

PATENT NO. 4,276,902

# **NPR**

### DESIGN FEATURES

The R-K NPR series pilot operated (remote) pressure regulator is ideal for hard to reach places and for situations where instant fluid pressure changes are needed (such as spraying or rinsing applications). When the valve is installed the pressure can be adjusted from 5-100 P.S.I. with an air pressure regulator to protect the system from pressure changes. It will provide an accurate outlet flow if a series of pressure regulators are required for the system or operation.

Wide working pressure range (5 to 100 PSIG)

Top entry for easy in-line maintenance and minimum water hammer.

Air-to-open, spring to close.

Molded bodies are standard for 1/2", 3/4" and 1" valves. Suitable for most harsh chemical applications.

# PILOT OPERATED PRESSURE REGULATOR

# SPECIFICATIONS

Upstream Pressure Vacuum to 150 PSIG

Air Actuating Pressure 5 to 100 PSIG

Regulated Pressure 5 to 100 PSIG

PVC Type 1, Grade 1 Material Valve Body

Polypropylene

**PVDF** Teflon

Seal **EPDM** 

> VITON KALREZ

Mounting method

Temperature Range

0 F to 140 F for PVC

0 F to 180 F for POLYPRO

0 F to 280 F for PVDF

0 F to 340 F for TEFLON

Valve ports 1/4" to 1" Valve FNPT

1.5" to 2" Valve MPT

All valves are fully ported

(4) 1/4" -20 tapped holes for

standard machined valve body

(1/4" to 1.00")

(2) Cut-out slots on molded valve body (1/2" to 1")

# ORDER INFORMATION

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.

#### NPR - X X X - X X X = MOLDED BODY VALVE SIZE -25 = 1/4" (1/2"-3/4"-1" ONLY) MATERIAL -SEALS $50 = 1/2^{\circ}$ 1 = PVCE = EPDM75 = 3/4° 2 = POLYPRO V = VITON 100 = 1.0" 3 = PVDFK = KALREZ 150 = 1.5° 4 = TEFLON O = OTHER (Please specify) 200 = 2.0" 5 = OTHER (Please specify)

R-K INDUSTRIES

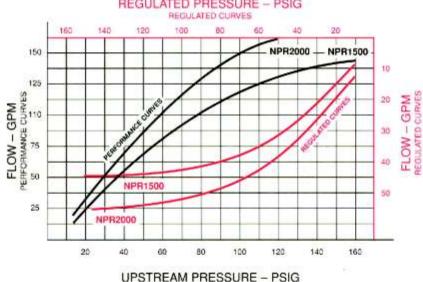


# **ENGINEERING & PERFORMANCE DATA**

## REGULATED PRESSURE - PSIG REGULATED CURVES 160 140 100 60 60 NPR1000 50 PERFORMANCE CURVES NPR500 FLOW - GPM **NPR750 NPR750** 30 NPR1000 **NPR500** 10 160 UPSTREAM PRESSURE - PSIG

Performance curves show the flow rate of NPR valves with piston seal fully open. Regulated curves show the flow rate of NPR valves at the points of pre-set downstream pressure.

# REGULATED PRESSURE - PSIG



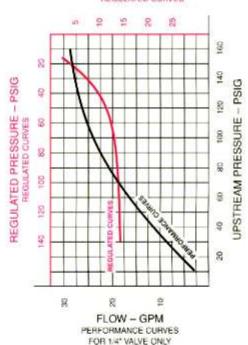
# NOTES

TEST DATA WAS PERFORMED WITH 68 DEGREE F WATER, AND 160 PSIG MAXIMUM PRESSURE.

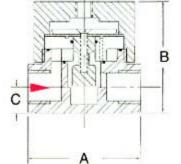
THESE PERFORMANCE CURVES WILL BE CHANGED WITH HIGHER VISCOSITY LIQUID AND/OR HIGHER **TEMPERATURE** 

CONSULT YOUR LOCAL SALES REP OR MANUFACTURER DIRECTLY FOR CUSTOM PRODUCTS OR SPECIAL APPLICATIONS.

#### FLOW - GPM REGULATED CURVES



# **DIMENSIONAL DATA**



1/2" TO 1.0" VALVE STYLE

DIMENSIONS IN INCHES

( ) MOLDED BODY DIM

Valve size	Ports	Α	В	С	Cv
1/4"	FNPT	2.00	1.90	.5	.58
1/2*	FNPT	(2.90)	(2.60)	(.7)	2.85
3/4*	FNPT	(3.30)	(3.30)	(.8)	3.12
1.0*	FNPT	(3.90)	(4.00)	(.9)	4.28
1.5*	MPT	5.50	5.40	1.5	15.8*
2.0*	MPT	6.00	6.00	1.7	21.1*

(\*) Cv value @ 150 GPM

