

HM Series - Pneumatic Actuated, Metal diaphragm valve - Low pressure - 150 Psi

UCV HM Specifications - 150 Psi

Structure	Direct seal metal diaphragm valve without seal packing, pneumatically operated
Item pressure - Low pressure	Vacuum to 150 PSI (10 bar)
Operating Temperature: Standard Available	14 to 140°F, -10 to 60°C (PCTFE [®] Seat) 14 to 302°F, -10 to 150°C *(Vespe [®] Seat)
Leakage: Inboard Leakage Outboard Leakage Across the seat Leakage	↑ 1x10 ⁻⁹ atm cc He/sec ↑ 1x10 ⁻⁹ atm cc He/sec ↑ 1x10 ⁻⁹ atm cc He/sec
Particles	No particles detected above 0.1 m.
Cv value	0.3
Surface finish Ra (Ave)-Standard	5 in
Actuator air supply (Pneumatic)	60 to 90 psig (4 to 6 bar)
Air Connection (Pneumatic)	**Thread 10-32 UNF, 1/8 NPT

* Used with Viton O-ring for actuation device

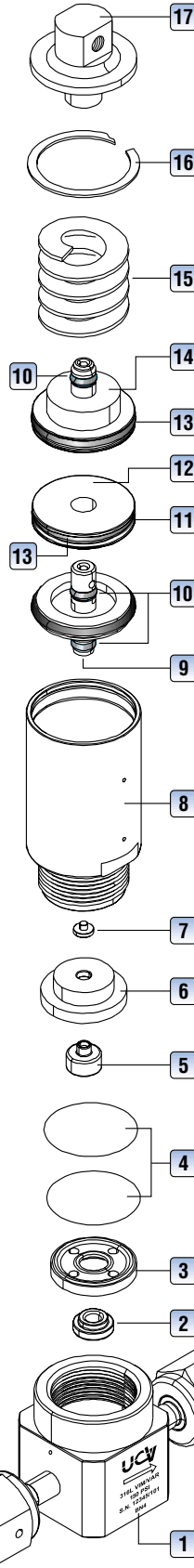
** Air Connection for thread 10-32 UNF is standard

Materials of Construction

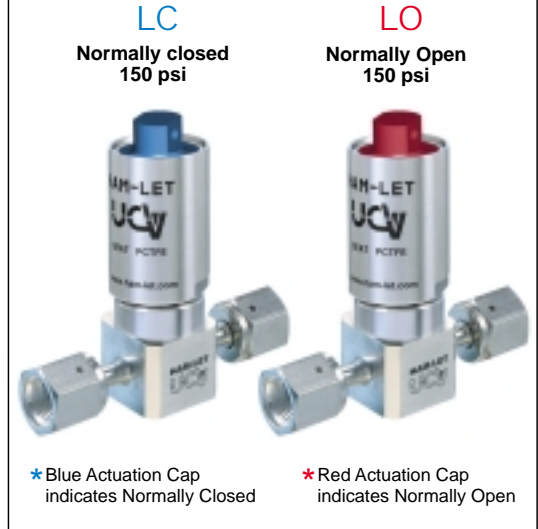
Item No.	PART No.	MATERIAL
*1	Body	Stainless steel, 316L Vim/Var
*2	Seat	**PCTFE [®] / Vespe [®]
*3	Seat holder	Stainless steel, 316L Vim/Var
*4	Diaphragm	Ni-Co Alloy
5	Act. button	Stainless steel, AISI 303
6	Act. button holder	Stainless steel, ASTM 630 H900
7	Spacer	Stainless steel, ASTM 630 H900
8	Cylinder Body	Stainless steel, AISI 303
9	Lower Piston	A6061T6 Anodize
10	O-Ring P3	NBR (A305)
11	O-Ring P20	NBR (A305)
12	Middle plate	A6061T6 Anodize
13	O-Ring P21	NBR (A305)
14	Upper piston	A6061T6 Anodize
15	Spring	SWOSC-V
16	Spring RING	Stainless steel, 304
17	Upper Guide	A6061T6 Color Anodize

*Wetted parts

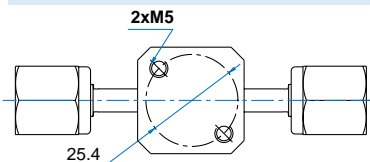
**PCTFE[®] Seat is standard.



Actuation Device

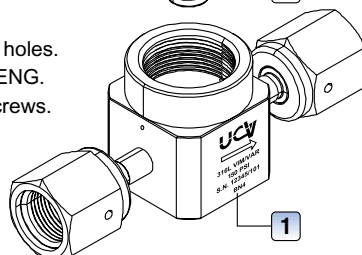


Panel mounting, two port straight valve - Standard

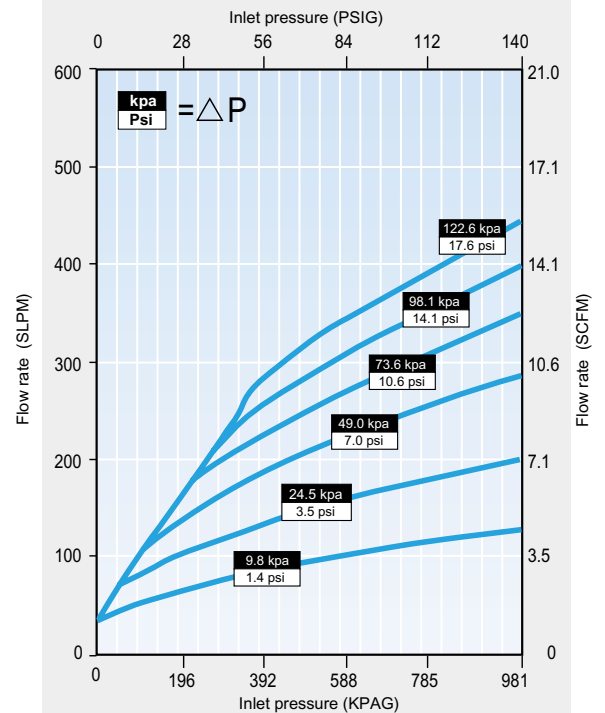


Optional, four threaded holes.

- All the other valve types have standard four threaded holes.
- Dimensions are according to SEMATECH96063137-ENG.
- The M5 threaded mounting holes will accept 10-32 screws.



Nitrogen Flow for low pressure valve - Cv 0.3



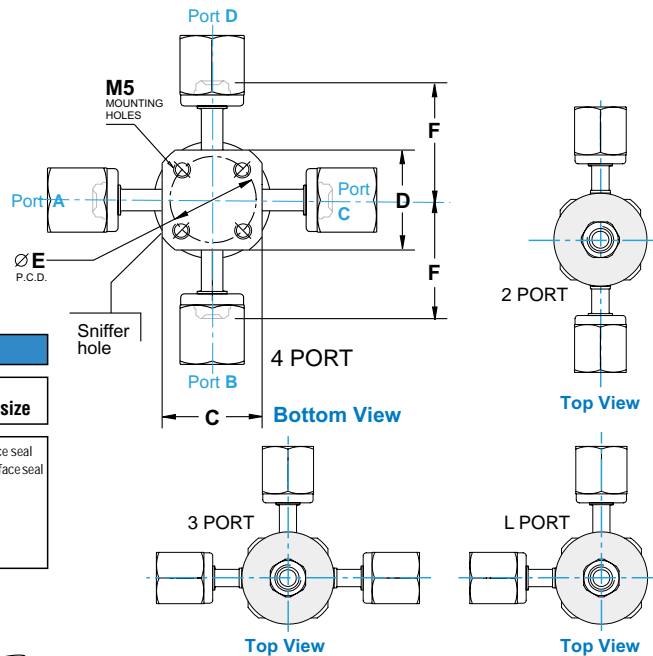
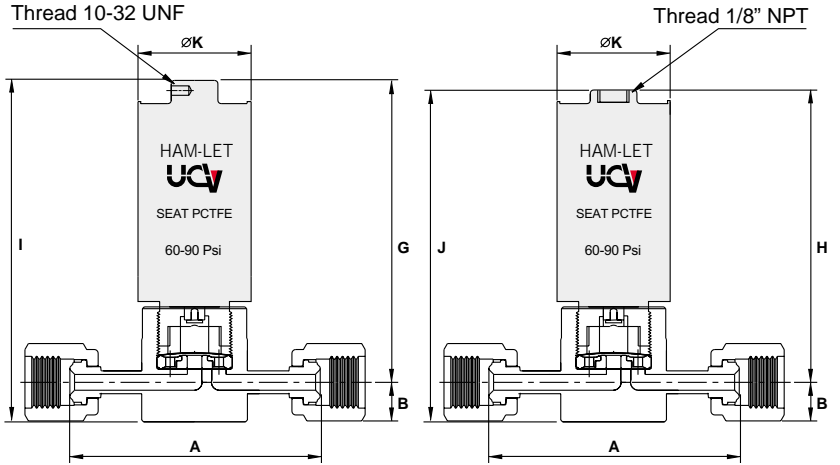
Select the right component for safety's sake

The total design of the system must be taken into consideration when selecting components in order to ensure that your Ham-Let products provide safe, trouble-free operation. It is the responsibility of the system designer and the user to consider the compatibility of the materials, of the components and system, the function of the component, appropriate rating, and to ensure proper installation, operation and maintenance.

Valve Dimensions - Inch, mm

Size	Connection	A		B		C		D		E		F		G		H		I		J		ØK	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1/4	Swivel Female face seal	2.78	70.6	0.44	11.0	1.16	29.4	1.16	29.4	1.00	25.4	1.40	35.3	2.87	73.0	2.67	68.0	3.31	84.0	3.11	79.0	1.102	28.0
1/4	Male face seal	2.30	58.4	0.44	11.0	1.16	29.4	1.16	29.4	1.00	25.4	1.15	29.2	2.87	73.0	2.67	68.0	3.31	84.0	3.11	79.0	1.102	28.0
1/4	Swivel Male face seal	2.78	70.6	0.44	11.0	1.16	29.4	1.16	29.4	1.00	25.4	1.40	35.3	2.87	73.0	2.67	68.0	3.31	84.0	3.11	79.0	1.102	28.0
1/4	Buttweld	1.75	44.4	0.44	11.0	1.16	29.4	1.16	29.4	1.00	25.4	0.87	22.2	2.87	73.0	2.67	68.0	3.31	84.0	3.11	79.0	1.102	28.0

Dimensions are for reference only, and are subject to change.



How to order:

HM20	4	V	K	LC	
Valve Series	Body Size	Body Material	Seat Material	Actuation Device	End Connection & size
2 - 2 Port valve 3 - 3 Port valve 4 - 4 Port valve	4-1/4"	316L VIM / VAR	K- PCTFE® (KEL-F®) S- VESPEL®	LC-Normally Closed LO-Normally Open	GM- Swivel Male face seal GF- Swivel Female face seal BW- Buttweld M- Male Face seal 4 - 1/4 6 - 3/8 8 - 1/2

Example- A:
Valve Series- 2 Port valve, Body Size-1/4", Body Material- 316L Vim/Var,
Seat Material - PCTFE, Actuation Device- Pneumatic Normally Closed,
End Connection & Size- Face Seal Female 1/4"
HM20 - 4VKLC - GF4

Example- B:
Valve Series- 3 Port valve, Body Size-1/4",
Body Material- 316L Vim/Var, Seat Material -
PCTFE, Actuation Device- Pneumatic
Normally Open,
End Connection & size- Buttweld 1/4"
Air connection thread 1/8 NPT
HM30 - 4VKLO - BW4-1/8 NPT

