

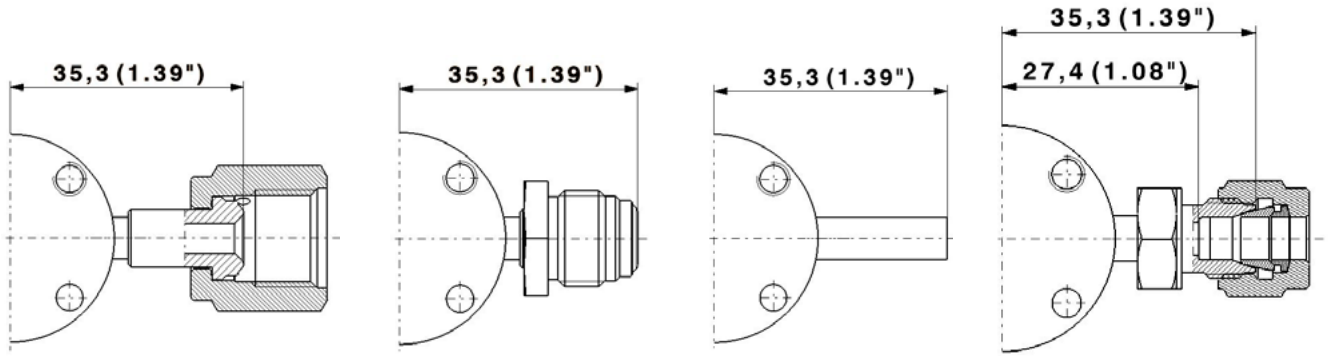


## DIAPHRAGM VALVE

- 100% Helium Leak Test performed
- Assembling, testing & Packaging in clean-room: Class ISO 4
- Reverse seat design for high life cycle
- Individual serial number for full traceability
- Electropolished surface roughness per SEMI F19 UHP Grade
- Fluid specific seat material as standard options
- Low internal volume
- Constant bleed option available
- 316L VAR® stainless steel double melt per SEMI F20 option available
- Additional Multi-port options
- 270° multiturn handwheel with open/close indicator

**RX04**

# RX04 | HIGH PERFORMANCE UHP LINE VALVES



## SPECIFICATIONS

### Max. inlet pressure

See table next page

### Pneumatic actuator opening pressure

5 to 7 bar (73 to 102 psig)\*

### Certified max. Helium outboard leak rate

$\leq 1 \times 10^{-9}$  mbar.l/s

### Temperature range

See table next page

### Nominal seat diameter

4 mm (0,16")

### Certified max. Helium across the seat leak rate (at max. pressure)

$\leq 1 \times 10^{-9}$  mbar.l/s

### Wetted volume

$< 1.2 \text{ cm}^3$

### Flow capacity (Cv)

0.2

### Certified max. Helium inboard leak rate (at max. pressure)

$\leq 1 \times 10^{-9}$  mbar.l/s

### Burst pressure

$> 700 \text{ bar}$  (10152 psig)

## CONSTRUCTION MATERIAL

	Parts	Material
Wetted parts	Body	SS 316L, VAR
	Seat	PCTFE, PVDF, VESPEL®
	Diaphragm	Phynox®
Non-wetted parts	Backup diaphragm	Phynox®
	Handwheel	Aluminium
	Actuator Body	SS 316L or Aluminium
	Others	Stainless Steel and Alloys

## SURFACE FINISH

S	Ra 0.4 $\mu\text{m}$ (15 $\mu\text{in}$ )
V	Ra 0.25 $\mu\text{m}$ EP (10 $\mu\text{in}$ )

SCAN ME FOR FLOW CURVES & PRODUCT CONFIGURATOR



## VALVE VERSION / MAX. WORKING PRESSURE

Valve	Max. working pressure
RX04 (LM) Multiturn handwheel <sup>1 2</sup>	20 bar
RX04 (MH) Multiturn handwheel <sup>1 2</sup>	240 bar
RX04 (LQ) Quarter turn handwheel <sup>1</sup>	20 bar
RX04 (HQ) Quarter turn handwheel <sup>1</sup>	240 bar
RX04 (BP*) Pneumatically actuated	10 bar
RX04 (LP*) Pneumatically actuated <sup>3</sup>	20 bar
RX04 (HP*) Pneumatically actuated <sup>3</sup>	240 bar

<sup>1</sup> FT (Panel Mounting) option available

<sup>2</sup> MSF LOTO option available

<sup>3</sup> Position indication switch available

## PNEUMATIC ACTUATION

### Parts

<b>Actuator Body</b>	Aluminium / Stainless Steel
<b>Piston</b>	Brass / Aluminium / Stainless Steel
<b>O-ring</b>	NBR
<b>All others</b>	Stainless Steel

## MANUAL ACTUATION

### Parts for all valve grades

<b>Upper spindle</b>	Brass
<b>Handle</b>	Aluminium
<b>All others</b>	Stainless Steel

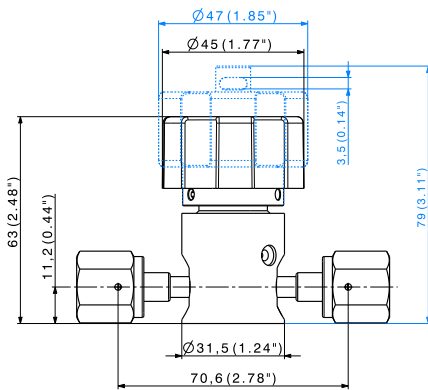
## TEMPERATURE RANGE

### Seat (Actuation type)

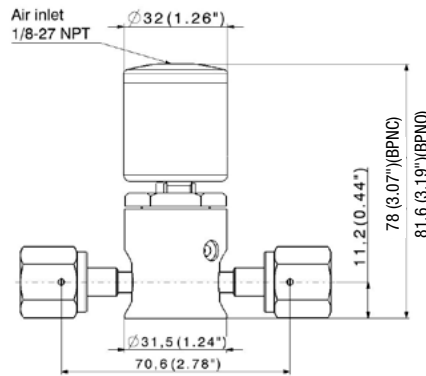
PCTFE / PVDF (manual & pneumatic*)	-40°C to +65°C (-40°F to +149°F)
VespeI® (manual & pneumatic*)	-40°C to +150°C (-40°F to +302°F)

\*-20°C pneumatic versions

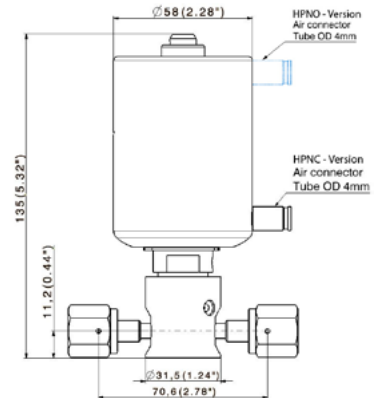
### RX04 - MULTI-TURN VALVE (HM, LM, MSF) WITH OPEN/CLOSE WINDOW



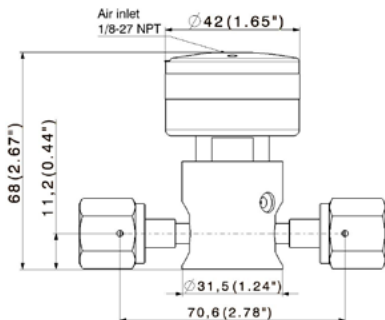
### RX04 - PNEUMATIC VALVE LOW PRESSURE (BPNC, BPNO)



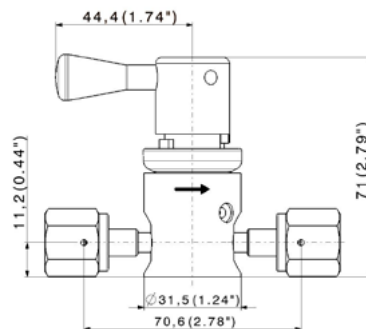
### RX04 - PNEUMATIC VALVE HIGH PRESSURE (HPNC, HPNO)



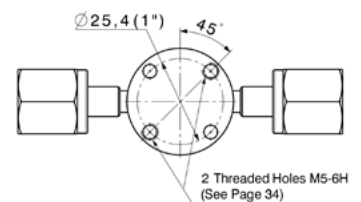
### RX04 - PNEUMATIC VALVE MEDIUM PRESSURE (LPNC, LPNO)



### RX04 - QUARTER-TURN VALVE (LQ, HQ)



### RX04 - BOTTOM VIEW



# PRODUCT CONFIGURATOR

	Surface Finish		Max. Delivery Pressure		Porting Configuration <sup>1</sup>		Body Material		Seat Material		End Connection		Options	
RX04	S		LM		2W1		-		K		A/B: B¼			
	Ra 0.4 µm (15 µin)	S	Multi-Turn Handwheel (20bar)	LM	2W1	2W1	SS 316L	-	PCTFE (Kel-F®)	K	Metal face seal ¼" - Female	V ¼ F	Panel Mounting	FT
	Ra 0.25 µm EP (10 µin)	V	Multi-Turn Handwheel (240bar)	HM	2W2	2W2	VAR**	A	PI (Vespel®)	V	Metal face seal ¼" - Male	V ¼ M	Electric limit switch***	CI
			Pneumatically actuated (10 bar)	BP*	3W4	3W4	Monel**	M	PVDF	P	BWO ¼"	B ¼	LOTO	MSF
			Pneumatically actuated (20 bar)	LP*	3W5	3W5	Hastelloy®**	H			BWO 6 mm	B6	Constant bleed	FPT
			Pneumatically actuated (240 bar)	HP*	3W6	3W6					Compression tube fittings	RDB ¼		
			Quarter-Turn Handwheel (20 bar)	LQ	3W8	3W8					Compression tube fittings	RDB 6		
			Quarter-Turn Handwheel (240 bar)	HQ	3W9	3W9								
					4W10	4W10								
					4W11	4W11								

<sup>1</sup> Check configurations here  
 \* Add NO for normally open or NC for normally closed  
 \*\* On demand  
 \*\*\* On HP and LP actuators only

## WORLDWIDE HEADQUARTERS



Find out our 24 locations here  
<https://rotarex.com/locations>