

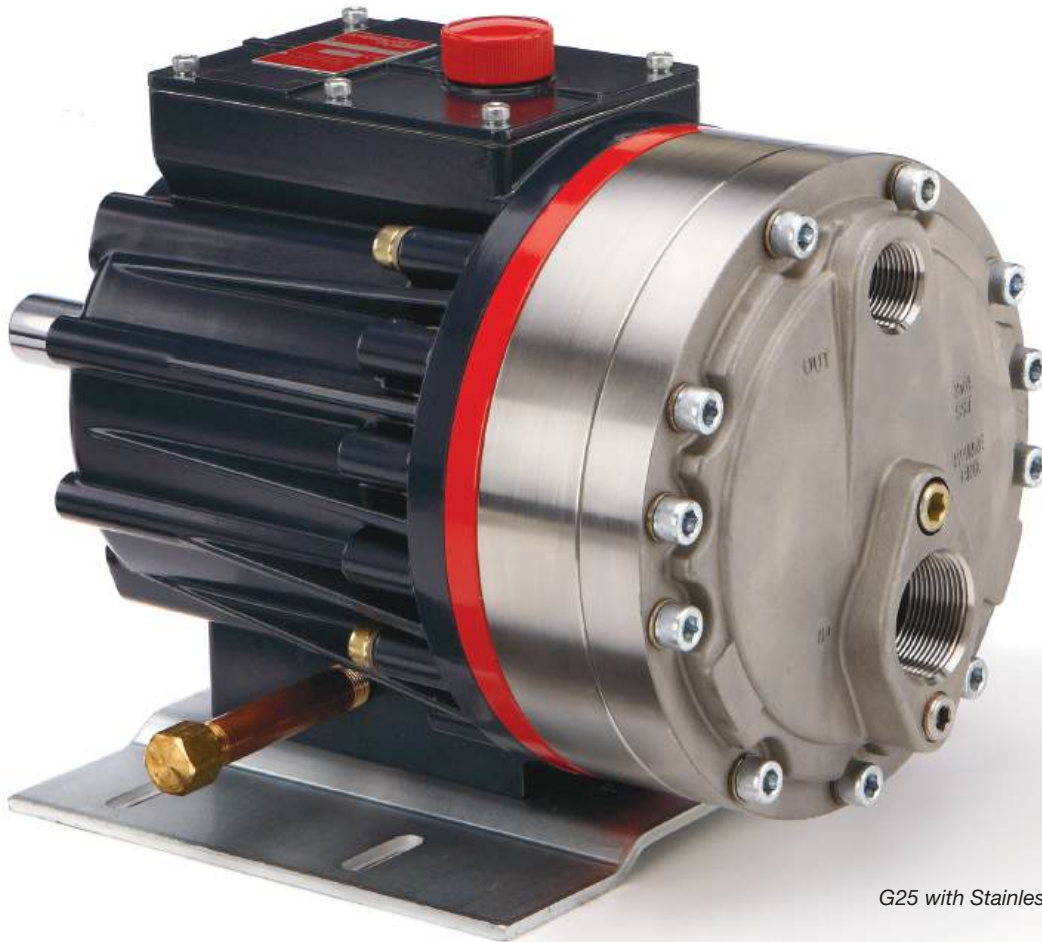
# G25 PRO SERIES

Maximum Flow Rate: 76 l/min (20.0 USgpm)  
Maximum Pressure: 69 bar (1000 psi) for Metallic Pump Heads  
24 bar (350 psi) for Non-metallic Pump Heads

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



UK CA CE



*G25 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.

  
**WANNER™**

# G25 Pro Series | Performance

## Capacities

Model	Max. Input rpm	Max. Flow Capacities @69 bar (1000 psi)		Max. Inlet Pressure		Max. Discharge Pressure					
		l/min	USgpm	bar	psi	Metallic Heads		Polypropylene Heads		PVDF Heads	
						bar	psi	bar	psi	bar	psi
G25-X	1050	75.7	20.0	17	250	69	1000	17	250	24	350
G25-E	1150	75.9	20.0	17	250	69	1000	17	250	24	350

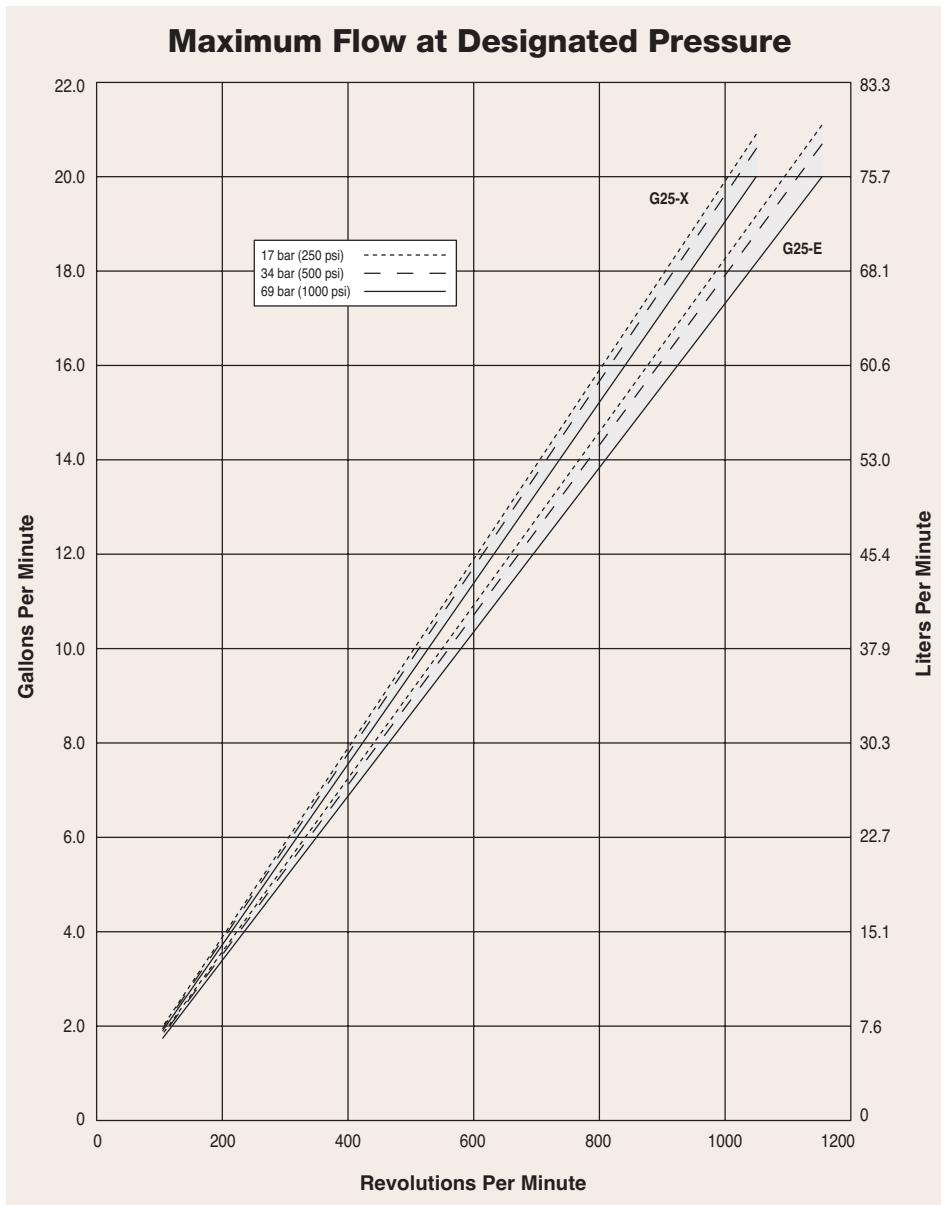
Performance and specification ratings apply to G25 configurations unless specifically noted otherwise.

## 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 960 rpm and pressures up to 69 bar (Metallic Head) and 24 bar (non-metallic pump heads)

## Available to Meet API 674

Please contact Wanner International for further information.



- 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.

# G25 Pro Series | Specifications

## Flow Capacities @ 69 bar (1000 psi) 6-pole Motor @ 50 Hz

Model	rpm	l/min	USgpm
G25-X	960	69.2	18.2
G25-E	960	63.3	16.7

## Flow Capacities @ 69 bar (1000 psi) 8-pole Motor @ 50 Hz

Model	rpm	l/min	USgpm
G25-X	730	52.6	13.9
G25-E	730	48.2	12.7

## Delivery @ 69 bar (1000 psi)

Model	litres/rev	gal/rev
G25-X	0.0721	0.0190
G25-E	0.0660	0.0174

## Maximum Discharge Pressure

Metallic Heads:	69 bar (1000 psi)
Non-metallic Heads:	17 bar (250 psi) Polypropylene 24 bar (350 psi) PVDF

## Maximum Inlet Pressure

17 bar (250 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).
Non-metallic Heads:	60°C (140°F).

## Maximum Solids Size

800 microns

## Inlet Port

1-1/2 inch BSPT  
1-1/2 inch NPT  
150lb ANSI RF Flange

## Discharge Port

1 inch BSPT  
1 inch NPT  
600lb ANSI RF Flange

## Calculating Required Power

$$\frac{50 \times \text{rpm}}{63,000} + \frac{\text{gpm} \times \text{psi}}{1,460} = \text{electric motor hp}$$

$$\frac{50 \times \text{rpm}}{84,428} + \frac{\text{l/min} \times \text{bar}}{511} = \text{electric motor kW}$$

### 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

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

**Shaft Diameter** 28.6 mm (1-1/8 inch)

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

**Bearings** Tapered roller bearings

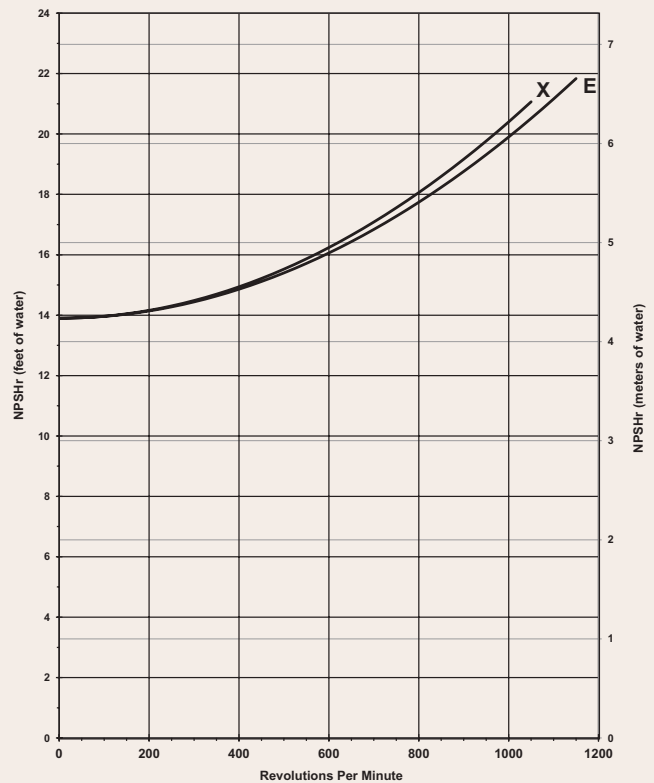
**Oil Capacity** 3.1 litres (3.3 US quarts)

## Weight

Metallic Heads: 56.8 kg (125 lbs.)

Non-metallic Heads: 40.9 kg (90 lbs.)

## Net Positive Suction Head (NPSHr)

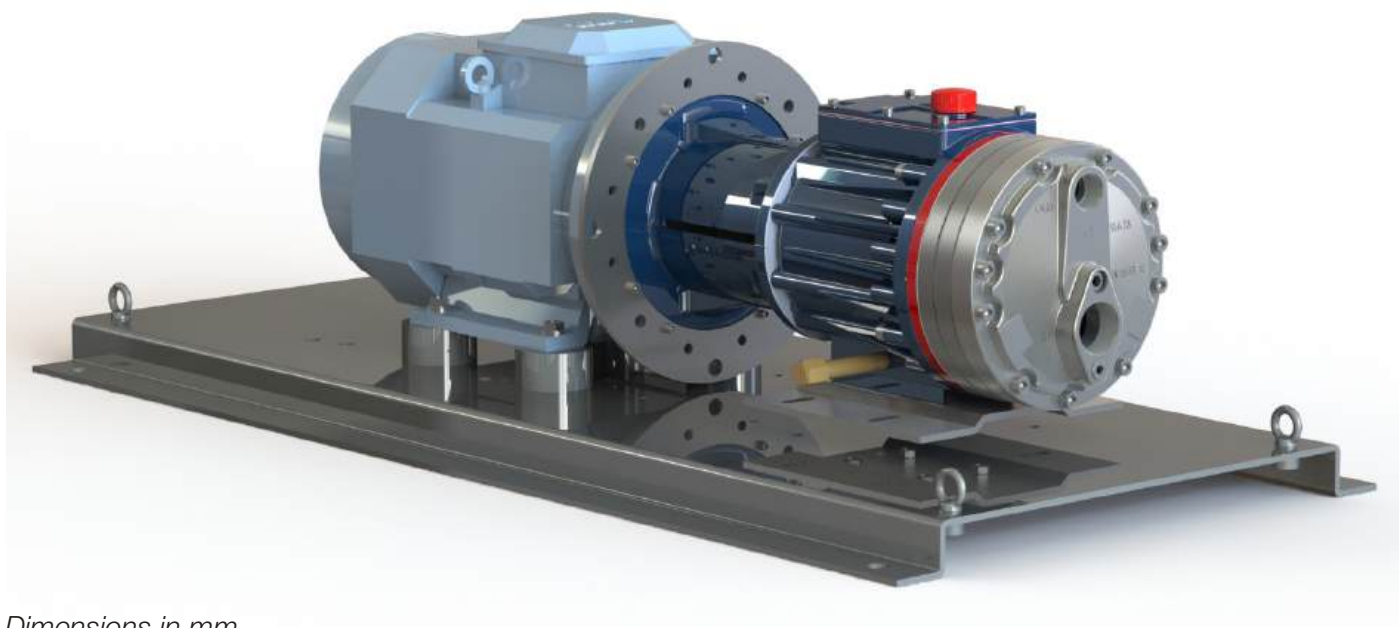


## Suction Lift

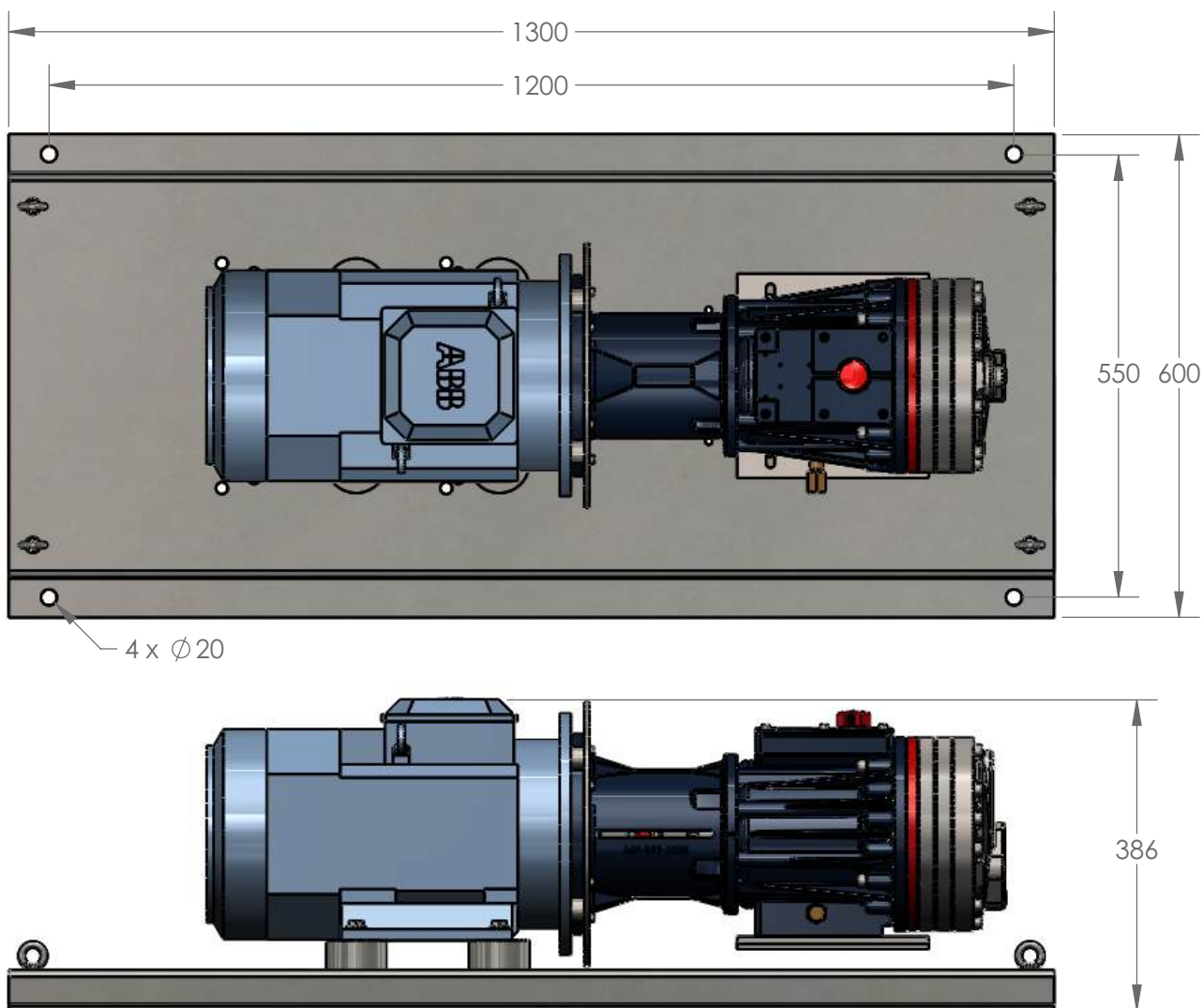
Each Hydra-Cell pump has different lift capability depending on model size, cam angle, speed, and fluid characteristics. To ensure that your specific lift characteristics are met, refer to the inlet calculations regarding friction, and acceleration head losses in your Hydra-Cell Product Manual. Compare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

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

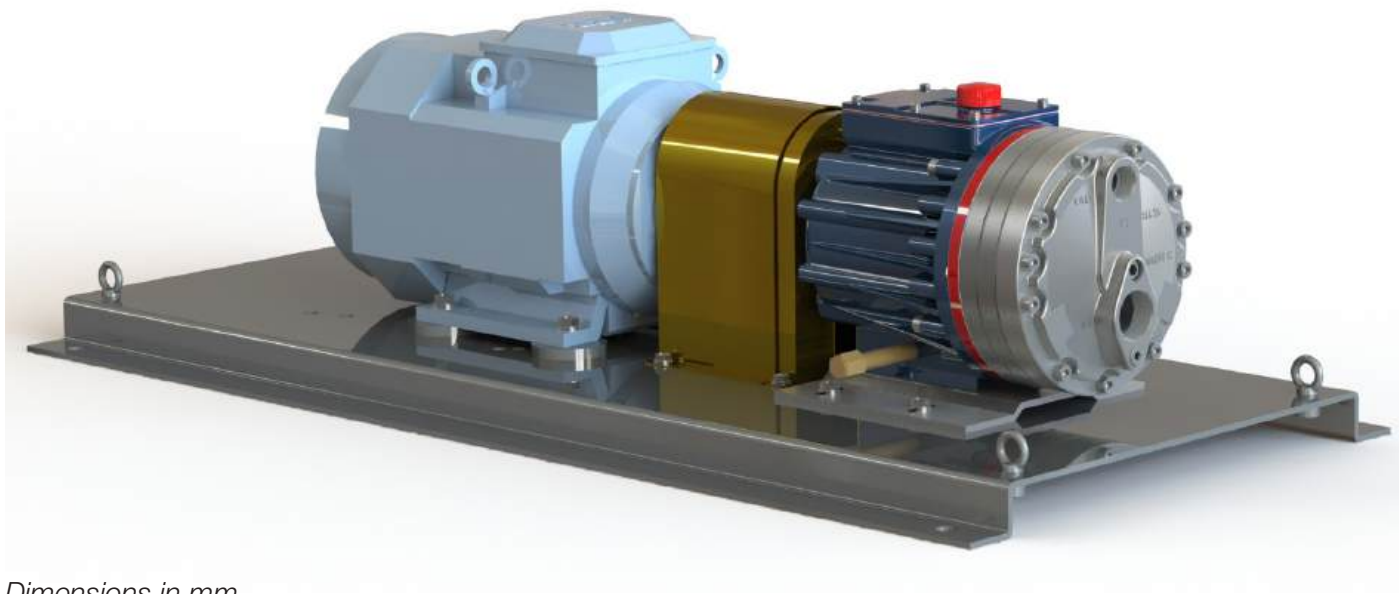
## Baseplate Assembly with Motor Adaptor for IEC 132 Motor Frame



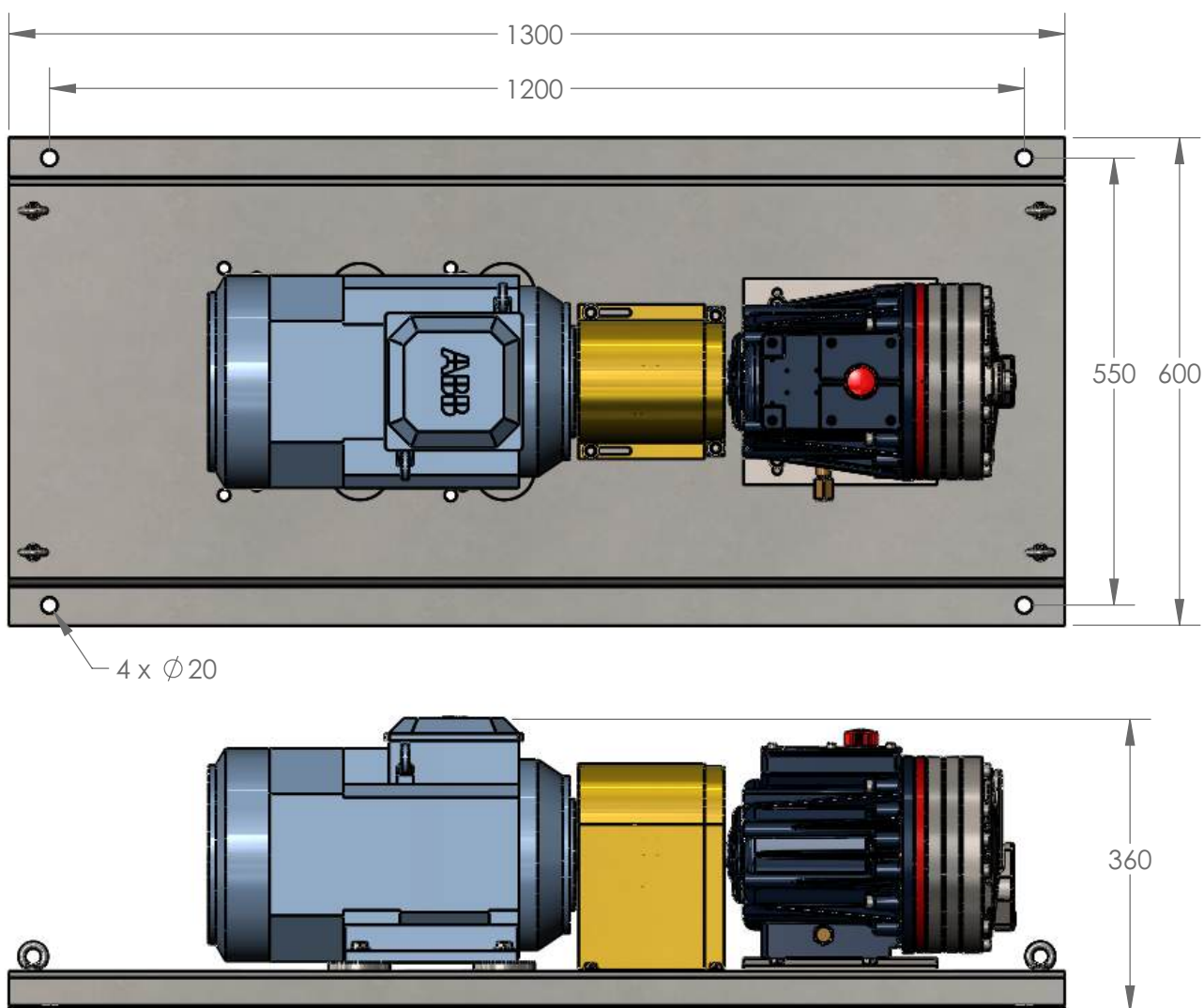
Dimensions in mm



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

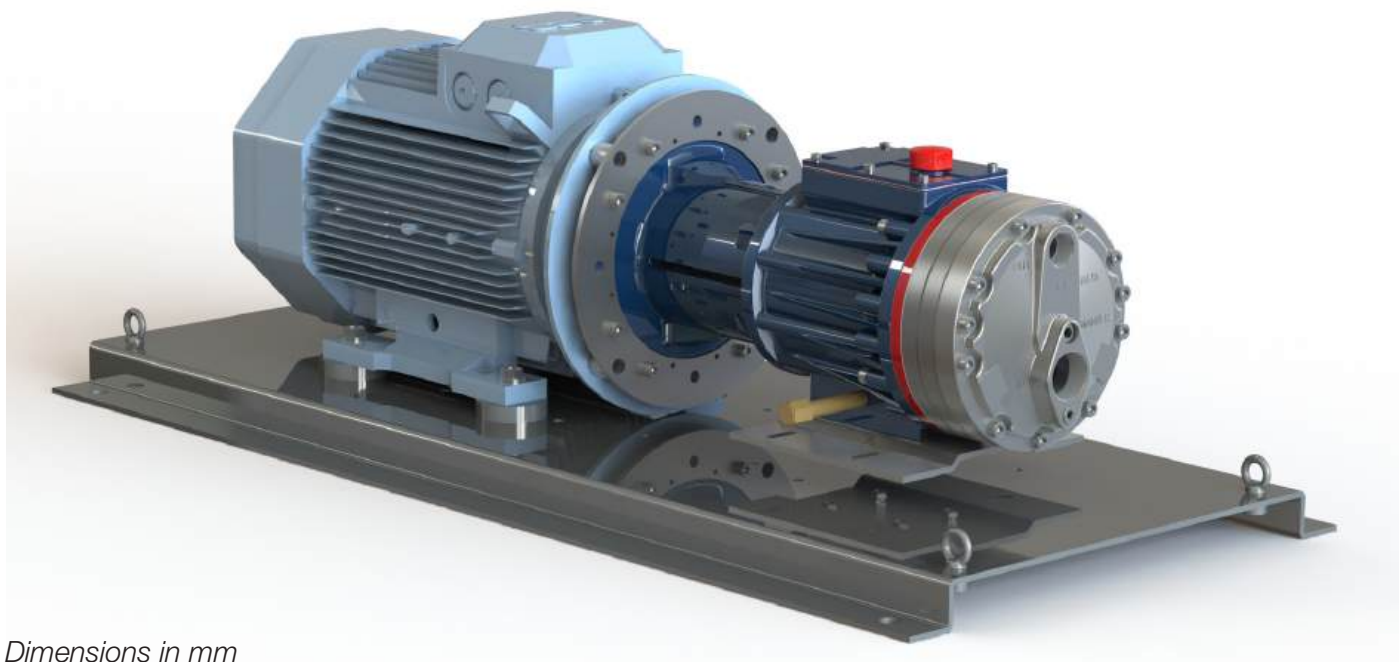


Dimensions in mm

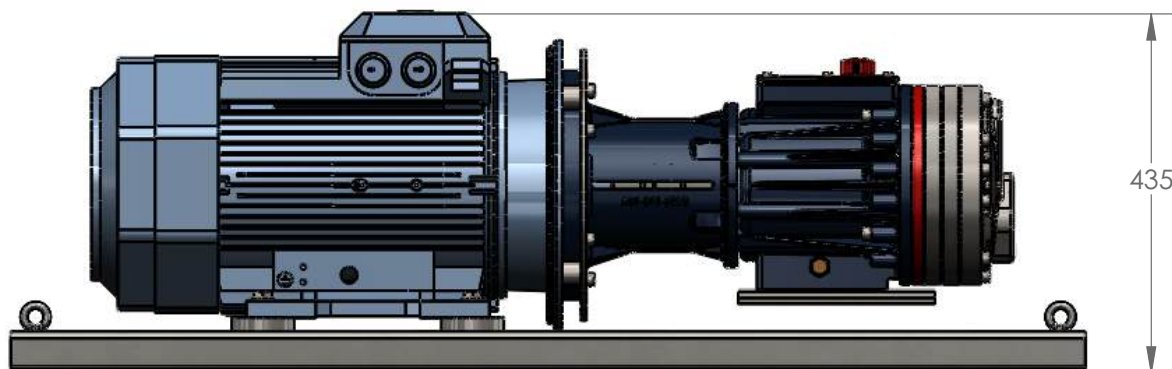
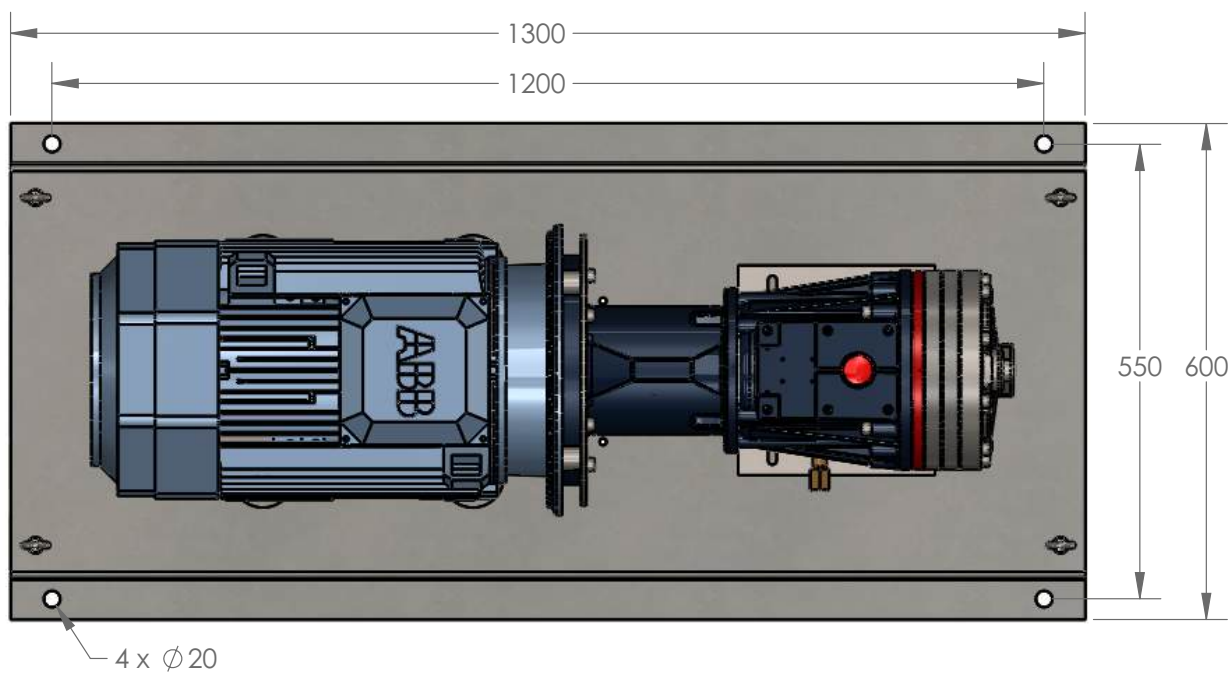




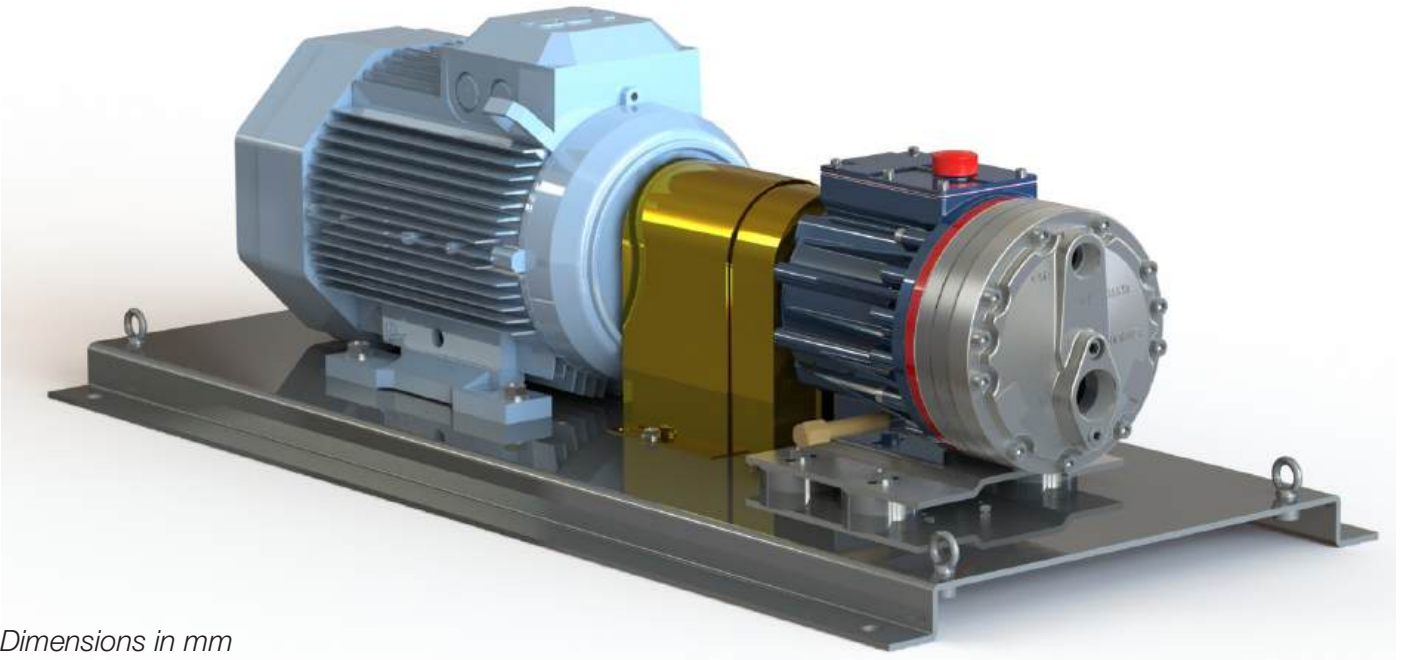
## Baseplate Assembly with Motor Adaptor for IEC 160 Motor Frame



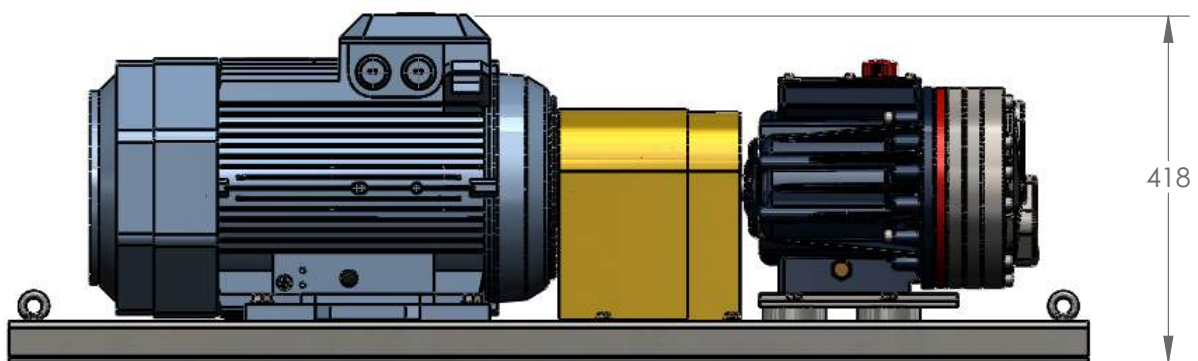
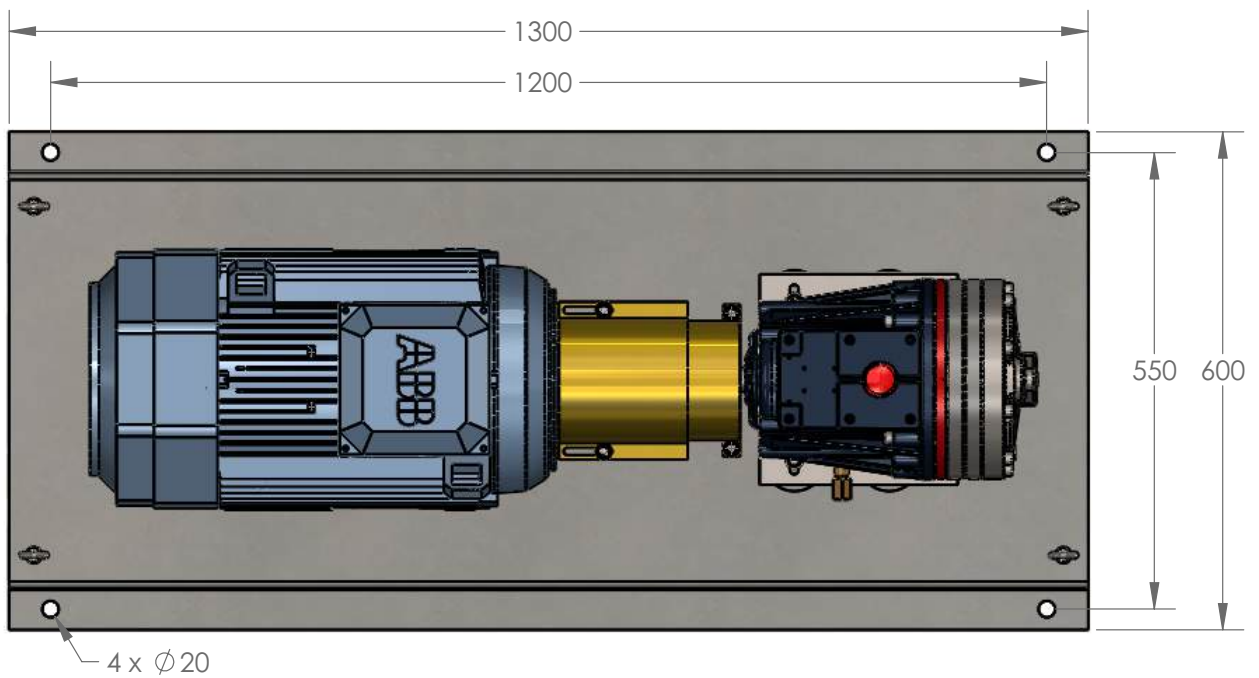
Dimensions in mm



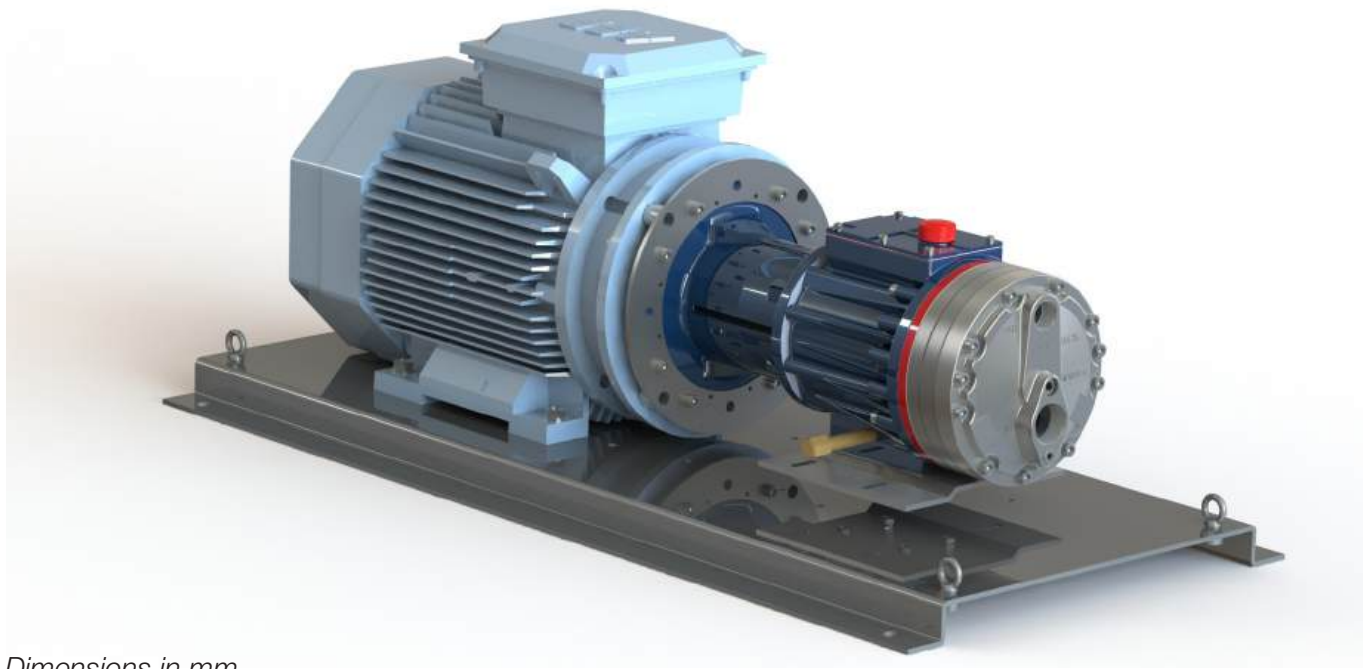
## Baseplate Assembly Long-coupled for IEC 160 Motor Frame



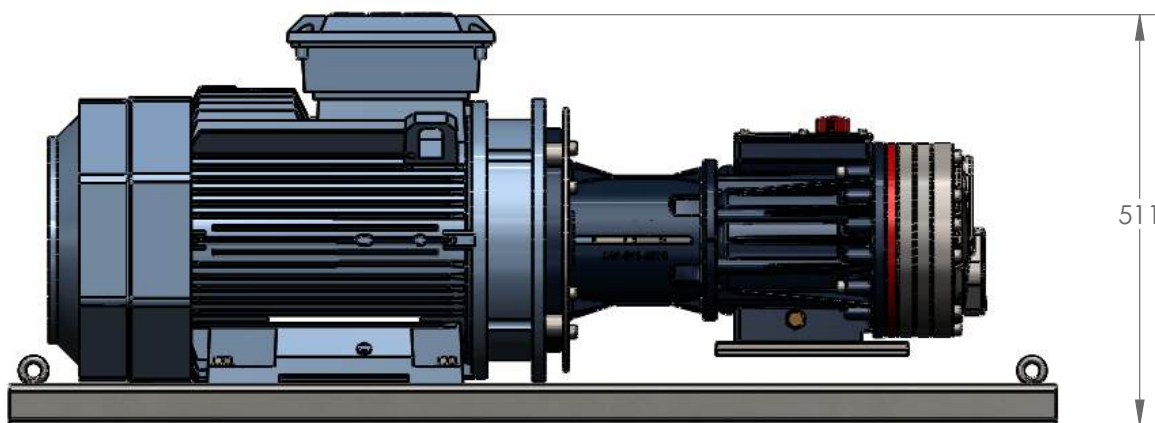
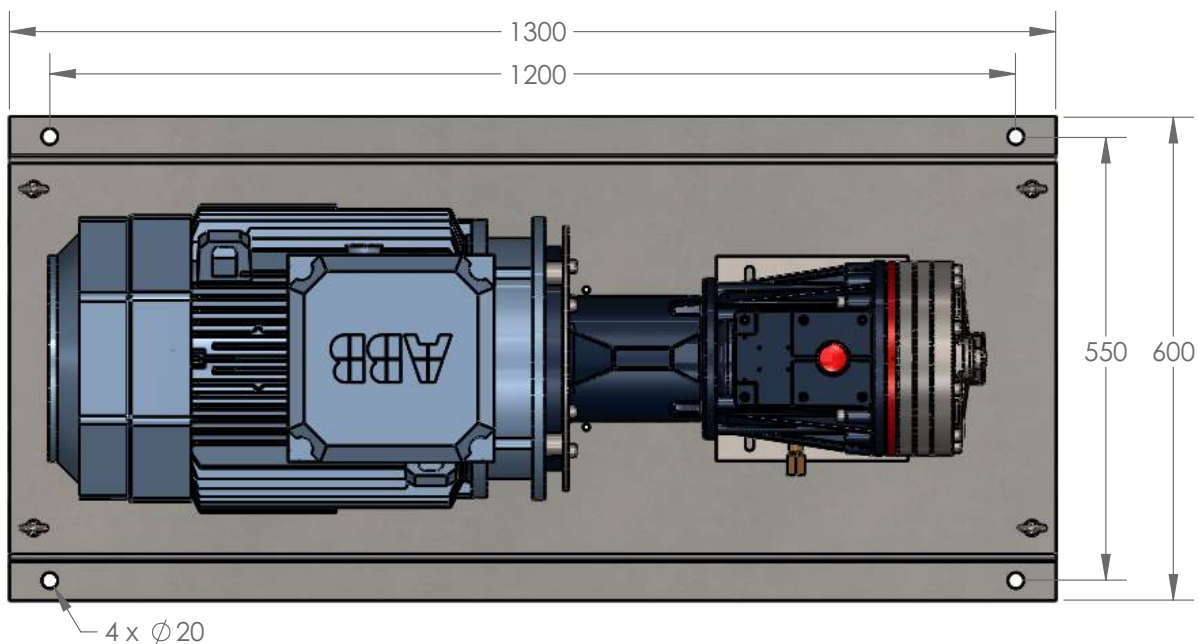
Dimensions in mm



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

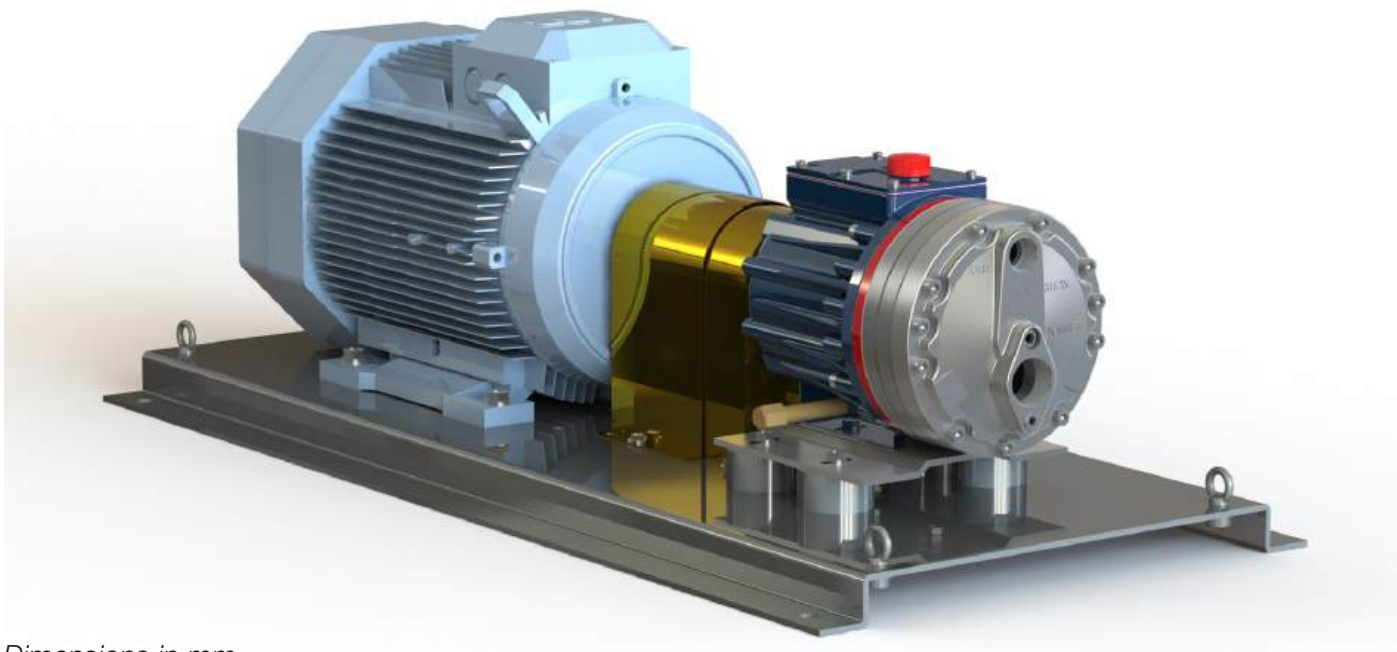


Dimensions in mm

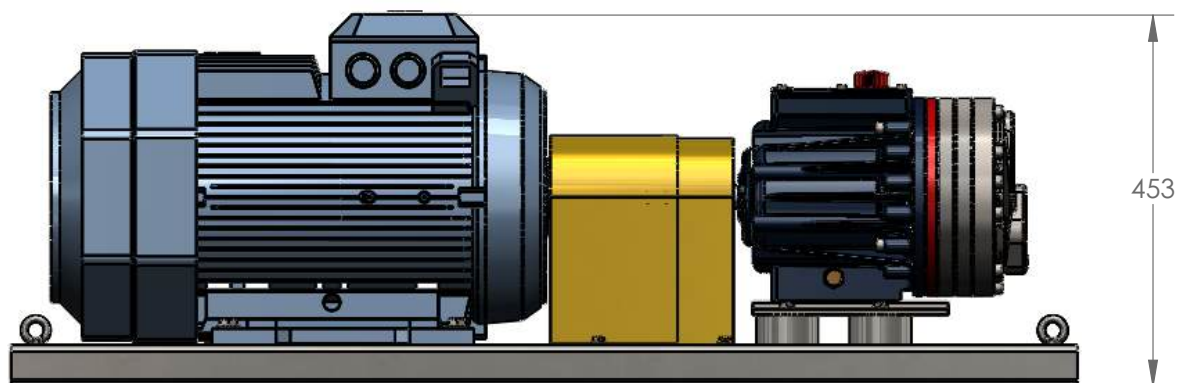
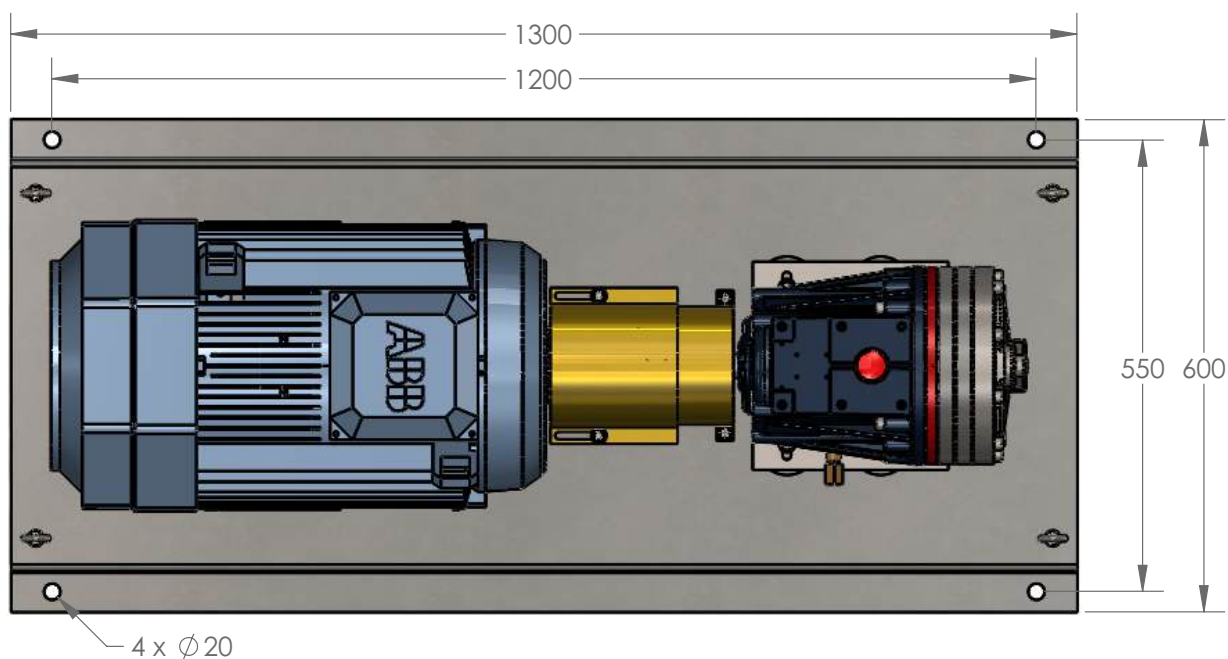




## Baseplate Assembly Long-coupled for IEC 180 Motor Frame

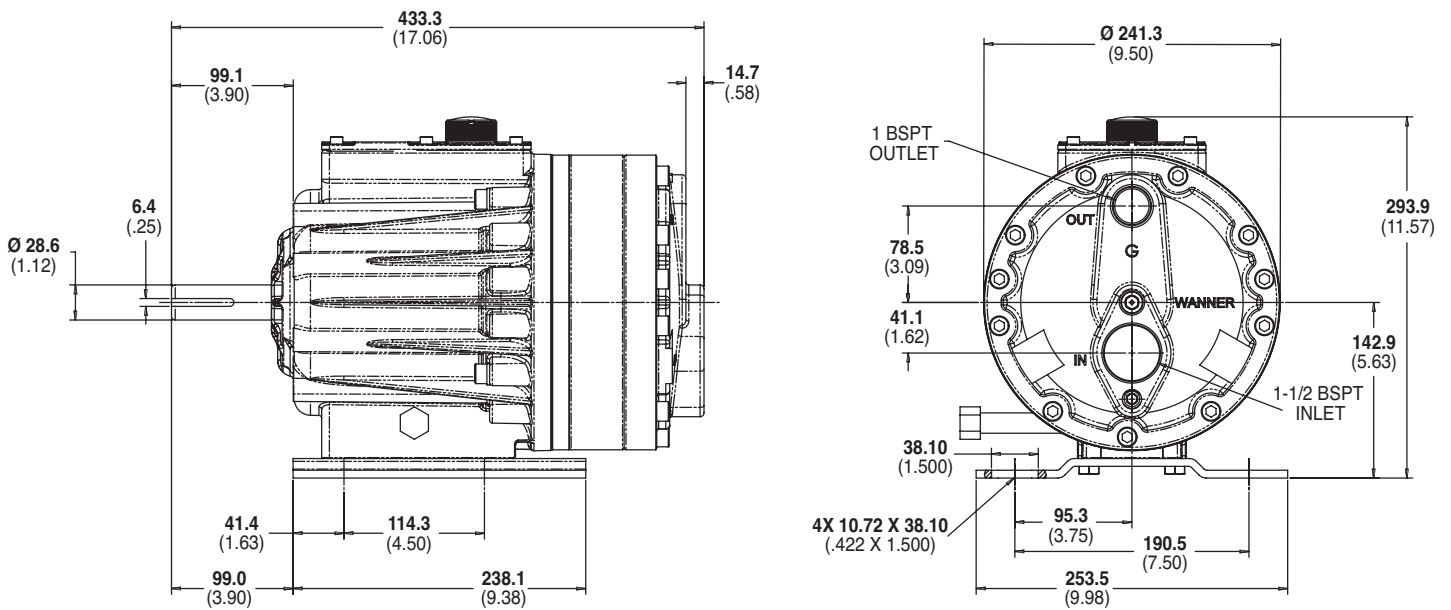


Dimensions in mm

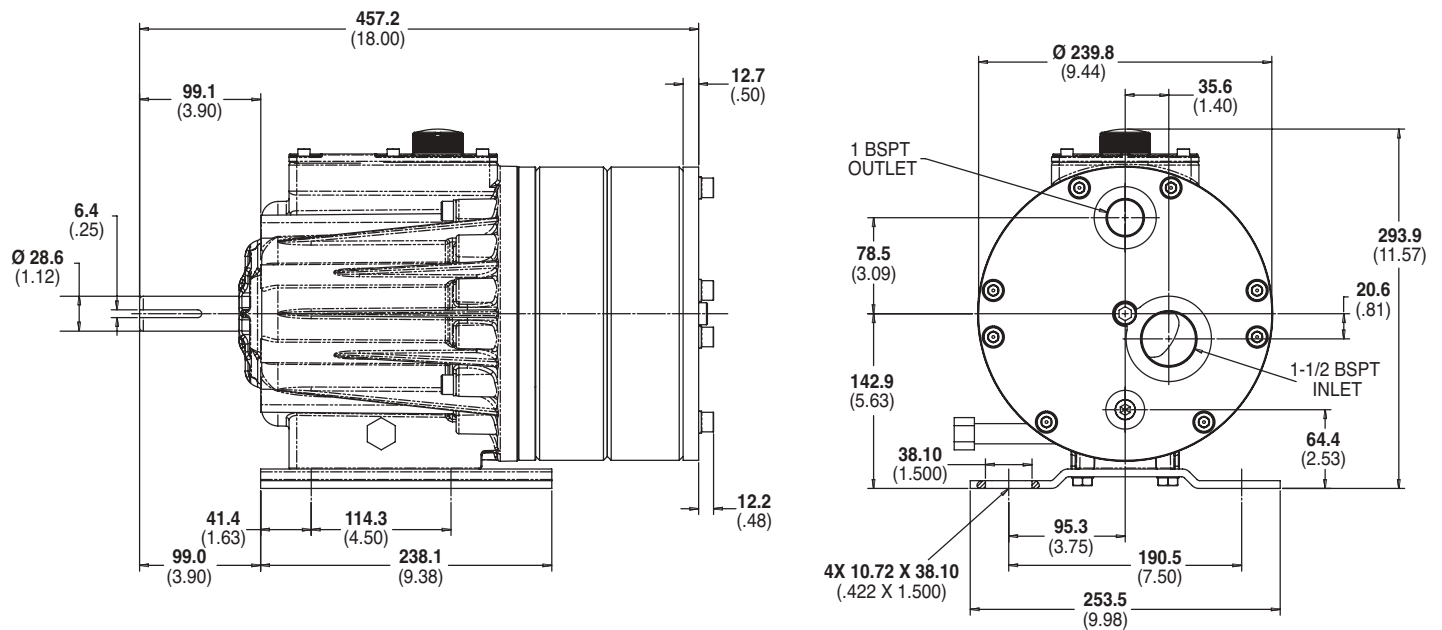


# G25 Pro Series | Representative Drawings

## G25 Models with Metallic Pump Head mm (Inches)



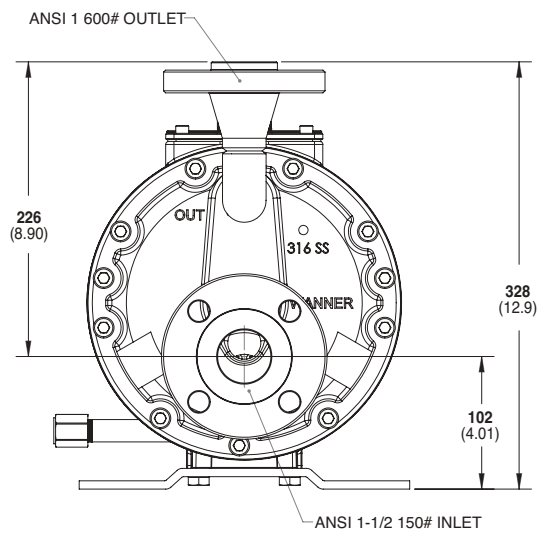
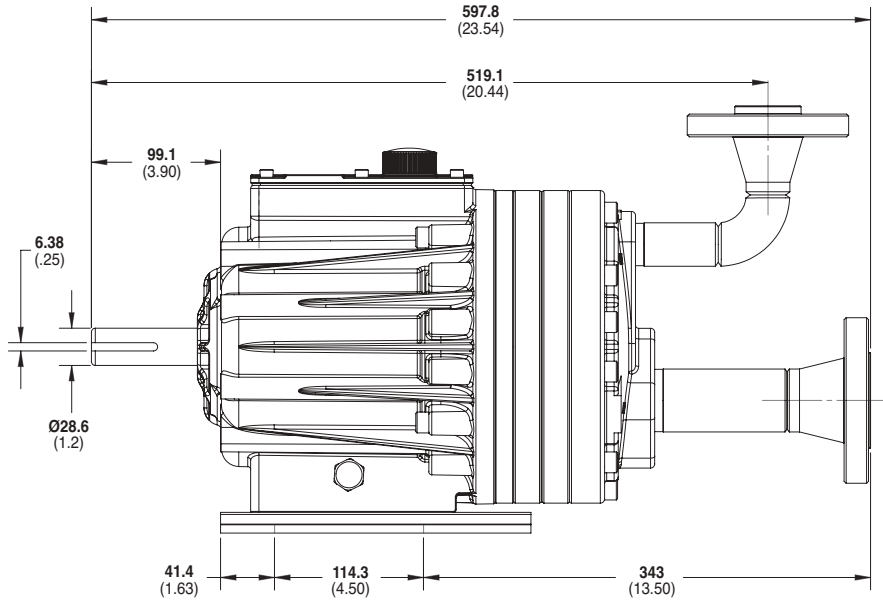
## G25 Models with Non-metallic Pump Head mm (Inches)



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

# G25 Pro Series | Representative Drawings

## G25 Models with ANSI RF Flanges mm (Inches)



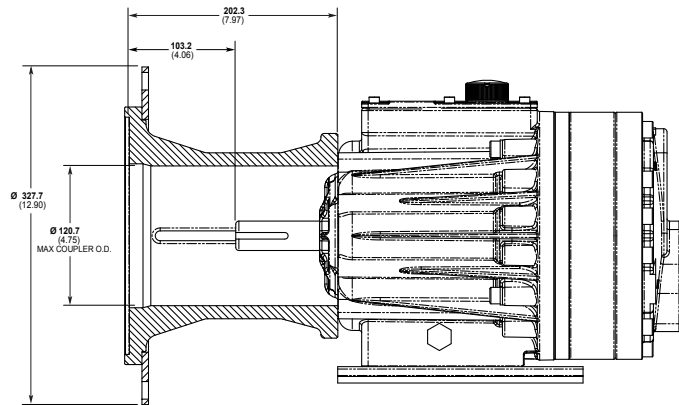
**Note:** Dimensions are for reference only. Contact factory for certified drawings.

## Pump/Motor Adapter mm (Inches)

### Part Number: A04-041-1201

Must be ordered separately for G25 models for use with IEC 132 frame motors, B35 flange.

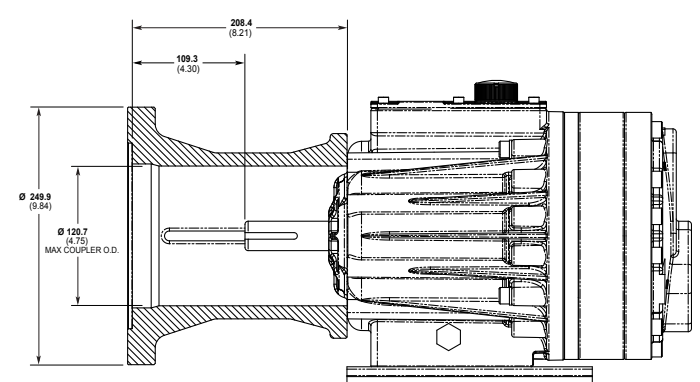
*NEMA adaptor available - consult factory.*



### Part Number: A04-041-1203

Must be ordered separately for G25 models for use with IEC 160 frame motors, B14 flange.

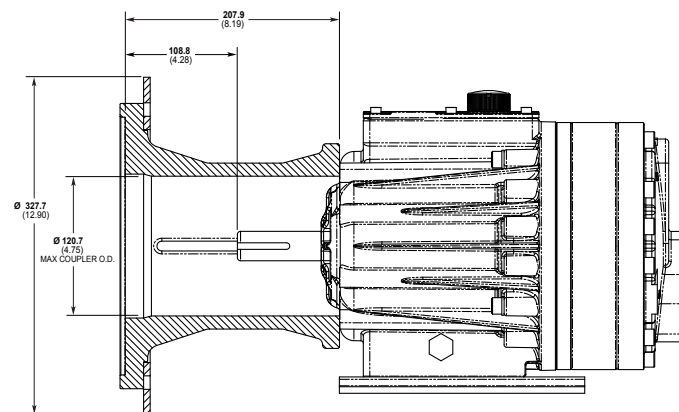
*NEMA adaptor available - consult factory.*



### Part Number: A04-041-1205

Must be ordered separately for G25 models for use with IEC 160 - 180 frame motors, B35 flange.

*NEMA adaptor available - consult factory.*



## Valve Selection

A seal-less **C63 Pressure Regulating Valve** is recommended for Hydra-Cell G25 pumping systems, especially for high-pressure requirements or when handling dirty fluids.



A **C23 Pressure Regulating Valve** provides a capable, lower-cost alternative to C63 valves for Hydra-Cell G25 pumping systems.

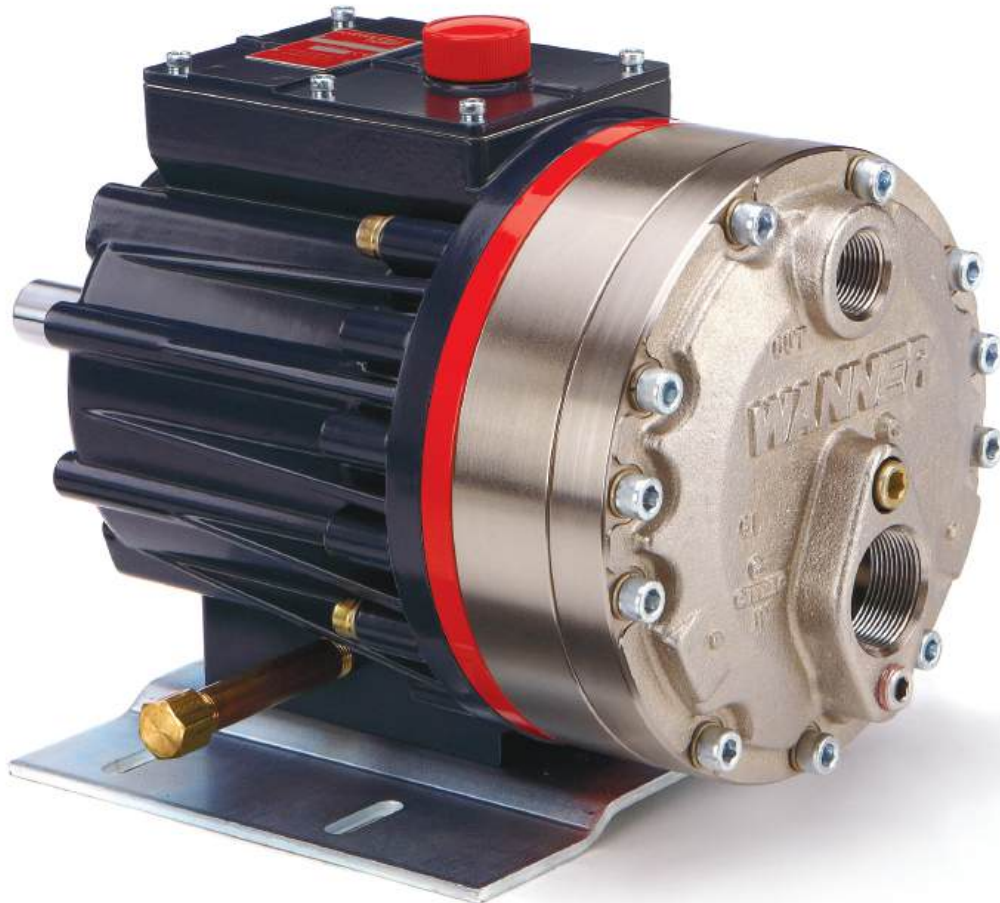




# G25 Pro Series | Options

## Contact Wanner International for:

- 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



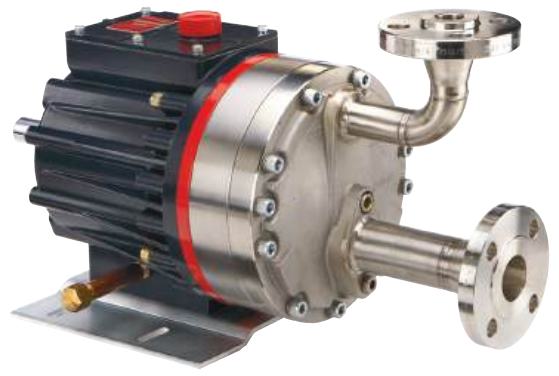
*G25 with Cast Iron pump head.*



*G25 with Brass pump head.*



*G25 with Polypropylene pump head.*



*G25 with Stainless Steel pump head and ANSI RF flanges.*

## Ordering Information

A complete G25 Series Model Number contains 12 digits including 9 customer-specified design and materials options, for example: G25XKCGNNECA.

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

Digit	Order Code	Description
<b>1-3</b>		<b>Pump Configuration</b>
	<b>G25</b>	Shaft-driven (BSPT)
<b>4</b>		<b>Hydraulic End Cam</b>
	<b>X</b>	Max 69.2 l/min (18.2 USgpm) @ 960 rpm
	<b>E</b>	Max 63.2 l/min (16.7 USgpm) @ 960 rpm
<b>5</b>		<b>Pump Head Version</b>
	<b>P</b>	Hydra-Cell Pro
	<b>M</b>	Hydra-Cell Pro - machined housing to accept C-face adapter/gearbox <i>See lower right for ATEX Certification Kit Options.</i>
<b>6</b>		<b>Pump Head Material</b>
	<b>B</b>	Brass
	<b>C</b>	Ductile Iron (Nickel-plated)
	<b>G</b>	Duplex Alloy 2205 Stainless Steel (with Hastelloy C followers & follower screws)
	<b>M</b>	PVDF (with Hastelloy C followers & follower screws)
	<b>N</b>	Polypropylene (with Hastelloy C followers & follower screws)
	<b>R</b>	316L Stainless Steel ANSI flange class 150 x 600
	<b>1</b>	316L Stainless Steel AS Cast custom ANSI or DIN flanges
	<b>S</b>	316L Stainless Steel
	<b>T</b>	Hastelloy CW12MW
<b>7</b>		<b>Diaphragm &amp; O-ring Material</b>
	<b>A</b>	Aflas diaphragm / PTFE o-ring
	<b>E</b>	EPDM (requires EPDM-compatible oil - Digit 12 oil code C)
	<b>G</b>	FKM
	<b>J</b>	PTFE (available with E and S cams only; 960 rpm max.)
	<b>K</b>	FFKM diaphragm / PTFE o-ring
	<b>P</b>	Neoprene
	<b>T</b>	Buna-N
<b>8</b>		<b>Valve Seat Material</b>
	<b>C</b>	Ceramic
	<b>D</b>	Tungsten Carbide (900 rpm max.)
	<b>H</b>	17-4 Stainless Steel
	<b>N</b>	Nitronic 50
	<b>T</b>	Hastelloy C

Digit	Order Code	Description
<b>9</b>		<b>Valve Material</b>
	<b>C</b>	Ceramic
	<b>D</b>	Tungsten Carbide (900 rpm max.)
	<b>F</b>	17-4 Stainless Steel
	<b>N</b>	Nitronic 50
	<b>T</b>	Hastelloy C
<b>10</b>		<b>Valve Springs</b>
	<b>E</b>	Elgiloy
	<b>T</b>	Hastelloy C
<b>11</b>		<b>Valve Spring Retainers</b>
	<b>C</b>	Celcon
	<b>H</b>	17-7 Stainless Steel
	<b>M</b>	PVDF
	<b>P</b>	Polypropylene
	<b>T</b>	Hastelloy C
	<b>Y</b>	Nylon (Zytel)
<b>12</b>		<b>Hydra-Oil</b>
	<b>A</b>	10W30 standard-duty oil
	<b>B</b>	40-wt for continuous-duty oil (use with 316L SST or Hastelloy CW12MW pump head - standard)
	<b>C</b>	40-wt EPDM-compatible oil
	<b>E</b>	Food-contact oil
	<b>G</b>	5W30 cold-temp severe-duty synthetic oil
	<b>H</b>	15W50 high-temp severe-duty synthetic oil

**G25 Pump Housing is standard as Cast Aluminum.**  
Upgrade to Ductile Iron available.



### 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.
- ATEX is not available with non-metallic pump heads.

## Partners in over 70 countries



**WANNER™**  
Global Sales and Technical Support

### Americas

- Minneapolis, Minnesota USA
- Wichita Falls, Texas USA
- São Paulo, Brazil
- Buenos Aires, Argentina

### EMEA | Australia

- Hampshire, United Kingdom
- Cairo, Egypt
- Düsseldorf, Germany
- Lyon, France

### Asia | Pacific

- Kowloon, Hong Kong
- Shanghai, China
- Jakarta, Indonesia

### India

- Mumbai, India
- New Delhi
- Bangalore
- Gujarat

## Wanner worldwide

GLOBAL SALES & TECHNICAL SUPPORT

### WANNER ENGINEERING, INC.

WORLD HEADQUARTERS & MANUFACTURING

Minneapolis, Minnesota USA  
t: 612-332-5681  
e: sales@wannereng.com  
Hydra-Cell.com

### REGIONAL OFFICE

Wichita Falls, Texas USA  
t: 940-322-7111  
e: sales@wannereng.com

### LATIN AMERICAN OFFICE

São Paulo, Brazil  
t: +55 (11) 99582-1969  
e: mmagoni@wannereng.com  
Hydra-Cell-Pumps.com.br

### WANNER INTERNATIONAL, LTD.

UNITED KINGDOM

Church Crookham, Hampshire UK  
t: +44 (0) 1252 816847  
e: support@wannerint.com  
Hydra-Cell.co.uk

### WANNER PUMPS, LTD.

Kowloon, HONG KONG  
t: +852 3428 6534  
e: sales@wannerpumps.com  
WannerPumps.com

Shanghai, CHINA  
t: +86-21-6876 3700  
e: sales@wannerpumps.com  
WannerPumps.com

### WANNER INDIA PVT. LTD.

Mumbai, INDIA  
t: +91 (22) 22044766  
e: support@wannerindia.com  
WannerIndia.com



### OFFICIAL UK DISTRIBUTOR

Michael Smith Engineers Limited  
Web: www.michael-smith-engineers.co.uk  
Email: info@michael-smith-engineers.co.uk  
Freephone: 0800 316 7891