



1590 and 3150

High Sanitation Diaphragm Pumps

- Models have flow rates ranging from 90 gpm to 150 gpm
- Easy to clean with its quick knock down, 185° rotating design
- Featuring Graco's durable, lube-free, non-sticking air valve



PUMP

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volume

For more information visit www.graco.com/sanitary
or call **1-877-844-7226**

PROVEN QUALITY. LEADING TECHNOLOGY

1590 and 3150 Ordering Information

3150 Technical Specifications

Maximum fluid working pressure..... 120 psi (8.4 bar, 0.84 MPa)
 Maximum free flow delivery* 150 gpm (568 lpm)
 Maximum suction lift - ball 18 ft (5.5 m) wet, 9 ft (2.7 m) dry
 Maximum suction lift - flapper 10 ft (3.0 m) wet, 5 ft (1.5 m) dry
 Maximum size of pumpable solids
 Ball 1 in (25.4 mm)
 Flapper 2.5 in (63.5 mm)
 Maximum diaphragm operating temperature
 Santoprene 180°F (82.2°C)
 Buna-N 180°F (82.2°C)
 PTFE 220°F (104.4°C)
 Fluoroelastomer 250°F (121°C)
 EPDM 275°F (135°C)
 Typical sound level at 70 psi air (4.9 bar) air @ 50 cpm..... 85 dBa
 Air pressure operating range 20 to 120 psi
 (1.4 to 8.4 bar, 0.14 to 0.84 MPa)
 Air inlet size 1/2 npt(f)
 Fluid inlet & outlet size (determined by part number)..... Tri-clamp connections
 Weight 145 lb
 Instruction manual 310622

* Flow rates are with muffler and do not vary based on diaphragm material. Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type.

3150 High Sanitation Pumps

3A Pump with Leak Detector

Part No.	Type	Inlet/ Outlet Size	Diaphragm	Ball Material
SA1AAA	3-A Approved	1.5 in x 1.5 in	Overmolded EPDM	PTFE
SA2AAA	3-A Approved	2 in x 2 in	Overmolded EPDM	PTFE
SA3AAA	3-A Approved	3 in x 3 in	Overmolded EPDM	PTFE
SA4AAA	3-A Approved	4 in x 4 in	Overmolded EPDM	PTFE
SA5AAA	3-A Approved	3 in x 2 in	Overmolded EPDM	PTFE

Sanitary Ball Pump

Part No.	Type	Inlet/ Outlet Size	Diaphragm	Ball Material
SA13A1	Ball Check	1.5 in x 1.5 in	Overmolded PTFE/EPDM	PTFE
SA23A1	Ball Check	2 in x 2 in	Overmolded PTFE/EPDM	PTFE
SA33A1	Ball Check	3 in x 3 in	Overmolded PTFE/EPDM	PTFE
SA43A1	Ball Check	4 in x 4 in	Overmolded PTFE/EPDM	PTFE
SA53A1	Ball Check	3 in x 2 in	Overmolded PTFE/EPDM	PTFE
SA3361	Ball Check	3 in x 3 in	Overmolded PTFE/EPDM	Santoprene
SB2AA1	Ball Check	2 in x 2 in	Overmolded EPDM	PTFE
SB3AA1	Ball Check	3 in x 3 in	Overmolded EPDM	PTFE
SB2661	Ball Check	2 in x 2 in	Santoprene	Santoprene
SB3661	Ball Check	3 in x 3 in	Santoprene	Santoprene
SB2771	Ball Check	2 in x 2 in	Buna-N	Buna-N
SB3771	Ball Check	3 in x 3 in	Buna-N	Buna-N
SB2881	Ball Check	2 in x 2 in	Fluoroelastomer	Fluoroelastomer
SB3881	Ball Check	3 in x 3 in	Fluoroelastomer	Fluoroelastomer

Sanitary Flapper Pump

Part No.	Type	Inlet/ Outlet Size	Diaphragm Material
SF3AF1	Flapper	3 in x 3 in	Overmolded EPDM
SF4AF1	Flapper	4 in x 4 in	Overmolded EPDM
SF36F1	Flapper	3 in x 3 in	Santoprene
SF46F1	Flapper	4 in x 4 in	Santoprene
SF37F1	Flapper	3 in x 3 in	Buna-N
SF47F1	Flapper	4 in x 4 in	Buna-N
SF38F1	Flapper	3 in x 3 in	Fluoroelastomer
SF48F1	Flapper	4 in x 4 in	Fluoroelastomer

3150 Pump Accessories

15D989	Conversion kit: Ball to flapper, includes four flapper assemblies
15H461	Conversion kit 3-A: Flapper to ball, includes four housing retainers; balls need to be ordered separately
15E285	Conversion kit: Flapper to ball, includes four housing retainers; balls need to be ordered separately
112361	Santoprene ball (order quantity four)
15B492	Buna-N ball (order quantity four)
112359	PTFE ball (order quantity four)
15B491	Fluoroelastomer ball (order quantity four)
253225	Santoprene diaphragm kit
253223	Buna-N diaphragm kit
253222	Fluoroelastomer diaphragm kit
253224	Overmolded EPDM diaphragm kit
15D990	Leak detector kit

1590 Technical Specifications

Maximum fluid working pressure..... 120 psi (8.4 bar, 0.84 MPa)
 Maximum free-flow delivery 90 gpm (340 lpm)
 Maximum suction lift 28 ft (8.5 m) wet, 15 ft (4.57 m) dry
 Maximum size pumpable solids 5/8 in (15.9 mm)
 Air pressure operating range 20-120 psi (1.4-8 bar, 0.14-0.8 MPa)
 Maximum air consumption 125 scfm
 Air consumption at 70 psi air inlet pressure/60 gpm..... 50 scfm
 Maximum pump speed 200 cpm
 * Gallons (Liters) per cycle..... 0.5 (1.96)
 **Maximum Noise Level at 100 psi, full flow..... 90 dBa
 **Sound Power Level 103 dBa
 **Noise Level at 70 psi and 50 cpm..... 85 dBa
 Maximum fluid operating temperature is based on the following maximum diaphragm, ball, and seat temperature ratings.
 PTFE 220°F (104.4°C)
 Santoprene 180°F (82.2°C)
 3-A Approved EPDM 275°F (135°C)
 Air inlet size 0.5 in npt(f)
 Weight 97 lb (44 kg)
 Instruction manual 310622

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

**Noise levels measured with the pump mounted on the stand. Sound power measured per ISO Standard 9614-1

1590 High Sanitation Pumps

Part Number	Type	Inlet	Diaphragm
SABAAA	3-A Approved	2 in x 2 in	Overmolded EPDM
SBBAAA	Ball	2 in x 2 in	Overmolded EPDM
SBBA11	Ball	2 in x 2 in	PTFE
SABA13	Ball	2 in x 2 in	PTFE
SBBA13	Ball	2 in x 2 in	PTFE
SBBA22	Ball	2 in x 2 in	Santoprene

1590 Kits and Accessories

255122	Air valve repair kit 3-A
255058	Overmolded EPDM diaphragm kit
255059	Santoprene diaphragm kit
255060	PTFE diaphragm kit
15D990	Leak detector
112421	Santoprene ball (quantity one)
112419	PTFE ball (quantity one)

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