

iDP Valves

300 Series, 3-Port Inline Inert Diaphragm-Poppet Valve



Humphrey

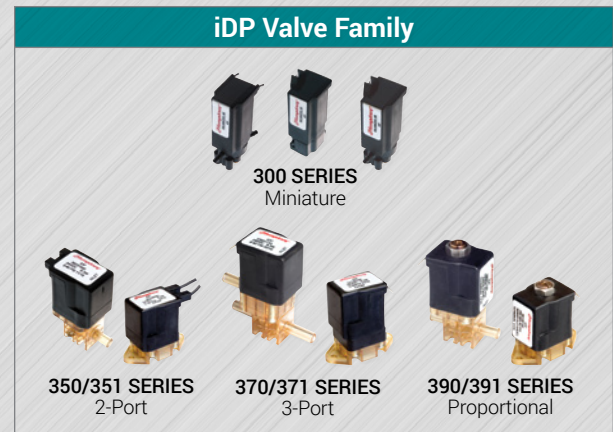
Introducing Humphrey's 300 series iDP 3-way inline valve. Inert solenoid valves are designed to control aggressive media in most harsh environments. When size and space require a more compact design consider the 300 series iDP. The flexing diaphragm-poppet design isolates the solenoid from media ensuring sustained performance and long life.

FEATURES

- Inert wetted materials provide broad chemical compatibility:
 - Body/Fitting Elements – PEEK (Polyethylethylketone)
 - Diaphragm-Poppet/Seals – Viton®-GF or EPDM
- Max pressure: 40 PSI [2.76 bar] standard
- Flow rates @ 40 PSI: 50 SLPM air or 1.45 SLPM water
- Coil encapsulation protects from corrosive external fluid exposure.
- Various port types and coil inputs provide design flexibility.
- Robust design; Tested to beyond 20 million cycles.
- 300 Series, 2-Port Inline and Manifold Valves also available.



300
3-Port
Inline, Direct Piping



ACCESS ONLINE CATALOG
Obtain 3D CAD Download, CAD Viewer,
2D Dimensional Drawings, Product Images,
DataSheet PDFs, Product Accessories



How to Order

iDP 300 Series, 3-Port Inline

300	7	3	1	3	0	30073130
MODEL 300	BODY 7. Viton®GF* 8. EPDM	BODY STYLE (IN-OUT) 3. 3-Port Inline	PORT TYPES 1. 1/16" Tube Barbs 2. 3/32" Tube Barbs 3. 1/8" Tube Barbs	SOLENOID 1. 12 VDC – Pin Connector** 3. 24 VDC – Pin Connector** 5. 12 VDC – Wire Leads 7. 24 VDC – Wire Leads	ORDER EXAMPLE	

* Highly Fluorinated Viton®

** Mating Option: Tyco 640442-2
Molex 22-01-2027

iDP Valves

300 Series, 3-Port Inline

SPECIFICATIONS	IDP 300 3-PORT INLINE
TYPE OF OPERATION	Direct Solenoid, Media Separated
NUMBER OF POSITIONS	2
FUNCTION	Normally Closed
MEDIA	Aggressive Liquids and Gases
WETTED PARTS: BODY AND DIAPHRAGM-POPPET	PEEK, Viton®GF or EPDM
PRESSURE RANGE: DIVERTER – PSI (BAR)	Vacuum to 40 PSI (2.76)
REVERSE PRESSURE RANGE: SELECTOR – PSI (BAR)	Vacuum to 10 PSI (0.7)
PIPING TYPE	Inline, Direct Piping
WATER FLOW @ 40 PSI (TYP)	1.45 SLPM
AIR FLOW @ 40 PSI (TYP)	50 SLPM
FLUID TEMPERATURE	-20°C to 95°C
AMBIENT TEMPERATURE	-20°C to 65°C
CYCLES/MIN	300
RESPONSE TIME @ 40 PSI (TYP)	25 msec
PORT SIZE	1/16", 3/32" or 1/8"
ELECTRICAL ENTRY	Plug-In or Lead Wires
VOLTAGES	12VDC, 24VDC
VOLTAGE TOLERANCE	±10%
POWER CONSUMPTION (WATTS)	3.5
WEIGHT	0.22 lbs

300 SERIES, 3-WAY INTERNAL VOLUMES	1/16" Barb Body	3/32" Barb Body	1/8" Barb Body
UNACTUATED (COMMON & NO)	0.010in ³	0.012in ³	0.014in ³
ACTUATED (COMMON & NC)	0.009in ³	0.010in ³	0.022in ³

MEDIA COMPATIBILITY

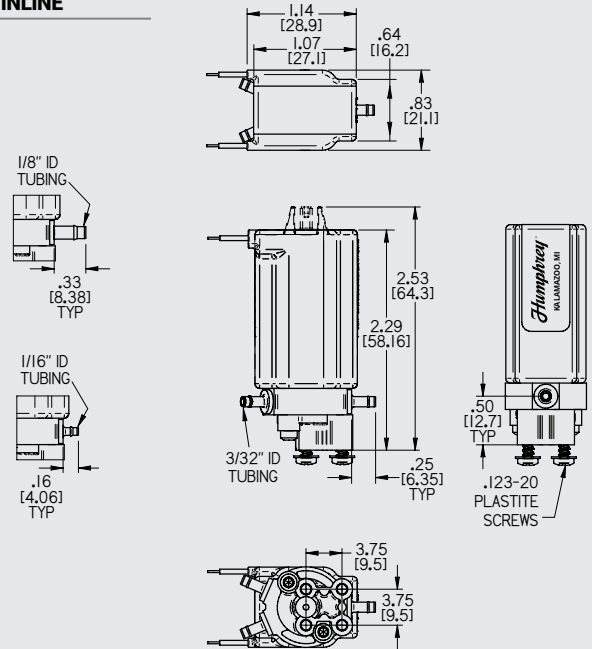
- Citric Acid
- Formaldehyde
- Biological Solutions
- Sodium Hypochlorite
- Dextrose/Sugars
- Dialysate
- Hydrogen Peroxide
- Acetic Acid
- Bleach/Lye
- Most aggressive medias

APPLICATIONS & MARKETS

- Kidney Dialysis
- Analytical Chemistry
- Diagnostic Systems
- Agent Detection
- Environmental Monitoring
- Food and Beverage
- Gaseous Flow Control
- Water Purification
- Clinical Diagnostics

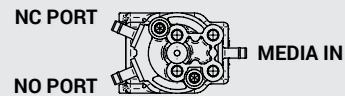
DIMENSIONAL DRAWINGS

300 3-PORT INLINE

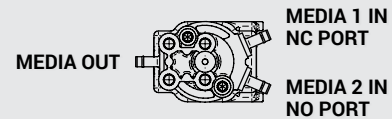


300 Series 3-port may function either as a diverter valve or selector valve at 10 PSI.

As a **DIVERTER VALVE** (up to 40 PSI inlet)



As a **SELECTOR VALVE** (up to 10 PSI either inlet)



[] = mm

RECOMMENDED MATING ELECTRICAL CONNECTION || For Pins: Tyco 640442-2; Molex 22-01-2027
Lead Wires: Connect to 22 AWG x 24" length

Certified: ISO 9001:2015

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Printed in U.S.A.
LDSIDP3003P20

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