


Chemical Injection Pumps and Products




API 675 PERFORMANCE



WILLIAMS
MILTON ROY



V Dual Seal Plunger




X Dual Seal Plunger



W High Pressure High Flow Plunger



WILROY™
Hydraulically Actuated
Diaphragm Pump



MK XIIA Oscillamatic®
Controller



LD Low Pressure
Diaphragm



MK VII



WPC 9001
Electronic Pump
Controller



APU-XP
Automatic Processing Unit

V DUAL SEAL PLUNGER

SERIES OF METERING PUMPS

Featuring our Oscillamatic® Controller & Corrosion-resistant 316 SS Construction



MODEL @ AIR/GAS SUPPLY PRESSURE	MAX VOLUME GPH / LPH	VOLUME PER STROKE CC	STROKE LENGTH (INCHES)	STROKES PER MINUTE (RANGE)	MAX DISCHARGE PRESSURE PSIG / BARG
CP125V125 @ 100 PSI/6.9 BAR	.07 / .27	.1	.5	1-45	8,650 / 596.4
CP250V225 @ 100 PSI/6.9 BAR	.57 / 2.16	.8	1	1-45	7,200 / 496.4
CP250V300 @ 100 PSI/6.9 BAR	.57 / 2.16	.8	1	1-45	13,100 / 903.2
CP500V225 @ 100 PSI/6.9 BAR	2.30 / 8.71	3.2	1	1-45	1,750 / 120.7
CP500V300 @ 100 PSI/6.9 BAR	2.30 / 8.71	3.2	1	1-45	3,250 / 224.1
CRP500V400 @ 100 PSI/6.9 BAR @ 150 PSI/10.3 BAR	2.30 / 8.71 2.30 / 8.71	3.2 3.2	1 1	1-45 1-45	6,300 / 434.4 9,200 / 634.3
CRP750V400 @ 100 PSI/6.9 BAR @ 150 PSI/10.3 BAR	5.00 / 18.9 5.00 / 18.9	7.0 7.0	1 1	1-45 1-45	2,600 / 178.3 4,000 / 275.8
CRP1000V400 @ 100 PSI/6.9 BAR @ 150 PSI/10.3 BAR	9.08 / 34.37 9.08 / 34.37	12.7 12.7	1 1	1-45 1-45	1,520 / 104.8 2,300 / 158.6
CRP1000V600 @ 100 PSI/6.9 BAR @ 150 PSI/10.3 BAR	9.04 / 34.22 7.00 / 26.50	12.6 9.8	1 1	1-45 1-35	3,400 / 234.4 4,700 / 324.0
CRP1000V800 @ 100 PSI/6.9 BAR @ 150 PSI/10.3 BAR	8.81 / 33.35 6.82 / 25.81	12.3 9.5	1 1	1-45 1-35	6,300 / 434.4 9,100 / 627.4

* This data should only be used to provide you with your initial size selection. You must refer to the actual performance graphs. Discharge pressures with use of MKXIIA controller.



V, X and W plunger pumps available with ceramic plungers



X DUAL SEAL PLUNGER

SERIES OF METERING PUMPS

Featuring our Oscillamatic® Controller & Anodized Aluminum for Non-corrosive Applications



MODEL @ AIR/GAS SUPPLY PRESSURE	MAX VOLUME GPH / LPH	VOLUME PER STROKE CC	STROKE LENGTH (INCHES)	STROKES PER MINUTE (RANGE)	MAX DISCHARGE PRESSURE PSIG / BARG
CP125X125 @ 65 PSI / 4.5 BAR	.07 / .27	.1	.5	1-45	5,000 / 344.8
CP250X225 @ 65 PSI / 4.5 BAR	.57 / 2.16	.8	1	1-45	4,100 / 282.7
CP250X300 @ 65 PSI / 4.5 BAR	.57 / 2.16	.8	1	1-45	6,500 / 448.2
CP500X225 @ 90 PSI / 6.2 BAR	2.30 / 8.71	3.2	1	1-45	1,300 / 89.6
CP500X300 @ 90 PSI / 6.2 BAR	2.30 / 8.71	3.2	1	1-45	2,200 / 151.7
CRP500X400 @ 50 PSI / 3.5 BAR @ 90 PSI / 6.2 BAR	2.30 / 8.71 2.30 / 8.71	3.2 3.2	1 1	1-45 1-45	2,900 / 203.9 9,200 / 634.3
CRP750X400 @ 50 PSI / 3.5 BAR @ 90 PSI / 6.2 BAR	5.00 / 18.9 5.00 / 18.9	7.0 7.0	1 1	1-45 1-45	1,150 / 80.9 2,300 / 161.7

* This data should only be used to provide you with your initial size selection. You must refer to the actual performance graphs. Discharge pressures with use of MKII or MKVII controllers.

W HIGH FLOW, HIGH PRESSURE PLUNGER

SERIES OF METERING PUMPS

Featuring our Oscillamatic® Controller, Pneumatic Relay & All 316 SS Construction



MODEL	MAX VOLUME GPH / LPH	VOLUME PER STROKE CC	STROKE LENGTH (INCHES)	STROKES PER MINUTE (RANGE)	DISCHARGE PRESSURE PSIG / BARG
CRP1500W400	22.90 / 86.40	36.0	1 1/4	1-40	950 / 66
CRP1500W600	22.90 / 86.40	36.0	1 1/4	1-40	1,800 / 124
CRP1500W800	22.90 / 86.40	36.0	1 1/4	1-40	3,200 / 221
CRP2250W600L	90.00 / 336.00	160.0	2 1/2	1-35	1,000 / 69
CRP2250W800L	90.00 / 336.00	160.0	2 1/2	1-35	1,650 / 114

NOTE: ⁽¹⁾ The minimum volume recommended for any pump should be calculated on the basis of 1/4 inch minimum stroke length and 5 strokes per minute minimum with a controller, or 1 stroke minimum with a solenoid.



WILROY™

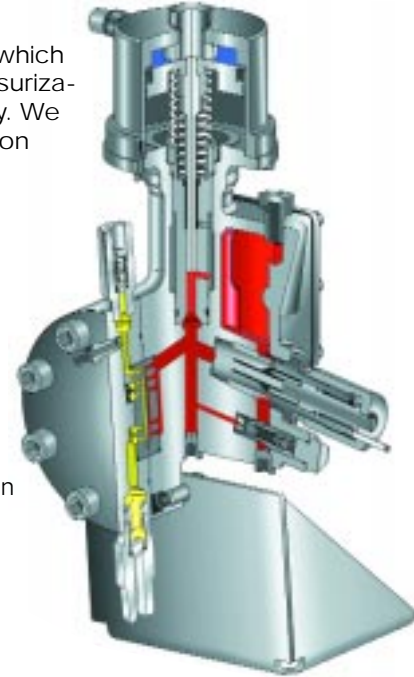
HYDRAULICALLY ACTUATED DIAPHRAGM PUMP



Williams and Milton Roy have combined technologies to design a pump blending the proven mRoy® hydraulic by-pass diaphragm design with the Williams "V" Series pump. The result is the low volume, high turndown characteristics of a pneumatic drive coupled with the chemical containment and high pressure capabilities of a hydraulically actuated diaphragm.

The WILROY™ is a hydraulically actuated diaphragm pump which delivers chemical containment, low maintenance, overpressurization protection with unsurpassed accuracy and repeatability. We invite you to look at how we can meet your chemical injection needs with proven solutions from Williams Milton Roy.

- 316 SS exposure
- Integral relief valve
- Maintenance-free hydraulic system
- Two sizes in one housing — Field reconfigurable
- Compact size for ease of installation
- Centralized design for ease of maintenance & operation
- Gylon® diaphragm for diverse compatibility
- Optimum chemical containment



Model	Maximum Volume @500PSI GPH / LPH	Volume Per Stroke CC	Stroke Length INCH	Strokes Per Minute (Range)	Max Discharge Pressure PSIG / BARG	Max Air Consumption	
						@100 PSIG	@6.9 BAR
						SCF Per Day	SCM Per Day
WILROY™ 2M	.55 / 2.08	.8	1	1-45	3000 / 207	2100	59
WILROY™ 5M	2.2 / 8.33	3.2	1	1-45	3000 / 207	2100	59

LD LOW-PRESSURE DIAPHRAGM

SERIES OF METERING PUMPS

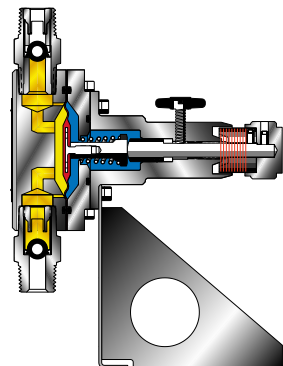
Featuring our Oscillamatic® Controller



Model	Maximum Volume GPH / LPH	Maximum Discharge Pressure*		Air to Fluid Pressure	Strokes Per Minute (SPM)	Volume Per Stroke (cc)
		PSI	Bar			
LD100-316-TFE	0.75 / 2.8	80	5.52	100:80	1-45	1.0
LD200-316-TFE	10.0 / 37.8	98	6.76	100:96	1-45	14.0
LD400-316-TFE	45.0 / 170.3	93	6.41	100:93	1-45	63.0
LD100-TFE-TFE	0.75 / 2.8	75	5.17	100:75	1-45	1.0
LD200-TFE-TFE	10.0 / 37.8	93	6.41	100:93	1-45	14.0
LD400-TFE-TFE	45.0 / 170.3	90	6.20	100:90	1-45	63.0

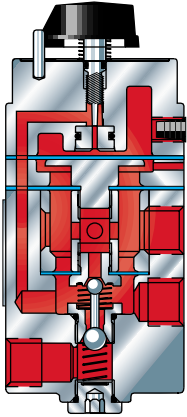
* With 100 PSI air supply

The LD Pump Features All-PTFE diaphragms, improved stroke adjustment, higher flow range, and 316 SS or TFE construction.



Oscillamatic® PNEUMATIC CONTROLLERS

Featuring our latest addition to the Williams line—the MK XIA controller which combines the corrosion resistance of 316 SS with the diaphragm-style spool design for ease of maintenance. The Williams “Oscillamatic” controllers are unique and precise pneumatic instruments. These units are designed to operate any pneumatic metering pumps or instrument requiring pilot pulses. The controllers accept a constant supply of air or gas pressure which produces pneumatic output pulses. The output signal is manually adjusted by a control rate valve. The controller, installed on the metering pump, provides the most accurate and reliable pneumatic control available today.



MODELS	SUPPLY RANGE PSI BAR	BODY MATERIAL	STROKE SPM	ELASTOMERS AVAILABLE	SPOOL STYLE
MK XIA	30-100 2.0-6.9	316 SS	1-45	NEOPRENE	DIAPHRAGM
MK VII	50-90 3.4-6.2	ANODIZED ALUMINUM	1-45	NEOPRENE VITON®	DIAPHRAGM
MK II	25-65 1.7-4.5	ANODIZED ALUMINUM	1-45	NEOPRENE VITON®	DIAPHRAGM



MK II & MK VII

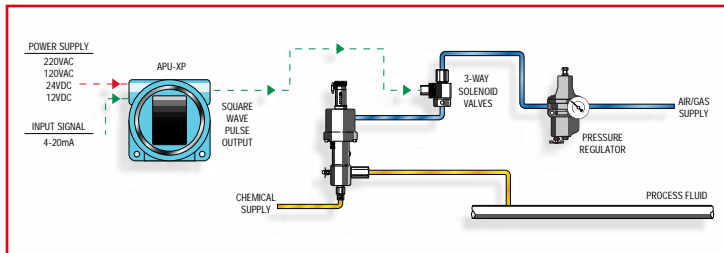
MK XIA

APU-XP AUTOMATIC PROCESSING UNIT

The APU Series AUTOMATIC PROCESSING UNIT is designed to automate pneumatic metering pumps. The APU accepts a linear 4-20 mA signal from a process flow meter and operates a pneumatic metering pump to operate proportional to the input signal for more efficient chemical usage.

This is accomplished by the use of a normally closed, 3-way solenoid valve connected to air or gas supply.

Accepts 12 VDC, 24 VDC, 120 VAC, or 220 VAC power supply.



WPC9001 ELECTRONIC PUMP CONTROLLER

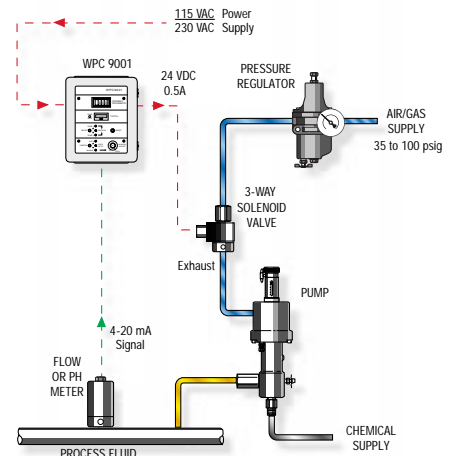
WPC-9001-XP (Nema 7)
For Hazardous Locations



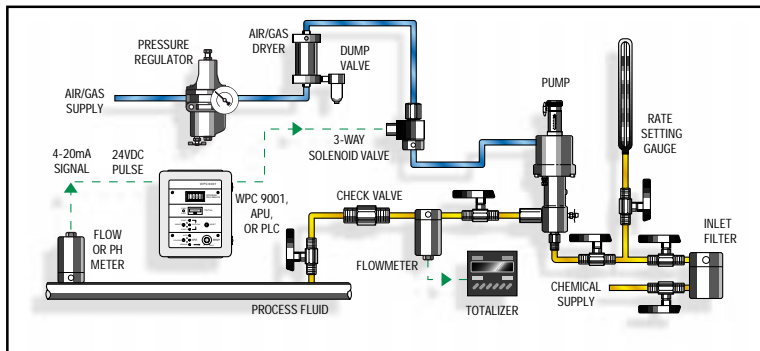
WPC-9001-GP (Nema 4x)
For General Purpose Locations

Operation

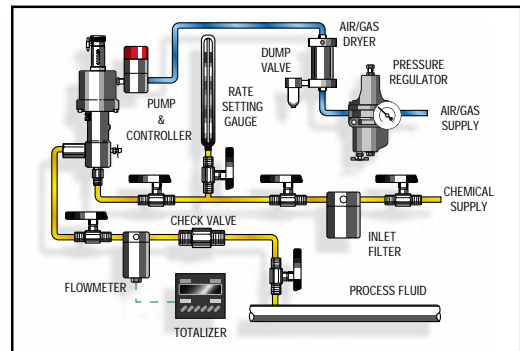
- Auto Mode - The output is 0 to 45 strokes per minute in proportion to the 4-20 mA input. The rate is field adjustable.
- Manual Mode - Field adjustable from 0 to 45 strokes per minute.
- Pump Switching Mode - With a two pump system using the optional flow switch the unit selects the standby pump when no flow signal is transmitted.
- Auto/Manual Switching Mode - With the loss of signal (signal drops below 3.5 mA for more than one minute) the unit automatically switches to manual mode.



TYPICAL INSTALLATION



FlowTracking Controller Configuration



Standard Pneumatic Controller Configuration

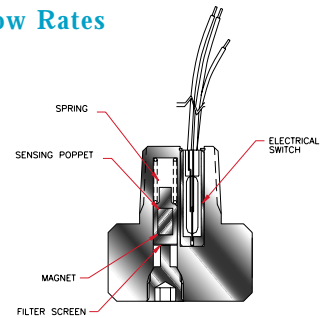
PUMP ACCESSORIES

WFS6704 MICRO FLOW SWITCH

For Detecting Increases & Decreases in Flow Rates



- Explosion Proof Class I, Division 1&2, Groups A, B, C, D
- Class II, Division 1&2, Groups E, F, G
- Fully Field Adjustable
- Operates in Any Orientation
- Miniature Compact Size
- Operating Temperature -40° F to +300° F (-40° C to +150° C)
- Operating Pressure 3000 PSIG (207 bar)
- Corrosion Resistant 316 Stainless Steel
- Shock & Vibration Resistant
- 1/4" NPT Connections



DRUM GAUGES Liquid Level/Injection Rate Gauge	
MODELS	MATERIALS
C779WS	Carbon Steel
C779WS-V	Carbon Steel - Vented
C779WS-SS	Stainless Steel
C779WS-SS-V	Stainless Steel - Vented
30216-CS-V-GPD-S	Carbon Steel
30216-S6-V-GPD-S	Stainless Steel



LIQUID CHEMICAL FILTERS 316 Stainless Steel		
MODELS	CONNECTION FILTER ELEMENT	OPTIONAL FILTER ELEMENT
LCF-10-25	1/4" NPT 25 micron, Std	1, 2, 8 microns or 100 mesh stainless steel screen
LCF-15-25	1/2" NPT 25 micron, Std	

PCV125 AL Pressure Regulator		
SENSITIVITY	FLOW RATES	MAX. PRESSURE
0.1 PSI	20SCFM	250 PSI
0.689kPa	.566m ³ /min	1724 kPa



AIR OR GAS DRYER-FILTERS Complete with Manual Drain Valve		
MODELS	FLOW RATES	MAX. PRESSURE
J-150	40SCFM	150 PSI
J-500	40SCFM	500 PSI



AUTOMATIC DUMP VALVES Used with the Air or Gas Dryer-Filters		
MODELS	BOWL	MAX. PRESSURE
ADV-150-A	Plastic	150 PSI
ADV-250-A	Steel	250 PSI



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