

# 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.*

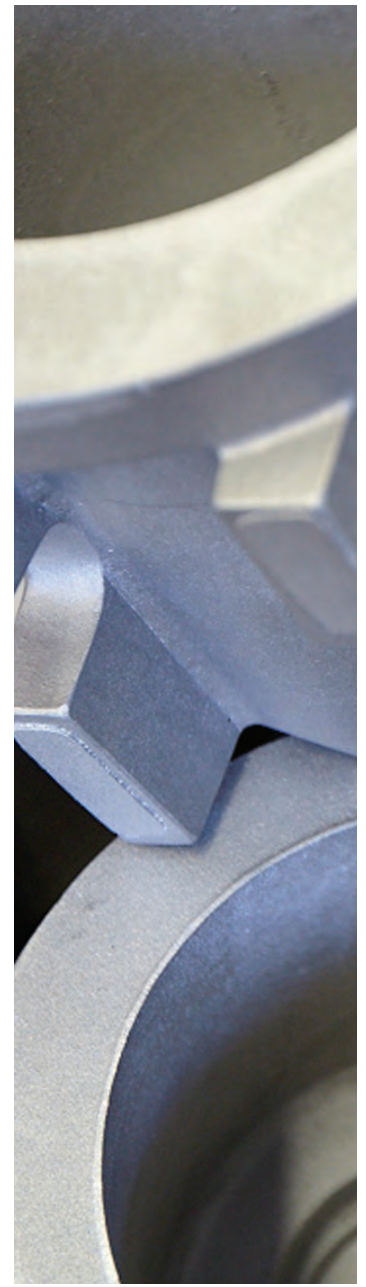
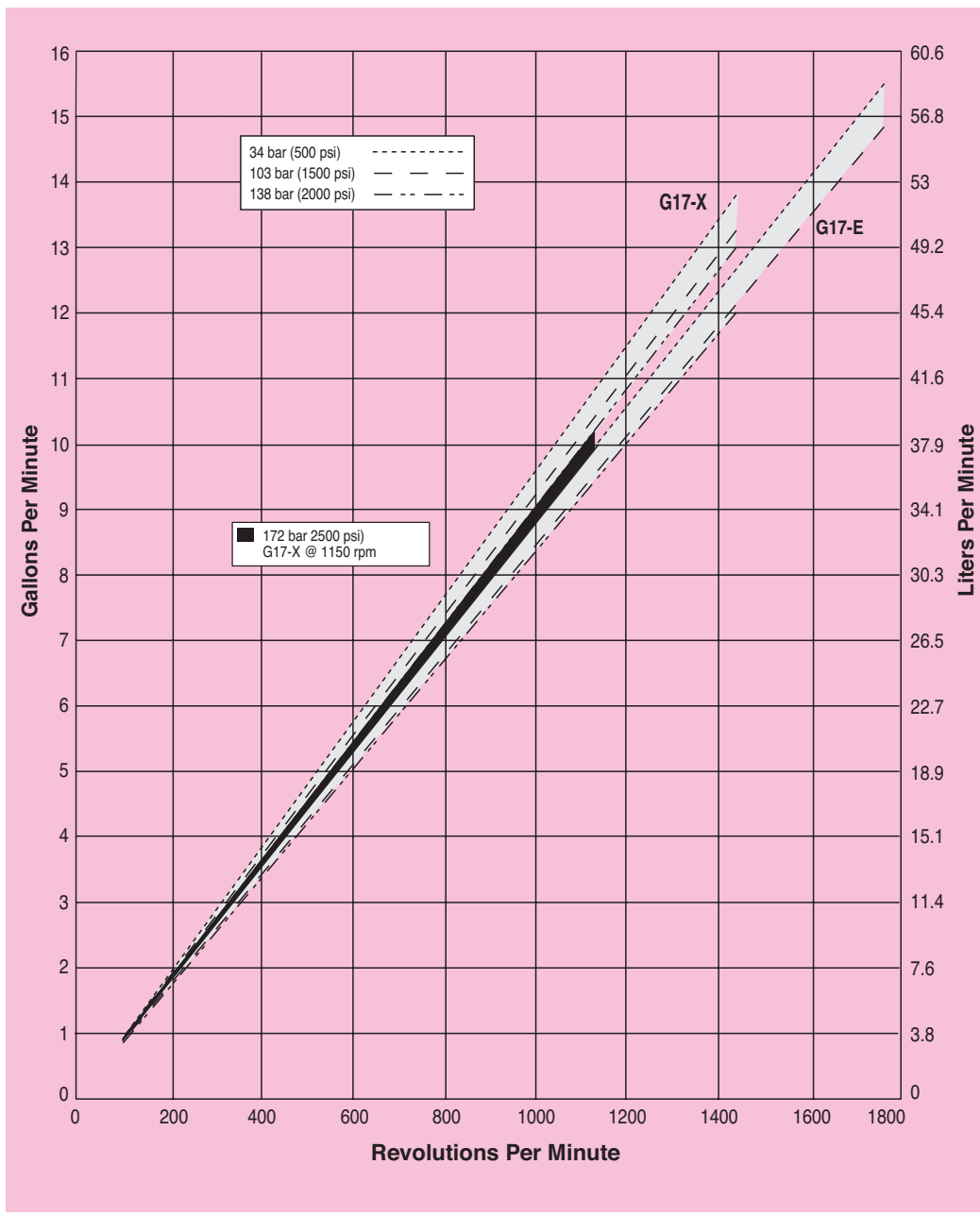
# G17 Series Performance

## 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.

## 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	liters/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

Metallic 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

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

## 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 liters (2.2 US quarts)

## Weight

Metallic Heads: 145 lbs. (66 kg)

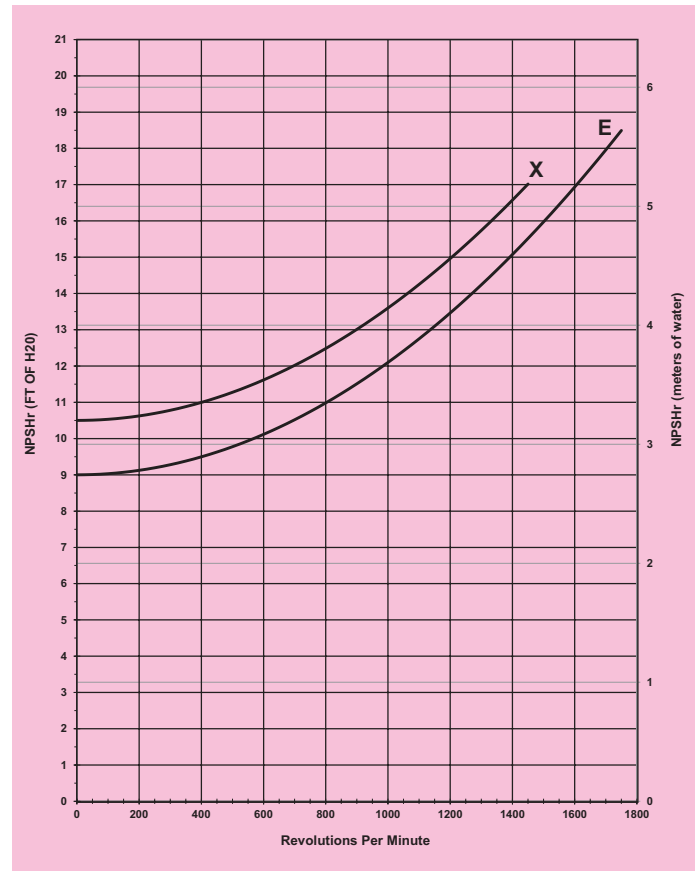
## Calculating Required Power

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

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

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)

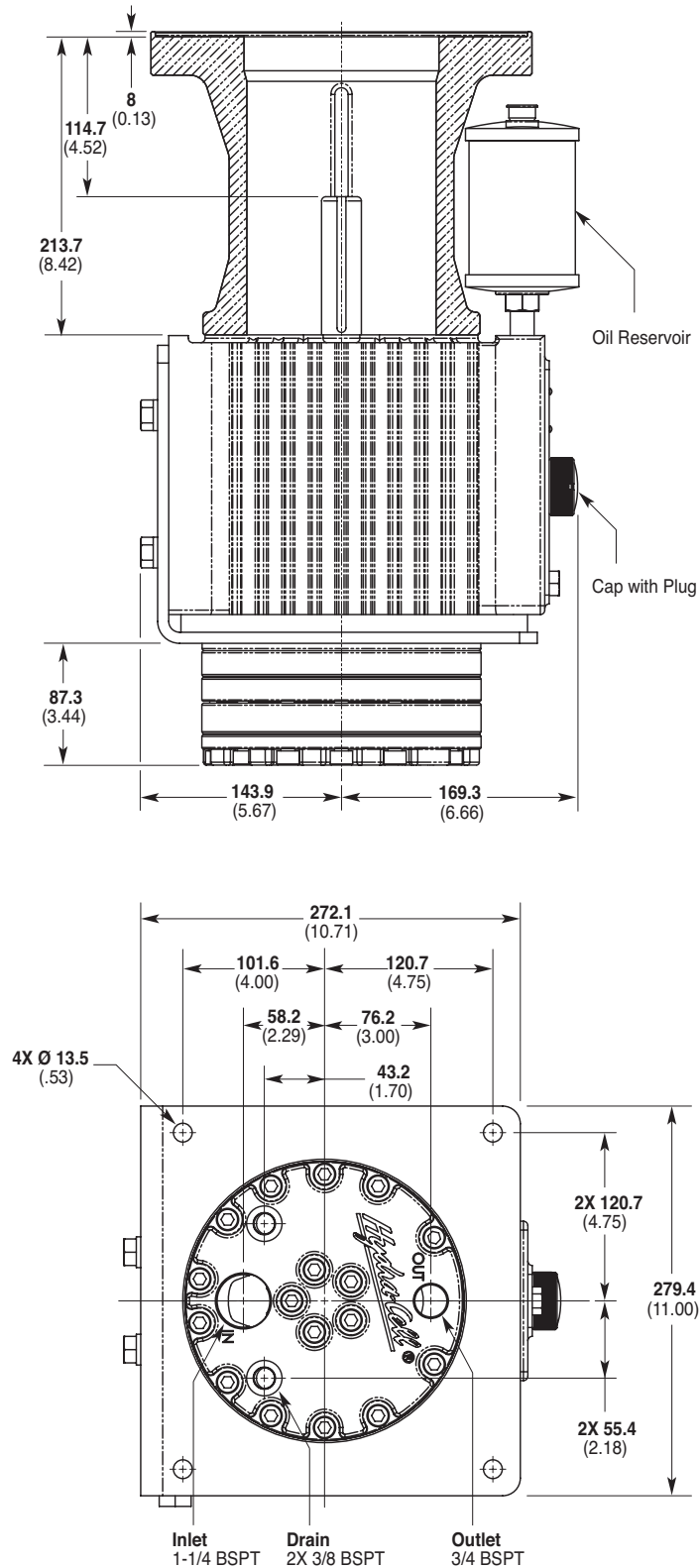


## Self-priming:

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)

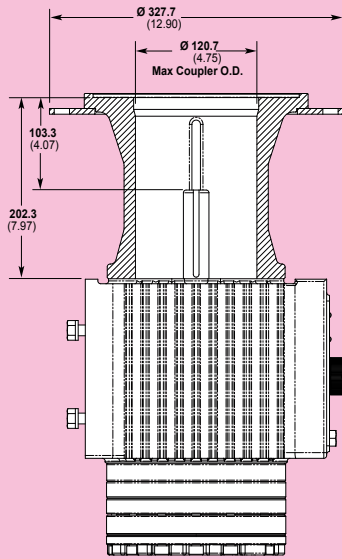


**Note:** Contact factory for additional drawings of specific models and configurations.

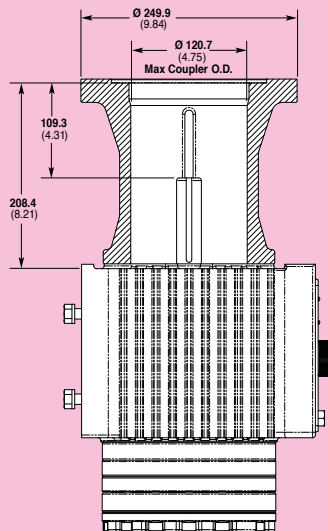
# G17 Series **Adaptors and Valves**

## Pump/Motor Adaptor mm (Inches)

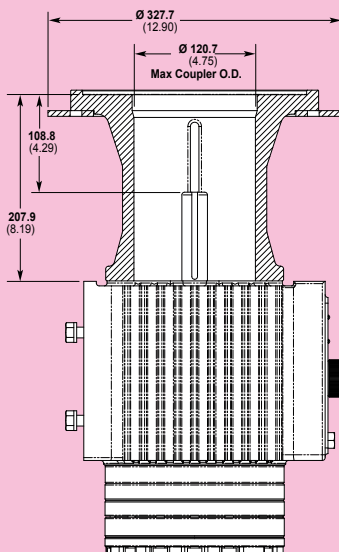
**Part Number:  
A01-041-1201**  
Must be ordered separately for use with IEC 132 frame motors, B5 flange.



**Part Number:  
A01-041-1203**  
Must be ordered separately for use with IEC 160 frame motors, B14 flange.



**Part Number:  
A01-041-1205**  
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

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

A complete G17 Series Model Number contains 12 digits including 9 customer-specified design and materials options, for example: G17XABTHFECG.

Digit	Order Code	Description
<b>1-3</b>		<b>Pump Configuration</b>
	G17	Vertical shaft-driven (BSPT Ports) *Pump/motor adaptors ordered separately. See previous page.
<b>4</b>		<b>Hydraulic End Cam</b>
	X	Max 48.0 l/min (12.7 gpm) @ 1450 rpm
	E	Max 43.5 l/min (11.5 gpm) @ 1450 rpm
<b>5</b>		<b>Pump Head Version</b>
	D	BSPT Ports
	-	ATEX (Note: ATEX 94/9/EC Certified, Category 2, Zone 1. Includes certificate and oil level monitor.)
<b>6</b>		<b>Pump Head Material</b>
	B	Brass
	G	Duplex Alloy 2205
	S	316L Stainless Steel
<b>7</b>		<b>Diaphragm &amp; O-ring Material</b>
	G	FKM
	T	Buna-N
<b>8</b>		<b>Valve Seat Material</b>
	D	Tungsten Carbide
	H	17-4 Stainless Steel
	N	Nitronic 50
<b>9</b>		<b>Valve Material</b>
	D	Tungsten Carbide
	F	17-4 Stainless Steel
	N	Nitronic 50
<b>10</b>		<b>Valve Springs</b>
	E	Elgiloy (Exceeds SST grade 316L)
	H	17-7 Stainless Steel
	T	Hastelloy C
<b>11</b>		<b>Valve Spring Retainers</b>
	C	Celcon
	H	17-7 Stainless Steel
	M	PVDF
	P	Polypropylene
	Y	Nylon (Zytel)

Digit	Order Code	Description
<b>12</b>		<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





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