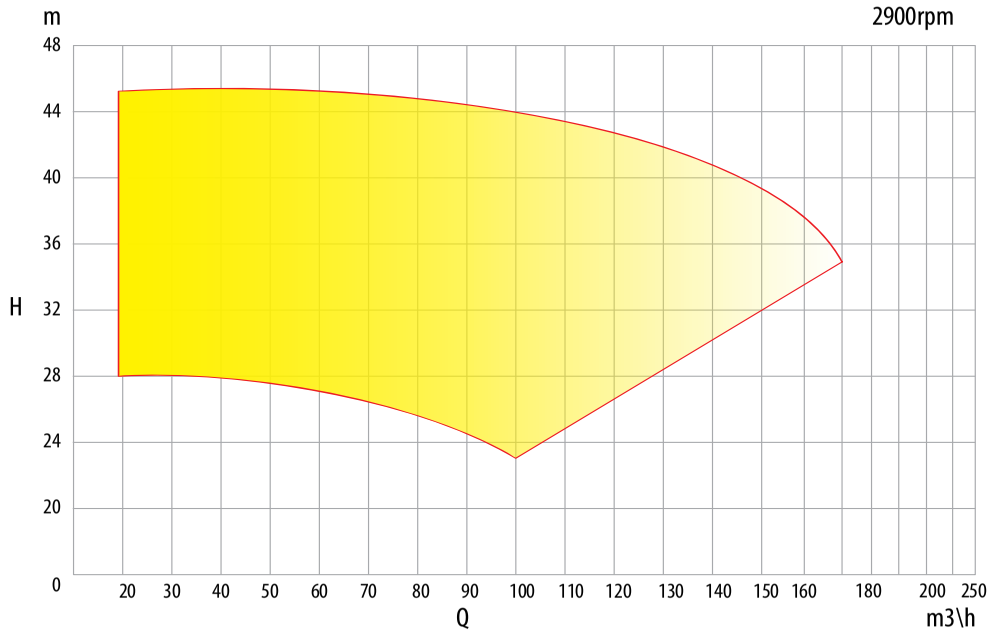
Performances 2900 rpm	Q max = 170 m3/h - H max = 45 mcl
Electric Motors	• UTN-BL: 2.2 kW (motor size 100) -> 37 kW (motor size 200) • UTN-L: 2.2 kW (motor size100) -> 37 kW (motorsize 200)
Temperature range	• PP: - 10 °C -> +70 °C • *PVDF: - 30 °C -> +100 °C (end 2014) • PFA: - 50 °C -> +140 °C
Allowable Pressure Range	• PP: from 16 bar (20 °C) to 12 bar (70 °C) • *PVDF: from 16 bar (20 °C) to 8 bar (100 °C) • PFA: from 16 bar (20 °C) to 8 bar (140 °C)
Flange Connections	UNI 1092-2 / ISO 7005-2 PN 16RF, type B slotted to ASME /ANSI class 150
Viscosity	min : 1 cSt min - max : 100 cSt
Allowable Solids	• Max concentration 3 % by volume • Max particle size 0,25 mm

Part list

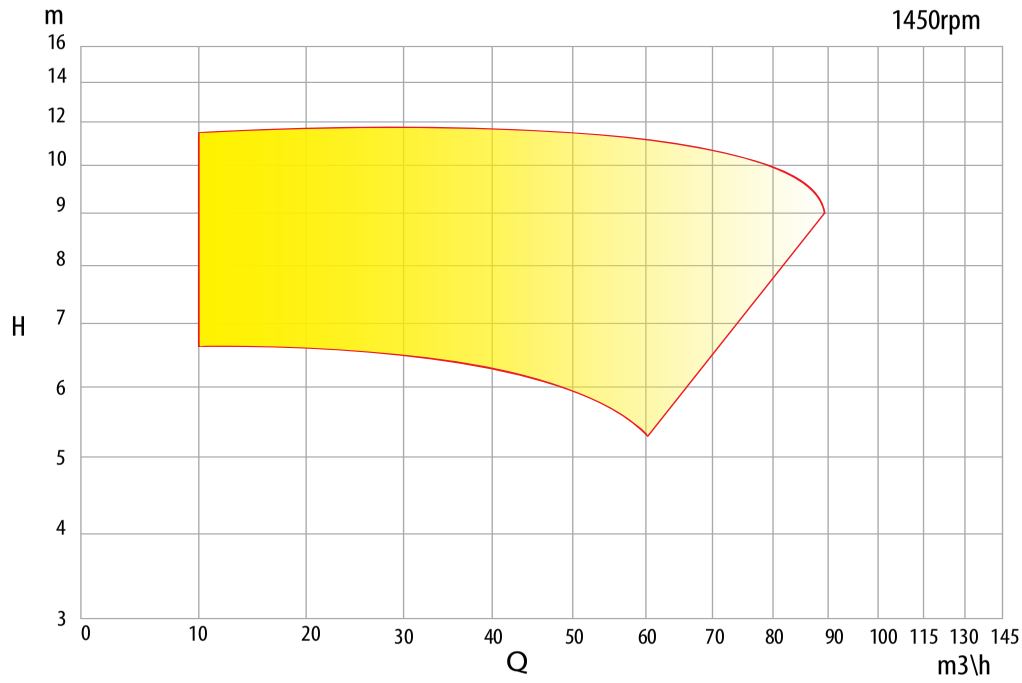
DIN	Component	Material
102	Casing	PP lined \ *PVDF lined \ PFA lined
106	Suction Casing	PP-GF \ *PVDF-CF \ PFA lined
157	Isolation Shell	PP-GF \ *PVDF-CF \ PFA+CF
211	Shaft	SiC \ Al2O3 \ RunSafe SiC
240	Impeller Assembly	PP lined \ *PVDF lined \ PFA lined
344	Lantern	GS400
412.1	O-Ring Casing	EPDM \ FPM \ FPM enc. FEP
510	Thrust Bearing	SiC \ Al2O3 \ RunSafe SiC
529	Rotating Bushing	SiC \ PTFE-Al2O3 \ Graphite \RunSafe SiC
856	Outer Magnet	GS400+Ryton
891	Pump foot pad	GS400

PERFORMANCE FIELDS

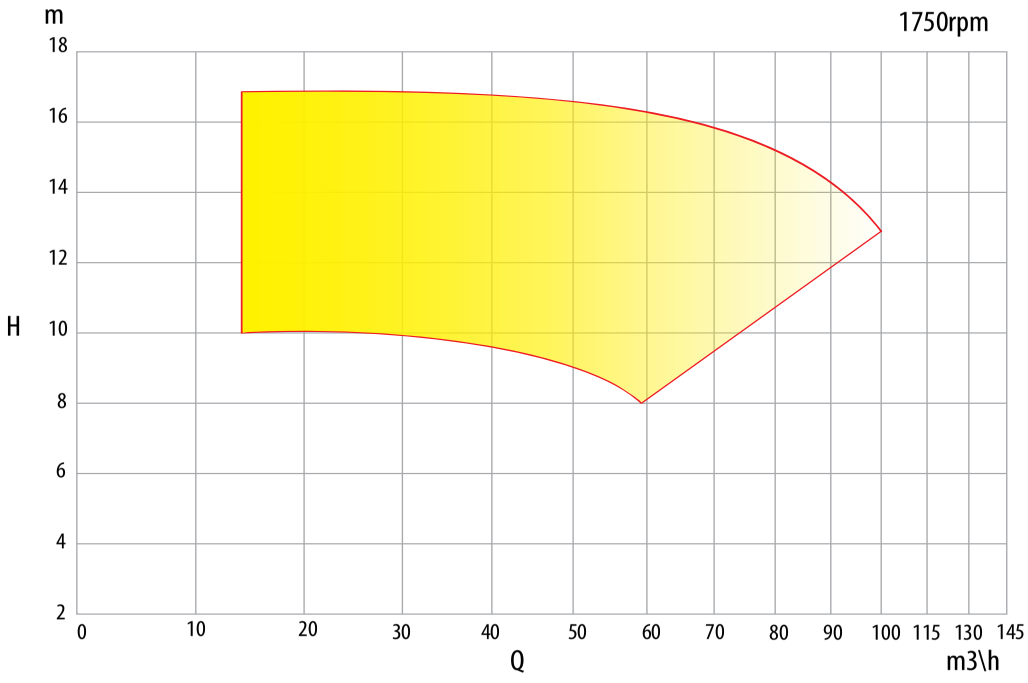
50 Hz - 2900rpm



50 Hz - 1450rpm



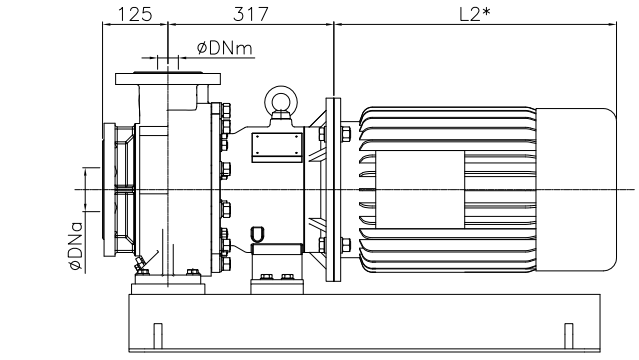
60 Hz - 1750rpm

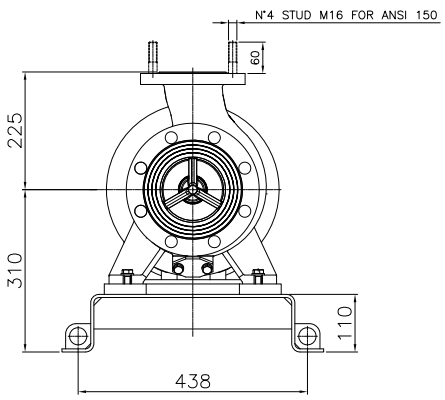


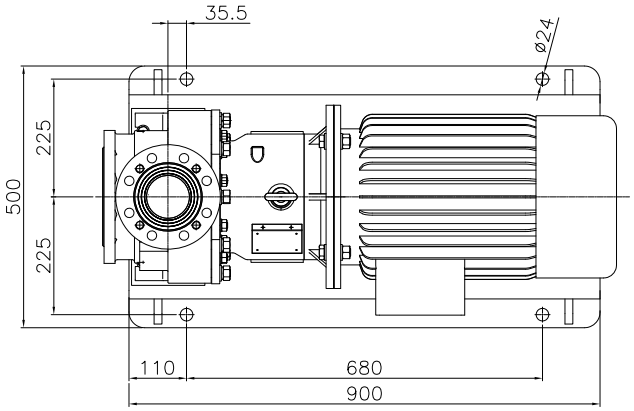
Not binding data refers to water at room temperature. For specific performance curve contact CDR Pompe SpA.

OVERALL DIMENSIONS

UTN-BL MOT. 100-160

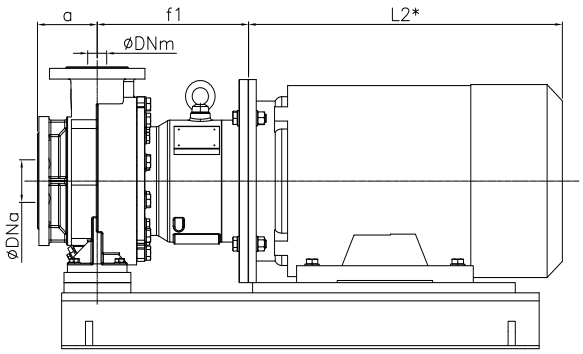


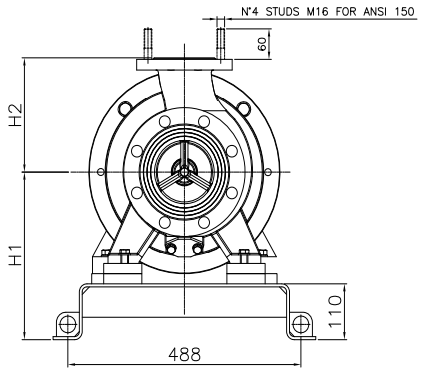


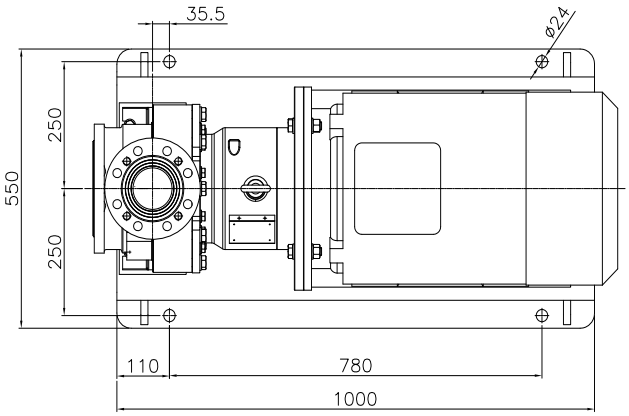


MOTOR SIZE/ Motore	H1	H2	f1
	mm	mm	mm
180-B35	310	225	317
200-B35	330		

UTN-BL MOT. 180-200

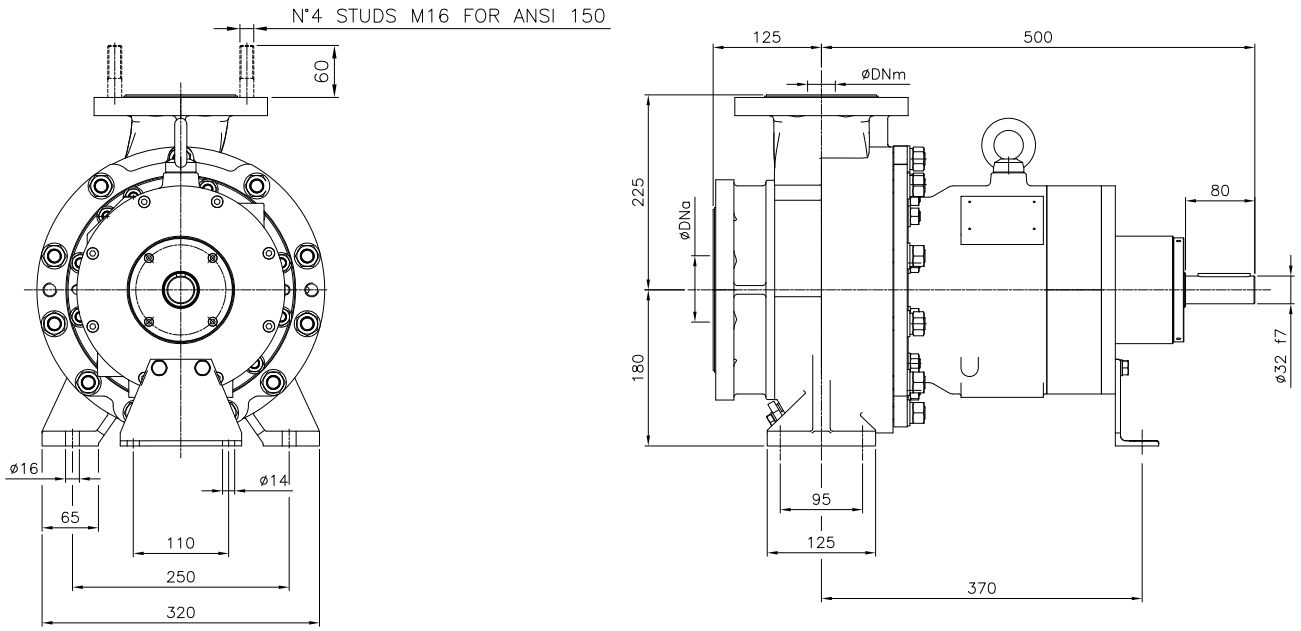




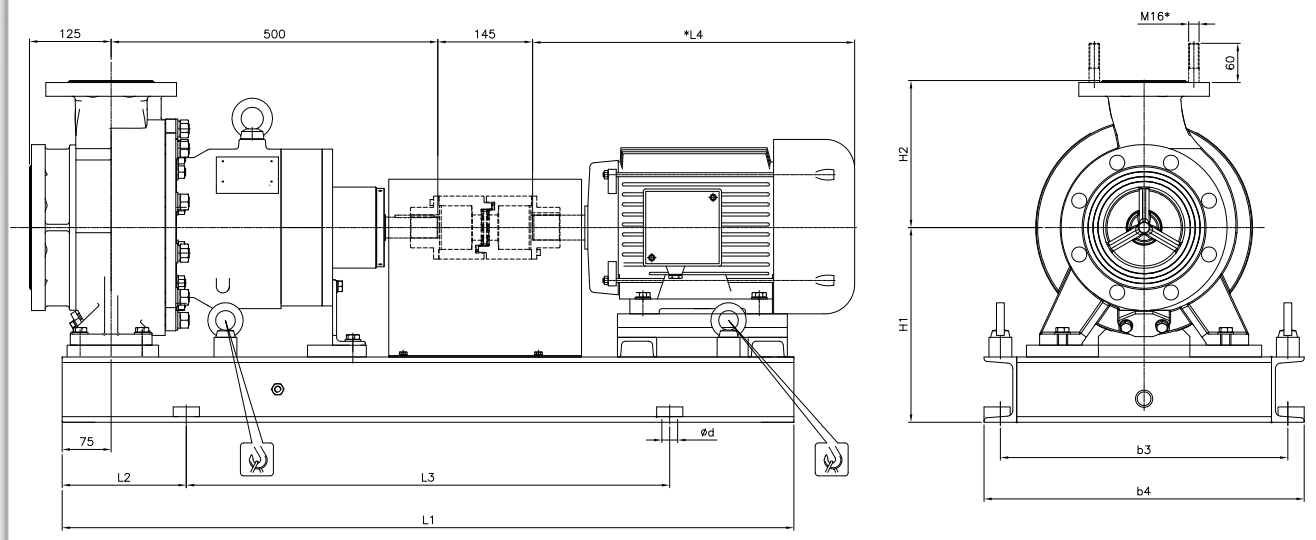


Dna UNI EN 1092-1 PN 16RF drilled to ANSI 150	DNm UNI EN 1092-1 PN 16RF drilled to ANSI 150
Ø	Ø
125	80
* L2 dimension is according to installed motor manufactured	

UTN-L BARESHAFT



UTN-L BASEPLATE INSTALLATION



Dna UNI EN 1092-1 PN 16RF drilled to ANSI 150	DNm UNI EN 1092-1 PN 16RF drilled to ANSI 150
Ø	Ø
125	80
* L2 dimension is according to installed motor manufactured	

For further info, please visit

www.cdrpompe.com

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Technical Characteristics

The technical data and characteristics stated in this General Catalogue are not binding. CDR Pompe S.p.a. reserves the right to make modifications without notice. Therefore data, dimensions, performances and any other stated issues are indicative only and not binding. Anyway for any technical details you must require an up-to-date product technical card.