

# MEDIUM CAPACITY PUMPS

## MC-1044/H Series Pumps | Flow Rates of 17-35 GPM (65-133 LPM)



**MC-1044HZ**

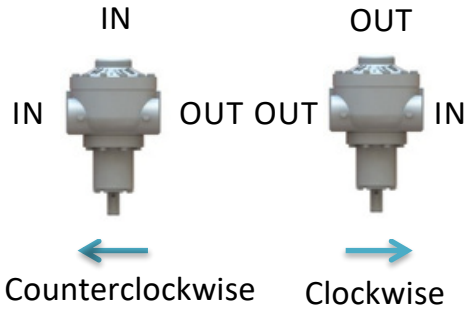
- Ideal for small bulk transfer applications, truck loading/unloading, or filling multiple cylinders at one time
- Extra inlet in cover eliminates elbows. The unused inlet port is plugged. This supplied plug can be moved to meet the desired plumbing configuration.
- Reversible (can be used for loading and unloading)
- Two ¼” NPT ports in main housing for pressure gauge or hydrostatic relief valve
- No greasing or lubrication required
- Supplied as a complete unit (pump, base, motor, coupling, coupling guard protection) or pump only
- Direct drive reduces maintenance

Pumps Only		Average Delivery Rate (See page 16 for pump performance curves)		Maximum Differential Pressure	Inlet/Outlet Size*	Motor**
Model	Motor Speed (RPM)	40 PSID (3 bar)	75 PSID (5 bar)	PSI (BAR)	FNPT (DN)	HP (kW)
MC-1044	1800 (60 Hz)	17 GPM	14 GPM	125 PSI	1-1/2"	1-1/2 HP (0.75 kW) to 40 psid (3 bar)
<b>MAX 1800 RPM</b>	1500 (50 Hz)	(27 LPM)	(21 LPM)	(8 BAR)	(DN 40)	2 HP (1.5 kW) over 75 psid (5 bar)
MC-1044H	1800 (60 Hz)	30 GPM	25 GPM	125 PSI	1-1/2"	2 HP (1.5 kW) to 75 psid (5 bar)
<b>MAX 1800 RPM</b>	1500 (50 Hz)	( 87 LPM)	(72 LPM)	(8 BAR)	(DN 40)	3 HP (2.25 kW) over 75 psid (5 bar)

\*Recommended liquid outlet size on supply tanks/inlet line size: 1-1/2" – 2"

\*\*Explosion Proof motors are UL listed and available in 1 or 3 phase electricity for 60 Hz (1800 RPM) or 50 Hz (1500 RPM) locations, 1 phase: 115/230V (suitable for 208V), 3 phase: 208/230/460 V. Motors are base mounted, direct drive as standard option with coupling, coupling guard and thermal overload protection. ATEX/UKEX certified motors also available. For external dimension drawings, please visit [www.smithpumps.com](http://www.smithpumps.com).

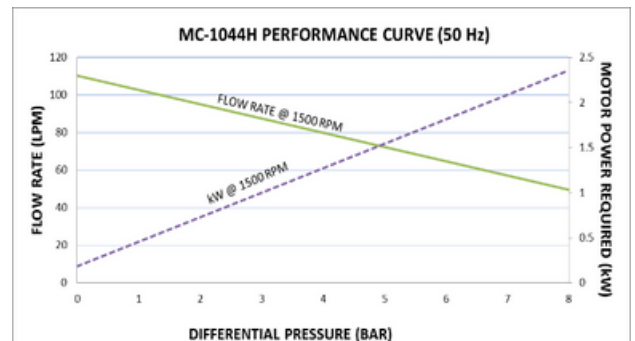
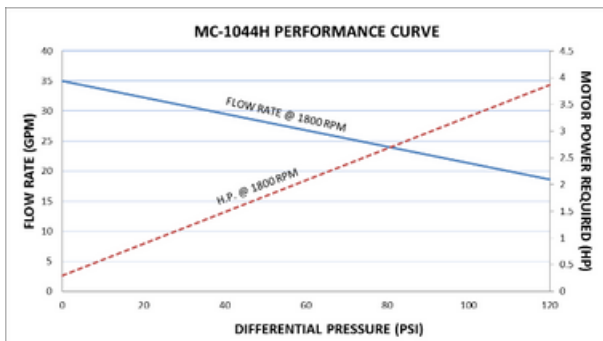
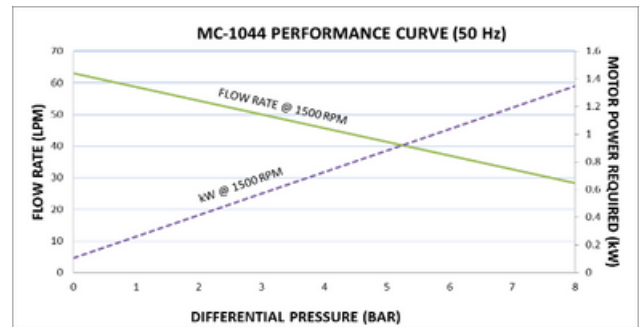
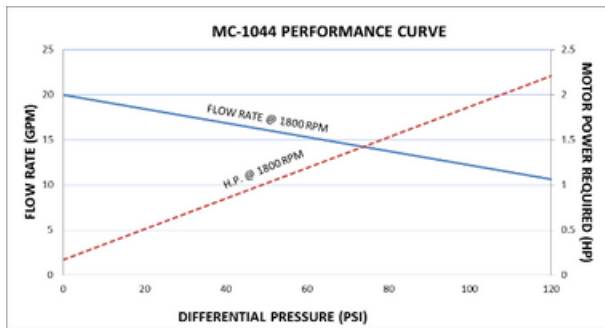
Both MC-1044 & MC-1044H pumps are reversible for loading/unloading applications



Model	Length of time to fill 4 100 lb (45 kg) LP-gas cylinders	Weight (Pump only)	Weight (Pump, coupling, motor)
MC-1044 @ 1800 RPM	4-5 minutes	45 lbs (21 kg)	190-230 lbs* (85-105 kg)
MC-1044H @ 1800 RPM	3-4 minutes	45 lbs (21 kg)	190-265 lbs* (85- 120 kg)

\* Weight varies depending on motor, contact factory for specific weight

## PUMP PERFORMANCE CURVES



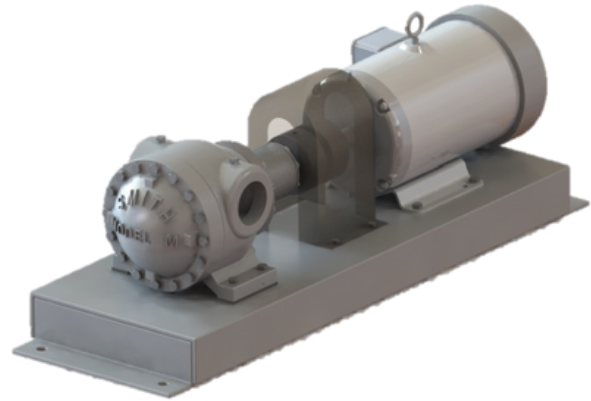
Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C).

Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).

# MEDIUM CAPACITY PUMPS

## MC-2/H SERIES PUMPS | Flow Rates of 42-50 GPM (160-190 LPM)

- The “workhorse” of small bulk plant installations
- Developed for 50 Hz Countries, the MC-2H has identical flow rate as the MC-2 (1800 RPM) when operated at 1500 RPM
- For increased pump longevity, operate a “non-H” pump at 1500 RPM or lower
- Flanged option pumps (“F”) available in 2” threaded, butt-weld, or socket-weld versions
- No greasing or lubrication required
- Reversible for loading/unloading
- Ideal for installations where 3 phase electricity is not available



Note: Pump/motor assembly above comes with coupling guard protection

Pumps Only		Average Delivery Rate (See page 18 for pump performance curves)		Max Differential Pressure	Inlet/Outlet Size*	Motor**	NPSHr
Model	Motor Speed (RPM)	40 PSID (3 bar)	75 PSID (5 bar)	PSI (BAR)	FNPT (DN)	HP (kW)	Feet (meters)
MC-2, MC-2F <b>MAX 1800 RPM</b>	1800 (60 Hz) 1500 (50 Hz)	42 GPM (125 LPM)	35 GPM (102 LPM)	125 PSI (8 BAR)	2-1/2" , 2" flanged  (DN 65) (DN 50, flanged)	3 HP (2.25 kW) to 40 psid (3 bar) 5 HP (3.7 kW) over 75 psid (5 bar)	1  (0.3 m)
MC-2H, MC-2HF <b>MAX 1500 RPM</b>	1200 (60 Hz) 1500 (50 Hz)	32 GPM (157 LPM)	25 GPM (134 LPM)	125 PSI (8 BAR)	2-1/2" 2" (flanged)  (DN 65) (DN 50, flanged)	3 HP (2.25 kW) to 40 psid (3 bar) 5 HP (3.7 kW) over 75 psid (5 bar)	1  (0.3 m)

\*Recommended liquid outlet size on supply tanks/inlet line size: 2-3" (DN 50 – DN 80) \*\*Explosion Proof motors are UL listed and available in 1 or 3 phase electricity for 60 Hz (1800 RPM) or 50 Hz (1500 RPM) locations, 1 phase: 230V (suitable for 208V), 3 phase: 208/230/460 V. Motors are base mounted, direct drive as standard option with coupling, coupling guard and thermal overload protection. ATEX/UKEX certified motors also available. For external dimension drawings, please visit [www.smithpumps.com](http://www.smithpumps.com).



**Threaded Flange**



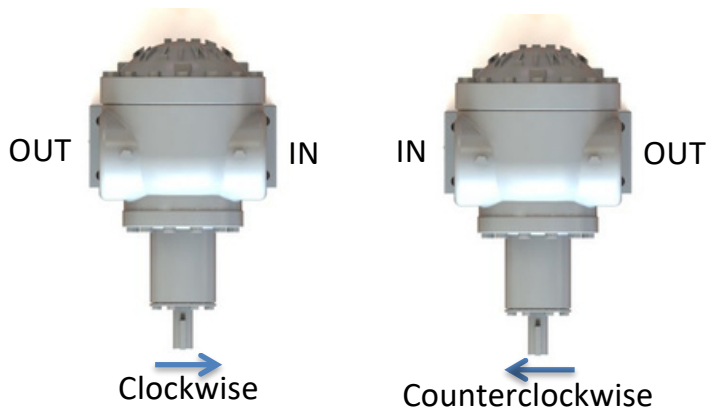
**Butt-Weld Flange**



**Socket Weld Flange**

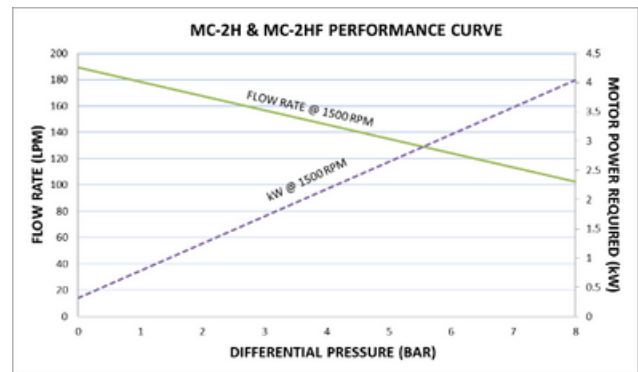
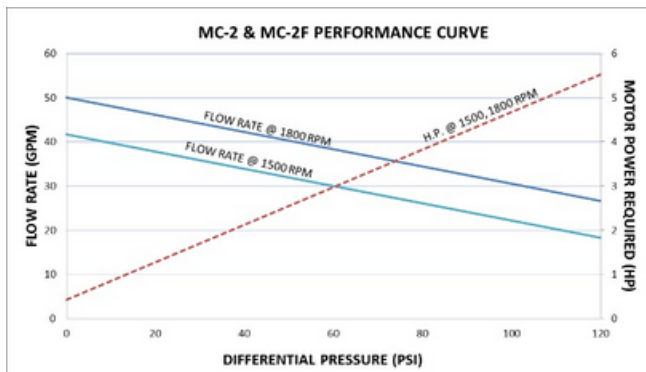
Flanges are constructed of carbon steel. Other flange materials available upon request.

Model	Length of time to fill 5 100 lb (45 kg) LP-gas cylinders	Weight (Pump only)	Weight (Pump, base, coupling, coupling guard, motor)
MC-2, MC-2F @ 1800 RPM	4 minutes	75 lbs (34 kg)	285-350 lbs* (129-159 kg)
MC-2H, MC-2HF @ 1500 RPM	4 minutes	75 lbs (34 kg)	285-350 lbs* (129-159 kg)



\* Weight varies depending on motor, contact factory for specific weight

MC-2/MC-2H pumps are reversible for loading/unloading applications



Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C).

Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).

# MEDIUM CAPACITY PUMPS

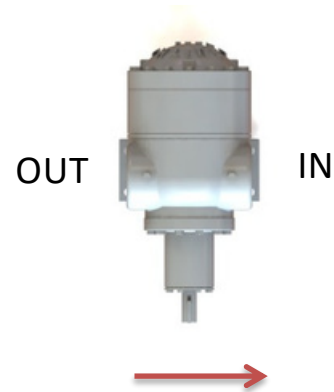
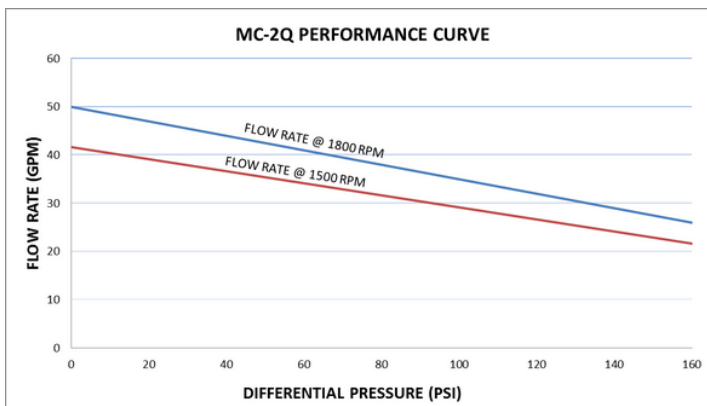
## High Differential Pressure | MC-2Q Pump



- Capable of differential pressures of up to 150 psi (over 10 bar)
- Unique helical gear design provides higher differential pressures and quieter operation

### MC-2QZ

Pumps Only		Average Delivery Rate		Max Differential Pressure	Inlet/Outlet Size*	Motor**	NPSHr
Model	Motor Speed (RPM)	40 PSID (3 bar)	150 PSID (15 bar)	PSI (BAR)	FNPT (DN)	HP (kW)	Feet (meters)
MC-2Q,	1800 (60 Hz)	45 GPM	28 GPM	150 PSI	2-1/2"	5 HP (3.7 kW) to 100 psid (6.5 bar)	1
<b>MAX 1800 RPM</b>	1500 (50 Hz)	136 LPM	87 LPM	(15 BAR)	(DN 40)	7-1/2 HP (5.6 kW) over 150psid 151(15 bar)	(0.3 m)



Clockwise, not reversible

Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C). Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).

MC-2Q pump external dimensions and weight same as MC-3 pump on page 21. Flanged options available.

# LARGE CAPACITY PUMPS

## MC-3/H SERIES PUMPS | Flow Rates of 83 – 100 GPM (315 – 380 LPM)



**MC-3Z**

- Most popular pump for heavy duty bulk transfer
- Developed for 50 Hz Countries, the MC-3H has identical flow rate as the MC-3 (1800 RPM) when operated at 1500 RPM
- For increased pump longevity, operate a “non-H” pump at 1500 RPM or lower
- Flanged option pumps (“F”) available in 2” threaded, butt-weld, or socket-weld versions
- Reversible for loading/unloading.
- No greasing or lubrication required
- Supplied as a complete unit (pump, base, motor, coupling, coupling guard protection) or pump only
- Direct drive reduces maintenance

Pumps Only		Average Delivery Rate (See page 21 for pump performance curves)		Max Differential Pressure	Inlet/Outlet Size*	Motor**	NPSHr
Model	Motor Speed (RPM)	40 PSID (3 bar)	75 PSID (5 bar)	PSI (BAR)	FNPT (DN)	HP (kW)	Feet (meters)
MC-3, MC-3F  <b>MAX 1800 RPM</b>	1800 (60 Hz)	84 GPM	70 GPM	125 PSI	2-1/2” 2” (flanged) (DN 65)	5 HP (3.7 kW) to 40 psid (3 bar)	1
	1500 (50 Hz)	(255 LPM)	(202 LPM)	(8 BAR)	(DN 50) flanged	7-1/2 HP (5.6 kW) over 75 psid (5 bar)	(0.3 m)
MC-3H, MC-3HF  <b>MAX 1500 RPM</b>	1200 (60 Hz)	64 GPM	50 GPM	125 PSI	2-1/2” 2” (flanged) (DN 65)	5 HP (3.7 kW) to 40 psid (3 bar)	1
	1500 (50 Hz)	(318 LPM)	(265 LPM)	(8 BAR)	(DN 50) flanged	7-1/2 HP (5.6 kW) over 75 psid (5 bar)	(0.3 m)

\*Recommended liquid outlet size on supply tanks/inlet line size: 2-3” (DN 50 – DN 80) \*\*Explosion Proof motors are UL listed and available in 1 or 3 phase electricity for 60 Hz (1800 RPM) or 50 Hz (1500 RPM) locations, 1 phase: 230V (suitable for 208V), 3 phase: 208/230/460 V. Motors are base mounted, direct drive as standard option with coupling, coupling guard and thermal overload protection. ATEX/UKEX certified motors also available. For external dimension drawings, please visit [www.smithpumps.com](http://www.smithpumps.com).



**Threaded Flange**

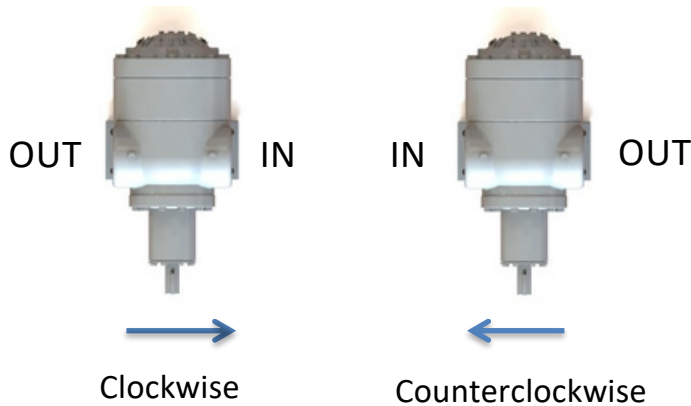


**Butt-Weld Flange**



**Socket Weld Flange**

Flanges are constructed of carbon steel. Other flange materials available upon request.

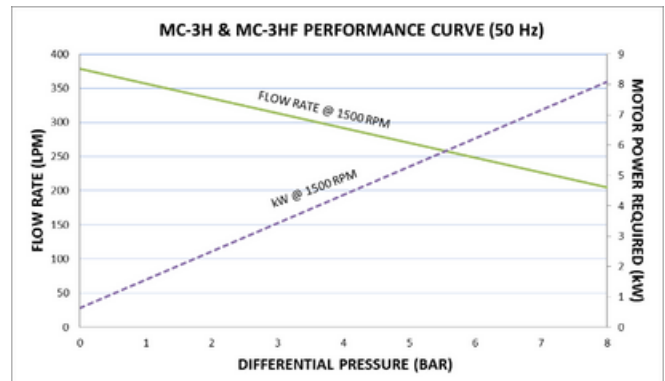
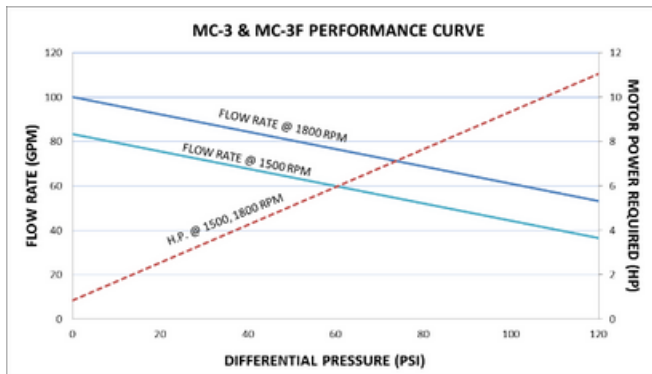


For models MC-3, MC-3F, MC-3H, MC-3HF

Model	Weight (Pump only)	Weight (Pump, base, coupling, guard, motor)
MC-3, MC-3F, MC-3H, MC-3HF, MC-2Q	100 lbs (45 kg)	350-400 lbs* (159-182 kg)

\* Weight varies depending on motor, contact factory for specific weight

## PUMP PERFORMANCE CURVES



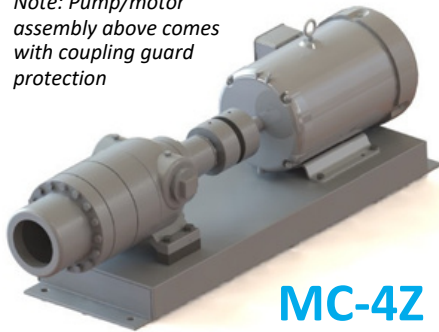
Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C).

Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).

# LARGE CAPACITY PUMPS

## MC-4/H Pumps | Flow Rates of 125 – 150 GPM (474 – 568 LPM)

Note: Pump/motor assembly above comes with coupling guard protection



**MC-4Z**

- Developed for 50 Hz Countries, the MC-4H has identical flow rate as the MC-4 (1800 RPM) when operated at 1500 RPM
- For increased pump longevity, operate a “non-H” pump at 1500 RPM or lower
- Inlet through the cover to eliminate elbows
- Flanged option pumps (“F”) available in 4” threaded or socket-weld inlet/ 2” threaded, socket-weld, or butt-weld outlet
- No greasing or lubrication required
- Supplied as a complete unit (pump, base, motor, coupling, coupling guard protection) or pump only
- Direct drive reduces maintenance

Pumps Only		Average Delivery Rate (See page 23 for pump performance curves)		Max Differential Pressure	Inlet/ Outlet Size*	Motor**	NPSHr
Model	Motor Speed (RPM)	40 PSID (3 bar)	75 PSID (5 bar)	PSI (BAR)	FNPT (DN)	HP (kW)	Feet (meters)
MC-4, MC-4F <b>MAX 1800 RPM</b>	1800 (60 Hz)	125 GPM	105 GPM	125 PSI	4” inlet 2-1/2” outlet [2” outlet for flanged version]	7-1/2 HP (5.6 kW) to 40 psid (3 bar)	1.5 ft
	1500 (50 Hz)	(363 LPM)	(306 LPM)	(8 BAR)	(DN 100) inlet (DN 65) (DN 50) flanged	10 HP (7.5 kW) over 75 psid (5 bar)	(0.5 m)
MC-4H, MC-4HF <b>MAX 1500 RPM</b>	1200 (60 Hz)	96 GPM	75 GPM	125 PSI	4” inlet 2-1/2” outlet [2” outlet for flanged version]	7-1/2 HP (5.6 kW) over 75 psid (5 bar)	1.5 ft
	1500 (50 Hz)	(475 LPM)	(398 LPM)	(8 BAR)	(DN 100) inlet (DN 65) (DN 50) flanged	10 HP (7.5 kW) over 75 psid (5 bar)	(0.5 m)

\*Recommended liquid outlet size on supply tanks/inlet line size: 3” (DN 80) \*\*Explosion Proof motors are UL listed and available for 3 phase electricity for 60 Hz (1800 RPM) or 50 Hz (1500 RPM) locations, 3 phase: 208/230/460 V. Motors are base mounted, direct drive as standard option with coupling, coupling guard and thermal overload protection. ATEX/UKEX certified motors also available. For external dimension drawings, please visit [www.smithpumps.com](http://www.smithpumps.com).

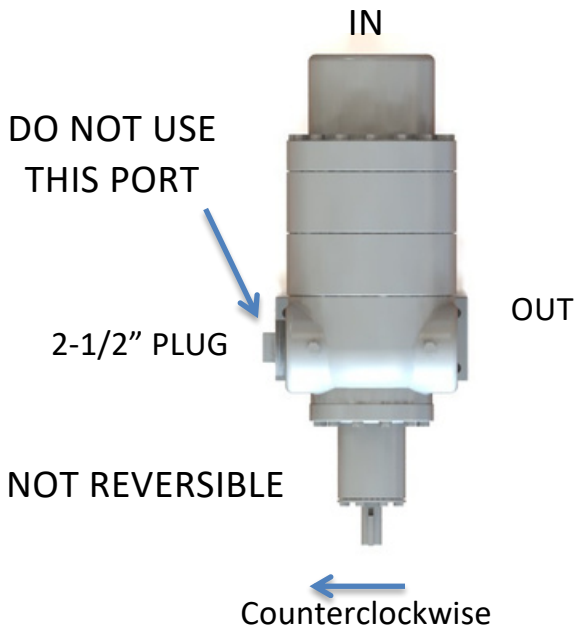


**Threaded Flange**



**Welded Flange**

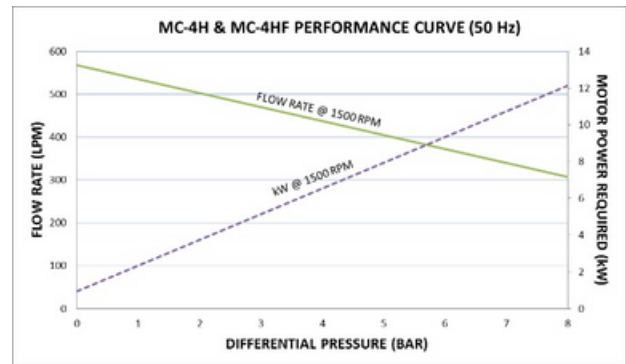
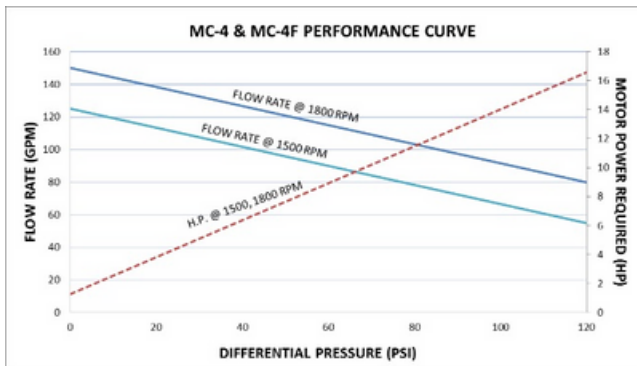
Flanges are constructed of carbon steel. Other flange materials available upon request.



Model	Weight (Pump only)	Weight (Pump, base, coupling, coupling guard, motor)
MC-4, MC-4F, MC-4H, MC-4HF	135 lbs (62 kg)	450-500 lbs* (204-227 kg)

\* Weight varies depending on motor, contact factory for specific weight

## PUMP PERFORMANCE CURVES



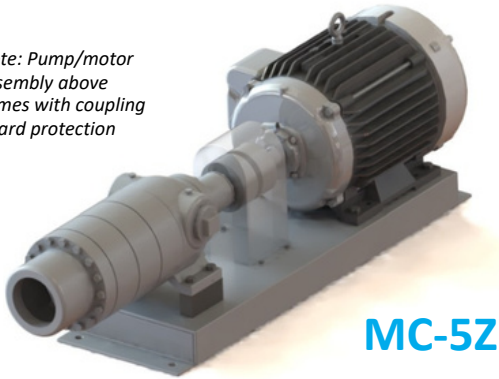
Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C).

Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).

# LARGE CAPACITY PUMPS

## MC-5/H Pumps | Flow Rates of 167– 250 GPM (630 – 946 LPM)

Note: Pump/motor assembly above comes with coupling guard protection



- Ideal for high capacity bulk transfer
- For higher flow rates, specify our “Large” gear option for 250 GPM
- For increased pump longevity, operate a “non-H” pump at 1500 RPM or lower
- Inlet through the cover to eliminate elbows
- Flanged option pumps (“F”) available in 4” threaded or socket-weld inlet/ 2” threaded, socket-weld, or butt-weld outlet
- Supplied as a complete unit (pump, base, motor, coupling, coupling guard protection) or pump only
- No greasing or lubrication required
- Direct drive reduces maintenance

Pumps Only		Average Delivery Rate (See page 25 for pump performance curves)		Max Differential Pressure	Inlet/Outlet Size*	Motor**	NPSHr
Model	Motor Speed (RPM)	40 PSID (3 bar)	75 PSID (5 bar)	PSI (BAR)	FNPT (DN)	HP (kW)	Feet (meters)
MC-5, MC-5F  <b>MAX 1800 RPM</b>	1800 (60 Hz)	167 GPM	142 GPM	125 PSI	4” inlet 2-1/2” outlet [2” outlet for flanged version]	10 HP (7.5 kW) over 40 psid (5 bar)	2 ft
	1500 (50 Hz)	(511 LPM)	(409 LPM)	(8 BAR)	(DN 100) inlet (DN 65) (DN 50) flanged	15 HP (11.2 kW) over 75 psid (5 bar)	(0.61 m)
MC-5H, MC-5HF  <b>MAX 1500 RPM</b>	1200 (60 Hz)	128 GPM	100 GPM	125 PSI	4” inlet 2-1/2” outlet [2” outlet for flanged version]	10 HP (7.5 kW) over 40 psid (5 bar)	2 ft
	1500 (50 Hz)	(640 LPM)	(538 LPM)	(8 BAR)	(DN 100) inlet (DN 65) (DN 50) flanged	15 HP (11.2 kW) over 75 psid (5 bar)	(0.61 m)

\*Recommended liquid outlet size on supply tanks/inlet line size: 4-6” (DN 100 – DN 150) \*\*Explosion Proof motors are UL listed and available in 3 phase electricity for 60 Hz (1800 RPM) or 50 Hz (1500 RPM) locations. 3 phase: 208/230/460 V. Motors are base mounted, direct drive as standard option with coupling, coupling guard and thermal overload protection. ATEX/UKEX certified motors also available. For external dimension drawings, please visit [www.smithpumps.com](http://www.smithpumps.com).

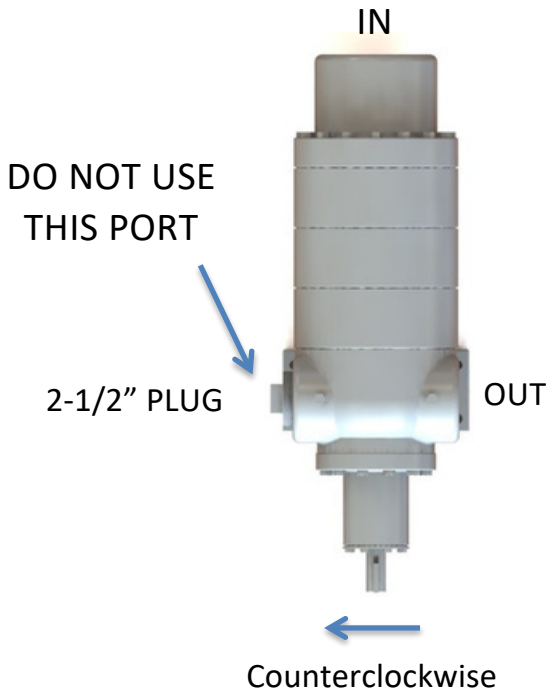


**Threaded Flange**



**Welded Flange**

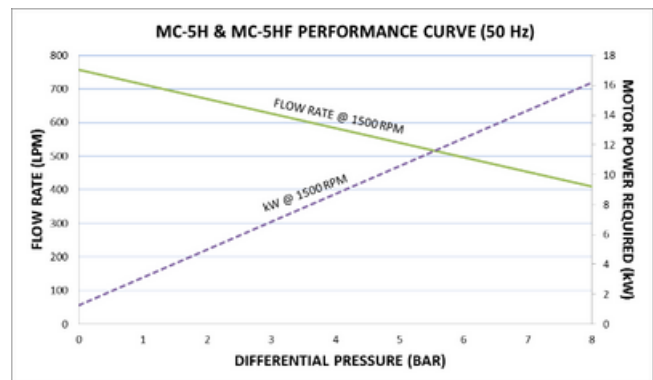
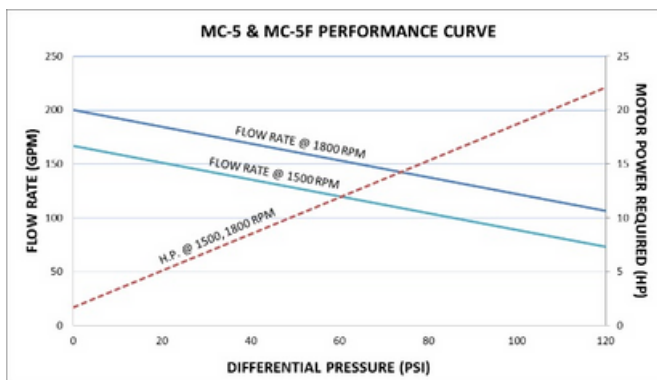
*Flanges are constructed of carbon steel. Other flange materials available upon request.*



Model	Weight (Pump only)	Weight (Pump, base, coupling, coupling guard, motor)
MC-5, MC-5F, MC-5H, MC-5HF	170lbs (77 kg)	465-530 lbs* (211-240 kg)

\* Weight varies depending on motor, contact factory for specific weight

## PUMP PERFORMANCE CURVES



Performance curves based on delivery rates of LP-gas at 70°F (21°C). Actual flow may be 10-15% greater than predicted. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F (0°C).

Note: For other liquid services or for more information on predicted pump output, please visit our pump performance calculator at [smithpumps.com](http://smithpumps.com).