

DESCRIPTION

The R-K DDV series direct operating diaphragm valve features a compact thermoplastic valve designed for most harsh chemicals, DI water and high purity applications. Double diaphragms (primary: Teflon, back-up: reinforced EPDM). Pneumatic control to open and spring to close. No metal contact with fluid. High Cv rating.

Direct acting full flow with top entry for easy maintenance and minimum water hammer. The standard valve is normally closed (apply air to open). Normally open valve is also available upon request.

R-K DDV SERIES DIRECT OPERATING DIAPHRAGM VALVE



KEY FEATURES

- Direct operating diaphragm valve
- Double diaphragms (primary: Teflon, back-up: reinforced EPDM)
- Pneumatic control to open and spring to close
- No metal contact with fluid
- High Cv rating
- Direct acting full flow with top entry for easy maintenance and minimum water hammer. The standard valve is normally closed (apply air to open). Normally open valve is also available upon request.

VALVE BODY MATERIALS:

- PVC Type 1, Grade 1
- Polypropylene
- PVDF
- Teflon

Diaphragm	Primary: Teflon Back-up: EPDM
Seal	EPDM VITON KALREZ

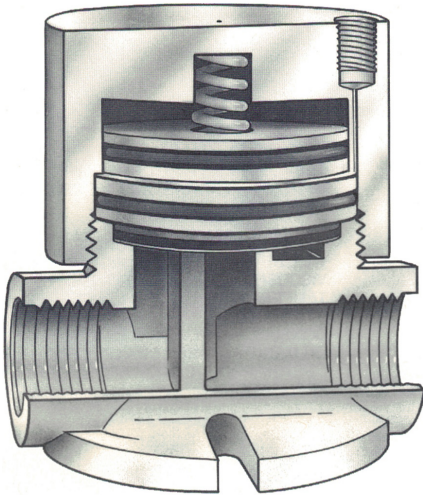
SIZES & PORTING

Valve sizes: 1/4", 1/2", 3/4", 1.0".

Valve ports

1/4" to 1" Valve FNPT
All valves are fully ported

Mounting method: (4) 1/4"-20 tapped holes for standard machined valve body. (1/4" only)
(2) cut-out slots on molded valve body. (1/2" to 1.00")



PRESSURE & TEMPERATURE RATINGS:

Operating Pressure: 10 to 100 PSIG
Air actuating pressure: 25 to 80 PSIG

Temperature Range

- PVC: 0°F to 140°F
- POLYPRO: 0°F to 180°F
- PVDF: 0°F to 280°F
- Teflon: 0°F to 340°F

SIX MODELS TO CHOOSE FROM

Type 1	Normally Closed	Most common configuration. Air pressure to the 1/8" top port opens the valve. When pressure is removed, the spring closes it. Fail-safe closed
Type 2	Normally Open	Air pressure to the 1/8" top port closes the valve. When pressure is removed, the spring returns it to full open. Fail-safe open

The chart below will specify R - K standard valves regarding valve size, valve material, and seal material.
 For special orders, please consult the factory for pricing and delivery information.

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VALVE SIZE

25 = 1/4"
 50 = 1/2"
 75 = 3/4"
 100 = 1.0"
 150 = 1.5"
 200 = 2.0"

MATERIAL

1 = PVC
 2 = POLYPRO
 3 = PVDF
 4 = TEFLON
 5 = OTHER (Please specify)

SEALS

E = EPDM
 V = VITON
 K = KALREZ
 O = OTHER (Please specify)

X = MOLDED BODY
 (1/2", 3/4", 1" ONLY)

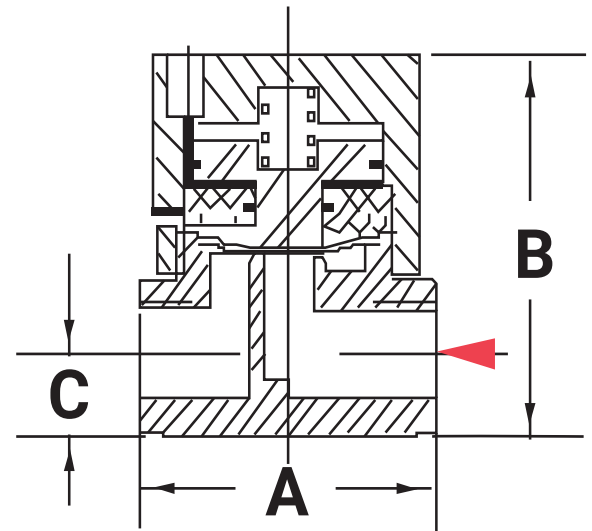
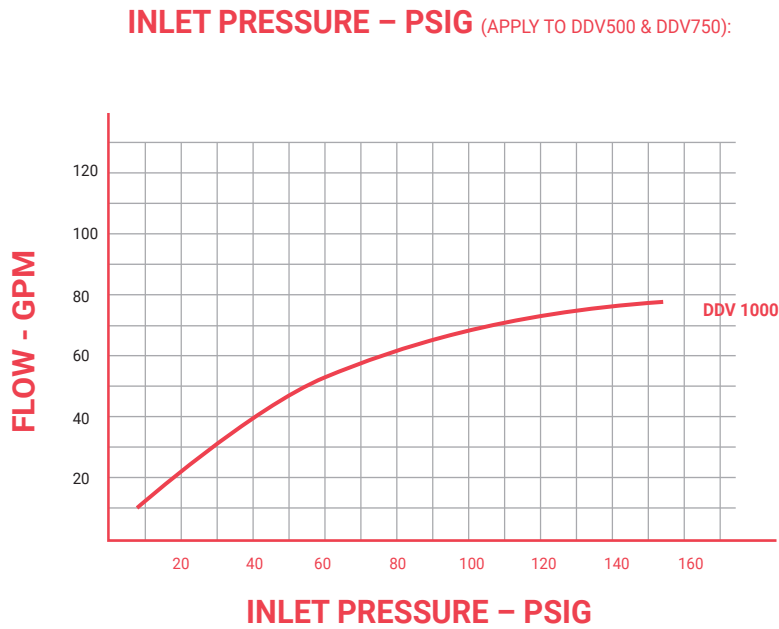
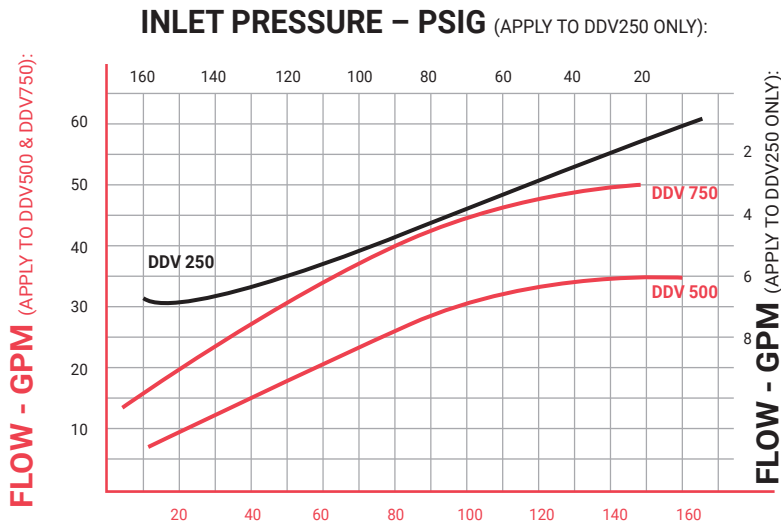
VALVE TYPE

1 = NORMALLY CLOSED
 2 = NORMALLY OPEN

ENGINEERING & PERFORMANCE DATA

NOTES

- Test data was performed with 68°F water and 160 PSIG maximum pressure.
- Performance curves may change with higher viscosity liquid and/or higher temperature.
- Customers should consult sales reps or the manufacturer for custom products or special applications.



DIMENSIONAL DATA

DIMENSIONS IN INCHES

() MOLDED BODY DIM

Valve size	Ports	A	B	C	Cv	Back Press	Min. Air Press.
1/4"	FNPT	1.5	2	0.38	1.82	40	25
1/2"	FNPT	(2.9)	(2.96)	(0.7)	3.68	80	30
3/4"	FNPT	(3.3)	(3.62)	(0.8)	5.76	80	40
1.0"	FNPT	(3.9)	(4.97)	(0.9)	9.13	60	40