

## DESCRIPTION

The R-K NLM series valve features a compact valve designed to be used in places where no lubrication is required or permitted. Minimal actuation pressure with the hand or knee allows one or both hands to be free to handle the parts. The patented valve is designed so there is no metal contact with the fluid. Automatic fail-safe shut-off, directing full flow and top entry for easy maintenance makes this an ideal valve for most manual applications. A Teflon wiper ring prevents dirt from entering the valve.

It is ideal for harsh chemicals, DI water and other high purity applications. The standard valve is normally closed, i.e., push-to-open, release-to-close. Normally open configuration is also available upon request.

## R-K NLM SERIES MANUAL OPERATED VALVE



## KEY FEATURES

- No lubrication required - Designed for applications where lubrication is not required or permitted
- Minimal activation pressure - Operates with minimum hand, foot, or knee pressure
- Hands-free capability - Allows one or both hands to be free to handle parts
- Patented no-contact design - No metal contact with fluid prevents contamination
- Dirt protection - Teflon wiper ring prevents dirt entry through valve top
- Automatic fail-safe shut-off - Built-in safety feature

## VALVE BODY MATERIALS:

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

### Seal Options

- EPDM,
- VITON,
- KALREZ

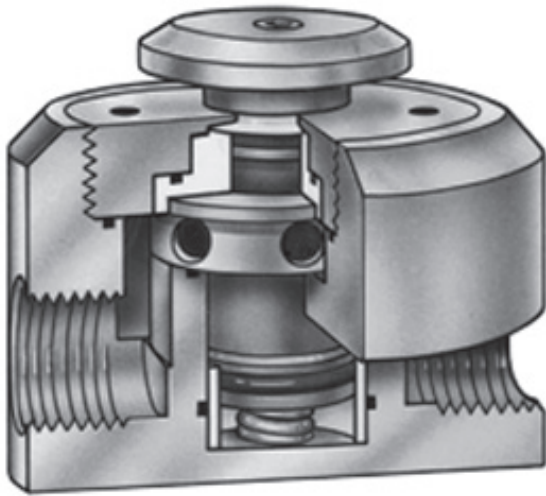
## SIZES & PORTING

**Valve Sizes:** ¼", ½", ¾", 1", 1½", 2",

### Port Types:

¼" to 2" valve FNPT  
1.5" to 2" valve MPT  
All valves are fully ported

**Mounting:** (4) ¼" -20 tapped holes for standard machined valve body (¼" to 1.30")



**PATENT NO: 4,267,861**

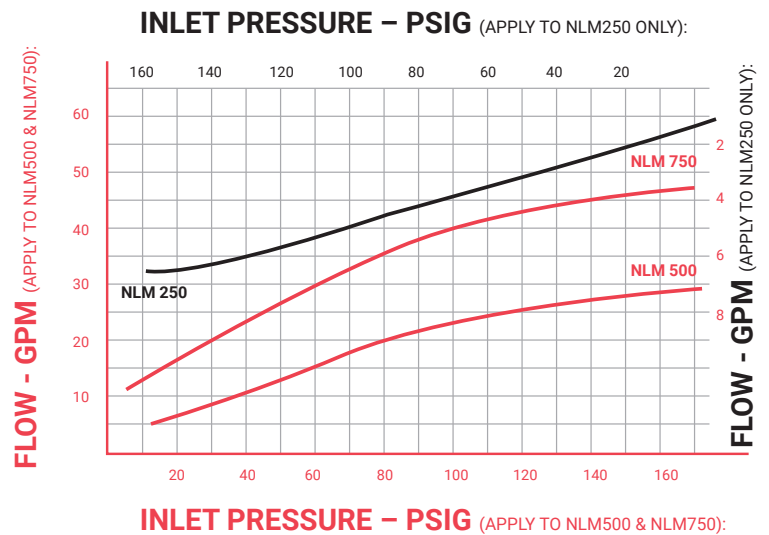
## PRESSURE & TEMPERATURE RATINGS:

**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 230°F for PVDF
- 0°F to 340°F for Teflon

## ENGINEERING & PERFORMANCE DATA



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.

## NLM - X X X - XX

### VALVE SIZE

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

### MATERIAL

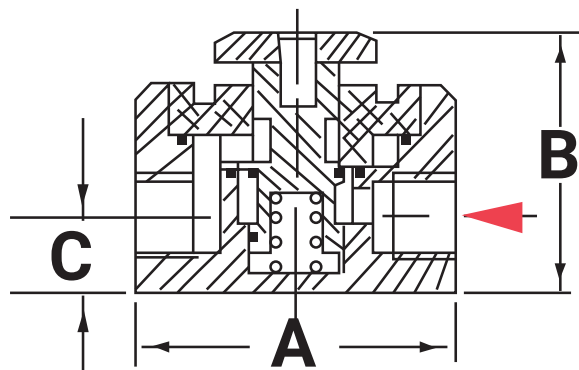
1 = PVC  
2 = POLYPRO  
3 = PVDF  
4 = TEFLON  
5 = OTHER (Please specify)

### SEALS

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

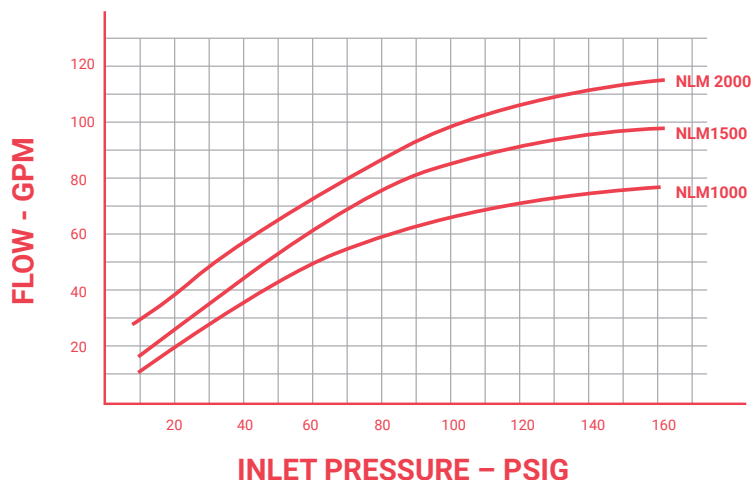
**X = MOLDED BODY**  
1/2", 3/4", 1" only

# ENGINEERING & PERFORMANCE DATA



## NOTES

- During the assembly process, a small amount of silicone krytox is applied to assist in the threadent motion. Parts are thoroughly cleaned prior to final assembly and testing.
- Test data was performed with 68°F water, and 150 PSIG maximum pressure.
- These performance curves will be changed with higher or lower PSIG and or higher viscosity liquid and or higher temperature.
- Consult your local sales rep or Manufacturer for custom products or special applications.



## DIMENSIONAL DATA

DIMENSIONS IN INCHES

Valve Size	Ports	A	B	C	Cv
1/4"	FNPT	2	1.8	0.5	0.58
1/2"	FNPT	3	2.5	0.7	2.84
3/4"	FNPT	3.5	3	0.9	4.14
1"	FNPT	4	3.5	1.1	5.86
1.5"	MPT	5	4.7	1.5	16.7*
2.0"	MPT	6	5.5	1.7	22.3*

(\*) Cv value @ 150 GPM