

## **Product Warranty**

**PERIOD OF WARRANTY.** Subject to the limitations set forth below, Mazzei warrants that for a period of twelve (12) months after sale to Customer, as defined by the date of product shipment from Mazzei, Mazzei's Products (except for the specific warranties for PP (polypropylene plastic) and PVDF (polyvinylidene fluoride plastic) injectors, set forth immediately hereafter) shall be free from defects in material and workmanship. With respect to PP injectors and PVDF injectors, Mazzei warrants: (a) for a period of three (3) years after sale to Customer PP injectors shall be free from defects in material and workmanship; and (b) for a period of six (6) years after sale to Customer, PVDF injectors shall be free from defects in material and workmanship.

PROCEDURE FOR WARRANTY CLAIMS. In the event any Products are found to be defective during the warranty period, Customer must contact an Authorized Mazzei Dealer no later than one (1) month after the expiration of the applicable warranty period to make a warranty claim which arose during the warranty period. Dealer will coordinate with Mazzei to process all warranty claims. In the event the Dealer cannot or will not respond to the Customer, Customer may contact the Mazzei Warranty Department directly. Mazzei will issue a return authorization number ("RMA") after validation of the nature of the claimed defect. No products shall be returned without prior issue by Mazzei of a RMA number. Dealer or Customer, as appropriate, shall return the Product(s) to Mazzei with the RMA clearly affixed to the product and postage prepaid at the following address: 500 Rooster Drive, Bakersfield, California, 93307 USA. Attn: Warranty Claims Division.

**MAZZEI'S OPTIONS IN RESPONDING TO WARRANTY CLAIM.** Mazzei will, at its sole option, either repair or replace the defective Product(s). Any repair or replacement hereunder may contain newly manufactured or reconditioned used parts which are equivalent to new.

**EXCLUSIONS FROM WARRANTY COVERAGE.** The foregoing warranty shall become void and will not apply if (a) the Product(s) has/have been tampered with in any way or attempts to repair it/them have been made by any person other than a Mazzei employee or authorized Dealer's technician; or (b) non-Mazzei supplied parts/products used in conjunction with the Product have damaged the Product; or (c) damage which occurred in shipping is apparent or subsequently proved; or (d) the Product(s) is/are damaged by catastrophe, fault or negligence of any person or entity other than Mazzei; or (e) the Product(s) is/are damaged by use of the Product(s) for purposes other than that for which it has been specifically designed.

**SUBJECT TO CHANGE.** This limited warranty is subject to change by Mazzei from time to time upon thirty (30) days' written notice.

TIME LIMITS. Any action for breach of this warranty shall be brought within three (3) months of the expiration of the warranty period.

**LIMITATIONS ON WARRANTY.** Mazzei's obligation under this LIMITED warranty is limited to the repair or replacement of defective products at Mazzei's sole discretion, and specifically excludes any consequential damages arising from any defective product. Any and all costs of removal, installation and/or reinstallation, AND freight charges are expressly excluded from this warranty. There are no other express product warranties. Any implied warranties required by law shall last for a period of twelve (12) months after shipment to customer. Mazzei does not warrant that products will meet or continue to meet customer specifications or that any or all errors, malfunctions and defects can or will be corrected. Mazzei does not warrant that the operation of the products will be uninterrupted or error free.

**DISCLAIMER.** Any recommendations for particular products and/or system design, whether contained in this document, within a drawing, communicated by electronic means, or given verbally, are intended solely as guides to actual system design. Said recommendations are based upon information and intended operating conditions supplied by others, the accuracy of which is beyond verification by Mazzei. Likewise, the actual operation of any system utilizing the products and/or recommendation of Mazzei is equally beyond the control of Mazzei. Therefore, Mazzei cannot, and does not, warrant the suitability of its products for a particular or specific intended purpose or service, nor the performance of any system incorporating components made and/or sold by Mazzei. No representation nor warranty as to any product's specific in the field performance, if different than or broader than that as set forth and limited herein, shall be binding on Mazzei unless set forth in writing and signed by an authorized agent of Mazzei.

**CHOICE OF LAW, VENUE AND ATTORNEY FEES.** The provisions of this Warranty shall be interpreted according to the laws of the State of California, United States of America, without regard to any conflict of laws provision. The proper forum for any dispute or controversy arising out of any sale shall be the Kern County Superior Court, Bakersfield, California, USA. In the event of litigation, whether on contract or in tort, the prevailing party shall be awarded reasonable attorneys fees and costs of suit.

**NOTICE.** All notices to be given with respect to this sale agreement and applicable purchase orders hereunder shall be given to Mazzei at the following address: Mazzei Injector Company, LLC, 500 Rooster Drive, Bakersfield, CA 93307 USA. Notices to Buyer will be directed to the addressee appearing on Buyer's Purchase Order or to Buyer at the address appearing on Mazzei's order confirmation.

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Mazzei Injector Company, LLC Product Catalog – Agriculture

**ТОС** 

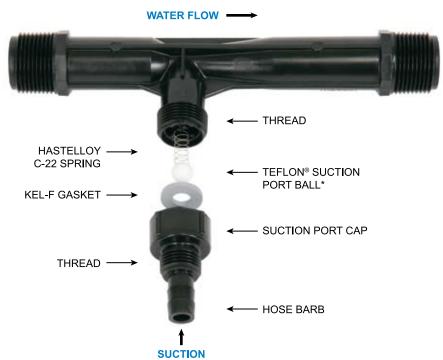
## The Mazzei Injector

#### World class design, precision performance...nothing works like a Mazzei.

Mazzei® Injector Company, LLC is the world's leading manufacturer of high-performance Venturi-type, differential pressure injectors with internal mixing vanes that transfer or mix liquid or gas additives into solution. When a sufficient pressure difference exists between the inlet and outlet sides of the injector, a vacuum is created inside the injector body, which initiates suction of a liquid or gas through the suction port. Mazzei Injectors operate over a wide range of pressures and require only a minimal pressure differential between the inlet and outlet sides to initiate a vacuum at the suction port.

#### There is no substitute for a Mazzei

Mazzei Injectors are precisely engineered and cannot be duplicated. Imitations and look-alike products simply do not perform like a Mazzei. The U.S. Patent and Trademark Office awarded Mazzei a trademark registration for its unique look and shape. The injector's trademark look represents Mazzei's acquired reputation among consumers for years of quality and performance. The Mazzei look is recognized internationally, so it is important to make sure the injector is a Mazzei. Customers should make sure it is a Mazzei by checking for the Mazzei name on the injector. Then buyers can be assured that they are getting the best and most effective mixing and contacting available.



\* Teflon® is a registered trademark of the DuPont Company, which has no affiliation with Mazzei Injector Company.



To help select the right injector for irrigation applications, Mazzei has developed a web-based calculator that will assist users in selecting injectors for liquid injection applications. Called the InjectorSelector™, the calculator is accessible for registered and approved users via the Mazzei website at www.Mazzei.net. Injector performance data can be found on the website also.

Product Catalog – Agriculture Mazzei Injector Company, LLC

## **Agricultural Applications**

#### Precise chemical applications for irrigation systems...the low cost solution.

Injecting chemicals into a pressurized irrigation system (chemigation) is the most common application for Mazzei Injectors in agriculture. Mazzei pioneered this simple-to-use and easy to install solution more than 30 years ago. Using high-efficiency patented and trademarked Venturi injectors, Mazzei's chemigation technology delivers a uniform distribution of chemicals and fertilizers within the irrigation water. Mazzei Injectors offer the advantages of an easy to maintain non-mechanical system. With no moving parts, and often no supplemental pump system, Mazzei is the cost-effective choice. A Mazzei Injector delivers precise mixing and uniform distribution of material into the water stream. Because Mazzei Injectors are designed for vacuum transfer of irrigation chemicals, they provide safe chemigation.

- **Easy to install**
- ► Years of proven performance
- **▶** Uniform chemical injection
- ► Low cost solution to other injection methods
- Generally injection stops when water flow stops
- Available in polypropylene or PVDF





Dimensions for 3090-PP

# **Mazzei® Injectors**

## **MNPT**

Black Polypropylene  283-PP	33-PP 37-PP 34-PP 34X-PP 34-PP	1/2 1/2 1/2 1/2 1/2	1/4 1/4 1/4 1/4	N/A N/A 1/4
283-PP 1/2 1/4 1 287-PP 1/2 1/4 1 287-PP 1/2 1/4 1  384-PP 1/2 1/4 1  384-PP 1/2 1/4 1  484-PP 1/2 1/4 1  484-PP 1/2 1/4 1  584-PP 1/2 1/4 1  484-PP 1/2 1/4 1  484-PP 1/2 1/4 1  584-PP 1/2 1/4 1  484-PP 1/2 1/4 1  584-PP 1/2 1/4 1  484-PP 1/2 1/4 1  584-PP 1/2 1/4 1  584-PP 1/2 1/4 1  584-PP 1/2 1/2 1/2 1  585-5-5-1 11.0 1  1583-PP 1 1/2 1/2 1  1583-PP 1 1/2 1/2 1  1583-PP 1 1/2 1/2 1  1585-PP 1 1/2 1/2 1  1587-PP 1 1/2 1/2 1  2081A-PP 2 N/A 1  1minersions for 1583A-PP thru 1587-PP 2 N/A 1  1minersions for 1583A-PP 2 N/A 1  2083X-PP 2 N/A 1	37-PP 34-PP 34X-PP 34-PP	1/2 1/2 1/2 1/2	1/4 1/4 1/4	N/A 1/4
287-PP 1/2 1/4 1/4 1/2 1/2 1/4 1/4 1/2 1/2 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	37-PP 34-PP 34X-PP 34-PP	1/2 1/2 1/2 1/2	1/4 1/4 1/4	N/A 1/4
384-PP 1/2 1/4  -2.5" 5.9" 1/2 1/4  484-PP 1/2 1/4  484-PP 1/2 1/4  484-PP 1/2 1/4  584C-PP 1/2 1/4  -2.5" 5.9" 484A-PP 3/4 1/4  -2.5" 5.9" 485X-02-PP 1 1 1/2  -2.5" 5.9" 878-02-PP 1 1 1/2  -2.5" 5.9" 1 1/2  -2.5" 5.9" 1 1/2  -2.5" 5.9" 1 1/2  -2.5" 1	34-PP 34X-PP 34-PP	1/2 1/2 1/2	1/4 1/4	1/4
ensions for 283-PP thru 287-PP  384X-PP  1/2  1/4  484-PP  1/2  1/4  584C-PP  1/2  1/4  484-PP  1/2  1/4  584C-PP  1/2  1/4  484-PP  1/2  1/4  484-PP  3/4  1/4  878-02-PP  1 1/2  878-02-PP  1 1/2  878-02-PP  1 1/2  878-02-PP  1 1/2  17/2  878-02-PP  1 1/2  17/2  17/2  17/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1585X-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1078-02-PP  1 1/2  1587-PP  1 1/2  1	34X-PP 34-PP	1/2	1/4	
ensions for 283-PP thru 287-PP  384X-PP  1/2  1/4  484-PP  1/2  1/4  584C-PP  1/2  1/4  484-PP  1/2  1/4  584C-PP  1/2  1/4  484-PP  1/2  1/4  484-PP  3/4  1/4  878-02-PP  1 1/2  878-02-PP  1 1/2  878-02-PP  1 1/2  878-02-PP  1 1/2  17/2  878-02-PP  1 1/2  17/2  17/2  17/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1583A-PP  1 1/2  1585X-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1587-PP  1 1/2  1078-02-PP  1 1/2  1587-PP  1 1/2  1	34X-PP 34-PP	1/2	1/4	
484-PP 1/2 1/4  584C-PP 1/2 1/4  584C-PP 1/2 1/4  484A-PP 3/4 1/4  584-PP 3/4 1/4  584-PP 3/4 1/4  584-PP 1 1/2  584-PP 1 1/2  5878-02-PP 1 1/2  585X-02-PP 1 1/2  1078-02-PP 1 1/2  1078-02-PP 1 1/2  1583A-PP 1 1/2  1584A-PP 1 1/2  1585X-PP 1 1/2  1585X-PP 1 1/2  1585X-PP 1 1/2  1587-PP 1 1/2  1587-PP 1 1/2  1587-PP 1 1/2  1078-02-PP 1 1/2  1587-PP 2 N/A 1 1  2081A-PP 2 N/A 1	84-PP	1/2	4 / 4	1/4
484A-PP 3/4 1/4  484A-PP 3/4 1/4  584-PP 3/4 1/4  878-02-PP 1 1/2  978-02-PP 1 1/2  1078-02-PP 1 1/2  1583A-PP 1 1/2  1584A-PP 1 1/2  1585X-PP 1 1 1/2  1585X-PP 1 1 1/2  1585X-PP 1 1 1/2  1585X-PP 1 1 1/2  1587-PP 1 1/2  1587-PP 2 N/A 1 1  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1	34C-PP	1/2	1/4	1/4
484A-PP 3/4 1/4  snsions for 384-PP thru 584-PP 3/4 1/4  878-02-PP 1 1/2  snsions for 484A-PP thru 584-PP 1 1/2  1078-02-PP 1 1/2  1583A-PP 1 1/2  1584A-PP 1 1/2  1584A-PP 1 1/2  1585X-PP 1 1/2  1587-PP 1 1/2  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1  2083X-PP 2 N/A 1			1/4	1/4
## 1/2 ##				
584-PP 3/4 1/4  878-02-PP 1 1/2  885X-02-PP 1 1/2  978-02-PP 1 1/2  1078-02-PP 1 1/2  1583A-PP 1 1/2  1584A-PP 1 1/2  1585X-PP 1 1 1/2  1585X-PP 1 1 1/2  1587-PP 1 1 1/2  1587-PP 1 1/2  2083X-PP 2 N/A 1 1/2  1583A-PP 2 N/A 1 1/2  1583A-PP 2 N/A 1 1/2	B4A-PP	3/4	1/4	1/4
885X-02-PP 1 1/2 978-02-PP 1 1/2 1078-02-PP 1 1/2 1078-02-PP 1 1/2 1583A-PP 1 1/2 1584A-PP 1 1/2 1585X-PP 1 1/2 1585X-PP 1 1/2 1587-PP 1 1/2 1587-PP 2 N/A 1 2083X-PP 2 N/A 1 2083X-PP 2 N/A 1	84-PP	3/4	1/4	1/4
885X-02-PP 1 1/2 978-02-PP 1 1/2 1078-02-PP 1 1/2 1078-02-PP 1 1/2 1583A-PP 1 1/2 1584A-PP 1 1/2 1585X-PP 1 1/2 1587-PP 1 1/2 1587-PP 2 N/A 1 1/2 1583A-PP 2 N/A 1 1/2 1583A-PP 2 N/A 1 1/2				
978-02-PP 1 1/2 1/2 1/2 1583A-PP 1 1/2 1/2 1/2 1585X-PP 1 1 1/2 1/2 1587-PP 1 1 1/2 1/2 1/2 1587-PP 1 1 1/2 1/2 1/2 1587-PP 1 1/2 1/2 1/2 1587-PP 1 1 1/2 1/2 1/2 1/2 1587-PP 1 1 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	78-02-PP	1	1/2	1/2
1078-02-PP 1 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1		1		1/2
1583A-PP 1 1 1/2 1/2  1584A-PP 1 1 1/2 1/2  1585X-PP 1 1 1/2 1/2  1587-PP 1 1 1/2 1/2  2081A-PP 2 N/A 1  2083X-PP thru 1587-PP  11.0"  nsions for 1583A-PP thru 1587-PP	78-02-PP	1		1/2
1583A-PP 11/2 1/2  1584A-PP 11/2 1/2  1584A-PP 11/2 1/2  1585X-PP 11/2 1/2  1587-PP 11/2 1/2  1587-PP 1 1/2 1/2  1587-PP 2 N/A 1  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1	078-02-PP	1	1/2	1/2
1583A-PP 11/2 1/2  1584A-PP 11/2 1/2  1585X-PP 11/2 1/2  1585X-PP 11/2 1/2  1587-PP 11/2 1/2  1587-PP 1 1/2 1/2  1587-PP 2 N/A 1  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1				
1585X-PP 1 1 1/2 1/2 1587-PP 1 1 1/2 1/2  1587-PP 2 N/A 1  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1  2083X-PP 1 1 1/2 1/2				1/2
1587-PP 1 1 1/2 1/2  2081A-PP 2 N/A 1  2083X-PP 2 N/A 1  2083X-PP brit 1587-PP				1/2
2081A-PP 2 N/A 1 2083X-PP 2 N/A 1 2083X-PP 2 N/A 1 2083X-PP 11.0"				1/2
2083X-PP 2 N/A 1 2083X-PP bru 1587-PP	587-PP	1 1/2	1/2	1/2
2083X-PP 2 N/A 1 2083X-PP bru 1587-PP	2014 DD	0	<b>31/4</b>	4.44
11.0" → nsions for 1583A-PP thru 1587-PP				1 1/4
	J83X-PP	2	N/A	1 1/4
3030-11 3 IV/A I	nan_DD	2	NI/A	1 1/2
	J30-11	3	IV/A	1 1/2
nsions for 2081A-PP thru 2083X-PP				
2.5"		587-PP 081A-PP 083X-PP	081A-PP 2 083X-PP 2	081A-PP 2 N/A 083X-PP 2 N/A

Product Catalog – Agriculture Mazzei Injector Company, LLC



# **Mazzei® Injectors**

-26.0"

Dimensions for 4091-PVDF

## **MNPT**

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All measurements in inches, unless noted.	ements in inches, unless noted.		Suction Port		
		Inlet & Outlet	Barb	Thread	
Black PVDF	202 DVDF	1/0	1/4	NI/A	
Only available in	n natural. 283-PVDF	1/2	1/4	N/A	
1 2.5" Only available in	n blue. 287-PVDF	1/2	1/4	N/A	
	Tolue. 201 1 VDI	1/2	1/4	IV/A	
—	384-PVDF	1/2	1/4	1/4	
The initial of the control of the co	384X-PVDF	1/2	1/4	1/4	
25"	484-PVDF	1/2	1/4	1/4	
2.5"	584C-PVDF	1/2	1/4	1/4	
—2.5"—→ 5.9"——		.,_	., .		
nensions for 384-PVDF thru 584C-PVDF	484A-PVDF	3/4	1/4	1/4	
	484X-PVDF	3/4	1/4	1/4	
2.5"	584-PVDF	3/4	1/4	1/4	
	684-PVDF	3/4	1/4	1/4	
mensions for 484A-PVDF thru 784-PVDF	784-PVDF	3/4	1/4	1/4	
4.0"	878-02-PVDF	1	1/2	1/2	
7	885X-02-PVDF	1	1/2	1/2	
3.7" 9.0"	978-02-PVDF	1	1/2	1/2	
mensions for 878-02-PVDF thru 1078-02-PVDF	1078-02-PVDF	1	1/2	1/2	
1					
3.5"	1583A-PVDF	1 1/2	1/2	1/2	
T	1584A-PVDF	1 1/2	1/2	1/2	
11.0"	1585X-PVDF	1 1/2	1/2	1/2	
mensions for 1583A-PVDF thru 1587-PVDF	1587-PVDF	1 1/2	1/2	1/2	
2.5"	2081A-PVDF	2	N/A	1 1/4	
5.0"	2083X-PVDF	2	N/A	1 1/4	
nensions for 2081A-PVDF thru 2083X-PVDF					
	3090-PVDF	3	N/A	2x1.50	
	4091-PVDF	4	N/A	2x2	
	3.4"				
5.7" <del></del>	<b>-</b>				
mensions for 3090-PVDF					
	=11-				
Sur					



Dimensions for ISO 3090-GRPP

Product Catalog – Agriculture

# **Mazzei® Injectors**

## **BSPT**

Mazzei Injector Company, LLC

All measurements in inches, unless noted.	Part Number	Part Number Inlet &	Nominal	Suction Port	
All Hiedsul Ghierus III Iliches, uniess Holeu.	Fait Number	Outlet mm	Pipe Size	Barb	Thread
Green Polypropylene					
	Note: ½" MNPT Poly both have the same t				
2.5"	ISO 584-GRPP	20	3/4	1/4	1/4
2.5" 5.9"					
Dimensions for ISO 584-GRPP	ISO 885X-02-GRPP	25	1	1/2	1/2
	ISO 878-02-GRPP	25	1	1/2	1/2
4.0"	ISO 1078-02-GRPP	25	1	1/2	1/2
7					
9.0"	ISO 1583A-GRPP	40	1 1/2	1/2	1/2
Dimensions for ISO 885X-02-GRPP thru ISO 1078-02-GRPP	ISO 1587-GRPP	40	1 1/2	1/2	1/2
3.5"	ISO 2081A-GRPP	50	2	N/A	1 1/4
I					
5.5" 11.0" Dimensions for ISO 1583A-GRPP thru ISO 1587-GRPP	ISO 3090-GRPP	80	3	N/A	1 1/2
2.5" Dimensions for ISO 2081A-GRPP					



# **Mazzei® Injectors**

## **BSPT**

**M** 6

	David Mounda ou	Inlet &	Nominal Pipe	Sucti	on Port
All measurements in inches, unless noted.	Part Number	Outlet mm	Size	Barb	Thread
Blue PVDF					
	Note: ½" MNPT PVD the same threads pe				ctors; both have
2.5"	ISO 484A-PVDF	20	1/2	1/4	1/4
	ISO 484X-PVDF	20	3/4	1/4	1/4
2.5" 5.9"  Dimensions for ISO 484A-PVDF thru ISO 684-PVDF	ISO 584-PVDF	20	3/4	1/4	1/4
Difficultion for 100 404A-1 VDF till till 100 004-1 VDF	ISO 684-PVDF	20	3/4	1/4	1/4
4.0"	ISO 878-02-PVDF	25	1	1/2	1/2
3.7"	ISO 885X-02-PVDF	25	1	1/2	1/2
9.0"  Dimensions for ISO 878-02-PVDF thru ISO 1078-02-PVDF	ISO 978-02-PVDF	25	1	1/2	1/2
	ISO 1078-02-PVDF	25	1	1/2	1/2
		,			
3.5"	ISO 1583A-PVDF	40	1 1/2	1/2	1/2
5.5"	ISO 1584A-PVDF	40	1 1/2	1/2	1/2
Dimensions for ISO 1583A-PVDF thru ISO 1587-PVDF	ISO 1585X-PVDF	40	1 1/2	1/2	1/2
	ISO 1587-PVDF	40	1 1/2	1/2	1/2
2.5"	ISO 2081A-PVDF	50	2	N/A	1 1/4
5.0"	ISO 2083X-PVDF	50	2	N/A	1 1/4
Dimensions for ISO 2081A-PVDF thru ISO 2083X-PVDF					
	ISO 3090-PVDF	80	3	N/A	2x1 1/2
134	ISO 4091-PVDF	100	4	N/A	2x2
	•				
19.0"					
Dimensions for ISO 3090-PVDF					
	•				
	5.1"				
8.6"					
26.0"— Dimensions for ISO 4091-PVDF					
UIIIONONONO IUI IOU 4071-T VUI					



## **Suction Kits**

All measurements in inches, unless noted.





Part Number	Description
K184	Suction line kit for 0.50" and 0.75" injectors
K183	Suction line kit for 1.0" & 1.5" injectors
KR183	Economy suction line kit for 1.0" & 1.5" injectors
K282	Suction line kit for 2.0" injectors
KR282	Economy suction line kit for 2.0" injectors

# **Bypass Kits**

All measurements in inches, unless noted.



Part Number	Description
K184-A	Bypass and suction line kit for 0.50" injectors
K184-B	Bypass and suction line kit for 0.75" injectors
K181-A-02	Bypass and suction line kit for 1.0" injectors
K183-A	Bypass and suction line kit for 1.5" injectors
K282-A	Bypass and suction line kit for 2.0" injectors

## **Flowmeters**

All measurements in inches, unless noted.





Part Number	Scale Range	Length	Thread Size
F-44250L-8	0.02525 GPM	6.25	1/2
F-44330L-8	3.0-30.0 GPH	6.25	1/2
F-44375L-8	0.1-1.0 GPM	6.25	1/2
F-44376L-8	0.2-2.0 GPM	6.25	1/2
F-44500L-8	0.5-5.0 GPM	8.90	1/2
F-44560L-8	5.0-60.0 GPH	8.90	1/2
F-44750L-8	1.0-10.0 GPM	9.00	1/2
F-44750L-12	1.0-10.0 GPM	7.50	3/4
F-45750L-12	1.0-10.0 GPM	10.00	3/4
F-30	Call for info		

Call for info

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## **Bell Reducers**

All measurements in inches, unless noted.	Part Number	Description
Black PVDF – MNPT		
	BR125-PVDF	1.25" x 0.50" FNPT bell reducer
	BR125-1-PVDF	1.25" x 1.0" FNPT bell reducer
	BR150-PVDF	1.5" x 0.50" FNPT bell reducer
	BR151-PVDF	1.5" x 1.0" FNPT bell reducer

## Blue PVDF – BSPT



ISO BR125-PVDF	1.25" Female BSPT x 0.50" FNPT bell reducer
ISO BR150-PVDF	1.5" Female BSPT x 0.50" FNPT bell reducer
ISO BR205-PVDF	2.0" Female BSPT x 0.50" FNPT bell reducer

# **Suction Port Caps**

All measurements in inches, unless noted.	Part Number	Injector Replacement Caps For Models:
PVDF		
	CAP-PVDF .25	283-287
	CAP-PVDF .375	384-684
- Miller	CAP-PVDF .75	878-1587
Indicate Color		

## Polypropylene



	CAP-PP .25	283-287
	CAP-PP .375	384-584
	CAP-PP .75	878-1587



## **Check Valves**

All measurements in inches, unless noted.	Part Number	Description
	C83-PP	0.50" check valve for old-style 1.0" injectors – polypropylene
C-86	C83-PVDF	0.50" check valve for old-style 1.0" injectors – PVDF
	C75-CVA	1.25" check valve for 2.0" injectors - PVC (1.25" FNPT x 1" hose barb connections)
	C75R	1.25" check valve for 2.0" injectors – PVC
	C75R-BSPT	1.25" check valve for 2.0" injectors – PVC
	C86	1.25" check valve for 2.0" injectors – PVC

# **Check Valve Repair Kits**

Ball, spring and gasket	Part Number	Description
	CR-1	For use with models 283 & 287, spring not included
	CR-2	For use with models 384, 484A, 584 & 684
	CR-3	For use with check valve C83
	CR-4	For use with models 1583, 1584 & 1585X

## **Metering Valves**

MV-50 PP

All measurements in inches, unles	es noted.	Part Number	Description
MV-5 PVDF MV-5 PP	MV-5 PP	0.50" Metering valve, customized "V Port" characterized seat control	
	MV-5 PVDF	0.50" Metering valve, customized "V Port" characterized seat control	
	MV-25 PP	0.25" Metering valve for 0.50" & 0.75" injectors	
	MV-50 PP	0.50" Metering valve for 1.0" & 1.5" injectors	
	CP-5 PVC	Coupling for MV-5	
	CP-5 PVDF	Coupling for MV-5	

## **Suction Port Screen Assemblies**

MV-25 PP

All measurements in inches, unless noted.	Part Number	Description
	SPSA-1.25-A	Suction port screen w/ check valve – 1.25" FNPT connection (for 2" injectors)
	SPSA-1.5-A	Suction port screen w/ check valve – 1.5" FNPT connection (for 3" injectors)
	SPSA-2-A	Suction port screen w/ check valve - 2.0" FNPT connection (for 4" injectors)

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## **Strainers**

All measurements in inc	ches, unless not	ed.		Part Number	Description
		88		S-25HB	Strainer for suction lines, 1/4" hose barb connection
Λ		#		S-50HB	Strainer for suction lines, 1/2" hose barb connection
		т.	ENE	S-84	Strainer for suction lines, less tubing adapter
				S-84 1/4"	Strainer for suction lines w/ tubing adapter TA-525
			S-84 1/2"	Strainer for suction lines w/ tubing adapter TA-550	
		time in		S-84FV	Strainer with foot valve, 3/8" hose barb and 1/2" MNPT connector
	100			S-87	PVC strainer for 1.0" suction lines used on 2.0" injectors
	1				
S-25HB – S-50HB	S-84	S-84 FV	S-87		

## **Tubing Adapters**

measurements in inches, unless noted.	Part Number	Description
lyethylene		
	TA-225	1/4"x1/4" (MNPT x tube size)
	TA-525	1/2"x1/4" (MNPT x tube size)
	TA-550	1/2"x1/2" (MNPT x tube size)

# **Tubing Clamps**

TA-525

TA-550

All measurements in inches, unless noted.	Part Number	Description
Polypropylene		
	CLAMP#23	Clamp for 1/4" ID tubing
	CLAMP#32	Clamp for 3/8" ID tubing
	CLAMP#44	Clamp for 1/2" ID tubing

## **Vinyl Tubing**

All measurements in inches, unless noted.	Part Number	Description
	VT-025 - per foot	Clear vinyl tubing, 1/4"x3/8" – 100' roll
	VT-050 - per foot	Clear vinyl tubing, 1/2"x3/4" – 100' roll
	VT-100 - per foot	Clear vinyl tubing, 1"x1-5/16" – 100' roll

# **Typical Installations for Irrigation Systems**

Mazzei Injectors require differential pressure to create suction. The injector's outlet pressure (backpressure) must be sufficiently lower than the inlet pressure. For most models, significant suction occurs with 25-30% pressure differential.

Mazzei Injectors can be installed with the main body in a horizontal position or vertically with the outlet up. The injector suction port can be oriented in any position.

To insure consistent suction, the outlet side of the injector should be flooded or have some restriction downstream (backpressure).

Always use full flow isolation valves and non-restrictive fittings when connecting to the injector. These valves and fittings should be at least the same size as the inlet/outlet connections on the injector. Isolation valves are optional, but recommended.

Do not over-tighten the injector when attaching piping and fittings. The use of an appropriate thread sealant is recommended.

Install pressure gauges near the inlet and outlet of the injector to monitor operating conditions.

#### Diagrams 1 and 2

The injector is installed around a point of restriction, such as a regulator valve or a gate/ball valve. These create a differential pressure across the injector, thereby allowing the injector to produce a vacuum and draw in material.

#### Diagram 3

When mainline pressure cannot be reduced, a small booster pump can be used to create a sufficient differential to operate the injector.

For additional information, including troubleshooting tips and injector performance data, please visit our website at www.mazzei.net. Always follow environmental regulations regarding backflow prevention and chemical use.



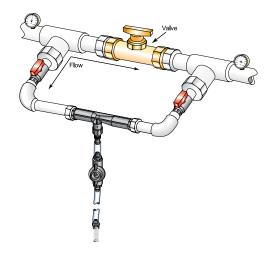


Diagram 1 Bypass Assembly "A"

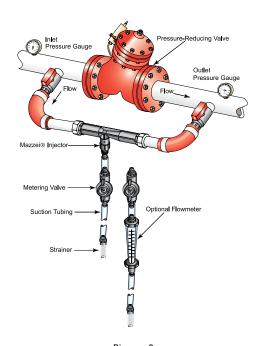


Diagram 2 With Pressure-Reducing Valve

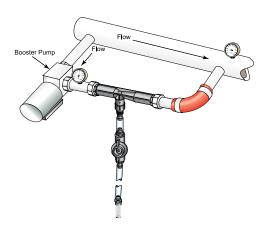


Diagram 3 **Bypass with Booster Pump** 

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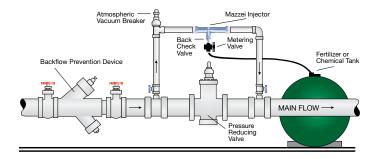
# Use of Anti-Syphon and Backflow Prevention Equipment with Mazzei Injectors

Recently, the Environmental Protection Agency and other Federal and State regulatory bodies have voiced concerns (and in some states have already adopted regulations) regarding backflow prevention and anti-syphoning in conjunction with the injection of fertilizers or other chemicals into irrigation systems. Generally, these regulations are designed to safeguard individual household or community water supplies and underground aquifers from contamination. This is accomplished by eliminating the possibility of backflow into a well or syphoning into a water system once the irrigation water is shut off.

The following illustrations depict methods of installing Mazzei Injectors in conjunction with anti-syphon and backflow prevention equipment.

#### Example #1

This first example depicts a Mazzei Injector installed around a point of restriction such as a regulator valve, which creates a differential pressure in the main flow line, thereby allowing the injector to produce a vacuum for chemical induction into the system.



#### NOTE:

The injector is installed above the level of the fertilizer or chemical tank.

A simple atmospheric vacuum breaker is placed on the injector bypass line, also above the level of the chemical tank. (This assures a positive anti-syphon system during main flow shutdown.)

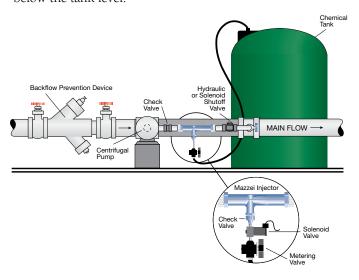
A Reduced Pressure Principle backflow prevention device is installed on the main flow line upstream from the injection equipment to prevent any possible backflow from that point. (Most areas in the U.S. require some type of backflow prevention on all irrigation systems whether they include injection equipment or not.)

#### Example #2

This example depicts a Mazzei Injector installed in conjunction with a straight centrifugal pump, which boosts a portion of the main flow through the injector, thereby creating a differential pressure, allowing the injector to produce a vacuum for chemical induction downstream from the pump.

When employing this method, the auxiliary centrifugal pump must be interlocked electrically with the main supply pump so it can be operational only while the main supply pump is running.

Since it may not always be practical to install the injector above the level of the chemical tank, this illustration shows methods of isolating the injection system from the main flow line (during shutdown) when the injector is installed below the tank level.



#### NOTE:

A one-way check valve is installed on the injector bypass line prior to the inlet of the injector.

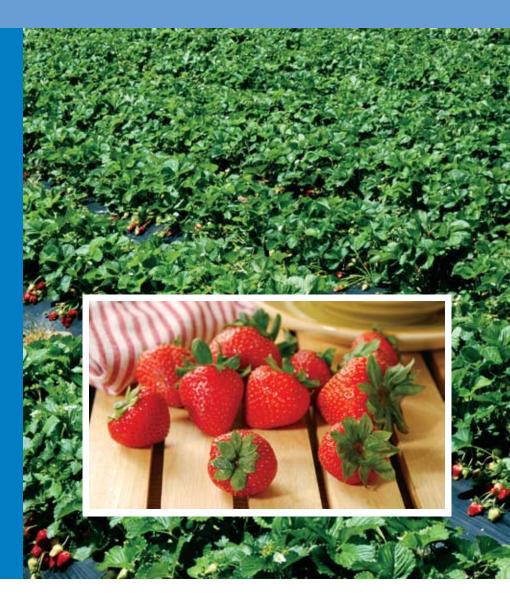
A normally closed hydraulic shut-off valve is installed on the injector bypass downstream from the outlet of the injector. (This valve will automatically close during shutdown of the main flow line.) A normally-closed solenoid valve (electrically interlocked with the pump) can also be used at this point.

As in example #1, a Reduced Pressure Principle backflow prevention device should always be installed in the main flow line upstream from any injection equipment.

#### INSET:

Another method of isolating the chemical from the main flow line, during shutdown, is the use of a small, normally-closed solenoid valve on the chemical suction line between the injector and the chemical tank. This valve must also be electrically interlocked with the pumping plant. A positive shut-off of the chemical line will then occur during a power or breaker failure or at any time the pump is stopped.

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## Why Mazzei

Since 1978, Mazzei has distinguished itself by an ability to evaluate problems and develop innovative solutions.

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