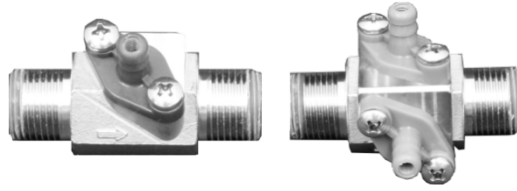


LO-FLO ROCKET

High Performance Injectors Technology by DEMA

211 & 221 Series Injectors



Overview

The DEMA Rocket injector is designed as a fully customizable, easy to service injector for all your in-line cleaning needs. It is more than capable of operating under a greater range of pressures and provides a variety of dilution ratios from 1:4 to 1:178 depending on flow rate and nozzle size. Complete serviceability is available by incorporating a removable metering barb, nozzle and other internal components. Only the best materials used such as Aflas, Hastalloy, 316 grade Stainless Steel, Teflon and polypropylene.

Warnings

This product is designed only to be used as described in this instruction sheet. Adhere to all warnings and cautions identified in this document.



WARNING: Installations must conform to all local and national plumbing codes and use approved backflow prevention and pressure relief devices where required.



Always read MSDS for all chemicals used and follow personal protective guidelines.

Packaging, Operating Requirements

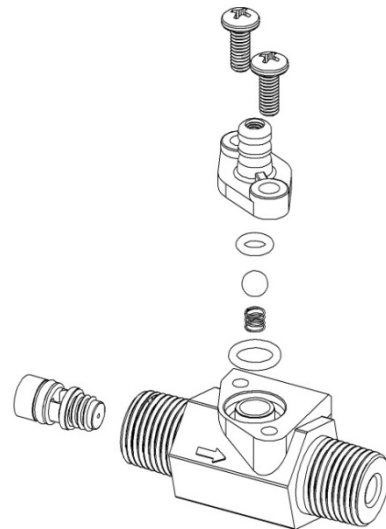
In this package*	
1 – Rocket Injector	
1 – Instruction Sheet	

*Each unit is packaged individually.
Metering tips and tubing are not included.

	Minimum	Maximum
Operating Temperature	-	150 F
Operating Pressure	40 psi	1000 psi
Installation Torque		20 in-lb

Parts List

Nozzle and Barb Repair Kits Part No.		
Single Barb	Dual Barb	
21.029	22.029	
21.040	22.040	
21.051	22.051	
Last three digits identify nozzle size		
Check Valve Kits Part No.		
Single Barb	Dual Barb	
21.001	21.002	
Metering Barbs		
Part Number	Color	
21.01NT	White	
21.01YL	Yellow	
21.01TN	Tan	



Installation

Placement in the water line:

1. The injector may be installed in a horizontal or vertical line and with the metering barb in any position below, above, or to the side. Water flow must be in the direction of the arrow on the injector body. If the thread size is different from the line size, use pipe bushings or reducers as required. Injector selection is based on flow, not line size. Flow requirements are listed in the table below.

Connection to chemical supply:

2. Install a ceramic weight by sliding the plastic tubing through the ceramic weight. Drop the end of the tubing with the strainer and ceramic weight into the fluid product container. Cut the tubing to any convenient length and slip the open end over the metering barb. The container may be more than 8 feet below the injector (extra tubing required) but injection capacity will be less. Do not place the container above the injector unless the injector is under pressure when not in use. This will prevent free siphoning.

Metering Tip Chart

Flow Rate (GPM) @ 200 PSI		0.30	0.55	0.85
Metering Barb Color		White	Yellow	Tan
Nozzle Size		0.029"	0.040"	0.051"
Metering Tip Color	Copper	1:96	1:141	1:130
	Pumpkin	1:77	1:116	1:118
	Burgundy	1:57	1:91	1:107
	Lime	1:38	1:66	1:96
	Tan	1:35	1:64	1:85
	Orange	1:26	1:47	1:64
	Turquoise	1:20	1:35	1:46
	Pink	1:13	1:23	1:31
	Lt. Blue	1:13	1:20	1:29
	Brown	1:12	1:17	1:26
	Red	1:11	1:15	1:22
	White	1:10	1:12	1:18
	Green	1:10	1:10	1:16
	Blue	1:9.9	1:8.4	1:13
	Yellow	1:9.5	1:7	1:10
	Black	1:9	1:5.6	1:7.8
	Purple	1:8.6	1:5.2	1:6.9
Gray	1:8.2	1:4.8	1:5.9	
NO TIP	1:8.1	1:4.7	1:5.5	

Flow Rate (GPM) @ 100 PSI		0.25	0.40	0.60
Metering Barb Color		White	Yellow	Tan
Nozzle Size		0.029"	0.040"	0.051"
Metering Tip Color	Copper	1:86	1:100	1:178
	Pumpkin	1:80	1:82	1:145
	Burgundy	1:78	1:65	1:109
	Lime	1:76	1:49	1:75
	Tan	1:65	1:48	1:71
	Orange	1:50	1:35	1:50
	Turquoise	1:40	1:27	1:39
	Pink	1:30	1:18	1:27
	Lt. Blue	1:29	1:15	1:24
	Brown	1:27	1:13	1:20
	Red	1:22	1:11	1:17
	White	1:17	1:9	1:14
	Green	1:16	1:8.5	1:12
	Blue	1:14	1:8.5	1:9.5
	Yellow	1:13	1:8.4	1:9.4
	Black	1:13	1:8.4	1:9.4
	Purple	1:12	1:8.3	1:9.3
Gray	1:10	1:8.3	1:9.3	
NO TIP	1:9.6	1:8	1:9	

NOTE: Dilution Ratios are based on 200 PSI inlet pressure and 50 PSI outlet pressure. Dilution Ratios are based on drawing water or water-thin product through the metering tip. Different viscosities and temperatures will affect the draw rates and lower the amount of fluid induced increasing the overall dilution ratio making the injectors (and ratio) leaner.

Troubleshooting

Unit fails to draw or draws incorrect induction of chemical after initial installation:

1. Is the injector sized correctly to the equipment? Review application and installation requirements against nozzle specifications for correct installation.
2. Is the injector body installed with the arrow on the side in the direction of the water flow? If not, remove and reverse direction to have arrow pointing same as flow of water.
3. Is the metering tip seated firmly against metering barb? Check by turning metering tip clockwise until it won't turn any further. No threads of the metering tip should be visible when installed correctly.

Unit stops drawing chemical:

1. Is the chemical pickup tube clogged? Check installed components such as a foot valve and any inline check valves installed to make sure they're free of obstructions.
2. Is the metering tip clogged? Remove and clean. Average life of a metering tip is between 6-12 months depending on chemicals used.
3. Is the injector check valve clogged? Remove metering barb to inspect check valve ball, spring and O-rings.

Warranty

Merchandise Returns

No Merchandise will be returned for credit without DEMA'S written permission. Returned merchandise authorization number is required in advance of return.

Product Warranty

DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "o"-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty is void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number must be granted in advance of returned units for repair or replacement (See "Merchandise Returns" above).