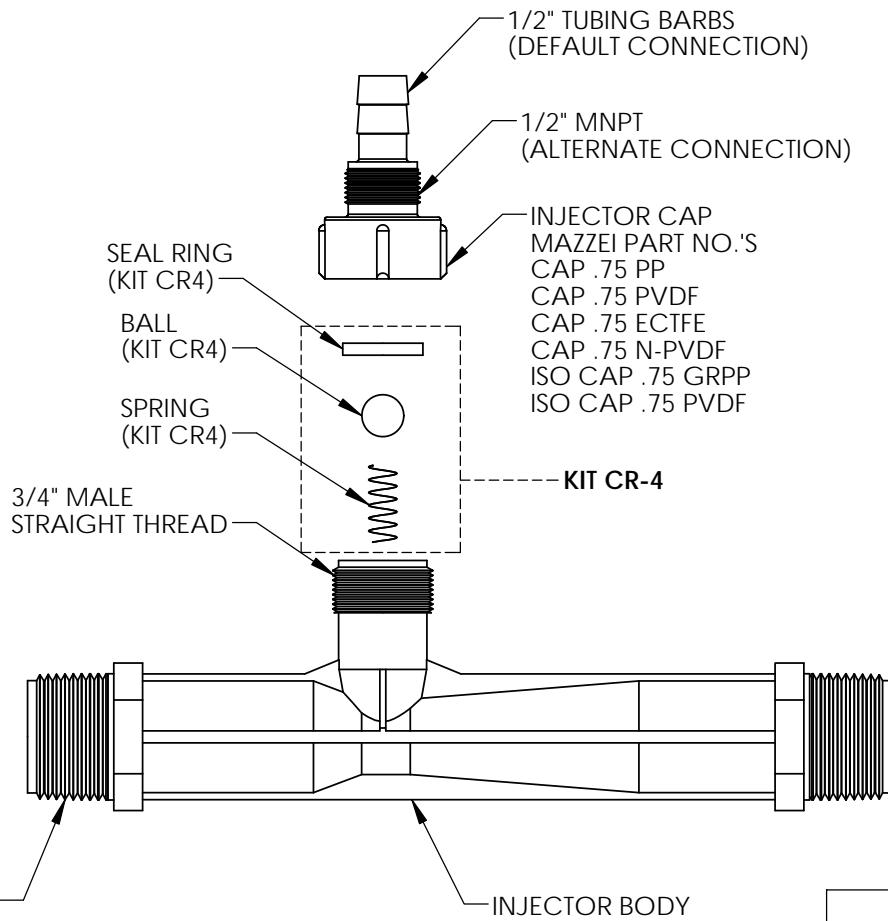


NOTES:

1. MADE IN THE U.S.A.
2. U.S. PATENT No. 5,863,128
3. U.S. No. 3,852,076 AND INTERNATIONAL REGISTERED TRADEMARKS
4. MATERIAL: GLASS FILLED POLYPROPYLENE (PP) OR POLYVINYLIDENE FLUORIDE (PVDF) OR ETHYLENE CHLOROTRIFLUOROETHYLENE (ECTFE)
5. INLET/OUTLET CONNECTION:  
1" MNPT OR BSPT
6. SUCTION PORT CONNECTION:  
  
DEFAULT - 1/2" I.D. TUBING BARB WITH INTEGRATED CHECK VALVE  
  
ALTERNATE - 1/2" MNPT - SEE ALTERNATE CAP MODIFICATION DETAIL
7. FOR INSTALLATION RECOMMENDATIONS REFER TO MAZZEI TECHNICAL BULLETINS No. 4, No. 5, No. 6, No. 10 AND No. 11, WHICH CAN BE FOUND IN THE "KNOWLEDGE CENTER" AT WWW.MAZZEI.NET.
8. MAZZEI INJECTOR CO., LLC.  
500 ROOSTER DR.  
BAKERSFIELD, CA 93307  
TEL: 661.363.6500  
WEB: WWW.MAZZEI.NET



1/2" TUBING BARBS  
(DEFAULT CONNECTION)

1/2" MNPT  
(ALTERNATE CONNECTION)

INJECTOR CAP  
MAZZEI PART NO.'S  
CAP .75 PP  
CAP .75 PVDF  
CAP .75 ECTFE  
CAP .75 N-PVDF  
ISO CAP .75 GRPP  
ISO CAP .75 PVDF

SEAL RING  
(KIT CR4)

BALL  
(KIT CR4)

SPRING  
(KIT CR4)

KIT CR-4

3/4" MALE  
STRAIGHT THREAD

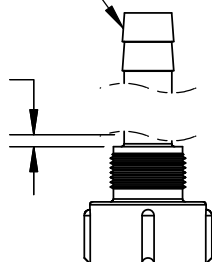
1" MNPT OR BSPT  
(TYPICAL)

INJECTOR BODY  
MAZZEI PART NO.'S  
0878 3 PP  
0878 3 PVDF  
0878 3 N-PVDF  
0878 3 ECTFE  
ISO 0878 3 GRPP  
ISO 0878 3 PVDF  
ISO 0878 3 ECTFE

KIT CR-4	
TITLE	MATERIAL
BALL	TEFLON® (PTFE)
SEAL RING	KEL-F® (PCTFE)
SPRING	HASTELLOY C-22

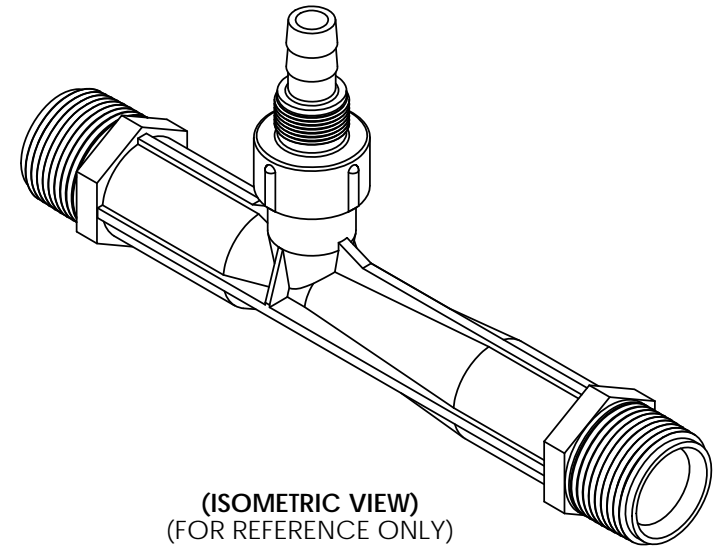
REMOVE HOSE BARBS  
FROM CAP AND DISCARD

[3mm]  
.13in  
MAXIMUM  
STICKOUT

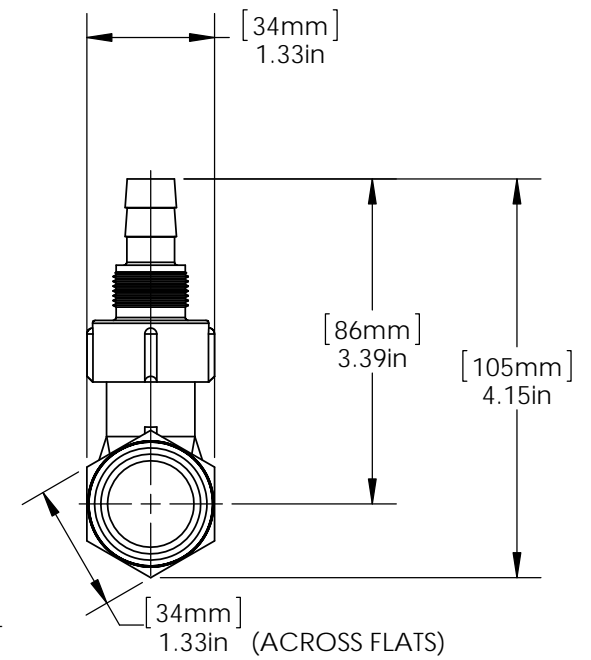
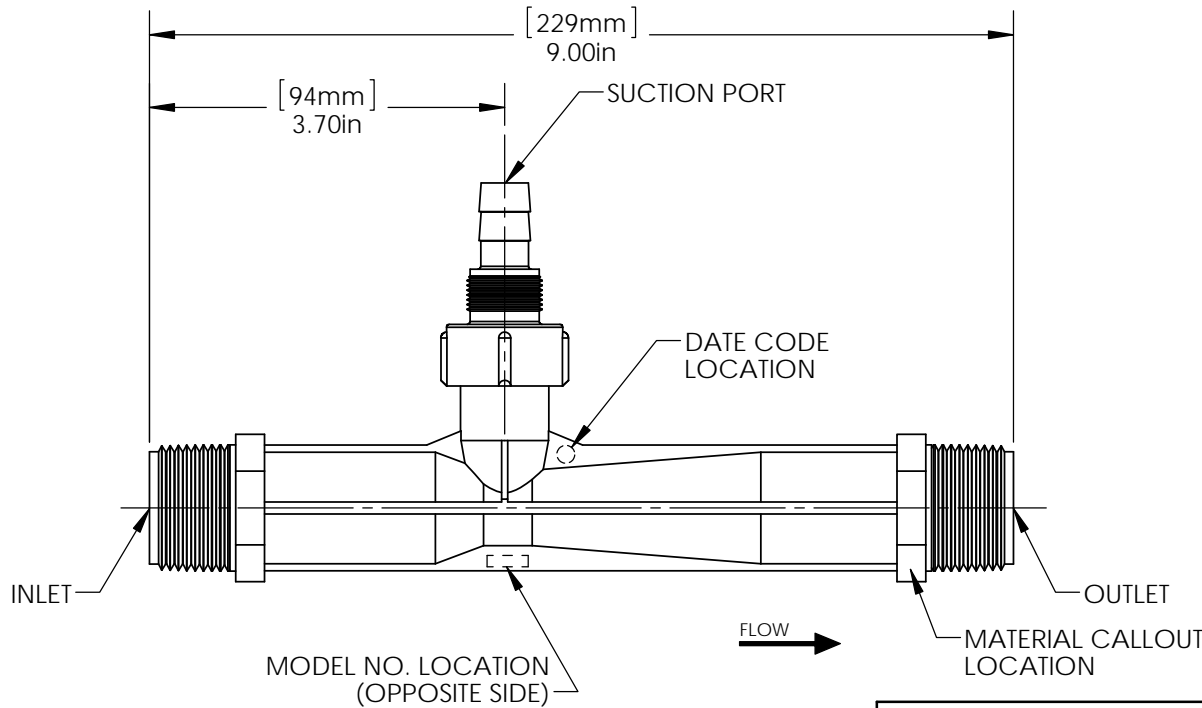


"CAP MODIFICATION DETAIL"  
(ALTERNATE)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			TITLE: 1" INJECTOR; MODEL 0878 3			
DRAWN:	T. JOHNS		DRAWING NO.: 0878 3 PP/PVDF/ECTFE			
DATE:	7/19/2013	SIZE:	WEIGHT:	SCALE:	REV.:	SHEET:
APPROVED:	P. BANKOWSKI	A	N/A	1:2	A	1 OF 2



(ISOMETRIC VIEW)  
(FOR REFERENCE ONLY)



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		 <b>Mazzei</b> <sup>®</sup>	TITLE: 1" INJECTOR; MODEL 0878 3		
DRAWN: T. JOHNS	DATE: 7/19/2013		DRAWING NO.: 0878 3 PP/PVDF/ECTFE		
APPROVED: P. BANKOWSKI	SIZE: A	WEIGHT: N/A	SCALE: 1:2	REV.: A	SHEET: 2 OF 2



Operating Pressure PSIG		WATER SUCTION		Operating Pressure PSIG		WATER SUCTION	
Injector INLET	Injector OUTLET	Motive Flow GPM	Water Suction GPH	Injector INLET	Injector OUTLET	Motive Flow GPM	Water Suction GPH
<b>5</b>	0	<b>3.6</b>	62.8	<b>60</b>	0	<b>12.6</b>	72.4
	1		36.1		5		72.4
	2		23.8		10		72.4
	3		7.3		15		72.4
	4		*(4.1)		1.6		20
<b>10</b>	0	<b>5.2</b>	93.7		30		71.2
	2		61.9		35		63.3
	5		36.4		40		41.4
	7		15.8		45		*(51.2)
	8		*(8.7)		3.7		
<b>15</b>	0	<b>6.3</b>	87.3	<b>70</b>	0	<b>13.7</b>	73.6
	5		62.1		5		73.6
	7		45.4		10		73.6
	10		23.6		15		73.6
	12		*(12.5)		7.2		20
<b>20</b>	0	<b>7.3</b>	82.8		30		73.6
	5		80.4		40		67.5
	10		48.6		45		46.9
	12		33.6		50		30.7
	15		*(16.5)		21.0		55
<b>25</b>	0	<b>8.2</b>	82.3	<b>80</b>	0	<b>14.6</b>	74.2
	5		81.3		5		74.2
	10		73.2		10		74.2
	15		45.3		15		74.2
	20		*(21.0)		20.1		20
<b>30</b>	0	<b>8.9</b>	79.9		30		74.2
	5		79.1		40		73.7
	10		76.9		50		56.9
	15		65.3		60		25.8
	20		*(26.1)		35.3		65
<b>35</b>	0	<b>9.7</b>	79.3	<b>90</b>	0	<b>15.5</b>	74.2
	5		79.3		5		74.2
	10		77.5		10		74.2
	15		74.5		20		74.2
	20		*(30.1)		52.3		30
<b>40</b>	0	<b>10.3</b>	77.4		40		74.2
	5		77.4		50		70.0
	10		77.4		60		47.8
	15		73.6		70		18.1
	25		*(34.4)		50.6		75
<b>45</b>	0	<b>11.0</b>	79.6	<b>100</b>	0	<b>16.3</b>	0.84
	5		79.6		5		76.3
	10		79.6		10		76.3
	15		79.6		20		76.3
	20		78.8		30		76.3
	25		67.0		40		76.3
	30		44.1		50		74.5
35	*(38.4)	22.0	60		67.7		
<b>50</b>	0	<b>11.5</b>	74.7		70		44.6
	5		74.7		80		*(84.5)
	10		74.7	0	75.3		
	15		74.7	5	75.3		
	20		74.7	10	75.3		
	25		68.3	20	75.3		
	30		56.1	30	75.3		
	35		36.6	40	74.9		
40	*(42.3)	9.5	50	75.3			
				60	74.9		
				70	70.2		
				80	61.2		
				90	34.5		
				100	*(101)		
					8.5		

Injector Performance Table  
 Water Suction Capacity

Model 878-03



Operating Pressure kg/cm <sup>2</sup>		WATER SUCTION		Operating Pressure kg/cm <sup>2</sup>		WATER SUCTION	
Injector Inlet	Injector Outlet	Motive Flow l/min	Water Suction l/hr	Injector Inlet	Injector Outlet	Motive Flow l/min	Water Suction l/hr
<b>0.35</b>	0.00	<b>13.8</b>	237	<b>4.22</b>	0.00	<b>47.9</b>	274
	0.07		136		0.35		274
	0.14		90.2		0.70		274
	0.21		27.7		1.05		274
	0.28		*(0.28)		1.41		274
<b>0.70</b>	0.00	<b>19.5</b>	354		2.11		269
	0.14		234		2.46		239
	0.35		138		2.81		156
	0.49		59.9		3.16		*(3.60) 61.8
	0.56		*(0.61)		14.0		
<b>1.05</b>	0.00	<b>23.9</b>	330	<b>4.92</b>	0.00	<b>51.7</b>	278
	0.35		235		0.35		278
	0.49		172		0.70		278
	0.70		89.4		1.05		278
	0.84		*(0.88)		1.41		278
<b>1.41</b>	0.00	<b>27.6</b>	313		2.11		278
	0.35		304		2.81		255
	0.70		184		3.16		177
	0.84		127		3.52		116
	1.05		*(1.16)		3.87		*(4.10) 48.8
<b>1.76</b>	0.00	<b>30.9</b>	311	<b>5.62</b>	0.00	<b>55.3</b>	280
	0.35		307		0.35		280
	0.70		277		0.70		280
	1.05		171		1.05		280
	1.41		*(1.48)		1.41		280
<b>2.11</b>	0.00	<b>33.9</b>	302		2.11		280
	0.35		299		2.81		278
	0.70		291		3.52		215
	1.05		247		4.22		97.7
	1.41		133		4.57		*(4.75) 30.0
	1.76		*(1.84)	34.3			
<b>2.46</b>	0.00	<b>36.6</b>	300	<b>6.33</b>	0.00	<b>58.7</b>	281
	0.35		300		0.35		281
	0.70		293		0.70		281
	1.05		282		1.41		281
	1.41		198		2.11		281
	1.76		*(2.12)		114		2.81
<b>2.81</b>	0.00	<b>39.1</b>	293		3.52		265
	0.35		293		4.22		181
	0.70		293		4.92		68.7
	1.05		293		5.27		*(5.32) 3.1
	1.41		278				
	1.76		191				
<b>3.16</b>	2.11	*(2.42)	106	<b>7.03</b>	0.00	<b>61.8</b>	289
	2.46		301		0.35		289
			301		0.70		289
			301		1.41		289
			301		2.11		289
			298		2.81		289
			253		3.52		281
			167		4.22		256
		83.3	4.92		169		
<b>3.52</b>	0.00	<b>43.7</b>	283		5.62		*(5.94)
	0.35		283	0.00	285		
	0.70		283	0.35	285		
	1.05		283	0.70	285		
	1.41		283	1.41	285		
	1.76		258	2.11	285		
	2.11		212	2.81	285		
	2.46		138	3.52	285		
	2.81		*(2.97)	36.2	4.22	283	
			4.92	266			
			5.62	231			
			6.33	130			
			7.03	*(7.14) 32.5			



**Injector Performance Table**  
**Air Suction Capacity**

Operating Pressure PSIG		AIR SUCTION		Operating Pressure PSIG		AIR SUCTION	
Injector INLET	Injector OUTLET	Motive Flow GPM	Air Suction SCFH	Injector INLET	Injector OUTLET	Motive Flow GPM	Air Suction SCFH
<b>5</b>	0	<b>3.5</b>	14.9	<b>60</b>	0	<b>12.1</b>	71.3
	1		5.4		5		54.9
	2		1.5		10		33.4
	3		0.41		15		20.2
	4		*(4.0)		20		14.6
<b>10</b>	0	<b>4.9</b>	33.9		30		7.8
	2		8.5		35		5.7
	5		2.8		40		4.3
	7		0.88		45		*(51.2)
	8		*(8.7)		0.61		2.4
<b>15</b>	0	<b>6.1</b>	36.0	<b>70</b>	0	<b>13.1</b>	77.0
	5		7.4		5		60.1
	7		3.8		10		40.7
	10		0.74		15		25.5
	12		*(12.5)		20		19.1
<b>20</b>	0	<b>7.0</b>	44.2		30		11.2
	5		12.5		40		6.7
	10		4.3		45		5.0
	12		2.7		50		4.1
	15		*(16.5)		1.7		55
<b>25</b>	0	<b>7.8</b>	44.7	<b>80</b>	0	<b>14.0</b>	81.2
	5		17.4		5		65.0
	10		6.7		10		49.9
	15		3.4		15		31.0
	20		*(21.0)		1.2		20
<b>30</b>	0	<b>8.6</b>	51.0		30		14.1
	5		26.1		40		9.0
	10		11.3		50		5.8
	15		6.4		60		3.8
	20		*(26.1)		2.9		65
<b>35</b>	0	<b>9.3</b>	51.9	<b>90</b>	0	<b>14.8</b>	85.3
	5		34.3		5		69.6
	10		14.0		10		56.4
	15		8.6		20		26.9
	20		4.7		30		17.3
<b>40</b>	0	<b>9.9</b>	55.8		40		12.1
	5		40.6		50		7.9
	10		17.6		60		5.1
	15		11.6		70		3.4
	25		*(34.4)		4.8		75
<b>45</b>	0	<b>10.5</b>	66.9	<b>100</b>	0	<b>15.6</b>	88.6
	5		42.1		5		72.4
	10		20.7		10		62.8
	15		12.8		20		30.9
	20		8.9		30		20.3
<b>50</b>	0	<b>11.1</b>	64.9		40		14.5
	5		48.7		50		10.0
	10		23.8		60		7.2
	15		16.1		70		5.1
	20		10.3		80		*(84.5)
<b>60</b>	0	<b>12.1</b>	71.3	<b>120</b>	0	<b>17.1</b>	98.1
	5		54.9		5		81.0
	10		33.4		10		70.8
	15		20.2		20		41.9
	20		14.6		30		26.1
<b>70</b>	0	<b>13.1</b>	77.0		40		19.2
	5		60.1		50		14.5
	10		40.7		60		10.8
	15		25.5		70		7.8
	20		19.1		80		5.7
<b>80</b>	0	<b>14.0</b>	81.2	90	4.6		
	5		65.0	100	*(101)		
	10		49.9	2.5			
	15		31.0				
	20		23.1				
<b>90</b>	0	<b>14.8</b>	85.3				
	5		69.6				
	10		56.4				
	20		26.9				
	30		17.3				
<b>100</b>	0	<b>15.6</b>	88.6				
	5		72.4				
	10		62.8				
	20		30.9				
	30		20.3				
<b>110</b>	0	<b>16.5</b>	91.5				
	5		75.0				
	10		58.5				
	20		38.0				
	30		25.5				
<b>120</b>	0	<b>17.1</b>	94.1				
	5		77.0				
	10		60.1				
	20		40.7				
	30		25.5				

**Model 878-03**

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Mazzei Injector Company, LLC  
 500 Rooster Drive, Bakersfield, CA 93307-9555 USA

TEL 661.363.6500 • FAX 661.363.7500 • www.mazzei.net

*\*NUMBERS IN PARENTHESIS indicate the injector outlet pressure when suction stops (Zero Suction Point).*



**Injector Performance Table**  
**Air Suction Capacity - METRIC**

Operating Pressure kg/cm <sup>2</sup>		AIR SUCTION		Operating Pressure kg/cm <sup>2</sup>		AIR SUCTION	
Injector INLET	Injector OUTLET	Motive Flow l/min	Air Suction l/min	Injector INLET	Injector OUTLET	Motive Flow l/min	Air Suction l/min
0.35	0.00	13.2	7.0	4.22	0.00	45.9	33.6
	0.07		2.5		0.35		25.9
	0.14		0.73		0.70		15.8
	0.21		0.19		1.05		9.5
	0.28		*(0.28)		1.41		6.9
0.70	0.00	18.7	16.0		2.11		3.6
	0.14		4.0		2.46		2.7
	0.35		1.3		2.81		2.0
	0.49		0.42		3.16		1.1
	0.56		*(0.61)		0.29		*(3.60)
1.05	0.00	22.9	17.0	4.92	0.00	49.6	36.3
	0.35		3.5		0.35		28.3
	0.49		1.8		0.70		19.2
	0.70		0.35		1.05		12.0
	0.84		*(0.88)		1.41		9.0
1.41	0.00	26.5	20.9		2.11		5.3
	0.35		5.9		2.81		3.2
	0.70		2.0		3.16		2.3
	0.84		1.2		3.52		1.9
	1.05		*(1.16)		0.82		*(4.10)
1.76	0.00	29.6	21.1	5.62	0.00	53.0	38.3
	0.35		8.2		0.35		30.6
	0.70		3.2		0.70		23.5
	1.05		1.6		1.05		14.6
	1.41		*(1.48)		1.41		10.9
2.11	0.00	32.5	24.0		2.11		6.6
	0.35		12.3		2.81		4.2
	0.70		5.3		3.52		2.7
	1.05		3.0		4.22		1.8
	1.41		*(1.84)		1.4		*(4.75)
2.46	0.00	35.1	24.5	6.33	0.00	56.2	40.2
	0.35		16.2		0.35		32.8
	0.70		6.6		0.70		26.6
	1.05		4.0		1.41		12.7
	1.41		2.2		2.11		8.1
2.81	0.00	37.5	26.3		2.81		5.7
	0.35		19.1		3.52		3.7
	0.70		8.3		4.22		2.4
	1.05		5.5		4.92		1.6
	1.41		3.1		5.27		*(5.32)
3.16	0.00	39.7	31.5	7.03	0.00	59.3	41.85
	0.35		19.9		0.35		34.1
	0.70		9.8		0.70		29.6
	1.05		6.0		1.41		14.6
	1.41		4.2		2.11		9.5
3.52	0.00	41.9	30.6		2.81		6.8
	0.35		23.0		3.52		4.7
	0.70		11.2		4.22		3.4
	1.05		7.6		4.92		2.4
	1.41		4.9		5.62		*(5.94)
3.52	0.00	41.9	30.6	8.44	0.00	64.9	46.3
	0.35		23.0		0.35		38.2
	0.70		11.2		0.70		33.4
	1.05		7.6		1.41		19.7
	1.41		4.9		2.11		12.3
3.52	0.00	41.9	30.6		2.81		9.0
	0.35		23.0		3.52		6.8
	0.70		11.2		4.22		5.1
	1.05		7.6		4.92		3.7
	1.41		4.9		5.62		2.7
3.52	0.00	41.9	30.6	6.33	2.1		
	0.35		23.0	7.03	*(7.14)		
	0.70		11.2	0.00	1.1		
	1.05		7.6	0.35	38.2		
	1.41		4.9	0.70	33.4		

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*\*NUMBERS IN PARENTHESIS indicate the injector outlet pressure when suction stops (Zero Suction Point).*

**Model 878-03**