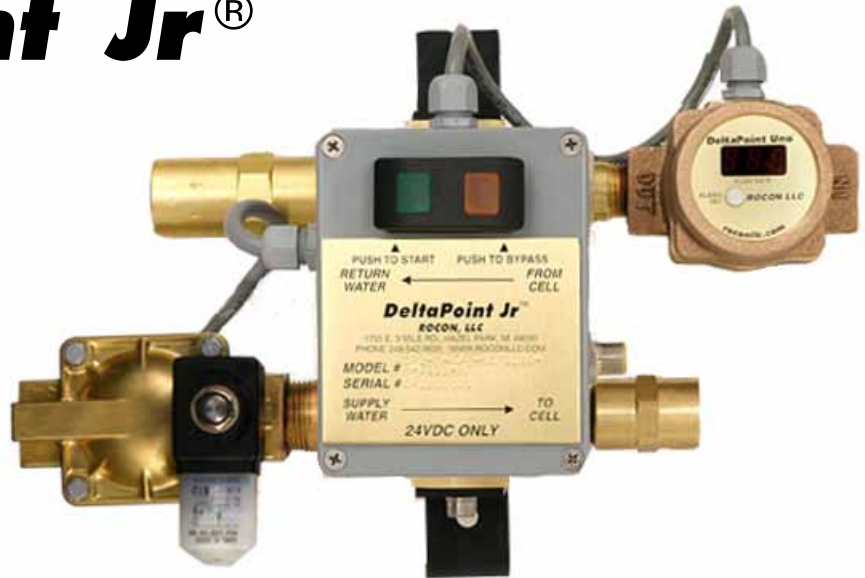


DeltaPoint Jr®

**Resistance welding
tip loss monitor
for steady flows**



Description

Deltapoint Jr®, detects cap loss / hose burst / water off in resistance welding circuits, thus assures quality welds. Monitoring robotic cells, pedestal welders or multiple work cells via vortex flow sensor in the return line from the cell, shutting water off and sending alarm to robot controllers/ PLC/monitoring systems upon fault detection. With no moving parts (sensor), the unit is unaffected by dirty water and will eliminate nuisance tripping. Stand-Alone package reduces installed cost, operating cost minimal and no training required.

Features

- Stand-Alone package reduces installed cost, operation and training cost minimal
- Sensor has no moving parts to wear, break or cause nuisance tripping
- Visual flow indication
- Toggle switch to Restart, Weld and Bypass
- Remote Shut-Off Standard
- Bypass – Electrical & Mechanical Standard
- User Programmable: Flow Rate and Alarm Set Point
- Range: 6 GPM (23 LPM), 12 GPM (45 LPM)
- Optional: Minimal Maintenance Shutoff Valves – Air operated, 2 million cycle
- Water/Glycol coolant up to 20% mix

Unit Specifications

Unit

- Pressure Drop: See Chart
- Differential Pressure limits: 5 – 80 PSID (0.3 – 5.5 Bar)
- Maximum Operation Pressure: 190 PSI (13 Bar)
- Fluid temperature limits: 35-210°F (2-99°C)
- Ambient temperature limits: 32 – 122 F (0 – 50C)
- Circuit Board Selectable: Alarm, Restart, Interrupt
- Weight: 11 Lbs (5 kg)
- Wetted material: Brass
- Electrical enclosure: Plastic
- Porting: See Chart

Flow Meter

- Accuracy: $\pm 2\%$ Full Scale flow
- Repeatability: $\pm .25\%$ of actual flow
- Response time flow: 1 second to 63% of flow change
- Material: PVDF (Kynar)
- LED visual water flow rate

Solenoid Valve

- Style: Diaphragm, 2 –way, pilot operated, NC
- Cv: 8.4
- Mechanical Bypass: Standard
- Response time: 1-1.5 seconds to shut off water*
- Material: Brass
- Seal: NBR (Buna N)

* Length of hose run from unit to weld gun effects response time.

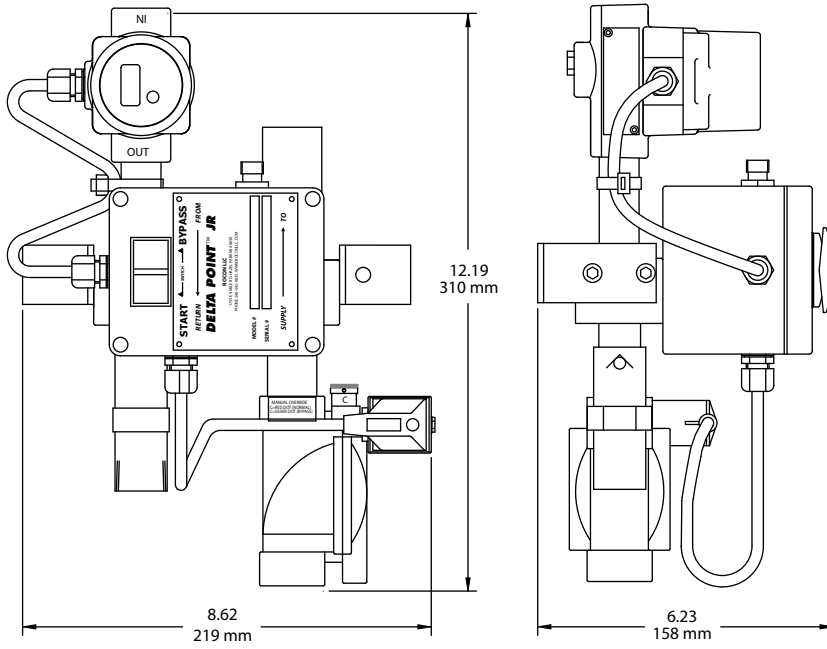
Check Valve

- Style: Piston, O ring seal
- Material: Brass
- Seal: NBR (Buna N)

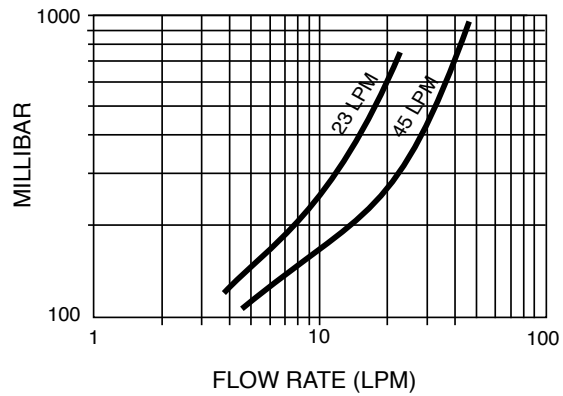
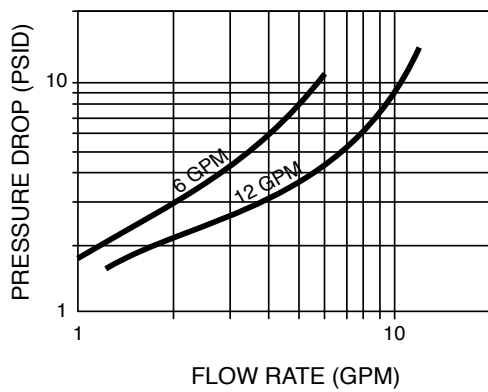
Electrical Specifications

- Available in DC version
- Input Power: 10-30 VDC @ 80 mA
- Alarm Output: SPST Solid State Relay 92 mA

DIMENSION DRAWING



UNIT PRESSURE DROP CHART



HOW TO ORDER Select appropriate symbols and build a model code number, as in example shown:

Example: DPJ - 12GM - 6 - D24AB - F N

MAX FLOW RATE		
.6 - 6 GPM (2.3 - 23 LPM)	=	6GM
1.2 - 12 GPM (4.5 - 45 LPM)	=	12GM
2.3 - 23 LPM (.6 - 6 GPM)	=	23LM
4.5 - 45 LPM (1.2 - 12 GPM)	=	45LM

PORT SIZE		
3/4" NPTF	=	6
3/4" NPTF Supply & Return AND 1/2" NPTF To and From Cell	=	6/4

Note: Both port offerings available in 6GPM or 12GPM

ELECTRICAL CONNECTOR TYPE

DC PIN CONNECTOR WIRING OPTIONS

DC 4 pin Micro		=	D24
1: Brown	+24 VDC		
2: White	Remote Reset		
	Select 1 of the 2 options:		
	0 VDC	=	A
	+24 VDC	=	B
3: Blue	0 VDC		
4: Black	Alarm Out		
	Select 1 of the 2 options:		
	0 VDC (NPN)	=	A
	+24 VDC (PNP)	=	B
DC 5 pin Micro		=	D25
1: Brown	+24 VDC		
2: White	0 VDC		
3: Blue	Chassis Ground		
4: Black	Remote Reset		
	Select 1 of the 2 options:		
	0 VDC	=	A
	+24 VDC	=	B
5: Grey	Alarm Out		
	Select 1 of the 2 options:		
	0 VDC (NPN)	=	A
	+24 VDC (PNP)	=	B
DC 6 pin Micro (Choose EOA or Proteus style)			
EOA Style		=	D26E
Proteus Style		=	D26P
1: Brown	+24 VDC		
2: White	0 VDC		
3: Blue	Chassis Ground		
4: Black	Remote Reset		
	Select 1 of the 2 options:		
	0 VDC	=	A
	+24 VDC	=	B
5: Grey	Alarm Out		
	Select 1 of the 2 options:		
	0 VDC (NPN)	=	A
	+24 VDC (PNP)	=	B
6: Pink	Remote Shutoff		
	Select 1 of the 2 options:		
	Solenoid Interrupt	=	A
	Not used	=	B

NOTE: With your DC Connector Selection, also select one EACH wiring option where provided in blue.

DPJ FACTORY USER SETTINGS

Factory Standard	=	F
User Settings	=	U

DPJ FACTORY STANDARD SETTINGS

User Menu	6 GPM	12 GPM
Restart Delay (RD)	5 seconds	5 seconds

DPJ USER SETTINGS - SETTABLE RANGES

User Menu	6 GPM	12 GPM	Available in Increments
Low Set Point Range (LS)	.3-5.5 GPM	1.5-10 GPM	.01 GPM (6 GPM unit) 0.1 GPM (12 GPM unit)
Restart Delay (RD)	0-30 seconds	0-30 seconds	5 seconds

NOTE: Factory standard settings are used by default. Consult factory for user defined settings.

OPTIONS

No Options Selected	=	N
Poppet Style Check Valve	=	V1
Air Operated Shut-Off Valve	=	V2

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