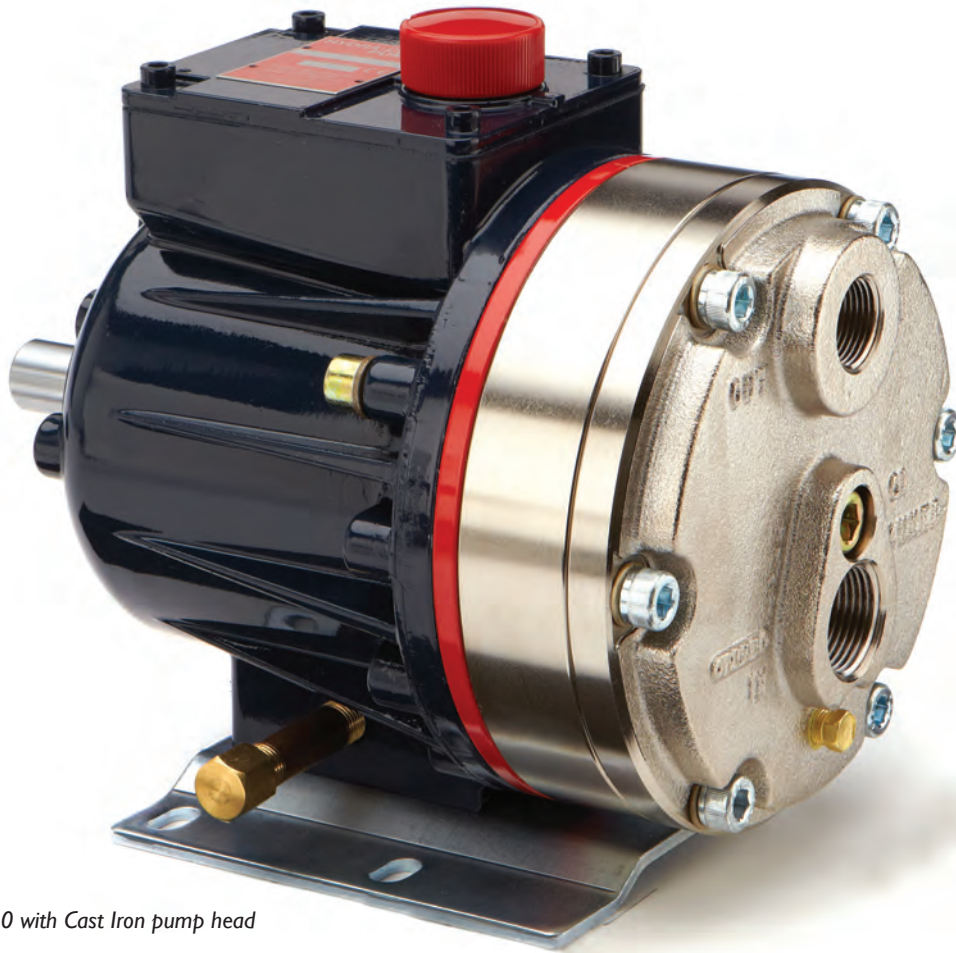


G10 Series

Maximum Flow Rate: 8.8 gpm (33.4 l/min)

Maximum Pressure: 1500 psi (103 bar) for Metallic Pump Heads
350 psi (24 bar) for Non-metallic Pump Heads



G10 with Cast Iron pump head



G10 with Brass pump head



G10 with Polypropylene pump head



G10 with Stainless Steel pump head and ANSI flanges

G10 Series Performance

Capacities

Flow

Model	Max. Input rpm	Max. Flow	
		@ 1000 psi (69 bar) gpm	@ 1000 psi (69 bar) l/min
G10-X	1450	8.1	30.6
G10-E	1750	8.8	33.4
G10-S	1750	6.0	22.7
G10-I	1750	4.0	15.0
@ 1500 psi (103 bar)			
G10-X	790	4.26	15.1
G10-E	790	3.87	14.7

Pressure

Maximum Inlet Pressure
250 psi (17 bar)

Maximum Discharge Pressure

Metallic Pump Heads:

G10-X, E, S, I to 1000 psi (69 bar)

G10-X to 1500 psi (103 bar) @ 790 rpm max.

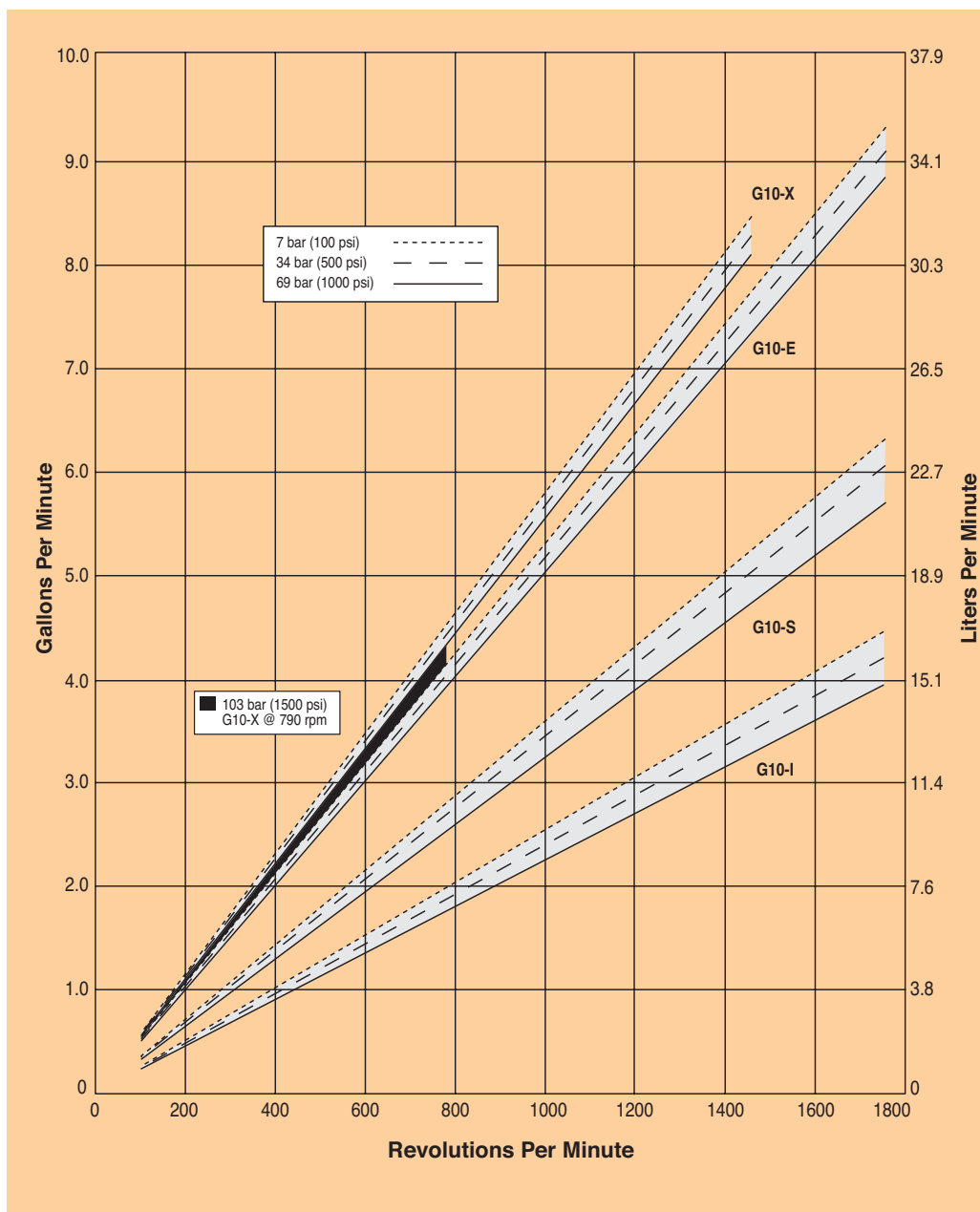
Non-metallic Pump Heads:

250 psi (17 bar) Polypropylene

350 psi (24 bar) PVDF

Performance and specification ratings apply to G10 configurations unless specifically noted otherwise.

Maximum Flow at Designated Pressure



G10 Series Specifications

Flow Capacities @ 69 bar (1000 psi) 4-pole Motor @ 50 Hz

Model	rpm	gpm	l/min
G10-X	1450	8.10	30.6
G10-E	1450	6.63	25.1
G10-S	1450	4.96	18.8
G10-I	1450	3.30	12.5

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

Model	rpm	gpm	l/min
G10-X	960	5.19	19.6
G10-E	960	4.39	16.6
G10-S	960	3.28	12.4
G10-I	960	2.19	8.3

Delivery @ 103 bar (1500 psi)

Model	gal/rev	liters/rev
G10-X	0.0054	0.0205
G10-E	0.0049	0.0186

Delivery @ 69 bar (1000 psi)

Model	gal/rev	liters/rev
G10-X	0.0056	0.0211
G10-E	0.0051	0.0191
G10-S	0.0034	0.0130
G10-I	0.0023	0.0086

Maximum Discharge Pressure

Metallic Heads:	69 bar (1000 psi) @ 1450 rpm (G10-X)
	69 bar (1000 psi) @ 1750 rpm (G10-E, S, I)
	103 bar (1500 psi) @ 790 rpm (G10-X)
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).
	60 °C (140 °F)
Non-metallic Heads:	60 °C (140 °F)

Maximum Solids Size 500 microns

Inlet Port	1 inch BSPT
	1 inch NPT
	150lb ANSI RF flange

Discharge Port	3/4 inch BSPT
	3/4 inch NPT
	600lb ANSI RF flange

Shaft Diameter 22.2 mm (7/8 inch)

Shaft Rotation Reverse (bi-directional)

Bearings Tapered roller bearings

Oil Capacity 1.05 liters (1.1 US quarts) - See pages 96 and 97 for oil selection and specification.

Weight

Metallic Heads:	21.8 kg (48 lbs.)
Non-metallic Heads:	15.9 kg (35 lbs.)

Calculating Required Power

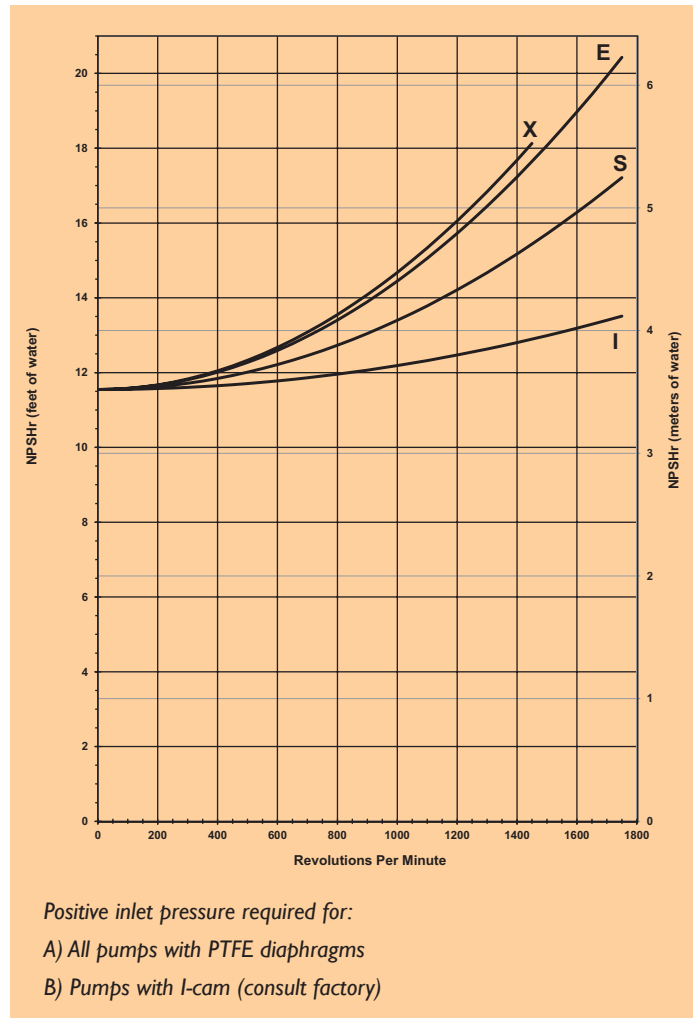
$$\frac{15 \times \text{rpm}}{63,000} + \frac{\text{gpm} \times \text{psi}}{1,460} = \text{electric motor hp}$$

$$\frac{15 \times \text{rpm}}{84,428} + \frac{\text{l/min} \times \text{bar}}{511} = \text{electric motor kW}$$

See page 164 for calculating pulley size.

When using a variable frequency drive (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)



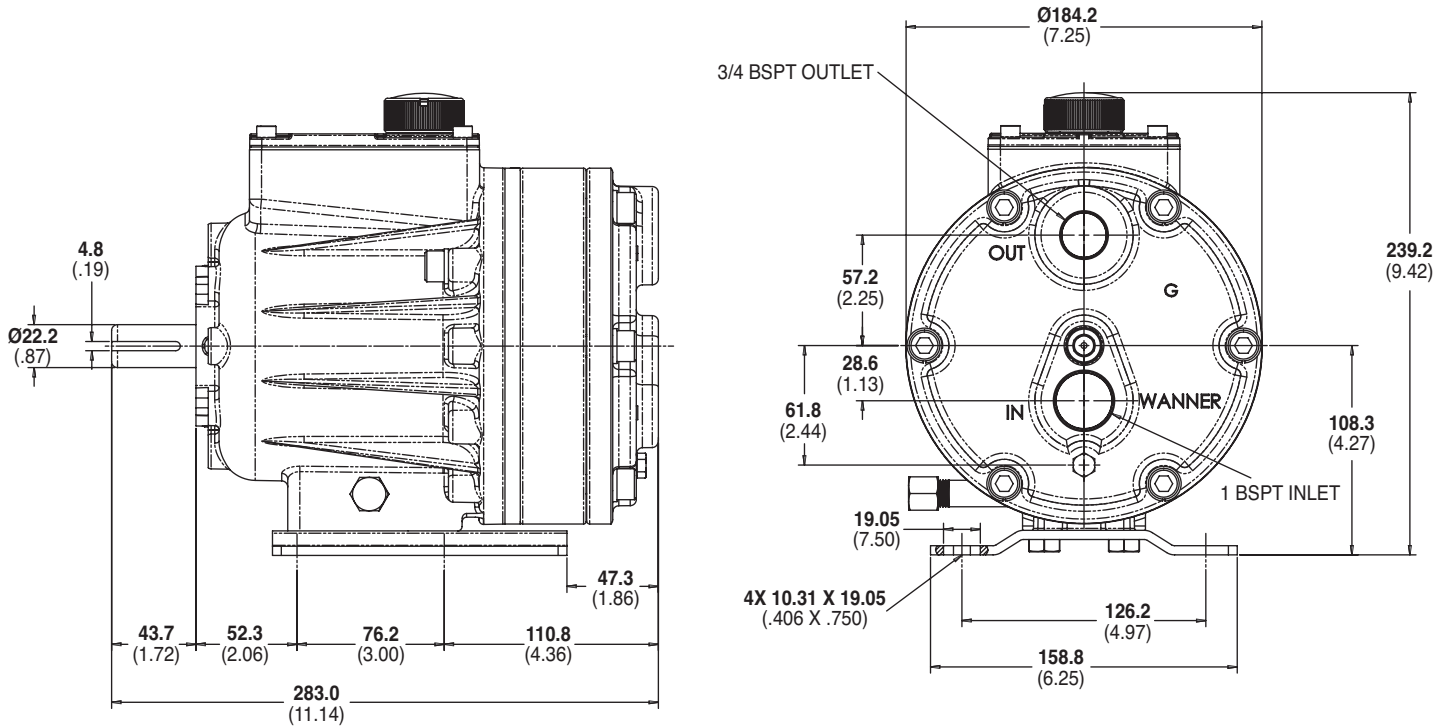
Self-priming:

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.

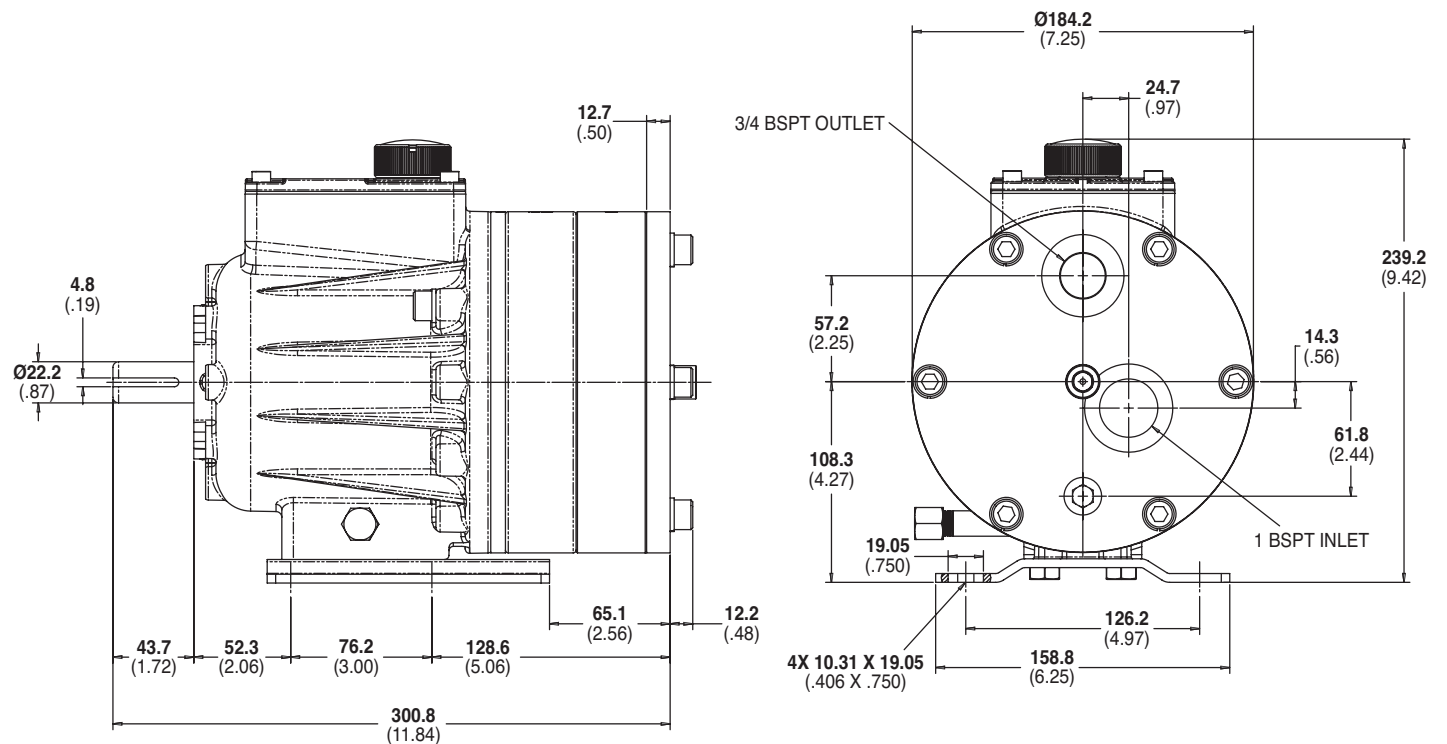
For technical assistance in pump selection, see Frequently Asked Questions on page 162, Design Considerations on page 163, and Installation Guidelines on pages 164-165.

G10 Series Representative Drawings

G10 Models with Metallic Pump Head mm (Inches)



G10 Models with Non-metallic Pump Head mm (Inches)



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

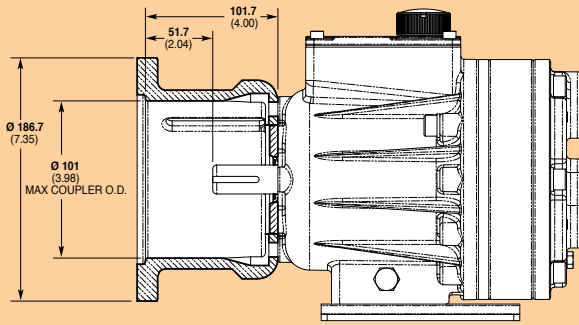
G10 Series **Adapters/Valves/Skids**

Pump/Motor Adapter mm (Inches)

Part Number: A04-003-I200

Must be ordered separately for G10 models for use with IEC 80 - 90 frame motors, B5 flange.

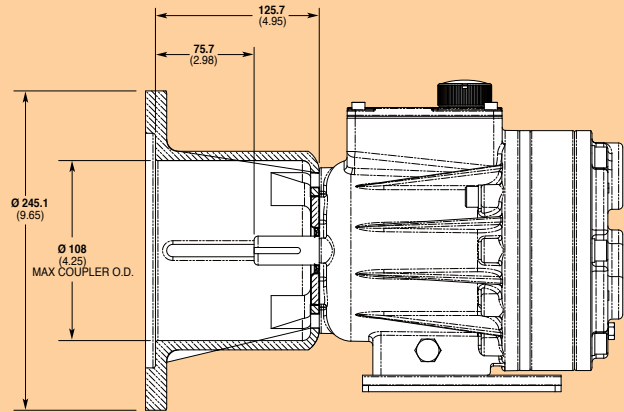
NEMA adapter available - consult factory.



Part Number: A04-004-I200

Must be ordered separately for G10 models for use with IEC 100 - 112 frame motors, B5 flange.

NEMA adapter available - consult factory.



Valve Selection

A seal-less C62 Pressure Regulating Valve is recommended for Hydra-Cell G10 pumping systems, especially for high-pressure requirements or when handling dirty fluids. See page 88 for more information.



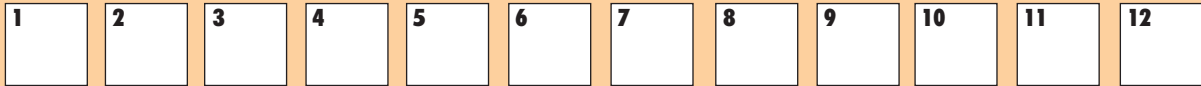
A C22 Pressure Regulating Valve provides a capable, lower-cost alternative to C62 valves for Hydra-Cell G10 pumping systems. See page 84 for more information.



Skid-mounted G10 with 3hp, 3-phase motor.

G10 Series **How to Order**

Ordering Information



A complete G10 Series Model Number contains 12 digits including 9 customer-specified design and materials options, for example: G10XKBTHFECA.

Digit	Order Code	Description
1-3	G10	Pump Configuration Shaft-driven (BSPT Ports or ANSI Flanges)* *Pump/motor adapters ordered separately. See previous page.
4	X	Hydraulic End Cam Max 30.6 l/min (8.1 gpm) @ 1450 rpm
	E	Max 25.1 l/min (6.6 gpm) @ 1450 rpm
	S	Max 18.8 l/min (5.0 gpm) @ 1450 rpm
	I	Max 12.5 l/min (3.3 gpm) @ 1450 rpm
5	K	Pump Head Version Kel-Cell BSPT Ports
	R	Kel-Cell Reduced Pocket
	X	ATEX <i>(Note: ATEX 94/9/EC Certified, Category 2, Zone 1. Includes certificate and oil level monitor.)</i>
6	B	Pump Head Material Brass
	C	Cast Iron (Nickel-plated)
	G	Duplex Alloy 2205 (with Hastelloy C followers & follower screws)
	M	PVDF (with Hastelloy C followers & follower screws)
	N	Polypropylene (with Hastelloy C followers & follower screws)
	P	Polypropylene (with 316L Stainless Steel followers & follower screws)
	R	316L Stainless Steel ANSI flange class 150 x 600
	S	316L Stainless Steel
	T	Hastelloy CW12MW
7	A	Diaphragm & O-ring Material Aflas diaphragm / PTFE o-ring
	E	EPDM (requires EPDM-compatible oil - Digit 12 oil code C)
	G	FKM
	J	PTFE (available with E and S cams only; 1200 rpm max.)
	P	Neoprene
	T	Buna-N

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

G10 Pump Housing is standard as Cast Aluminum. Upgrade to Ductile Iron available.

Note: For motors, bases, couplings and other pump accessories, refer to the Accessories section beginning on page 92.

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