

# mROY<sup>®</sup>

## Metering Pumps

### Models A and B

mROY<sup>®</sup> series models A and B metering pumps are controlled-volume, hydraulically-actuated diaphragm pumps that are designed for consistent chemical delivery. Its compact design contains a plunger that reciprocates at a fixed stroke, displacing a fixed volume of hydraulic fluid and thereby actuating a flexible, chemically inert PTFE diaphragm to create the pumping action. This field-proven design enables metering with repetitive steady-state accuracy at a  $\pm 1\%$  range. Designed to meet global industry standards, models A and B provide accurate dosing of a broad spectrum of fluids. Like all mROY<sup>®</sup> metering pumps, models A and B are built to run continually all year long with preventative maintenance, leading to decades of consistent performance.

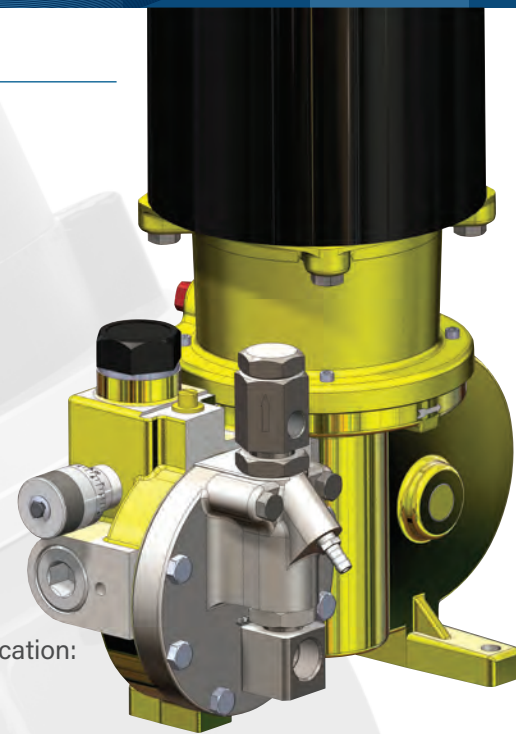
### Applications

Injection of chemicals such as coagulants, biocides, disinfectants, polymers, softening agents, acids and bases for pH control, scale and corrosion inhibitors, oxygen scavengers, process additives, and many more for the following areas of application:

- Chemical and petrochemical processing
- Cooling towers and boilers
- Drinking water treatment
- Oil and gas production
- Industrial water and wastewater treatment
- Pharmaceuticals production
- Power generation
- Agriculture

### Features and Benefits

- Hydraulically-balanced PTFE diaphragm, designed for 96,000 hours operating life, does not use seals and eliminates plunger packing maintenance.
- Liquid end bleed system makes it easier to commission a new or a newly maintained pump.
- Worm and pinion drive operating in an oil bath lubrication produces a smooth mechanical motion that eliminates wear and tear of mechanical lost motion designs and assures long gear and bearing life.
- Dust-tight cast iron housing provides a rugged enclosure for operation in the harshest plant and field environments.
- Micrometer capacity adjustment enables accurate output flow control.
- Internal hydraulic pressure relief valve automatically protects the pump's hydraulic system from over pressure conditions.
- High-performance, adjustable, cartridge-type check valves provide positive, repeatable sealing on every pump stroke.
- Metallic liquid end materials for corrosion resistance in any chemical application.
- The pump is capable of withstanding a wide range of fluid and ambient temperatures with options for extreme low and high temperature requirements.
- The pump meets standards for CE, ATEX, and API 675.
- Extensive motor mount and pipe connection options are available for process compatibility and simple integration into chemical injection systems.



Maximum Capacity Ratings (@ 100 psi / 7 bar)		
Motor	gph	L/hr
60 Hz - 1725 rpm	0.36 to 85	1.4 to 321.7

## mROY® Series - Fixed Option

Material	Frame	Capacity @ 100 psi	Capacity at Max. psi	Max. psi	Model Number <small>Replace _ at end of code with: A for API 675 Motor Mount or C for Close Coupled Motor Mount</small>	Motor Horsepower (hp)
316L SS	A	0.36	0.20	2000	MRAQS-0.4-SS_	1/3
		0.73	0.34	2000	MRAQS-0.7-SS_	1/3
		1.44	0.68	2000	MRAQS-1.4-SS_	1/3
		2.32	1.09	2000	MRAQS-2.3-SS_	1/3
		3.64	1.72	2000	MRAQS-3.6-SS_	1/3
		6.20	5.70	925	MRAQS-6-SS_	1/3
		12.30	11.20	350	MRAQS-12-SS_	1/3
		19.40	18.10	350	MRAQS-19-SS_	1/3
	30.00	29.00	200	MRAQS-30-SS_	1/3	
	B	30.40	25.60	1000	MRBQS-30-SS_	1
85.00		79.00	400	MRBQS-85-SS_	1	
ALLOY 20	A	6.20	5.70	925	MRAQS-6-A2_	1/3
		30.00	29.00	200	MRAQS-30-A2_	1/3
	B	30.40	25.60	1000	MRBQS-30-A2_	1
		85.00	79.00	400	MRBQS-85-A2_	1

### Motors Available as a Separate Line Item

Motor Horsepower (hp)	Phase	Description	Part Number
1/3 hp	1 ph	1725 RPM-60Hz-TEFC-115/208/230V	4112002010
	3 ph	1725 RPM-60Hz-TENV-208/230/460V	4112002320
1 hp	1 ph	1725 RPM-60 Hz-TEFC-115/208/230V	4112008010
	3 ph	1725 RPM-60 Hz TEFC-208/230/460V	4112008310

### Explosion-Proof Motors Available as a Separate Line Item

Motor Horsepower (hp)	Phase	Description	Part Number
1/3 hp	1 ph	1725 RPM-60Hz-XPNV-115/208/230V	4112002040
	3 ph	1725 RPM-60Hz-XPNV-115/208/230V	4112002340
1 hp	1 ph	1725 RPM-60Hz-XPNV-208/230/460V	4112008030
	3 ph	1725 RPM-60Hz-XPFC-208/230/460V	4112008330

#### Important Application Notes:

- Motor warranty is based on motor supplier standard warranty.
- Motor manufacturer may vary.
- The motors above are general duty. All motor manufacturers note that general duty totally enclosed motors are equivalent to IP54 or below, and thus not suitable for outdoor or washdown areas without protection. For outdoor and washdown applications, use washdown duty, IP55 or above rated motors. This is especially true for vertically mounted applications. Motors should never be stored outside or in damp areas.