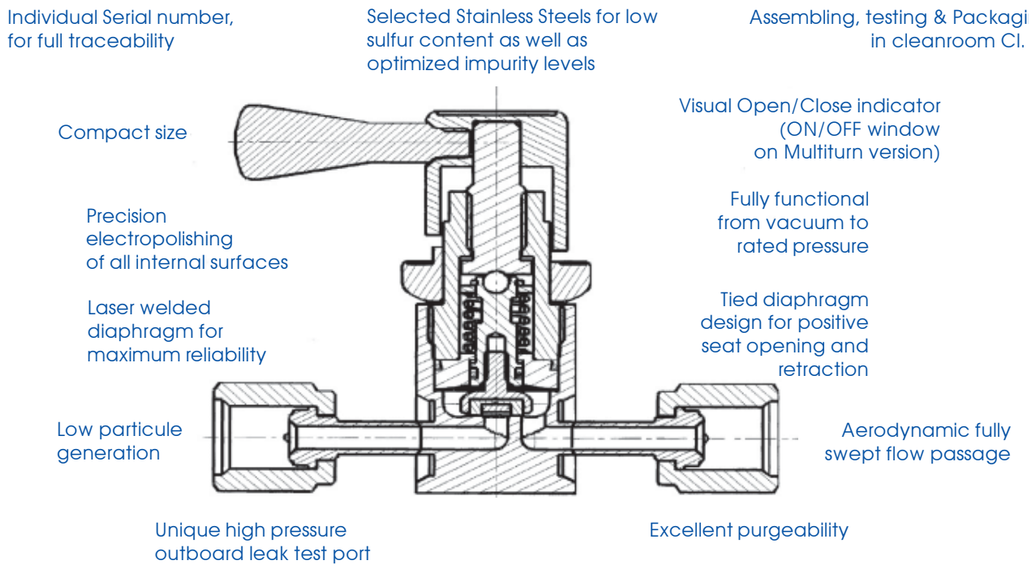
SELFA
Valves & Fittings

FEATURE a unique proven design — M4.1



Manufactured to the **THREE STAR PROCESS** •

CONSTRUCTION MATERIALS

		Valve Grade & Materials		
	Parts	M4.1S	M4.1V	M4.1U
Wetted parts	Body	SS 316L	SS 316L	SS 316L VAR
	Surface Finish	< 0,4 µm non EP (15µin Ra)	< 0,25 µm EP (10µin Ra)	< 0,15 µm EP (6µin Ra)
	Diaphragm	Hastelloy®		
	Seat Material	Kel-F® (Vespel®, PVDF, metal on request)		
Non-wetted parts	Backup diaphragms	Elgiloy®		
	all others	Stainless Steel or alloys		

Manual Actuation

Parts for all valve grades	
Upper spindle	Brass
Handle	Aluminum or Extruded Plastic
All others	Stainless Steel or Alloys

Pneumatic Actuation

Parts	Low Pressure	High Pressure
Actuator Body	SS 316 L	Aluminum
Piston	Aluminum	
O-rings	NBR - PC 851	
All others	Stainless Steel or Alloys	

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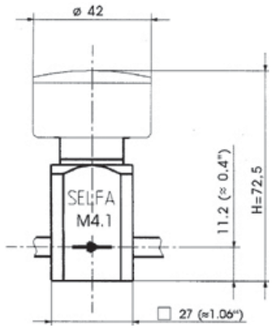
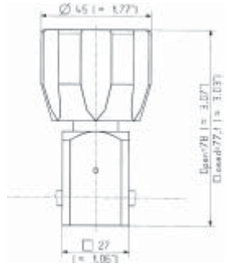
TECHNICAL DATA — M4.1

TECHNICAL DATA		
Fluid Media		Standard, High and Ultra High Purity, corrosive and non-corrosive gases
Max working pressure	M4.1 Manual	vacuum to 240 bar (3500 PSI)
	M4.1 Pneumatic - Low Pressure	17 bar (250 PSI)
	M4.1 Pneumatic - High Pressure	200 bar (2900 PSI)
Pneumatic actuator opening pressure		5 - 7 bar (75 - 105 PSI)
Temperature range		-20°C to + 80°C (-4° F to 176°F)
Burst Pressure		850 bar (12500 PSI)
Flow Capacity (C_v)	M4.1 Manual	C_v = 0.26
	M4.1 Pneumatic	C_v = 0.26
Certified max. Helium inboard leak rate		< 1.10^{-9} mbar.l/sec
Certified max. Helium outboard leak rate (at max. pressure)		< 1.10^{-9} mbar.l/sec
Certified max. Helium across the seat leak rate (at max. pressure)		< 1.10^{-9} mbar.l/sec
Wetted volume		< 1.2 cc
Mounting		Panel or back mounting
Nominal seatDiameter		4 mm (0,16")

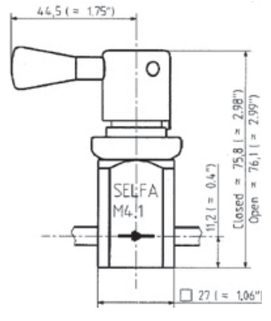
DIMENSIONS



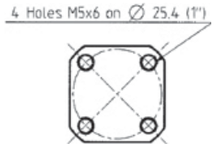
M4.1 - Pneumatic Valve Low Pressure



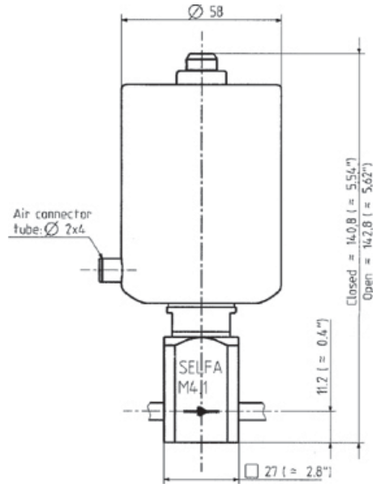
M4.1 Multiturn valve (MT) with open/ close window



M4.1 - Quarter turn (QT) valve



M4.1 bottom view



M4.1 - Pneumatic valve High Pressure

M4.1-leaf 09-2

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HOW TO ORDER — M4.1

PART NUMBER							
Example :	M4.1V	MT	2V1	I	/	K	A/B : B1/4	MS
	1	2	3	4		5	6	7

1 - Valve Series and Surface Finish

M4.1U	Ra 0,15µm EP (6 µin Ra)
M4.1V	Ra 0,25µm EP (10 µin Ra)
M4.1S	Ra 0,4µm nonEP (15 µin Ra)

2 - Valve Actuation (Standard: Normally Closed=NC)

QT	Manually actuated - Quarter Turn
MT	Manually actuated - Multi Turn
LP	Pneumatically actuated - Low Pressure
HP	Pneumatically actuated - High Pressure
	(Add - NO - for Normally Open version)
	(Add - NF - for Normally Close version)

Standard colour:
for handles: white (other colours on request)
for LP actuators: NO=green NF=blue
for HP actuators: NO/NF=white

3 - Valve Configurations

2V1 2 ports in line

See below for other configurations

4 - Body Material (others on request)

A	AISI 316L, VAR
I	AISI 316L
H	Hastelloy® (on request)

5 - Seat Material

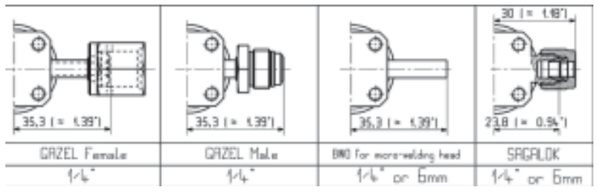
K	PCTFE (Kel-F®)
V	PI (Vespel®)
P	PVDF
M	Metal (on request)

6 - End Connections

V1/4-F	GAZEL® 1/4" - Female (Face Seal)*
V1/4-M	GAZEL® 1/4" - Male (Face Seal)*
B1/4	BWO 1/4" - Standard (Orbital Weld)
B6	BWO 6 mm (Orbital Weld)
RDB 6	**SAGALOK** Double ring Fittings: 6 mm
RDB 1/4	**SAGALOK** Double ring Fitting: 1/4"

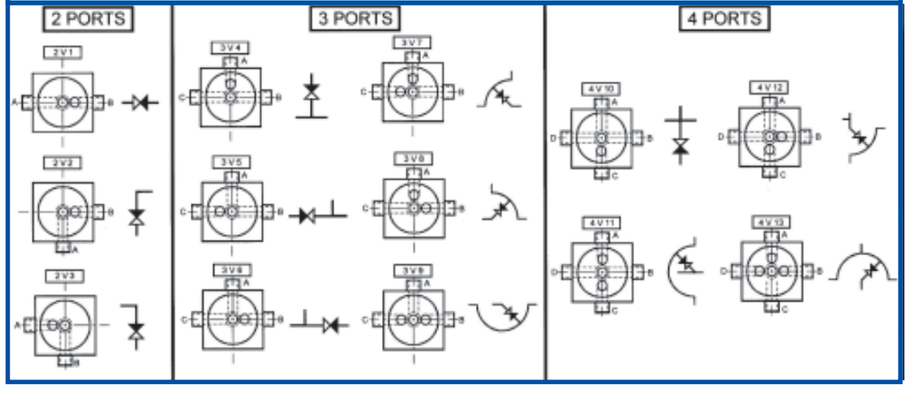
7 - Options

MS	Valve fitted with locking service
FT	Panel mounting
—	Back mounting
CI	Electric limit switch (LP actuators only)



GAZEL® -Female (face seal)* **GAZEL® -Male (face seal)*** **BWO for standard welding heads** **SAGALOK Double ring Fitting**

Valve configurations



*All GAZEL® Face Seals are VCR® compatible. VCR® is a registered trade mark of CAJON CO., HASTELLOY® is a registered trade mark of CABOT Corp. , Kel-F® is a registered trade mark of 3M company, Vespel® is a registered trade mark of DUPONT, ELGILOY® is a registered trade mark of ELGILOY Company.

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Valves & Fittings

A total component solution, from source to process

M4.1
SPRINGLESS DIAPHRAGM VALVES FOR HP AND UHP APPLICATIONS (STANDARD AND GAS SPECIFIC)

4.1

M4.1-leaf 09-2
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