

# Solid Block Mag Drive Centrifugal 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 sealless pumps are engineered to comply with the new environmental rules "1990 EPA Clean Air Act".

## » BENEFITS

Our Solid Block Mag Drive Plastic Centrifugal Pumps are ideal for medium-duty applications, offering a robust solution for fluid transfer.

Fabricated from solid extruded bar and block plastic materials, these pumps resist internal and external corrosion with heavy-walled, machined construction, providing superior resistance to permeation.

Ensuring zero leakages in extreme working conditions, the absence of a mechanical seal or packing gland enhances safety for both workers and the environment.



» SPECIFICATIONS

Tapflo's Solid Block Mag Drive Plastic Centrifugal Pump can maintain design head and flow for an extended running period.

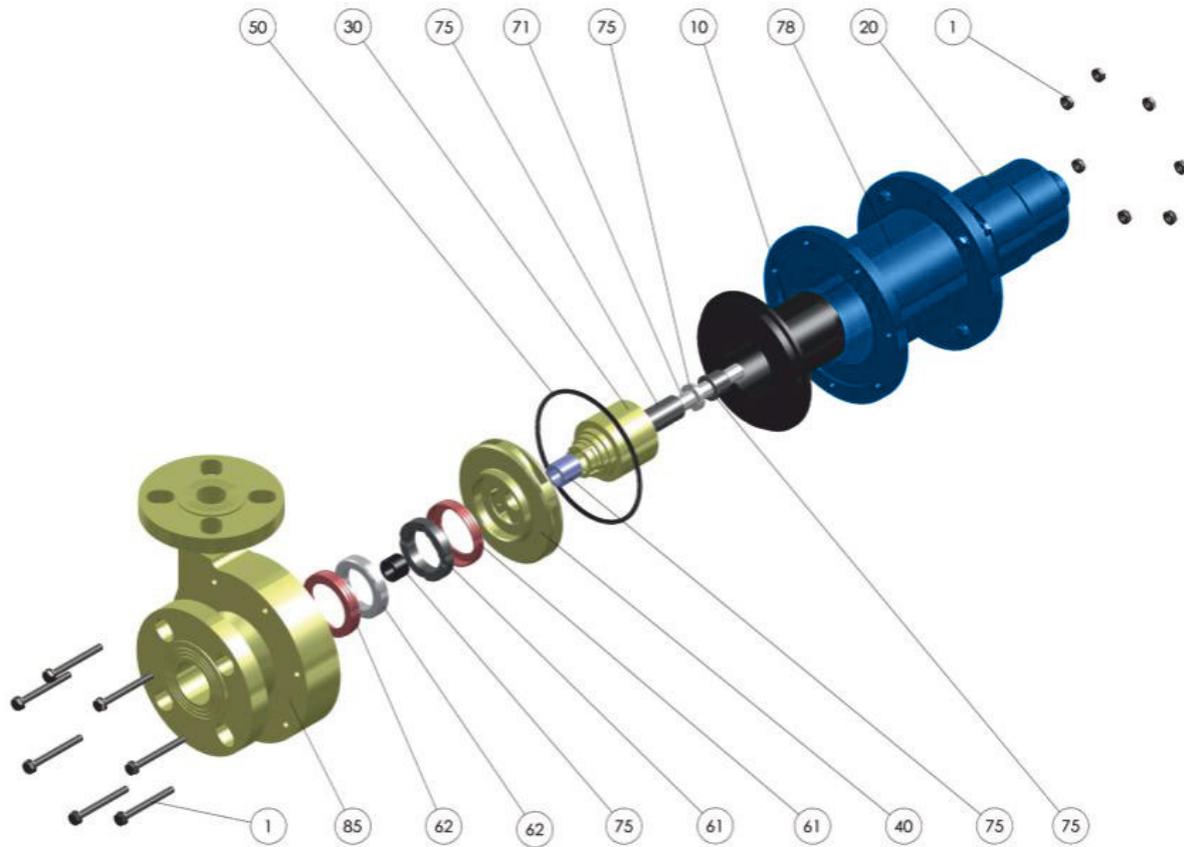
- **Materials:** Solid Extruded Bar & Block PP & PVDF
- **Max Capacity:** Up to 140m<sup>3</sup>/hr @ 50 Hz & up to 150m<sup>3</sup>/hr @ 60 Hz
- **Max Pressure:** 55m @ 50 Hz & 58m @ 60 Hz
- **Self-Priming:** No (Std.) – Self-Priming Variant available on request
- **Max Temperature:** Up to 90°C for PVDF & up to 65°C for PP
- **Max System Pressures:** 4...10 Bar



» FEATURES

- Fabricated from solid extruded bar and block plastic materials, providing resilience against internal and external corrosion
- Designed with construction features ensuring zero leakages
- Head up to 55m @ 50 Hz & up to 58m @ 60 Hz; Flow up to 140m<sup>3</sup>/hr @ 50 Hz & up to 150m<sup>3</sup>/hr @ 60 Hz
- Temperature Range: PVDF: -30°C up to 90°C & PP: -30°C up to 65°C
- Supports specific gravities up to 2 kg/dm<sup>3</sup>
- System Pressure Rating: Ranges from 4 Bar up to 10 Bar, depending on the model and material
- High Torque Neodymium Magnets
- Heavy Casing Wall Thickness
- Silicon Carbide Shaft
- Oversized, high-purity ceramic or silicon carbide (SiC) thrust bearings on request
- PTFEC chemically resistant sleeve bearings, SIC or PTFEG on request
- Modular Impeller
- Direct Starting Motors
- 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

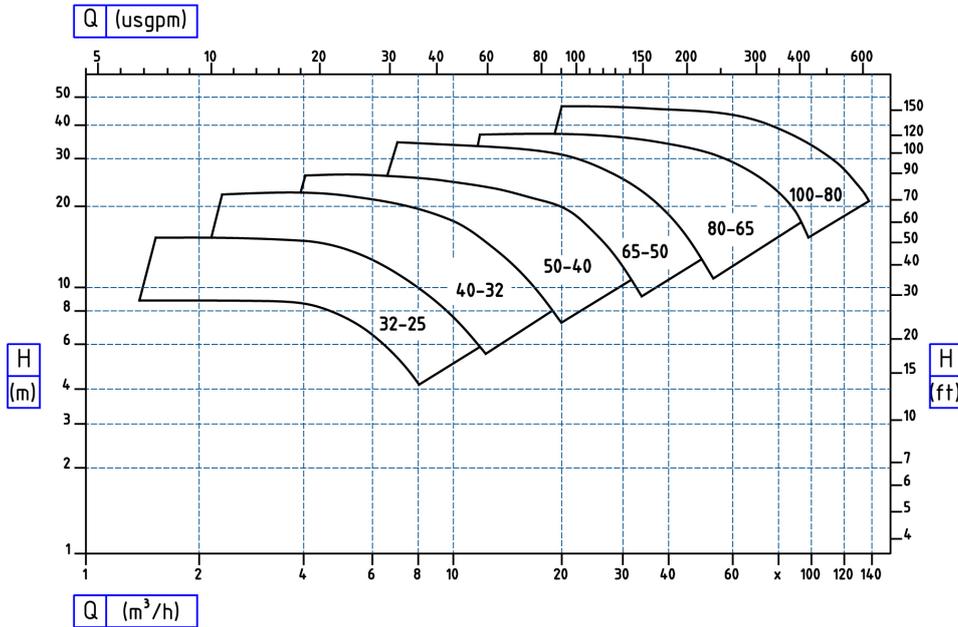




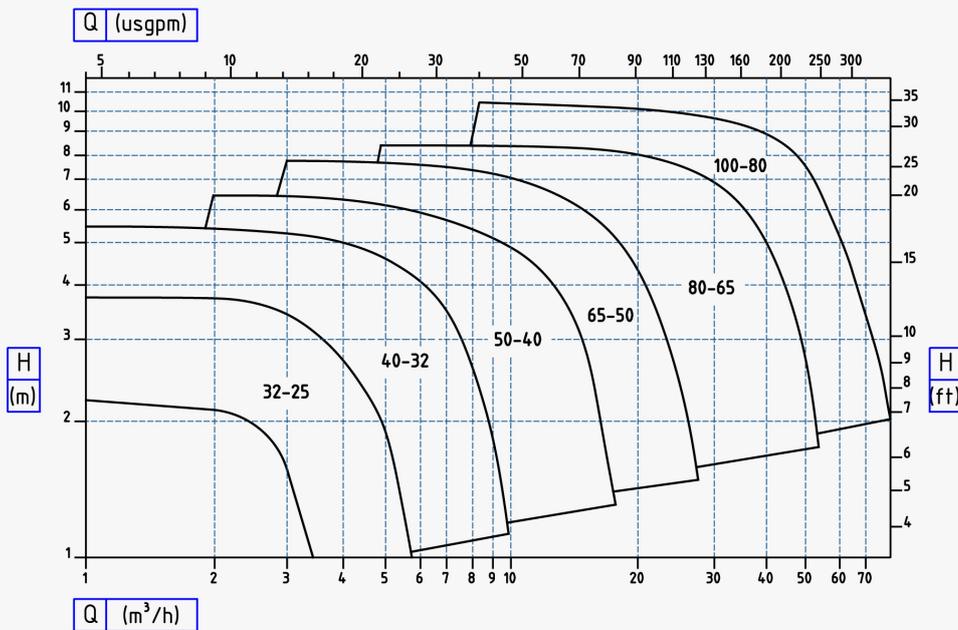
Ref.	Description	Ref.	Description
1	Screws and Bolts	61	Front Impeller Thrust Bearing and Cup
10	Containment Shell	62	Casing Thrust Bearing and Cup
20	External Magnet Ring	71	Impeller Shaft
30	Internal Magnet Ring	75	Sleeve and Stationary Bearings
40	Impeller	78	Coupling Housing
50	O-Ring	85	Pump Casing

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

## Design Curves

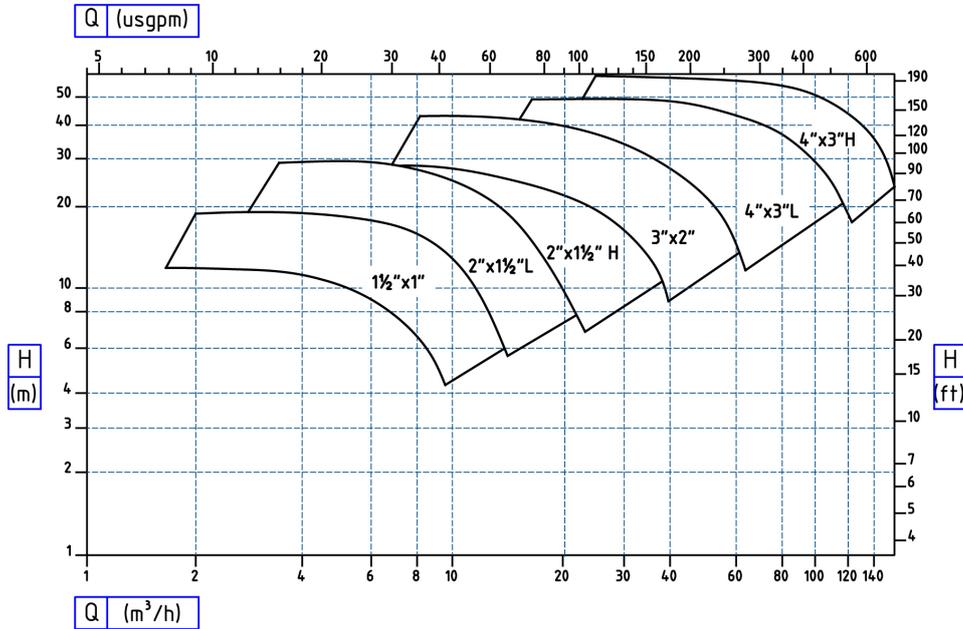


» Plastic Centrifugal Pump  
**2900 rpm 50hz**

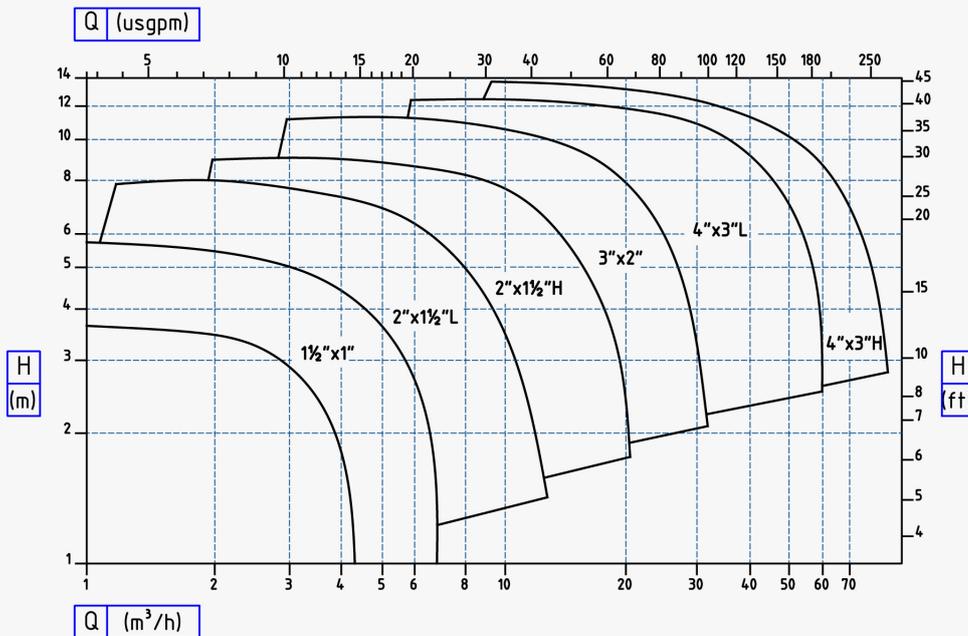


» Plastic Centrifugal Pump  
**1450 rpm 50hz**

## Design Curves

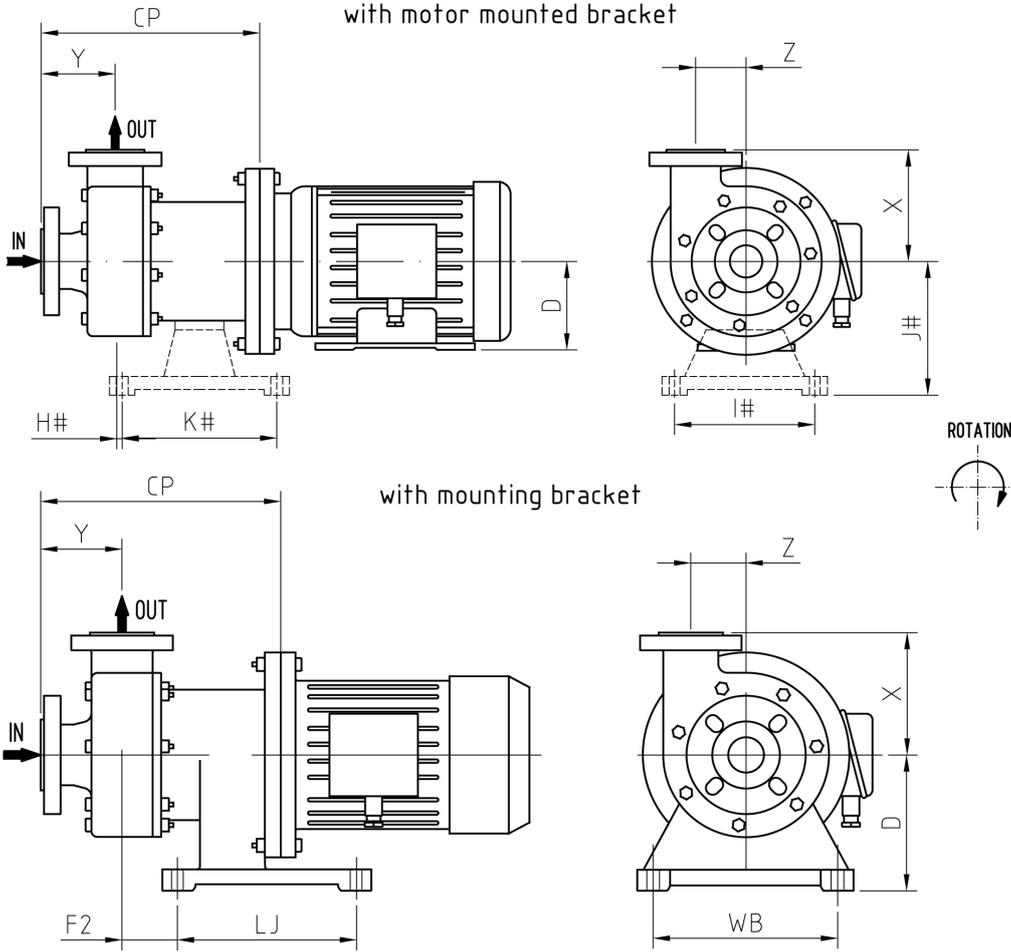


» Plastic Centrifugal Pump  
**3500 rpm 60hz**



» Plastic Centrifugal Pump  
**1750 rpm 60hz**

## Overall Dimentions



MODELS	IMP.	SUCTION FLANGE	DISCHARGE FLANGE	D	X	Y	Z	CP	F2	LJ	WB	
32-25	(mm)	101	40mm PN16 ISO/JIS	25mm PN16 ISO/JIS	89	128	76	53	235	N/A	N/A	N/A
	(in)	4.0	1.5" 150# RF ANSI	1" 150# RF ANSI	3.50	5.04	2.99	2.09	9.25	N/A	N/A	N/A
40-32	(mm)	114	50mm PN16 ISO/JIS	40mm PN16 ISO/JIS	89	149	70	58	238	N/A	N/A	N/A
	(in)	4.5	2" 150# RF ANSI	1.5" 150# RF ANSI	3.50	5.87	2.76	2.28	9.37	N/A	N/A	N/A
50-40	(mm)	114	50mm PN16 ISO/JIS	40mm PN16 ISO/JIS	89	149	84	63	255	N/A	N/A	N/A
	(in)	4.5	2" 150# RF ANSI	1.5" 150# RF ANSI	3.50	5.87	3.31	2.48	10.03	N/A	N/A	N/A
65-50	(mm)	152	80mm PN16 ISO/JIS	50mm PN16 ISO/JIS	175	171	103	73	321	59	250	220
	(in)	6	3" 150# RF ANSI	2" 150# RF ANSI	6.89	6.73	4.06	2.87	12.64	2.39	9.84	8.66
80-65	(mm)	165	100mm PN16 ISO/JIS	80mm PN16 ISO/JIS8	200	198	121	82	368	73	290	250
	(in)	6.5	4" 150# RF ANSI	3" 150# RF ANSI	7.87	7.44	4.76	3.23	14.49	2.87	11.42	9.84
100-80	(mm)	178	100mm PN16 ISO/JIS	80mm PN16 ISO/JIS	200	277	129	102	379	76	290	250
	(in)	7	4" 150# RF ANSI	3" 150# RF ANSI	7.87	8.94	5.08	4.02	14.96	2.99	11.42	9.84

# ON REQUEST ONLY

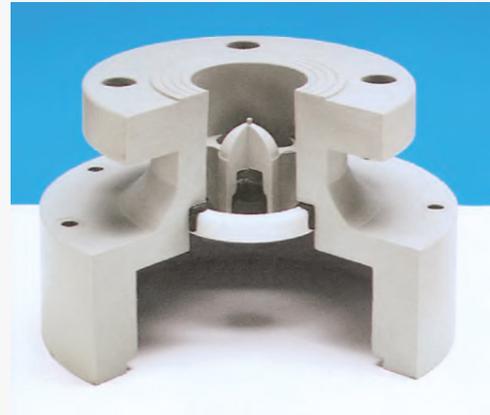
**Construction materials**

- Polypropylene - PP
- Polyvinylidene Fluoride - PVDF

**Options & special executions**

- Atex execution
- Long coupled configuration
- Different bearing / Shaft materials available

» TYPICAL CASING WALL THICKNESSES



» CENTRIFUGAL SELF-PRIMING PUMPS  
ON REQUEST ONLY

- The same basic features of Solid Block Mag Drive Plastic Centrifugal pumps apply to the Self-Priming Solid Block Mag Drive Plastic Centrifugal Pump
- Series design with the additional self-priming pump casing
- Self Priming Solid Block Mag Drive Plastic Centrifugal Pumps provide smooth continuous leak-proof operation

**SELF-PRIMING CONFIGURATION**

