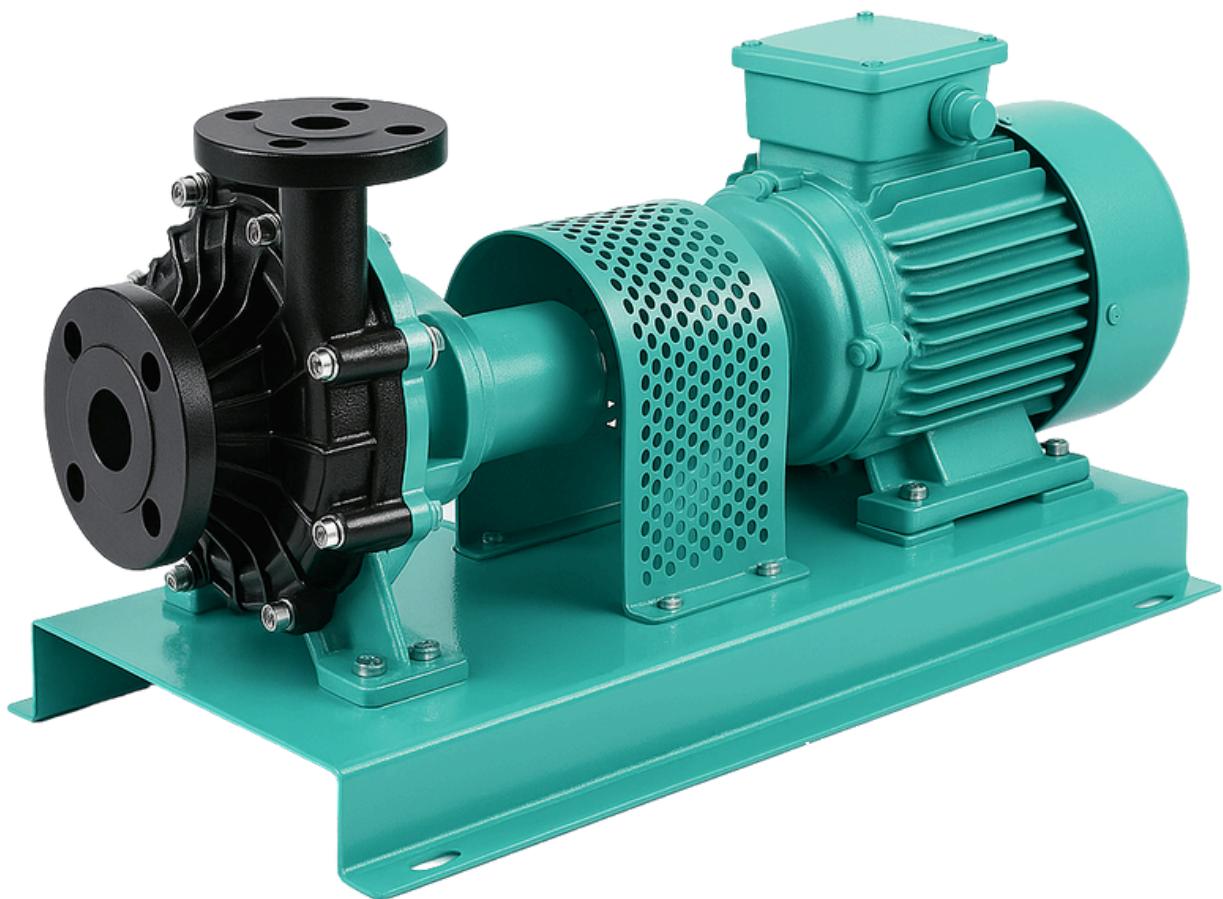




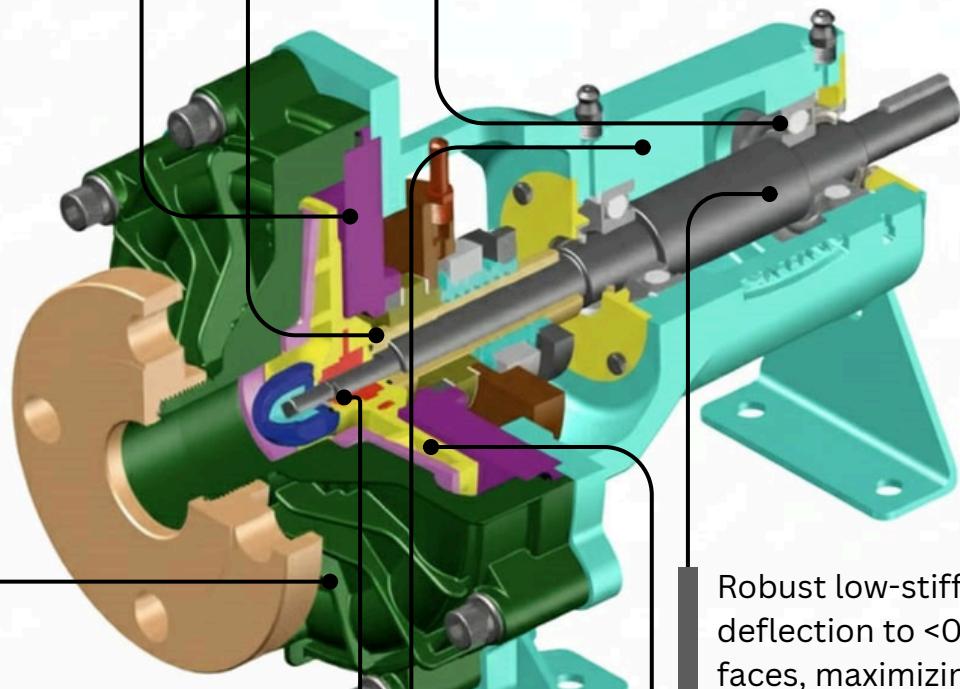
# CorroSafe (TcorroZ)



**Non Metallic Mechanical Seal Pumps**  
**GFRPP, CFRPVDF**

# Design Features

- Casing Cover**
- Sleeve Functionality**
- High-Performance Bearings**
- Bush**
- Impeller Insert**
- Sturdy Shaft**
- Efficient Impeller Performance**
- Bearing Pedestal**



Lightweight, robust non-metallic volute casing ensures efficient hydraulic flow of process media.

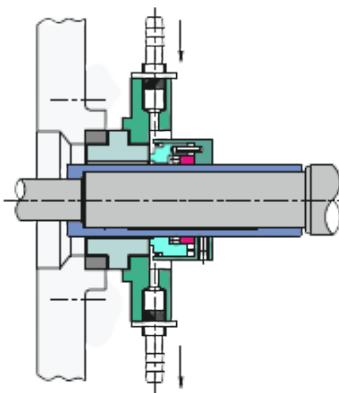
Sleek, lightweight, and robust bearing bracket for stable support

Innovative positive locking methodology

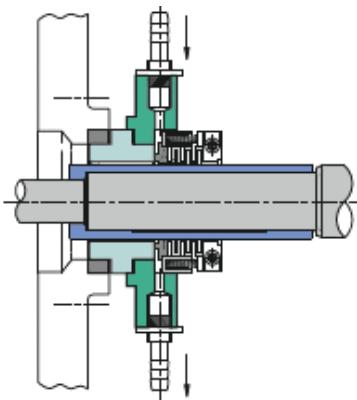
Positive locking design prevents failure from reverse rotation.

Hydrodynamically optimized, closed / semi-open radial impeller designed for Optimum suction behaviour with low NPSH requirement Low noise

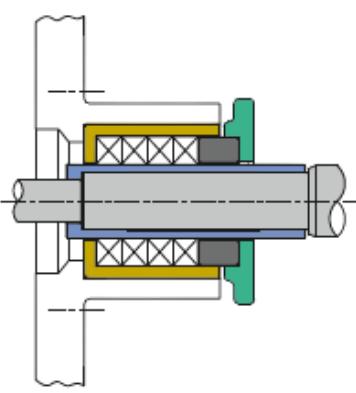
# MECHANICAL SEAL OPTIONS



Single PTFE Bellows seal (TB)



Single Pusher Seal (RA)



Gland Packing (GP)

- **Type TB** – A single, externally mounted seal utilizing PTFE bellows as the secondary sealing element. It offers broad-spectrum chemical resistance, making it suitable for both clean and corrosive process fluids.
- **Type RA** – A single, externally mounted seal with fluoroelastomer (FKM/FFKM) secondary sealing. Engineered to withstand highly corrosive fluids and homogeneous slurry applications.
- **Type GP** – A cost-effective sealing option using pure PTFE packing with lubrication, providing a reliable dynamic seal for general-duty applications.

## Robust Bearing Bracket Design :-

- High component interchangeability across models reduces spare-parts inventory requirements.
- The rugged construction enhances reliability, minimizes unplanned downtime, and allows easier assembly and maintenance.

## Lubrication :-

- The bearing bracket is grease-lubricated for continuous operation in applications up to 120 °C (250 °F).
- Grease nipples are provided at both the pump and drive ends for convenient servicing. Optional “greased-for-life” or “sealed-for-life” bearings can be supplied on request.

## Robust Shaft Design:-

### Shaft Design

CorroSafe Series shafts are available in both solid and sleeved configurations, engineered to maintain a low shaft stiffness ratio (L3/D4). This minimizes shaft deflection, thereby enhancing seal performance and extending bearing life. The design also accommodates the First Obstruction Length (FOB) requirements of standard, commercially available single mechanical seals.

### Operating parameters :-

Type	TB*	RA*	GP
Pressure	up to 5 bar (75 psi)	27.6 bar (400 psi)	10 bar (150 psi)
Temperature	up to 71°C (160°F)	204°C (400°F)	280°C (572°F)
Shaft Speed	up to 10 m/s (33 fps)	23 m/s (75 fps)	10 m/s (33 fps)

\*Values for Flowserve seals. Other seals available on request.

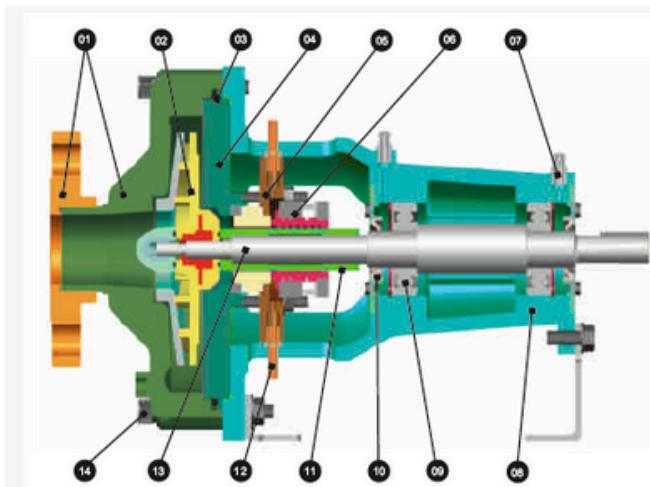
# PRODUCT SUMMARY

**CorroSafe Series pumps** are precision-engineered, injection-moulded, horizontal, side-discharge, back-pull-out, volute-casing, single-stage end-suction centrifugal pumps. Designed for robust chemical duty, the TcoroZ Series is optimized to handle a wide range of industrial process fluids with specific gravities up to **1.3**. Typical applications include **electroplating lines, chemical filtration systems, fume scrubbing units, and bulk chemical transfer operations such as loading and unloading**

## Technical Data :-

Operating Frequency	50 Hz [60 Hz]
Capacity [Q]	up to 30 m <sup>3</sup> /hr [132 US gpm]
Head [H]	up to 30 m [98 ft]
Motor Power [P]	up to 3.7 kW [5 hp]
Viscosity	up to 80 mPas [80 cP]
Suction Lift	up to 8 m [26 ft] with priming chamber*
Maximum Working Pressure	6 bar [87 psi]
Maximum Specific Gravity [SG]	1.3
Minimum Continuous Flow [MCF]	2 m <sup>3</sup> /hr [9 US gpm]
Maximum Temperature	PP : 82°C [180°F], GFRPP: 90°C [194°F], CFRPVDF: 110°C [230°F]
Suction & Delivery Connection	ANSI B16.5 - Class 150, DIN 2501, BS4504 - PN16, BSP or NPT*
Shaft Seal	Single Mechanical Seals & Gland Packing
Bearings	Rolling Element Bearings
Lubrication	Grease
Motor Compatibility	IS 1231, IEC 72-1, NEMA*

\*available on request



Casing & Flanges 01

PP<sup>1</sup> / GFRPP<sup>2</sup> / CFRPVDF<sup>3</sup>

Impeller 02

PP / GFRPP / CFRPVDF

O-Rings 03

FKM / FFKM / EPDM / TFE-P

Casing Cover 04

PP-H / GFRPP / CFRPVDF

Seal Cover 05

FRP<sup>4</sup>

Mechanical Seal (Stationary & Rotary) 06

Ceramic / SiC<sup>5</sup> / GFT<sup>6</sup> / Carbon

Grease Nipple 07

Stainless Steel

Bearing Bracket 08

Cast Iron\*

Rolling Element Bearings 09

Carbon Chromium Steel

Oil Seals 10

Chlorobutadiene Rubber

Sleeve 11

Ceramic / SiC / FRP / Super Alloys

Male Hose Barb Nipple 12

Brass

Shaft 13

Stainless Steel

Fasteners 14

Stainless Steel

1 - Polypropylene, 2 - Glass Fibre-Reinforced PP, 3 - Carbon Fibre-Reinforced Polyvinylidene Fluoride, 4 - Fibre-Reinforced Plastic, 5 - Silicon Carbide, 6 - Glass Filled Polytetrafluoroethylene

\* - with high grade 2C corrosion protection paint. Special coatings available on request



**GFRPP** : Suitable for Aggressive Media up to 90°C (194°F)

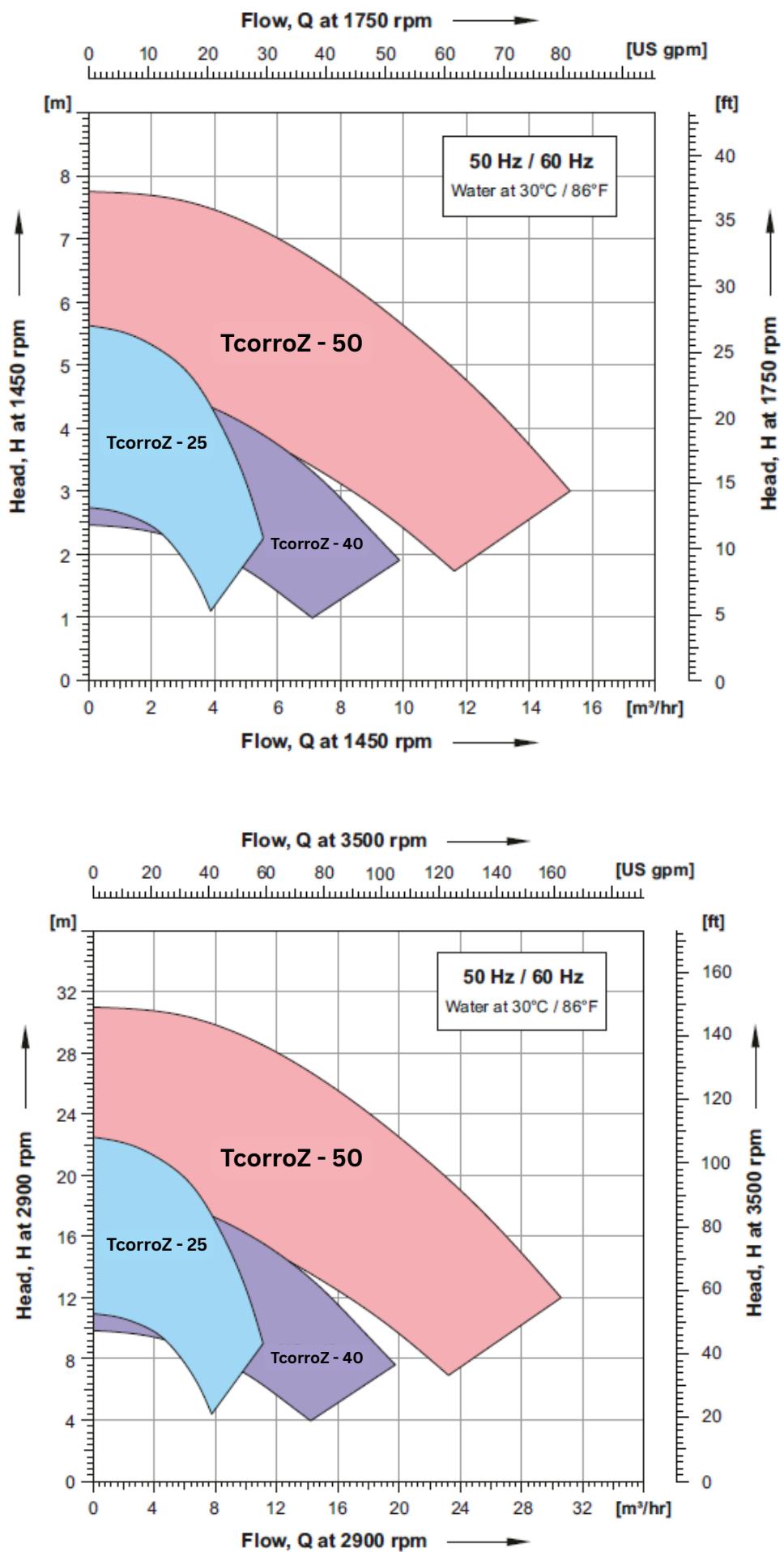


**CFRPVDF** : Suitable for Corrosive, Hazardous Media up to 110°C (230°F)



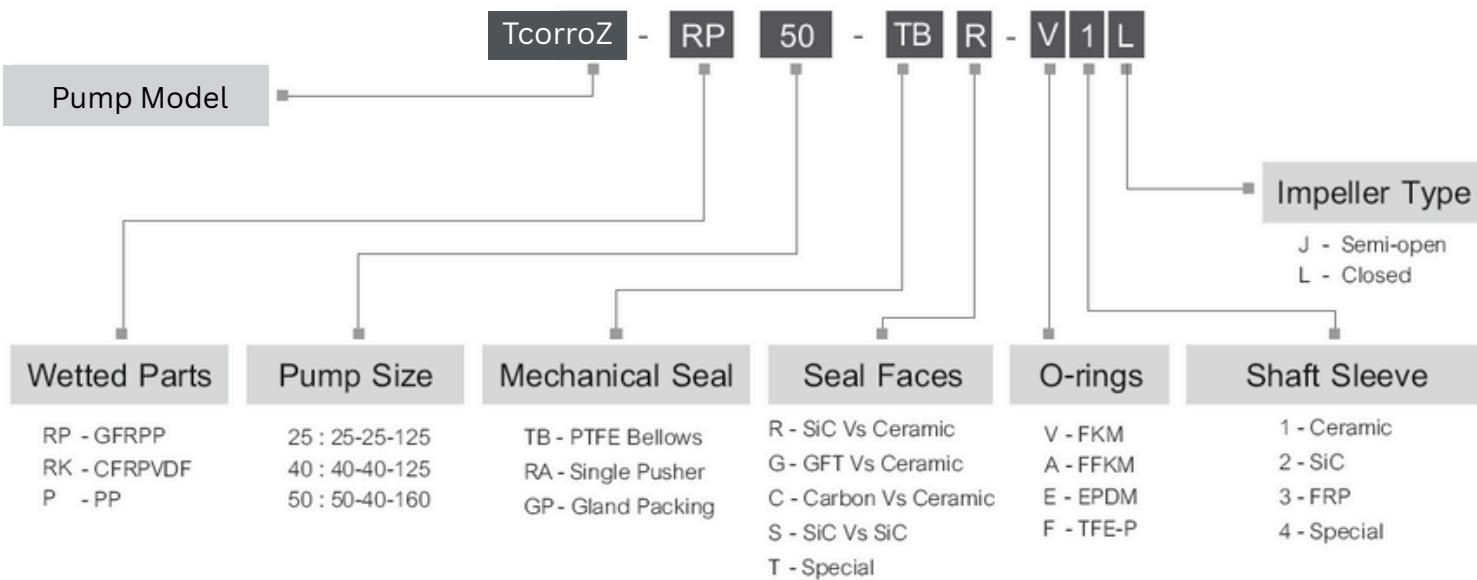
**PP** : Available on Request

# Hydraulic Performance

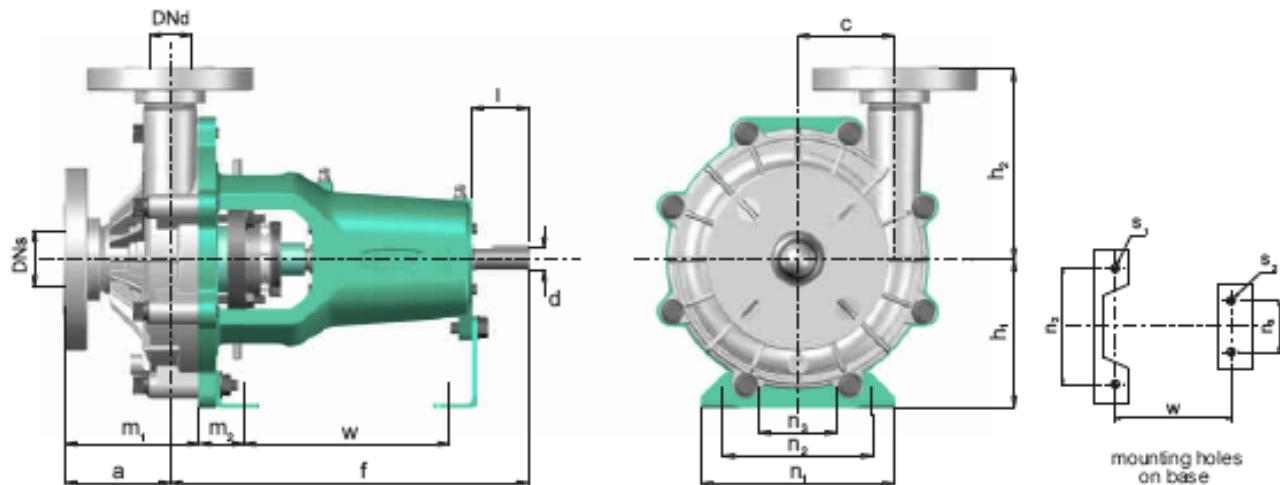


# PUMP IDENTIFICATION

- CorroSafe Series (TcorroZ)



## PUMP DIMENSION:-

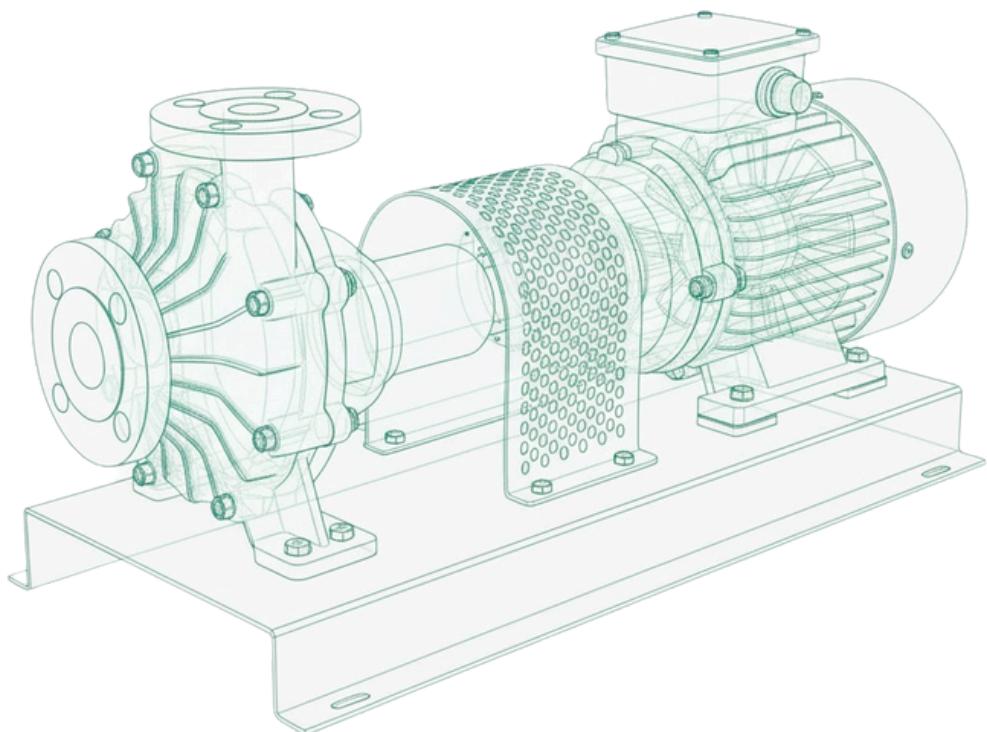


MODELS	PUMP DIMENSIONS																
	DNs	DNd	a*	f	c	h <sub>1</sub>	h <sub>2</sub> *	m <sub>1</sub> *	m <sub>2</sub>	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	w	S <sub>1</sub>	S <sub>2</sub>	d	l
TcorroZ - 25	25	25															
TcorroZ - 40	40	40	85	315	70	120	140	110	37	170	130	80	185	M10	M10	19	50
TcorroZ - 50	50	40			85	130	160										

All Dimensions in mm; \* - 8 mm more length for flanged connection



**TranspumpServ**  
GLOBAL PVT LTD



## India

**Transpumpserv Global (HQ)**  
Vadodara – Gujarat, INDIA

**Transpumpserv Engineering  
(Mfg. Unit-1)**  
Valod – Surat, INDIA



## Canada

**Transpumpserv Canada (SO)**  
Toronto – Canada

📞 +91 7016539529

✉️ [info@transpumpservglobal.com](mailto:info@transpumpservglobal.com) [www.transpump](http://www.transpumpservglobal.com)servglobal.com

Follow Us :