

# MRB

## DESIGN FEATURES

The R-K MRB series pressure relief valve is a 2-port valve designed to relieve excess pressure that may occur in the line or system even with back pressure or head pressure on the downstream side. Adjust the threaded stem to obtain the selected line or tank relief pressure. An outlet (tee) may be required on the inlet side of the valve. The valve starts to open as line pressure approaches set pressure until fully open. The valve can be set to relieve excess pressure between 10-80 P.S.I. The 1/4" valve is also available with a relief range of 60-125 P.S.I. It's designed so there is no metal contact with the fluid and top entry makes in-line maintenance easy. Can be factory pre-set upon request. Controlled pressure setting up to 100 P.S.I. available on request.

## PRESSURE RELIEF VALVE

### SPECIFICATIONS

Upstream Pressure	Vacuum to 150 PSIG	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
Relief Pressure	10 to 80 PSIG standard Consult factory for higher relief requirements	Valve ports	1/4" to 1" Valve FNPT 1.5" to 4" Valve MPT All valves are fully ported
Pressure differential	Plus or Minus 5 PSIG from any pre-set pressure relief point.	Mounting method	(4) 1/4" -20 tapped holes for standard machined valve body. (1/4" to 1.00")
Material	Valve Body PVC Type 1, Grade 1 Polypropylene PVDF Teflon		
Seal	EPDM VITON KALREZ		

### 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.

MRB - X X X - X		
VALVE SIZE	MATERIAL	SEALS
25 = 1/4"	1 = PVC	E = EPDM
50 = 1/2"	2 = POLYPRO	V = VITON
75 = 3/4"	3 = PVDF	K = KALREZ
100 = 1.0"	4 = TEFLON	O = OTHER (Please specify)
150 = 1.5"	5 = OTHER (Please specify)	
200 = 2.0"		
300 = 3.0"		
400 = 4.0"		

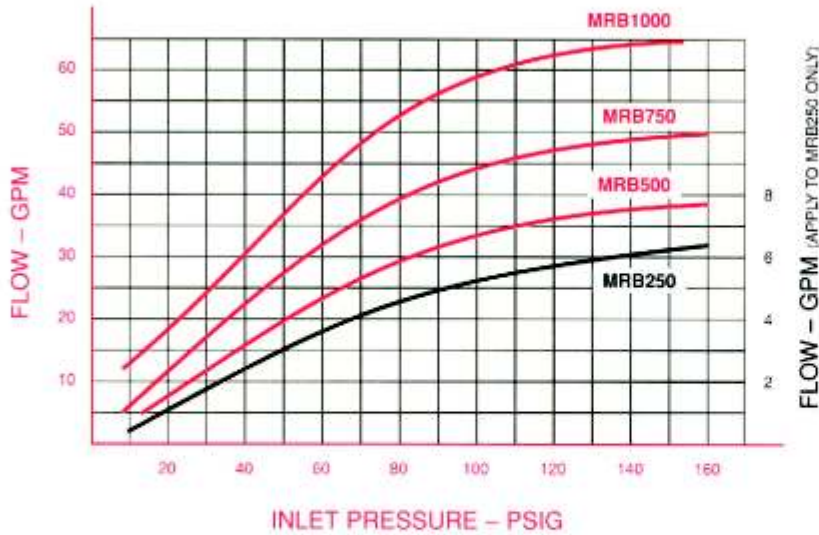
**R-K INDUSTRIES**



1120 E. LOCUST STREET  
ONTARIO, CA 91761

(909) 947-5227 • FAX: (909) 947-3039 • <http://www.rkvalve.com>

# ENGINEERING & PERFORMANCE DATA



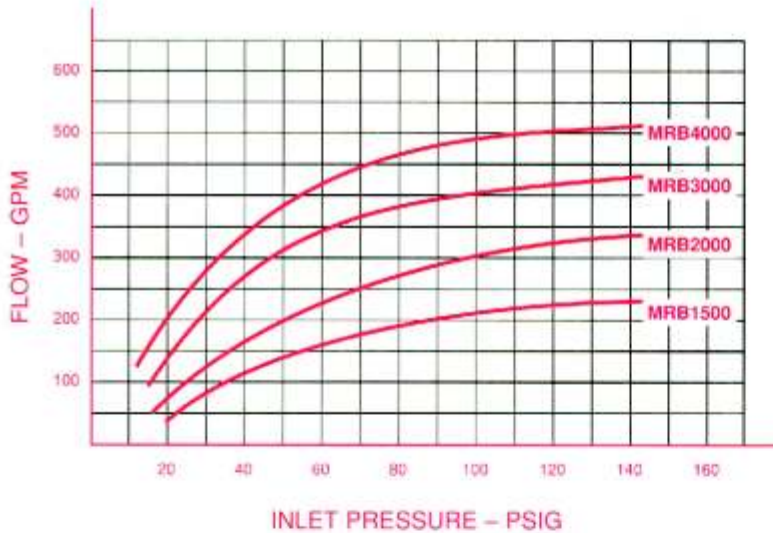
## NOTES

THE PERFORMANCE CURVES SHOW THE FLOW RATE OF MRB VALVES WITH THE VALVE FULLY OPEN AND 100% FLOW THRU THE VALVE. THESE CURVES WILL CHANGE DEPENDING ON THE FLOW THROUGH THE SYSTEM AT EACH DIFFERENT SET POINT.

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

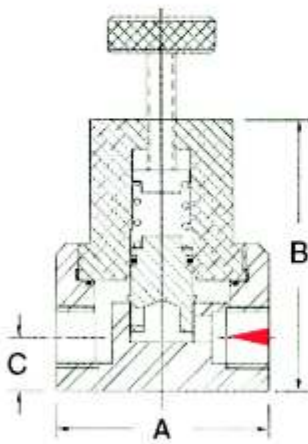
THESE PERFORMANCE CURVES WILL BE CHANGED WITH HIGHER VISCOSITY LIQUID AND/OR HIGHER TEMPERATURE.

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



## DIMENSIONAL DATA

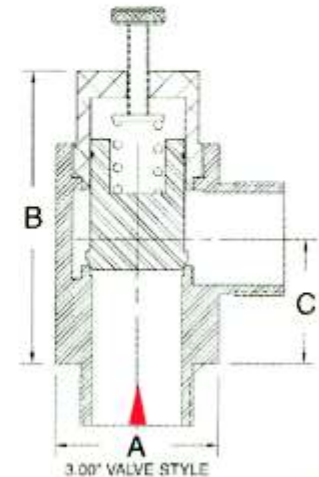
DIMENSIONS IN INCHES



1/4" TO 2.00" VALVE STYLE

Valve size	Ports	A	B	C	Cv
1/4"	FNPT	2.00	1.80	.5	.58
1/2"	FNPT	3	2.5	.7	2.87
3/4"	FNPT	3.5	3	.9	3.31
1.0"	FNPT	4	3.5	1.1	4.32
1.5"	MPT	5.0	4.7	1.5	16.4*
2.0"	MPT	6.0	5.5	1.7	21.6*
3.0"	MPT	5.0	6.75	3.75	32.2*
4.0"	MPT	6.0	7.50	4.00	37.4*

(\* ) Cv value @ 150GPM



3.00" VALVE STYLE

**R-K INDUSTRIES**



1130 E. LOCUST STREET  
ONTARIO, CA 91761

(909) 947-8227 • FAX: (909) 947-3039 • <http://www.rkvalve.com>