

# Metal Volumetric Vane Pump



## » TECHNOLOGY, INNOVATION & RELIABILITY

Tapflo UK is a leading industrial pump manufacturer on a mission to deliver a wide range of high-quality products for various industrial and hygienic applications.

Our range of Sealless Sliding Vane Pumps is ideal for various industries, including Water Treatment, Pharmaceutical, Chemical, Petrochemical, and Refinery. Committed to environmental responsibility, Tapflo's Sealless Pumps comply with the "1990 EPA Clean Air Act," contributing to a "zero emission" mission for a sustainable future.

## » VOLUMETRIC VANE PUMP BENEFITS

Tapflo Metal Volumetric Vane Pumps are designed and built for consistent low flow and high head, self regulating applications. All Tapflo pumps, due to the construction features, ensure zero leakages even under extreme working conditions.

The absence of mechanical seals or packing glands eliminates dangerous emissions in order to protect the environment and workers.

## » FEATURES

- Sealless in design, ensuring zero leakages even in extreme conditions
- Maintains head/flow during extended running periods
- Dry self-priming up to 2.5m of water
- Easily replaceable carbon cartridge
- Fully encapsulated external magnet
- Bronze Rub ring standard on coupling housing
- No metal-to-metal contact, no internal slip
- Heavy-duty machined pressure parts
- Possibility to run with a frequency converter.
- These pumps are designed for ATEX regulation category II 2 G C T2-T6

## » SPECIFICATIONS

Tapflo Volumetric Vane Pumps can maintain design head and flow for during an extended running periods due to their self compensating carbon vanes. Volumetric Vane Pumps are suitable for thin non lubricating mediums eliminates pressure drop and without rapid wear of carbon parts.

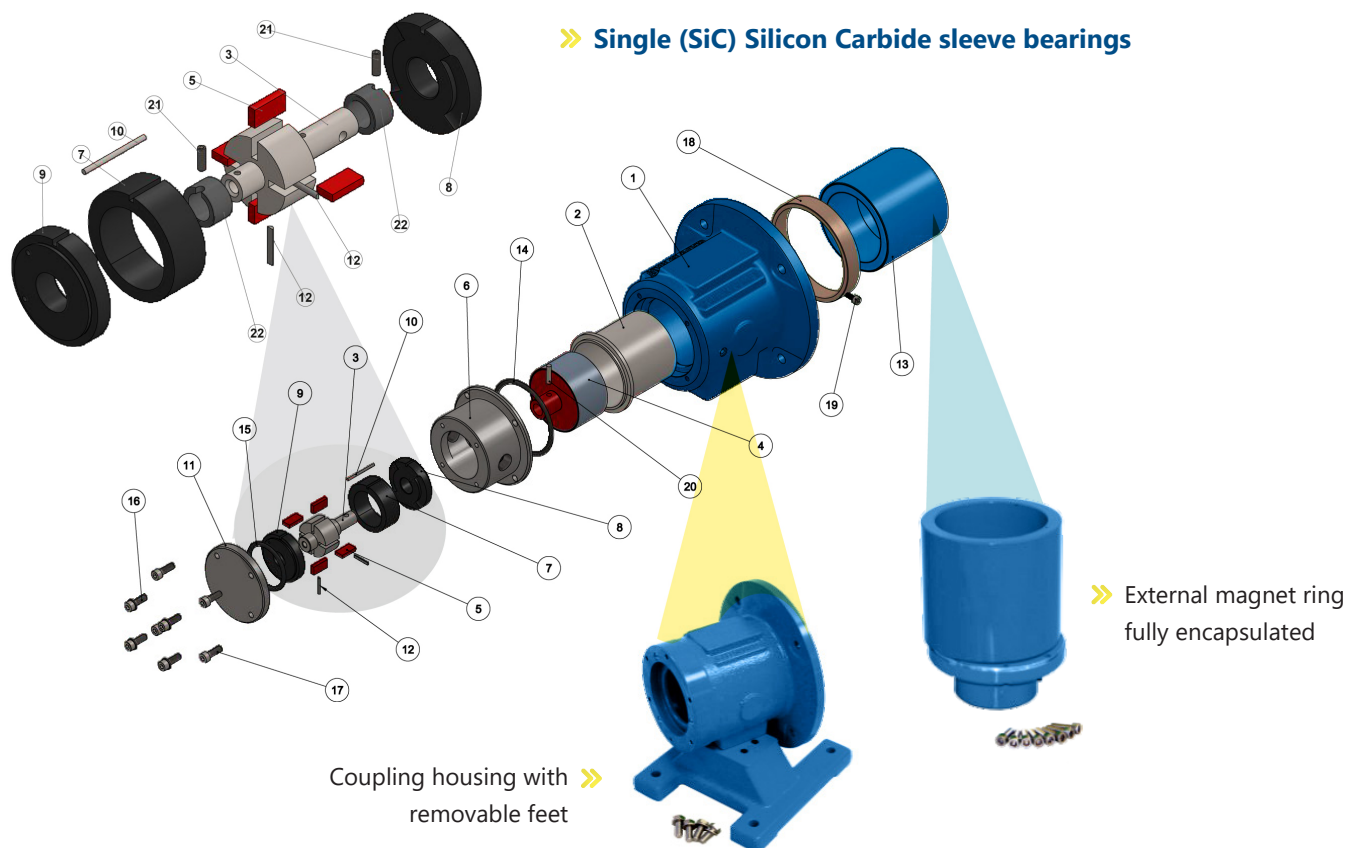
- Dry self-priming up to 2,5m (8 feet) of water
- Temperature range -100°C (-148 °F) up to +250°C (480°F)
- Specific gravities up to 2 kg/dm<sup>3</sup>
- Viscosities up to 2000 cPs (8 poles motor)
- System pressure rating 25 Bar (350 PSI) special design over 670 Bar (9720 PSI)



## » INDUSTRIES & APPLICATIONS

- Water Treatment
- Pharmaceutical
- Chemical
- Petrochemical
- Refinery
- Biofuels
- Pulp & Paper
- Municipal (scrubber system)
- Mechanical Seal Flushing
- Hydrocarbon Precessing/Refining
- Pilot Plants
- Refineries Sampling

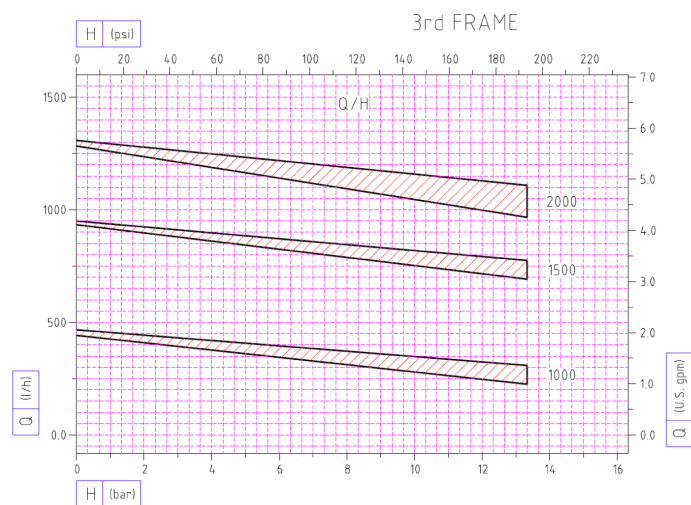
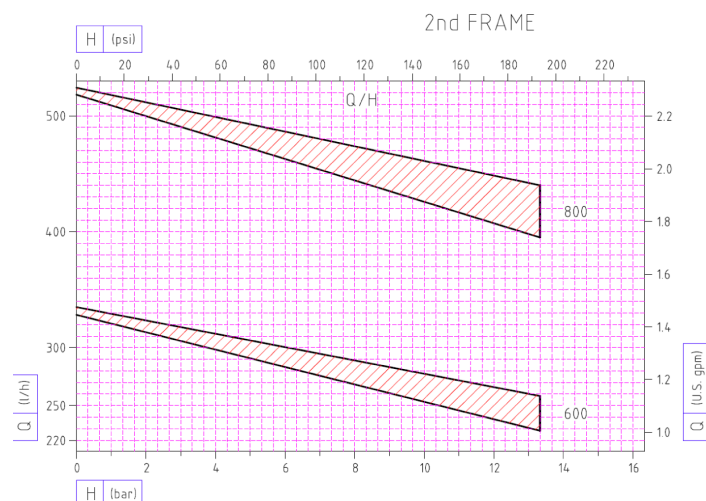
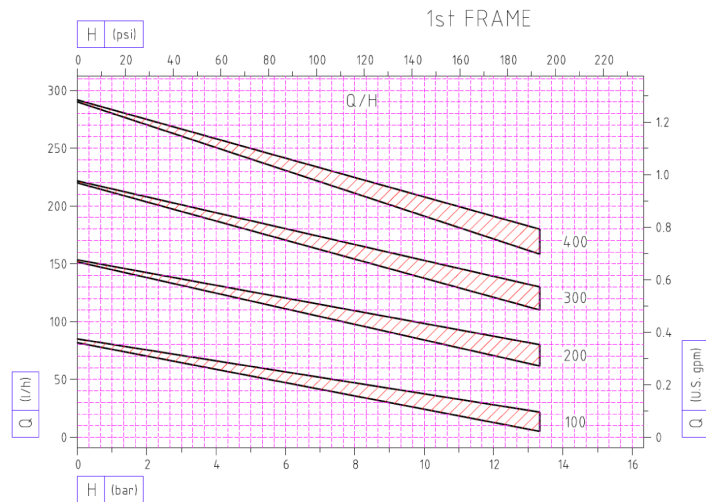




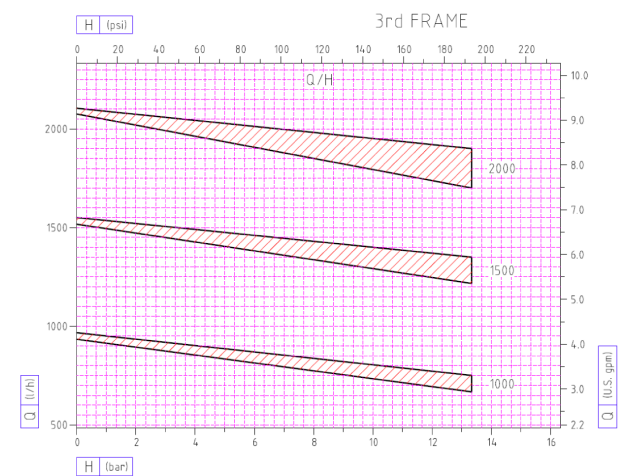
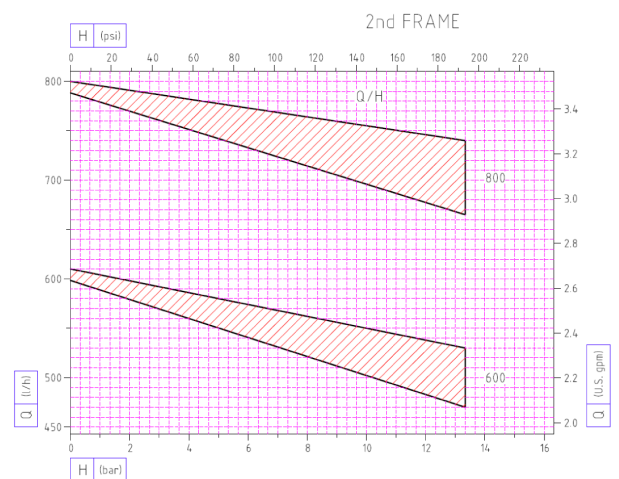
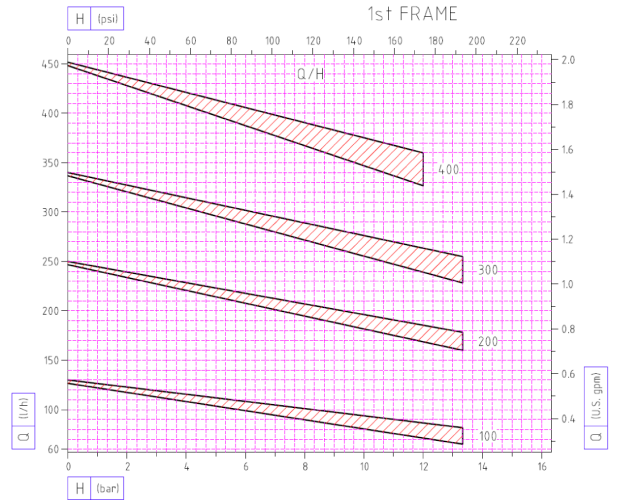
Ref.	Description	Ref.	Description
1	Coupling housing	13	External magnet ring
2	Containment shell	14	Rear O-Ring
3	Rotor shaft	15	Front O-Ring
4	Internal magnet ring	16	End cover screw
5	Vane	17	Pump casing screw
6	Pump casing	18	Rub ring
7	Stator ring carbon	19	Rub ring screw
8	Rear flange carbon	20	Inner magnet pin
9	Front flange carbon	SINGLE SIC BRGS	
10	Alignment pin	21	Bearing grub screw
11	End cover	22	SiC bearing
12	Vane pin		

# Design Curves

» 950 rpm 50hz



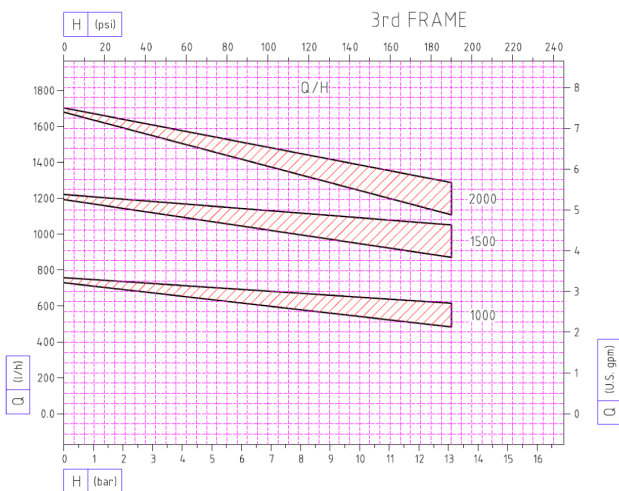
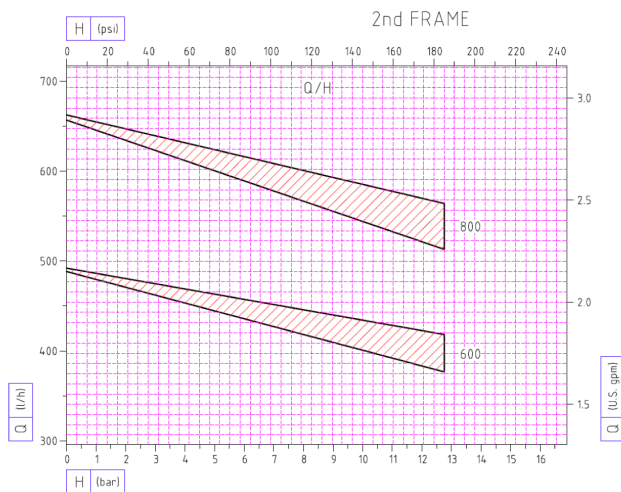
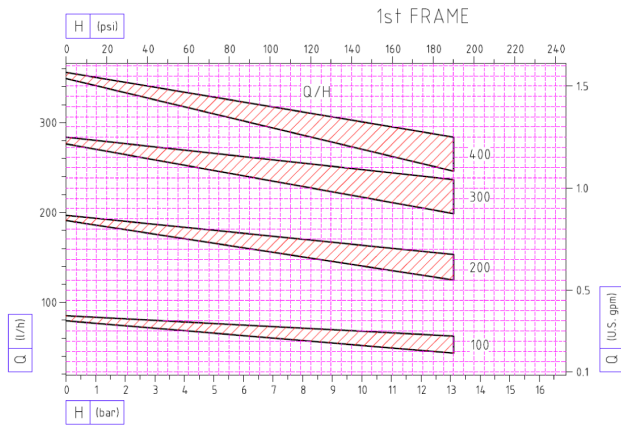
» 1450 rpm 50hz



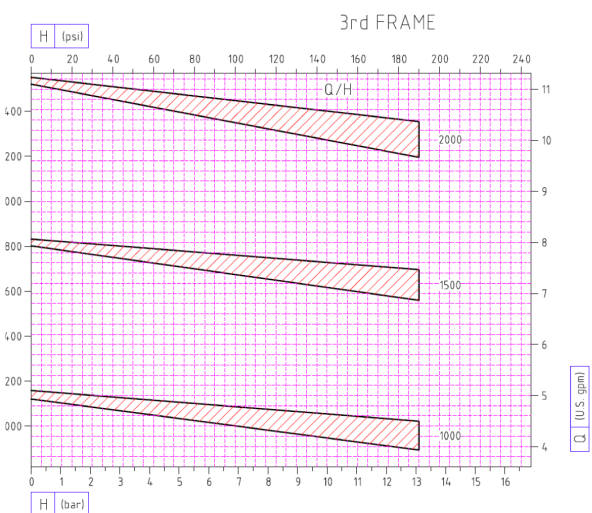
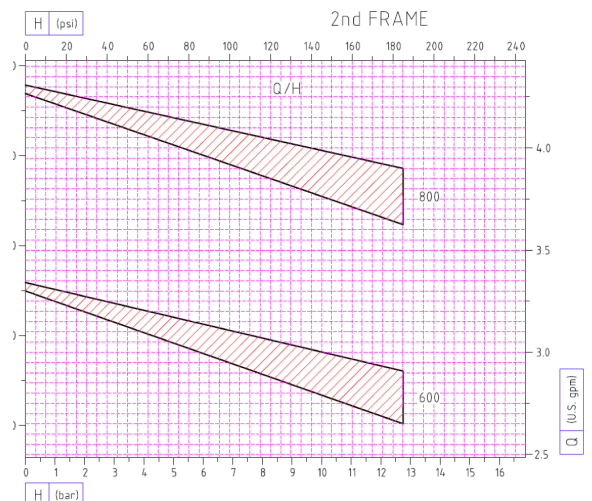
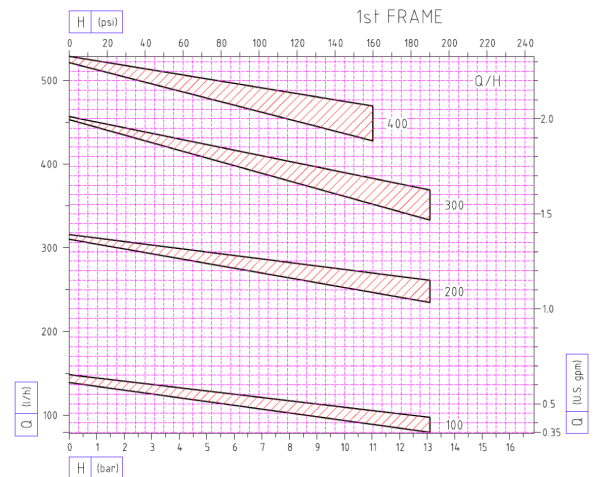


# Design Curves

## » 1150 rpm 60hz

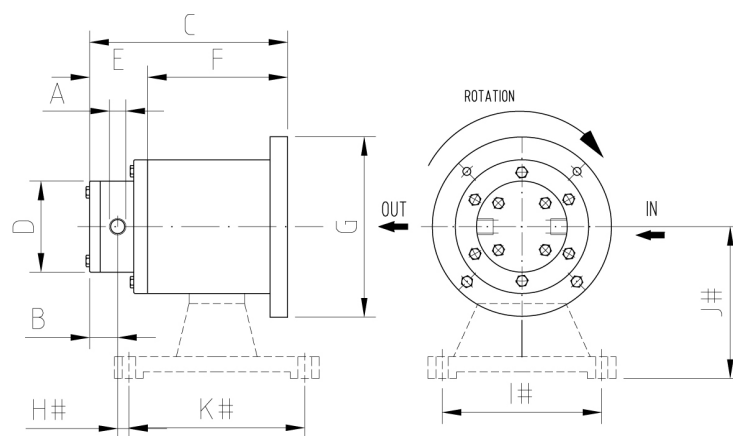


## » 1750 rpm 60hz



# Overall Dimentions

Construction materials	
<ul style="list-style-type: none"> <li>• Stainless Steel SS316L</li> <li>• Incoloy 825™</li> <li>• Alloy 20™</li> <li>• Hastelloy C-276™</li> <li>• Duplex</li> <li>• Titanium</li> <li>• Other materials on request</li> </ul>	



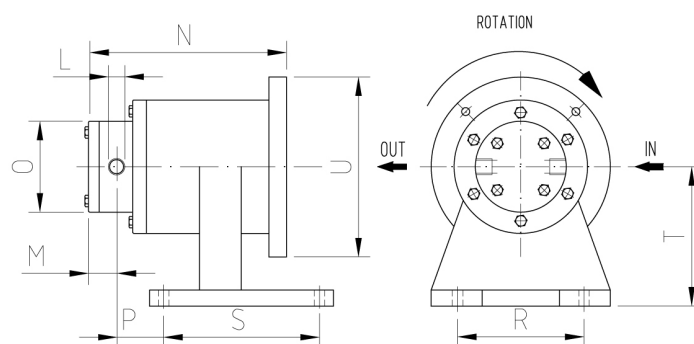
1° FRAME

# ON REQUEST ONLY

PUMPS 100 200 300 400												mm
A	B	C	D	E	F	G	H	I	J	K		inches
3/8"FPT	26	153	70	48	105	140	160	4	140	117	160	WEIGHT
3/8"NPT	1"	6"	2"3/4	1"7/8	4"1/8	5"1/2	6"1/4	0.157"	5.512"	4.606"	6.3"	3,5Kg
												lbs7

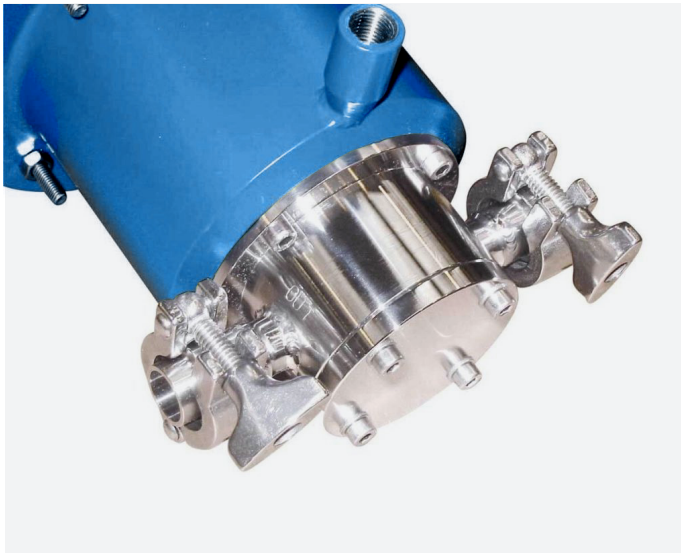
2° FRAME

PUMPS 600 800											mm
A	B	C	D	E	F	G	H	I	J	K	inches
1/2"FPT	36	204	95	66	138	200	44.2	140	126	160	WEIGHT
1/2"NPT	1"3/8	8"	3"3/4	2"5/8	5"1/2	7"7/8A	1.74"	5.512"	4.96"	6.3"	6Kg
											lbs12



3° FRAME

PUMPS 1000 1500 2000										mm
L	M	N	O	P	R	S	T	U		inches
3/4"FPT	47	256	123	90	155	192	134	200		WEIGHT
3/4"NPT	1"7/8	10"	4"7/8	3"1/2	6"1/8	7"1.2	5"1/4	7"7/8		14Kg
										lbs28



**Complete pump polished with tri-clamp connections for sanitary applications.** All wetted parts polished with surface roughness less than 0,6 µm Ra.



**High Pressure Variation** – Design pressure 710 Bar (10298 PSI) with hydrotest 1064 Bar (15433 PSI) –Material Superduplex SAF 2507.



**Complete pumps for Polyurethane application** – Silicon carbide sleeves – Material SS316L.

## OPTIONS & SPECIAL EXECUTIONS

- Flanged ports ISO / ANSI
- Tri-clamp ports
- High temperature design
- Low temperature design
- High pressure design
- Special polished finishing
- Hygienic design
- Jacketed coupling housing
- Jacketed end cover