

M20 | DIAPHRAGM VALVES FOR UHP APPLICATIONS

Feature a unique proven design

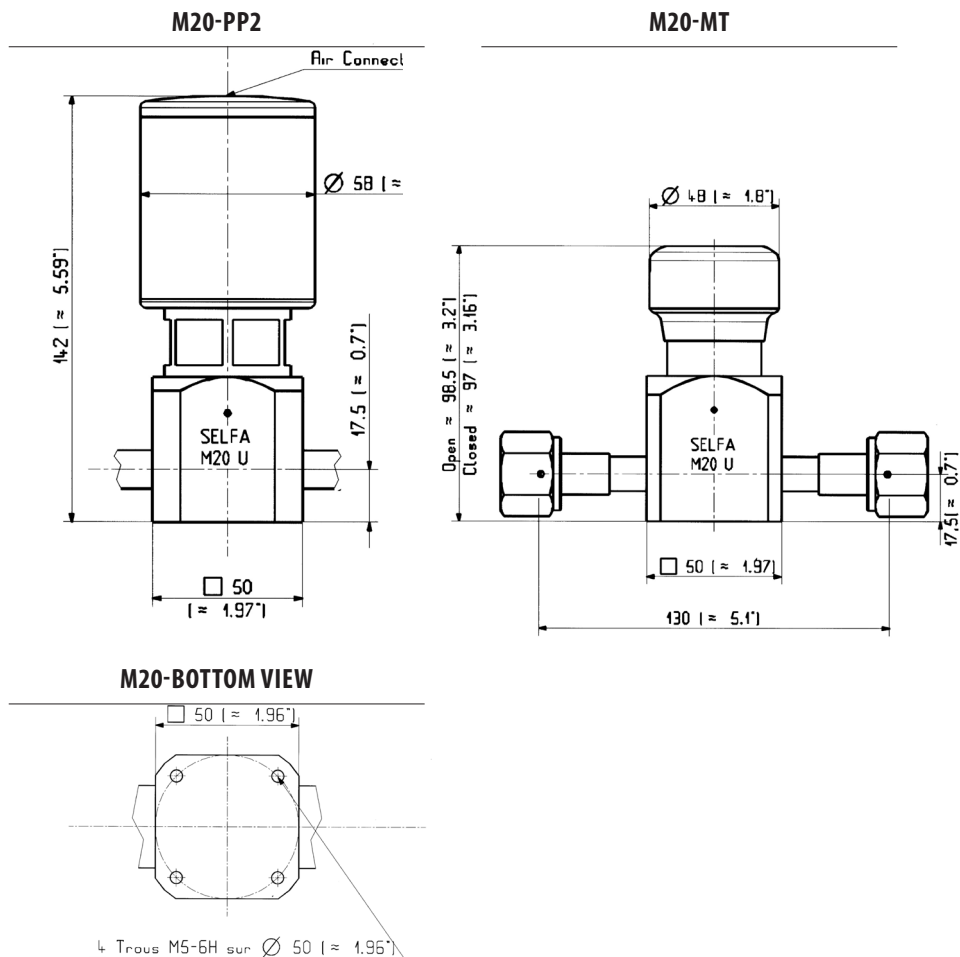


KEY FEATURES

- Tied diaphragm design for positive seat opening and closing
- Individual serial number for full traceability
- Assembling, testing and packaging in cleanroom class 10
- Easy purgeability (optional purge ports, up/down stream)
- Excellent flow coefficient
- Metal to Metal sealing to atmosphere
- 3 ports option



DIMENSIONS



SPECIFICATIONS

Fluid Media	High purity and UHP, corrosive and non-corrosive gases	Temperature range	-20°C to + 65°C (-4°F to 176°F) standard	Certified max. Helium across the seat (at max. pressure)	< 1.10 ⁻⁹ mbar.l/sec
Max. working pressure	• M20 MT manual: 15 bar (215psi) • M20 PP2 pneumatic: 15 bar (215psi)	Flow coefficient	CV = 3,5	Nominal seat Diameter	20 mm (0,79")
Min. operating pressure	Vaccum (for manual only)	Certified max. Helium inboard leak rate (at max. pressure)	< 10 ⁻⁹ mbar.l/sec		
Actuator opening pressure	5 to 7 bar (75 to 105 psi)	Certified max. Helium outboard leak rate (at max. pressure)	< 10 ⁻⁹ mbar.l/sec		

CONSTRUCTION MATERIAL

	Parts	Valve Grade & Materials		
		S	V	U
Wetted parts	Body	Stainless Steel 316L		
	Surface Finish	< 0,4 µm non EP (15 µ in Ra)	< 0,25 µm EP (10 µ in Ra)	< 0,18 µm EP (7 µ in Ra)
	Diaphragm	Elgiloy®		
	Seat Material	PCTFE (Kel-F®) / PVDF or Vespel® (on request)		
Non-wetted parts	Backup diaphragms	Phynox®		
	All others	Stainless steel or alloys		

MANUAL ACTUATION

Parts for all valve grades	
Handle	Aluminium
All others	Stainless Steel or Alloys

PNEUMATIC ACTUATION

Parts	
O-ring	NBR
Actuator Body	Aluminium

PRODUCT CONFIGURATOR

	Valve series	Valve Actuation	Valve Configurations	Body Material (others on request)	Seat Material	End connections (IN/OUT)	Options
M20	S	MT	2V1	I	K	A/B: B¾"	FT
	UHP - Ra 0.18 µm Ep. (7 µin Ra)	U Multi-Turn Handwheel	2V1 2 ports in line	316L	PCTFE (Kel-F®)	V¾-F Metal face seal ¾" - Female	FP Back Mounting
	HP/UHP - Ra 0.25 µm Ep. (10 µin Ra)	V Pneumatically actuated (Normally closed version)	2VPEG 2 Ports in line, upstream purge port - left side	Hastelloy® (on request)	PI (Vespel®)	V¾-M Metal face seal ¾" - Male	CI Electric Limit Switch (PP2 actuators)
	HP Version - Ra 0.4 µm non EP (15 µin Ra)	S PP2 Normally open version	2VPSG 2 Ports in line, downstream purge port - left side		PVDF	P BWO ¾" (Butt Orbital Weld)	B¾"
		PP2 Normally closed version	2V1P2 2 Ports in line, 2 purge ports upstream/downstream/left side For "Tee" configurations please refer to M12			BWO 1" (Butt Orbital Weld)	B 1
						Metal face seal 1" - Male	V1-M