

**Maritime Equipment
Easy Maintenance On Board**



CONTENT

INTRODUCTION

Why Partner With Graco	p. 4 - 5
------------------------------	----------

CLEANING

Deck Cleaning	p. 6
Chemical Cargo Cleaning	p. 7

SANITISING

Sanitising, Disinfecting & Deodorising Jobs	p. 8 - 9
---	----------

SURFACE PREPARATION

Small Surface Preparation Jobs	p. 10 - 11
Vapour Abrasive Blasting	p. 12 - 13
Dust Removal	p. 14 - 15

FLUID TRANSFER

Electric Operated Diaphragm Pumps	p. 16
Air Operated Double Diaphragm Pumps	p. 17
Air Operated Double Diaphragm Pumps > Model Overview	p. 18 - 21
Popular Models	p. 22 - 23

COATING

Spot Repair & Small Maintenance Jobs	p. 24 - 17
Cargo Hold Maintenance & Bigger Maintenance Jobs	p. 28 - 29
Accessories.....	p. 30 - 39

LUBRICATION

Light-Duty Oil & Grease Pumps	p. 40 - 43
Heavy-Duty Oil & Grease Pumps	p. 44 - 45
Hose Reels	p. 46 - 47

WHY PARTNER WITH GRACO?

FLEET OWNERS AND SHIP CHANDLERS

- The only 'pump' manufacturer to offer you such a wide range of marine equipment.
- With 3,300 distributors around the world, you have easy access to our products and spare parts.
- The wide-ranging ATEX and IECEx approved products provide the perfect solution for hazardous areas on board your petroleum tankers or bulk cargo carriers. You benefit from reliable products supported by many years of experience.
- Sharing user experiences, training information and latest developments.

We have you covered with over
3,300 distributors
worldwide

COMMITMENT TO QUALITY SINCE 1926

Graco strives for continuous improvement and excellence. To guarantee superior quality and to meet the market's changing requirements, we prioritize the investment of human and financial resources in Research and Development.

Every day, over 440 engineers perform research, product and process development. Innovative technologies and extensive field testing are a natural part of our process to develop new products.

Every aspect of our production is subject to constant testing and evaluation. It's the foundation to deliver products with long service life and low cost of ownership. The insurance to help you grow your business.

MARINE CATALOGUE

- Overview of our extensive range of marine products designed to work within the toughest marine conditions.
- Our products are listed with the Graco Partnumber and the IMPA Reference where applicable, and they are illustrated to ease the ordering process between the shipowner and shipboard personnel and the ship supplier.
- You can order the complete range from one contact and delivery happens worldwide. Contact details are listed at the end of the catalogue.



DECK CLEANING

HYDRA-CLEAN® AIR-OPERATED CART-MOUNT

The Hydra-Clean® Pressure Washer is designed for high pressure and high volume cleaning. Its high flow rate reduces the time taken to complete cleaning tasks saving on labour costs.

The unit itself can be operated on base oil, fresh and salt water, making it ideal for deck and tank cleaning.

The Hydra-Clean® can be used in hazardous areas as it's ATEX approved.

Advantages

- **Air-operated**
Low sound level – ideal for on board cleaning on cruise ships
High pressure and high flow cleaning
Up to 276 bar (4000 psi) and 34 lpm (9 gpm)
- **Easy to use**
Use with hot or cold water, detergents or strong chemical solutions up to 93°C (200°F)
- **Supports multiple guns**
Use 2 spray wands at the same time to support multiple operators
- **ATEX approved**
The air-driven motor enables use in explosion classified areas.
Ideal for cleaning on board of tankers



IMPA REFERENCE	59 07 39	59 07 34
GRACO PART NUMBER	247553	258664
Pump Package	30:1 Cart Mount	40:1 Cart Mount
Max. Working Pressure	211 bar (21.1 MPa / 3065 psi)	276 bar (27.6 MPa/ 4000 psi)
Max. Air Input Pressure	7 bar (0.7 MPa / 100 psi)	
Fluid Flow at 60 cpm	25.9 lpm (6.8 gpm)	17.4 lpm (4.6 gpm)
Cycle	430 cc (14.5 oz)	290 cc (9.8 oz)
Air Inlet Size	3/4" npt(f)	
Fluid Inlet Size	1 in	
Fluid Outlet Size	3/8 in	
Manual	312585	
Pump Std Repair Kit	17L796	24C162
Optional PTFE Repair Kit	222846	

Accessories

- 247878 Std. Discharge hose (3/8" x 15 m):
10 bar with M & F QD's
- 247880 Gun SST quick disconnect connections
- 24W471 Hose Reel Kit:
344 bar (5000 psi) maximum pressure
- 15T272 Coupler, 3/8" QR , 3/8-18 NPT:
For adding a second hose with gun to the outlet of the pump

CHEMICAL CARGO CLEANING

HYDRA-CLEAN® AIR-OPERATED 10:1 DRUM-MOUNT

It is the ideal solution for a majority of fluid handling tasks on board.

The pump is designed to be mounted on any open head universal drum and it can spray vertically up to 12 m (39.3 ft).

It is ideal for applying chemicals and detergents onto surface, washing down, general transfer of fluids and chemical injection into pressurised systems.

Advantages

- **Start-up ready**
Delivered with lubricator, hoses, spray gun and nozzle
- **Ease of use**
Use with open-head universal drums – vertically spraying up to 12 m (39.3 ft)
- **Efficient cleaning**
Use with hot or cold water, detergents or strong chemical solutions up to 93°C (200°F)
- **Supports multiple guns**
Use 2 spray wands at the same time to support multiple operators
- **ATEX approved**
The air-driven motor enables use on all vessel types.



IMPA REFERENCE	
GRACO PART NUMBER	6880119
Pump Package	10:1 Drum Mount
Max. Working Pressure	125 bar (12.5 MPa/ 1800 psi)
Max. Air Input Pressure	12.5 bar (1.2 MPa / 180 psi)
Fluid Flow at 60 cpm	11.4 lpm (3 gpm)
Cycle	189 cc (6.4 oz)
Air Inlet Size	1/2" npt(f)
Fluid Inlet Size	1/2 in
Fluid Outlet Size	3/4 in
Manual	308116
Pump Std Repair Kit	224401
Optional PTFE Repair Kit	224889

Accessories

- 247878 Std. Discharge hose (3/8" x 15 m):
10 bar with M & F QD's
- 247880 Gun SST quick disconnect connections
- 24W471 Hose Reel Kit:
344 bar (5000 psi) maximum pressure
- 15T272 Coupler, 3/8" QR , 3/8-18 NPT:
For adding a second hose with gun to the outlet of the pump

SANITISING, DISINFECTING AND DEODORISING JOBS

SANISPRAY HP™

When sanitising a small room or the entire deck, you want to have the right equipment to do the job. Otherwise, surfaces might not be efficiently disinfected or the equipment might be even unsafe to use. Graco's SaniSpray HP-range is specifically designed to disinfect any surface safely, fast and thoroughly.

The complete line of SaniSpray HP sprayers is built to deliver the highest level of productivity on every job. Whether you need to treat a small spot or an entire deck, there is a SaniSpray HP model with the performance you need to take on the task.



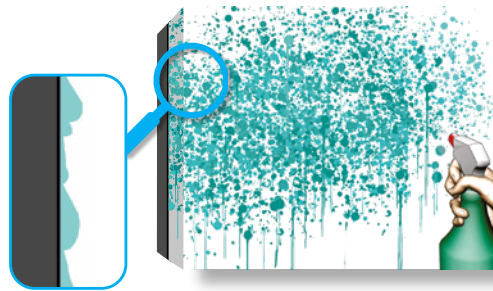
- Advantages**
- Consistent atomisation and coverage**
Delivers the proper atomisation required to quickly and consistently coat surfaces to disinfect and sanitise efficiently
 - Ready to spray**
Comes with everything you need to start immediately. Just add disinfectant and get to work.
 - High speed and productivity**
Choose the SaniSpray HP model by its flow rate to match job requirements

IMPA REFERENCE				
GRACO PART NUMBER	25R943 (230V CEE) 25R949 (230V UK)	25R945 (230V CEE) 25R950 (230V UK)	25R946 (230V CEE) 25R948 (230V IT/DK/CH/UK)	25R947 (230V CEE) 25R951 (110V UK)
Graco Model	SaniSpray HP 20* Corded Handheld Sprayer	SaniSpray HP 20 Cordless Handheld Sprayer	SaniSpray HP 65 Portable Hopper Sprayer	SaniSpray HP 130 2-Gun Cart Sprayer
Max. Flow Rate	0.6 lpm (0.16 gpm)	0.6 lpm (0.16 gpm)	1.9 lpm (0.5 gpm)	3.8 lpm (1 gpm) Ability to use 2 guns simultaneously
Max. Tip Size	.019"	.019"	.023"	.031"
Pressure	Adjustable 69 bar (6.9 MPa, 0-1000 psi)			
Particle** Micron Size	Adjustable Particle - Micron Size - Fine Mist to Coarse Spray			
Capacity	Fill & Spray 1.25 litres (0.33 gal)	Fill & Spray 1.25 litres (0.33 gal)	Pour & Go 5.7 litres (1.5 gal)	High Production Use Any Container
Power Sources	230V CEE Corded 230V UK Corded	DEWALT 18V Cordless Lithium Ion Batteries	230V CEE Corded 230V IT,DK, CH, UK Corded	230V CEE Corded 110V UK Corded
Includes	<ul style="list-style-type: none">313 Fine Spray Tip515 & 619 Coarse Spray Tip40 cm (15.7 in) Spray Extension5 FlexLiner BagsStorage PlugStorage Bag	<ul style="list-style-type: none">313 Fine Spray Tip515 & 619 Coarse Spray Tip40 cm (15.7 in) Spray Extension2 DEWALT*** 18V Max 2.0 ah Lithium-Ion BatteriesCharger5 FlexLiner BagsStorage PlugStorage Bag	<ul style="list-style-type: none">SaniSpray HP Gun¼" x 15m (50ft) BlueMax II Hose1/8" x (4.5 ft) BlueMax Whip Hose515 Fine Spray Tip617 & 619 Medium & Coarse High Production Spray Tips40 cm (15.7 in) Spray Extension	<ul style="list-style-type: none">(2) SaniSpray HP Guns(2) ¼" x15m (50 ft) BlueMax II Hose(2) 1/8" x (4.5 ft) BlueMax Whip Hose(2) 617 Fine Spray Tips(2) 617 & (2) 619 Medium & Coarse High Production Spray Tips(2) 40 cm (15.7 in) Spray Extension
Modular Repair	Yes	Yes	Yes	Yes

* SaniSpray HP 20 Corded Handheld Sprayer cannot spray alcohol based (flammable) products.
** Particle size will vary based on tip size, pressure and disinfectant product. Average particle size measured when spraying water ranges from 30 to 110 microns
*** DEWALT® and the DEWALT Logo are trademarks of DEWALT Industrial Tool Co. and are used under licence.

Graco's SaniSpray HP products have been designed to deliver consistent coverage, without heavy drips and runs, so that you can achieve specified disinfectant dwell times. Only Graco's SaniSpray HP sprayers are designed and built specifically to be compatible with sanitising and disinfecting chemicals while applying them with maximum efficiency.

THE OLD WAY



Inconsistent coverage with drips and runs

THE SANISPRAY HP WAY



Consistent coverage from edge to edge

VS

Compatible Disinfectants

- Approved Alcohol-based (Flammable) Active Ingredients - Ethanol, Isopropanol (except for SaniSpray HP 10 and 20 Corded models)
- Approved Non-Alcohol Based Active Ingredients - Aldehydes, Phenols, Quaternary Ammonium Compounds, Sodium Hypochlorite (Bleach), Peroxyacetic Acid, Hydrogen Peroxide, Hypochlorous Acid
- Consult with your material manufacturer to confirm spray application and equipment compatibility

		RAC X LP TIPS:							
		MATERIAL FLOW							
		FINE MIST		ATOMISATION			COARSE SPRAY		
		IN	.013"	.015"	.017"	.019"	.021"	.023"	.025"
Narrow ↑ SPRAY PATTERN WIDTH ↓ Wide	6-8	LP 313	LP 315						
	8-10		LP 415	LP 417	LP 419	LP 421	LP 423	LP 425	
	10-12		LP 515	LP 517	LP 519	LP 521	LP 523	LP 525	
	12-14		—	LP 617	LP 619	LP 621	LP 623	LP 725	
	14-16		—	—	—	—	LP 723	LP 725	
		SaniSpray 20 Optimal Range			SaniSpray 65 Optimal Range		SaniSpray 130 Optimal Range		

SaniSpray 20 Optimal Range SaniSpray 65 Optimal Range SaniSpray 130 Optimal Range

SMALL SURFACE PREPARATION JOBS

GRINDLAZER™

Proper surface preparation is essential to ensure optimal adhesion of any coating to the surface by removing all surface contaminants – leaving the surface clean, dry, properly profiled and sound.

The GrindLazer HandHeld Series is a great choice for small onboard surface preparation jobs.

The rugged and compact desing allows for easy touch-ups, edging and removal of renders and coatings from steel surfaces in hard-to-reach areas.



- Advantages
- **Versatile**
Handles both horizontal and vertical surfaces
 - **Long life**
Steel and high-impact plastic construction
 - **Flexible**
Available in both drum and rotary styles


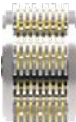

IMPA REFERENCE		
GRACO PART NUMBER	25N391	25N392
Graco Model	GrindLazer Standard DC21 E	GrindLazer Standard RC71 E
Cutter Type	Drum	Rotary
Max. Working Width	5 cm (2 in)	17.5 cm (7 in)
Cutter Drum Diameter	10 cm (4 in)	10 cm (4 in)
Engine/Motor – cm³ (HP)	230V Makita	230V Makita
Max. Cut Rate	10 m²/hr (100 ft²/hr)	10 m²/hr (100 ft²/hr)
Vacuum Port	✓	✓
Manual	3A5575	3A5575

Both units come with a Carbide Flail cutter drum.

A Steel Star cutter drum is recommended when removing epoxy and corrosion on a steel surface.

USED ON: **GrindLazer Standard DC21 E**
See Repair manual for additional Cutter Stacking Recommendations.



CUTTER TYPE	PROFILE	INDIVIDUAL CUTTER	FULLY ASSEMBLED DRUM	DRUM REBUILD KIT	CUT WIDTH	#CUTTERS	#SPACERS	#RODS
	CARBIDE FLAIL DRUM STYLE CUTTER							
	-	19A009	-	-	-	1	-	-
	Fine	-	25M891	25M892	2 in / 5 cm	48	6	6
	Medium	-	25M889	25M890	2 in / 5 cm	36	42	6
	Course	-	25N060	25N065	2 in / 5 cm	30	60	6
	STEEL STAR DRUM STYLE CUTTER							
	-	19A063	-	-	-	1	-	-
	Fine	-	25M909	25M910	2 in / 5 cm	90	0	6
	CARBIDE STAR DRUM STYLE CUTTER							
	-	19A005	-	-	-	1	-	-
	Fine	-	25M903	25M904	2 in / 5 cm	54	0	6
	Medium	-	25M901	25M902	2 in / 5 cm	42	36	6

USED ON: **GrindLazer Standard RC71 E**
See Repair manual for additional Cutter Stacking Recommendations.



CUTTER TYPE	PROFILE	INDIVIDUAL CUTTER	FULLY ASSEMBLED DRUM	DRUM REBUILD KIT	CUT WIDTH	#CUTTERS	#SPACERS	#RODS
	CARBIDE FLAIL ROTARY STYLE CUTTER							
	-	19A009	-	-	-	1	-	-
	Fine	-	25M915	25M916	7 in / 17.5 cm	42	36	6
	Medium	-	25M911	25N068	7 in / 17.5 cm	28	7	7
	STEEL STAR ROTARY STYLE CUTTER							
	-	19A063	-	-	-	1	-	-
	Fine	-	25M919	25M920	7 in / 17.5 cm	21	21	7
	Medium	-	25M917	25M918	7 in / 17.5 cm	56	7	7
	CARBIDE STAR ROTARY STYLE CUTTER							
	-	19A005	-	-	-	1	-	-
	Fine	-	25M931	25M932	7 in / 17.5 cm	28	35	7
	Medium	-	25M929	25M930	7 in / 17.5 cm	21	28	7

VAPOUR ABRASIVE BLASTING

ECOQUIP 2™ EQP

Whether you plan to remove old coatings on deck or corrosion control on steel structures on board, it's time to consider an alternative to your power/pressure washer, chemical cleaners or hand/bristle tools. Graco's EcoQuip 2™ EQp is a portable and powerful machine that gets the job done quickly and effectively.

Graco's Vapour Abrasive Blast Equipment (EcoQuip 2™) reduces dust by up to 92% compared to traditional dry blasting. The machine uses very little water, making containment and cleanup of debris simple while still delivering the right profile.

Advantages

- **Small and portable**
Easy to move on the deck (99.8 kg/ 220 lb)
- **Versatile**
Handles both horizontal and vertical surfaces
- **ATEX approved**
Can be used on all vessel types
- **Limited health risks**
Limited risks due to vibrations caused by hand tools
- **Environmentally friendly**
Up to 92% less dust and less media consumption compared to dry blasting minimizes tenting and containment. Uses less abrasive and less water, so you have no large slurry mess to clean up

Accessories

- 17D788 Blast Control Switch Pneumatic
- 17R840 Pinch Hose Replacement Kit EQp

- 26A075 Blast Hose Replacement 1"
- 26A077 Blast Hose Extension 1"
- 26A029 1" Nozzle Extension with Handles
- 17R451 Blast Hose Replacement 1"

- 24Z140 Blast Hose Replacement 1/2"
- 24Z141 Blast Hose Extension 1/2"
- 24Z931 1/2" Nozzle Extension with Handles
- 17R024 #4 Nozzle for 1/2" Blast Hose

Basic Technical Requirements

- Blast media (e.g. garnet, crushed glass, ...)
- A 1" blast hose is recommended to provide a larger blast pattern
- A water connection or an external water tank



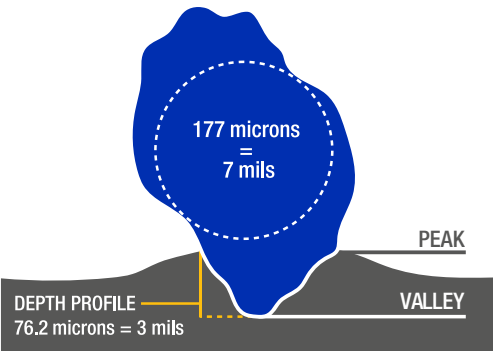
IMPA REFERENCE	59 08 16	59 08 17
GRACO PART NUMBER	278861	278862
Graco Model	EQp ATEX Low Flow Package	EQp ATEX High Flow Package
Pot Capacity	57 litres (2 ft³)	57 litres (2 ft³)
Enclosure	Coated	Coated
Blast Circuit	16 mm (5/8 in)	16 mm (5/8 in)
Max. Compressed Air	8.5 m³/min (300 cfm)	8.5 m³/min (300 cfm)
Max. Blast Pressure	10.3 bar (150 psi)	10.3 bar (150 psi)
Nozzle	#5	#6
Blast Hose ID	12.7 mm (1/2 in)	25.4 mm (1 in)
Blast Hose Length	15 m (50 ft)	15 m (50 ft)
Manual	3A4802	3A4802

A PERFECT SURFACE PREPARATION BY CHOOSING THE RIGHT ABRASIVE.

- ▶ Abrasives for vapour blasting should always be non-ferrous, heavier than water and not dissolving in it.
- ▶ As a general rule, the blaster should use the finest abrasive necessary to attain the required surface preparation parameters.

Abrasive size, mesh		#20/40	#30/60	#80
Profile, Hy5, microns, mils; acc. to ISO8503/1*	Alumina	75 – 115 microns 3.35 – 4.5 mils	55 – 85 microns 2.16 – 2.95 mils	35 – 65 microns 1.4 – 2.0 mils
	Garnet	70 – 110 microns 2.75 – 4.30 mils	50 – 80 microns 1.97 – 3.15 mils	30 – 60 microns 1.18 – 2.36 mils
	Copper Slag	60 – 100 microns 2.36 – 3.94 mils	45 – 70 microns 1.77 – 2.75 mils	25 – 50 microns 1.0 – 1.97 mils
	Crushed Glass	55 – 75 microns 2.16 – 3.35 mils	35 – 50 microns 1.4 – 1.97 mils	15 – 30 microns 0.6 – 1.18 mils

* Please take into consideration that above data is based on the most optimal setup and results may vary based on local parameters



RECOMMENDED ABRASIVE SIZES FOR ECOQUIP EQp

Mesh	Inch max	Inch average	Inch min	Microns max	Microns average	Microns min
20	0.0430	0.0270	0.0180	1 092	686	487
25	0.0320	0.0220	0.0140	813	559	356
30	0.0300	0.0190	0.0120	762	483	305
40	0.0220	0.0140	0.0095	559	356	241
45	0.0195	0.0120	0.0080	495	305	203
50	0.0160	0.0100	0.0065	406	254	165
60	0.0130	0.0080	0.0050	330	203	127
70	0.0115	0.0065	0.0040	292	165	102
80	0.0095	0.0057	0.0035	241	145	89

- Recommended
- Possible
- Only if you have to. Large size abrasives are recommended only in mixtures with small abrasives like 30/60 or 20/40

DUST REMOVAL

LAZERVAC™

Cleaning up after blasting or grinding to remove all the dust can be most time-consuming, and labour is costly. All dust must be removed before you can move on to the next stage of the job because any residue left will spoil the coating. Use Graco's LazerVac for all-round surface preparation jobs to efficiently remove and reduce airborne dust.



Advantages

- **More uptime**
Toolless design allows for quick filter change-out while on the job
- **Safer jobsites**
OSHA-compliant filtration removes dust, resulting in a safer environment
- **Reduced filter clogging**
Separate motor operates dual paddles, which knock down the debris from the filter while you work, preventing filter clogging

IMPA REFERENCE	
GRACO PART NUMBER	26B003(EU) / 26B004(IT) 26B005(CH) / 26B006(DK)
Graco Model	LazarVac 330
Air Power - Air Watts	1665
Air Flow - l/sec. (cfm)	175 l/sec (375 cfm)
Vacuum Pressure	186.8 mmHg (100") water
Capacity	75 litres (20 gal)
Motor Engine cc (hp)	230V electric (3.0)
Manual	3A5576

Accessories

- 17X185 Filter for LazerVac 330 (1 piece)
- 17X695 Dust bags for LazerVac 330 (20 pieces)
- 17X156 Standard vacuum hose (9 m/29.5 ft)
- 17X704 High-temperature vacuum hose (9 m/29.5 ft)



ELECTRIC OPERATED DIAPHRAGM PUMPS

HUSKY™ E-SERIES

The Husky™ E-series consists of unique electric pumps. They combine the advantages of an air-operated double diaphragm pump into an electric pump. The Husky™ E-series are the only electric pumps that can stall under pressure, without damaging the pump. They are the ideal solution for all onboard fluid transfers when air supply is an issue.



Advantages

- **Energy efficient**
Electric drive reduces energy consumption up to 5x compared to traditional air operated diaphragm pumps
- **Stall under pressure**
Patent pending technology allows the pumps to stall under pressure preventing pump failures from clogged lines or closed valves
- **Seal-less design**
Eliminates leaking and failures due to run-dry pump conditions
- **Easy to move**
Available in cart-mount

IMPA REFERENCE	59 17 70
GRACO PART NUMBER	648142
Graco Model	Husky 1050e
Connection Size	1 in
Thread Type	NPT(f) or BSPT
Max. Flow Rate	148 lpm (48 gpm)
Max. Discharge Pressure	4.8 bar (0.48 MPa, 70 psi)
Materials of Construction	Aluminium
Centre Section	Aluminium
Maximum Solids	3.2 mm (1/8 in)
AC Motor Power	2 HP
BLDC Motor Power	2.2 HP
Pump Weight	33.6 kg - 49.7 kg (80 lb - 109.5 lb) (depending on configuration)
Instruction Manual	334188
Repair Parts Manual	334189

AIR OPERATED DOUBLE DIAPHRAGM PUMPS

HUSKY™

Husky™ pumps are the perfect solution for bilge evacuation or when pumping oil out of barrels, seawater to wash the deck, or sludge out of the cargo area. They are designed to help you get the job done right every time, and are built to save you money. Reliable, efficient, accurate, safe and clean: built to give you peace of mind even in the harshest sea conditions.



Advantages

- **ATEX approved**
A risk-free solution for every vessel type
- **Rugged construction**
Resists corrosion for reliable performance and long life
- **Designed to last**
Heavy-duty design offers long life, increased productivity and lower overall cost of ownership: diaphragms last five times longer than others in its class
- **Flow rates and sizes**
Up to 1135 lpm (300 gpm). Port sizes ranging from ¼" to 3" in NPT, BSP, and flange options
- **Easy maintenance**
The Husky has fewer parts than industry peer. The complete air valve is externally accessible so it can be serviced fast and easily without removing the pump
- **Modular air valve**
Stall-free, low pulsation air valve provides smooth and rapid changeover for increased efficiency and minimizes downtime

AIR OPERATED DOUBLE
DIAPHRAGM PUMPS > MODEL OVERVIEW

IMPA	59 17 65	59 17 66	59 17 67
Graco Model	HUSKY 205 PLASTIC	HUSKY 307 PLASTIC	HUSKY 515 PLASTIC
Connection Size	6.3 mm (1/4 in)	9.4 mm (3/8 in)	12.7 mm (1/2 in) and 19.1 mm (3/4 in)
Thread Type	NPT or BSP	NPT or BSP	NPT or BSP
Air Valve	Standard and Remote	Standard	Standard and Remote
Max. Flow Rate	19 lpm (5 gpm)	26 lpm (7 gpm)	57 lpm (15 gpm)
Max. Discharge Pressure	7 bar (0.7 MPa, 100 psi)	7 bar (0.7 MPa, 100 psi)	7 bar (0.7 MPa, 100 psi)
Materials of Construction	Polypropylene	Polypropylene	Polypropylene
Centre Section	Polypropylene	Polypropylene	Polypropylene
Materials for Seats		<ul style="list-style-type: none">AcetalPolypropyleneStainless Steel	<ul style="list-style-type: none">AcetalDuckbillPolypropyleneStainless Steel
Materials for Balls	<ul style="list-style-type: none">AcetalPolypropylenePVDF	<ul style="list-style-type: none">BunaPTFESantopreneTPE	<ul style="list-style-type: none">BunaFluoroelastomerPTFEStainless SteelTPE
Materials for Diaphragms	<ul style="list-style-type: none">PTFESantoprene	<ul style="list-style-type: none">BunaPTFESantopreneTPE	<ul style="list-style-type: none">BunaFluoroelastomerPTFEStainless SteelTPE
Maximum Solids	1.5 mm (0.06 in)	1.6 mm (0.063 in)	2.5 mm (0.094 in)
Pump Weight	0.9 kg (2.0 lb) Polypropylene	2.4 kg (5.2 lb) Polypropylene	2.9 kg (6.5 lb) Polypropylene
Instruction Manual	308652	308553	308981
Repair Parts Manual			

	59 17 68	
HUSKY 716 METAL	HUSKY 1050 PLASTIC	HUSKY 1050 METAL
19.1 mm (3/4 in)	25.4 mm (1 in)	25.4 mm (1 in)
NPT or BSP	ANSI/DIN Flange	NPT or BSP
Standard and Remote	Standard, Smart and Remote	Standard, Smart and Remote
61 lpm (16 gpm)	189 lpm (50 gpm)	189 lpm (50 gpm)
7 bar (0.7 MPa, 100 psi)	8.6 bar (0.9 MPa, 125 psi)	8.6 bar (0.9 MPa, 125 psi)
Aluminium / 316 Stainless Steel	Polypropylene	316 Stainless Steel / Aluminium
Polypropylene	Polypropylene	<ul style="list-style-type: none">Coated AluminiumPolypropylene
<ul style="list-style-type: none">AcetalPolypropyleneStainless Steel	<ul style="list-style-type: none">Polypropylene	<ul style="list-style-type: none">316 SSTAcetalGeolastPolypropyleneSantoprene
<ul style="list-style-type: none">BunaDuckbillFluoroelastomerPolypropylenePTFESantoprene TPE	<ul style="list-style-type: none">SantoprenePTFE	<ul style="list-style-type: none">316 SSTAcetalGeolastPTFESantoprene
<ul style="list-style-type: none">BunaFluoroelastomerPolypropylenePTFESantoprene	<ul style="list-style-type: none">PTFE/EPDM 2 PieceSantoprene	<ul style="list-style-type: none">GeolastPTFE/EPDM 2 PieceSantoprene
2.5 mm (0.094 in)	3.2 mm (0.125 in)	3.2 mm (0.125 in)
3.9 kg (8.5 lb) Aluminium 8.2 kg (18 lb) Stainless Steel	8.2 kg (18 lb) Polypropylene	10.4 kg (23 lb) Aluminium 16.5-18.6 kg (36.3-41 lb) Stainless Steel
308981	312877	312877
308797	313435	313435

AIR OPERATED DOUBLE
DIAPHRAGM PUMPS > MODEL OVERVIEW

IMPA	59 17 69		
Graco Model	HUSKY 1590 PLASTIC	HUSKY 1590 METAL	HUSKY 2150 PLASTIC
Connection Size	38.1 mm (1-1/2 in)	38.1 mm (1-1/2 in)	50.8 mm (2 in)
Thread Type	ANSI	NPT or BSP	ANSI/DIN Flange
Air Valve	Standard and Remote	Standard and Remote	Standard and Remote
Max. Flow Rate	379 lpm (100 gpm)	379 lpm (100 gpm)	568 lpm (150 gpm)
Max. Discharge Pressure	8.3 bar (0.8 MPa, 120 psi)	8.3 bar (0.8 MPa, 120 psi)	8.3 bar (0.8 MPa, 120 psi)
Materials of Construction	Polypropylene	316 Stainless Steel / Aluminium	Polypropylene
Centre Section	<ul style="list-style-type: none">• 316 Stainless Steel• Coated Aluminium	<ul style="list-style-type: none">• 316 Stainless Steel• Coated Aluminium	<ul style="list-style-type: none">• 316 Stainless Steel• Coated Aluminium
Materials for Seats	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Hardened SST• Polypropylene• Stainless Steel	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• Hardened SST• Polypropylene• Santoprene• Stainless Steel• TPE	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Polypropylene• PVDF• Stainless Steel
Materials for Balls	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• Stainless Steel• TPE	<ul style="list-style-type: none">• Acetal• Buna• Fluoroelastomer• Geolast• Hardened SST• PTFE• Santoprene• Stainless Steel• TPE	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• Santoprene• TPE
Materials for Diaphragms	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• TPE	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• Santoprene• TPE	<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• Santoprene• TPE
Maximum Solids	4.8 mm (0.188 in)	4.8 mm (0.188 in)	6.3 mm (0.25 in)
Pump Weight	16 kg (35 lb) Polypropylene	15.2 kg (33.5 lb) Aluminium 40 kg (86 lb) Stainless Steel	22 kg (49 lb) Polypropylene
Instruction Manual	308549	308441	308550
Repair Parts Manual			






HUSKY 2150 METAL	HUSKY 3300 PLASTIC	HUSKY 3300 METAL
50.8 mm (2 in)	76.2 mm (3 in)	76.2 mm (3 in)
NPT or BSP	ANSI/DIN Flange	NPT/BSP/ DIN/ANSI (AL only)
Standard and Remote	Standard	Standard
568 lpm (150 gpm)	1059 lpm (280 gpm)	1135 lpm (300 gpm)
8.3 bar (0.8 MPa, 120 psi)	7 bar (0.7 MPa, 100 psi)	8.6 bar (0.9 MPa, 125 psi)
Polypropylene / Aluminium / 316 Stainless Steel	Polypropylene	316 Stainless Steel, Aluminium
<ul style="list-style-type: none">• 316 Stainless Steel• Coated Aluminium	<ul style="list-style-type: none">• Polypropylene	<ul style="list-style-type: none">• Aluminum, Polypropylene* (*SST pump only)
<ul style="list-style-type: none">• Buna• Fluoroelastomer• Polypropylene• PVDF• Santoprene• Stainless Steel• TPE	<ul style="list-style-type: none">• Polypropylene• Santoprene• Stainless Steel	<ul style="list-style-type: none">• Acetal• Geolast• Santoprene• Stainless Steel• TPE
<ul style="list-style-type: none">• Acetal• Buna• Fluoroelastomer• Geolast• Hardened SST• PTFE• Santoprene• TPE	<ul style="list-style-type: none">• FKM• PTFE• Santoprene	<ul style="list-style-type: none">• Acetal• Geolast• PTFE• Santoprene
<ul style="list-style-type: none">• Buna• Fluoroelastomer• Geolast• PTFE• Santoprene• TPE	<ul style="list-style-type: none">• 2 pc PTFE• FKM• Santoprene	<ul style="list-style-type: none">• 2 pc PTFE• Geolast• Santoprene• TPE
6.3 mm (0.25 in)	12.7 mm (0.5 in)	12.7 mm (0.5 in)
26.3 kg (58 lb) Aluminium 50.3 kg (111 lb) Stainless Steel	90.7 kg (200 lb) Polypropylene	68 kg (150 lb) Aluminium 115.6 kg (255 lb) Stainless Steel
308368	3A0410	3A0410
	3A0411	3A0411

POPULAR MODELS



- ▶ **HUSKY 515 – ½ INCH**
- Designed to handle all fluids
 - Ideal for smaller onboard jobs such as emptying and filling vessels with chemical and petroleum fluids
 - Mainly used to transfer lubricants to the motor or other parts which need lubrication

PART NUMBER	DESCRIPTION
D5B911	PP fluid section, centre section, porting and seats. PTFE O-rings, balls and diaphragms - Plastic
REPAIR KITS	
D05001	515 Diaphragms, PTFE
241657	515 Air Valve




- ▶ **HUSKY 1050 – 1 INCH**
- The best solution for transferring sediment from the bilges in no time
 - Can handle erosion and corrosion
 - Light weight and easy to carry around on board
 - Stainless Steel models are ATEX certified and ensure great safety when transferring chemicals and petroleum liquids in hazardous environments

PART NUMBER		DESCRIPTION
649006		PP fluid section, centre section, porting, seats. PTFE O-rings, balls, diaphragms - Plastic
647671		PP fluid section, centre section, porting. Buna seats, balls, diaphragms - Metal
647156		Alu fluid section, centre section, porting. Acetal seats. PTFE O-rings, balls, diaphragms - Metal
651042		SST fluid section, porting. Aluminium centre section. Acetal seats. PTFE O-rings, balls, diaphragms - Metal
651041		SST fluid section, porting. Aluminium centre section, PP seats. PTFE O-rings, balls, diaphragms - Metal
REPAIR KITS		
24B627		1050 Diaphragm, PTFE
24B768		1050 Air Valve




- ▶ **HUSKY 1590 – 1- ½ INCH**
- Used in shipbuilding industry for emptying the bilges
 - Able to transfer any type of fluid on a ship

PART NUMBER		DESCRIPTION
DB2911		PP fluid section porting, seats. Aluminium centre section. PTFE O-rings, balls, diaphragms - Plastic
DBC777		Alu fluid section, porting, centre section. Buna seats, balls, diaphragms - Metal
DBC911		Alu fluid section, porting, centre section. Buna seats, balls, diaphragms - Metal
DTD311		SST fluid section, centre section, porting, seats. PTFE O-rings, balls, diaphragms - Metal
REPAIR KITS		
D0C001		1590 Diaphragm, PTFE (for P/N DB2911)
D0B007		1590 Diaphragm, Buna (for P/N DBC777)
D0B001		1590 Diaphragm, PTFE (for P/N DBC911)
236273		1590 Air Valve (for P/N DBC911)
255061		1590 Air Valve (for P/N DTD311)

- ▶ **HUSKY 2150 – 2 INCH**
- Used for transferring large amounts of oil and/or chemical products
 - Emptying oil and chemical tanks
 - Cleaning the tanks before other liquids need to be transferred in the same tank

PART NUMBER		DESCRIPTION
DF2911		PP fluid section, porting, seats. Aluminium centre section. PTFE O-rings, balls, diaphragms s - Plastic
DFC777		Alu fluid section, centre section, porting. Buna seats, balls, diaphragms - Metal
DFC911		Alu fluid section, centre section, porting. PP seats. PTFE O-rings, balls, diaphragms - Metal
DVD311		SST fluid section, centre section, porting, seats. PTFE O-rings, balls, diaphragms - Metal
REPAIR KITS		
D0G001		2150 Diaphragm, PTFE (for P/N DF2911)
D0F001		2150 Diaphragm, Buna (for P/N DFC777)
D0F001		2150 Diaphragm, PTFE (for P/N DFC911-DVD311)
236273		2150 Air Valve (for P/N DF2911 – DFC777 – DFC911)
255061		2150 Air Valve

- ▶ **HUSKY 3300 – 3 INCH**
- Only used for larger transfer applications such as filling and emptying tanks
 - Can handle almost all fluids used on a ship

PART NUMBER		DESCRIPTION
652404		PP fluid section, centre section, porting, seats. PTFE O-rings, balls, diaphragms - Plastic
652439		PP Fluid section, porting, seats. Aluminium centre section. PTFE O-rings, balls, diaphragms - Plastic
652146		Alu fluid section, centre section, porting. Buna seats, O-rings, balls, diaphragms - Metal
652160		Alu fluid section, centre section, porting, seats. PTFE O-rings, balls, diaphragms - Metal
652882		SST Fluid section, porting, seats. Aluminium centre section. PTFE O-rings, balls, diaphragms - Metal
REPAIR KITS		
24K209		3300 Diaphragm, PTFE (for P/N 652404)
24K897		3300 Diaphragm, Buna (for P/N 652439)
24K860		3300 Air Valve

SPOT REPAIR & SMALL MAINTENANCE JOBS

MERKUR - PNEUMATIC AIRLESS SPRAYER

Graco offers you superior performance with advanced technology. To fit a wider variety of applications, you can choose from four different motor options, making the Merkur a suitable unit for almost all small onboard maintenance jobs. Ergonomy, lower emissions, cost-saving and finishing are the keywords of this new pump generation.

Advantages

- **Superior performance**
Low pulsation and no stalling, low air consumption and easier to clean
- **Ergonomy**
A compact and lightweight unit, equipped with control plate at operator height, is easy to use and move around
- **Reduced costs**
Fewer spare parts offers an increased ease of serviceability and a lower cost of ownership
- **Durable construction**
The stainless steel pump construction can withstand the harsh onboard marine environment



IMPA REFERENCE	27 08 46	27 08 48	27 08 44		27 08 49
GRACO PART NUMBER	G30C55	G36C11	G48C07	16U920	16U918
Graco Model	MERKUR SPRAYER 30:1 - CART	MERKUR SPRAYER 36:1 - CART	MERKUR SPRAYER 48:1 - CART	MERKUR SPRAYER 48:1 - CART	MERKUR SPRAYER 72:1 - CART
Pump Ratio	30:1	36:1	48:1	48:1	72:1
Spray Gun Type	XTR	G40	G40	XTR	XTR
Fluid Flow at 60 cpm	4.5 lpm (1.2 gpm)	6 lpm (1.6 gpm)	4.5 lpm (1.2 gpm)	4.5 lpm (1.2 gpm)	3 lpm (0.8 gpm)
Max. Fluid Outlet Pressure	206 bar (20.6 MPa/ 3000 psi)	248 bar (24.8 MPa/ 3600 psi)	275 bar (27.5 MPa, 4000 psi)	330 bar (33 MPa, 4800 psi)	500 bar (50 MPa, 7200 psi)
Max. Air Inlet Pressure	7 bar (0.7 MPa, 100 psi)	7 bar (0.7 MPa, 100 psi)	5.8 bar (0.58 MPa, 85 psi)	7 bar (0.7 MPa, 100 psi)	7 bar (0.7 MPa, 100 psi)
Air Consumption at 7 bar (100 psi) and 20 cpm	0.48 m³/min (17 scfm)	0.74m³/min (26 scfm)	0.74m³/min (26 scfm)		
Fluid Inlet Size	3/4" npt(m)	3/4" npt(m)	3/4" npt(m)	1-1/4" npt (m)	1-1/4" npt (m)
Fluid Outlet Size	3/8" npt(m)	3/8" npt(m)	3/8" npt(m)	3/8" npt(m)	3/8" npt(m)
Air Inlet (Motor)	1/4" npt(f)	1/2" npt(f)	1/2" npt(f)	1/2" npt(f)	1/2" npt(f)
Weight	108 kg (238 lb)	114 kg (251 lb)	110 kg (242.5 lb)	45 kg (99 lb)	45 kg (99 lb)
Manual	312797	312797	312797	332245	332245
Manual Motor	312796	312796	312796	312796	312796

Accessories

256410	Hopper 5 l (1.5 gal) polyethylene	256425	Fluid Filter Drain Valve, Stainless Steel 350 bar (35 MPa / 5000 psi)
222121	Fluid Regulator: Stainless Steel Maximum working pressure: 103 bar (10.3 MPa / 1500 psi)	224458	Replacement Filter Screen Element 3-pack elements, 30 mesh, SST
	Regulator range: 10-28 bar (1-2.8 MPa /150-1200 psi)	224459	Replacement Filter Screen Element 3-pack elements, 60 mesh, SST
24A587	Pump Outlet Fluid Filter: Stainless Steel 60 mesh (250 micron), 350 bar (35 MPa / 5000 psi)	24A540	Air Control Gauge Covers 5 sheets of 10 covers

PRESIDENT & MONARK - PNEUMATIC AIRLESS SPRAYERS

As two of the most reliable paint sprayers in the industry, the President and Monark are considered the reference for onboard paint jobs. Their rugged design makes them easy to service, reducing downtime and repair costs. The units are ready-to-use and are equipped with gun fluid hose swivel and whip hose, providing your operators the maximum comfort and ease of handling.

Advantages

- **Proven and durable**
Reliable, low maintenance air motor
- **Small and portable**
Easy to move around the ship
- **Positive displacement**
2-ball piston design provides uniform and easily controlled delivery
- **Versatile**
Stainless steel or carbon steel models available to handle various fluids
- **Flexible**
Drum and stubby length models available for mounting and application flexibility



IMPA REFERENCE		27 01 06			27 01 07
GRACO PART NUMBER	218956	232411	232433	224342	231921
Graco Model	MONARK 5:1 200L DRUM	MONARK 23:1 CART	MONARK 23:1 PAIL	PRESIDENT 10:1 BARE	PRESIDENT 30:1 CART
Pump Ratio	5:1	23:1	23:1	10:1	30:1
Max. Fluid Working Pressure		160 bar (16 MPa, 2300 psi)	160 bar (16 MPa, 2300 psi)	125 bar (12.5 MPa, 1800 psi)	210 bar (21 MPa, 3000 psi)
Max. Air Inlet Pressure	12 bar (1.2 MPa, 180 psi)	7 bar (0.7 MPa, 100 psi)	7 bar (0.7 MPa, 100 psi)	12 bar (1.2 MPa, 180 psi)	7 bar (0.7 MPa, 100 psi)
Air Consumption at 7 bar (100 psi)	0.08 m³/min (3 scfm)		0.056 m³/min (2 scfm)		
Max. Flow Ratio		2 lpm (0.5 gpm)			4 lpm (1.05 gpm)
Air Hose Connection		NPT 3/8 Female			NPT 3/8 Female
Paint Hose Connection		NPSM 1/4 Male			NPSM 1/4 Male
Weight		20 kg (45 lb)	21 kg (46.3 lb)		39 kg (85 lb)
Manual	307044		308765	308116	308635
Manual Motor	307043	308762	307043	306982	307043

Repair Parts/Kits

206728	Repair parts kit for Monark air motors
218136	Repair kit PTFE 23:1 Monark
239328	Repair kit, 23:1 Monark
207385	Repair kit for President air motors

SPOT REPAIR & SMALL MAINTENANCE JOBS

CLASSIC 390 PC & ST MAX 395 PC - ELECTRIC AIRLESS SPRAYERS

The Classic 390 PC and ST Max 395 PC are two of the lightest professional sprayers, making them ideal for top-quality maintenance. They are equipped with a fast and easy pump replacement system which saves you time and money due to pump repair times and changes.



Advantages

- **Flexible**
Available in compact stand version and cart version
- **Variable pressure control**
Position indicator allows repeatable setting while spraying light-to-heavier materials
- **Ready-to-spray**
Gun, filter, hose, tip and guard included
- **Less downtime**
With a spare pump ready, you will always be able to finish your job

IMPA REFERENCE	27 08 52	27 08 71	27 08 51	27 08 61	
GRACO PART NUMBER	17C348	17C347	17C346	17E864	17E865
Graco Model	Classic 390 PC EURO Stand	Classic 390 PC UK – Stand	Classic 390 PC multicord Stand	ST Max 395 PC EURO Stand	ST Max 395 PC EURO Hi Boy
Power Source	230V	110V		230V	230V
Max Working Pressure	228 bar (22.8 MPa, 3300 psi)			228 bar (22.8 MPa, 3300 psi)	
Max Fluid Flow	1.8 lpm (0.47 gpm)			2 lpm (0.54 gpm)	
Max Tip Size – 1 gun	0.53 mm (0.021")			0.58 mm (0.023")	
Min Generator	3000W			3500W	
Motor HP	5/8 DC			7/8 TEFC DC	
Weight	14 kg (30 lb)			20.5 kg (45.1 lb)	30 kg (66 lb)
Manual	334567			334530	

Accessories

- 223771 BlueMax II Hose ¼" x 30 m (1/4" x 100 ft)
- 17Y043 Contractor Spray Gun with RAC X LP-517 tip
- LP517 Low Pressure RAC x LP
- 287021 RAC X Tip Extension 50 cm (20")
- 240794 BleuMax II Hose 1/4" x 15 m (1/4" x 50 ft)
- 24V490 JetRoller System 18 cm (3.54")
- 25A841 JetRoller System 23 cm (9)

ST MAX II PC PRO - ELECTRIC AIRLESS SPRAYER

Graco's midsize electric airless sprayers make it easier to get more work done in one day with increased flow and production rates. Available in compact stand or cart version, their durable design can withstand even the most rugged environments.



Advantages

- **Less downtime**
Pump can be swapped in minutes and is easy to maintain
The design allows for fast cleaning with less water
- **Variable pressure control**
Position indicator allows repeatable setting while spraying light-to-heavier materials
- **Ready-to-spray**
Gun, filter, hose, tip and guard included
- **Easy transport**
Compact design that's lightweight and easy to move around

IMPA REFERENCE		27 08 62	27 08 72	27 08 64	27 08 54	27 08 65	27 08 55	27 05 75
GRACO PART NUMBER	17E871	17E872	17E873	17E874	17E875	17E876	17E877	17E878
Graco Model	ST Max 495 PC Pro EURO Stand	ST Max 495 PC Pro Multi Cord Stand	ST Max 495 PC Pro UK Stand	ST Max 495 PC Pro EURO Hi Boy	ST Max 495 PC Pro Multi Cord Hi Boy	ST Max 595 PC Pro EURO Hi Boy	ST Max 595 PC Pro Multi Cord Hi Boy	ST Max 595 PC Pro UK Hi Boy
Power Source	230V	230V	110V	230V	230V	230V	230V	110V
Max Working Pressure	227 bar (22.7 MPa, 3300 psi)			227 bar (22.7 MPa, 3300 psi)		227 bar (22.7 MPa, 3300 psi)		
Max Fluid Flow	2.3 lpm (0.6 gpm)			2.3 lpm (0.6 gpm)		2.3 lpm (0.6 gpm)		
Max Tip Size – 1 Gun	0.63 mm (0.025")			0.63 mm (0.025")		0.68 mm (0.027")		
Min Generator	3750W			3750W		4000W		
Motor HP	1.2 Brushless DC			1.2 Brushless DC		1.6 Brushless DC		
Weight	15 kg (34 lb)			30 kg (66.1 lb)		33 kg (72 lb)		
Manual	334530			334530		334530		

CARGO HOLD MAINTENANCE & BIGGER MAINTENANCE JOBS

KING - PNEUMATIC AIRLESS SPRAYER

The Graco King pneumatic airless sprayers are easy to maintain, with low pulsation for improved performance. They are designed to withstand the harshest environmental conditions and easily handle the toughest protective coatings and corrosion control applications. The heavy-duty cart is exceptionally robust and provides protection for the pump and accessories. When looking for a dependable, durable and rugged airless protective coatings sprayer to get the job done, choose the Graco King.

Advantages

- **Simple maintenance**
All motor parts are easily accessible and require simple maintenance
- **Reduced icing potential**
Up to 70% reduction with thermally isolated poppets
- **Less pulsation**
Higher exhaust capacity in the air valve for faster, smoother changeover and no pressure drops
- **Improved sealing and strength**
Enhanced edge loading and seven throat pickings instead of five
- **Multi-gun capabilities**
The ability to spray with up to six guns is now a reality, thanks to the more powerful and efficient changeovers



IMPA REFERENCE		27 08 12	27 08 13
GRACO PART NUMBER	K40FH1	K60FH1	K70FH1
Graco Model	King XL40-180 - Heavy-Duty Cart	King XL60-220 - Heavy-Duty Cart	King XL70-180 - Heavy-Duty Cart
Pump Ratio	40:1	60:1	70:1
Motor Type	3400 cc XL Air Motor	6500 cc XL Air Motor	
Output Per Cycle	180 cc	220 cc	180 cc
Max. Working Pressure	262 bar (26.2 MPa, 3800 psi)	417 bar (41.7 MPa, 6000 psi)	500 bar (50 MPa, 7250 psi)
Max. Air Input Pressure	7 bar (0.7 MPa, 100 psi)		
Output at 60 cpm	11 lpm (2.9 gpm)	12.9 lpm (3.4 gpm)	11 lpm (2.9 gpm)
Manual		3A5422D	3A5422D

- Accessories
- | | |
|--------|--|
| 262826 | Gun Splitter, 2 guns, with independent flush |
| 206994 | Throat Seal Liquid (TSL) |

E-XTREME - ELECTRIC AIRLESS SPRAYER

Rugged and reliable, the Graco e-Xtreme electric airless sprayer is the world’s first electric sprayer for protective coatings and corrosion control applications approved for hazardous locations. The sprayer provides long-lasting durability that boosts your productivity. The unit is ideal for medium to big jobs and is still easy to move around on board. In addition, electric technology eliminates pulsation and motor icing, making your jobs run smoothly - every time!

Advantages

- **Portable**
Easy to move around on deck
- **Reliable**
Electric power is safe, reliable and convenient
- **No icing**
Reduces downtime due to freeze-ups
- **Plug-in and spray**
No compressor needed



IMPA REFERENCE	27 01 09		27 01 10	
GRACO PART NUMBER	24Z901	24Z909	24Y901	24Y909
Graco Model	e-Xtreme Ex35 - cart mount	e-Xtreme Ex35 - wall mount	e-Xtreme Ex45 - cart mount	e-Xtreme Ex45 - wall mount
Max. Working Pressure	240 bar (24 MPa, 3500 psi)		310 bar (31 MPa, 4500 psi)	
Max Recommended Tip Size	0.53 mm (0.021") at 276 bar (28 MPa, 400 psi) spray pressure		0.58 mm (0.023") at 220 bar (22 MPa, 3200 psi) spray pressure	
Min Hose Length and ID	15 m (50ft) - 10 mm (3/8")			
Input Voltage	200 to 240 V, single phase, 50/60 Hz			
Input Power	2.5 kVA			
Sound Pressure	70 dBA			
Pump Lower	145 cc		180 cc	
Weight	135 kg (295 lb)			
Manual	3A3164		3A3164	

- Repair Parts/Kits
- | | | | |
|--------|---|--------|------------------------------------|
| 24F969 | Repair kit for Ex35, lower (180 cc) | 16W645 | Gearbox oil for electric driver 1l |
| 24F971 | Repair kit for Ex45, lower (145 cc) | 24Z269 | Cable assembly with 1 gland, 30 m |
| 244459 | Fluid filter element, 60 mesh, twin pack | 24Z273 | Cable assembly with 2 glands, 30 m |
| 244468 | Fluid filter element, 100 mesh, twin pack | | |

AIRLESS SPRAY GUNS



AIRLESS SPRAY GUNS – CONTRACTOR SERIES – 248 BAR (2.48 MPA, 3600 PSI)

The Contractor Guns from Graco are designed to be the longest lasting and most reliable airless spray guns. They aim to provide the maximum performance, reliability and comfort. Their durable nickel finish is corrosion resistant and easier to clean.

IMPA REFERENCE	27 01 21					
GRACO PART NUMBER	288420	288421	288425	288429	288430	288431
Graco Model	Contractor	Contractor	Contractor	Contractor FTx	Contractor FTx	Contractor FTx
Max Fluid Working Pressure	248 bar (24.8 MPa, 3600 psi)					
Inlet Size	1/4 NPSM					
Orifice Diameter	3.2 mm (0.125")					
Trigger	2-finger trigger	2-finger trigger	4-finger trigger	2-finger trigger	4-finger trigger	4-finger trigger
Tip	RAC X 515 Switch tip	RAC 5 517 Switch tip	RAC X 517 Switch tip	RAC X 515 Switch tip	RAC X 515 Switch tip	RAC 5 517 Switch tip
Tip Guard	RAC X HandTite guard	RAC 5 HandTite guard	RAC X HandTite guard	RAC X HandTite guard	RAC X HandTite guard	RAC 5 HandTite guard
Weight	624 gr (22 oz)					



AIRLESS SPRAY GUNS – XTR5 SERIES - 345 BAR (34.5 MPA, 5000 PSI)

The XTR5-series has a rugged, ergonomic design that handles the toughest protective coatings. The small profile allows easy access and spraying in tight areas with a max 345 bar (34.5 MPa, 5000 psi) fluid pressure.

IMPA REFERENCE	27 09 01	27 09 02	27 09 03
GRACO PART NUMBER	XTR500	XTR502	XTR504
Graco Model	XTR-5	XTR-5	XTR-5
Handle Shape	Round	Oval-insulated	Round
Trigger	Four-finger trigger	Four-finger trigger	Four-finger trigger
Tip	No tip	519 XHD RAC	519 XHD RAC



AIRLESS PAINT SPRAY HAND GUNS – SILVER PLUS - 345 BAR (34.5 MPA, 5000 PSI)

Graco's Silver Guns are known for their durability, long life, spraying performance, and comfortable design. They are the preferred gun for high pressure applications, with a 345 bar (34.5 MPa, 5000 psi) fluid rating for spraying the toughest materials.

IMPA	27 01 23		
GRACO PART NUMBER	235460	235461	243283
Graco Model	Silver Plus	Silver Plus	Silver Plus
Max Fluid Working Pressure	345 bar (34.5 MPa, 5000 psi)		
Inlet Size	1/4 NPSM		
Orifice Diameter	2.3 mm (0.09")		
Trigger	2-finger trigger	4-finger trigger	2-finger trigger
Tip	No tip	No tip	RAC5 5179 switch tip
Tip Guard	Standard dripless tip guard	Standard dripless tip guard	RAC5 HandTite guard
Weight	1.03 kg (2.76 lb)	1.3 kg (3.5 lb)	0.51 kg (1.13 lb)



AIRLESS SPRAY GUNS – XTR7 SERIES – 500 BAR (50 MPA, 7250 PSI)

The XTR7-series is built for extreme conditions. They have a fluid rating of 500 bar (50 MPa, 7250 psi). And their lightweight, compact design allows for easy maneuverability.

IMPA REFERENCE	27 09 04	27 09 05	27 09 06
GRACO PART NUMBER	XTR700	XTR702	XTR704
Graco Model	XTR-7	XTR-7	XTR-7
Handle Shape	Round	Oval-insulated	Round
Trigger	Four-finger trigger	Four-finger trigger	Four-finger trigger
Tip	No tip	519 XHD RAC	519 XHD RAC

TIPS

Improve spraying productivity and reduce downtime with the Graco HD RAC Switch Tips.

- Saves time – No screwdriver needed
- Change tip sizes in seconds – without removing the tip guard housing
- Locking tab ensures tip stays securely in the guard

Choose a tip with an orifice size rated for the paint or coating you'll be spraying. Size the spray tip according to the tip rating of your sprayer. If you plan on using multiple spray guns on your job, pick a tip size that matches the multiple gun tip rating of your sprayer.

The **letters** represent the Graco tip style

PAA = Professional Airless Applications
WR = WideRac
LP = Low Pressure
FFLP = Fine Finish Low Pressure
XHD = Extreme Heavy Duty

The **first number** indicates the fan width of the tip

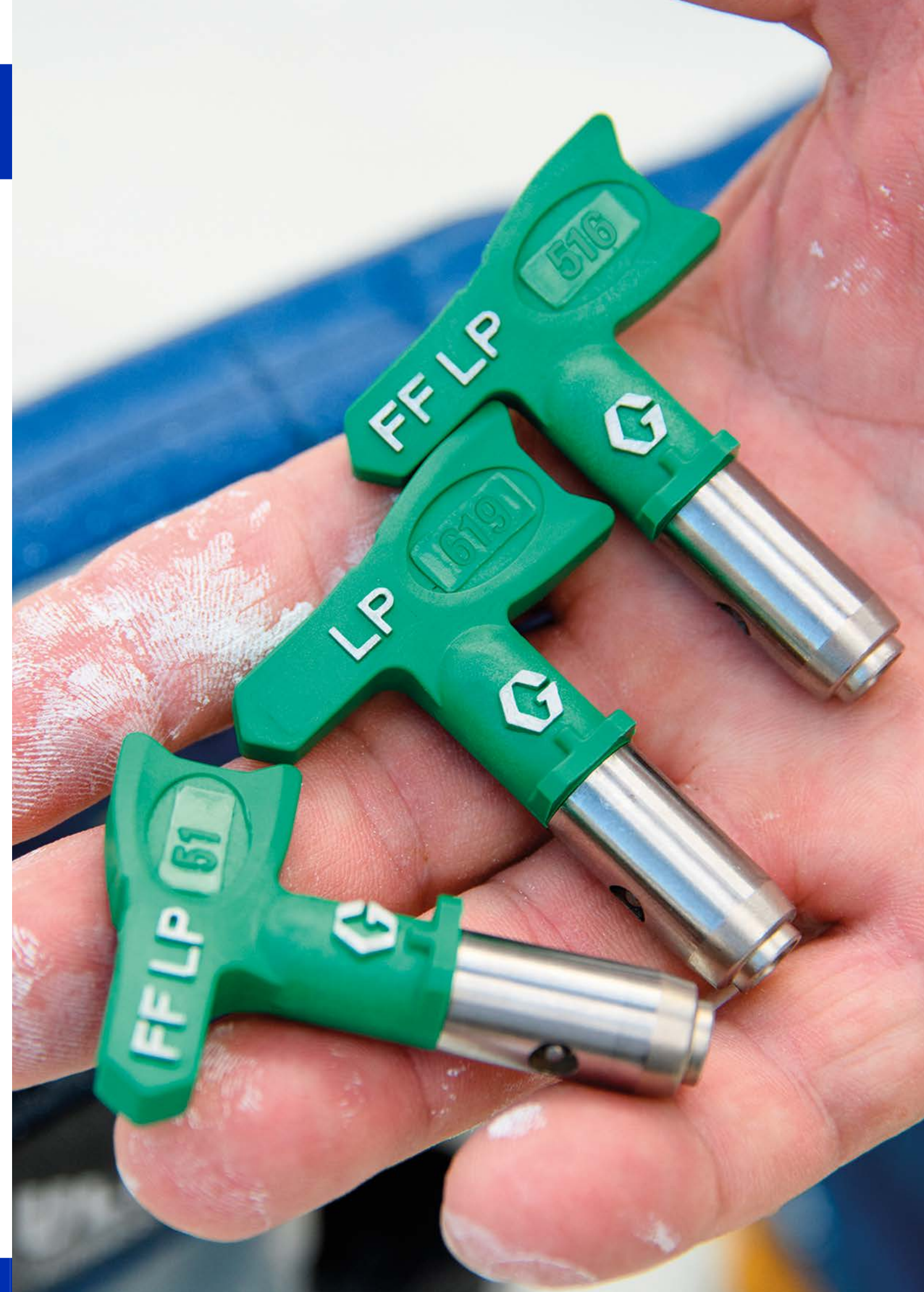
The first number stands for the width of the spray distribution (the fan width). It matches the angle you are spraying at. If the number is 5, then you are spraying at an angle of 50°. Multiply that number by 5 and you have a fan width if you hold the pistol 30 cm from the surface.

$5 \times 5 = 25$ fan width

The last **two numbers** indicate the spray orifice of the tip

The last two numbers of the tip show the size of the spray orifice, indicated in one thousandths of an inch. The higher the number, the greater the flow with which you can spray. For example, a '517' tip enables a greater flow than a '515' tip.

'17' matches an orifice of 0.017 inch or 0.43 mm.



SWITCH TIPS

RAC X

Choose RAC X tips for airless applications up to 350 bar (35 MPa, 5076 psi)

- (FF)LP tip (green) for fine finish applications
- PAA/WA tip (blue) for all professional airless applications

- 246215 Guard RAC X 7/8" thread
- 246437 Guard RAC X 11/16" thread
- 246770 Guard RAC X 18 x 1.5" thread



RAC X FFLP

MAXIMUM PRESSURE BAR/PSI/MPA:
350/5076/35.0



FAN WIDTH	ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE	
	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE
5 cm (1.97")	FFLP-108	27 11 20	FFLP-110	27 11 21	FFLP-112	27 11 22				
10 cm (3.94")	FFLP-208	27 09 07	FFLP-210	27 09 08	FFLP-212	27 09 09	FFLP-214	27 09 10		
15 cm (5.9")	FFLP-308	27 09 17	FFLP-310	27 09 18	FFLP-312	27 09 19	FFLP-314	27 09 20		
20 cm (7.87")			FFLP-410	27 09 28	FFLP-412	27 09 29	FFLP-414	27 09 30		
25 cm (9.84")			FFLP-510	27 09 38	FFLP-512	27 09 39	FFLP-514	27 09 40	FFLP-516	27 11 23
30 cm (11.81")									FFLP-616	27 11 24

RAC X LP

MAXIMUM PRESSURE BAR/PSI/MPA:
280/4050/28.0



FAN WIDTH	ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE	
	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE
15 cm (5.9")	LP-313		LP-315											
20 cm (7.87")			LP-415		LP-417		LP-419		LP-421		LP-423		LP-425	
25 cm (9.84")			LP-515		LP-517		LP-519		LP-521		LP-523		LP-525	
30 cm (11.81")					LP-617		LP-619		LP-621		LP-623		LP-625	
35 cm (13.78")									LP-723		LP-725			

RAC X PAA

MAXIMUM PRESSURE BAR/PSI/MPA:
350/5076/35.0



FAN WIDTH	ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE	
	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE
10 cm (3.94")	PAA-215	27 09 44	PAA-217	27 09 45	PAA-219	27 09 46	PAA-221	27 09 47				
15 cm (5.9")	PAA-315	27 09 48	PAA-317	27 09 49	PAA-319	27 09 50	PAA-321	27 09 53	PAA-323	27 09 54	PAA-325	27 09 55
20 cm (7.87")	PAA-415	27 09 56	PAA-417	27 09 57	PAA-419	27 09 58	PAA-421	27 09 59	PAA-423	27 09 60	PAA-425	27 09 68
25 cm (9.84")	PAA-515	27 09 69	PAA-517	27 09 70	PAA-519	27 09 72	PAA-521	27 09 73	PAA-523	27 09 74	PAA-525	27 09 75
30 cm (11.81")	PAA-615	27 09 76	PAA-617	27 09 77	PAA-619	27 09 78	PAA-621	27 09 79	PAA-623	27 09 80	PAA-625	27 09 81
35 cm (13.78")							PAA-721	27 09 82	PAA-723	27 09 83		
40 cm (15.75")			PAA-817	27 09 84	PAA-819	27 09 85	PAA-821	27 09 86				
60 cm (23.62")							PAA-1221	27 09 87	WA-1223	27 09 88	WA-1225	27 09 89

XHD

For heavy-duty application up to 500 bar (50 MPa, 7252 psi).

Recommended for Xtreme sprayers and XTR airless spray guns.

XHD Guard is compatible with XHD tips:

- XHD001 XHD RAC Guard (22.22 mm - 7/8")
- XHD005 XHD RAC Guard (17.46 mm - 11/16")



XHD

MAXIMUM PRESSURE BAR/PSI/MPA:
500/7252/50.0



FAN WIDTH	ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE		ORIFICE	
	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE	TIP SIZE	IMPA CODE
20 cm (7.87")	XHD-413		XHD-415	27 09 11	XHD-417	27 09 12	XHD-419	27 09 13	XHD-421	27 09 14	XHD-423	27 09 15	XHD-425	27 09 16
25 cm (9.84")	XHD-513	27 09 21	XHD-515	27 09 22	XHD-517	27 09 23	XHD-519	27 09 24	XHD-521	27 09 25	XHD-523	27 09 26	XHD-525	27 09 27
30 cm (11.81")	XHD-613	27 09 31	XHD-615	27 09 32	XHD-617	27 09 33	XHD-619	27 09 34	XHD-621	27 09 35	XHD-623	27 09 36	XHD-625	27 09 37

EXTENSIONS

CLEANSHOT POLEGUN

- Provides better spray control and less fatigue
- Balanced design – no excessive weight at the end of the pole



IMPA REFERENCE	27 10 15	27 10 16
GRACO PART NUMBER	287026	287027
Graco Model	CleanShot Polegun	Cleanshot Polegun
Max Fluid Working Pressure	248 bar (25 MPa, 3600 psi)	248 bar (25 MPa, 3600 psi)
Inlet Size	1/4" NPSM	1/4" NPSM
Orifice Diameter	2.27 mm (0.09")	2.27 mm (0.09")
Length	90 cm (2.95 ft)	180 cm (5.09 ft)
Weight	1.03 kg (2.76 lb)	1.03 kg (2.76 lb)

HEAVY-DUTY EXTENSIONS

- Tough, lightweight aluminium construction
- Can be combined for extended reach up to 3.6 m (12 ft)
- Attach to any airless spray gun
- Ideal for high-pressure spraying or low pressure rolling



IMPA REFERENCE	27 10 15				27 10 16
GRACO PART NUMBER	232121	232122	232123	232124	232125
Max Fluid Working Pressure	248 bar (24.8 MPa, 3600 psi)				
Length	25 cm (10")	50 cm (20")	100 cm (40")	150 cm (60")	200 cm (80")



RAC X TIP EXTENSIONS

- Includes: RAC X HandTite guard standard with 22 mm (7/8") gun nut and OneSeal

IMPA REFERENCE	27 10 11	27 10 12	27 10 13	27 10 14	27 10 16
GRACO PART NUMBER	287019	287020	287021	287022	232125
Max Fluid Working Pressure	280 bar (28 MPa, 4050 psi)				
Length	25 cm (10")	38 cm (15")	50 cm (20")	75 cm (30")	200 cm (80")

JETROLLER

JETROLLER

The JetRoller combines rolling and spraying into one action, saving time and labour on spray/back roll projects. It consists of a spray roller, a spray extension and a hand roller in one complete kit. Lightweight and portable, it fits existing airless sprayers and is the ideal time-saving addition to your painting arsenal. Ideal for rough or porous surfaces.



IMPA REFERENCE	27 04 21	27 04 22	27 04 23	27 04 24	27 04 25
GRACO PART NUMBER	24U172	24W128	24V490	24V491	25A841
Roll Style	USA	USA	Europe	Europe	UK
Roll Frame	22.86 cm (9")	45.72 cm (18")	18 cm (7.08")	25 cm (9.84")	22.86 cm (9")
Tip	LTX721	WR1223	PAA515	PAA721	LTX721
In-Line Valve	✓	✓	✓	✓	✓
45° Swivel	-	-	-	-	-
Clean Shot	✓	✓	✓	✓	✓

HOSES

BLUEMAX II HOSES

Airless hoses for small maintenance jobs

- Light weight and flexible - over 10% lighter weight and increased hose flexibility improves usability while spraying under pressure
- Highest safety standards - conductive core meets the highest worldwide safety standards unlike competitive ground wire hose designs
- Minimal hose coil memory - superior flexibility and reduced coil memory provides ease of use during coiling and uncoiling
- Corrosion resistant - plated spring guards are more corrosion resistant
- Available in a wide variety of lengths and diameters



> 227 BAR (22.7 MPA, 3300 PSI)

IMPA REFERENCE							
GRACO PART NUMBER	223756	240794	223771	240797	238358	238959	238359
Graco Model	BlueMax II Airless Hose				BlueMax II Whip Hose		
Length	4.5 m (15 ft)	15 m (50 ft)	30 m (100 ft)	15 m (50 ft)	0.9 m (3 ft)	1.4 m (4.5 ft)	1.8 m (6 ft)
Hose Diameter	6.35 mm (1.4")	6.35 mm (1.4")	6.35 mm (1.4")	9.52 mm (3.8")	4.76 mm (3/16")	4.76 mm (3/16")	4.76 mm (3/16")
Size ID	1.4" 18NPSM FXF				1.4" 18NPSM MXF		

AIRLESS (AIR-ASSISTED) GUN, TIP AND HOSE KITS

- A complete set of gun and hose combined into an economical package
- Easy to keep a spare kit ready



IMPA REFERENCE	
GRACO PART NUMBER	17Y051
Graco model	Contract PC Airless Spray Gun
	RAC X LP517 SwitchTip
	BlueMax II Airless Hose 6.35 mm (1/4") x 15 m (50 ft)
	BlueMax II Airless Whip Hose 4.76 mm (3/16") x 1.4 m (4.5 ft)

XTREME DUTY HOSES

High-pressure hoses for air-operated sprayers

- Complete line of strong and safe hoses
- Colour-coded by pressure to take the guesswork out of using the right hose
- Easy-to-order, configurable part numbering system
- Durable design reduces downtime



> 310 BAR (31 MPA, 4500 PSI)

IMPA REFERENCE	27 10 21	27 10 22	27 10 23	27 10 24	27 10 25	27 10 26	27 10 27	27 10 28	27 10 29
GRACO PART NUMBER	H42525	H42550	H4251X	H43825	H43850	H4381X	H45025	H45050	H4501X
Length	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)
Hose Diameter	6.4 mm (1/4")			9.5 mm (3/8")			12.7 mm (1/2")		
Size ID	1/4" Female NPSM			3/8" Female NPSM			1/2" Female NPSM		

> 386 BAR (38.6 MPA, 5600 PSI)

IMPA REFERENCE	27 10 31	27 10 32	27 10 33	27 10 34	27 10 35	27 10 36	27 10 37	27 10 38	27 10 39
GRACO PART NUMBER	H52525	H52550	H5251X	H53825	H53850	H5381X	H55025	H55050	H5501X
Length	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)
Hose Diameter	6.4 mm (1/4")			9.5 mm (3/8")			12.7 mm (1/2")		
Size ID	1/4" Female NPSM			3/8" Female NPSM			1/2" Female NPSM		



> 500 BAR (50 MPA, 7250 PSI)

IMPA REFERENCE	27 10 41	27 10 42	27 10 43	27 10 44	27 10 45	27 10 46	27 10 47	27 10 48	27 10 49
GRACO PART NUMBER	H72525	H72550	H7251X	H73825	H73850	H7381X	H75025	H75050	H7501X
Length	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)	7.6 m (25 ft)	15.2 m (50 ft)	30.5 m (100 ft)
Hose Diameter	6.4 mm (1/4")			9.5 mm (3/8")			12.7 mm (1/2")		
Size ID	1/4" Female NPSM			3/8" Female NPSM			1/2" Female NPSM		



LIGHT-DUTY OIL & GREASE PUMPS

FAST-BALL

Use the Fast-Ball for onboard lower volume and short-run transfers of petroleum and synthetic based oils. These pumps are designed to provide a reliable fluid flow and ensure smooth pumping.

Advantages

- **Durable**
Rated for continuous duty in challenging applications
- **Less pump wear**
In-line design with fewer moving parts in the air motor assembly means less downtime and low repair costs
- **Flexible**
Use with both petroleum- and synthetic-based oils
- **Ready to use**
Convenient pump packages come with everything you need to get started immediately

Accessories

- 247431 Fast-Ball Repair Kit
- 222308 Bung adapter
- 222118 Connection hose kit (4.5 m - 14.76 ft)
- 222119 Connection hose kit (1.8 m - 5.9 ft)



IMPA REFERENCE	61 74 61	61 74 61	61 74 61
GRACO PART NUMBER	222051	222103	222104
Graco Model	Fast-Ball Universal Oil Pump	Fast-Ball 200 litre Oil Pump Bung Mounted	Fast-Ball 1041 litre Oil Pump Bung Mounted
Pump Ratio	1:1	1:1	1:1
Max Fluid Output Pressure	12.4 bar (1.24 MPa, 180 psi)	12.4 bar (1.24 MPa, 180 psi)	12.4 bar (1.24 MPa, 180 psi)
Fluid Flow at 80 cpm	18-22.7 lpm	18-22.7 lpm	18-22.7 lpm
Air Use and Flow at 80 cpm	0.20 m³/min at 11.7 lpm	0.20 m³/min at 11.7 lpm	0.20 m³/min at 11.7 lpm
Output per Cycle	151 cc	151 cc	151 cc
Air Inlet	1/4" NPT (F)	1/4" NPT (F)	1/4" NPT (F)
Fluid Inlet	1 – 1/2" NPT (F)	1 – 1/2" NPT (F)	1 – 1/2" NPT (F)
Fluid Outlet	3/4" NPT (F)	3/4" NPT (F)	3/4" NPT (F)
Weight	3.6 kg (7.9 lb)	5.9 kg (13 lb)	6.4 kg (14.1 lb)
Manual	307906	307906	307906

LIGHT-DUTY OIL & GREASE PUMPS

LD AIR-POWERED PUMPS

The affordable and full featured LD is designed for lower volume applications. These pumps are fine-tuned for a compact, flexible and still incredibly durable solution. Field-proven performance for a solution that works as hard as you. When transferring oil or grease on board out of 20 to 200 litre drums, you should consider the LD as it offers field-proven performance for a solution that works as hard as you.

Advantages

- Durable**
Patent-pending cup and plate design eliminates the need for O-rings that wear out faster for a more durable, longer-lasting solution
- High performance**
Fast repairs, flexible configuration, industry leading five year warranty, and so many other field-proven features
- Reliable**
Patent-pending self-cleaning design increases reliability in dirty air environments and minimizes pressure drop with rapid changeovers for reduced stalling and smoother flow
- Ease of use**
Air inlet and exhaust locations are easy to configure with just four bolts for simple, hassle-free installations
- Constant**
NXT Air Valve is designed to reduce icing in continuous use applications and uses less air than competitive pumps for better efficiency. Easy to repair or replace without tearing down internal pump components for less downtime

Accessories

- 24H798 Air Valve Repair Kit
- 24J757 Air Motor Service Kit (npt)
- 24J758 Air Motor Service Kit (bspp)
- 24J759 Air Motor Service Kit (bspt)



IMPA REFERENCE					
GRACO PART NUMBER	24G582	24G594	24G606	24J030	25C549
Graco Model	LD 3:1 Oil Pump, 200L Drum, Metallic tube	LD 5:1 Oil Pump, 200L Drum, Metallic tube	LD 50:1 Grease Pump, 180 kg (400 lb)	LD 50:1 Grease Pump 16 kg (35 lb), Stationary Package	LD 50:1 Grease Pump 16 kg (35 lb) Mobile Package
Maximum Fluid Working Pressure	31 bar (3.10 MPa, 450 psi)	51.7 bar (5.17 MPa, 750 psi)	51.7 bar (5.17 MPa, 750 psi)	35 bar (3.5 MPa, 5000 psi)	51.7 bar (5.17 MPa, 750 psi)
Fluid Pressure Ratio	3:1	5:1	50:1	50:1	50:1
Air Operation Range	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)	1.37 to 10.3 bar (20 to 150 psi)
Max Recommended Pump Speed	120 cycles per minute	180 cycles per minute	120 cycles per minute	120 cycles per minute	180 cycles per minute
Cycles Per Litre (Gallon)	7 cycles per litre (29 cycles per gallon)	10 cycles per litre (37 cycles per gallon)	103 cycles per kg (47 cycles per pound)	7 cycles per liter (29 cycles per gallon)	10 cycles per liter (37 cycles per gallon)
Wetted Parts	Zinc Plated Carbon, Steel, Aluminium, Nitrile, Polyurethane, Nickel Plated Aluminium		Steel, Brass, Nitrile Rubber, Polyurethane, UHMWPE, Acetal	Steel, Brass, Nitrile Rubber, Polyurethane, UHMWPE, Acetal	
Approximate Weight	3.2 kg (7 lb)	3.2 kg (7 lb)	7.7 kg (17 lb)		
Air Inlet	1/4"	1/4"	1/4"	1/4"	1/4"
Fluid Inlet	1"	1"	Priming Piston	1"	1"
Fluid Outlet	1/2"	1/2"	1/4"	1"	1"
Manual	3A1334	3A1334	3A1334	3A1335	3A1335
Repair Kit Manual	3A1494	3A1494	3A1495	3A1495	3A1495

HEAVY-DUTY OIL & GREASE PUMPS

FIRE-BALL

When working in one of the most demanding environments, you need a pump you can rely on. Graco's Fire-Ball pumps are designed for applications requiring continuous duty and are built to last. With so many unique maintenance saving features, Fire-Ball pumps reduce downtime and save you money. Whether you're pumping oil or grease for low, medium or high volume applications, trust Graco's Fire-Ball pumps to get the job done!

Advantages

- **Durable**
Rated for continuous duty in challenging applications
- **Less pump wear**
In-line design with fewer moving parts in the air motor assembly means less downtime and low repair costs
- **Flexible**
Use with both petroleum- and synthetic-based oils
- **Ready to use**
Convenient pump packages come with everything you need to get started immediately

IMPA REFERENCE	61 74 64	61 74 65	61 74 66
GRACO PART NUMBER	246775	225931/225642	237526
Graco Model	Mini Fire-Ball 225, Oil Pump, Universal Pump Only	Fire-Ball 300, Oil Pump, 200 litre Bung or Cover Mounted Package	Fire-Ball 425, Oil Pump, Universal Pump Only
Application	Low to medium volume	Medium volume	High volume
Pump Ratio	3:1	5:1	3:1
Max. Fluid Output Pressure	37 bar (0.37 MPa, 540 psi)	62 bar (0.62 MPa, 900 psi)	37 bar (0.37 MPa, 540 psi)
Fluid Flow at 80 cpm	7.0 lpm (1.84 gpm)	9.3 lpm (2.8 gpm)	50.6 lpm (13.4 gpm)
Cycles per Litre (gallon)	11.4 cycles per litre (43.5 cycles per gallon)	11.4 cycles per litre (43.5 cycles per gallon)	11.4 cycles per litre (43.5 cycles per gallon)
Air Use and Flow at 7 bar (100 psi) and 80 cpm	0.241 m³ /min at 7.9 l/min (8.5 scfm at 2.1 gpm)	0.765 m³ /min at 11.5 l/min (27 scfm at 3 gpm)	1.64 m³ /min at 50.6 l/min (58 scfm at 13.4 gpm)
Wetted Materials	<ul style="list-style-type: none">• Steel• Buna-N• Polyurethane• Aluminium• Rulon®	<ul style="list-style-type: none">• Steel• Polyurethane• Aluminium• Buna-N	<ul style="list-style-type: none">• Steel• Polyurethane• Aluminium• Nitrile
Air Inlet	3/8" npt(f)	3/8" npt(f)	1/2" npt(f)
Fluid Inlet	1-1/2" npt(f)	1-1/2" npt(f)	1-1/2" npt(f)
Fluid Outlet	1/2" npt(f)	1/2" npt(f)	3/4" npt(f)
Line Length	Up to 76.2 m (250 ft)	Up to 152.5 m (500 ft)	Up to 76.2 m (250 ft)
Manual	309868	306518	308485



IMPA	61 74 69	61 74 80	61 74 88
GRACO PART NUMBER	246909	239877/239888	205395
Graco Model	Mini Fire-Ball 225, Grease Pump, 16 kg Drum-Pump Only	Fire-Ball 300, Grease Pump, 16/180 kg, Drum-Pump Only	Fire-Ball 425, Grease Pump, 180 kg, Drum-Pump Only
Application	Low to medium volume	Medium volume	High volume
Max. Fluid Output Pressure	580 bar (58 MPa, 8400 psi)	580 bar (58 MPa, 8400 psi)	517 bar (51.7 MPa, 7500 psi)
Pump Ratio	50:1	50:1	50:1
Continuous-Duty Flow Rate kg/min. (lb/min.)	0.15 kg/min (0.32 lb/min)	0.54 kg/min (1.19 lb/min)	1.5 kg/min (3.35 lb/min)
Air Use	0.2 m³ /min (7.3 scfm) at 18 kg/min (0.41 lb/min.) at 7 bar (100 psi) at 80 cpm	0.645 m³ /min (22.8 cfm) at 7 bar (100 psi)	0.54m³ /min (19 cfm) at 4.8 bar (70 psi)
Wetted Materials	<ul style="list-style-type: none">• Steel• Urethane• Aluminium• Buna-N• Brass• Ethylene• Delrin	<ul style="list-style-type: none">• CS• Delrin®• Buna-N• Polyurethane	<ul style="list-style-type: none">• CS• Leather
Air Inlet	3/8" npt(f)	3/8" npt(f)	1-1/2" npt(f)
Fluid Inlet	Slotted	Slotted	Slotted
Fluid Outlet	1/4" npt(f)	1/4" npt (f)	3/8" in npt(f)
Line Length	Up to 30.5 m (100 ft)	Up to 76.2 m (250 ft)	Up to 76.2 m (250 ft)
Manual	309966	308883	306674

HOSE REELS

Graco's family of heavy-duty hose reels are designed for different types of applications. We also engineer our retractable hose reels to handle common fluids: lubricating grease, petroleum- and synthetic-based oils, hydraulic fluids, transmission fluids, gear oils, air, water, windshield wash fluid and diesel exhaust fluids.








Ordering Information

Part Number Example: HPH55B
Graco's smart part system makes choosing and ordering easy.

The example shows a reel with the following specifications:
An SD Series hose reel for high-pressure applications with a 3/8" hose diameter, 15 m hose length, with a metallic blue single pedestal frame.

PEDESTAL	REEL SERIES	OPERATING PRESSURE	HOSE DIAMETER		HOSE LENGTH	COLOUR
H = Hose Reel	R = LD	L = Low	SIZE 10	1 = 1/4"	3 = 11 m (35 ft)	A = White
	P = SD	M = Medium		2 = 3/8"	5 = 15 m (50 ft)	B = Metallic Blue
	S = XD	H = High		3 = 1/2"	6 = 20 m (65 ft)	C = Red
			SIZE 20	4 = 1/4"		D = Black
				5 = 3/8"		E = Dark Blue
				6 = 1/2"		B and D = shipped with no hose
						F = Yellow

Metallic Blue reels are standard.
Consult customer service for lead times for other colours.

	Typical Application	Typical Fluid	Hose/Cord Length Options	Enclosed
<div>LD™ Series</div> 	<ul style="list-style-type: none">• Small maintenance shops• Tyre maintenance shops• Small fast lubes• Independent repair facilities• Industrial manufacturing facilities	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Air• Water• Grease• Anti-freeze• Windshield washer fluid	<ul style="list-style-type: none">• 11 m (35 ft)• 14 m (45 ft)• 15 m (50 ft)	Yes
<div>SD™ 10 / 20 Series</div> 	<ul style="list-style-type: none">• Car dealerships• Light-/medium-duty truck dealers• Fleet maintenance• Public works garages• Construction vehicle maintenance• Light-utility service trucks	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Air• Water• Grease• Anti-freeze• Windshield washer fluid	<ul style="list-style-type: none">• 11 m (35 ft)• 15 m (50 ft)• 20 m (65 ft)	Optional
<div>SD™ Series Cord Reels</div> 	<ul style="list-style-type: none">• Automotive dealerships• Fast lube centres• Service shops• Heavy-duty dealerships• Fleet services facilities• In-plant• Lube trucks• Mining		<ul style="list-style-type: none">• 11 m (35 ft)• 15 m (50 ft)• 29 m (95 ft)	Optional
<div>XD™ 10 / 20 Series</div> 	<ul style="list-style-type: none">• Heavy-duty truck dealers• Fleet maintenance• Mining maintenance• Public works garage• Construction vehicle maintenance• Heavy-duty mobile service trucks• Mining• Lube trucks	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Air• Water• Grease• Anti-freeze• Windshield washer fluid	<ul style="list-style-type: none">• 11 m (35 ft)• 15 m (50 ft)• 20 m (65 ft)	Optional
<div>XD™ 30 Series</div> 	<ul style="list-style-type: none">• Heavy-duty truck dealers• Fleet maintenance• Mining maintenance• Public works garage• Construction vehicle maintenance• Heavy-duty mobile service trucks• Mining• Lube trucks	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Diesel fuel• Air• Water• Grease• Anti-freeze• Windshield washer fluid• Pressure wash• Waste oil evacuation• Diesel exhaust fluid (DEF)	<ul style="list-style-type: none">• 11 m (35 ft)• 15 m (50 ft)• 20 m (65 ft)• 23 m (75 ft)	No
<div>XD™ 40 / 50 Series</div> 	<ul style="list-style-type: none">• Heavy-duty truck dealers• Fleet maintenance• Mining maintenance• Public works garages• Construction vehicle maintenance• Heavy-duty mobile service trucks• Agriculture• Lube trucks	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Diesel fuel• Air• Water• Anti-freeze• Waste oil evacuation	<ul style="list-style-type: none">• 11 m (35 ft)• 15 m (50 ft)• 23 m (75 ft)• 30 m (100 ft)	No
<div>XD™ 60 / 70 / 80 Series</div> 	<ul style="list-style-type: none">• Heavy-duty truck dealers• Fleet maintenance• Mining maintenance• Public works garages• Construction vehicle maintenance• Heavy-duty mobile service trucks• Agriculture• Lube trucks	<ul style="list-style-type: none">• Petroleum- and synthetic-based oils• Diesel fuel• Air• Water• Grease• Waste oil evacuation	<ul style="list-style-type: none">• 15 m (50 ft)• 23 m (75 ft)• 30 m (100 ft)• 46 m (150 ft)	No

Graco Headquarters around the World



► WORLDWIDE HEADQUARTERS

Graco Inc.
88-11th Avenue N.E.
Minneapolis, MN 55413
United States of America
Tel: +1 612 623 6000

► SOUTH AND CENTRAL AMERICA HEADQUARTERS

Graco Uruguay - Montevideo
GFEC Uruguay Free
Zone WTC Free Zone
Dr. Luis Bonavita 1294
Office 1504
Montevideo, Uruguay 11300
Tel: +598 2626 3111

► EMEA HEADQUARTERS

Graco Distribution BV
Industrieterrein Oude Bunders
Slakweidestraat 31
3630 Maasmechelen, Belgium
Tel: +32 89 770 700

► ASIA PACIFIC HEADQUARTERS

Graco Hong Kong Ltd.
Shanghai Representative Office
Building 7
1029 Zhongshan Road South,
Huangpu District
Shanghai, 200011
The People's Republic of China
Tel: +86 21 649 50088

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.



Europe
+32 89 770 700
FAX +32 89 770 777
WWW.GRACO.COM

Fluid Handling Solutions ◀

©2016 GRACO DISTRIBUTION BV 300787 revA 06/20 Printed In Europe
All other brand names or marks are used for identification purposes and are trademarks of their respective owners.
For more information on Graco's intellectual property, see www.graco.com/patent or www.graco.com/trademarks.