



# Monark 2:1 Drum Pump

■ **Air powered for high reliability and low cost**

■ **Delivery for 2:1 up to 6 gpm (22.8 lpm) at up to 240 psi (1.66 MPa, 16.6 bar)**

**Succeed with  
transfer, supply  
and circulation  
performance**

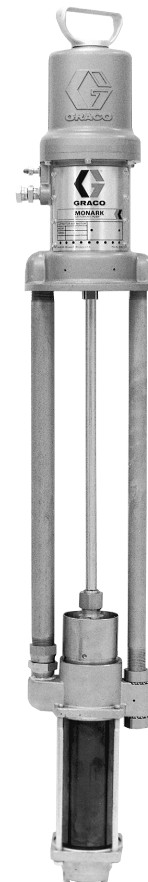
The Monark 2:1 drum pump is suited to a wide range of low to medium viscosity fluids for transfer, supply, and circulation applications. This pump is equipped with Graco's differential style air motor that provides constant fluid flow and pressure with minimal pulsation. The pumps are typically drum cover mounted.

#### **Typical Fluids Handled**

- Solventborne paints
- Resins
- Stains/varnishes
- Lacquers

#### **Typical Applications**

- Fluid transfer and supply
- Paint circulating
- Cleaning chemical supply

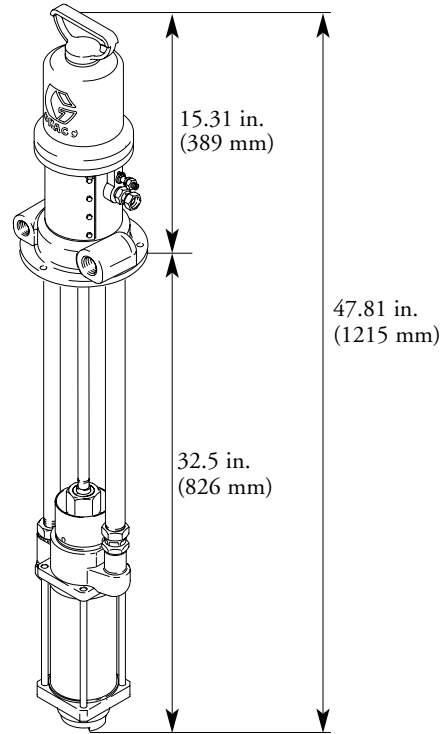


223-185

## Technical Specifications

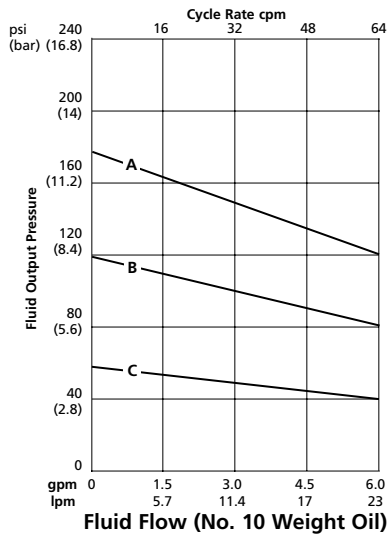
**Maximum continuous flow** ..... 5.5 gpm (21.1 lpm)  
**Volume/Cycle** ..... 11.6 oz.  
**Air motor diameter** ..... 3 in. (7.6 cm)  
**Air inlet pressure range** ..... 40-120 psi  
 (0.28-0.83 MPa, 2.8-8.3 bar)  
**Maximum fluid pressure** ..... 200 psi (1.4 MPa, 14 bar)  
**Air inlet size** ..... 3/8 npsm(f)  
**Fluid inlet size** ..... 1-1/2 npt(f)  
**Fluid outlet size** ..... 1 npt(f)  
**Weight** ..... 40 lb. (18 kg)  
**Instruction manual** ..... 307-985

## Dimensions

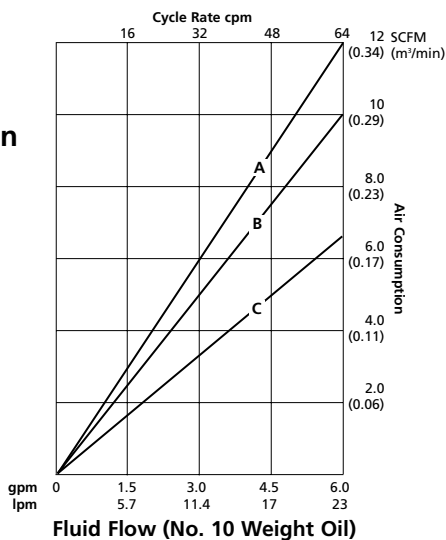


## Performance Charts for Monark 2:1 Drum Pump

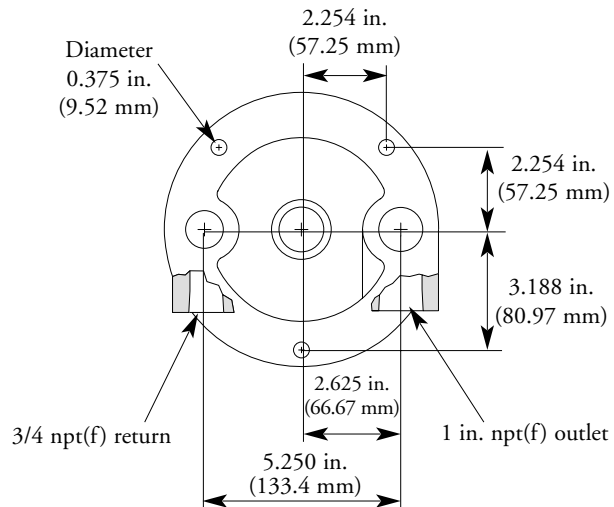
### Fluid Pressure



### Air Consumption



## Mounting Hole Layout



Note: Use mounting gasket 161-322.

### Air Pressure:

A = 100 psi (0.7 MPa, 7 bar)

B = 70 psi (0.47 MPa, 4.7 bar)

C = 40 psi (0.27 MPa, 2.7 bar)

Performance tested in No. 10 Weight motor oil (65 cp at 68° F (20° C))

## Ordering Information for Monark 2:1 Drum Pump

Order number includes motor and pump lower assembly

<b>Order Nos.</b>	<b>Monark 2:1</b>
<b>Pump Lower</b>	<b>223-185</b>
Part No.	223-177
Construction	CS
Standard Seal Repair Kit	223-320
Construction	UHMWPE/Leather
Optional Seal Repair Kit	223-321
Construction	Teflon®
<b>Motor</b>	
206-728: Repair Kit	

### SERVICE PARTS INFORMATION

<b>Pump Lower Part Nos.</b>	<b>223-177</b>
Displacement Rod	185-650
Construction	CS
Cylinder	185-649
Construction	CS
<b>Intake Valve (order separate part numbers)</b>	
Intake Ball	101-178
Intake Valve Seat	205-061
<b>Piston Valve (order separate part numbers)</b>	
Piston Ball	100-279
Seat	180-944

Teflon® is a registered trademark of Du Pont.

## Accessories

### 106-148 Air Line Filter

Maximum working pressure 250 psi (1.8 MPa, 18 bar).  
Inlet and outlet: 3/8 npt(f).

### 110-234 Air Regulator

Maximum working pressure 300 psi (2.1 MPa, 21 bar).  
Regulated pressure range 0-250 psi (1.8 MPa, 18 bar).  
Inlet and outlet: 3/8 npt(f).

### 214-847 Air Line Lubricator

Maximum working pressure 250 psi (1.8 MPa, 18 bar).  
Bowl capacity 5 oz. (0.15 liter). Inlet and outlet: 3/8 npt(f).

### 110-150 Air FRL Kit

Maximum working pressure 250 psi (1.8 MPa, 18 bar).  
Includes: air filter, regulator, pressure gauge, lubricator, mounting bracket, and connection fittings. Inlet and outlet: 3/8 npt(f).

### 224-040 Pump Runaway Valve

Maximum working pressure 120 psi (0.84 MPa, 8.4 bar).  
Inlet and outlet: 3/4 npt(f).

### 235-282 SR200 Surge Suppressor, Air-Operated

Compatible with both waterborne and solvent-based coatings.  
Maximum fluid pressure: 300 psi (2.1 MPa, 21 bar). Regulated pressure range: 0-250 psi (0-1.8 MPa, 0-18 bar).  
Inlet and outlet: 1-1/2 npt(f) sanitary clamp.

### Air Hoses

Part No.	I.D. Size	Length	Thread
214-650	1/2 inch	5 ft. (1.5 m)	3/8 npt(m)
214-655	1/2 inch	25 ft. (7.6 m)	3/8 npt(m)
214-654	1/2 inch	50 ft. (15.2 m)	3/8 npt(m)
214-653	1/2 inch	100 ft. (30.4 m)	3/8 npt(m)

### Red Alert Supply Line Filters

Red pop-up indicator reveals when filter element needs replacement.  
Materials of construction: Aluminum, glass sight, Viton O-ring.

Part No.	Mesh	Max. Working Pressure	Max Delivery
213-057	30	300 psi (2.1 MPa, 21 bar)	6 gpm (22 lpm)
213-058	60	300 psi (2.1 MPa, 21 bar)	6 gpm (22 lpm)
213-059	100	300 psi (2.1 MPa, 21 bar)	6 gpm (22 lpm)
213-060	150	300 psi (2.1 MPa, 21 bar)	6 gpm (22 lpm)
213-061	200	300 psi (2.1 MPa, 21 bar)	6 gpm (22 lpm)

### Replacement Screen Elements for Red Alert Filters

Part No.	Mesh	Material
108-106	30	SST
108-107	60	SST
108-108	100	SST
108-109	150	SST
108-110	200	Aluminum

### 223-160 Corrosion Resistant Fluid Filter

Maximum working pressure: 5000 psi (34.5 MPa, 345 bar).  
Screen: 60 mesh. Inlet: 3/8 npt(f), outlet: 1/4 npt(m).

### Replacement Screens, Stainless Steel (3-pack)

Part No.	Mesh	Material
238-435	30	SST
238-437	60	SST
238-439	100	SST
238-441	200	SST