



SaniForce™

Air-Operated Double Diaphragm Pumps

POWERFUL
ADVANCED
TECHNOLOGY



Portable, easy-to-clean, quick knockdown design

- Four models with maximum flow rates up to 567.8 l/min. (150 gpm)
- All fluid contact materials are **FDA-Compliant** and meet CFR Title 21
- Featuring Graco's durable, lube-free, non-sticking air valve
- Bolt-through and overmolded diaphragm options available

PROVEN QUALITY. LEADING TECHNOLOGY.

Ordering Information

SANIFORCE 515, 38.1 MM (1.5 IN) SANITARY CLAMP CONNECTION

Part Number	Kits	Seats/ O-rings	Balls	Diaphragms
FD5111	FK5111	SST/PTFE	PTFE	PTFE
FD5113	FK5113	SST/PTFE	PTFE	Overmolded PTFE
FD5122	FK5122	SST/PTFE	Santoprene	Santoprene
FD5611	FK5611	SST/EPDM	PTFE	PTFE
FD5613	FK5613	SST/EPDM	PTFE	Overmolded PTFE
FD5622	FK5622	SST/EPDM	Santoprene	Santoprene

SANIFORCE 1590, 50.8 MM (2.0 IN) SANITARY CLAMP CONNECTION

Part Number	Kits	Seats/ O-rings	Balls	Diaphragms
FD2111	FK2111	SST/PTFE	PTFE	PTFE
FD2122	FK2122	SST/PTFE	Santoprene	Santoprene
FD2211	FK2211	SST/EPDM	PTFE	PTFE
FD2222	FK2222	SST/EPDM	Santoprene	Santoprene
FD2113	FK2113	SST/PTFE	PTFE	Overmolded PTFE
FD2213	FK2213	SST/EPDM	PTFE	Overmolded PTFE
FD2132	FK2132	SST/PTFE	Polychloroprene	Santoprene
FD2232	FK2232	SST/EPDM	Polychloroprene	Santoprene
FD2133	FK2133	SST/PTFE	Polychloroprene with SST core	Overmolded PTFE

SANIFORCE 1040, 38.1 MM (1.5 IN) SANITARY CLAMP CONNECTION

Part Number	Kits	Seats/ O-rings	Balls	Diaphragms
FD1111	FK1111	SST/PTFE	PTFE	PTFE
FD1122	FK1122	SST/PTFE	Santoprene	Santoprene
FD1211	FK1211	SST/EPDM	PTFE	PTFE
FD1222	FK1222	SST/EPDM	Santoprene	Santoprene
FD1113	FK1113	SST/PTFE	PTFE	Overmolded PTFE
FD1213	FK1213	SST/EPDM	PTFE	Overmolded PTFE
FD1132	FK1132	SST/PTFE	Polychloroprene	Santoprene
FD1232	FK1232	SST/EPDM	Polychloroprene	Santoprene
FD1233	FK1233	SST/PTFE	Polychloroprene with SST core	Overmolded PTFE

SANIFORCE 2150, 63.5 MM (2.5 IN) SANITARY CLAMP CONNECTION

Part Number	Kits	Seats/ O-rings	Balls	Diaphragms
FD3111	FK3111	SST/PTFE	PTFE	PTFE
FD3122	FK3122	SST/PTFE	Santoprene	Santoprene
FD3211	FK3211	SST/EPDM	PTFE	PTFE
FD3222	FK3222	SST/EPDM	Santoprene	Santoprene
FD3113	FK3113	SST/PTFE	PTFE	Overmolded PTFE
FD3213	FK3213	SST/EPDM	PTFE	Overmolded PTFE
FD3132	FK3132	SST/PTFE	Polychloroprene	Santoprene
FD3232	FK3232	SST/EPDM	Polychloroprene	Santoprene
FD3133	FK3133	SST/PTFE	Polychloroprene with SST core	Overmolded PTFE

Technical Specifications

	SaniForce 515	SaniForce 1040	SaniForce 1590	SaniForce 2150
Maximum fluid working pressure	7 bar (0.7 MPa, 100 psi)	8 bar (0.8 MPa, 120 psi)	8 bar (0.8 MPa, 120 psi)	8 bar (0.8 MPa, 120 psi)
Air pressure operating range	1.4-7 bar (0.14-0.7 MPa, 20-100 psi)	1.4-8 bar (0.14-0.8 MPa, 20-120 psi)	1.4-8 bar (0.14-0.8 MPa, 20-120 psi)	1.4-8 bar (0.14-0.8 MPa, 20-120 psi)
Maximum air consumption	0.8 m ³ /min (28 scfm)	1.4 m ³ /min (50 scfm)	3.68 m ³ /min (130 scfm)	4.95 m ³ /min (175 scfm)
Air consumption at 4.8 bar/76 l (70 psi/20 gpm)	0.51 m ³ /min (18 scfm)	0.51 m ³ /min (18 scfm)	1.19 m ³ /min (42 scfm)	1.98 m ³ /min (70 scfm)
Maximum free-flow delivery	61 l/min. (16 gpm)	155 l/min. (41 gpm)	379 l/min. (100 gpm)	567.8 l/min. (150 gpm)
Liters (gallons) per cycle	0.15 (0.04) with standard diaphragms 0.11 (0.03) with overmolded diaphragms	0.61 (0.16)*	1.9 (0.5)*	3.67 (0.97)*
Maximum suction lift	7.6 m (25 ft) wet, 4.6 m (15 ft) dry	8.84 m (29 ft) wet, 4.87 m (16 ft) dry	8.84 m (29 ft) wet, 4.27 m (14 ft) dry	8.84 m (29 ft) wet, 4.87 m (16 ft) dry
Maximum size pumpable solids	2.38 mm (3/32 in)	3.2 mm (1/8 in)	4.8 mm (3/16 in)	6.3 mm (1/4 in)
Air inlet size	1/4 npt(f)	0.5 in npt(f)	0.5 in npt(f)	0.5 in npt(f)
Fluid inlet/outlet size	38.1 mm (1.5 in) sanitary flange	38.1 mm (1.5 in) sanitary flange	50.8 mm (2 in) sanitary flange	63.5 mm (2.5 in) sanitary flange
Weight - All models	10.25 kg (22.6 lb)	24.9 kg (55 lb)	40 kg (89 lb)	66.7 kg (147 lb)
Instruction manual	3A1973	311879	311879	311879
Maximum fluid operating temperature is based on the following maximum diaphragm, ball, and seat temperature ratings				
Stainless steel	121.1°C (250°F)	121.1°C (250°F)	121.1°C (250°F)	121.1°C (250°F)
PTFE	104.4°C (220°F)	104.4°C (220°F)	104.4°C (220°F)	104.4°C (220°F)
Santoprene	82.2°C (180°F)	82.2°C (180°F)	82.2°C (180°F)	82.2°C (180°F)
EPDM	135°C (275°F)	135°C (275°F)	135°C (275°F)	135°C (275°F)
Polychloroprene	93.3°C (200°F)	93.3°C (200°F)	93.3°C (200°F)	93.3°C (200°F)

*Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type

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

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