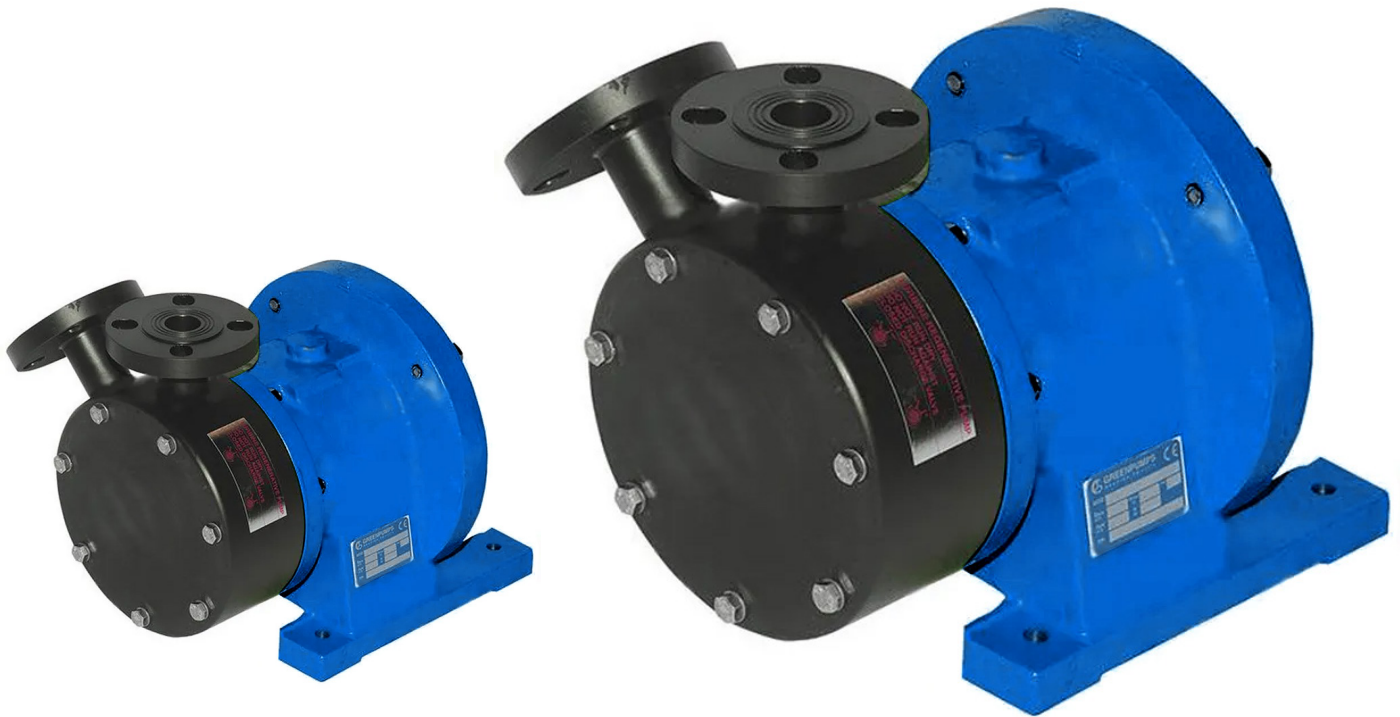


# Solid Block Mag Drive Regenerative Turbine Pump



## » TECHNOLOGY INNOVATION & RELIABILITY

Tapflo is specialised in the design and application for water treatment, pharmaceutical, chemical, petrochemical and refinery applications.

We continue every day to lead the way in providing the most reliable sealless pumps available with the latest technology. All Tapflo pumps sealless pumps are engineered to comply with the new environmental rules.

## » BENEFITS

Our Solid Block Mag Drive Plastic Regenerative Turbine Pump is an ideal solution for fluid transfer with a focus on low-flow, high-head applications including medium-duty services, industrial cleaning, OEM filter system manufacturing, CIP plant systems and more.

Crafted from solid plastic materials such as PP or PVDF, these pumps resist internal and external corrosion, ensuring reliable performance even in harsh environments. The heavy-walled machined construction provides exceptional resistance to permeation and migration of corrosive substances. With a commitment to environmental safety, these pumps are designed with features to achieve zero leakages in extreme working conditions, while the absence of a mechanical seal or packing gland eliminates dangerous emissions.

» SPECIFICATIONS

Tapflo Plastic Regenerative Turbine Pumps can maintain design head flow for an extended running period. The multi-vanes self-balancing impeller construction eliminates the thrust loads and can be started with completely open discharge valve. Plastic Regenerative Turbine Pumps are suitable for thin non lubricating mediums with a very low NPSH available value.

- **Materials:** Polypropylene (PP), Polyvinylidene Fluoride (PVDF)
- **Max Capacity:** Up to 13m<sup>3</sup>/hr @ 50 Hz & 15m<sup>3</sup>/hr @ 60 Hz
- **Max Pressure:** Up to 60m @ 50 Hz & up to 70m @ 60 Hz
- **Self-Priming:** No (Std.) - Self-Priming Variant
- **Max Temperature:** Up to 90°C for PVDF & up to 65°C for PP
- **Specific Gravities:** Up to 2kg/dm<sup>3</sup>
- **System Pressure Rating:** 4 Bar up to 10 Bar



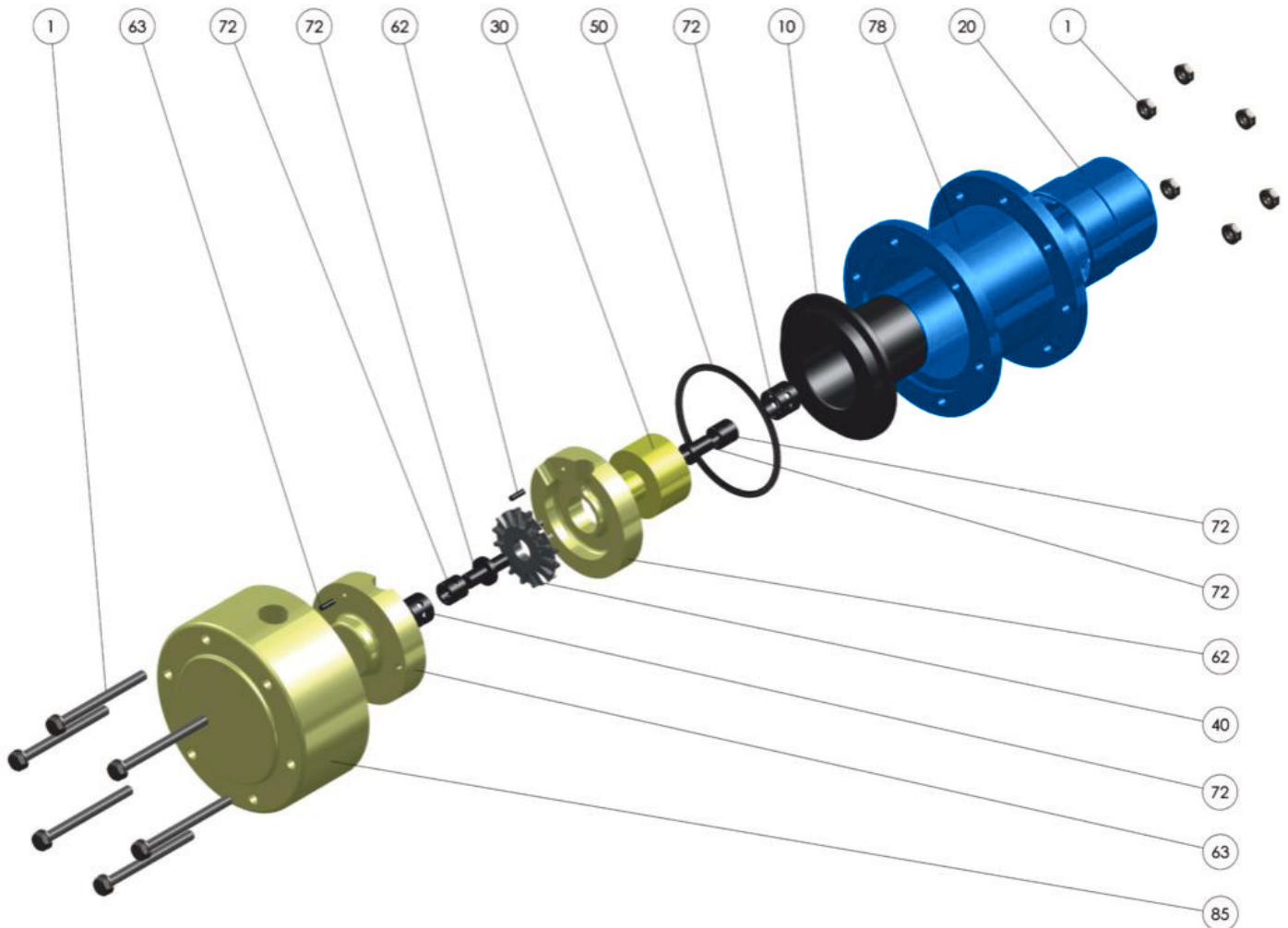
» FEATURES

- Built from solid plastic materials, the pumps resist internal and external corrosion
- Heavy-Walled Machined Construction
- Maintains head and flow for an extended running period
- Suitable for thin non-lubricating mediums with a very low NPSH available value
- Can be used like a mixer, handling liquids with different characteristics
- High Torque Neodymium Magnets
- Low Flow High Head Capability: Minimises bypass requirements
- Silicon carbide shaft
- PTFEC, SIC, or PTFEG bushings by request
- Close Coupled NEMA and IEC mounting for ease of installation
- High MTBF (Mean Time Between Failure)
- In accordance with ATEX regulation category EX II 2 G, ensuring adherence to safety standards

TYPICAL SERVICES

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• <b>Medium Duty Services</b></li> <li>• <b>Industrial Cleaning</b></li> <li>• <b>OEM Filter System Manufacturing</b></li> </ul> | <ul style="list-style-type: none"> <li>• <b>Electroplating</b></li> <li>• <b>Fume Scrubber</b></li> <li>• <b>CIP Plant System</b></li> </ul> |
|---|--|

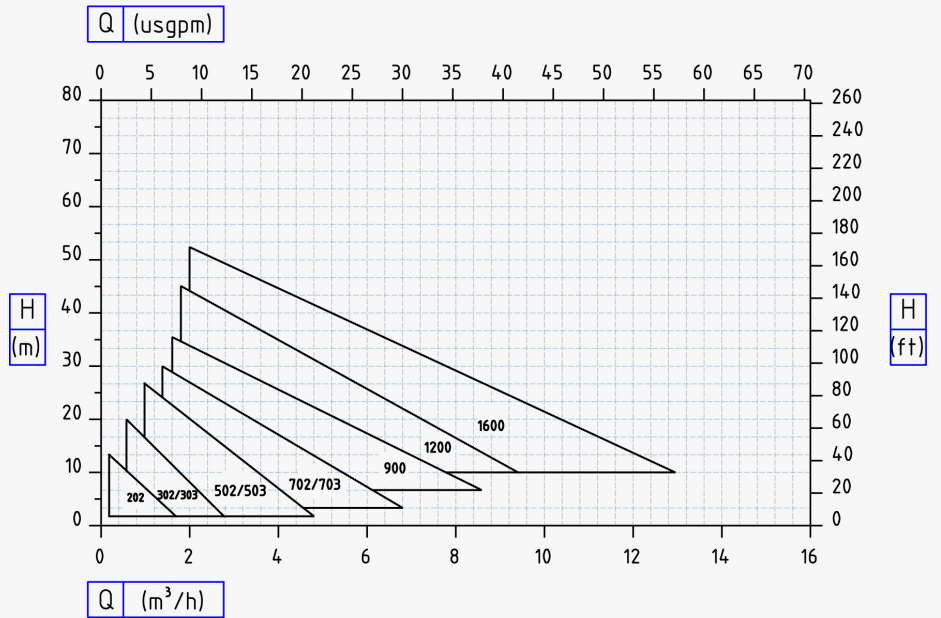




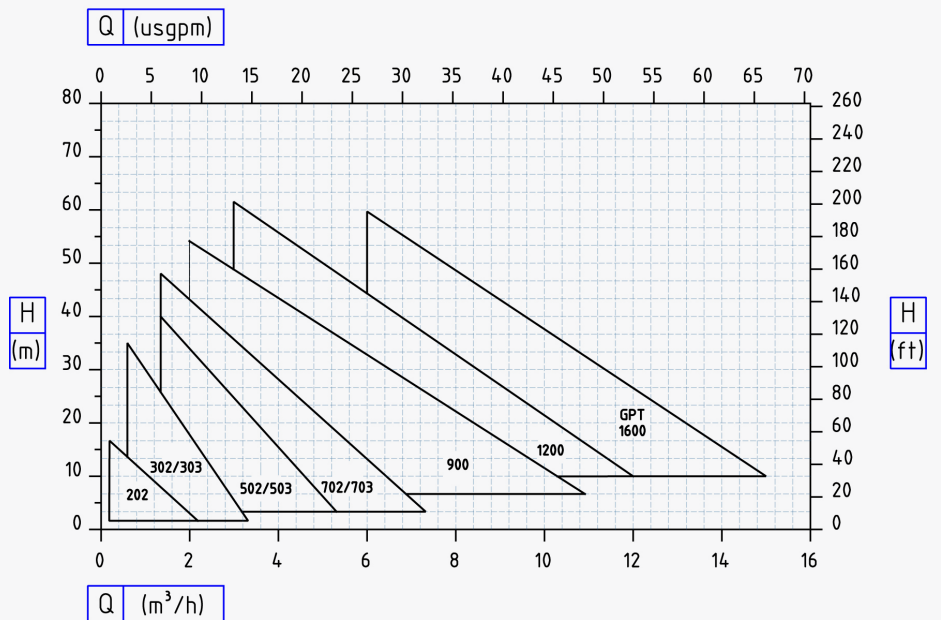
Ref.	Description	Ref.	Description
1	Screws and Bolts	62	Rear Ring
10	Containment Shell	63	Front Ring
20	External Magnet Ring	72	Shaft & Bearings
30	Internal Magnet Ring	78	Coupling Housing
40	Impeller	85	Pump Casing
50	O-ring		

## Design Curves

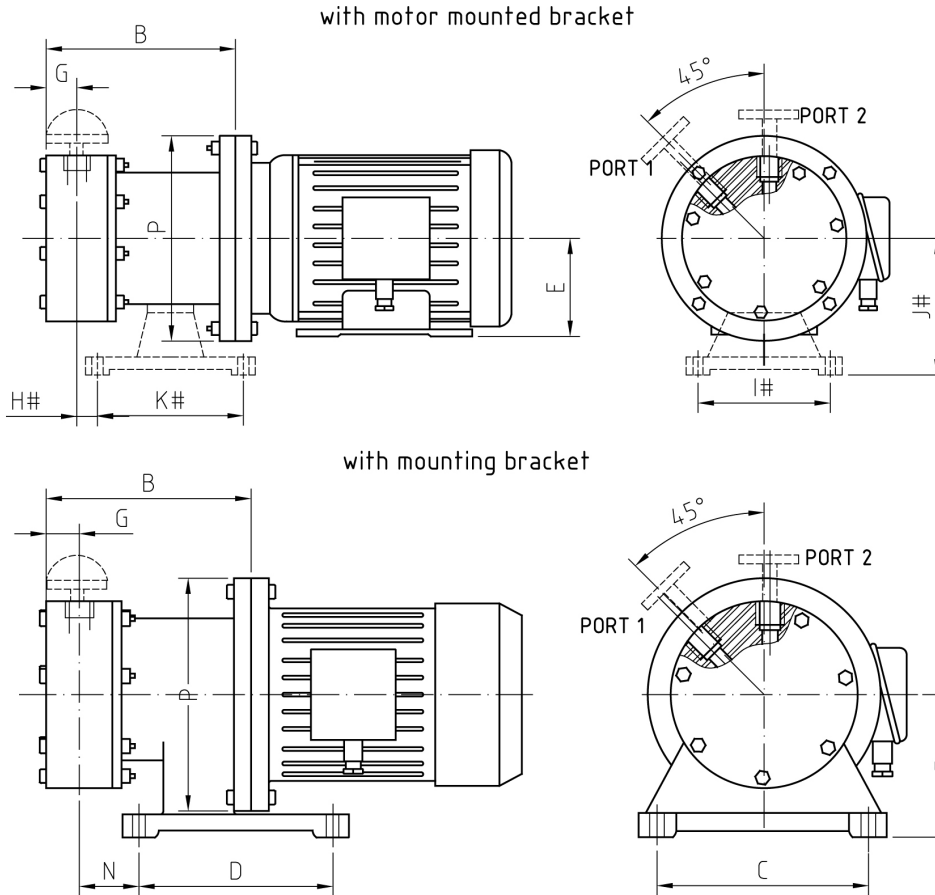
» **Plastic Regenerative Turbine Pump**  
**2900 rpm 50hz**



» **Plastic Regenerative Turbine Pump**  
**3500 rpm 60hz**



## Overall Dimensions



#ON REQUEST ONLY

MODELS	PORT 1		PORT 2		E	P	G	B	N	D	C	
	NPT	FLANGE	NPT	FLANGE								
202	(mm)	13	15mm PN16 ISO/JIS	13	15mm PN16 ISO/JIS	56	120	31	130	N/A	N/A	N/A
	(in)	0.5	0.5" 150# RF ANSI	0.5	0.5" 150# RF ANSI	2.2	4.7	1.2	5.1	N/A	N/A	N/A
302	(mm)	20	20mm PN16 ISO/JIS	20	20mm PN16 ISO/JIS	63	140	31	148	N/A	N/A	N/A
	(in)	0.75	0.75" 150# RF ANSI	0.75	0.75" 150# RF ANSI	2.5	5.5	1.2	5.8	N/A	N/A	N/A
303	(mm)	20	20mm PN16 ISO/JIS	20	20mm PN16 ISO/JIS	71	160	38	182	N/A	N/A	N/A
	(in)	0.75	0.75" 150# RF ANSI	0.75	0.75" 150# RF ANSI	2.8	6.3	1.5	7.15	N/A	N/A	N/A
502	(mm)	25	25mm PN16 ISO/JIS	25	25mm PN16 ISO/JIS	71	160	38	182	N/A	N/A	N/A
	(in)	1.0	1" 150# RF ANSI	1.0	1" 150# RF ANSI	2.8	6.3	1.5	7.15	N/A	N/A	N/A
503	(mm)	25	25mm PN16 ISO/JIS	25	25mm PN16 ISO/JIS	80	200	40	197	N/A	N/A	N/A
	(in)	1.0	1" 150# RF ANSI	1.0	1" 150# RF ANSI	3.15	7.9	1.6	7.75	N/A	N/A	N/A
702	(mm)	25	25mm PN16 ISO/JIS	25	25mm PN16 ISO/JIS	80	200	40	197	N/A	N/A	N/A
	(in)	1.0	1" 150# RF ANSI	1.0	1" 150# RF ANSI	3.15	7.9	1.6	7.75	N/A	N/A	N/A
703	(mm)	25	25mm PN16 ISO/JIS	25	25mm PN16 ISO/JIS	136	200	46	237	73	193	155
	(in)	1.0	1" 150# RF ANSI	1.0	1" 150# RF ANSI	5.35	7.9	1.8	9.3	2.9	7.6	6.1
900	(mm)	25	25mm PN16 ISO/JIS	25	25mm PN16 ISO/JIS	136	200	46	237	73	193	155
	(in)	1.0	1" 150# RF ANSI	1.0	1" 150# RF ANSI	5.35	7.9	1.8	9.3	2.9	7.6	6.1
1200	(mm)	32	32mm PN16 ISO/JIS	32	32mm PN16 ISO/JIS	175	250	52	275	65	250	220
	(in)	1 1/4	1 1/4" 150# RF ANSI	1 1/4	1 1/4" 150# RF ANSI	6.9	9.85	2	10.8	2.55	9.85	8.65
1600	(mm)	32	32mm PN16 ISO/JIS	32	32mm PN16 ISO/JIS	200	300	51	296	71	290	250
	(in)	1 1/4	1 1/4" 150# RF ANSI	1 1/4	1 1/4" 150# RF ANSI	7.9	11.8	2	11.65	2.8	11.4	9.85

» **CENTRIFUGAL SELF-PRIMING PUMPS (ON REQUEST ONLY)**

The same basic features of the pump apply to this series design with the additional self-priming pump casing.

Self-Priming Solid Block Mag Drive Plastic Regenerative Turbine Pumps provide smooth continuous leak-proof operation where top unloading is required.



SELF-PRIMING CONFIGURATION

LONG COUPLED CONFIGURATION

Options & Special Executions	Construction materials
<ul style="list-style-type: none"> <li>• Flanged ports ISO / ANSI</li> <li>• ATEX execution</li> <li>• Long coupled configuration</li> <li>• Different bearing / Shaft materials available</li> </ul>	<ul style="list-style-type: none"> <li>• Polypropylene - PP</li> <li>• Polyvinylidene Fluoride - PVDF</li> </ul>



» **REINFORCED CONTAINMENT SHELL**