

ProSeries[®]

by Blue-White[®] ***Ind.***

Exceed the Expected...

2010

Product List

Effective April 5, 2010

Updated: 05/17/2010

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Blue-White Policy

DEALERS: PLEASE CONTACT THE FACTORY FOR THE STOCKING OUTLET NEAREST YOU.

MINIMUM ORDER: The minimum acceptable order is \$75.00. There are no exceptions.

TERMS: Terms are NET 30 DAYS on approved credit. We do not ship orders to accounts with past-due balances. If you have not established open account terms with Blue-White, you may charge your order to your Visa, Mastercard or American Express, prepay your order or we will ship C.O.D.

FREIGHT: For all allowable items, our normal means of shipment is via United Parcel Service. Should you wish an alternate means of shipment, you must advise the factory at the time you place your order.

RETURNED GOODS: Any merchandise being returned to the factory, regardless of the reason for the return, must have a Returned Goods Authorization number. Contact our in-house sales staff for an RGA number. The factory does not accept C.O.D. shipments.

Blue-White does not permit the return of products because of overstock, discontinued products, etc. Under no circumstances will the factor consider the return of products over six months old from the date of original factory shipment.

ORDER ADD-ON: Please be certain your order is complete when placed. Since orders are immediately entered into the computer as received, we are unable to "add-on" later. Your understanding of this situation, and your cooperation are most appreciated.

Possession of this price schedule does not guarantee the right to purchase directly from the factory. F.O.B. Huntington Beach, California.

PRICES SHOWN IN THIS BOOK ARE IN U.S. DOLLARS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CONVERSION TABLE

TO CONVERT	TO	FORMULA
LIQUID		
GALLONS (US)	LITERS	GALLONS (US) x 3.78533 = LITERS
LITERS	GALLONS (US)	LITERS x .2642 = GALLONS (US)
OUNCES	MILLILITERS	OUNCES x 29.57 = MILLILITERS
MILLILITERS	OUNCES	MILLILITERS x .0338 = OUNCES
MILLILITERS/MIN	GAL. PER HOUR	ML/MN x .0158
FEET OF WATER	PSI	Feet of Water (Head) x .43352 = PSI
GALLONS (US)	POUNDS	GALLONS (US) x 8.337 = POUNDS
GALLONS (US)	CUBIC FEET	GALLONS (US) x .1337 = CUBIC FEET
GALLONS (US)	CUBIC INCHES	GALLONS (US) x 231 = CUBIC INCHES
GALLONS/DAY	MILLILITERS/MIN	GALLONS (US)/DAY x 2.628 = MILLILITERS/MIN
GALLONS (US)	CUBIC METERS	GALLONS (US) x .0037854 = CUBIC METERS
CUBIC METERS	GALLONS	CUBIC METERS x 264.173 = GALLONS
MISCELLANEOUS		
PSI	KGS/SQ. CM.	PSI x .070307 = KGS/SQ. CM
KGS/SQ. CM.	PSI	KGS/SQ. CM. x 14.223 = PSI
INCHES	MILLIMETERS	INCHES x 25.4 = MILLIMETERS
MILLIMETERS	INCHES	MILLIMETERS x .03937 = INCHES
BARS	PSI	BARS x 14.5 = PSI
PSI	BARS	PSI x .068947 = BARS

A3F Basic Controls

Now 2500:1
Turndown

Flex-Pro® Peristaltic Metering Pump



Features at a glance:

- Manual pump speed control
- Tube Failure Detection (TFD)
- Prime button
- Rotor reverse
- Tube life timer
- Output: 6 amp relay
- Input: Contact Closure (remote start / stop)
- Displays % motor speed and RPM
- Flow verification sensor compatible
- Color LCD (RGB multicolor)
- Output Adjustment: 2500:1 (.05 to 125 RPM)

Norprene® A3F Tube Pumps					Best Selling Tube!		
Meets FDA criteria for food Excellent chemical resistance							
Feed Rate			Max Pressure	Connection Type	A3F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.001 - 2.1	.003 - 7.8	.053 - 133	125 / 8.6	3/8" OD Tube / PVDF	A3F24-SND	A3F25-SND	A3F26-SND
.001 - 2.1	.003 - 7.8	.053 - 133	125 / 8.6	1/2" Male NPT / PVDF	A3F24-MND	A3F25-MND	A3F26-MND
.007 - 17.4	.026 - 66.0	.439 - 1097	125 / 8.6	3/8" OD Tube / PVDF	A3F24-SNH	A3F25-SNH	A3F26-SNH
.007 - 17.4	.026 - 66.0	.439 - 1097	125 / 8.6	1/2" Male NPT / PVDF	A3F24-MNH	A3F25-MNH	A3F26-MNH
.010 - 25.3	.038 - 96.0	.638 - 1596	125 / 8.6	3/8" OD Tube / PVDF	A3F24-SNJ	A3F25-SNJ	A3F26-SNJ
.010 - 25.3	.038 - 96.0	.638 - 1596	125 / 8.6	1/2" Male NPT / PVDF	A3F24-MNJ	A3F25-MNJ	A3F26-MNJ
.013 - 33.3	.050 - 126.0	.840 - 2100	125 / 8.6	3/8" OD Tube / PVDF	A3F24-SNK	A3F25-SNK	A3F26-SNK
.013 - 33.3	.050 - 126.0	.840 - 2100	125 / 8.6	1/2" Male NPT / PVDF	A3F24-MNK	A3F25-MNK	A3F26-MNK

Norprene® Low Pressure Tubes					New! Low Pressure Tube		
Extra long tube life at low pressures.							
Feed Rate			Max Pressure	Connection Type	A3F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.013 - 33	.050 - 126	.84 - 2100	30 / 2.1	3/8" OD Tube / PVDF	A3F24-SNKL	A3F25-SNKL	A3F26-SNKL
.013 - 33	.050 - 126	.84 - 2100	30 / 2.1	1/2" Male NPT / PVDF	A3F24-MNKL	A3F25-MNKL	A3F26-MNKL

Norprene® Chemical A3F Tube Pumps					Great for High Acid Concentrations!		
Meets FDA criteria for food Superior chemical resistance							
Feed Rate			Max Pressure	Connection Type	A3F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.006 - 14.5	.02 - 55.1	.368 - 920	50 / 3.4	3/8" OD Tube / PVDF	A3F24-STH	A3F25-STH	A3F26-STH
.006 - 14.5	.02 - 55.1	.368 - 920	50 / 3.4	1/2" Male NPT / PVDF	A3F24-MTH	A3F25-MTH	A3F26-MTH
.01 - 28.5	.04 - 108	.72 - 1800	50 / 3.4	3/8" OD Tube / PVDF	A3F24-STK	A3F25-STK	A3F26-STK
.01 - 28.5	.04 - 108	.72 - 1800	50 / 3.4	1/2" Male NPT / PVDF	A3F24-MTK	A3F25-MTK	A3F26-MTK

Tygothane® A3F Tube Pumps					Great for Oil Based Fluids!		
Meets FDA criteria for food Resistant to oils, greases and fuels							
Feed Rate			Max Pressure	Connection Type	A3F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.002 - 4.6	.007 - 17.4	.116 - 290	65 / 4.5	3/8" OD Tube / PVDF	A3F24-SGE	A3F25-SGE	A3F26-SGE
.002 - 4.6	.007 - 17.4	.116 - 290	65 / 4.5	1/2" Male NPT / PVDF	A3F24-MGE	A3F25-MGE	A3F26-MGE
.004 - 10.1	.015 - 38.4	.255 - 637	65 / 4.5	3/8" OD Tube / PVDF	A3F24-SGG	A3F25-SGG	A3F26-SGG
.004 - 10.1	.015 - 38.4	.255 - 637	65 / 4.5	1/2" Male NPT / PVDF	A3F24-MGG	A3F25-MGG	A3F26-MGG
.010 - 24.9	.038 - 94.2	.628 - 1570	65 / 4.5	3/8" OD Tube / PVDF	A3F24-SGH	A3F25-SGH	A3F26-SGH
.010 - 24.9	.038 - 94.2	.628 - 1570	65 / 4.5	1/2" Male NPT / PVDF	A3F24-MGH	A3F25-MGH	A3F26-MGH
.01 - 28.5	.04 - 108	.72 - 1800	65 / 4.5	3/8" OD Tube / PVDF	A3F24-SGK	A3F25-SGK	A3F26-SGK
.01 - 28.5	.04 - 108	.72 - 1800	65 / 4.5	1/2" Male NPT / PVDF	A3F24-MGK	A3F25-MGK	A3F26-MGK

A3V Deluxe Controls

Now 2500:1
Turndown

Flex-Pro® Peristaltic Metering Pump



Features at a glance (same as A3F including the following):

- Inputs (fully configurable):
 - 4-20 mA, 0-10 VDC, pulsed, contact closure (remote start / stop)
- Outputs (fully configurable):
 - 4-20 mA, pulsed, 6 amp relay, multiple contact closures
- Automated parts per million dosing
- Batch dispensing
- Repeating time cycle
- Displays (color):
 - % motor speed, RPM, output volume, alarm screens, incoming signal value, etc.

Norprene® A3V Tube Pumps Best Selling Tube!

Meets FDA criteria for food | Excellent chemical resistance

Feed Rate			Max Pressure	Connection Type	A3V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.001 - 2.1	.003 - 7.8	.053 - 132	125 / 8.6	3/8" OD Tube / PVDF	A3V24-SND	A3V25-SND	A3V26-SND
.001 - 2.1	.003 - 7.8	.053 - 132	125 / 8.6	1/2" Male NPT / PVDF	A3V24-MND	A3V25-MND	A3V26-MND
.007 - 17.4	.026 - 66.0	.439 - 1097	125 / 8.6	3/8" OD Tube / PVDF	A3V24-SNH	A3V25-SNH	A3V26-SNH
.007 - 17.4	.026 - 66.0	.439 - 1097	125 / 8.6	1/2" Male NPT / PVDF	A3V24-MNH	A3V25-MNH	A3V26-MNH
.010 - 25.3	.038 - 96.0	.638 - 1596	125 / 8.6	3/8" OD Tube / PVDF	A3V24-SNJ	A3V25-SNJ	A3V26-SNJ
.010 - 25.3	.038 - 96.0	.638 - 1596	125 / 8.6	1/2" Male NPT / PVDF	A3V24-MNJ	A3V25-MNJ	A3V26-MNJ
.013 - 33.3	.050 - 126.0	.840 - 2100	125 / 8.6	3/8" OD Tube / PVDF	A3V24-SNK	A3V25-SNK	A3V26-SNK
.013 - 33.3	.050 - 126.0	.840 - 2100	125 / 8.6	1/2" Male NPT / PVDF	A3V24-MNK	A3V25-MNK	A3V26-MNK

Norprene® Low Pressure Tubes New! Low Pressure Tube

Extra long tube life at low pressures.

Feed Rate			Max Pressure	Connection Type	A3V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.013 - 33	.050 - 126	.84 - 2100	30 / 2.1	3/8" OD Tube / PVDF	A3V24-SNKL	A3V25-SNKL	A3V26-SNKL
.013 - 33	.050 - 126	.84 - 2100	30 / 2.1	1/2" Male NPT / PVDF	A3V24-MNKL	A3V25-MNKL	A3V26-MNKL

Norprene® Chemical A3V Tube Pumps Great for High Acid Concentrations!

Meets FDA criteria for food | Superior chemical resistance

Feed Rate			Max Pressure	Connection Type	A3V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.006 - 14.5	.022 - 55.1	.368 - 920	50 / 3.4	3/8" OD Tube / PVDF	A3V24-STH	A3V25-STH	A3V26-STH
.006 - 14.5	.022 - 55.1	.368 - 920	50 / 3.4	1/2" Male NPT / PVDF	A3V24-MTH	A3V25-MTH	A3V26-MTH
.01 - 28.5	.04 - 108	.72 - 1800	50 / 3.4	3/8" OD Tube / PVDF	A3V24-STK	A3V25-STK	A3V26-STK
.01 - 28.5	.04 - 108	.72 - 1800	50 / 3.4	1/2" Male NPT / PVDF	A3V24-MTK	A3V25-MTK	A3V26-MTK

Tygothane® A3V Tube Pumps Great for Oil Based Fluids!

Meets FDA criteria for food | Resistant to oils, greases and fuels

Feed Rate			Max Pressure	Connection Type	A3V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.002 - 4.6	.007 - 17.4	.116 - 290	65 / 4.5	3/8" OD Tube / PVDF	A3V24-SGE	A3V25-SGE	A3V26-SGE
.002 - 4.6	.007 - 17.4	.116 - 290	65 / 4.5	1/2" Male NPT / PVDF	A3V24-MGE	A3V25-MGE	A3V26-MGE
.004 - 10.1	.015 - 38.4	.255 - 637	65 / 4.5	3/8" OD Tube / PVDF	A3V24-SGG	A3V25-SGG	A3V26-SGG
.004 - 10.1	.015 - 38.4	.255 - 637	65 / 4.5	1/2" Male NPT / PVDF	A3V24-MGG	A3V25-MGG	A3V26-MGG
.010 - 24.9	.038 - 94.2	.628 - 1570	65 / 4.5	3/8" OD Tube / PVDF	A3V24-SGH	A3V25-SGH	A3V26-SGH
.010 - 24.9	.038 - 94.2	.628 - 1570	65 / 4.5	1/2" Male NPT / PVDF	A3V24-MGH	A3V25-MGH	A3V26-MGH
.01 - 28.5	.04 - 108	.72 - 1800	65 / 4.5	3/8" OD Tube / PVDF	A3V24-SGK	A3V25-SGK	A3V26-SGK
.01 - 28.5	.04 - 108	.72 - 1800	65 / 4.5	1/2" Male NPT / PVDF	A3V24-MGK	A3V25-MGK	A3V26-MGK

A4F Basic Controls

New for 2010!

Flex-Pro® Peristaltic Metering Pump



Features at a glance:

- Manual pump speed control
- Tube Failure Detection (TFD)
- Prime button
- Rotor reverse
- Tube life timer
- Output: 6 amp relay
- Input: Contact Closure (remote start / stop)
- Displays % motor speed and RPM
- Flow verification sensor compatible
- Color LCD (RGB multicolor)
- Output Adjustment: 2500:1 (.05 to 125 RPM)

Norprene® A4F Tube Pumps Best Selling Tube!

Meets FDA criteria for food | Excellent chemical resistance

Feed Rate			Max Pressure	Connection Type	A4F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 28.5	.04 - 108	.72 - 1800	125 / 8.6	1/2" Hose Barb / PVDF	A4F24-BNH	A4F25-BNH	A4F26-BNH
.01 - 28.5	.04 - 108	.72 - 1800	125 / 8.6	1/2" Male NPT / PVDF	A4F24-MNH	A4F25-MNH	A4F26-MNH
.02 - 44.4	.07 - 168	1.12 - 2800	100 / 6.9	1/2" Hose Barb / PVDF	A4F24-BNJ	A4F25-BNJ	A4F26-BNJ
.02 - 44.4	.07 - 168	1.12 - 2800	100 / 6.9	1/2" Male NPT / PVDF	A4F24-MNJ	A4F25-MNJ	A4F26-MNJ
.02 - 50.7	.08 - 192	1.28 - 3200	80 / 5.5	1/2" Hose Barb / PVDF	A4F24-BNK	A4F25-BNK	A4F26-BNK
.02 - 50.7	.08 - 192	1.28 - 3200	80 / 5.5	1/2" Male NPT / PVDF	A4F24-MNK	A4F25-MNK	A4F26-MNK
.02 - 54.0	.09 - 204	1.36 - 3400	100 / 6.9	1/2" Hose Barb / PVDF (dual)	A4F24-BNHH	A4F25-BNHH	A4F26-BNHH
.02 - 54.0	.09 - 204	1.36 - 3400	100 / 6.9	1/2" Male NPT / PVDF (dual)	A4F24-MNHH	A4F25-MNHH	A4F26-MNHH
.04 - 100	.15 - 378	2.52 - 6300	50 / 3.4	1/2" Hose Barb / PVDF	A4F24-BNL	A4F25-BNL	A4F26-BNL
.04 - 100	.15 - 378	2.52 - 6300	50 / 3.4	1/2" Male NPT / PVDF	A4F24-MNL	A4F25-MNL	A4F26-MNL
.06 - 158.5	.24 - 600	4.0 - 10000	30 / 2.0	1/2" Hose Barb / PVDF	A4F24-BNP	A4F25-BNP	A4F26-BNP
.06 - 158.5	.24 - 600	4.0 - 10000	30 / 2.0	1/2" Male NPT / PVDF	A4F24-MNP	A4F25-MNP	A4F26-MNP

Norprene® Low Pressure Tubes New! Low Pressure Tube

Meets FDA criteria for food | Excellent chemical resistance (Extra long tube life at low pressures.)

Feed Rate			Max Pressure	Connection Type	A4F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.02 - 50.7	.07 - 192	1.28 - 3200	30 / 2.1	1/2" Hose Barb / PVDF	A4F24-BNKL	A4F25-BNKL	A4F26-BNKL
.02 - 50.7	.07 - 192	1.28 - 3200	30 / 2.1	1/2" Male NPT / PVDF	A4F24-MNKL	A4F25-MNKL	A4F26-MNKL
.04 - 111	.17 - 420	2.8 - 7000	30 / 2.1	1/2" Hose Barb / PVDF (dual)	A4F24-BNKKL	A4F25-BNKKL	A4F26-BNKKL
.04 - 111	.17 - 420	2.8 - 7000	30 / 2.1	1/2" Male NPT / PVDF (dual)	A4F24-MNKKL	A4F25-MNKKL	A4F26-MNKKL

Norprene® Chemical A4F Tube Pumps Great for High Acid Concentrations!

Meets FDA criteria for food | Superior chemical resistance

Feed Rate			Max Pressure	Connection Type	A4F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 20.6	.03 - 78	.52 - 1300	30 / 3.4	1/2" Hose Barb / PVDF	A4F24-BTH	A4F25-BTH	A4F26-BTH
.01 - 20.6	.03 - 78	.52 - 1300	30 / 3.4	1/2" Male NPT / PVDF	A4F24-MTH	A4F25-MTH	A4F26-MTH
.02 - 42.8	.06 - 162	1.08 - 2700	30 / 2.1	1/2" Hose Barb / PVDF	A4F24-BTK	A4F25-BTK	A4F26-BTK
.02 - 42.8	.06 - 162	1.08 - 2700	30 / 2.1	1/2" Male NPT / PVDF	A4F24-MTK	A4F25-MTK	A4F26-MTK
.02 - 50.7	.08 - 192	1.28 - 3200	30 / 2.1	1/2" Hose Barb / PVDF (dual)	A4F24-BTHH	A4F25-BTHH	A4F26-BTHH
.02 - 50.7	.08 - 192	1.28 - 3200	30 / 2.1	1/2" Male NPT / PVDF (dual)	A4F24-MTHH	A4F25-MTHH	A4F26-MTHH

Tygothane® A4F Tube Pumps Great for Oil Based Fluids!

Meets FDA criteria for food | Resistant to oils, greases and fuels

Feed Rate			Max Pressure	Connection Type	A4F Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 39.6	.06 - 150	1.0 - 2500	65 / 4.5	1/2" Hose Barb / PVDF	A4F24-BGH	A4F25-BGH	A4F26-BGH
.01 - 39.6	.06 - 150	1.0 - 2500	65 / 4.5	1/2" Male NPT / PVDF	A4F24-MGH	A4F25-MGH	A4F26-MGH
.02 - 55.5	.09 - 210	1.4 - 3500	65 / 4.5	1/2" Hose Barb / PVDF	A4F24-BGK	A4F25-BGK	A4F26-BGK
.02 - 55.5	.09 - 210	1.4 - 3500	65 / 4.5	1/2" Male NPT / PVDF	A4F24-MGK	A4F25-MGK	A4F26-MGK
.04 - 100	.2 - 378	2.5 - 6300	65 / 4.5	1/2" Hose Barb / PVDF (dual)	A4F24-BGKK	A4F25-BGKK	A4F26-BGKK
.04 - 100	.2 - 378	2.5 - 6300	65 / 4.5	1/2" Male NPT / PVDF (dual)	A4F24-MGKK	A4F25-MGKK	A4F26-MGKK

A4V Deluxe Controls

New for 2010!

Flex-Pro® Peristaltic Metering Pump



Features at a glance (same as A4F including the following):

- Inputs (fully configurable):
 - 4-20 mA, 0-10 VDC, pulsed, contact closure (remote start / stop)
- Outputs (fully configurable):
 - 4-20 mA, pulsed, 6 amp relay, multiple contact closures
- Automated parts per million dosing
- Batch dispensing
- Repeating time cycle
- Displays (color):
 - % motor speed, RPM, output volume, alarm screens, incoming signal value, etc.

Norprene® A4V Tube Pumps Best Selling Tube!

Meets FDA criteria for food | Excellent chemical resistance

Feed Rate			Max Pressure	Connection Type	A4V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 28.5	.04 - 108	.72 - 1800	125 / 8.6	1/2" Hose Barb / PVDF	A4V24-BNH	A4V25-BNH	A4V26-BNH
.01 - 28.5	.04 - 108	.72 - 1800	125 / 8.6	1/2" Male NPT / PVDF	A4V24-MNH	A4V25-MNH	A4V26-MNH
.02 - 44.4	.07 - 168	1.12 - 2800	100 / 6.9	1/2" Hose Barb / PVDF	A4V24-BNJ	A4V25-BNJ	A4V26-BNJ
.02 - 44.4	.07 - 168	1.12 - 2800	100 / 6.9	1/2" Male NPT / PVDF	A4V24-MNJ	A4V25-MNJ	A4V26-MNJ
.02 - 50.7	.08 - 192	1.28 - 3200	80 / 5.5	1/2" Hose Barb / PVDF	A4V24-BNK	A4V25-BNK	A4V26-BNK
.02 - 50.7	.08 - 192	1.28 - 3200	80 / 5.5	1/2" Male NPT / PVDF	A4V24-MNK	A4V25-MNK	A4V26-MNK
.02 - 54.0	.09 - 204	1.36 - 3400	100 / 6.9	1/2" Hose Barb / PVDF (dual)	A4V24-BNHH	A4V25-BNHH	A4V26-BNHH
.02 - 54.0	.09 - 204	1.36 - 3400	100 / 6.9	1/2" Male NPT / PVDF (dual)	A4V24-MNHH	A4V25-MNHH	A4V26-MNHH
.04 - 100	.15 - 378	2.52 - 6300	50 / 3.4	1/2" Hose Barb / PVDF	A4V24-BNL	A4V25-BNL	A4V26-BNL
.04 - 100	.15 - 378	2.52 - 6300	50 / 3.4	1/2" Male NPT / PVDF	A4V24-MNL	A4V25-MNL	A4V26-MNL
.06 - 158.5	.24 - 600	4.0 - 10000	30 / 2.0	1/2" Hose Barb / PVDF	A4V24-BNP	A4V25-BNP	A4V26-BNP
.06 - 158.5	.24 - 600	4.0 - 10000	30 / 2.0	1/2" Male NPT / PVDF	A4V24-MNP	A4V25-MNP	A4V26-MNP

Norprene® Low Pressure Tubes New! Low Pressure Tube

Meets FDA criteria for food | Excellent chemical resistance (Extra long tube life at low pressures.)

Feed Rate			Max Pressure	Connection Type	A4V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.02 - 50.7	.07 - 192	1.28 - 3200	30 / 2.1	1/2" Hose Barb / PVDF	A4V24-BNKL	A4V25-BNKL	A4V26-BNKL
.02 - 50.7	.07 - 192	1.28 - 3200	30 / 2.1	1/2" Male NPT / PVDF	A4V24-MNKL	A4V25-MNKL	A4V26-MNKL
.04 - 111	.17 - 420	2.8 - 7000	30 / 2.1	1/2" Hose Barb / PVDF (dual)	A4V24-BNKL	A4V25-BNKL	A4V26-BNKL
.04 - 111	.17 - 420	2.8 - 7000	30 / 2.1	1/2" Male NPT / PVDF (dual)	A4V24-MNKL	A4V25-MNKL	A4V26-MNKL

Norprene® Chemical A4V Tube Pumps Great for High Acid Concentrations!

Meets FDA criteria for food | Superior chemical resistance

Feed Rate			Max Pressure	Connection Type	A4V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 20.6	.03 - 78	.52 - 1300	30 / 3.4	1/2" Hose Barb / PVDF	A4V24-BTH	A4V25-BTH	A4V26-BTH
.01 - 20.6	.03 - 78	.52 - 1300	30 / 3.4	1/2" Male NPT / PVDF	A4V24-MTH	A4V25-MTH	A4V26-MTH
.02 - 42.8	.06 - 162	1.08 - 2700	30 / 2.1	1/2" Hose Barb / PVDF	A4V24-BTK	A4V25-BTK	A4V26-BTK
.02 - 42.8	.06 - 162	1.08 - 2700	30 / 2.1	1/2" Male NPT / PVDF	A4V24-MTK	A4V25-MTK	A4V26-MTK
.02 - 50.7	.08 - 192	1.28 - 3200	30 / 2.1	1/2" Hose Barb / PVDF (dual)	A4V24-BTHH	A4V25-BTHH	A4V26-BTHH
.02 - 50.7	.08 - 192	1.28 - 3200	30 / 2.1	1/2" Male NPT / PVDF (dual)	A4V24-MTHH	A4V25-MTHH	A4V26-MTHH

Tygothane® A4V Tube Pumps Great for Oil Based Fluids!

Meets FDA criteria for food | Resistant to oils, greases and fuels

Feed Rate			Max Pressure	Connection Type	A4V Model Numbers		
GPH	LPH	ML/Min	PSI / Bar	Fittings	115V AC	230V AC	220V AC
.01 - 39.6	.06 - 150	1.0 - 2500	65 / 4.5	1/2" Hose Barb / PVDF	A4V24-BGH	A4V25-BGH	A4V26-BGH
.01 - 39.6	.06 - 150	1.0 - 2500	65 / 4.5	1/2" Male NPT / PVDF	A4V24-MGH	A4V25-MGH	A4V26-MGH
.02 - 55.5	.09 - 210	1.4 - 3500	65 / 4.5	1/2" Hose Barb / PVDF	A4V24-BGK	A4V25-BGK	A4V26-BGK
.02 - 55.5	.09 - 210	1.4 - 3500	65 / 4.5	1/2" Male NPT / PVDF	A4V24-MGK	A4V25-MGK	A4V26-MGK
.04 - 100	.2 - 378	2.5 - 6300	65 / 4.5	1/2" Hose Barb / PVDF (dual)	A4V24-BGKK	A4V25-BGKK	A4V26-BGKK
.04 - 100	.2 - 378	2.5 - 6300	65 / 4.5	1/2" Male NPT / PVDF (dual)	A4V24-MGKK	A4V25-MGKK	A4V26-MGKK

FLEX-PRO

Peristaltic Metering Pump

Chemical Resistance List (abbreviated)

Norprene® Tubing			
Meets FDA criteria for food Excellent chemical resistance			Best Selling Tube!
Alcohol general Alum. 5% in water Ammonium chloride Ammonium hydroxide Benzyl alcohol Bleach Brine solutions Calcium hypochlorite 20% Ethylene glycol	Ferric chloride Ferric nitrate Ferric sulfate Ferrous chloride - 43% in water Ferrous sulfate Formic acid Glucose Hydrochloric acid 33% Hydrocyanic acid	Hydrogen peroxide Hypochlorous acid Iodine Lactic acid Magnesium chloride Magnesium sulfate Phosphoric acid Plating solutions Potassium hydroxide	Potassium permanganate Propylene glycol Sodium hydroxide 40% Sodium Bisulfite Sodium Hypochlorite 12.5% Sodium sulfide Sulfuric acid up to 50% Tannic acid

Norprene® Chemical Tubing - Ultra smooth plasticizer-free bore (inner liner)			Great for High Acid Concentrations!
Meets FDA criteria for food Superior chemical resistance			
Ferrous Chloride (up to 40%) Fluoboric Acid (up to 48%) Fluosilicic Acid (up to 25%) Hydrofluoric Acid (up to 48%) Nitric Acid (up to 71%)	Phosphoric Acid (up to 85%) Potassium Hypochlorite (up to 70%) Sodium Phosphate (up to 30%) Sulfuric Acid (up to 98%)	Bases Salts Ketones Alcohols Isobutyl Alcohol	Applications: Ink and solvent production Battery acid filling Specialty chemical production / processing Sensitive fluid transfer

Tygothane® Tubing			Great for Oil Based Fluids!
Meets FDA criteria for food Resistant to oils, greases and fuels			
Cyclohexane Diesel Fuel Fatty acids Gasoline Heptane Hexane	Kerosene Lard Mineral spirits Soap solutions Turpentine	Oils: ASTM reference No. 1,2,3 Castor Coconut Fuel	Oils: Linseed Lubricating Mineral


Norprene® is a registered trademark of Saint-Gobain.
Tygothane® is a registered trademark of Saint-Gobain.

Extended Brackets for ProSeries Pumps

Stainless Steel extended brackets allow pump to be securely mounted to most any surface; floor, shelf, or skid. Brackets lift pump up 4-1/2 inches (11.43 cm), for easy pump access in hard to reach areas.

- Raise metering pump 4-1/2 inches (11.43 cm) off ground or a surface.
- Made out of tough Stainless Steel.

Model #	Description
72000-380	Extended Mounting Bracket, 1 Pair, SS, 4 SS Screws



FLEX-PRO

Peristaltic Metering Pump

Ordering Matrix

A3 Model Number								
A3	Flex-Pro A3 Peristaltic Metering Pump							
A4	Flex-Pro A4 Peristaltic Metering Pump							
Series								
F	Single manual output control mode (manual control), Basic version							
V	Multiple automatic input output control and alarm modes (remote control), Deluxe version							
Drive								
2	Brushless DC motor, 0.05 to 125 RPM							
Power Cord (operating voltage requirement 96VAC to 264VAC)								
4	115V / 60Hz, power cord NEMA 5/15 plug (US)							
5	230V / 60Hz, power cord NEMA 6/15 plug (US)							
6	220V / 50HZ, power cord NEMA 7/VI plug (EU)							
8	240V / 50HZ, power cord AS 3112 plug (Australia / New Zealand)							
X	No Cord							
Connection Type								
S	3/8" OD x 1/4" ID Tube Compression Fitting, Natural PVDF (KYNAR), A3 models only							
M	1/2" Male NPT Fitting, Natural PVDF (KYNAR)							
B	1/2" Hose Barb Fitting, Natural PVDF (KYNAR), A4 models only							
C	3/4" Tri-Clamp Connections, Natural PVDF (KYNAR), A3 models only							
Pump Tube Size, Material								
ND	.075 ID Norprene® tube (A3 models only)							
NF	.155 ID Norprene® tube (A3 models only)							
NH	.25 ID Norprene® tube							
NJ	.312 ID Norprene® tube							
NK	.38 ID Norprene® tube							
NKL	.38 ID Norprene® tube Low Pressure, Extra long tube life at low pressures							
NL	.50 ID Norprene® tube (A4 models only)							
NP	.75 ID Norprene® tube (A4 models only)							
NHH	.25 ID + .25 ID Dual Norprene® tube, single inlet & outlet port (A4 models only)							
NKKL	.38 ID + .38 ID Dual Norprene® tube Low Pressure, Extra long tube life at low pressures (A4 models only)							
TH	.25 ID Norprene® Chemical tube							
TK	.38 ID Norprene® Chemical tube							
THH	.25 ID + .25 ID Dual Norprene® Chemical tube (A4 models only)							
TKK	.38 ID + .38 ID Dual Norprene® Chemical tube (A4 models only)							
GE	.125 ID Tygothane® tube (A3 models only)							
GG	.187 ID Tygothane® tube (A3 models only)							
GH	.25 ID Tygothane® tube							
GK	.38 ID Tygothane® tube							
GHH	.25 ID + .25 ID Dual Tygothane® tube (A4 models only)							
GKK	.38 ID + .38 ID Dual Tygothane® tube (A4 models only)							
Options (leave this blank for standard model)								
1	TI40-6V Threadless injection check valve, replaces A-104NK-6A threaded check valve							
2	C340A Foot valve, replaces standard C-342 inlet strainer (no check valve)							
R	Right facing pump head, input / output (Left facing fluid input / output is standard)							
D	Down facing pump head, input / output (Left facing fluid input / output is standard)							
A3	V	2	4	-	S	NH		Sample Model Number

A3 Replacement Parts List

Peristaltic Metering Pump

Item	Description	Part Number	QTY	Price
1	Pump Head	A3-SXX-H	1	
2	Spacer, Back	90011-184	1	

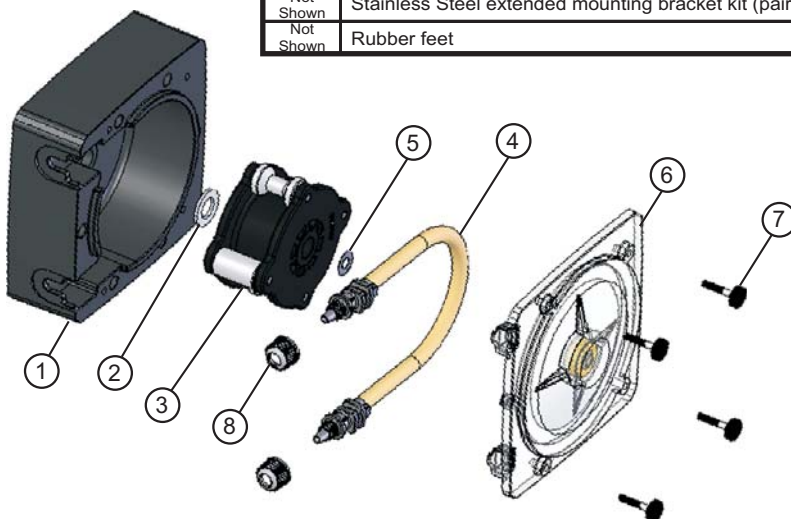
Norprene®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assembly Complete (Rotor), For ND, NF Tubes	A3-SND-R	1	
		4	Tube Assembly, 3/8" tube connect, Norprene ND (.075 ID)	A3-SND-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Norprene ND (.075 ID)	A3-MND-T	1	
		4	Tube Assembly, 3/8" tube connect, Norprene NF (.155 ID)	A3-SNF-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Norprene NF (.155 ID)	A3-MNF-T	1	

Norprene®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assembly Complete (Rotor), For NH, NJ, NK, NKL Tubes	A3-SNH-R	1	
		4	Tube Assembly, 3/8" tube connect, Norprene NH (.250 ID)	A3-SNH-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Norprene NH (.250 ID)	A3-MNH-T	1	
		4	Tube Assembly, 3/8" tube connect, Norprene NJ (.312 ID)	A3-SNJ-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Norprene NJ (.312 ID)	A3-MNJ-T	1	
		4	Tube Assembly, 3/8" tube connect, Norprene NK (.375 ID)	A3-SNK-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Norprene NK (.375 ID)	A3-MNK-T	1	
		4	Tube Assy, 3/8" tube cont, Norprene NKL (.375 ID) Low Pressure (30 psi max)	A3-SNKL-T	1	
		4	Tube Assy, 1/2" Male NPT, Norprene NKL (.375 ID) Low Pressure (30 psi max)	A3-MNKL-T	1	

Tygothane®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assembly Complete (Rotor), For GE, GG, GH, GK Tubes	A3-SGE-R	1	
		4	Tube Assembly, 3/8" tube connect, Tygothane GE (.125 ID)	A3-SGE-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Tygothane GE (.125 ID)	A3-MGE-T	1	
		4	Tube Assembly, 3/8" tube connect, Tygothane GG (.187 ID)	A3-SGG-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Tygothane GG (.187 ID)	A3-MGG-T	1	
		4	Tube Assembly, 3/8" tube connect, Tygothane GH (.250 ID)	A3-SGH-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Tygothane GH (.250 ID)	A3-MGH-T	1	
		4	Tube Assembly, 3/8" tube connect, Tygothane GK (.375 ID)	A3-SGK-T	1	
		4	Tube Assembly, 1/2" Male NPT connect, Tygothane GK (.375 ID)	A3-MGK-T	1	

Norprene® Chemical	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assembly Complete (Rotor), For TH, TK Tubes	A3-STH-R	1	
		4	Tube Assembly, 3/8" tube connect, Norprene Chemical TH (.250 ID)	A3-STH-T	1	
		4	Tube Assembly, 1/2" Male NPT, Norprene Chemical TH (.250 ID)	A3-MTH-T	1	
		4	Tube Assembly, 3/8" tube connect, Norprene Chemical TK (.375 ID)	A3-STK-T	1	
		4	Tube Assembly, 1/2" Male NPT, Norprene Chemical TK (.375 ID)	A3-MTK-T	1	

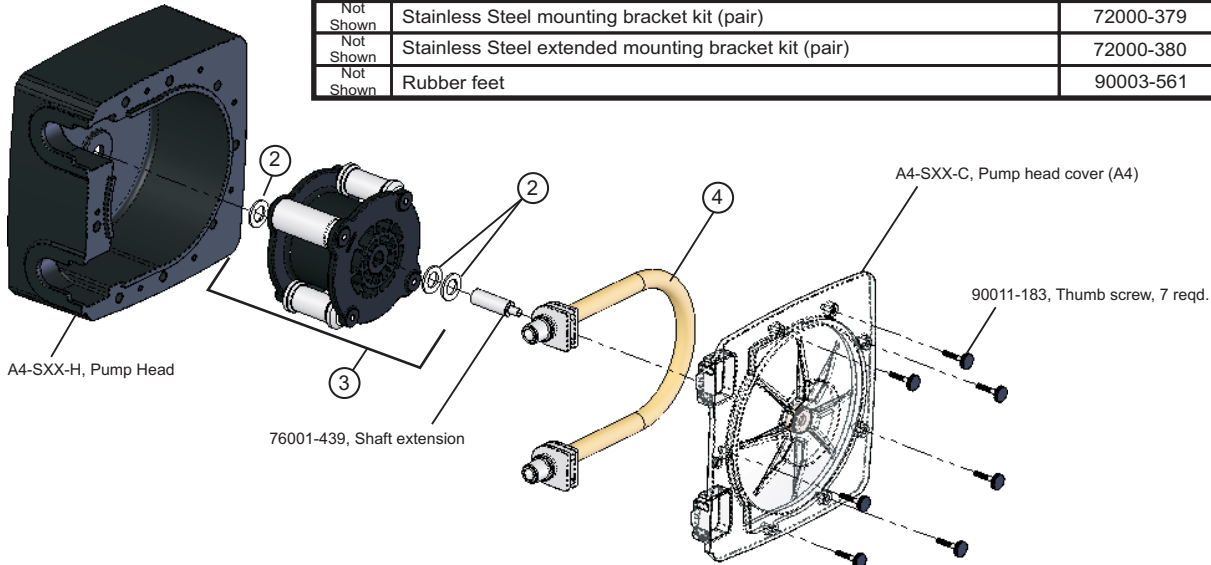
5	Spacer, Front	90011-014	1	
6	Pump Head Cover, Annealed Acrylic	A3-SXX-C	1	
7	Thumb Screw	90011-183	4	
8	Tube Nut, Compression, For 3/8" Tubing	C-330-6	2	
Not Shown	Stainless Steel mounting bracket kit (pair)	72000-379	1	
Not Shown	Stainless Steel extended mounting bracket kit (pair)	72000-380	1	
Not Shown	Rubber feet	90003-561	4	



A4 Replacement Parts List

Peristaltic Metering Pump

Item	Description	Part Number	QTY	Price	
2	Spacer, three spacers required, A4	90011-184	3		
Norprene®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assy Complete (A4 Rotor), For NH, NJ, NK Tubes	A4-MNH-R	1
		4	Tube Assembly, 1/2" hose barb, Norprene NH (.25 ID)	A4-BNH-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene NH (.25 ID)	A4-MNH-T	1
		4	Tube Assembly, 1/2" hose barb, Norprene NJ (.31 ID)	A4-BNJ-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene NJ (.31 ID)	A4-MNJ-T	1
		4	Tube Assembly, 1/2" hose barb, Norprene NK (.38 ID)	A4-BNK-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene NK (.38 ID)	A4-MNK-T	1
Norprene®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assy Complete (A4 Rotor), For NL, NP Tubes	A4-MNL-R	1
		4	Tube Assembly, 1/2" hose barb, Norprene NL (.50 ID)	A4-BNL-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene NL (.50 ID)	A4-MNL-T	1
		4	Tube Assembly, 1/2" hose barb, Norprene NP (.75 ID)	A4-BNP-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene NP (.75 ID)	A4-MNP-T	1
Norprene® and Norprene® Chemical	Tubing in this group are interchangeable with single roller assembly (rotor). Dual tube designs are Patent Pending	3	Roller Assy Complete (A4 Rotor), For NKL, NHH, NKLL, TH, TK, THH, TTK Tubes	A4-MTH-R	1
		4	Tube Assy, 1/2" Male NPT, Norprene NKL (.38 ID)	A4-MNKL-T	1
		4	Tube Assy, 1/2" hose barb, Norprene NKL (.38 ID)	A4-BNKL-T	1
		4	Tube Assy, 1/2" hose barb, Dual Norprene NH & NH (.25 + .25 ID)	A4-BNHH-T	1
		4	Tube Assy, 1/2" Male NPT, Dual Norprene NH & NH (.25 + .25 ID)	A4-MNHH-T	1
		4	Tube Assy, 1/2" hose barb, Dual Norprene NKL & NKL (.38 + .38 ID)	A4-BNKKL-T	1
		4	Tube Assy, 1/2" Male NPT, Dual Norprene NKL & NKL (.38 + .38 ID)	A4-MNKKL-T	1
		4	Tube Assembly, 1/2" hose barb, Norprene Chemical TH (.25 ID)	A4-BTH-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene Chemical TH (.25 ID)	A4-MTH-T	1
		4	Tube Assembly, 1/2" hose barb, Norprene Chemical TK (.38 ID)	A4-BTK-T	1
		4	Tube Assembly, 1/2" Male NPT, Norprene Chemical TK (.38 ID)	A4-MTK-T	1
		4	Tube Assy, 1/2" hose barb, Dual Norprene Chemical TH & TH (.25 + .25 ID)	A4-BTHH-T	1
		4	Tube Assy, 1/2" Male NPT, Dual Norprene Chemical TH & TH (.25 + .25 ID)	A4-MTHH-T	1
		4	Tube Assy, 1/2" hose barb, Dual Norprene Chemical TK & TK (.38 + .38 ID)	A4-BTKK-T	1
4	Tube Assy, 1/2" Male NPT, Dual Norprene Chemical TK & TK (.38 + .38 ID)	A4-MTKK-T	1		
Tygothane®	Tubing in this group are interchangeable with single roller assembly (rotor).	3	Roller Assy Complete (A4 Rotor), For GH, GK, GHH, GKK Tubes	A4-MGH-R	1
		4	Tube Assembly, 1/2" hose barb, Tygothane GH (.25 ID)	A4-BGH-T	1
		4	Tube Assembly, 1/2" Male NPT, Tygothane GH (.25 ID)	A4-MGH-T	1
		4	Tube Assembly, 1/2" hose barb, Tygothane GK (.38 ID)	A4-BGK-T	1
		4	Tube Assembly, 1/2" Male NPT, Tygothane GK (.38 ID)	A4-MGK-T	1
		4	Tube Assy, 1/2" hose barb, Dual Tygothane GH & GH (.25 + .25 ID)	A4-BGHH-T	1
		4	Tube Assy, 1/2" Male NPT, Dual Tygothane GH & GH (.25 + .25 ID)	A4-MGHH-T	1
		4	Tube Assy, 1/2" hose barb, Dual Tygothane GK & GK (.38 + .38 ID)	A4-BGKK-T	1
		4	Tube Assy, 1/2" Male NPT, Dual Tygothane GK & GK (.38 + .38 ID)	A4-MGKK-T	1
Not Shown	Stainless Steel mounting bracket kit (pair)	72000-379	1		
Not Shown	Stainless Steel extended mounting bracket kit (pair)	72000-380	1		
Not Shown	Rubber feet	90003-561	4		



CHEM-PRO C2F

Diaphragm Metering Pump

Features at a glance:

- Manual pump speed control
- Variable speed dive (max 166 strokes per minute)
- Diaphragm Failure Detection (DFD)
- Priming / degassing valve built-in
- Displays % motor speed
- Flow verification sensor compatible
- Smooth full stroke every time - helps reduce chance of vapor-lock
- Smooth chemical feed - no hammering as seen with solenoid pumps



C2F Diaphragm Metering Pump

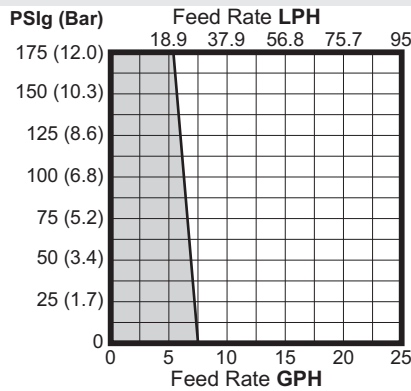
Max. 166 Strokes Per Minute

No Metal in fluid path

Feed Rate at 0 PSig			Max Pressure	Connection Type	C2F Model Numbers		
GPH	LPH	ML/Min	PSig (bar)	Fittings	115V AC	230V AC	220V AC
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Male NPT / PVDF	C2F243XVA	C2F253XVA	C2F263XVA
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Female NPT / PVDF	C2F243XVB	C2F253XVB	C2F263XVB
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Hose Barb / PVDF	C2F243XVC	C2F253XVC	C2F263XVC
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	3/8" Tube compression/ PVDF	C2F243XVD	C2F253XVD	C2F263XVD
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Male NPT / PVDF	C2F241XVA	C2F251XVA	C2F261XVA
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Female NPT / PVDF	C2F241XVB	C2F251XVB	C2F261XVB
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Hose Barb / PVDF	C2F241XVC	C2F251XVC	C2F261XVC
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	3/8" Tube compression/ PVDF	C2F241XVD	C2F251XVD	C2F261XVD
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Male NPT / PVDF	C2F242XVA	C2F252XVA	C2F262XVA
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Female NPT / PVDF	C2F242XVB	C2F252XVB	C2F262XVB
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Hose Barb / PVDF	C2F242XVC	C2F252XVC	C2F262XVC
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	3/8" Tube compression/ PVDF	C2F242XVD	C2F252XVD	C2F262XVD

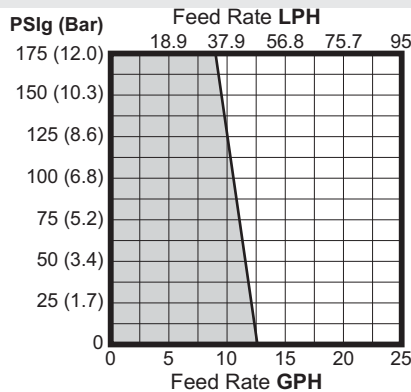
Small Diaphragm, Max 175 PSig / 12 bar

Model: C2x2x3
166 RPM
Small Diaphragm
.040" Offset



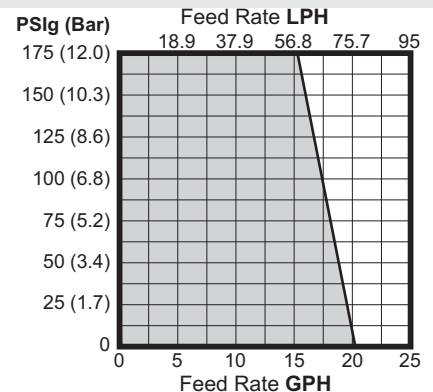
Small Diaphragm, Max 175 PSig / 12 bar

Model: C2x2x1
166 RPM
Small Diaphragm
.060" Offset



Large Diaphragm, Max 175 PSig / 12 bar

Model: C2x2x2
166 RPM
Large Diaphragm
.060" Offset



CHEM-PRO C2V

Diaphragm Metering Pump

Features at a glance:

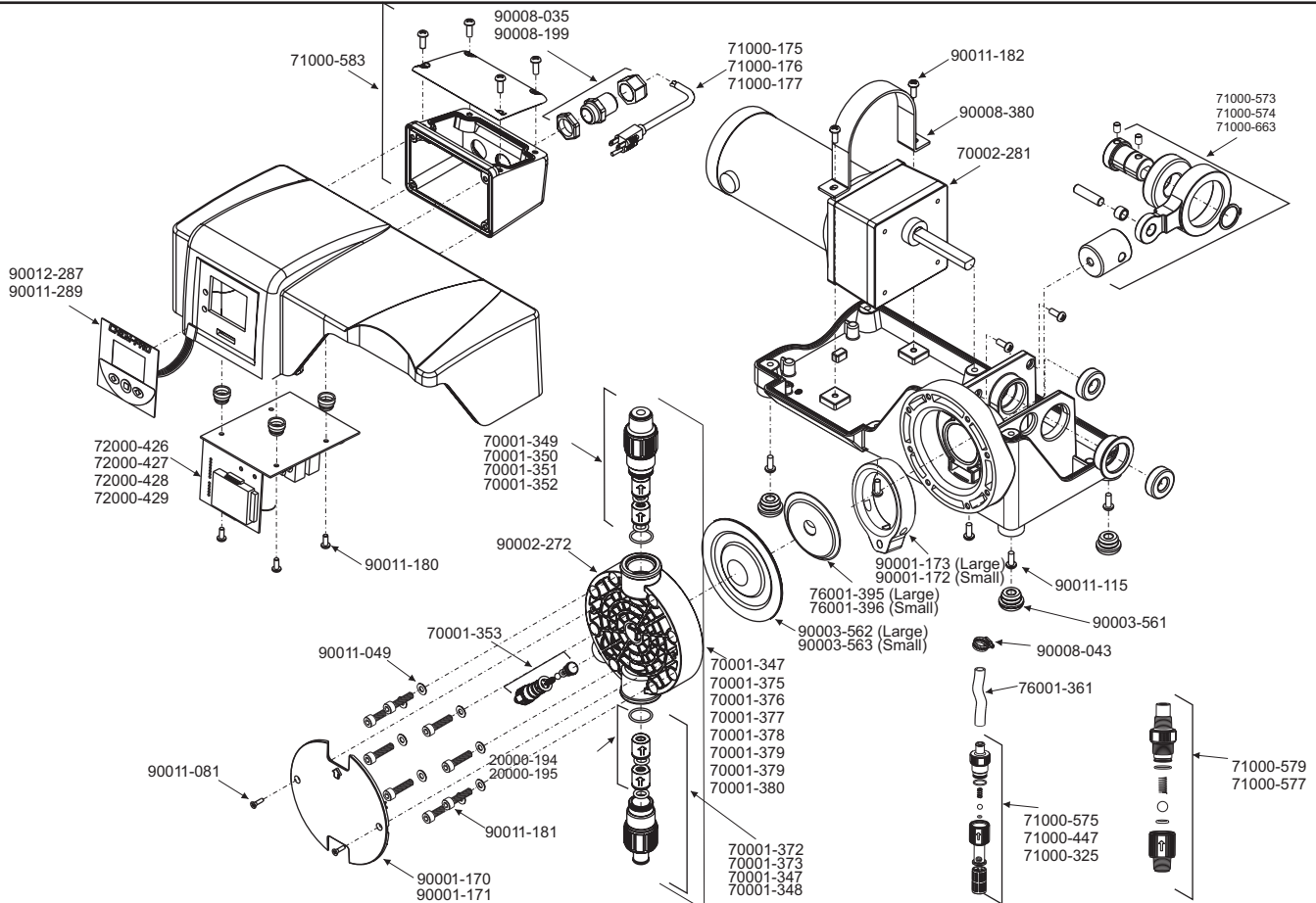
- Manual pump speed control
- Variable speed dive (max 166 strokes per minute)
- Inputs (fully configurable):
 - 4-20 mA, 0-10 VDC, High speed pulsed, Low speed pulsed
- Outputs: 3 amp relay
- Batch dispensing
- Displays % motor speed and RPM
- Flow verification sensor compatible
- Smooth full stroke every time - helps reduce chance of vapor-lock
- Smooth chemical feed - no hammering as seen with solenoid pumps



C2V Diaphragm Metering Pump Max. 166 Strokes Per Minute

No Metal in fluid path

Feed Rate at 0 PSig			Max Pressure	Connection Type	C2V Model Numbers		
GPH	LPH	ML/Min	PSig (bar)	Fittings	115V AC	230V AC	220V AC
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Male NPT / PVDF	C2V243XVA	C2V253XVA	C2V263XVA
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Female NPT / PVDF	C2V243XVB	C2V253XVB	C2V263XVB
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	1/2" Hose Barb / PVDF	C2V243XVC	C2V253XVC	C2V263XVC
.07 - 7.1	.27 - 27	4.50 - 450	175 (12)	3/8" Tube compression/ PVDF	C2V243XVD	C2V253XVD	C2V263XVD
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Male NPT / PVDF	C2V241XVA	C2V251XVA	C2V261XVA
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Female NPT / PVDF	C2V241XVB	C2V251XVB	C2V261XVB
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	1/2" Hose Barb / PVDF	C2V241XVC	C2V251XVC	C2V261XVC
.13 - 12.7	.48 - 48.0	8.00 - 800	175 (12)	3/8" Tube compression/ PVDF	C2V241XVD	C2V251XVD	C2V261XVD
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Male NPT / PVDF	C2V242XVA	C2V252XVA	C2V262XVA
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Female NPT / PVDF	C2V242XVB	C2V252XVB	C2V262XVB
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	1/2" Hose Barb / PVDF	C2V242XVC	C2V252XVC	C2V262XVC
.20 - 20.3	.77 - 76.8	12.80 - 1280	175 (12)	3/8" Tube compression/ PVDF	C2V242XVD	C2V252XVD	C2V262XVD



CHEM-PRO C3F

Diaphragm Metering Pump

Features at a glance:

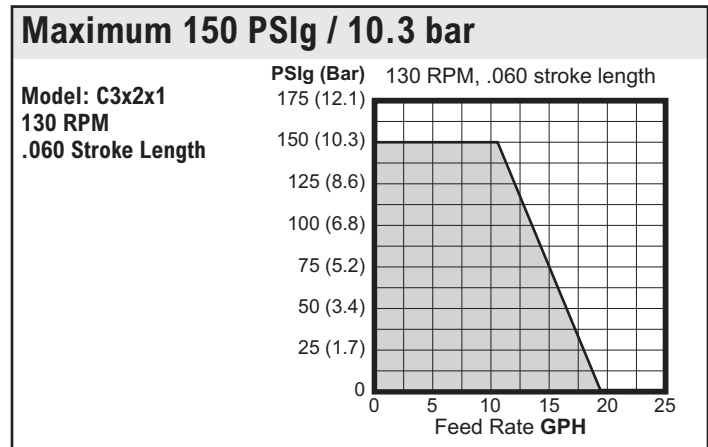
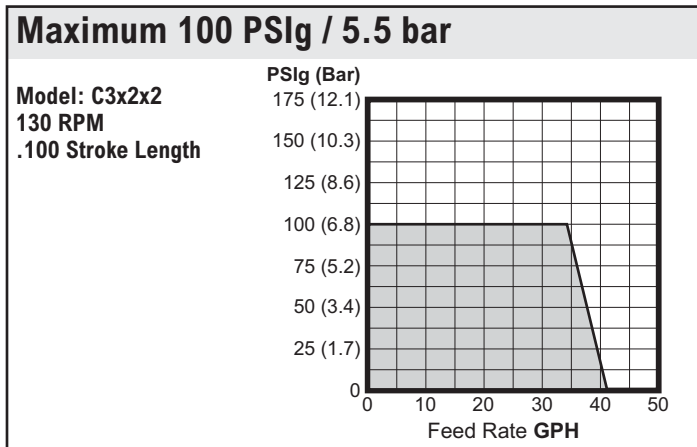
- Manual pump speed control
- Variable speed dive (max 166 strokes per minute)
- Diaphragm Failure Detection (DFD)
- Priming / degassing valve built-in
- Displays % motor speed
- Flow verification sensor compatible
- Smooth full stroke every time - helps reduce chance of vapor-lock
- Smooth chemical feed - no hammering as seen with solenoid pumps



C3F Diaphragm Metering Pump

No Metal in fluid path

Feed Rate at 0 PSig			Max Pressure	Strokes Per/Min	Connection Type	C3F Model Numbers		
GPH	LPH	ML/Min				Fittings	115V AC	230V AC
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Male NPT / PVDF	C3F241XVA	C3F251XVA	C3F261XVA
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Female NPT / PVDF	C3F241XVB	C3F251XVB	C3F261XVB
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Hose Barb / PVDF	C3F241XVC	C3F251XVC	C3F261XVC
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Male NPT / PVDF	C3F242XVA	C3F252XVA	C3F262XVA
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Female NPT / PVDF	C3F242XVB	C3F252XVB	C3F262XVB
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Hose Barb / PVDF	C3F242XVC	C3F252XVC	C3F262XVC



CHEM-PRO C3V

Diaphragm Metering Pump

Features at a glance:

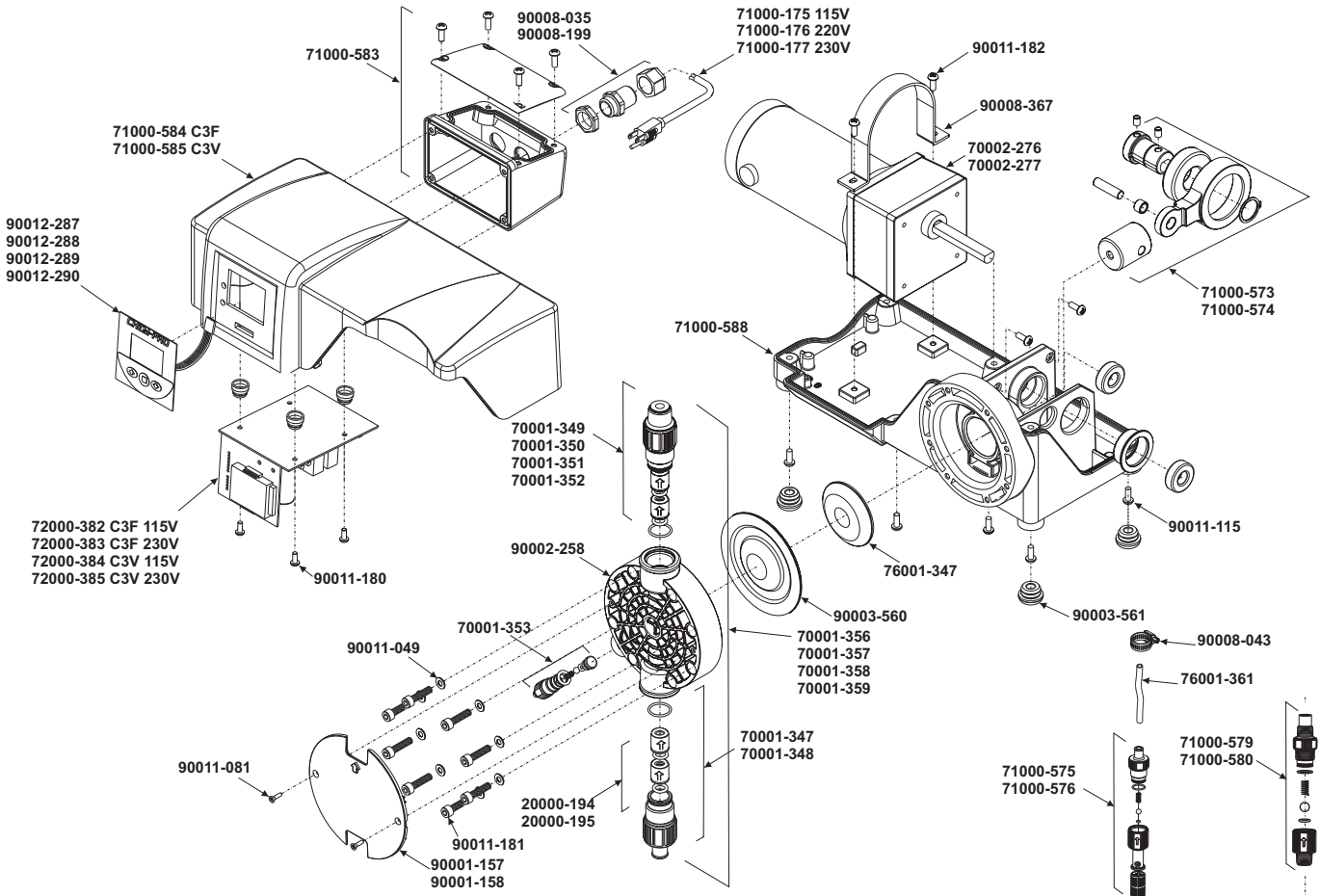
- Manual pump speed control
- Variable speed dive (max 166 strokes per minute)
- Inputs (fully configurable):
 - 4-20 mA, 0-10 VDC, High speed pulsed, Low speed pulsed
- Outputs: 3 amp relay
- Batch dispensing
- Displays % motor speed and RPM
- Flow verification sensor compatible
- Smooth full stroke every time - helps reduce chance of vapor-lock
- Smooth chemical feed - no hammering as seen with solenoid pumps



C3V Diaphragm Metering Pump

No Metal in fluid path

Feed Rate at 0 PSIG			Max Pressure PSIG / bar	Strokes Per/Min RPM	Connection Type Fittings	C3V Model Numbers		
GPH	LPH	ML/Min				115V AC	230V AC	220V AC
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Male NPT / PVDF	C3V241XVA	C3V251XVA	C3V261XVA
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Female NPT / PVDF	C3V241XVB	C3V251XVB	C3V261XVB
.19 - 19.7	.74 - 74.6	12.43 - 1243	150 / 10.3	130	1/2" Hose Barb / PVDF	C3V241XVC	C3V251XVC	C3V261XVC
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Male NPT / PVDF	C3V242XVA	C3V252XVA	C3V262XVA
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Female NPT / PVDF	C3V242XVB	C3V252XVB	C3V262XVB
.42 - 42	1.59 - 159	26.50 - 2650	100 / 6.8	130	1/2" Hose Barb / PVDF	C3V242XVC	C3V252XVC	C3V262XVC



CHEM-PRO

Ordering Matrix

Diaphragm Metering Pump

Chem-Pro Model Number																					
C2	Smaller overall size, lower output, higher pressure capability																				
C3	Larger overall size, higher output, lower pressure capability																				
Series																					
F	Single manual output control mode (manual control)																				
V	Multiple automatic input output control and alarm modes (remote control)																				
Maximum Strokes Per Minute																					
2	C2 Series = 166 RPM, C3 Series = 130 RPM (maximum strokes per minute)																				
Input Voltage																					
4	115V / 60Hz, power cord NEMA 5/15 plug (US)																				
5	230V / 60Hz, power cord NEMA 6/15 plug (US)																				
6	220V / 50HZ, power cord NEMA 7/VII plug (EU)																				
8	240V / 50HZ, power cord AS 3112 plug (Australia / New Zealand)																				
CAM Stroke Length and Diaphragm Size																					
<table border="1"> <thead> <tr> <th colspan="2">C2 Series Pumps</th> <th colspan="2">C3 Series Pumps</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>.060" (1.52 mm) stroke with small diaphragm</td> <td>1</td> <td>.060" (1.52 mm) stroke with large diaphragm</td> </tr> <tr> <td>2</td> <td>.060" (1.52 mm) stroke with large diaphragm</td> <td>2</td> <td>.100" (1.52 mm) stroke with large diaphragm</td> </tr> <tr> <td>3</td> <td>.040" (1.52 mm) stroke with small diaphragm</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>.100" (1.52 mm) stroke with large diaphragm</td> <td></td> <td></td> </tr> </tbody> </table>		C2 Series Pumps		C3 Series Pumps		1	.060" (1.52 mm) stroke with small diaphragm	1	.060" (1.52 mm) stroke with large diaphragm	2	.060" (1.52 mm) stroke with large diaphragm	2	.100" (1.52 mm) stroke with large diaphragm	3	.040" (1.52 mm) stroke with small diaphragm			4	.100" (1.52 mm) stroke with large diaphragm		
C2 Series Pumps		C3 Series Pumps																			
1	.060" (1.52 mm) stroke with small diaphragm	1	.060" (1.52 mm) stroke with large diaphragm																		
2	.060" (1.52 mm) stroke with large diaphragm	2	.100" (1.52 mm) stroke with large diaphragm																		
3	.040" (1.52 mm) stroke with small diaphragm																				
4	.100" (1.52 mm) stroke with large diaphragm																				
Electrical Options																					
X	Standard equipment (standard power cord based on "input voltage" & junction box based on "output control" selection)																				
P	Power cord with junction box (this selection only available if you select "F" under "output control")																				
Elastomer Material (o-rings)																					
V	Viton																				
E	EP																				
Outlet Fitting Connections																					
A	1/2" Male NPT, PVDF (Kynar®), ships with 1/2" male NPT injection fitting / check valve																				
B	1/2" Female NPT, PVDF (Kynar®), ships with 1/2" female NPT injection fitting / check valve																				
C	1/2" Hose Barb, PVDF (Kynar®) ships with 1/2" hose barb injection fitting / check valve																				
D	3/8" OD Tube Compression Fitting, PVDF (Kynar®)																				
C2	V	2	4	1	X	V	D	Sample Model Number													

Included Items	
3/8" OD Tube Connection	3/8" OD Suction tube 8 feet (2.4 m), priming tube 5 feet (1.5 m), 3/8" OD Discharge tube 8 feet (2.4 m), injection fitting/quill with check valve, foot valve, mounting brackets and 1 set of extra brushes.
1/2" NPT Connection	1/2" OD Suction tube 10 feet (2.4 m), priming tube 5 feet (1.5 m), injection fitting/quill with check valve, foot valve, mounting brackets and 1 set of extra brushes.
Wetted Parts List	
Diaphragm Pump:	Ancillary Items:
Diaphragm: Teflon®, (Teflon® coated Hypalon®)	Injection check valve: PVDF, Ceramic, Hastelloy C-276, Viton® (optional EP)
Pump head & adapters: PVDF (natural)	Foot valve / strainer: PVDF, Ceramic, Hastelloy C-276, Viton® (optional EP)
Pump head valves: PVDF, Ceramic, Viton® (optional EP)	Suction tube: PVC (clear)

CHEM-PRO

Diaphragm Metering Pump

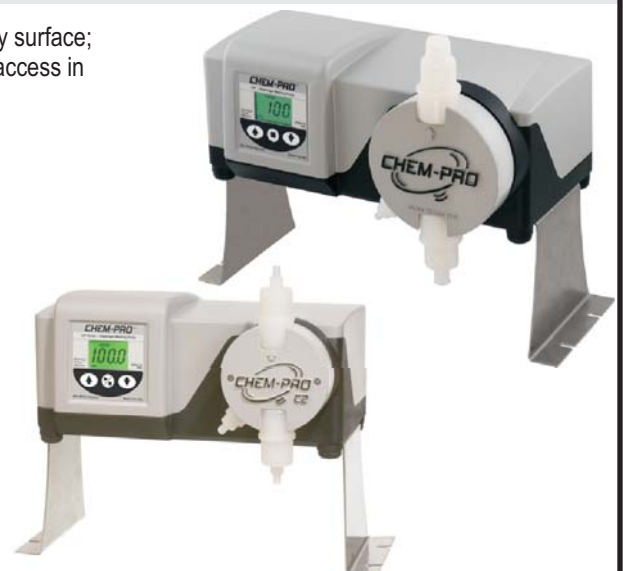
Replacement Parts List

Extended Brackets for ProSeries Pumps

Stainless Steel extended brackets allow pump to be securely mounted to most any surface; floor, shelf, or skid. Brackets lift pump up 4-1/2 inches (11.43 cm), for easy pump access in hard to reach areas.

- Raise metering pump 4-1/2 inches (11.43 cm) off ground or a surface.
- Made out of tough Stainless Steel.

Model #	Description
72000-380	Extended Mounting Bracket, 1 Pair, SS, 4 SS Screws

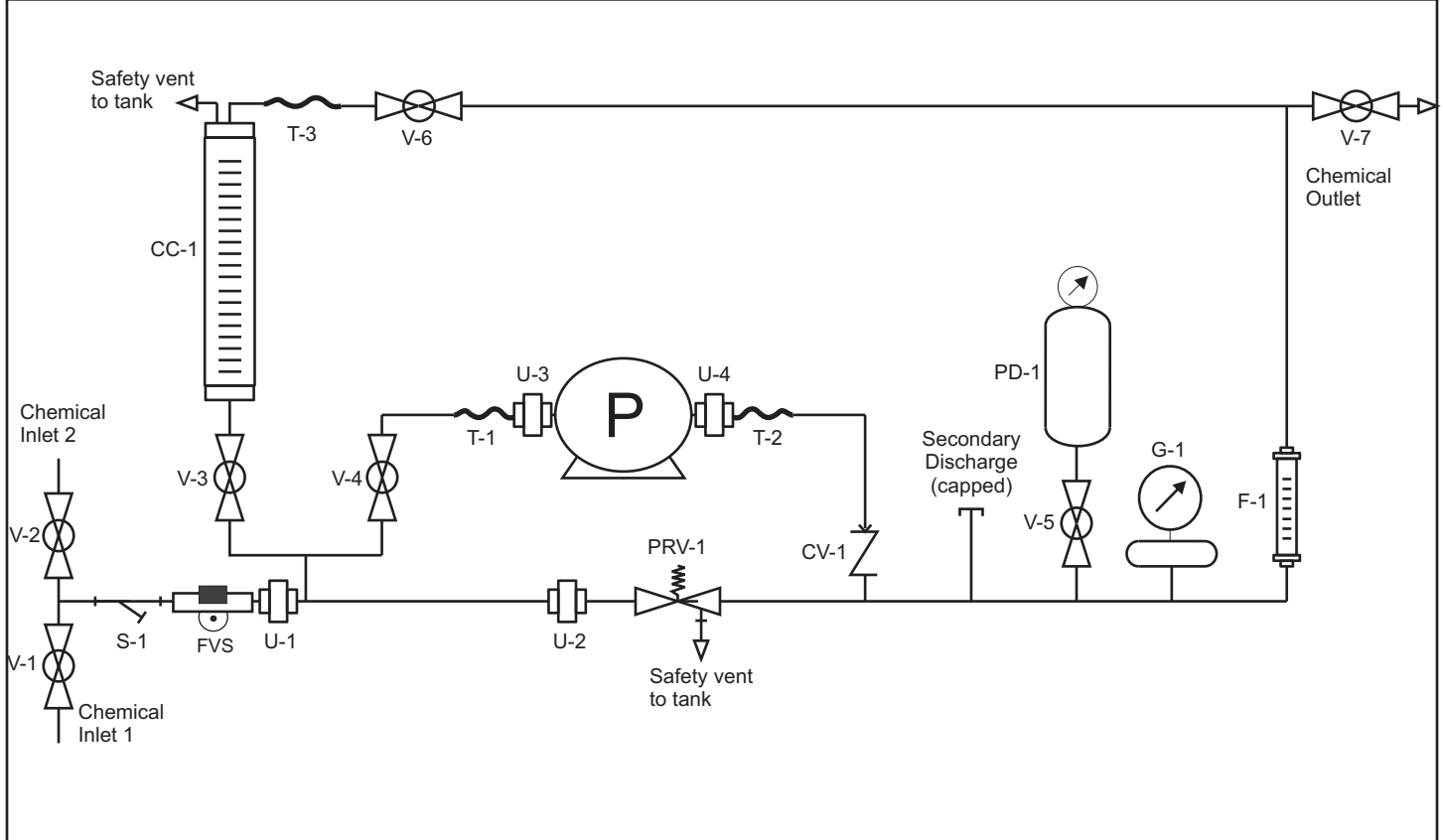


CHEM-FEED

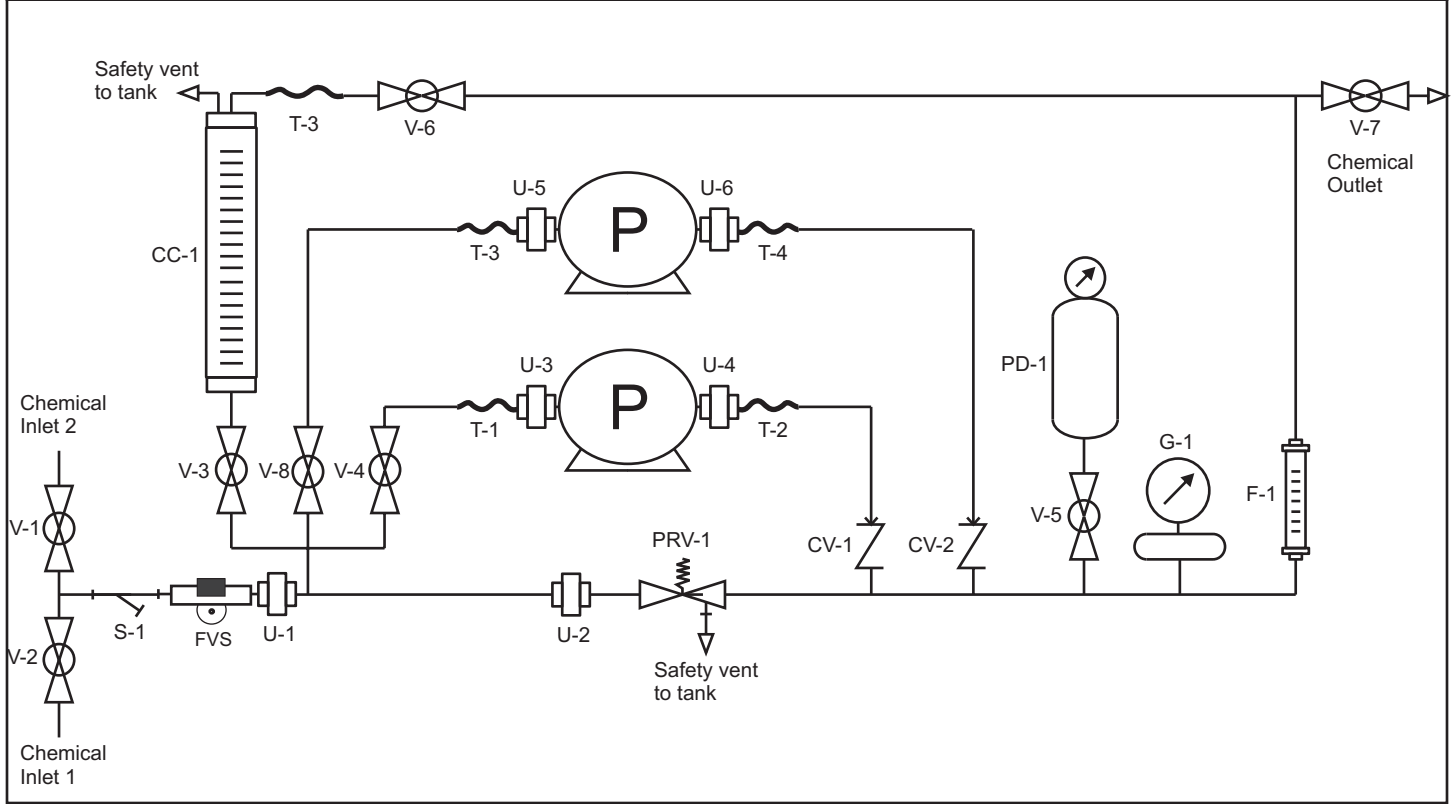
Engineered Skid Systems

Piping and Instrument Diagrams

Single Pump Skids



Dual Pump Skids



CHEM-FEED

Matrix

Engineered Skid Systems

Chem-Feed Engineered Skid System Matrix										
CFS-1	Single pump system - single chemical / single outlet									
CFS-2	Dual pump system - single chemical / single outlet									
Piping / Valves / Seal Materials										
A	PVC piping, PVC ball valves, PVC unions, Viton seals									
B	PVC piping, PVC ball valves, PVC unions, EP seals									
Structure Assembly Materials										
A	Chemical resistant powder coated aluminum stand with 316 SS mounting pads									
Inlet Strainer and Flow Verification Sensors										
A	PVC body inlet strainer with Viton seals (without Flow Verification Sensor)									
B	PVC body inlet strainer with EP seals (without Flow Verification Sensor)									
C	PVC body inlet strainer and 30 - 300 ml/min Flow Verification Sensor with Viton seals									
D	PVC body inlet strainer and 100 - 1000 ml/min Flow Verification Sensor with Viton seals									
E	PVC body inlet strainer and 200 - 2000 ml/min Flow Verification Sensor with Viton seals									
F	PVC body inlet strainer and 300 - 3000 ml/min Flow Verification Sensor with Viton seals									
G	PVC body inlet strainer and 500 - 5000 ml/min Flow Verification Sensor with Viton seals									
H	PVC body inlet strainer and 700 - 7000 ml/min Flow Verification Sensor with Viton seals									
J	PVC body inlet strainer and 30 - 300 ml/min Flow Verification Sensor with EP seals									
K	PVC body inlet strainer and 100 - 1000 ml/min Flow Verification Sensor with EP seals									
L	PVC body inlet strainer and 200 - 2000 ml/min Flow Verification Sensor with EP seals									
M	PVC body inlet strainer and 300 - 3000 ml/min Flow Verification Sensor with EP seals									
N	PVC body inlet strainer and 500 - 5000 ml/min Flow Verification Sensor with EP seals									
P	PVC body inlet strainer and 700 - 7000 ml/min Flow Verification Sensor with EP seals									
X	None									
Calibration Cylinder										
A	32 GPH (2000 ml)									
B	16 GPH (1000 ml)									
C	8 GPH (500 ml)									
D	4 GPH (250 ml)									
E	1.6 GPH (100 ml)									
X	None									
Pressure Relief Valve (PRV)										
A	PVC body, PTFE diaphragm									
B	PVDF body, PTFE diaphragm									
C	PTFE body, PTFE diaphragm									
Pulsation Dampener										
A	10 cubic inch, CPVC body, PTFE diaphragm, Viton seals									
B	10 cubic inch, CPVC body, PTFE diaphragm, EPDM seals									
X	None									
Pressure Gauge with Guard										
A	200 PSI gauge, PVC guard, Viton or EP diaphragm (based on previous selections)									
B	100 PSI gauge, PVC guard, Viton or EP diaphragm (based on previous selections)									
C	30 PSI gauge, PVC guard, Viton or EP diaphragm (based on previous selections)									
X	None									
Check Valve										
A	PVC valve body, Viton diaphragm seal									
B	PVC valve body, EPDM diaphragm seal									
CFS-1	A	A	-	A	A	A	X	B	A	Sample Model Number

SONIC-PRO

Hybrid Ultrasonic Flow Meter Doppler and Transit Time



S1



S2



S3

Application Qualifier

Fluid Requirements:

Doppler Operation

- Must conduct sound
 - Must contain sound reflecting particles such as air bubbles, sand, etc.
- Doppler measurement requires 0.02% to 15% (200 to 150,000 ppm) particles be present in the flow stream to "reflect" the sound waves.

Transit-Time Operation

- Must conduct sound
- Must be relatively clean fluid

Transit Time measurement requires relatively "clean" fluid. Fluids containing from 0% to 10% (0 to 100,000 ppm) of particles are acceptable.

Note: Do not attempt to measure very low flow velocities in the Doppler mode, the particles can fall out of suspension resulting in error or failure.

Pipe Requirements:

Pipe Material	Pipe Size Ranges and Maximum Wall Thickness		
	Doppler Mode Pipe Size Range	Transit Time Mode Pipe Size Range	Max Pipe Wall
Brass (Naval)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Copper	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
FRP (fiberglass reinforced plastic)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Iron (cast)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Iron (ductile)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Nylon	1" to 100" (25mm to 2500mm)	1-1/2" to 100" (40mm to 2500mm)	2.00" (50mm)
Polyethylene (HDPE)	1" to 100" (25mm to 2500mm)	1-1/2" to 100" (40mm to 2500mm)	2.00" (50mm)
Polyethylene (LDPE)	1" to 100" (25mm to 2500mm)	1-1/2" to 100" (40mm to 2500mm)	1.00" (25mm)
Polypropylene	1" to 100" (25mm to 2500mm)	1-1/2" to 100" (40mm to 2500mm)	.500" (13mm)
PVC / CPVC	1" to 100" (25mm to 2500mm)	1-1/2" to 100" (40mm to 2500mm)	2.00" (50mm)
304 Stainless Steel	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
304L Stainless Steel	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
316 Stainless Steel	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Steel (1% carbon hard)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Steel (carbon)	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)
Titanium	2" to 100" (63mm to 2500mm)	2" to 100" (63mm to 2500mm)	.500" (13mm)

Note: The outside surface of the pipe must be clean and smooth. Insulation, coatings, rust and other surface imperfections should be removed before installing the transducers. The inside surface of the pipe must be smooth to properly reflect the sound wave.

Straight Lengths of Pipe Requirements:

Type of Disturbance	Straight Lengths of Pipe Required		Important Information
	Upstream from Transducers	Downstream from Transducers	
Flange	5 x Nominal Pipe Size	5 x Nominal Pipe Size	Sonic-Pro's sound wave beam is only affected by fluid that actually passes through the beam. The meter will not measure with high accuracy if the fluid velocity is not consistent across the entire pipe diameter. Flow disturbances such as pumps, elbows, tees, and valves in the flow stream can cause swirl patterns and vortices that will affect the measurement. Install the transducers on a straight run of pipe as far as possible from any disturbances. The distance required for high accuracy will depend on the type of disturbance.
Reducer	7 x Nominal Pipe Size	5 x Nominal Pipe Size	
90° Elbow	10 x Nominal Pipe Size	5 x Nominal Pipe Size	
Two 90° Elbows - 1 Direction	15 x Nominal Pipe Size	5 x Nominal Pipe Size	
Two 90° Elbows - 2 Directions	20 x Nominal Pipe Size	5 x Nominal Pipe Size	
Gate valve	25 x Nominal Pipe Size	5 x Nominal Pipe Size	
Pump	25 x Nominal Pipe Size	5 x Nominal Pipe Size	

SONIC-PRO

Hybrid Ultrasonic Flow Meter Matrix

Sonic-Pro Part Number Matrix

Signal Processing Unit (SPU) Display Options	
S1	Factory configured - without display - no configuration menu access ¹
S2	Factory configured - with display - no configuration menu access ¹
S3	Factory configured - with display and with user configurable menu access

Smart Communications and Control Options ²	
A	Communications Includes Ethernet, USB, RS-232, RS-485 connections and user configuration and monitoring PC software.
B	Process Control Includes three 10 amp, Form C relays. Note: requires S3 configurable display or the communications option "A" above.
C	Both communications and Process Control options.
X	None

Power Supply Cord Rating and Plug type ⁵	
1	U.S. 125V with NEMA 5/15 plug
2	European 250V with CEE 7/VII plug
3	U.S. 250V with NEMA 6/15 plug
8	Australia/New Zealand 250V with AS 3112 plug
X	Power cord without attachment plug

Transducer Model and Cable Length	
A1	Model A transducer with 10 ft cable
A2	Model A transducer with 25 ft cable
A3	Model A transducer with 50 ft cable
A4	Model A transducer with 100 ft cable
XX	No Transducers

Factory Configuration Options

Nominal Pipe Size ⁴															
IPS Pipe Size						Metric Pipe Size									
015	1-1/2"	060	6"	181	18"	300	30"	041	40mm	125	125mm	250	250mm	500	500mm
020	2"	080	8"	201	20"	320	32"	051	50mm	140	140mm	280	280mm	560	560mm
025	2-1/2"	100	10"	220	22"	340	34"	063	63mm	160	160mm	315	315mm	630	630mm
030	3"	120	12"	240	24"	360	36"	075	75mm	180	180mm	355	355mm	710	710mm
040	4"	141	14"	260	26"	420	42"	090	90mm	200	200mm	400	400mm	800	800mm
050	5"	161	16"	281	28"	480	48"	110	110mm	225	225mm	450	450mm	101	1000mm

Pipe Pressure Rating ⁴									
SK	Sch 5 (ASTM D 1785)	DA	SDR 41 (ASTM D 2241)	CA	Class 50 (ANSI C151)	TA	Sanitary Tubing 0.065" wall	PA	PN 4 metric (DIN 8062)
SA	Sch 10 (ASTM D 1785)	DB	SDR 26 (ASTM D 2241)	CB	Class 51 (ANSI C151)	TB	Sanitary Tubing 0.083" wall	PB	PN 6 metric (DIN 8062)
SB	Sch 20 (ASTM D 1785)	DC	SDR 21 (ASTM D 2241)	CC	Class 52 (ANSI C151)	TC	Sanitary Tubing 0.109" wall	PC	PN 10 metric (DIN 8062)
SC	Sch 30 (ASTM D 1785)	DD	SDR 19 (ASTM D 2241)	CD	Class 53 (ANSI C151)	TK	Type K copper (ASTM B 88)	PD	PN 16 metric (DIN 8062)
SD	Sch 40 (ASTM D 1785)	DE	SDR 17 (ASTM D 2241)	CE	Class 54 (ANSI C151)	TL	Type L copper (ASTM B 88)	PE	PN 20 metric (DIN 8062)
SE	Sch 60 (ASTM D 1785)	DF	SDR 15.5 (ASTM D 2241)	CF	Class 55 (ANSI C151)	TM	Type M copper (ASTM B 88)	BB	Class B British (BS 3506)
SF	Sch 80 (ASTM D 1785)	DG	SDR 13.5 (ASTM D 2241)	CG	Class 56 (ANSI C151)			BC	Class C British (BS 3506)
SG	Sch 100 (ASTM D 1785)	DH	SDR 11 (ASTM D 2241)					BD	Class D British (BS 3506)
SH	Sch 120 (ASTM D 1785)	DI	SDR 9 (ASTM D 2241)					BE	Class E British (BS 3506)
SI	Sch 140 (ASTM D 1785)	DJ	SDR 7.3 (ASTM D 2241)					B7	Class 7 British (BS 3506)
SJ	Sch 160 (ASTM D 1785)	DK	SDR 7 (ASTM D 2241)	DL	SDR 18 (ASTM D 2241)				

Pipe Material ⁴							
A	Brass (naval)	F	Nylon	K	PVDF	P	Steel (Carbon)
B	Copper	G	Polyethylene (HDPE)	L	Stainless Steel 304	Q	Titanium
C	FRP (fiberglass reinforced plastic)	H	Polyethylene (LDPE)	M	Stainless Steel 304L		
D	Iron (cast)	I	Polypropylene	N	Stainless Steel 316		
E	Iron (ductile)	J	PVC / CPVC	O	Steel (1% Carbon, hardened)		

Display Volume Units ³									
G	U.S. Gallons	F	Cubic Feet	M	Cubic Meters	B	U.S. Barrels Liquid (31.5 Gal)	O	Ounces
L	Liters	A	Acre Feet	I	Imperial Gallons	P	U.S. Barrels Oil (42.0 Gal)	K	Milliliters

Display Time Units					
M	Minutes	H	Hours	D	Days

Fluid ⁴					
AA	Alcohol (Ethyl alcohol; Ethanol)	AF	Isopropyl Alcohol	AK	Toluene
AB	Benzene	AG	Methyl Alcohol (methanol)	AL	Water (distilled; waste)
AC	Ethylene Glycol	AH	Methyl Ethyl Ketone (MEK)	AN	Water (sea; brine)
AD	Ethylene Glycol / water (50%)	AI	Milk	AP	Wine
AE	Gasoline	AJ	Oil (diesel)		

Display Language							
E	English	S	Spanish	G	German	F	French

S3 C 1 A1 060 SD J G M AL E Sample Sonic-Pro Part Number

Transducer Set only	
ST	Sonic-Pro Transducer
Transducer model / pipe range	
A	Model "A" transducers - 1.5" to 100" OD pipe
Cable Length	
010	10 Feet
025	25 Feet
050	50 Feet
100	100 Feet

S3 - A - 010 Sample Number

- Notes:
1. Unless equipped with the communications option and user software, models S1 and S2 are factory configurable only.
 2. Option B, Process Control Relays, requires either the S3 configurable display or the communications option.
 3. Other display volume units, including custom units, are available. Contact the factory for ordering information.
 4. Other pipe sizes, pipe pressure ratings, pipe materials and fluids are available. Contact the factory for ordering information.
 5. Power cord only. Input power requirement is 110 to 240 VAC or 15 to 30 VDC.

