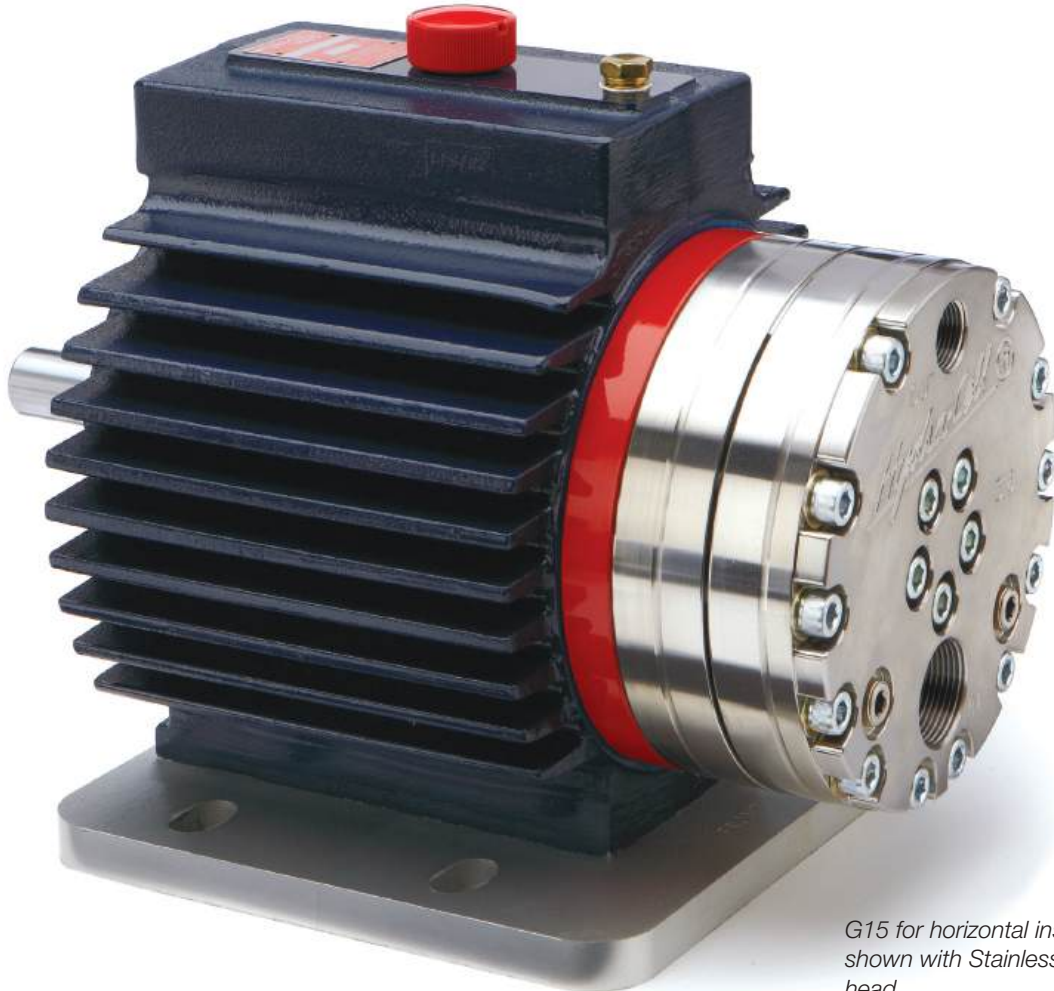


# G15 & G17 PRO SERIES

Maximum Flow Rate: 58.7 l/min (15.5 USgpm)  
Maximum Pressure: 172 bar (2500 psi) for Metallic Pump Heads

## **WANNER™ HYDRA-CELL® PRO** SEAL-LESS PUMP TECHNOLOGIES



*G15 for horizontal installations  
shown with Stainless Steel pump  
head.*

### **A higher standard of pump performance and energy efficiency.**

- Integrates **Wanner Hydra-Cell® Pro** seal-less pump technologies for the highest levels of volumetric and energy efficiencies, up to 90% across the full rpm range.
- Reliably handles a wide range of viscosities and shear sensitivities, corrosive liquids, abrasives, slurries and suspended solids.
- No mechanical dynamic seals, packing, or cups to leak, wear or replace – reduces maintenance, costs and downtime.
- Can run dry indefinitely without damage to the pump.
- Seal-less design API 674 pumps that also exceed API 675 standards for accuracy, linearity and repeatability.
- Pumped media is 100% contained – prevents degradation, contamination and environmental risks.
- Patented ADPC (Advanced Diaphragm Position Control) and hydraulic oil management system protect diaphragms under closed or restricted inlet conditions.
- Reduced ownership costs – acquisition, operation, service, maintenance, and energy use.



# G15 & G17 Pro Series | Performance

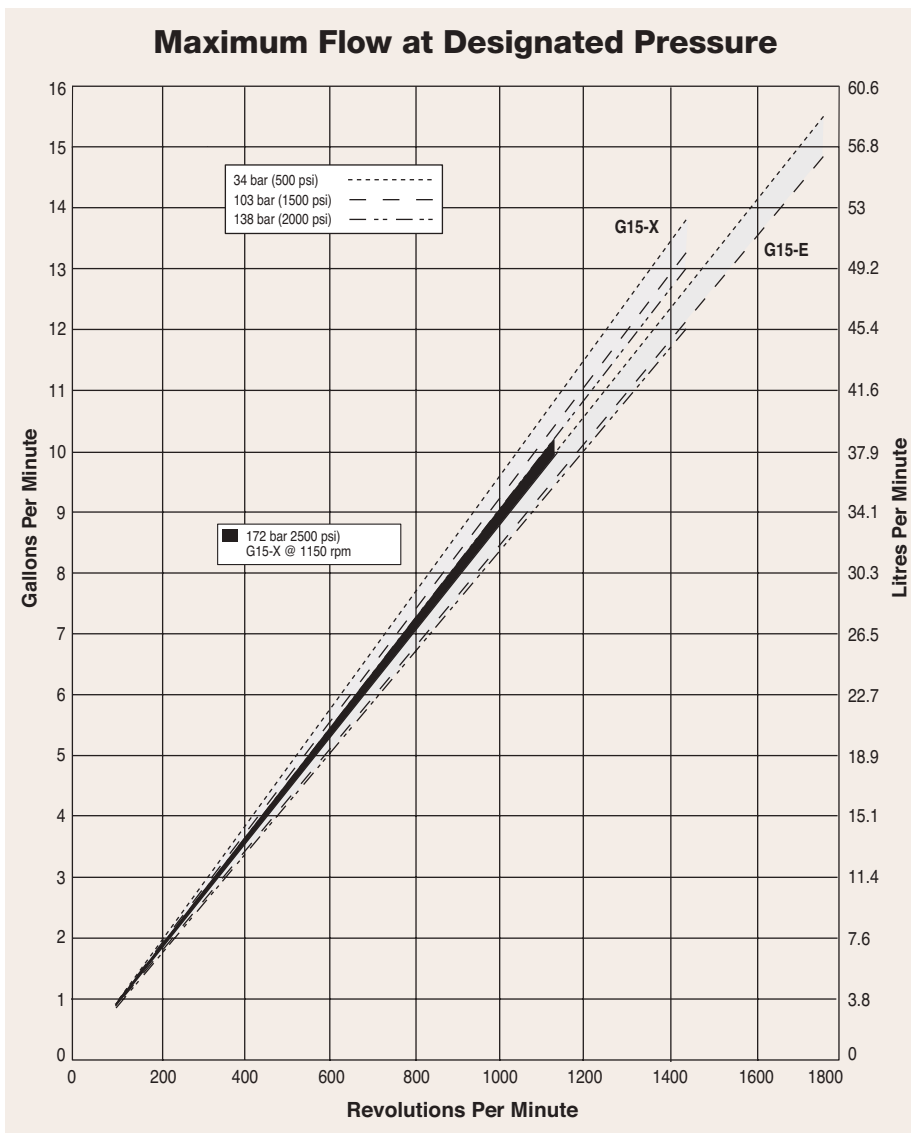
## Capacities

Model	Max. Input rpm	Max. Flow Capacities		Max. Inlet Pressure		Max. Discharge Pressure	
		l/min	USgpm	bar	psi	bar	psi
G15/G17-X	1450	52.2	13.8	34	500	34	500
	1450	50.2	13.3	34	500	103	1500
	1450	49.2	13.0	34	500	138	2000
	1150	38.1	10.1	34	500	172	2500
G15-E	1750	58.7	15.5	34	500	34	500
	1750	56.2	14.8	34	500	103	1500
	1450	45.5	12.0	34	500	138	2000

Performance and specification ratings apply to G15 configurations unless specifically noted otherwise.

## Metering & Dosing

API 675 Performance Characteristics of Steady State Accuracy  $\pm 1\%$ , Linearity  $\pm 3\%$  and Repeatability  $\pm 3\%$  can be achieved at speeds up to 1150 rpm and pressures up to 172 bar (metallic pump heads) or speeds up to 1440 rpm and pressures up to 138 bar (metallic pump heads) for X-cam pumps only.



- True positive displacement pumping action achieves overall efficiency of  $>90\%$ , targeting improvements at lower speeds and higher pressures.

Due to the Wanner Engineering Continuous Improvement Program, specifications and other data are subject to change.

# G15 & G17 Pro Series | Specifications

## Flow Capacities (4-pole Motor @ 50 Hz)

Model	@ max rpm	bar	psi	l/min	USgpm
G15-X	1450	34	500	52.3	13.8
	1450	103	1500	50.2	13.3
	1450	138	2000	49.2	13.0
	1150	172	2500	38.1	10.1
G15-E	1750	34	500	58.7	15.5
	1750	103	1500	56.2	14.8
	1450	138	2000	45.5	12.0

## Delivery

Model	bar	psi	litres/rev	gal/rev
G15-X	34	500	0.0360	0.0095
	103	1500	0.0346	0.0092
	138	2000	0.0339	0.0090
	172	2500	0.0331	0.0088
G15-E	34	500	0.0335	0.0089
	103	1500	0.0321	0.0085
	138	2000	0.0314	0.0083

## Maximum Discharge Pressure

Metallic Heads:	103 bar (1500 psi) @1750 rpm (G15-E only)
	138 bar (2000 psi) @1450 rpm
	172 bar (2500 psi) @1150 rpm

## Maximum Inlet Pressure

34 bar (500 psi)

## Maximum Operating Temperature

Metallic Heads: 121°C (250°F) - Consult factory for correct component selection for temperatures from 71°C (160°F) to 121°C (250°F).

## Calculating Required Power

$$\frac{80 \times \text{rpm}}{63,000} + \frac{\text{gpm} \times \text{psi}}{1,460 - \left(\frac{\text{psi} - 500}{20}\right)} = \text{electric motor hp}^*$$

$$\frac{80 \times \text{rpm}}{84,428} + \frac{\text{l/min} \times \text{bar}}{511 - \left(\frac{\text{bar} - 35}{4}\right)} = \text{electric motor kW}^*$$

\*rpm equals pump shaft rpm. HP/kW is required application power. Use caution when sizing motors with variable speed drives.

### Attention!

When using a variable frequency drive (VFD) controller, calculate the hp or kW at minimum and maximum pump speed to ensure the correct hp or kW motor is selected. Note that motor manufacturers typically de-rate the service factor to 1.0 when operating with a VFD.

## Calculating Pulley Size

$$\frac{\text{motor pulley OD}}{\text{pump rpm}} = \frac{\text{pump pulley OD}}{\text{motor rpm}}$$

**Maximum Solids Size** 500 microns

**Inlet Port** 1-1/4 inch BSPT  
1-1/4 inch NPT

**Discharge Port** 3/4 inch BSPT  
3/4 inch NPT

**Shaft Diameter** 28.58 mm (1-1/8 inch)

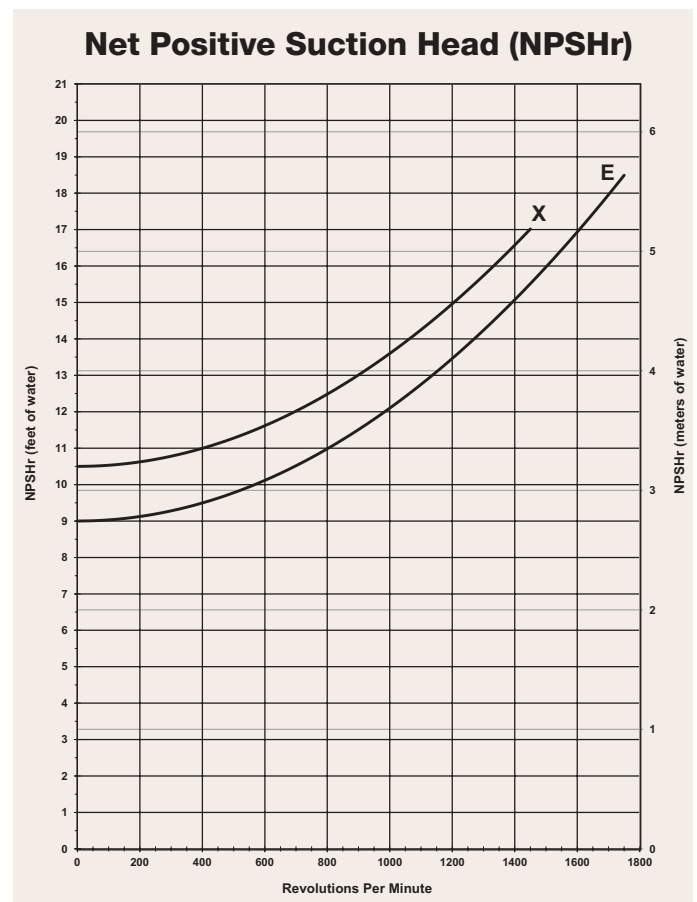
**Shaft Rotation** Reverse (bi-directional)

**Bearings** Tapered roller bearings

**Oil Capacity** 2.1 litres (2.2 US quarts)

## Weight

Metallic Heads: 66 kg (145 lbs.)

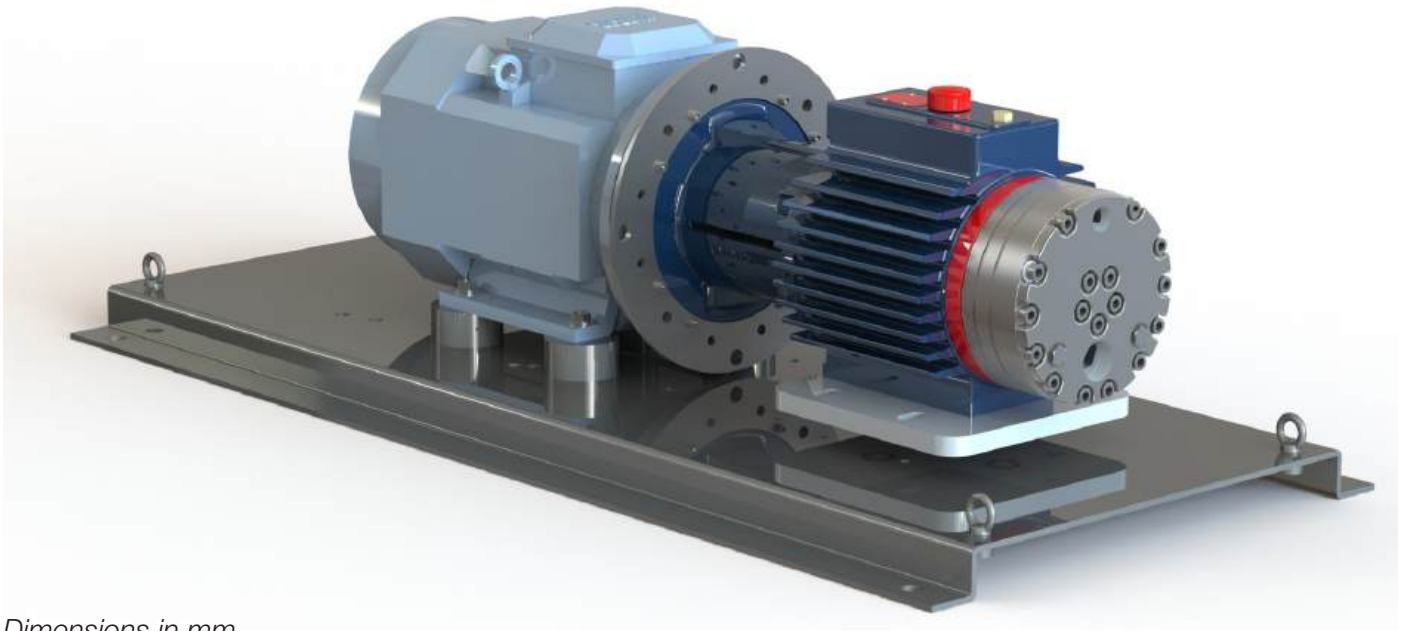


## Suction Lift

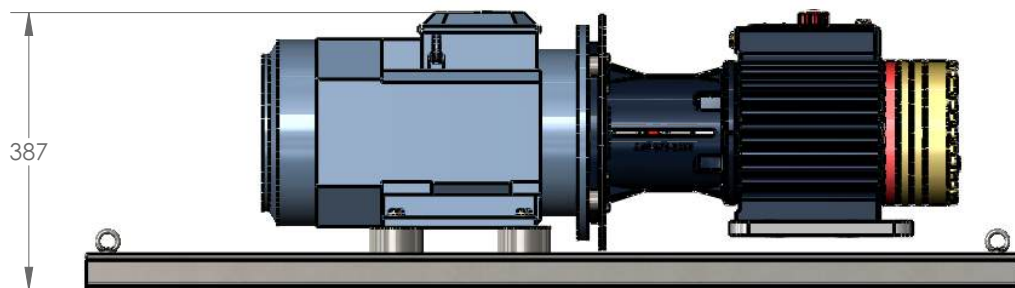
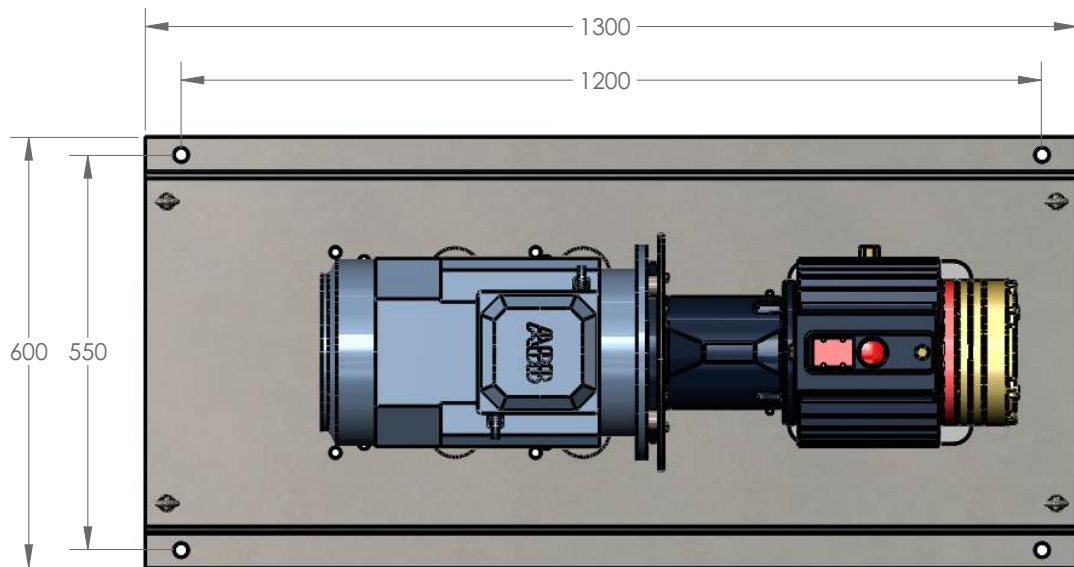
Each Hydra-Cell pump has different lift capability depending on model size, cam angle, speed, and fluid characteristics. To ensure that your specific lift characteristics are met, refer to the inlet calculations regarding friction, and acceleration head losses in your Hydra-Cell Product Manual. Compare those calculations to the NPSHr curves above.

Due to the Wanner Engineering Continuous Improvement Program, specifications and other data are subject to change.

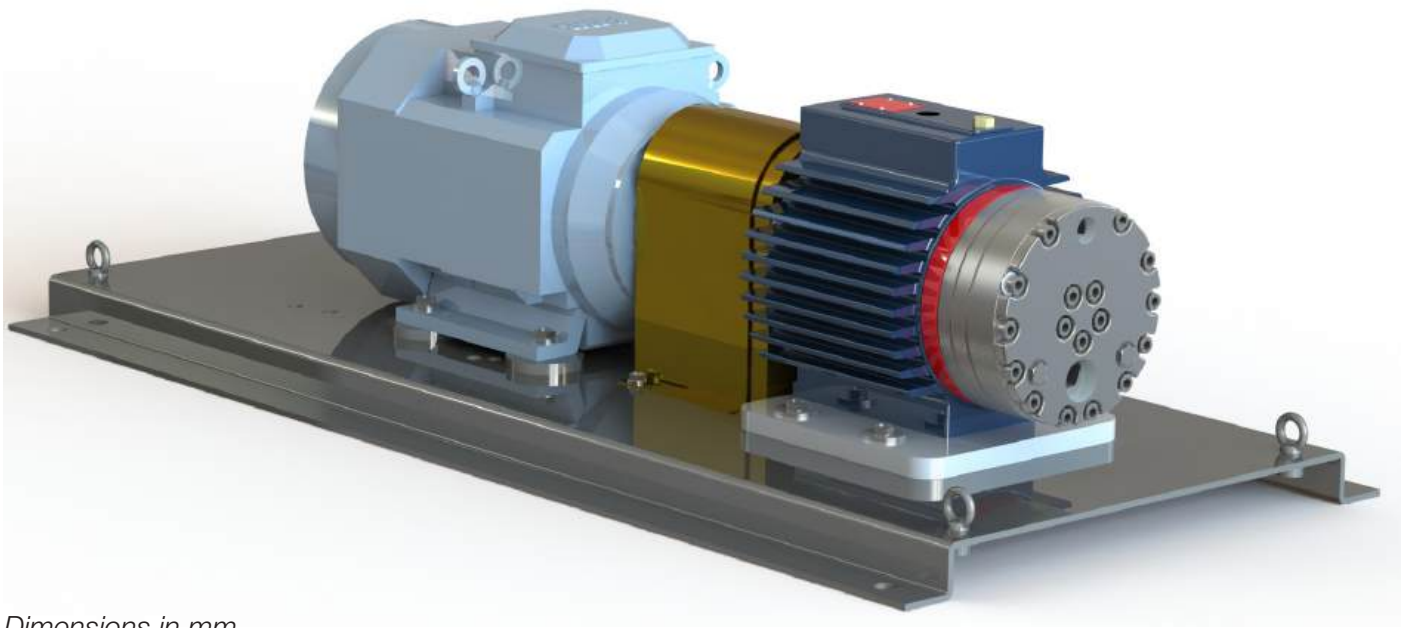
## Baseplate Assembly with Motor Adaptor for IEC 132 Motor Frame



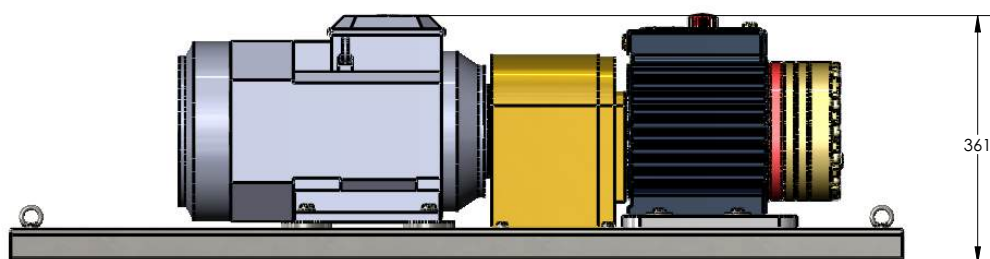
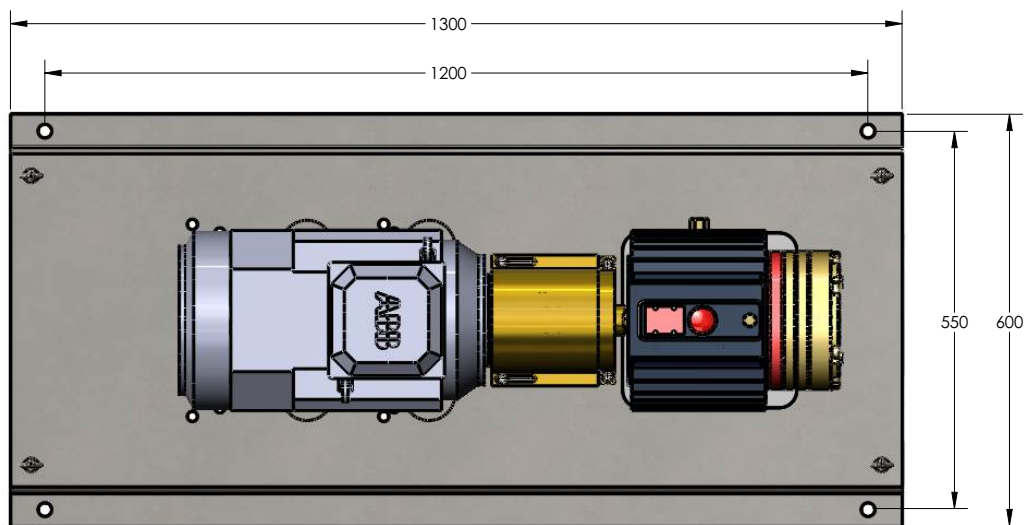
Dimensions in mm



## Baseplate Assembly with Long-coupled for IEC 132 Motor Frame

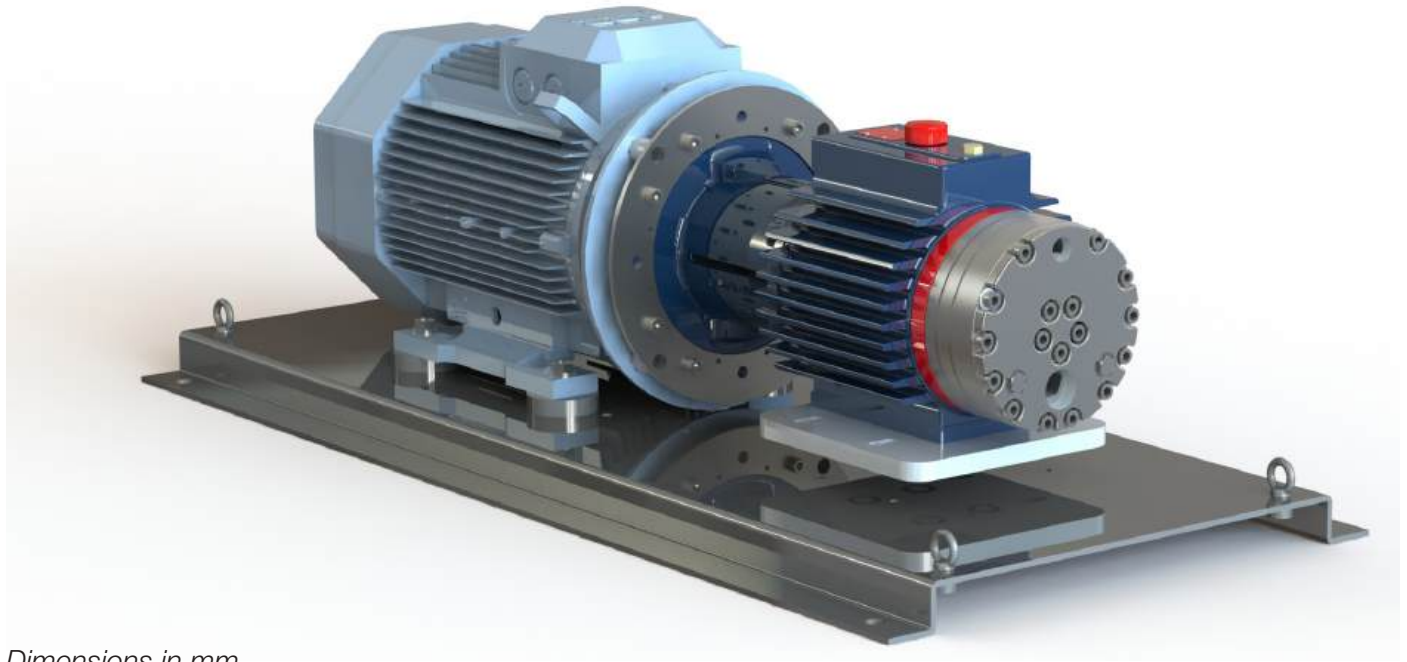


Dimensions in mm

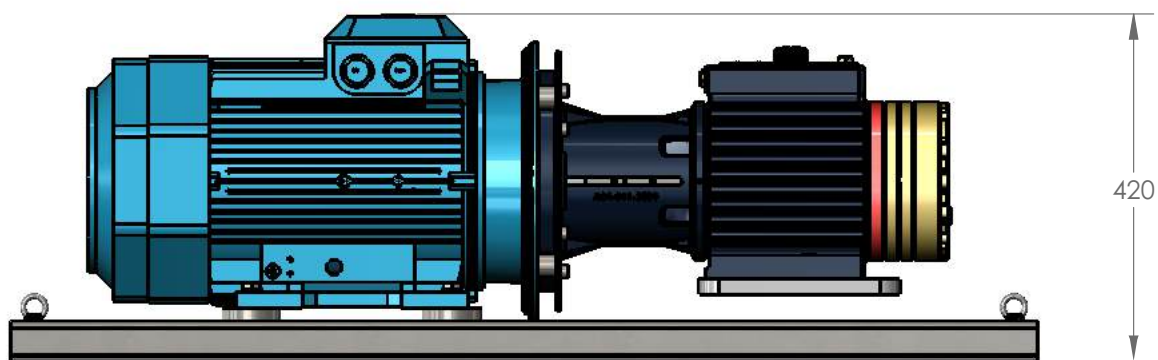
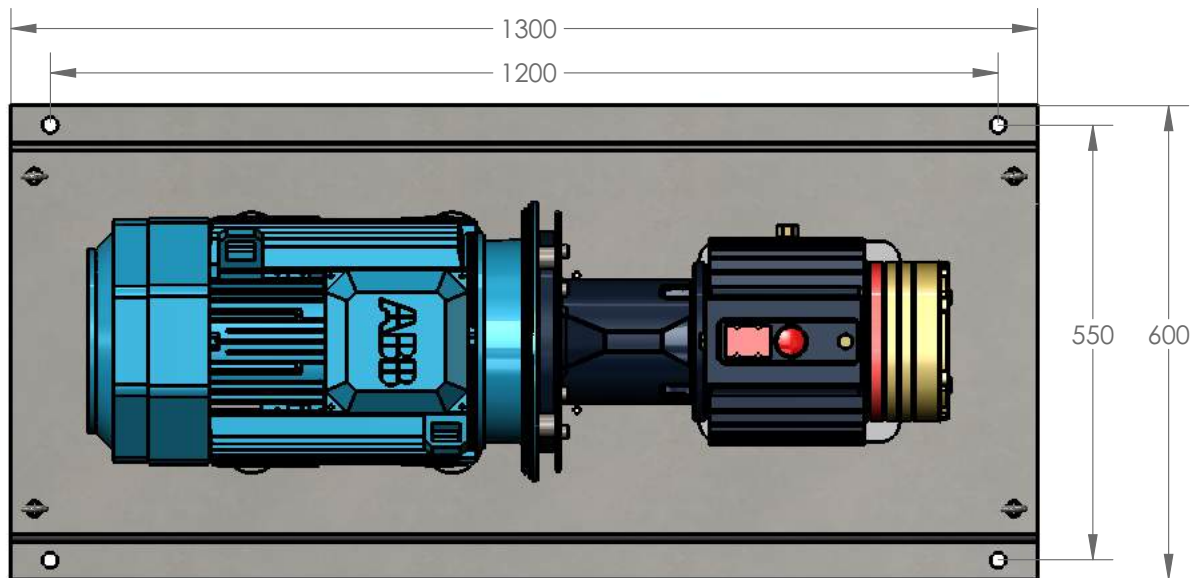




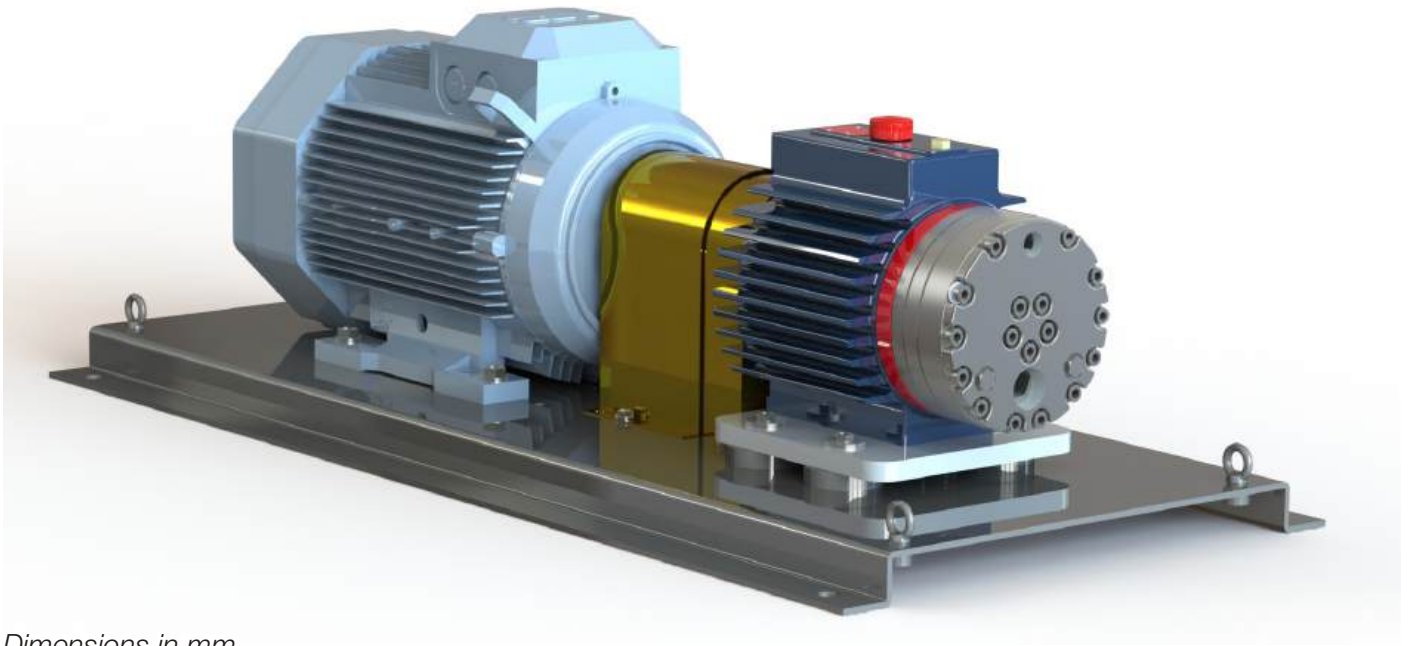
## Baseplate Assembly with Motor Adaptor for IEC 160 Motor Frame



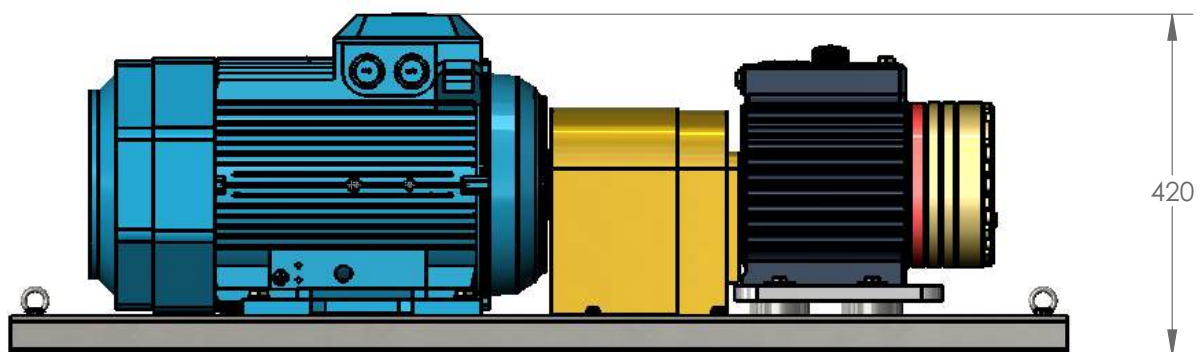
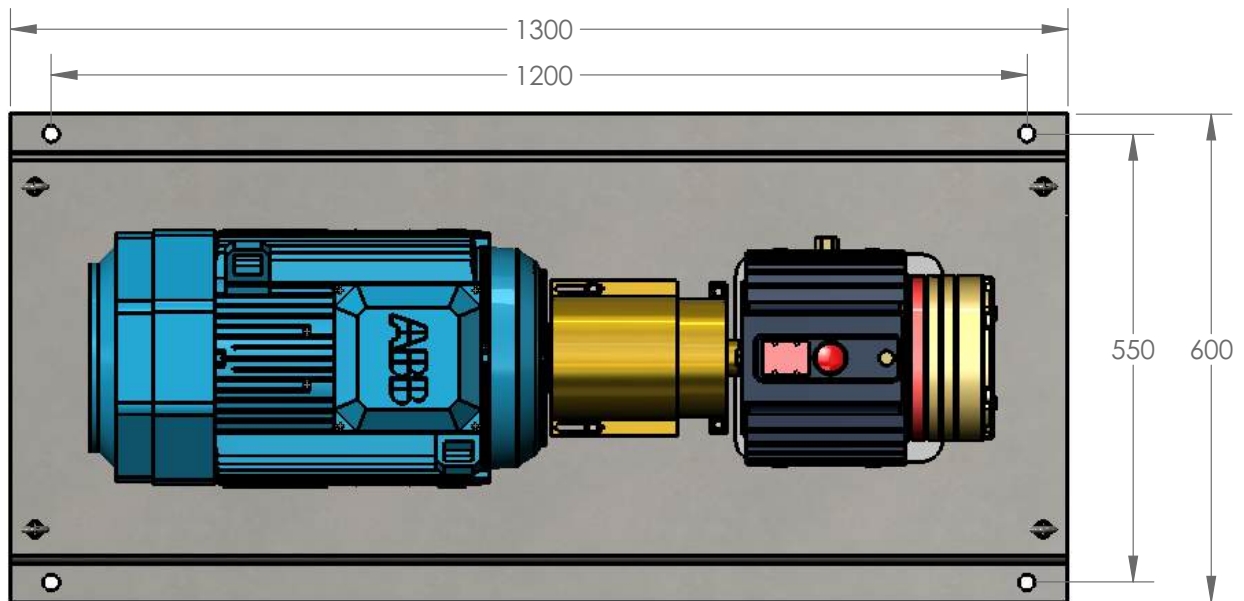
Dimensions in mm



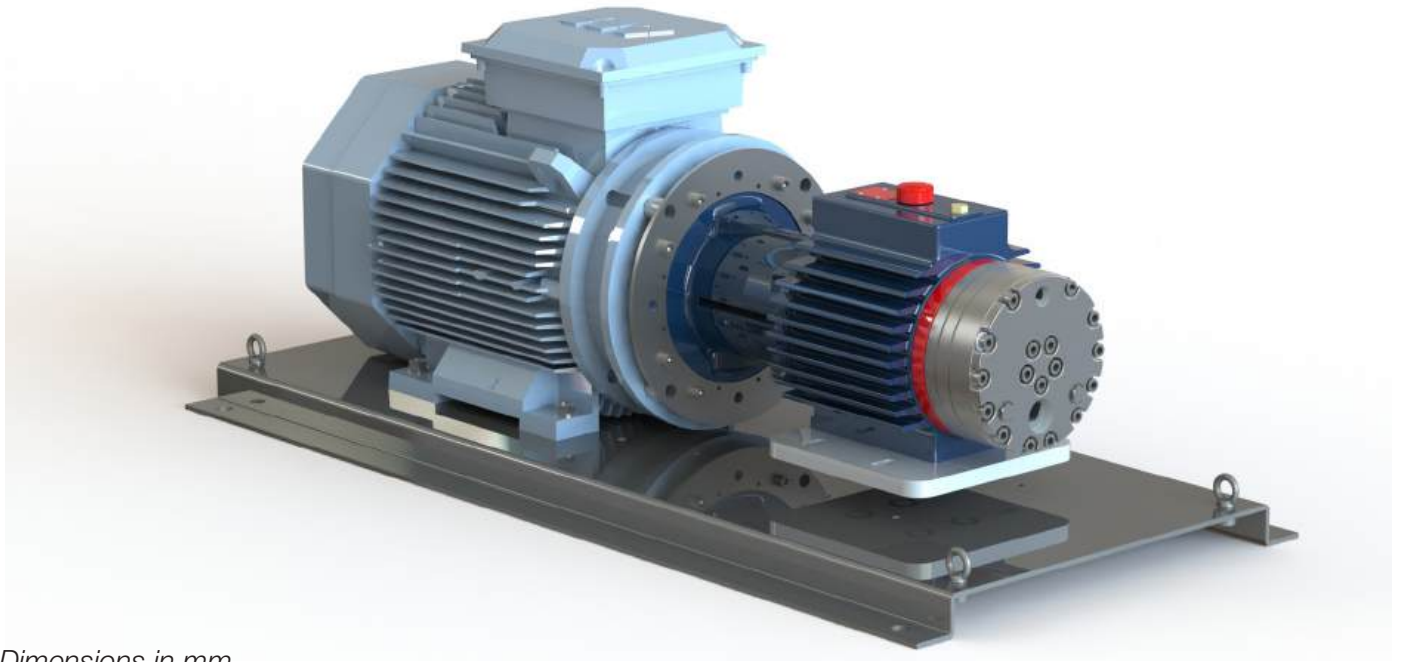
## Baseplate Assembly Long-coupled for IEC 160 Motor Frame



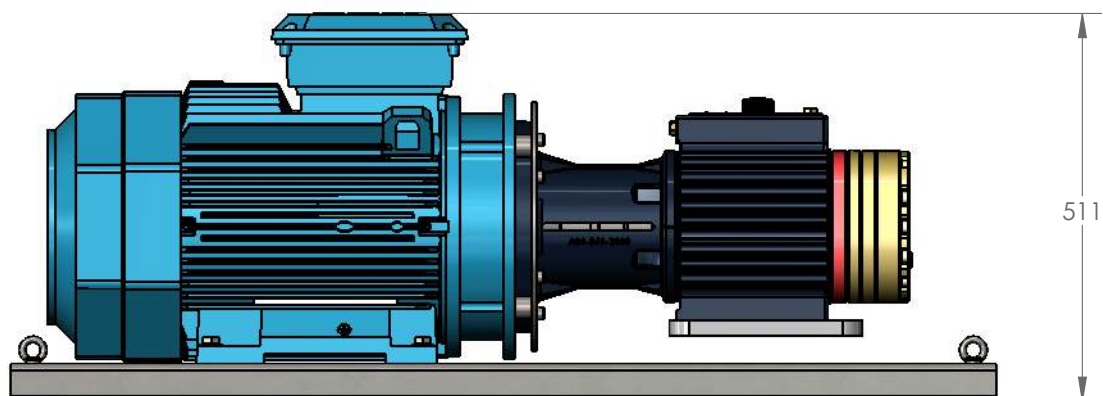
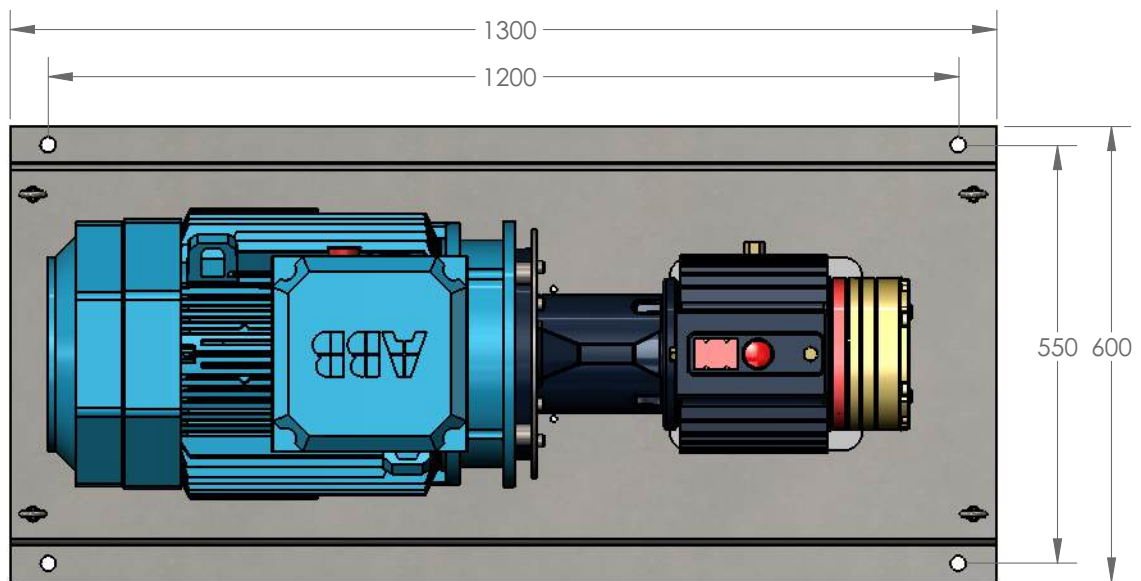
Dimensions in mm



## Baseplate Assembly with Motor Adaptor for IEC 180 Motor Frame

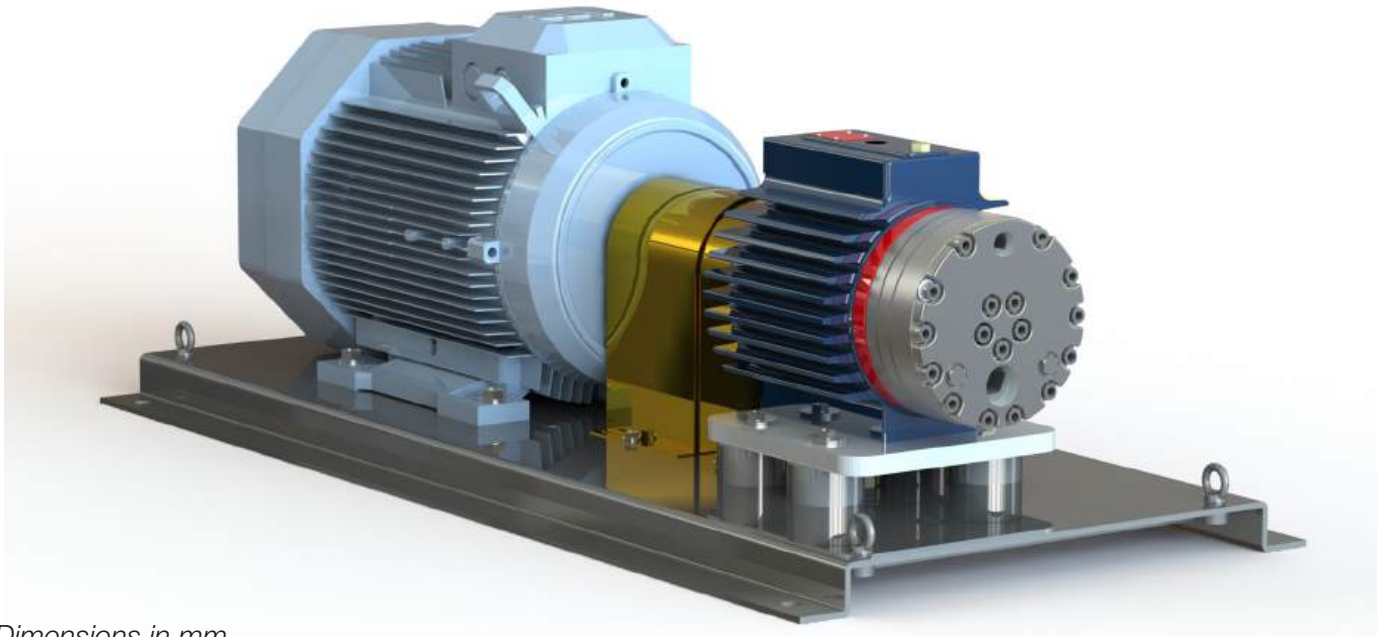


Dimensions in mm

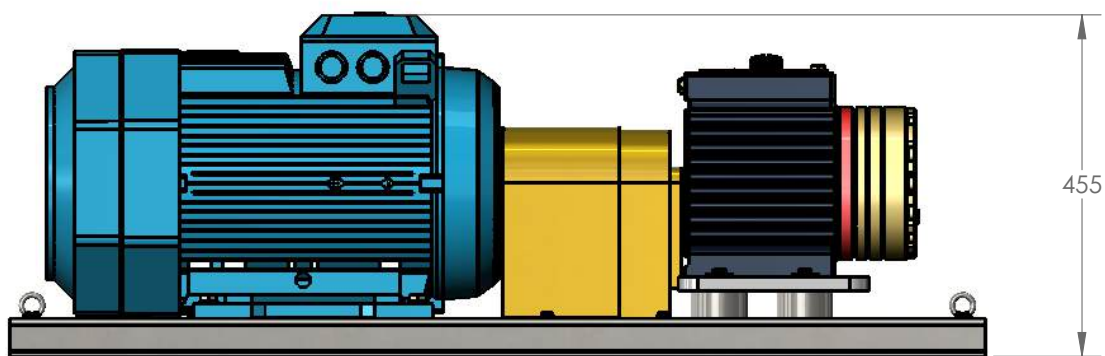
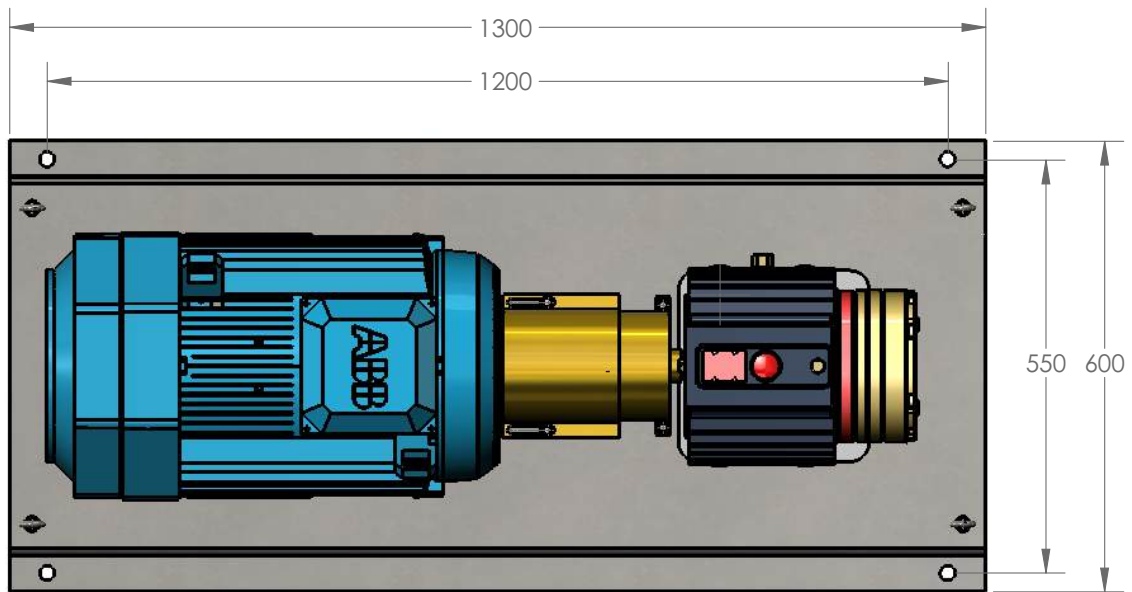




## Baseplate Assembly Long-coupled for IEC 180 Motor Frame

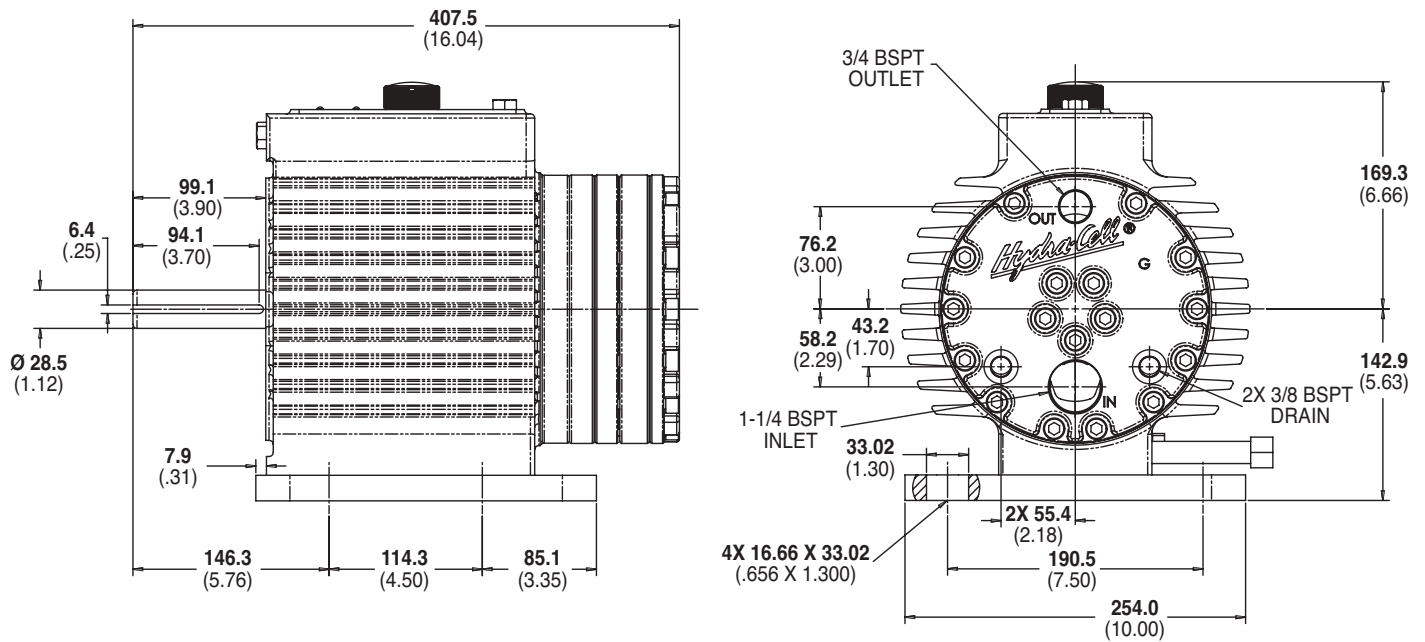


Dimensions in mm

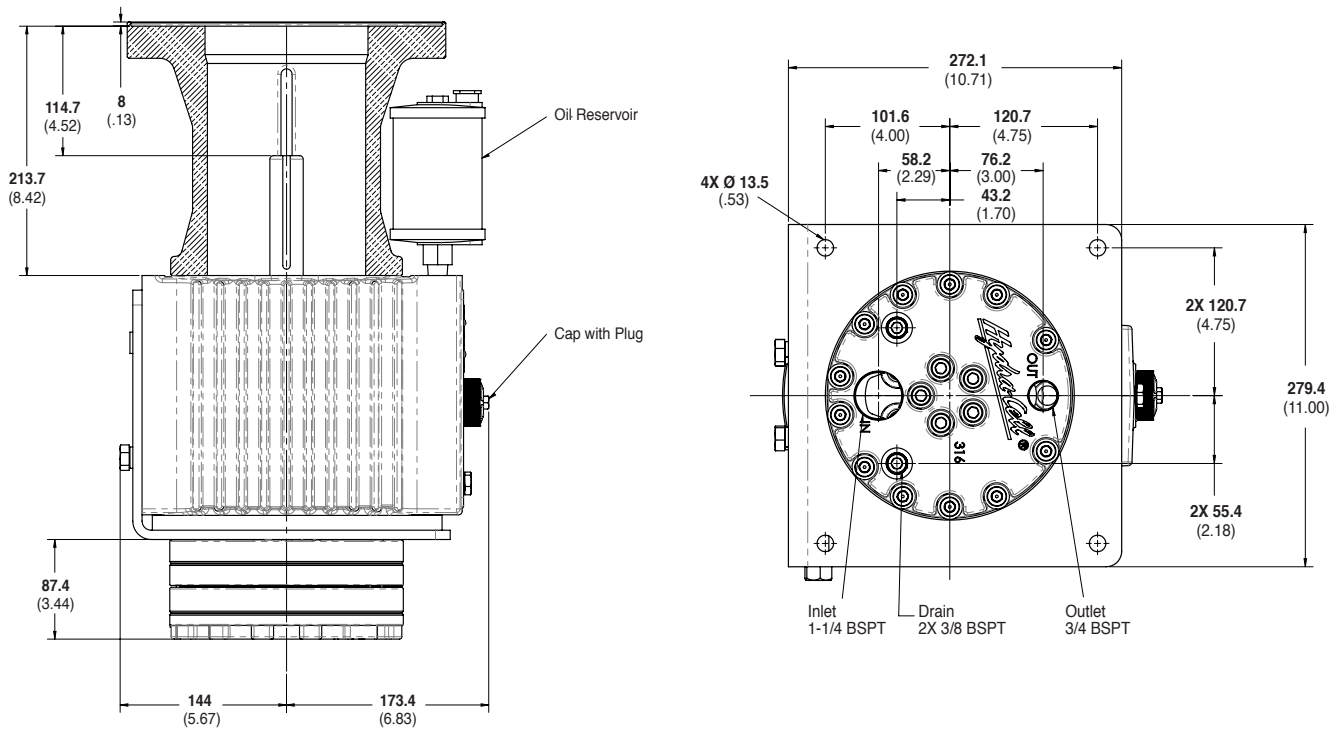


# G15 & G17 Pro Series | Representative Drawings

## G15 Models with Metallic Pump Head mm (Inches)



## G17 Models with Metallic Pump Head mm (Inches)



**Note:** Dimensions are for reference only. Contact factory for certified drawings.

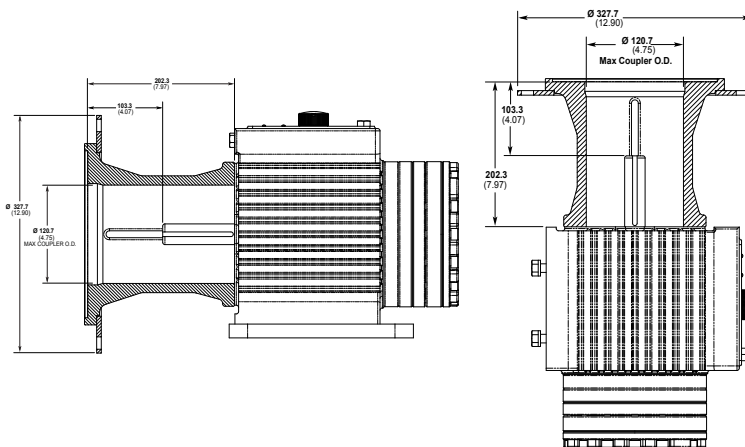
# G15 & G17 Pro Series | Adapters / Valves

## Pump/Motor Adapter mm (Inches)

### Part Number: A04-041-1201

Must be ordered separately for use with IEC 132 frame motors, B5 flange.

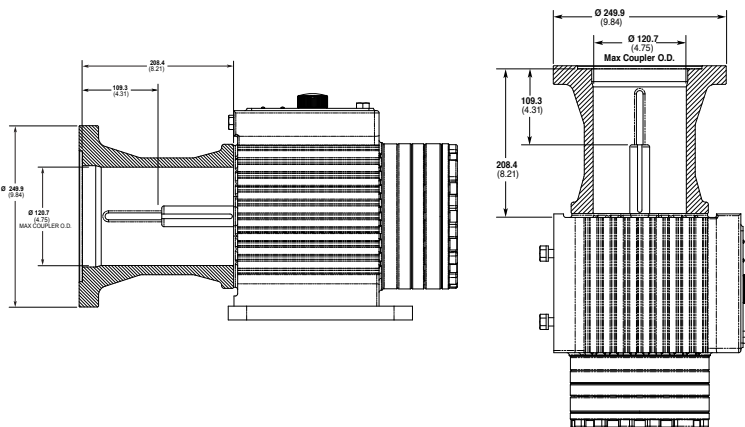
*NEMA adaptor available - consult factory.*



### Part Number: A04-041-1203

Must be ordered separately for use with IEC 160 frame motors, B14 flange.

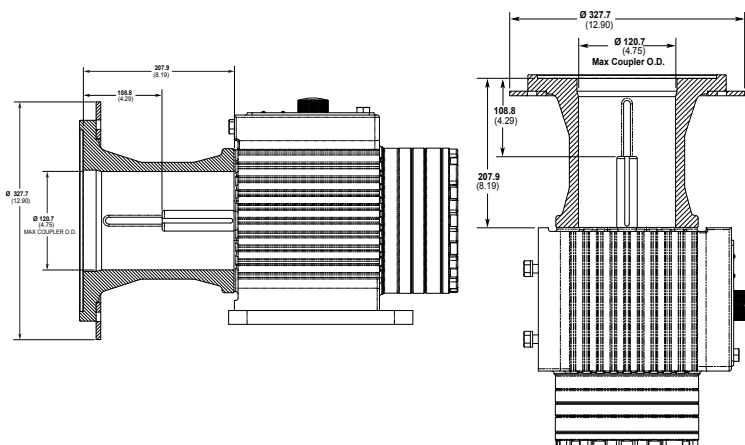
*NEMA adaptor available - consult factory.*



### Part Number: A04-041-1205

Must be ordered separately for use with IEC 160 - 180 frame motors, B5 flange.

*NEMA adaptor available - consult factory.*



## Valve Selection

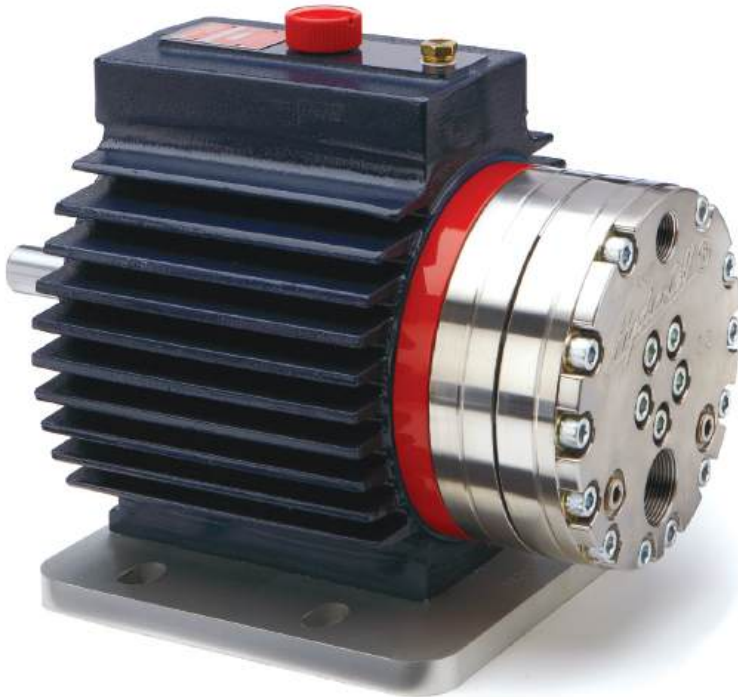
A Hydra-Cell G15 Series pumping system uses a **C62 Pressure Regulating Valve**.



# G15 & G17 Pro Series | Options

## Contact Wanner International for:

- ANSI, DIN, SAE, Tri-Clamp, ASME BPE or other specialised flange connections
- Motors, bases, couplings and other pump accessories
- Hydra-Oil selection and specification information
- Design considerations, installation guidelines, and other technical assistance in pump selection
- Process liquid end built with NACE and 3.1 traceable material certification



*G15 for horizontal installations shown with Stainless Steel pump head.*



*G17 for vertical mounting (including motor adaptor, base plate and oil reservoir) shown with Brass pump head.*



# G15 & G17 Pro Series | How to Order

## Ordering Information

A complete G15 Series Model Number contains 12 digits including 8 customer-specified design and materials options, for example, G15XKBTHFEGG.

1	2	3	4	5	6	7	8	9	10	11	12
G	1			P							

Digit	Order Code	Description
1-3		<b>Pump Configuration</b>
	G15	Horizontal shaft-driven (BSPT Ports)*
	G17	Vertical shaft-driven (BSPT Ports)* *Pump/motor adaptors ordered separately. See page 11.
4		<b>Hydraulic End Cam</b>
	X	Max 49.2 l/min (13.0 USgpm) @ 1450 rpm
	E	Max 45.5 l/min (12.0 USgpm) @ 1450 rpm
5		<b>Pump Head Version</b>
	P	Hydra-Cell Pro <i>See lower right for ATEX Certification Kit Options.</i>
6		<b>Pump Head Material</b>
	B	Brass
	G	Duplex Alloy 2205 Stainless Steel
	S	316L Stainless Steel
	R	316L Stainless Steel with ANSI RF Flanges, Class 600lb x 2500lb
T	Hastelloy C	
7		<b>Diaphragm &amp; O-ring Material</b>
	A	Aflas diaphragm / PTFE o-ring
	G	FKM
	P	Neoprene
	T	Buna-N
8		<b>Valve Seat Material</b>
	D	Tungsten Carbide
	H	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
9		<b>Valve Material</b>
	D	Tungsten Carbide
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C

Digit	Order Code	Description
10		<b>Valve Springs</b>
	E	Elgiloy
	H	17-7 Stainless Steel (high-viscosity only - requires 3.5 bar suction pressure)
	T	Hastelloy C
11		<b>Valve Spring Retainers</b>
	C	Celcon
	H	17-7 Stainless Steel
	M	PVDF
	P	Polypropylene
	T	Hastelloy C
	Y	Nylon
12		<b>Hydra-Oil</b>
	A	10W30 standard-duty oil
	B	40-wt for continuous-duty (use with 316L SST pump head - standard)
	E	Food-contact oil
	G	5W30 cold-temp severe-duty synthetic oil
	H	15W50 high-temp severe-duty synthetic oil



### ATEX Certification Kit Options

As a separate line on your order, please add the required ATEX Certification Kit Option.

- ATEX 2014/34/EU Certified, Category 2, Zone 1
- ATEX 2014/34/EU Certified, Category 3, Zone 2





- All options include Certificate, Oil Level Monitor or Sight Glass, Earth Stud & Secondary ATEX Label.
- Extra oil is required to fill the oil bowl during installation of ATEX pumps. This oil is not included and must be ordered separately.

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