

ROCON LLC

FLOW RANGE
MAX PRESSURE

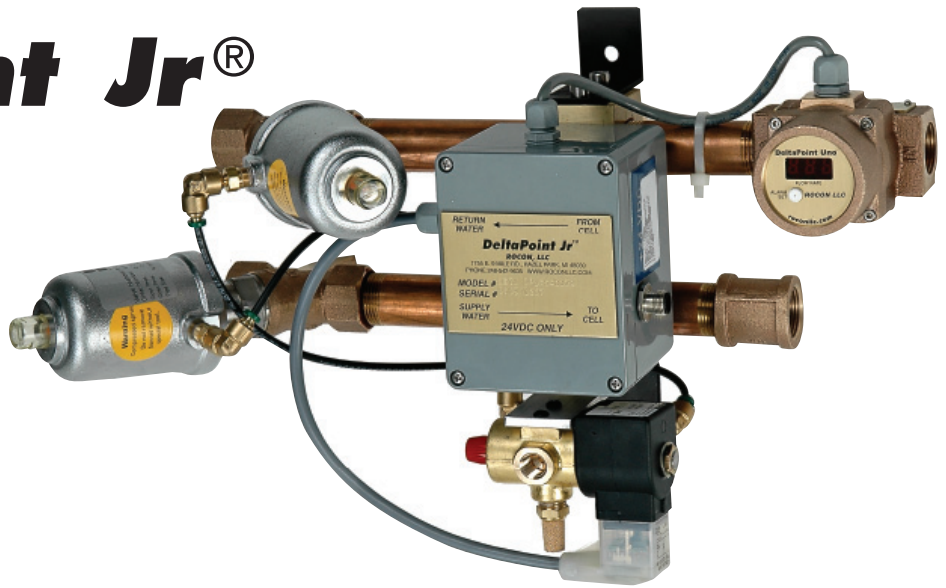
0.4-12 GPM (2-45 LPM)
190 PSI (13 BAR)

SERIES: DPR

DeltaPoint Jr®

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

**Robot Controlled
Version**



Description

DeltaPoint Jr®, detects cap loss/hose burst/water off in a resistance welding circuit, thus assuring 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. The DP Jr RC Version is controlled via the robot or PLC logic. Stand-Alone package that reduces installed, operating and training cost.

Features

- Stand Alone Package
- Controlled via Robot or PLC Logic
- Sensor has no moving parts to wear, break or cause nuisance tripping
- Visual flow indication
- Dual Alarm – Low and High
- Air Operated Shut-Off Valves – resists debris or coating
- Bypass – Air Pilot Valve Standard
- Range: 4 GPM (15 LPM), 12 GPM (45 LPM) and 25 GPM (95 LPM)
- 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: 35-185°F (2-99°C)
- Ambient temperature limits: 32 – 122 F (0 – 50C)
- Optional Solenoid ON: 0V or 24V
- Weight: 10 Lbs (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

Air Shut-Off Valve

- 2 Position - 2-Way Angle Body, NC
 - Operation Pressure: 190 PSI (13 bars)
 - Cv: 9.2
 - Visual position indicators
 - Response time: 1-1.5 seconds to shut off water.*
 - Material: Forged Brass
 - Seal: NBR (Buna N)
- *Length of hose run from unit to weld gun effects response time.

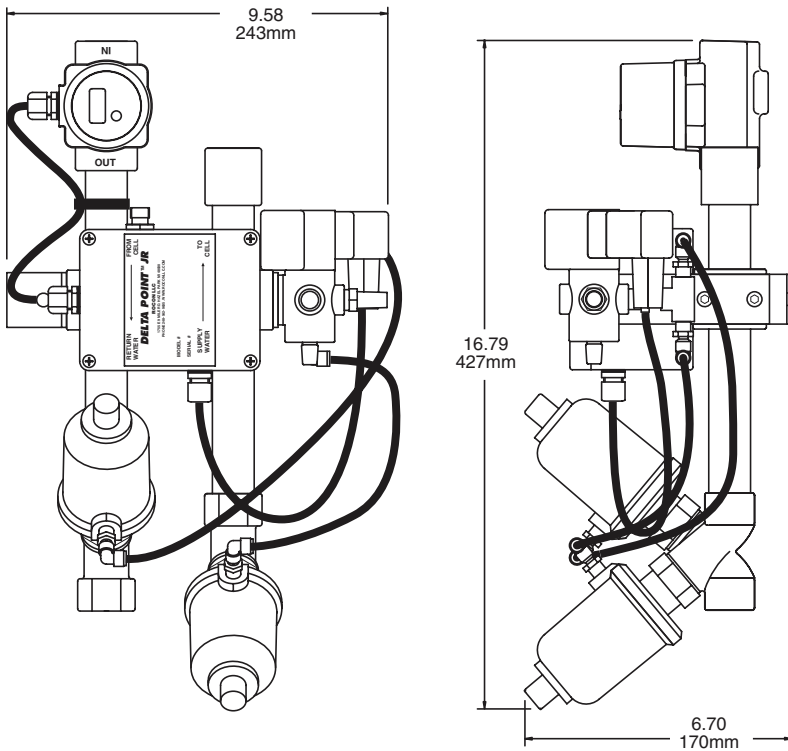
Air Pilot Solenoid Valve

- 2 Position – 3 Way Valve, NO
- 24 VDC
- Pilot PSI: 65–145 PSI (4.5-10 bar)
- Mechanical Bypass: Standard
- LED - DIN Connector

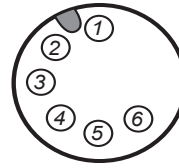
Electrical Specifications

- Input Power: 10-30 VDC @ 80 mA
- Alarm Output: SPST Solid State Relay 92 mA
- Electrical Connector: See Chart

DIMENSION DRAWING



ELECTRICAL CONNECTION



PIN 1 BROWN = +24V
 PIN 2 WHITE = OUT 2 (LOW ALARM)
 PIN 3 BLUE = DC GROUND
 PIN 4 BLACK = OUT 1 (HIGH ALARM)
 PIN 5 GRAY = VALVE ON (+24V TO TURN ON)
 PIN 6 NOT USED

Inputs

Pin 1 = +24 VDC – Power
 Pin 3 = DC Ground – Floating
 Pin 5 = Valve Control – Starts / Stops
 Water Flow to Weld Gun

Outputs

Pin 2 = Low Alarm Output – Alarm or
 OK to Weld
 Pin 4 = High Alarm Output – Alarm or
 Not Used

CABLE FOR PIN CONNECTOR

Length in Meters	Part Number
5	7402-5M

HOW TO ORDER

Select the appropriate symbols to build a model code:

EXAMPLE: **DPR** - **B-6** - **XXXXD**

FLOW SWITCH RANGE and PORT SIZE			
	Port/Pipe Size in inches NPT for Supply and Return Lines	Port/Pipe Size in inches NPT for Pipes To and From Cell	Symbol
0.4 - 4 GPM (2 - 15 LPM)	3/4	1/2	= A-6/4
0.4 - 4 GPM (2 - 15 LPM)	3/4	3/4	= A-6
1.2 - 12 GPM (5 - 45 LPM)	3/4	3/4	= B-6

ELECTRICAL
4 Digit Number assigned at Factory followed by alpha code:
Example XXXXD = DC
The 4 digit code covers: Connectors style, number of pins, wire color and function. Alarm type, restart type and any options picked.

ROCON LLC

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