



1590 and 3150

High Sanitation Diaphragm Pumps

- Graco 3-inch pumps are certified by 3-A for dairy and milk applications
- 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



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

PROVEN QUALITY. LEADING TECHNOLOGY

PUMP
the
volume

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)
 Ball..... 18 ft (5.5 m) wet, 9 ft (2.7 m) dry
 Flapper 10 ft (3.0 m) wet, 5 ft (1.5 m) dry
 Maximum size of pumpable solids 1 in (25.4 mm)
 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)
 Fluoroelastomer 250°F (121°C)
 EPDM 275°F (435°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	3A Approved	1.5 in x 1.5 in	Over molded EPDM/PTFE
SA2AAA	3A Approved	2 in x 2 in	Over molded EPDM/PTFE
SA3AAA	3A Approved	3 in x 3 in	Over molded EPDM/PTFE
SA4AAA	3A Approved	4 in x 4 in	Over molded EPDM/PTFE
SA5AAA	3A Approved	3 in x 2 in	Over molded EPDM/PTFE

Sanitary Ball pump (SB)

Part No.	Type	Inlet/ Outlet Size	Diaphragm/Ball Material
SB2AA1	Ball Check	2 in x 2 in	Over-molded EPDM/PTFE
SB3AA1	Ball Check	2 in x 2 in	Over-molded 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 (SF)

Part No.	Type	Inlet/ Outlet Size	Diaphragm Material
SF3AF1	Flapper	4 in x 4 in	Overmolded
SF4AF1	Flapper	4 in x 4 in	Overmolded
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 3A: 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 4)
 15B492 Buna-N Ball (order quantity 4)
 112359 PTFE Ball (order quantity 4)
 15B491 Fluoroelastomer Ball (order quantity 4)
 253225 Santoprene Diaphragm kit
 253223 Buna-N Diaphragm kit
 253222 Fluoroelastomer Diaphragm kit
 253224 Over molded 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 (14-8 bar, 014-08 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)
 3A 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	Ball	2 in x 2 in	Overmolded EPDM
SBBA00	Ball	2 in x 2 in	Overmolded EPDM
SBBA11	Ball	2 in x 2 in	PTFE
SBBA22	Ball	2 in x 2 in	Santoprene

1590 Kits and Accessories

255122 Air Valve Repair Kit 3A
 255058 Overmolded EPDM Diaphragm Kit
 255059 Santoprene Diaphragm Kit
 255060 PTFE Diaphragm Kit
 15D990 Leak Detector
 112421 Santoprene Ball (quantity: 1)
 112419 PTFE Ball (quantity: 1)

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