

# INSTRUMENTATION VALVES

## NEEDLE VALVE (HARD SEAT)

### MODEL CODE : KNV4

Type needle valves with hard seat are designed for use on applications requiring complete isolation or throttling of the media. The conical metal tip (Stem Type CT) press fitted ensures perfect alignment for positive bubble tight shut-off. Available with end connections in sizes from 1/8" to 1" and a wide choice in connections of female

### TECHNICAL SPECIFICATIONS

Design Pressure	: 6000 PSI
Max temp.	: 240°C
Material	: Stainless Steel
Stem	: (Type CT) Conical tip press fitted hard chrome Plated
Gland Packing	: PTFE
Stem packing area	: Burnished finish for Smooth valve operation.
Safety Feature	: Back seating for preventing stem blowout.

Size	Type	Length A	Width B	Height open) Max., C	Handle D	Handle OD E
1/8"	FxF	50	22	55	40	10
	MxF	55	22	55	40	10
	MxM	60	22	55	40	10
1/4"	FxF	55	25	63	40	10
	MxF	65	25	63	40	10
	MxM	60	25	63	40	10
3/8"	FxF	55	25	63	40	10
	MxF	65	25	63	40	10
	MxM	65	25	63	40	10
1/2"	FxF	65	32	83.6	50	12
	MxF	75	32	83.6	50	12
	MxM	70	32	83.6	50	12
3/4"	FxF	70	38	88.6	50	12
	MxF	75	38	88.6	50	12
	MxM	80	38	83.6	50	12
1"	FxF	90	45	98	70	12
	MxF	105	45	98	70	12
	MxM	105	45	98	70	12

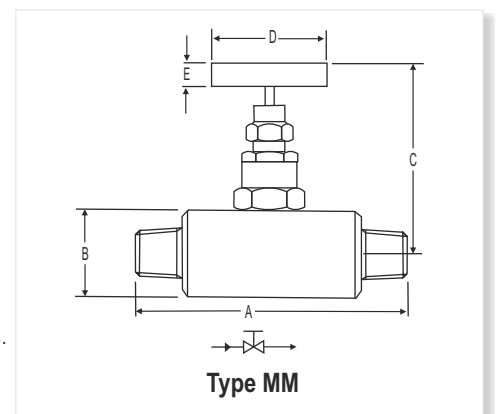
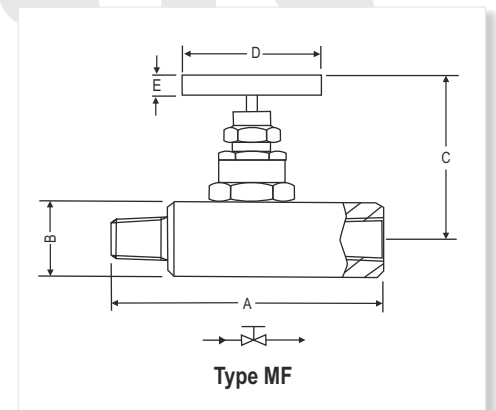
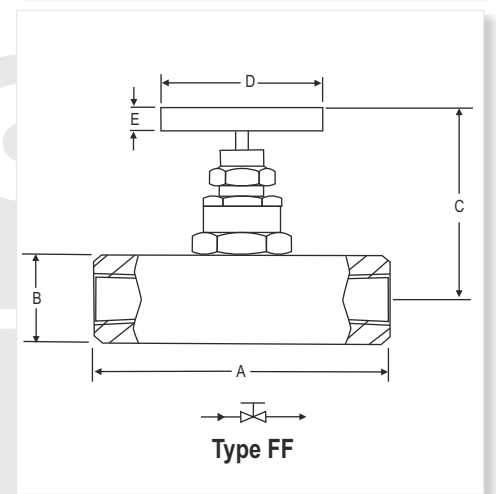
All dimensions are in mm

### APPLICATIONS

- High pressure line shut off.
- Instrument isolation.
- Drain valve.
- Liquid and vapor service.

**OPTIONAL :** KNV 10 - High pressure valves for 10,000 psi pressure  
KNV 20 - High pressure valves for 20,000 psi pressure

Note : Other combination sizes available on request. Please contact factory for more details.



## VALVES

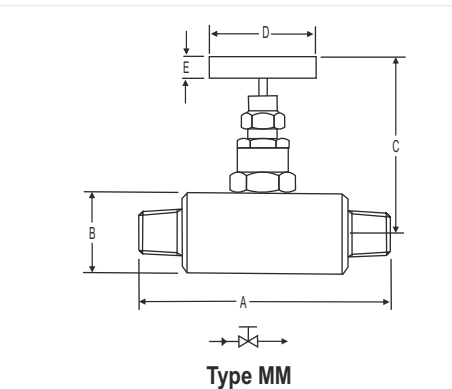
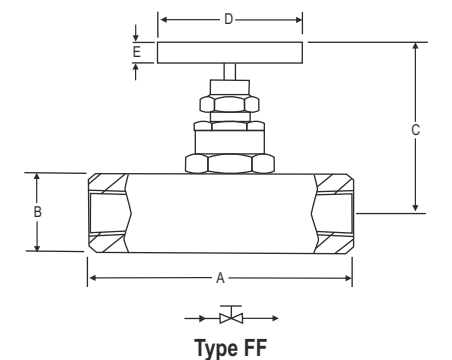
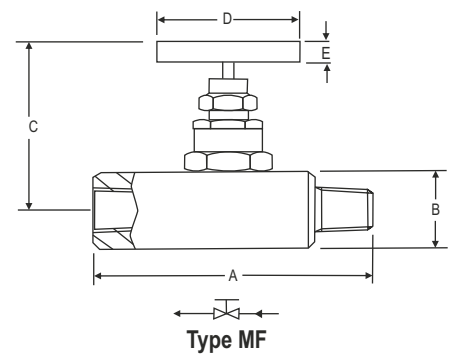


### MODEL CODE : KGSV

Type needle valves with soft seat types are designed for use on applications requiring complete isolation or throttling of the media and for high pressure instrument lines. Ideal for use on gas services and some liquid applications. Specially designed Delrin needle tip (stem type DS) rolled into the stem assembly in perfect location for positive bubble tight shut-off. Available with end connections in sizes from 1/8" to 1" and a wide choice of female screwed, male to female screwed or socket weld.

### TECHNICAL SPECIFICATIONS

Design Pressure	: 6000 PSI
Max temp.	: 100°C
Material	: Stainless steel
Stem	: (DS)Delrin Soft Needle Tip rolled into the needle
Gland Packing	: PTFE
Stem packing area	: Burnished finish for smooth valve operation.
Safety Feature	: Back seating for preventing stem blowout.



Size	Type	Length A	Width B	Height (open) Max., C	Handle D	Handle OD E
1/8"	FxF	50	25	63.5	40	10
	MxF	55	25	63.5	40	10
	MxM	60	25	63.5	40	10
1/4"	FxF	55	25	63.5	40	10
	MxF	65	25	63.5	40	10
	MxM	60	25	63.5	40	10
3/8"	FxF	55	25	63.5	40	10
	MxF	65	25	63.5	40	10
	MxM	65	25	63.5	40	10
1/2"	FxF	65	32	93.5	50	12
	MxF	75	32	93.5	50	12
	MxM	70	32	93.5	50	12
3/4"	FxF	70	38	96.5	50	12
	MxF	75	38	96.5	50	12
	MxM	80	38	93.5	50	12
1"	FxF	90	45	101	70	12
	MxF	105	45	101	70	12
	MxM	105	45	101	70	12

All dimensions are in mm

### APPLICATIONS

- Instrument line shut off.
- Instrument isolation.
- Drain valve.
- Specially designed for gas service and liquid applications.

Note : Other combination sizes available on request. Please contact factory for more details.



## NEEDLE VALVE

### MODEL CODE : KRPV

Type needle valves with rising plug design meant for use **in applications on fluids containing solid particles** designed to give high capacity bi-directional flow with reliable bubble shut-off. The flow path of the valve is easy to clean for viscous fluid application. Available with end connections in sizes from 1/8" to 1" and a wide Choice of female screwed, male to female screwed or socket weld.

### TECHNICAL SPECIFICATIONS

Design Pressure	:	6000 PSI
Max temp.	:	240°C
Stem	:	Rising Plug(Type BD) with Delrin seat
Stem packing area	:	Burnished finish for smooth valve operation.
SafetyFeature	:	Back seating for preventing stem blowout.
Feature	:	Replaceable soft seat which absorbs contaminants and operates in dirty service, with easy Maintenance and straight through design for high capacity bi-directional flow.

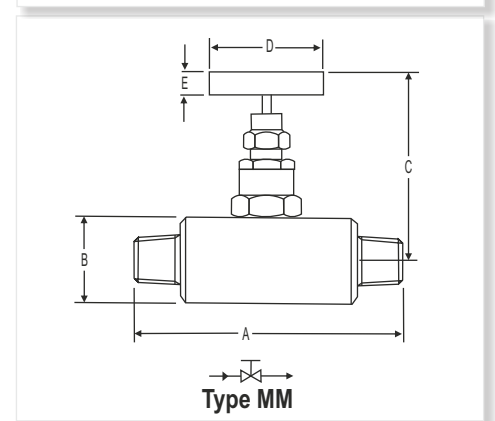
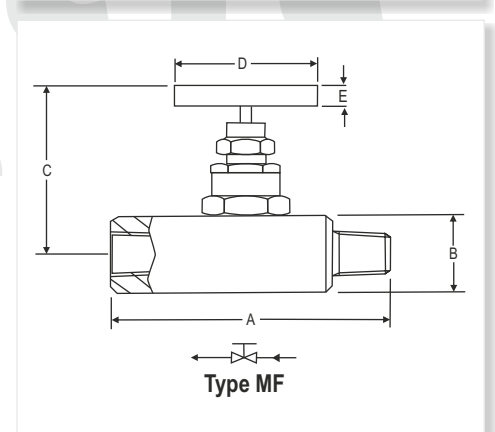
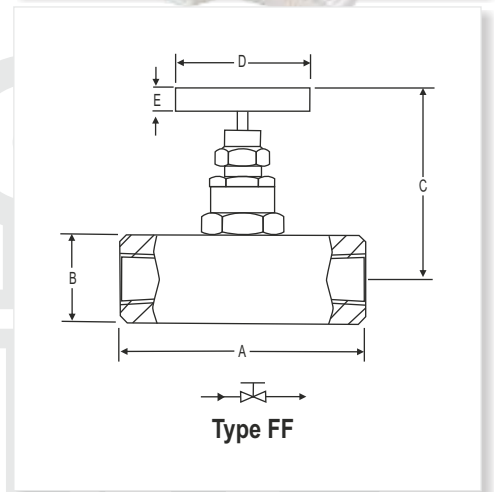
Size	Type	Length A	Width B	Height (open) Max., C	Handle D	Handle OD E
1/8"	FxF	50	25	64.5	40	10
	MxF	55	25	64.5	40	10
	MxM	60	25	64.5	40	10
1/4"	FxF	55	25	64.5	40	10
	MxF	65	25	64.5	40	10
	MxM	60	25	64.5	40	10
3/8"	FxF	55	25	64.5	40	10
	MxF	65	25	64.5	40	10
	MxM	65	25	64.5	40	10
1/2"	FxF	65	32	94	50	12
	MxF	75	32	94	50	12
	MxM	80	32	94	50	12
3/4"	FxF	70	38	97	50	12
	MxF	75	38	97	50	12
	MxM	80	38	94	50	12
1"	FxF	90	45	101	70	12
	MxF	105	45	101	70	12
	MxM	105	45	101	70	12

All dimensions are in mm

### APPLICATIONS

- Instrument line shut off.
- Instrument isolation.
- Drain / vent valve.
- Viscous and plugging service.

Note : Other combination sizes available on request. Please contact factory for more details.



**MODEL CODE : KNV4, KGSV, KRPV**

### HOW TO ORDER

**BASIC MODEL : KNV4, KNV10, KNV20, KGSV, KRPV**

Body Material	Stem Packing	Size = P x P1	Connections (inlet x outlet)	Threads
C = Carbon Steel	P = PTFE	22 = 1/8" x 1/8"	FF = Female x Female	N = NPT (ANSI B 1.20.1)
S = SS 316	G = Grafoil	24 = 1/4" x 1/4"	MF = Male x Female	P = BSPP (BS 2779, ISO 228/1)
S4 = SS 304		33 = 3/8" x 3/8"	MM = Male x Male	B = BSPT (BS 21, ISO 7/1)
SL = SS 316L		44 = 1/2" x 1/2"	SW = Socket Weld	
M4 = Monel 400		66 = 3/4" x 3/4"		
M5 = Monel 500		88 = 1" x 1"		
H = Hastelloy C				
B = Brass				

### OPTIONS

IE : Handle circular.

TF : Compliance to NACE standard MR-0175.

SG : For Oxygen service, valves are supplied cleaned, degreased and suitably packed.

GH: Material test certificate

GO: Hydro test certificate

PV : IBR Approval

### Ordering Example:

To place an order simply refer to the codes in the table.

Valve Type : Body Material + Stem Packing + Size + Connections + Threads + Options  
**KNV4 : S + P + 44 + FF + N = KNV4 - S - P - 44 - FF - N - Options**

Note -

The weld prepared types are available with a male-or-female plain end - suitable for socket weld, or male butt weld end.

Always specify pipe schedule and further requirements when ordering valves for welded or Flange connections. Panel mounting option for installation in racks and panels.

### STANDARD VALVE MATERIALS

Valve	Body	Bonnet	Stem	Tip
Carbon Steel	CS A105	CS A105	SS 304	SS 304
Stainless Steel	SS 316	SS 316	SS 316	SS 316
Monel	Monel	Monel	Monel	Monel

FOR OTHER OPTIONAL ITEMS, PLEASE CONTACT FACTORY FOR DELIVERY AND MINIMUM QUANTITY OF ORDER.

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.

Modifications may take place and materials specified may be replaced by others without prior notice.



**VALVES**

# NEEDLE VALVE

## SPECIAL SERIES

### MODEL CODE : KNVR

With threaded inlet and outlet port. One end of the valve is provided with a rotating nut.



**Rotating End**

#### Applications

- High pressure line shut off.
- Instrument isolation.
- Gauge isolation.
- Liquid and vapor service

### MODEL CODE : KNV24

Needle valves are designed for use on application requiring complete isolating or throttling of the media. Available with and connection in size 1 1/2" (NPT, BSP) and a wide choice in connection of female screwed, male screwed etc. Withstands pressure up to 6000 PSI



**Size 1 1/2"**

#### Applications

- High pressure line shut off.
- Instrument isolation.
- Gauge isolation.
- Liquid and vapor service

### MODEL CODE : KNV32

Needle valves are designed for use on application requiring complete isolating or throttling of the media. Available with and connection in size 2" (NPT, BSP) and a wide choice in connection of female screwed, male screwed etc. Withstands pressure up to 6000 PSI



**Size 2"**

#### Applications

- High pressure line shut off.
- Instrument isolation.
- Gauge isolation.
- Liquid and vapor service



PLEASE CONTACT US FOR FURTHER DETAILS ON ABOVE SERIES .

**MANIFOLDS**