



Graco EP Series

Hose Pump Technology



Single, oversized roller compresses a low friction hose through a full 360-degree rotation

- More flow per revolution than conventional designs
- One hose compression per revolution – extends hose life
- Inexpensive to maintain – no valves, seals or glands
- Pumps are reversible and can be used to empty lines or clear blockages
- Integral drive and motor can run as low as 1 rpm

PROVEN QUALITY. LEADING TECHNOLOGY.

EP Series Hose Pumps

Unique Advantages

Graco's positive displacement hose pumps rotate a full 360-degrees.

Because they use a single roller to compress the hose once per revolution, your hoses last longer so you have less maintenance and downtime.

Several hose diameter options are available within the same housing. This gives you greater flexibility and means you can use your EP Series pump for a wide variety of applications.

Removable Cover

- Easier access to internal parts, making maintenance fast and simple

Compact Footprint

- Ideal for tight spaces and flexible placement

Efficient Pumping Action

- 50% more flow per revolution than conventional designs
- One hose compression per revolution - extends hose life

Low Maintenance

- Quick replacement of hose
- No moving parts in the fluid stream

Integral Drive Train

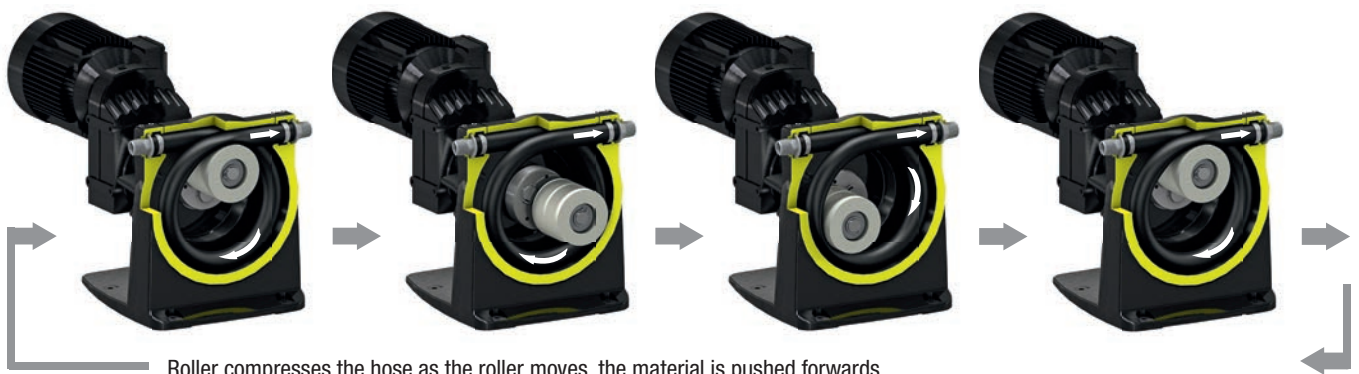
- Runs at speeds as low as 1 rpm

Hose Clamp Assembly

- One-piece "quick change" assembly for easy service



Hose Pump Operation



Roller compresses the hose as the roller moves, the material is pushed forwards.

Built to Handle the Toughest Jobs

Only the interior of the hose is in contact with the fluid being pumped, making it easy to sterilize and clean the inside pumping surfaces. The gentle pumping action is ideal for shear sensitive materials and fragile cell cultures.

Innovative Hose Design

Graco's 360-degree hose pump is designed to put **40% less stress on the hose** compared to conventional shoe pumps running at the same flow rate.

The hoses are highly engineered for **long life** and **durability** and are available in a wide variety of configurations for the most demanding applications and materials.



EP Series Pumps

EP2

typically used for chemical metering applications



EP3

typically used for chemical metering or sanitary applications



EP4

typically used for abrasive material transfer applications



Hose Materials	Stripe Colour / Inside Colour	Application	Max. Continuous Use Fluid Temperature
Natural Rubber (NR)	None / Black	Abrasive materials	71°C (160°F)
Nitrile Rubber (NBR)	Yellow / Black	Oil and fat based materials	104°C (220°F)
Ethylene propylene (EPDM)	Blue / Black	General chemicals	121°C (250°F)
Chlorosulfonated polyethylene (CSM)	Orange / Black	Corrosive chemicals	121°C (250°F)



How to Select Your Graco EP Series Pump

Three easy steps to choosing the right pump for YOU!

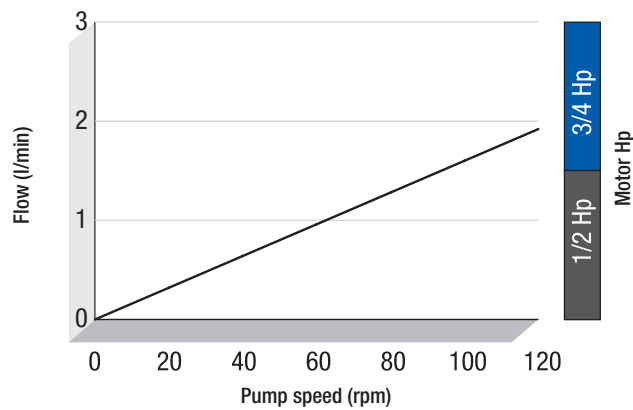
- 4-5 **1** Choose your pump size to meet your flow requirement
Refer to the Performance Charts below to choose your Pump Model.
- 6-7 **2** Choose your pump speed range
Using the Selection Charts, go to your Model Number and find the Gear Ratio for your desired pump speed.
- 8-9 **3** Choose your hose & hose barb materials to meet your material properties
Keep moving down the Selection Charts to select your hose material and your hose barb material.

1 Choose your pump size to meet your flow requirement

EP2 SERIES: max 8 l/min.

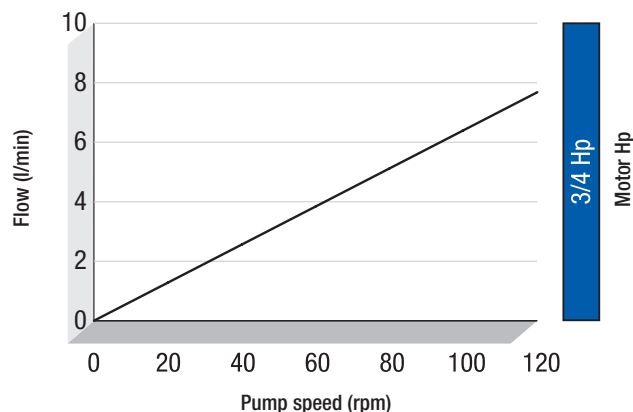
Pump Model EP2006

Max flow:2.0 l/min (0.5 gpm)
 Capacity:0.015 l/rev (0.004 gal/rev)
 Max discharge pressure:13.8 bar (200 psi)
 Hose diameter:6 mm
 Port size:1/2 in male NPT



Pump Model EP2013

Max flow:7.9 l/min (2.1 gpm)
 Capacity:0.06 l/rev (0.016 gal/rev)
 Max discharge pressure:13.8 bar (200 psi)
 Hose diameter:13 mm
 Port size:1/2 in male NPT



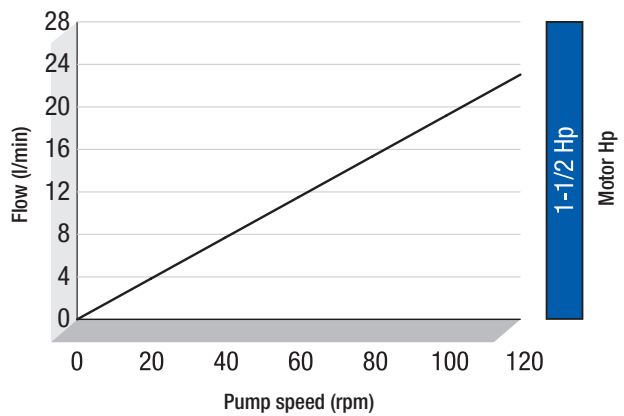
Performance Charts



EP3 SERIES: max 24 l/min.

Pump Model EP3019

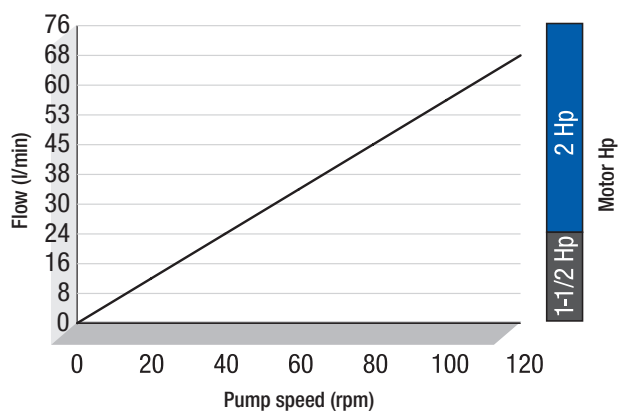
Max flow:23.6 l/min (6.2 gpm)
 Capacity:0.182 l/rev (0.045 gal/rev)
 Max discharge pressure:13.8 bar (200 psi)
 Hose diameter: 19 mm
 Port size: 3/4 in male NPT



EP4 SERIES: max 74 l/min.

Pump Model EP4029

Max flow:73.8 l/min (19.5 gpm)
 Capacity:0.568 l/rev (0.15 gal/rev)
 Max discharge pressure:13.8 bar (200 psi)
 Hose diameter: 29 mm
 Port size: 1-1/4 in male NPT



Complete Pumps

Graco Assembled Complete Pumps

2

Choose your pump speed range

Model	EP2006			EP2013		
Max flow @ 130 rpm - l/min	2.0			7.9		
Flow/Rev - liter	0.015			0.060		
Motor/Gear Speed Range	Low	Mid	High	Low	Mid	High
Motor Consumption - HP (kW)	0.33 (0.25)	0.5 (0.37)	-	0.33 (0.25)	0.75 (0.56)	-
Pump Speed @ 50 Hz - rpm *	9	29	-	9	29	-
Flow Rate @ 50 Hz - l/min *	0.14	0.43	-	0.53	2.58	-
Maximum Working Pressure - bar (psi)	13.8 (200)			13.8 (200)		
Maximum Suction Lift - m (ft)	8.9 (29)			8.9 (29)		
Operation Manual	3A1938			3A1938		
Repair-Parts Manual	3A1940			3A1940		
Pump Inlet / Outlet Size	1/2" male NPT			1/2" male NPT		

* Using a VFD you can run the motor at a different frequency. This will change the rpm of the pump. For example you increase rpm (& flow) by 20% if you run the motor at 60 Hz instead 50 Hz.

3

Choose your hose & hose barb materials to meet your material properties

Hose Material	Hose Barb Material	EP2006			EP2013		
Natural Rubber	316 SST	24L104	24L118	-	24L188	24L202	-
	Hastelloy-C	-	-	-	-	-	-
Nitrile	316 SST	24L107	24L121	-	24L191	24L205	-
	Hastelloy-C	24L108	24L122	-	24L192	24L206	-
EPDM	316 SST	24L100	24L114	-	24L184	24L198	-
	Hastelloy-C	24L101	24L115	-	24L185	24L199	-
GSM	316 SST	24L105	24L119	-	24L189	24L203	-
	Hastelloy-C	24L106	24L120	-	24L190	24L204	-

Ordering Information - Selection Charts

Model	EP3019			EP4029		
Max flow @ 130 rpm - l/min	23.6			73.8		
Flow/Rev - liter	0.182			0.568		
Motor/Gear Speed Range	Low	Mid	High	Low	Mid	High
Motor Consumption - HP (kW)	1 (0.75)	1.5 (1.12)	-	1.5 (1.12)	2 (1.50)	2 (1.50)
Pump Speed @ 50 Hz - rpm *	15	42	-	19	43	76
Flow Rate @ 50 Hz - l/min *	2.67	7.5	-	10.7	24.9	43.2
Maximum Working Pressure - bar (psi)	13.8 (200)			13.8 (200)		
Maximum Suction Lift - m (ft)	8.9 (29)			8.9 (29)		
Operation Manual	3A1938			3A1938		
Repair-Parts Manual	3A1939			3A1939		
Pump Inlet / Outlet Size	3/4" male NPT			1-1/4" male NPT		

Hose Material	Hose Barb Material	EP3019			EP4029		
Natural Rubber	316 SST	24L546	24L560	-	25L028	25L042	25L056
	Hastelloy-C	-	-	-	-	-	-
Nitrile	316 SST	24L549	24L563	-	25L031	25L045	25L059
	Hastelloy-C	24L550	24L564	-	25L032	25L046	25L060
EPDM	316 SST	24L542	24L556	-	25L024	25L038	25L052
	Hastelloy-C	24L543	24L557	-	25L025	25L039	25L053
GSM	316 SST	24L547	24L561	-	25L029	25L043	25L057
	Hastelloy-C	24L548	24L562	-	25L030	25L044	25L058

Pump Kits

Graco Pump Kits with Hose not installed

(Fully assembled pumps with the hose shipped in a separate package)

2

Choose your pump speed range

Model	EP2006			EP2013		
Max flow @ 130 rpm - l/min	2.0			7.9		
Flow/Rev - liter	0.015			0.060		
Motor/Gear Speed Range	Low	Mid	High	Low	Mid	High
Motor Consumption - HP (kW)	0.33 (0.25)	0.5 (0.37)	-	0.33 (0.25)	0.75 (0.56)	-
Pump Speed @ 50 Hz - rpm *	9	29	-	9	29	-
Flow Rate @ 50 Hz - l/min *	0.14	0.43	-	0.53	2.58	-
Maximum Working Pressure - bar (psi)	13.8 (200)			13.8 (200)		
Maximum Suction Lift - m (ft)	8.9 (29)			8.9 (29)		
Operation Manual	3A1938			3A1938		
Repair-Parts Manual	3A1940			3A1940		
Pump Inlet / Outlet Size	1/2" male NPT			1/2" male NPT		

* Using a VFD you can run the motor at a different frequency. This will change the rpm of the pump. For example you increase rpm (& flow) by 20% if you run the motor at 60 Hz instead 50 Hz.

3

Choose your hose & hose barb materials to meet your material properties

Hose Material	Hose Barb Material	EP2006			EP2013		
Natural Rubber	316 SST	24L374	24L388	-	24L458	24L472	-
	Hastelloy-C			-			-
Nitrile	316 SST	24L377	24L391	-	24L461	24L475	-
	Hastelloy-C	24L378	24L392	-	24L462	24L476	-
EPDM	316 SST	24L370	24L384	-	24L454	24L468	-
	Hastelloy-C	24L371	24L385	-	24L455	24L469	-
GSM	316 SST	24L375	24L389	-	24L459	24L473	-
	Hastelloy-C	24L376	24L390	-	24L460	24L474	-

Ordering Information - Selection Charts

Model	EP3019			EP4029		
Max flow @ 130 rpm - l/min	23.6			73.8		
Flow/Rev - liter	0.182			0.568		
Motor/Gear Speed Range	Low	Mid	High	Low	Mid	High
Motor Consumption - HP (kW)	1 (0.75)	1.5 (1.12)	-	1.5 (1.12)	2 (1.50)	2 (1.50)
Pump Speed @ 50 Hz - rpm *	15	42	-	19	43	76
Flow Rate @ 50 Hz - l/min *	2.67	7.5	-	10.7	24.9	43.2
Maximum Working Pressure - bar (psi)	13.8 (200)			13.8 (200)		
Maximum Suction Lift - m (ft)	8.9 (29)			8.9 (29)		
Operation Manual	3A1938			3A1938		
Repair-Parts Manual	3A1939			3A1939		
Pump Inlet / Outlet Size	3/4" male NPT			1-1/4" male NPT		

Hose Material	Hose Barb Material	EP3019			EP4029		
Natural Rubber	316 SST	24L630	24L644	-	25L094	25L108	25L122
	Hastelloy-C			-			
Nitrile	316 SST	24L633	24L647	-	25L097	25L111	25L125
	Hastelloy-C	24L634	24L648	-	25L098	25L112	25L126
EPDM	316 SST	24L626	24L640	-	25L090	25L104	25L118
	Hastelloy-C	24L627	24L641	-	25L091	25L105	25L119
GSM	316 SST	24L631	24L645	-	25L095	25L109	25L123
	Hastelloy-C	24L632	24L646	-	25L096	25L110	25L124

Hose Pumps with no Motor Drive

Ordering and Mounting Information

Hose Pumps with No Motor Drive

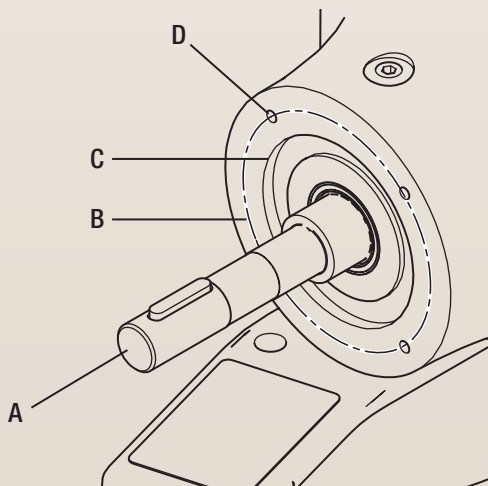
(Fully assembled pumps with customer to supply motor drive)

Hose Material	Hose Barb Material	EP2006	EP2013	EP3019	EP4029
Natural Rubber	316 SST	24M739	24M767	24M795	24M820
	Hastelloy-C	-	-	-	-
Nitrile	316 SST	24M742	24M770	24M798	24M823
	Hastelloy-C	24M743	24M771	24M799	24M824
EPDM	316 SST	24M735	24M763	24M791	24M816
	Hastelloy-C	24M736	24M764	24M792	24M817
CSM	316 SST	24M740	24M768	24M796	24M821
	Hastelloy-C	24M741	24M769	24M797	24M822

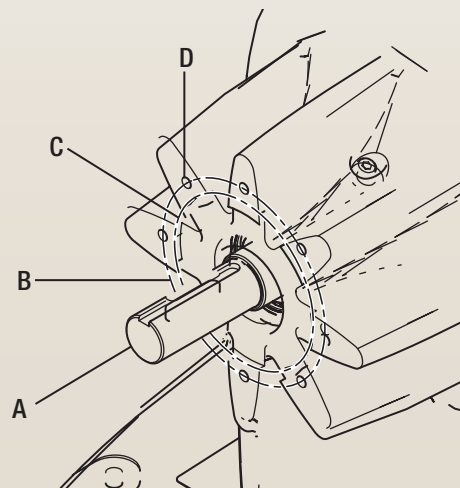
Mounting a Non-Graco Motor

To mount a non-Graco motor and gearbox to a bare EP Hose Pump

EP Series Pump Size	Hollow Bore Shaft Diameter A	Bolt Circle Diameter B	Flange Pilot Diameter C	Mounting Hole Thread Size D
EP2	20 mm	100 mm	80 mm	M6
EP3	30 mm	130 mm	110 mm	M8
EP4	35 mm	165 mm	130 mm	M10



Motor mounting dimensions for EP2 Pumps



Motor mounting dimensions for EP3 & EP4 Pumps

Kits and Replacement Hoses

Ordering Information

Replacement Hose Kits

	EP2006	EP2010	EP2013	EP3016	EP3019	EP4025	EP4029
Natural Rubber	24K482	24K492	24K502	24K522	24K532	24K542	24K552
Nitrile	24K484	24K494	24K504	24K524	24K534	24K544	24K554
EPDM	24K483	24K493	24K503	24K523	24K533	24K543	24K553
CSM	24K487	24K497	24K507	24K527	24K537	24K547	24K557

VFDs (Variable Frequency Drives)

HP	Input Voltage	Output Voltage	Used with Pump	Part Number
0.5	120 or 240 VAC (1 Phase)	240 VAC (3 Phase)	EP2006	16K905
0.5	208-240 VAC (1 or 3 Phase)	208-240 VAC (3 Phase)	EP2006	16K906
1	120 or 240 VAC (1 Phase)	240 VAC (3 Phase)	EP2010 - EP2013	16K907
1	208-240 VAC (1 or 3 Phase)	208-240 VAC (3 Phase)	EP2010 - EP2013	16K908
1.5	120 or 240 VAC (1 Phase)	240 VAC (3 Phase)	EP3016 - EP3019	16K909
1.5	208-240 VAC (1 or 3 Phase)	208-240 VAC (3 Phase)	EP3016 - EP3019	16K910
2	208-240 VAC (1 or 3 Phase)	208-240 VAC (3 Phase)	EP4025 - EP4029	16K911
2	400-480 VAC (3 Phase)	400-480 VAC (3 Phase)	EP4025 - EP4029	16K912

Hose Pump Lubricant

Description	Part Number
Glycerin Based Hose Lube (1 liter)	24K692
Glycerin Based Hose Lube (3.8 liter - 1 gallon)	24K694
Glycerin Based Hose Lube (208 liter - 55 gallon)	24M435

EP2 requires 250 ml (8 oz) of hose lube; EP3 requires 1 l (1 qt) of hose lube;
EP4 requires 2 l (1/2 g) of hose lube

Other

Description	Part Number
"Band-It" Clamp Tool	24L497

Graco Process Solutions



EP2 Hose Pump

- Max flow: 7.9 lpm (2.1 gpm)
- Ideal for chemical metering applications



EP3 Hose Pump

- Max flow: 23.6 lpm (6.2 gpm)
- Typically used for chemical metering & sanitary applications



EP4 Hose Pump

- Max flow: 73.8 lpm (19.5 gpm)
- Ideal for abrasive material transfer applications



Husky™ 205

- 1/4 in (6.3 mm) connection
- Max flow: 19 lpm (5 gpm)
- Polypropylene, acetal, PVDF



Husky 307

- 3/8 in (9.4 mm) connection
- Max flow: 26 lpm (7 gpm)
- Polypropylene, acetal



Husky 515

- 1/2 in (12.7 mm) connection
- Max flow: 57 lpm (15 gpm)
- Polypropylene, acetal, PVDF



Husky 716

- 3/4 in (19.1 mm) connection
- Max flow: 61 lpm (16 gpm)
- Aluminum, stainless steel



Husky 1050

- 1 in (25.4 mm) connection
- Max flow: 189 lpm (50 gpm)
- Aluminum, polypropylene, conductive polypropylene, PVDF, stainless steel, hastelloy



Husky 1590

- 1-1/2 in (38.1 mm) connection
- Max flow: 340 lpm (90 gpm)
- Polypropylene, acetal, PVDF, aluminum, stainless steel



Husky 2150

- 2 in (50.8 mm) connection
- Max flow: 568 lpm (150 gpm)
- Polypropylene, PVDF, aluminum, stainless steel, iron



Husky 3300

- 3 in (76.2 mm) connection
- Max flow: 1135 lpm (300 gpm)
- Polypropylene, aluminum, stainless steel



1:1 Fast-Flo™

- Max flow: 19 lpm (5 gpm)
- UL options available



Hydra-Clean™

- High pressure cleaning and sanitizing
- Air-operated for hazardous or confined areas
- 12:1, 23:1, 30:1 or 45:1 ratio options
- Available in wall or cart mount packages

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Graco is certified ISO 9001.

GRACO BVBA Industrieterrein Oude Bunders • Slakweidestraat 31 • B-3630 Maasmechelen
Tel: +32 (89) 770 700 • Fax: +32 (89) 770 777 • E-mail: info@graco.be • http://www.graco.com

©2011 Graco BVBA 344964ENEU Rev.C 09/13 Printed in Europe.

All other brand names or marks are used for identification purposes and are trademarks of their respective owners.

