

FEATURES

- Solenoid operator is separated from the fluid
- Rugged construction for high pressures and harsh environments
- Manual reset version available
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure 0 to 30 bar [1 bar = 100 kPa]
Ambient temperature range -10°C to +40 °C
Maximum viscosity 300 cSt (mm²/s)
Response time (with air ΔP = 6 bar) 30 ms [opening/closing in AC (~)]

fluids (1) (*)	temperature range (TS)	seal materials (*)
water, air, inert gas, oil	-10°C to +80°C	NBR (nitrile) IIR (butyl) (corrosive fluids)



MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

	Brass body	Stainless steel body
Body	Brass	AISI 303 SS
Internal parts	Stainless steel	Stainless steel
Springs	Stainless steel	Stainless steel
Seals	NBR	IIR
Shading coil	Copper	Copper

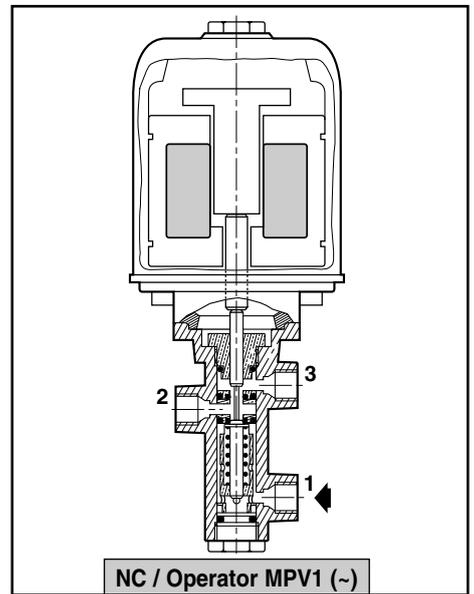
OTHER MATERIALS

Solenoid operator MPV1 (AC ~) IP54 metal cover
 CPV1 (DC =) IP65 cast iron cover

ELECTRICAL CHARACTERISTICS

Coil insulation class E
Coil connection Screw terminals
Cable entry Cable gland (Pg11P)
Electrical safety IEC 335
Standard voltages DC (=) : 24V - 48V
 AC (~) : 24V - 48V - 115V - 230V / 50 Hz
 (Other voltages on request)

solenoid operator reference	nominal power ratings				ambient temperature range (TS) (°C)	coil construction
	inrush		holding			
	(VA)	(W)	(VA)	(W)		
MPV1 (~)	600	55	15	-	- 10 to + 40	wrapped
CPV1 (=)	-	-	-	24		



SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)				solenoid operator reference		(M)	catalogue number		reference	
				min.	maximum (PS)		~				=	~		=
					air (*)	water/oil (1) (*)								
(G*)	(mm)	(m ³ /h)	(l/min)											
NC - normally closed - brass body														
1/4	4	0,18	3	0	30	30	30	30	MPV1	CPV1	×	13100300	13101179	V301-O-4
	5	0,36	6	0	20	20	20	20	MPV1	CPV1	×	13100090	13101180	V301-O-5
	6	0,57	9,5	0	8	8	8	8	MPV1	CPV1	×	13100107	13101183	V301-O-6
NO - normally open - brass body														
1/4	4	0,18	3	0	30	30	30	30	MPV1	CPV1	×	13100135	13101185	V301-F-4
	5	0,36	6	0	20	20	20	20	MPV1	CPV1	×	13100141	13101186	V301-F-5
	6	0,57	9,5	0	8	8	8	8	MPV1	CPV1	×	13100156	13101188	V301-F-6
U - universal - brass body														
1/4	4	0,18	3	0	8	8	8	8	MPV1	CPV1	×	13100328	13101191	V301-U-4
	5	0,36	6	0	5	5	5	5	MPV1	CPV1	×	13100199	13101192	V301-U-5
	6	0,57	9,5	0	2	2	2	2	MPV1	CPV1	×	13100223	13101194	V301-U-6
NC - normally closed - stainless steel body														
1/4	5	0,36	6	0	20	20	20	20	MPV1	CPV1	×	13100102	13101181	V301-O-5

(M) Manual operator: X: without (holding manual operator or impulse manual operator on request, see options)

(1) Standard construction 2/2 and 3/2 NC/NO brass bodied solenoid valves can only be used where they are vented without backpressure. In case of use with liquid media (water and oil), the upper button must be fitted with a seal (see "options"). Brass bodied universal (U) solenoid valves and stainless steel bodied NC/NO and U solenoid valves are fitted with such seals as standard.

Manual reset solenoid valve: Version with manual reset operator + 5A contact.
Full order number:
 Solenoid valve catalogue number given above + one of the following reset option catalogue numbers:
 • MPV1 operator (~), catalogue number 260565
 • CPV1 operator (=), catalogue number 260567

OPTIONS

- **Manual reset version** with 5A auxiliary switch: catalogue number **260565** (with MPV1), catalogue number **260567** (with CPV1)
- Stainless steel NO/U solenoid valves (5mm dia.), IIR (butyl) seal for corrosive fluids: this option may limit the max. service pressure. Contact us
- 3/2 solenoid valves of dia. 3 mm, $\Delta P = 0$ to 40 bar (NC-NO) and 0 to 10 bar (U); 2/2 NC-NO solenoid valves with brass or stainless steel body
- Air operated valves
- Flameproof enclosure to EEx d for potentially explosive atmospheres according to "ATEX/CENELEC"
- Coil insulation class B
- On solenoid operator MPV1 (~):
 - maintained manual operator, catalogue number **210515** / impulse manual operator, catalogue number **210517**
 - auxiliary switch: 5A, catalogue number **260541**
- On solenoid operator CPV1 (=):
 - diode for direct current coil, catalogue number **010001**
 - maintained manual operator, catalogue number **210519** / impulse manual operator, catalogue number **210521**
 - auxiliary switches: 5A, catalogue number **260547** / 15 A, catalogue number **260549**
 - auxiliary switches in neutral atmosphere with or without manual reset
- On solenoid operators MPV1 / CPV1 (~/=):
 - cover on manual operator, catalogue number **160001**
 - marine paint, catalogue number **609502** / anti-corrosive paint, catalogue number **609503**
 - other cable glands Pg 13P (CM12); Pg 16P (CM14); BV1; BV2; BVP1
- On valve body:
 - **brass body**: fit the upper button with a seal (NBR or FPM) for use with liquid media
 - FPM seal (fluoroelastomer) - Fluids: hydrocarbons (temperature range: -10°C to +80°C)
 - oxygen service, catalogue number **970507**

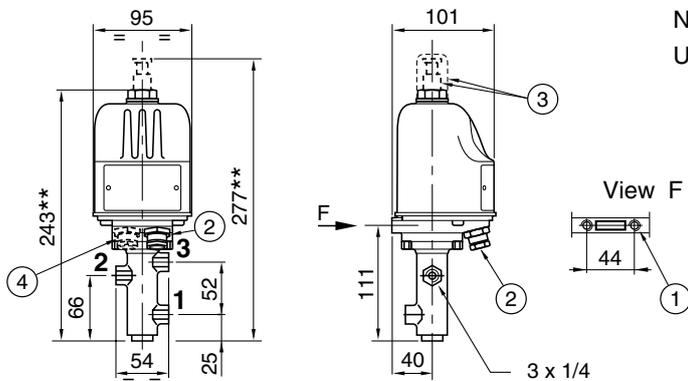
INSTALLATION

- **Vertical mounting only, solenoid operator upwards**
- 2 (MPV1) or 3 (CPV1) mounting holes
- Pipe connections (G*) have standard combination thread according to ISO 228/1 et ISO 7/1
- Spare parts kits and replacement coils are available

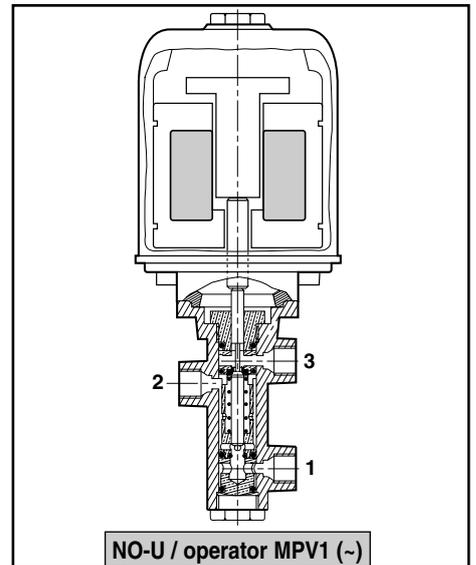
DIMENSIONS (mm), WEIGHT (kg)



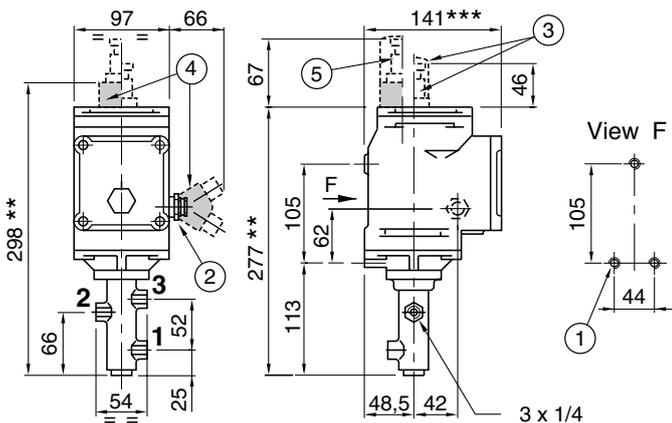
AC solenoid valve / solenoid operator type: **MPV1**



NC/NO: port 1
U: Any port



DC solenoid valve / solenoid operator type: **CPV1**



- ① Mounting holes M6, depth 9 mm
 - ② Cable gland (Pg 11P)
 - Options:**
 - ③ Manual operator, cover
 - ④ Auxiliary switch + Second cable gland (MPV1) or 2 cable glands (Pg 11P) (CPV1)
 - ⑤ Manual operator with auxiliary switch
- ** + 115 mm for cover removal
*** + 17 mm for cover removal

solenoid operator	weight (1)
MPV1 (~)	2,750
CPV1 (=)	6,800

(1) Incl. coil