

# G17 Series

Maximum Flow Rate: 58.7 l/min (15.5 gpm)

Maximum Pressure: 172 bar (2500 psi) for Metallic Pump Heads



**WANNER**  
*Hydra-Cell*<sup>®</sup>  
Seal-less Pump Technology



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

# G17 Series Performance

## Capacities

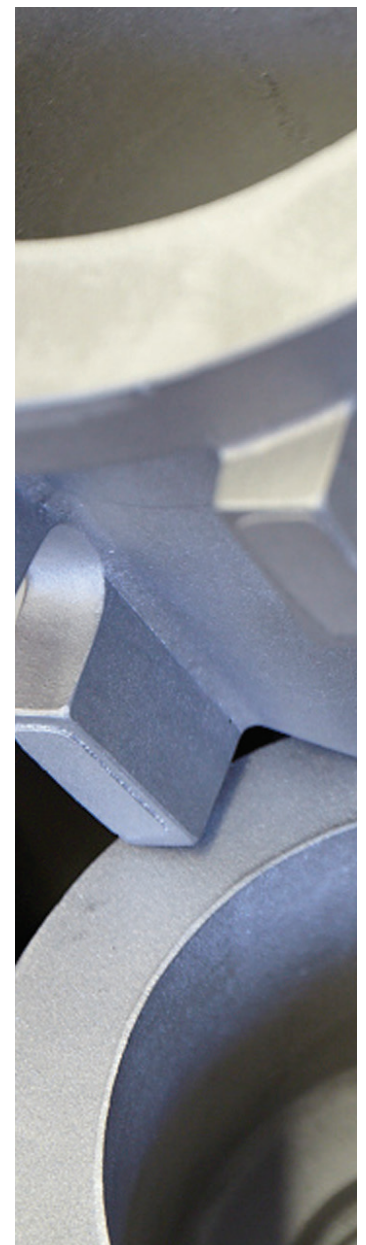
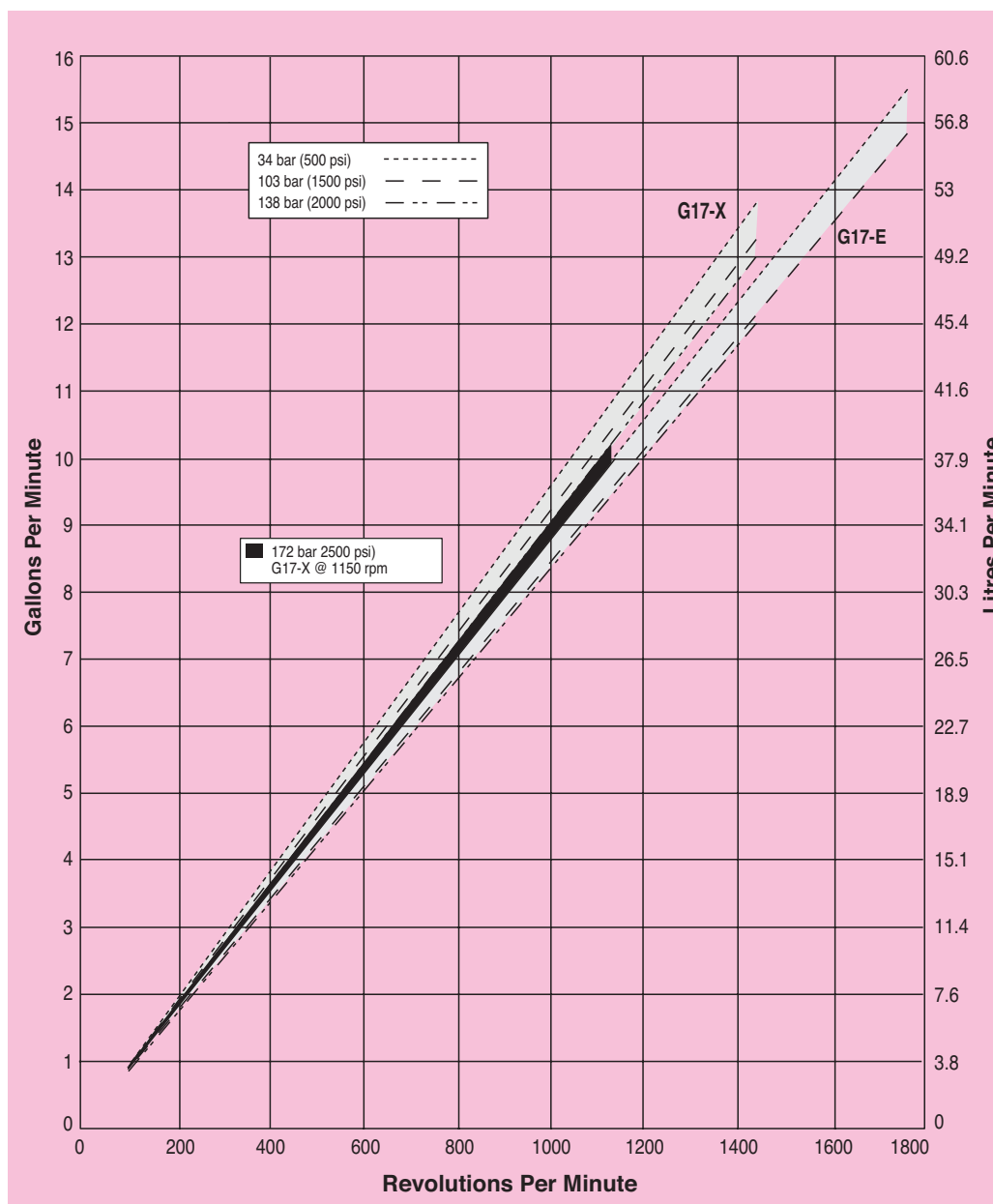
Model	Max. Input rpm	Flow		Pressure	
		gpm	l/min	Max. Inlet Pressure	Max. Discharge Pressure
G17-X	1450	13.8	52.3	34 bar (500 psi)	34 bar (500 psi)
	1450	13.3	50.2	34 bar (500 psi)	103 bar (1500 psi)
	1450	13.0	49.2	34 bar (500 psi)	138 bar (2000 psi)
	1150	10.1	38.1	34 bar (500 psi)	172 bar 2500 psi)
G17-E	1750	15.5	58.7	34 bar (500 psi)	34 bar (500 psi)
	1750	14.8	56.2	34 bar (500 psi)	103 bar (1500 psi)
	1450	12.0	45.5	34 bar (500 psi)	138 bar (2000 psi)

Performance and specification ratings apply to G17 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.

## Maximum Flow at Designated Pressure



# G17 Series Specifications

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

Model	@ max rpm	psi	bar	gpm	l/min
G17-X	1450	500	34	13.8	52.3
	1450	1500	103	13.3	50.2
	1450	2000	138	13.0	49.2
	1150	2500	172	10.1	38.1
G17-E	1750	500	34	15.5	58.7
	1750	1500	103	14.8	56.2
	1450	2000	138	12.0	45.5

## Delivery

Model	psi	bar	gal/rev	litres/rev
G17-X	500	34	0.0095	0.0360
	1500	103	0.0092	0.0346
	2000	138	0.0090	0.0339
	2500	172	0.0088	0.0331
G17-E	500	34	0.0089	0.0335
	1500	103	0.0085	0.0321
	2000	138	0.0083	0.0314

## Maximum Discharge Pressure

Metallc Heads:	103 bar (1500 psi) @1750 rpm (G17-E only)
	138 bar (2000 psi) @1450 rpm
	172 bar (2500 psi) @1150 rpm

## Maximum Inlet Pressure 500 psi (34 bar)

## Maximum Operating Temperature

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

Metallc Heads:	145 lbs. (66 kg)
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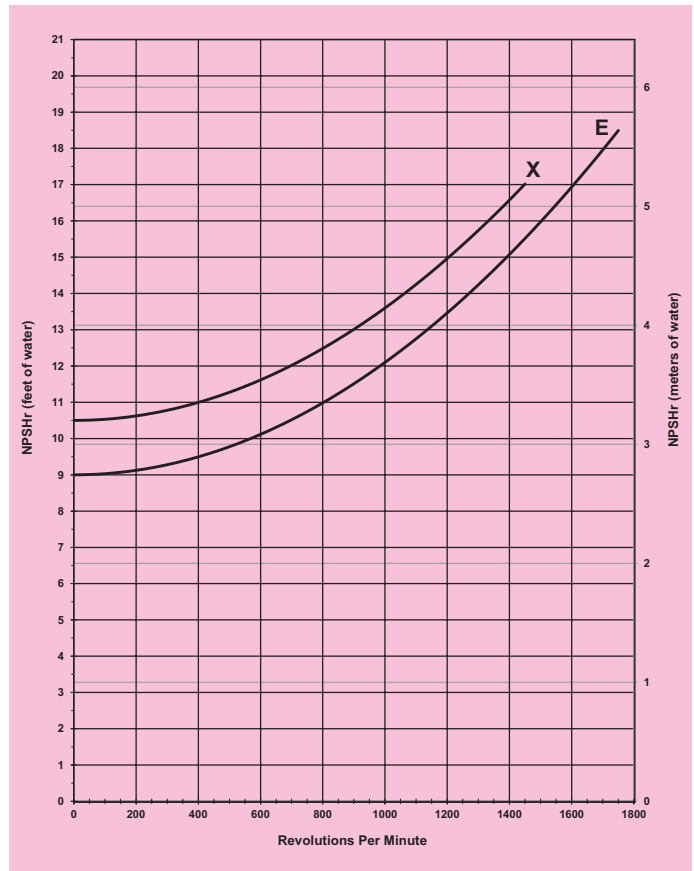
## Calculating Required Power

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

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

When using a variable frequency controller (VFD) 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.

## Net Positive Suction Head (NPSHr)

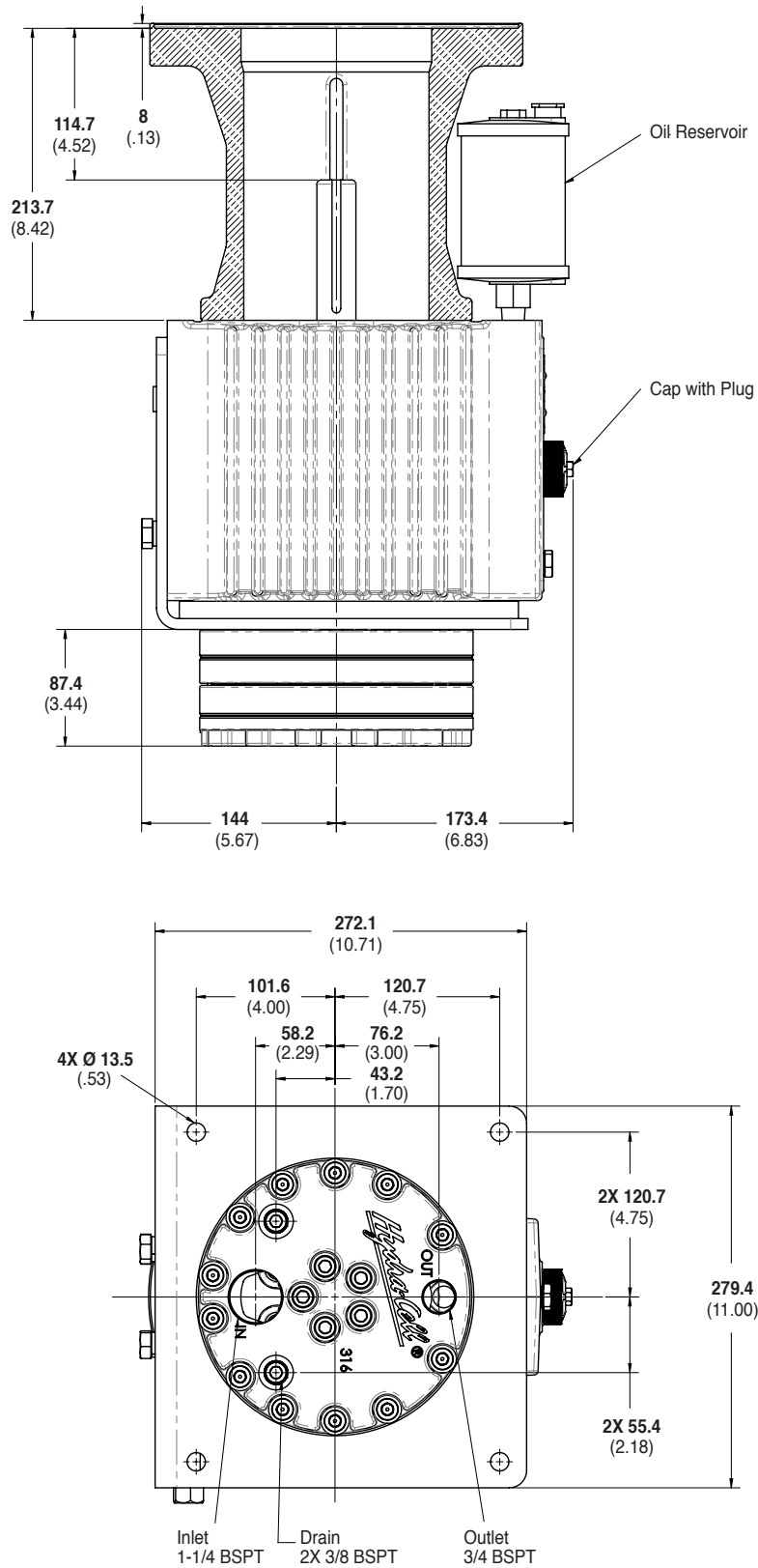


## Suction Lift:

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 Installation & Service Manual. Compare those calculations to the NPSHr curves above.

# G17 Series Representative Drawings

## G17 Models for Vertical Mounting mm (Inches)

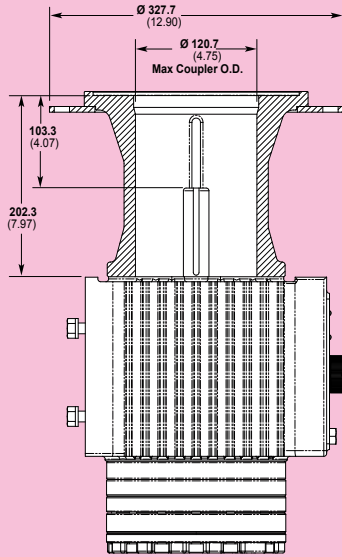


**Note:** Dimensions are for reference only. Contact Wanner International for certified drawings.

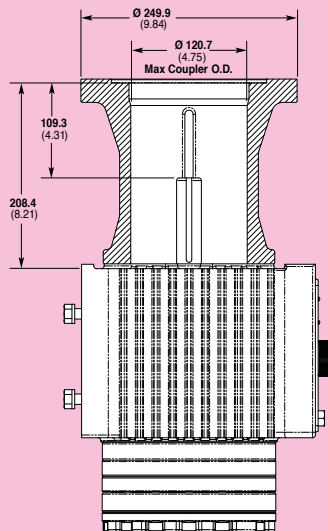
# G17 Series Motor Adaptors / Valves

## Pump/Motor Adaptor mm (Inches)

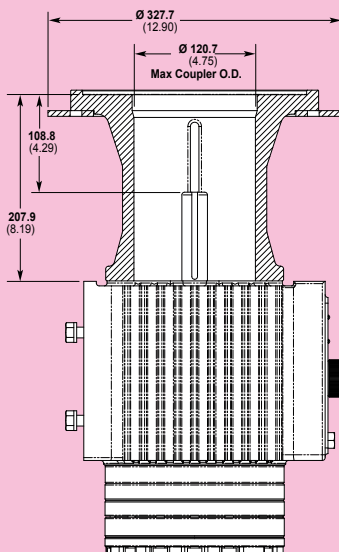
**Part Number:  
A04-041-1201**  
Must be ordered  
separately for use  
with IEC 132 frame  
motors, B5 flange.



**Part Number:  
A04-041-1203**  
Must be ordered  
separately for use  
with IEC 160 frame  
motors, B14 flange.



**Part Number:  
A04-041-1205**  
Must be ordered  
separately for use  
with IEC 160 - 180  
frame motors, B5  
flange.



*NEMA adaptors available - consult factory.*

## Valve Selection

A Hydra-Cell G17 Series  
pumping system uses a  
C62 Pressure Regulating  
Valve.



# G17 Series **How to Order**

## Ordering Information



A complete G17 Series Model Number contains 12 digits including 8 customer-specified design and materials options, for example, G17XKBTHFECG.

Digit	Order Code	Description
<b>1-3</b>	<b>G17</b>	<b>Pump Configuration</b> Vertical shaft-driven (BSPT Ports)* *Pump/motor adaptors ordered separately. See previous page.
<b>4</b>	<b>X</b> <b>E</b>	<b>Hydraulic End Cam</b> Max 48.0 l/min (12.7 gpm) @ 1450 rpm Max 43.5 l/min (11.5 gpm) @ 1450 rpm
<b>5</b>	<b>K</b>	<b>Pump Head Version</b> Advanced Diaphragm Position Control (ADPC) BSPT Ports
<b>6</b>	<b>B</b> <b>G</b> <b>S</b> <b>T</b>	<b>Pump Head Material</b> Brass Duplex Alloy 2205 Stainless Steel 316L Stainless Steel Hastelloy C
<b>7</b>	<b>A</b> <b>G</b> <b>T</b>	<b>Diaphragm &amp; O-ring Material</b> Aflas diaphragm / PTFE o-ring FKM Buna-N
<b>8</b>	<b>D</b> <b>H</b> <b>N</b> <b>T</b>	<b>Valve Seat Material</b> Tungsten Carbide 17-4 Stainless Steel Nitronic 50 Hastelloy C
<b>9</b>	<b>D</b> <b>F</b> <b>N</b> <b>T</b>	<b>Valve Material</b> Tungsten Carbide 17-4 Stainless Steel Nitronic 50 Hastelloy C
<b>10</b>	<b>E</b> <b>H</b> <b>T</b>	<b>Valve Springs</b> Elgiloy 17-7 Stainless Steel Hastelloy C

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



# G17 Series



**WANNER**

**Hydra-Cell**<sup>®</sup>

Partners in over 70 Countries

## Standards Compliance



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