

Humphrey[®]

ProCONTROL[™]

Proportional Control Valves



www.humphrey-products.com

PROCONTROL Proportional Valves

Humphrey **PROCONTROL** Proportional Valves provide superior proportional control performance, versatility, and value. Utilizing a frictionless, flat-spring armature, **PROCONTROL** achieves excellent flow characteristics and long life in a simple, compact construction.

PC3 MINIATURE

Control up to 24 LPM



**PC3
Inline**

**PC3
Manifold
Mount**

PC10 SMALL

Control up to 65 LPM



**PC10
Inline**

**PC10
Manifold
Mount**

PC30 LARGE

Control up to 300 LPM



**PC30
Inline**

**PC30
Manifold
Mount**

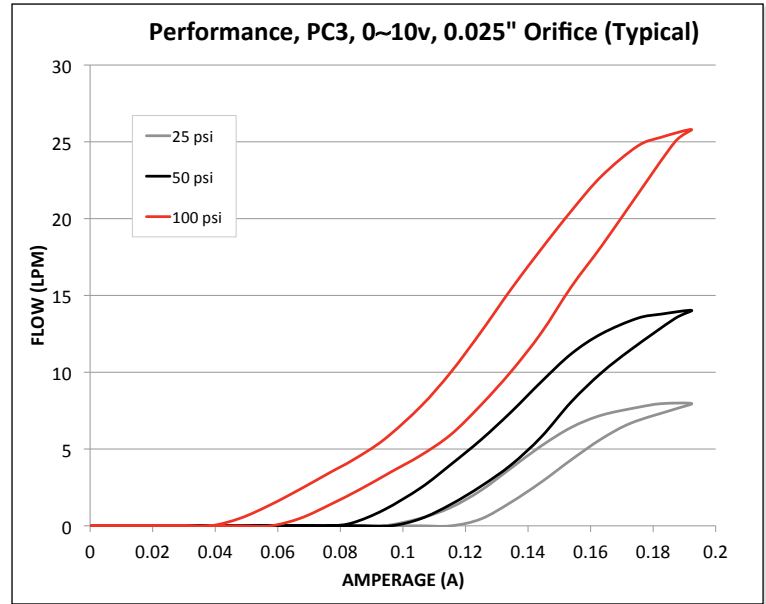
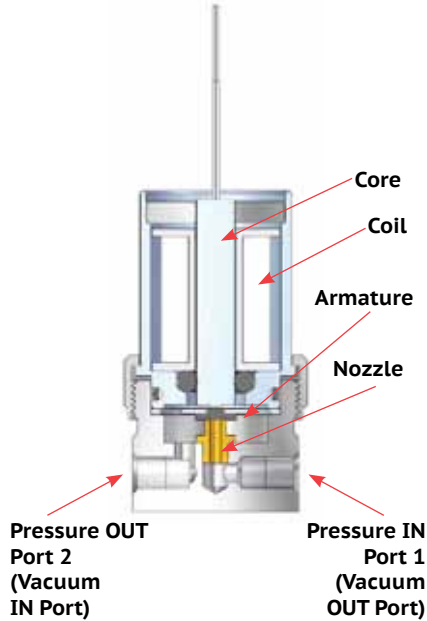
FEATURES AND BENEFITS:

- Low hysteresis throughout the range
- Excellent flow control
- Low power consumption
- Long, trouble-free life
- Quiet operation
- Compact construction
- Made in the USA
- RoHS and REACH compliant

TYPICAL APPLICATIONS:

- Selectable or dynamic control of media flow
- Control of downstream pressure
- Vacuum control applications
- Operation of small bore cylinders

PC3 Half-Sections, Specifications, Drawings & Charts

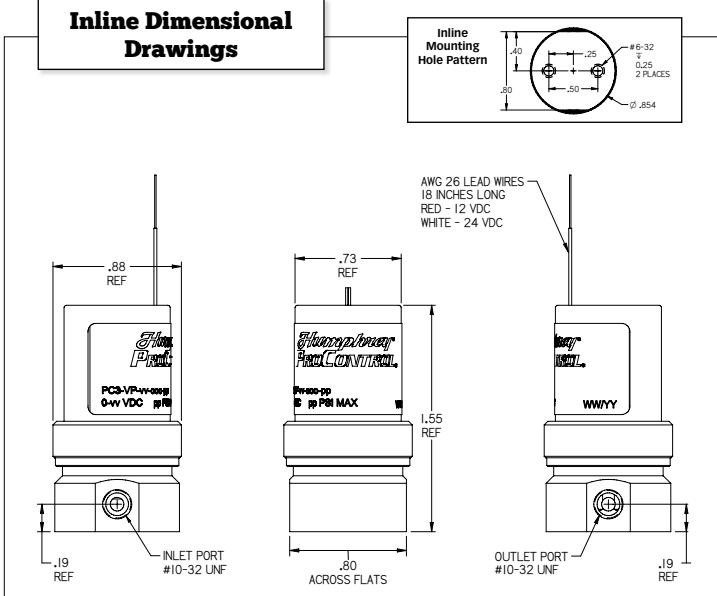


Specifications

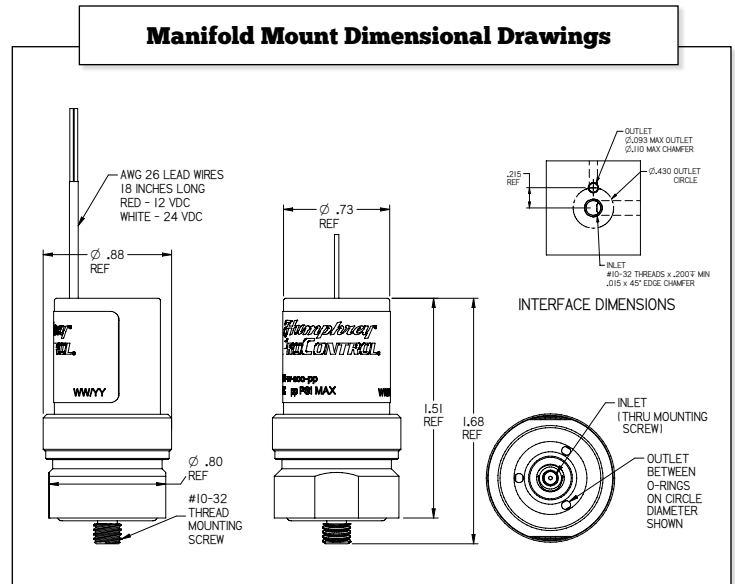
Type of Operation:	Direct Acting	Response Time (full span):	5-8 ms
Function:	2-Way, Normally Closed	Weight (lbs):	0.15
Media:	Air, Vacuum or Inert Gas	Wetted Materials:	ENP Brass, Stainless Steel, Nickel Plated Steel, FKM
Ambient Temp. Range:	-20° to 200°F	Max. Hysteresis:	10%
Max PSIG and Available Orifices:		Power Consumption (watts):	2.0
@ 25 PSIG	.025 / .040 / .060	Nominal Resistance @72°F (Ohms):	0~10V 52
@ 50 PSIG	.025 / .040		0~20V 273
@ 100 PSIG	.025	Input Current for Full Flow (mA):	0~10V 192
Maximum Flow (LPM):	24		0~20V 73
Lubrication:	Not required		
Filtration:	40 Micron		

Note: Consult factory for minimum pressure requirements and vacuum service.

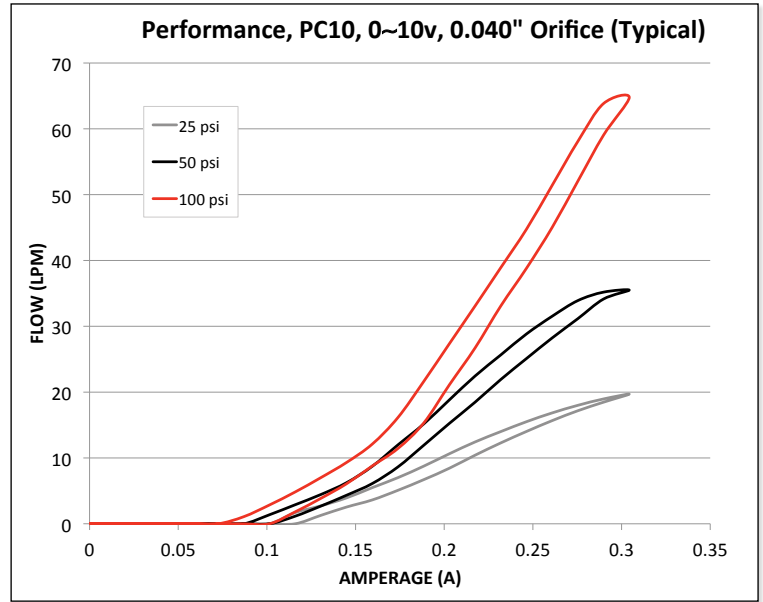
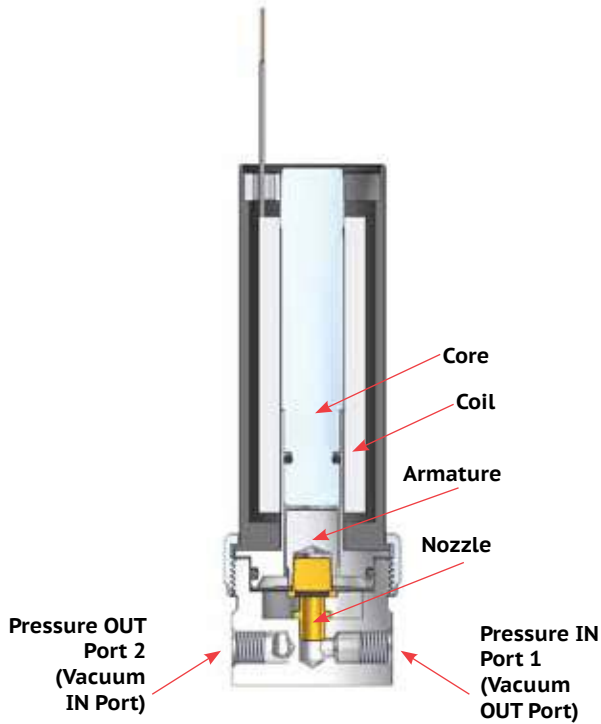
Inline Dimensional Drawings



Manifold Mount Dimensional Drawings



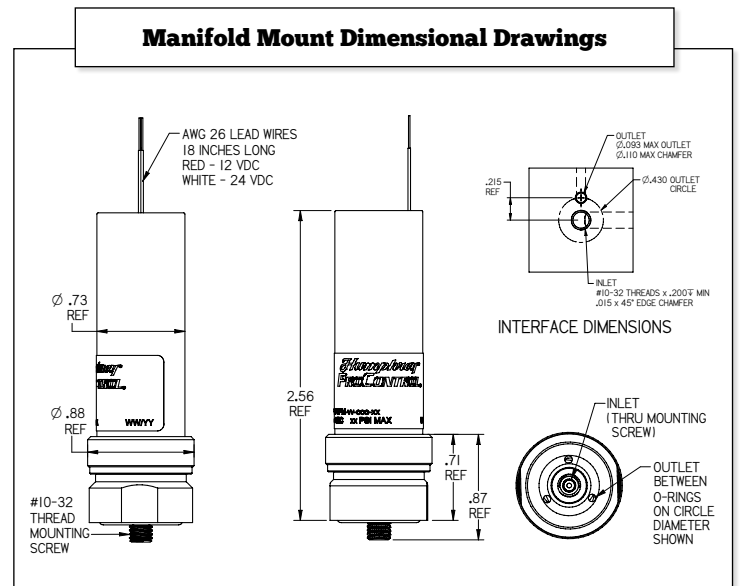
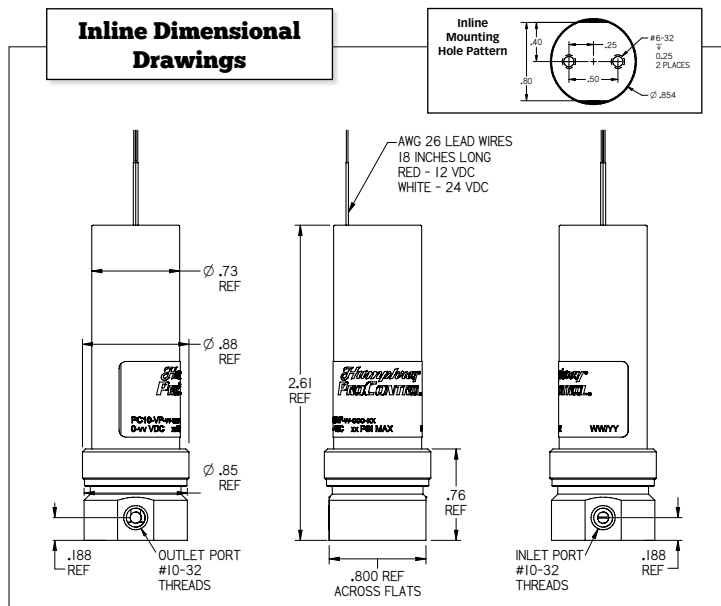
PC10 Half-Sections, Specifications, Drawings & Charts



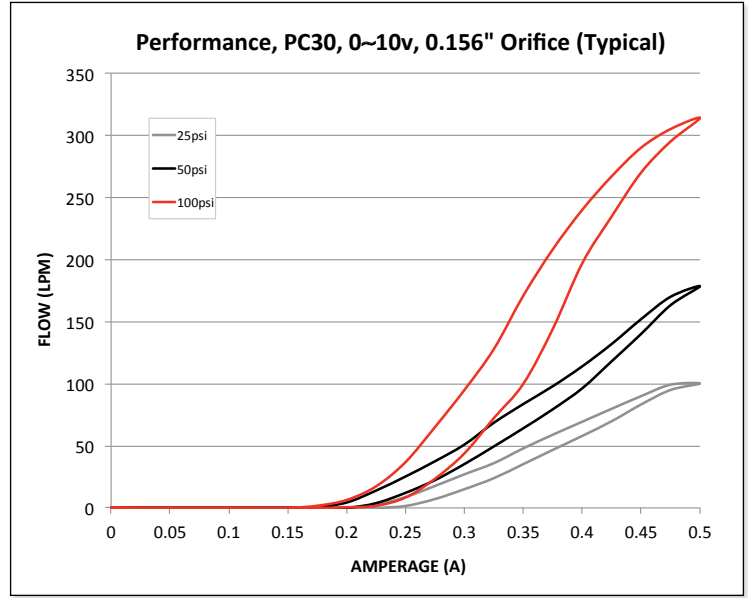
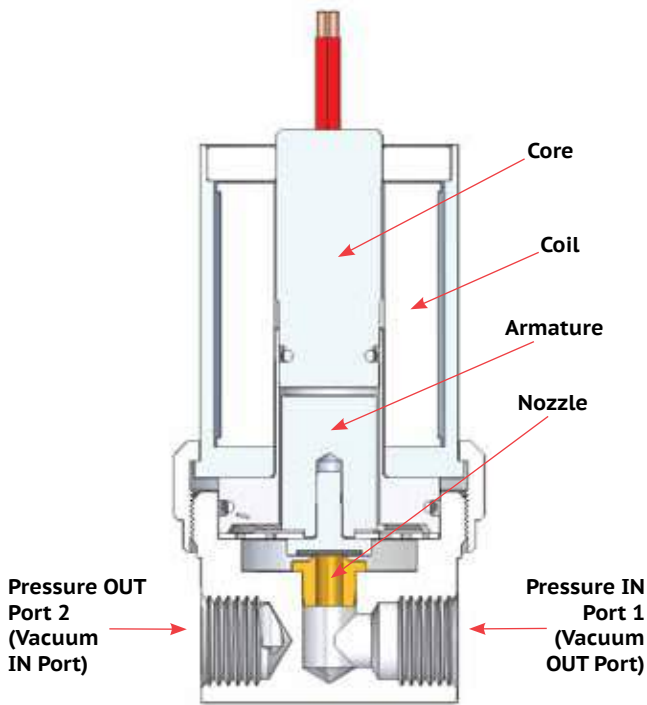
Specifications

Type of Operation:	Direct Acting	Response Time (full span):	5-8 ms
Function:	2-Way, Normally Closed	Weight (lbs):	0.4
Media:	Air, Vacuum or Inert Gas	Wetted Materials:	ENP Brass, Stainless Steel, Nickel Plated Steel, FKM
Ambient Temp. Range:	-20° to 200°F	Max. Hysteresis:	10%
Max PSIG and Available Orifices:		Power Consumption (watts):	5.8
@ 25 PSIG	.040 / .060 / .090	Nominal Resistance @72°F (Ohms):	0~10V 17
@ 50 PSIG	.040 / .060		0~20V 70
@ 100 PSIG	.040	Input Current for Full Flow (mA):	0~10V 588
Maximum Flow (LPM):	65		0~20V 285
Lubrication:	Not required		
Filtration:	40 Micron		

Note: Consult factory for minimum pressure requirements and vacuum service.



PC30 Half-Sections, Specifications, Drawings & Charts

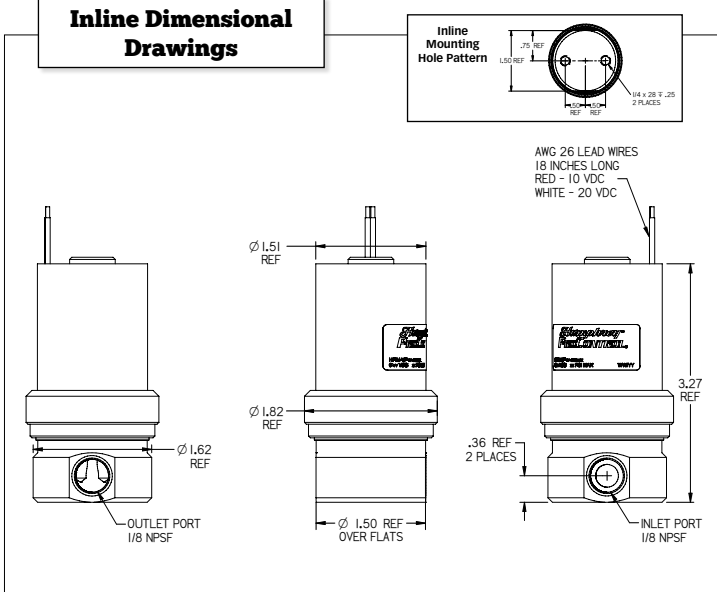


Specifications

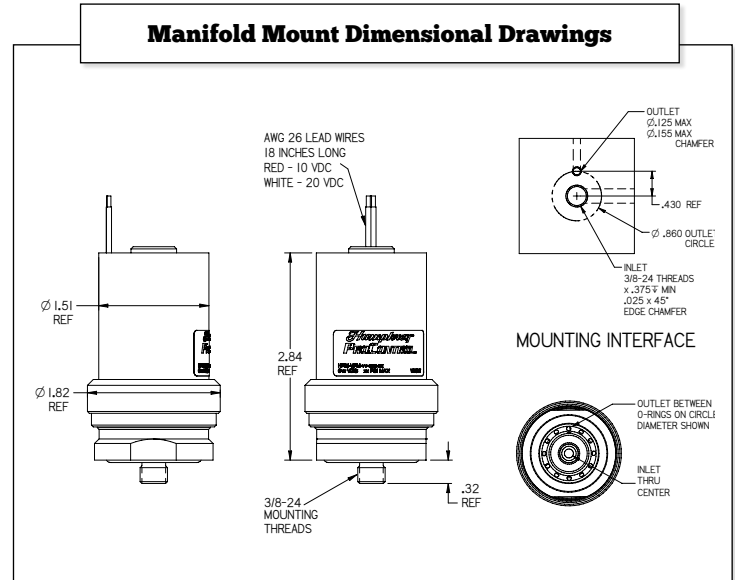
Type of Operation:	Direct Acting	Response Time (full span):	5-8 ms
Function:	2-Way, Normally Closed	Weight (lbs):	0.9
Media:	Air, Vacuum or Inert Gas	Wetted Materials:	ENP Brass, Stainless Steel, Nickel Plated Steel, FKM
Ambient Temp. Range:	-20° to 200°F	Max. Hysteresis:	10%
Max PSIG and Available Orifices:		Power Consumption (watts):	5.8
@ 25 PSIG	.156 / .188 / .250	Nominal Resistance @72°F (Ohms):	0~10V 19
@ 50 PSIG	.156 / .188		0~20V 70
@ 100 PSIG	.156	Input Current for Full Flow (mA):	0~10V 525
Maximum Flow (LPM):	300		0~20V 285
Lubrication:	Not required		
Filtration:	40 Micron		

Note: Consult factory for minimum pressure requirements and vacuum service.

Inline Dimensional Drawings




Manifold Mount Dimensional Drawings



How to Order
ProCONTROL™
PC3
Proportional Valves


PC3	VP	10	25	A0
ELECTRICAL CONNECTION V – Wire Leads + PORT TYPE P – Inline PM – Manifold	VOLTAGE 10 - 0 to 10 VDC 20 - 0 to 20 VDC	ORIFICE SIZE 25 - 0.025" (100 PSIG max) 40 - 0.040" (50 PSIG max) 60 - 0.060" (25 PSIG max)		MAXIMUM PRESSURE* 25 - 25 PSIG 50 - 50 PSIG A0 - 100 PSIG

Order Example: PC3-VP-10-25-A0 

* Corresponding Maximum PSIG Orifice Size
25, 50, A0 – 0.025" orifice
25, 50 – 0.040" orifice
25 – 0.060" orifice

How to Order
ProCONTROL™
PC10
Proportional Valves


PC10	VP	20	60	50
ELECTRICAL CONNECTION V – Wire Leads + PORT TYPE P – Inline PM – Manifold	VOLTAGE 10 - 0 to 10 VDC 20 - 0 to 20 VDC	ORIFICE SIZE 40 - 0.040" (100 PSIG max) 60 - 0.060" (50 PSIG max) 90 - 0.090" (25 PSIG max)		MAXIMUM PRESSURE* 25 - 25 PSIG 50 - 50 PSIG A0 - 100 PSIG

Order Example: PC10-VP-20-60-50 

* Corresponding Maximum PSIG Orifice Size
25, 50, A0 – 0.040" orifice
25, 50 – 0.060" orifice
25 – 0.090" orifice

How to Order
ProCONTROL™
PC30
Proportional Valves

PC30	VPM	20	156	A0
ELECTRICAL CONNECTION V – Wire Leads + PORT TYPE P – Inline PM – Manifold	VOLTAGE 10 - 0 to 10 VDC 20 - 0 to 20 VDC	ORIFICE SIZE 156 - 0.156" (100 PSIG max) 188 - 0.188" (50 PSIG max) 250 - 0.250" (25 PSIG max)		MAXIMUM PRESSURE* 25 - 25 PSIG 50 - 50 PSIG A0 - 100 PSIG

Order Example: PC30-VPM-20-156-A0 

* Corresponding Maximum PSIG Orifice Size
25, 50, A0 – 0.156" orifice
25, 50 – 0.188" orifice
25 – 0.250" orifice



While the medical, analytical instrumentation and testing/measurement applications have been common, **ProCONTROL** valves are suitable for most market segments, including **ProCONTROL** pressure regulators.



The flexible valve design can be tailored to meet specific requirements, via Humphrey Engineered Solutions.



For more information on Engineered Solutions, please visit www.humphrey-products.com.

Humphrey

A privately owned US company since 1901.

www.humphrey-products.com

Humphrey Products Company • P.O. Box 2008 • Kalamazoo, MI 49003 USA
P.269.381.5500 • F.269.381.4113

PCPVa-2015 Copyright © 2015 Humphrey Products Company, Inc. Printed in U.S.A.