



# E-Flo DCi™

Direct Current (DC) Electric Pumps with Intelligent (i) Control

PROVEN QUALITY. LEADING TECHNOLOGY.



# Experience More with Less

Compared to pneumatic pumps or other electric pumps, the Graco E-Flo DCi offers:

- more **power** and **efficiency** in a smaller footprint that takes up less space
- more **reliability** and **ease of use** with less parts to maintain
- more **intelligence** with less hardware to communicate important data

## Proven Construction and Simplicity

Graco E-Flo DCi electric pumps continue to set industry standards for high reliability, low maintenance and energy conservation.

### ELECTRIC MOTORS

- Handle a broad range of paints and coatings
- Adapt to changing conditions, especially with Intelligent Paint Kitchen control
- Save energy

#### Modularity

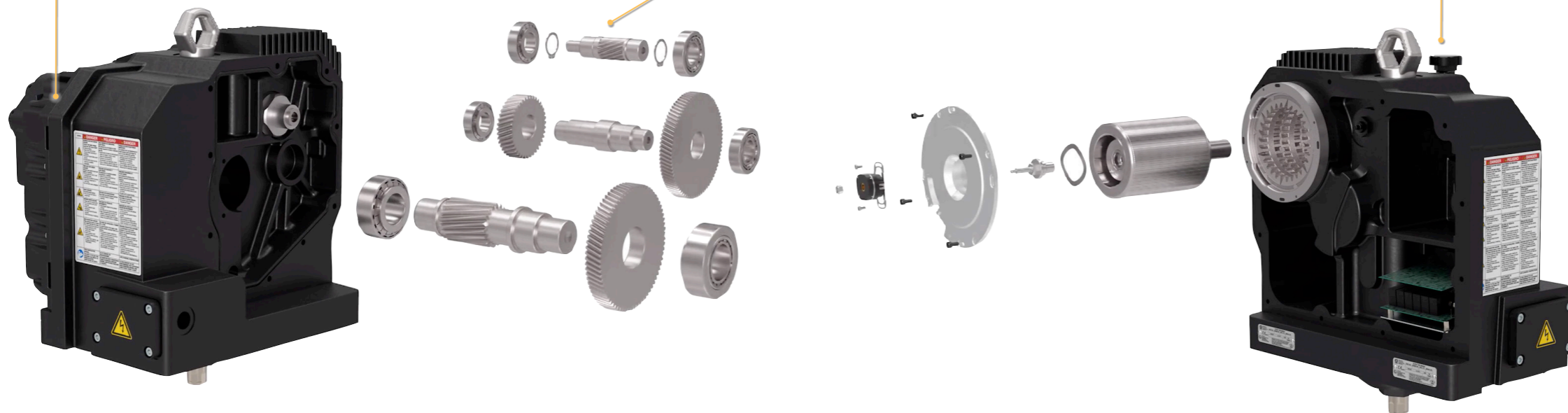
It's easy to replace existing Graco pneumatic or hydraulic pump motors with the E-Flo DCi.

#### Minimal Moving Parts

There's less to service or fix than any other electric pump on the market.

#### Low Maintenance

An annual oil change is all that's needed to keep the direct current (DC) motor running efficiently.





# Proven Construction and Simplicity

## PUMP LOWERS

Modular pump lowers allow you to easily:

- Install the right size and construction for your liquid finishing application.
- Access and service parts without slowing down production.

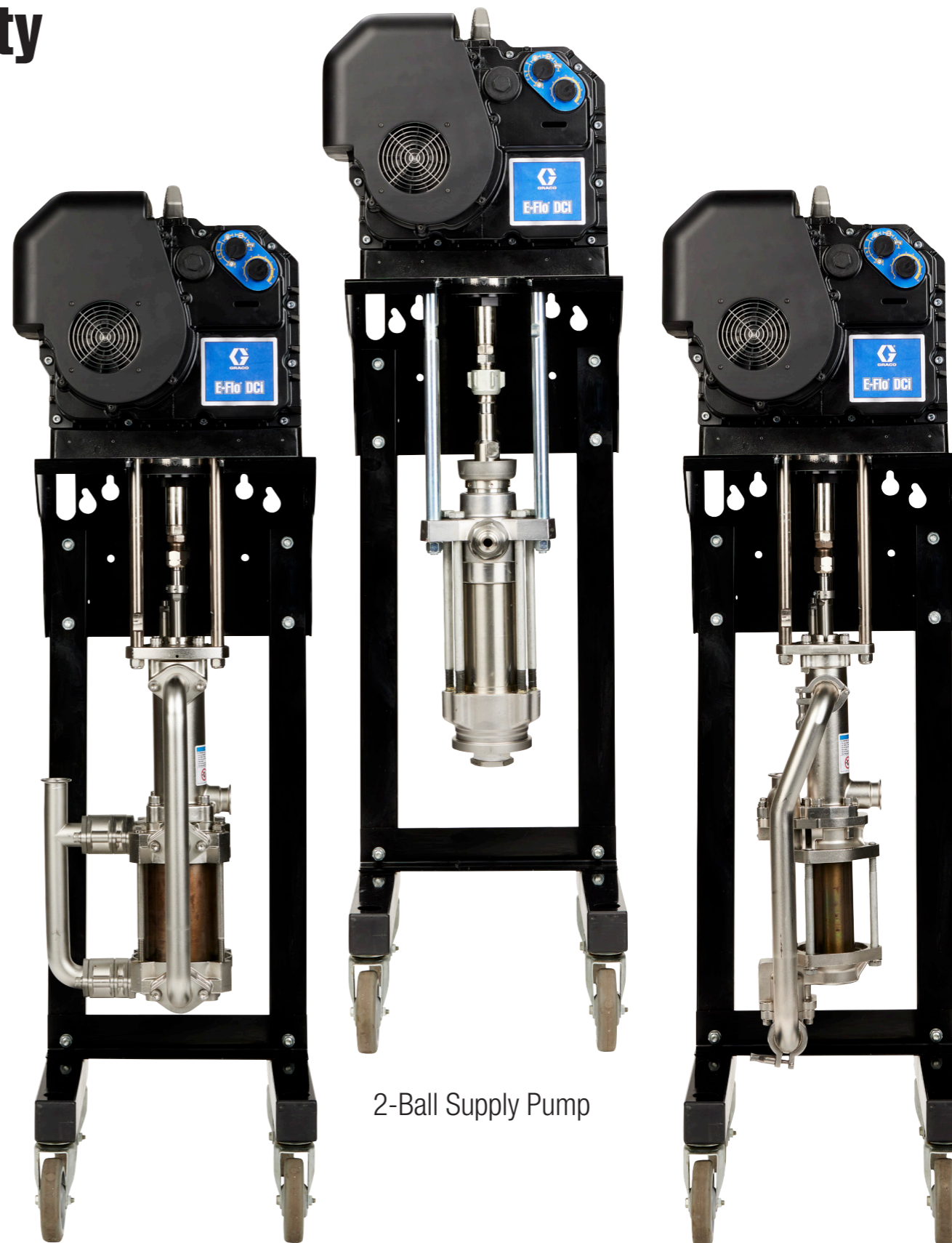
### 4-Ball Circulation

- 750 cc to 4000 cc configurations meet every flow application.
- Sealed from outside conditions, the 4-ball lower needs little to no maintenance.
- Durable ceramic Ultralife® coatings extend pump life.
- Chrome cylinders or silicone nitrile (SiNi) checks are available for special applications.

### 2-Ball Supply

- 145 cc to 1000 cc lowers achieve 6:1 to 46:1 equivalent pressure ratios.

**Compact Footprint:**  
Space-saving vertical design  
fits almost anywhere.



Large Sealed 4-Ball  
Circulation Pump

2-Ball Supply Pump

Mid-Range Sealed 4-Ball  
Circulation Pump



# Why Electric?

Graco electric pumps set industry standards for sustainability, reliability, flexibility and more.

**Save Energy:** Direct current (DC) electric motors run 5 to 10 times more efficiently than pneumatic or air motors. This can lower your energy bill and improve compliance with environmental regulations.

**Improve the Work Environment:** Electric motors operate at least 20 dBA quieter than similar-sized pneumatic motors. A quiet motor that exceeds OSHA\* sound regulations means happier operators who produce better results.

**Advance Quality:** For better, more consistent finishes, dual control technology gives you smooth, rapid changeovers, while minimizing pulsation. To lessen pulsation even more, you can add a surge tank to some E-Flo DCi packages.

**Prevent Downtime:** Graco electric pumps can move to stand-alone operation. This keeps production going as other parts of your finishing line undergo maintenance or repair.

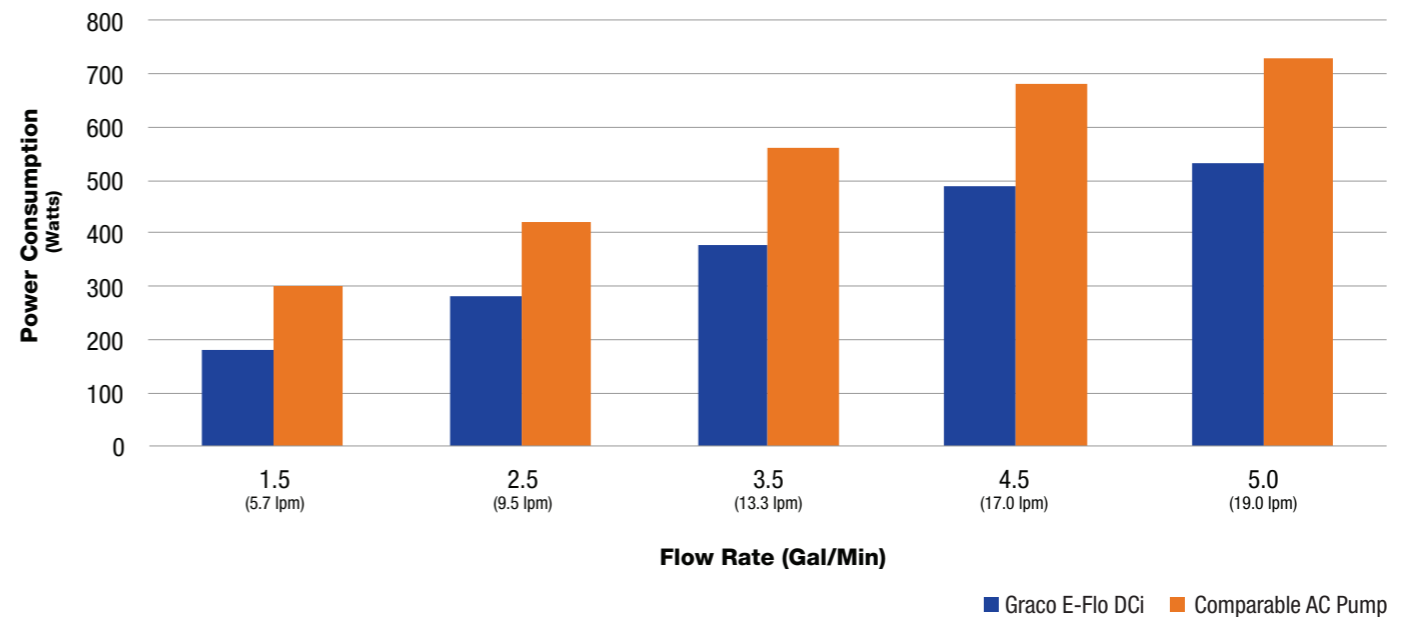
**Interface and Integrate Easily:** Basic installation involves a control module and PLC (programmable logic controller) connection. No VFD (variable frequency drive) required.

\*Occupational Safety and Health Administration

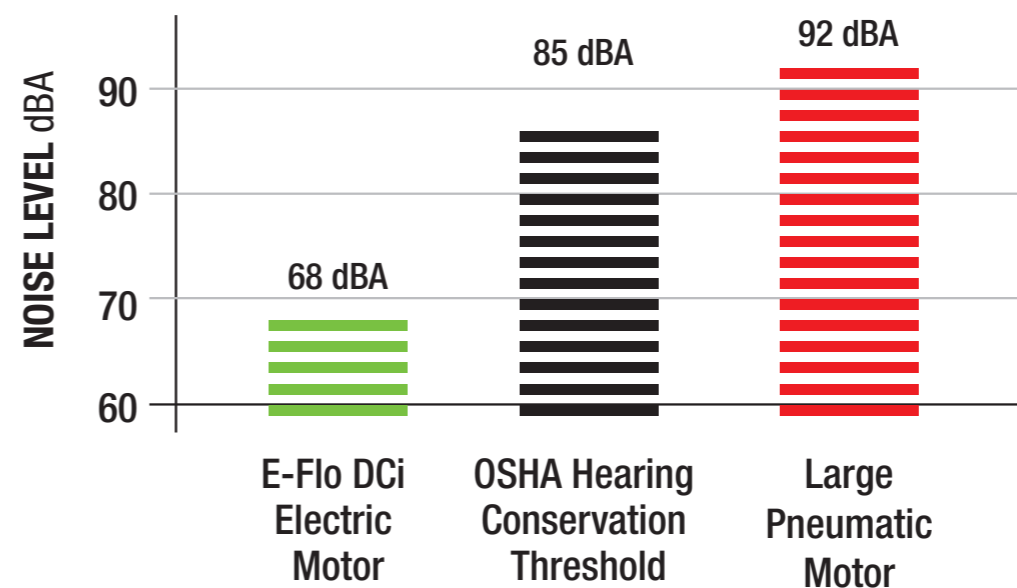
## Energy Consumption Comparison (comparison of like sized pumps)

Direct current (DC) uses 40 to 60 percent less energy than comparable alternating current (AC) pumps.

### E-Flo DCi vs Comparable AC Pump Power Consumption



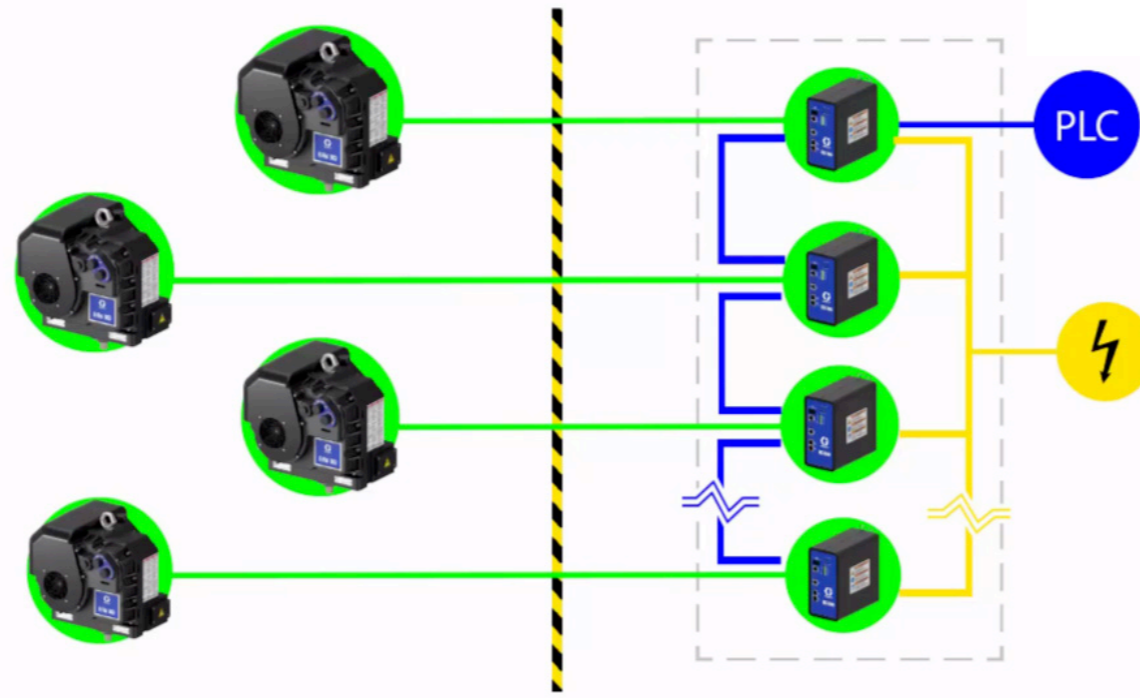
### Noise Comparison



Note: All pressures 100 psi

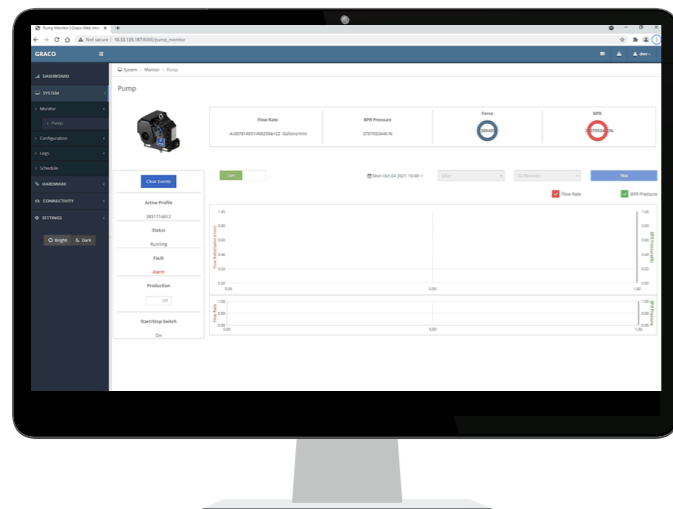
# Power Line Communication Module

It shouldn't take a lot of hardware and wiring to make your factory paint mix room and paint circulation system ready for IoT (Internet of Things) and Industry 4.0.



The E-Flo DCi Link power line communication module requires minimal field wiring to connect to your plant's PLC. This optimizes communication and truly makes your pump intelligent.

Ethernet access to web-based setup and programming enables real-time access to data. This can help you immediately address system issues and predict when motor or lower maintenance is needed.



- Basic or advanced options size up or down, according to changing production demands and reporting needs.
- Access real-time data – at any time from anywhere – on your connected device.
- Web interface includes operations monitor, system configuration, process and alarm data.
- Easily track and report on pressure, flow, power consumption and events.
- Events include over/under pressure or flow. This can help identify and fix pump runaway conditions before they become a problem.
- Built-in field bus connects PLC via Ethernet IP, Profinet, CC-Link IE, and Ethercat protocols.



# Choose the Right Pump for You!

How to Select Your E-Flo DCi

## Ordering Information

For more detailed information, reference manuals [3A7824](#) and [3A7826](#).

### Part Number Matrix

#### Circulation Pumps

First Digit	Second Digit	Third and Fourth Digit	Fifth Digit	Sixth Digit
Y = Intelligent	B = Basic 480V	31 = 1 HP 750 cc	4 = Sealed Ultralife	0 = No Stand
		21 = 1 HP 1000 cc	7 = Sealed with Surge Tank	1 = Stand
		58 = 2 HP 750 cc	8 = Sealed with Chrome	2 = Wall Mount Bracket
		40 = 2 HP 1000 cc	9 = Sealed with SiNi	
		30 = 2 HP 1500 cc		
		20 = 2 HP 2000 cc		
		90 = 3 HP 750 cc		
		62 = 3 HP 1000 cc		
		45 = 3 HP 1500 cc		
		35 = 3 HP 2000 cc		
		28 = 3 HP 2500 cc		
		23 = 3 HP 3000 cc		
		17 = 3 HP 4000 cc		
		53 = 5 HP 2500 cc		
		44 = 5 HP 3000 cc		
		33 = 5 HP 4000 cc		

#### Supply Pumps

First Digit	Second and 3rd Digit	Fourth Digit	Fifth Digit	Sixth Digit
Y = Intelligent	31 = 2 HP 145 cc	B = Basic 480V	Dura-Flo	0 = No Stand
	24 = 2 HP 180 cc		A: 3UHMW / 2 PTFE Stainless	1 = Stand
	21 = 2 HP 220 cc		B: 3 UHMW/2 Tuffstack, Stainless	2 = Wall Mount Bracket
	16 = 2 HP 290 cc		D: 3 PTFE / 2 Leather, Carbon Steel	
	46 = 3 HP 145 cc		E: 4 Leather / 1 PTFE, Stainless	
	40 = 3 HP 180 cc		G: PTFE / PTFE, Stainless	
	30 = 3 HP 220 cc		H: PTFE / Leather, Stainless	
	25 = 3 HP 290 cc		K: UHMW / Leather, Carbon Steel	
	15 = 3 HP 430 cc		Xtreme	
	12 = 3 HP 580 cc		1: 3 Xtreme / 2 Leather, Carbon Steel	
	06 = 3 HP 1000 cc			
	45 = 5 HP 290 cc			
	32 = 5 HP 430 cc			
	23 = 5 HP 580 cc			
	10 = 5 HP 1000 cc			

### Pump Specifications

#### Circulation Pumps

	750	1000	1500	2000	2500	3000	4000
Maximum Pressure 1 HP (bar)	300 (20.7)	200 (13.8)					
Maximum Pressure 2 HP (bar)	580 (40.0)	400 (27.6)	300 (20.7)				
Maximum Pressure 3 HP (bar)	900 (62.1)	600 (41.4)	450 (31.0)	350 (24.1)	280 (19.3)		
Maximum Pressure 5 HP (bar)					460 (31.8)	400 (27.6)	300 (20.7)
Maximum Flow @ 20 cpm gpm (lpm)	4.0 (15)	5.25 (20)	8.0 (30)	10.6 (40)	13.2 (50)	15.9 (60)	21.1 (80)
Volume per cycle (cc)	750	1000	1500	2000	2500	3000	4000
Footprint Area in <sup>2</sup> (cm <sup>2</sup> )	338 (2180)						
Weight lb (kg)	228 (103) - 251 (114)						

#### Supply Pumps

	145	180	220	290	430	580	1000
Maximum Pressure 2 HP (bar)	3100 (214)	2400 (166)	2100 (145)	1600 (110)			
Maximum Pressure 3 HP (bar)	4600 (317)	4000 (276)	3000 (207)	2500 (172)	1500 (103)	1200 (83)	600 (41)
Maximum Pressure 5 HP (bar)				4500 (310)	3200 (221)	2300 (159)	1000 (69)
Maximum Flow @ 20 cpm gpm (lpm)	0.77 (2.9)	0.95 (3.6)	1.2 (4.4)	1.5 (18)	2.3 (8.6)	3.1 (11.6)	5.3 (20)
Volume per cycle (cc)	145	180	220	290	430	580	1000
Footprint Area in <sup>2</sup> (cm <sup>2</sup> )	338 (2180)						
Weight lb (kg)	201 (91) - 223 (101)						

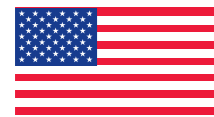
# Ordering Information

## Two Ball Lower

Pressure Ratio	Motor Size & Controls		Voltage	Packings/Construction										Lower Size					Mount		
	Motor Size	Basic Controls		380-480 VAC 3 Phase	A = 3 UHMW / 2 PTFE Stainless	B = 3 UHMW/2 Tufstack, Stainless	D = 3 PTFE / 2 Leather, Carbon Steel	E = 4 Leather / 1 PTFE, Stainless	G = PTFE / PTFE, Stainless	H = PTFE / Leather, Stainless	K = UHMW / Leather, Carbon Steel	1 = 3 Xtreme / 2 Leather, Carbon Steel	145 CC	180 CC	220 CC	290 CC	425 CC	560 CC	1000 CC	No Stand	Stand
6:1	3 HP	•	•															•	Y06BK0	Y06BK1	Y06BK2
6:1	3 HP	•	•															•	Y06BG0	Y06BG1	Y06BG2
10:1	5 HP	•	•															•	Y10BK0	Y10BK1	Y10BK2
12:1	3 HP	•	•				•											•	Y12BD0	Y12BD1	Y12BD2
12:1	3 HP	•	•	•														•	Y12BA0	Y12BA1	Y12BA2
15:1	3 HP	•	•				•											•	Y15BD0	Y15BD1	Y15BD2
15:1	3 HP	•	•				•											•	Y15BE0	Y15BE1	Y15BE2
16:1	2 HP	•	•															•	Y16B10	Y16B11	Y16B12
16:1	2 HP	•	•															•	Y16BE0	Y16BE1	Y16BE2
21:1	2 HP	•	•															•	Y21B10	Y21B11	Y21B12
21:1	2 HP	•	•															•	Y21BE0	Y21BE1	Y21BE2
23:1	5 HP	•	•				•											•	Y23BD0	Y23BD1	Y23BD2
23:1	5 HP	•	•	•														•	Y23BA0	Y23BA1	Y23BA2
24:1	2 HP	•	•															•	Y24B10	Y24B11	Y24B12
24:1	2 HP	•	•															•	Y24BE0	Y24BE1	Y24BE2
25:1	3 HP	•	•															•	Y25B10	Y25B11	Y25B12
25:1	3 HP	•	•															•	Y25BE0	Y25BE1	Y25BE2
30:1	3 HP	•	•															•	Y30B10	Y30B11	Y30B12
30:1	3 HP	•	•															•	Y30BE0	Y30BE1	Y30BE2
31:1	2 HP	•	•															•	Y31B10	Y31B11	Y31B12
31:1	2 HP	•	•															•	Y31BH0	Y31BH1	Y31BH2
32:1	5 HP	•	•				•											•	Y32BD0	Y32BD1	Y32BD2
32:1	5 HP	•	•				•											•	Y32BB0	Y32BB1	Y32BB2
40:1	3 HP	•	•															•	Y40BE0	Y40BE1	Y40BE2
45:1	5 HP	•	•															•	Y45BE0	Y45BE1	Y45BE2
46:1	3 HP	•	•															•	Y46BH0	Y46BH1	Y46BH2

## Accessories

Part Number	Description
25X675	DCi-Link Communication Module
255143	Wall Mount Bracket
253692	Floor Stand
20A749	Control Securing Kit



### AMERICAN BUILT QUALITY —

E-Flo DCi and DCi Link are designed and manufactured with globally sourced components that are assembled, and factory-tested in the USA.

## Four Ball Lower

Motor Size	Motor Size & Controls		Voltage	Approvals	Lower Type/Fittings				Mount			Output per Cycle									
	Motor Size	Basic Controls			380-480 VAC 3 Phase	ATEX / FM / IECEx	Sealed Stainless, Tri-Clamp, Ultralife	Sealed Stainless, Tri-Clamp Active Surge Tank	Sealed Stainless, Tri-Clamp Chrome	Sealed Stainless, Tri-Clamp, Ultralife, SNI	No Stand	Stand	Wall Mount Bracket	750 cc	1000 cc	1500 cc	2000 cc	2500 cc	3000 cc	4000 cc	
1HP	•	•	•	•	•					•		YB3140	YB2140								
1HP	•	•	•	•	•					•		YB3141	YB2141								
1HP	•	•	•	•	•						•	YB3142	YB2142								
1HP	•	•	•	•	•						•	YB3171	YB2171								
1HP	•	•	•	•	•						•	YB3172	YB2172								
1HP	•	•	•	•	•							YB3180	YB2180								
1HP	•	•	•	•	•						•	YB3181	YB2181								
1HP	•	•	•	•	•						•	YB3182	YB2182								
1HP	•	•	•	•	•							YB3190	YB2190								
1HP	•	•	•	•	•							YB3191	YB2191								
1HP	•	•	•	•	•							YB3192	YB2192								
2 HP	•	•	•	•	•							YB5840	YB4040	YB3040							
2 HP	•	•	•	•	•							YB5841	YB4041	YB3041							
2 HP	•	•	•	•	•							YB5842	YB4042	YB3042							
2 HP	•	•	•	•	•								YB4071	YB3071							
2 HP	•	•	•	•	•							YB4072	YB3072								
2 HP	•	•	•	•	•							YB5880	YB4080	YB3080							
2 HP	•	•	•	•	•							YB5881	YB4081	YB3081							
2 HP	•	•	•	•	•							YB5882	YB4082	YB3082							
2 HP	•	•	•	•	•							YB5890	YB4090	YB3090							
2 HP	•	•	•	•	•							YB5891	YB4091	YB3091							
2 HP	•	•	•	•	•							YB5892	YB4092	YB3092							
3 HP	•	•	•	•	•							YB9040	YB6240	YB4540	YB3540	YB2840					
3 HP	•	•	•	•	•							YB9041	YB6241	YB4541	YB3541	YB2841					
3 HP	•	•	•	•	•							YB9042	YB6242	YB4542	YB3542	YB2842					
3 HP	•	•	•	•	•									YB4571	YB3571						
3 HP	•	•	•	•	•									YB4572	YB3572						
3 HP	•	•	•	•	•								YB9080	YB6280	YB4580	YB3580	YB2880				
3 HP	•	•	•	•	•								YB9081	YB6281	YB4581	YB3581	YB2881				
3 HP	•	•	•	•	•								YB9082	YB6282	YB4582	YB3582	YB2882				
3 HP	•	•	•	•	•								YB9090	YB6290	YB4590	YB3590	YB2890				
3 HP	•	•	•	•	•								YB9091	YB6291	YB4591	YB3591	YB2891				
3 HP	•	•	•	•	•								YB9092	YB6292	YB4592	YB3592	YB2892				
5 HP	•	•	•	•	•													YB5340	YB4440	YB3340	
5 HP	•	•	•	•	•													YB5341	YB4441	YB3341	
5 HP	•	•	•	•	•													YB5342	YB4442	YB3342	
5 HP	•	•	•	•	•													YB5380	YB4480	YB3380	
5 HP	•	•	•	•	•													YB5381	YB4481	YB3381	
5 HP	•	•	•	•	•													YB5382	YB4482	YB3382	
5 HP	•	•	•	•	•													YB5390	YB4490	YB3390	
5 HP	•	•	•	•	•													YB5391	YB4491	YB3391	
5 HP	•	•	•	•	•													YB5392	YB4492	YB3392	

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.

Call today for product information or to request a demonstration.

877.84GRACO (1-877-844-7226) or visit us at [www.graco.com/EFloDCi](http://www.graco.com/EFloDCi).

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