

# MANUALLY OPERATED VALVES

## SERIES 1, 3, 4 AND VMS

Series 1, 3 and 4: 3/2-, 5/2- and 5/3-way CC, CO; ports G1/8, G1/4  
 Series VMS: 3/2-way; ports M5, G1/8, G1/4, G3/8, G1/2 and G3/4



Series 3 manual valves (G1/8) and Series 4 (G1/4), 3/2-, 5/2- and 5/3-way, are available with several devices designed to satisfy different needs. Series 1 is provided with two devices: pushbutton (3/2-way) and lever (3/2 and 5/2-way). Series VMS valves are 3/2-way slide valves which are available with ports M5, G1/8, G1/4, G3/8, G1/2 and G3/4.

The 3/2-way valves Series 3 and 4 are normally closed when 1 is the inlet and they can also be normally open when 3 is the inlet. Series 3 and 4 5/2-way valves can be supplied via ports 3 and 5 with two different pressures, if a cylinder has to be operated using a delivery pressure which is different from the return pressure.

### General Data

<b>Construction</b>	Series 3 and 4: spool-type Series 1: poppet-type Series VMS: slide
<b>Function</b>	Series 1, 3 and 4: 3/2 - 5/2 - 5/3 ways CC CO Series VMS: 3/2-way
<b>Materials</b>	Aluminium body, stainless steel spool, brass poppet, NBR seals
<b>Ports</b>	Series 1, 3 and 4: G1/8, G1/4 Series VMS: M5, G1/8, G1/4, G3/8, G1/2, G3/4
<b>Environmental temperature</b>	0°C ÷ 60°C
<b>Medium temperature</b>	0°C ÷ 50°C
<b>Operating pressure</b>	See the single models
<b>Fluid</b>	Filtered air, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil. Once applied the lubrication should never be interrupted.

## MANUALLY OPERATED VALVES

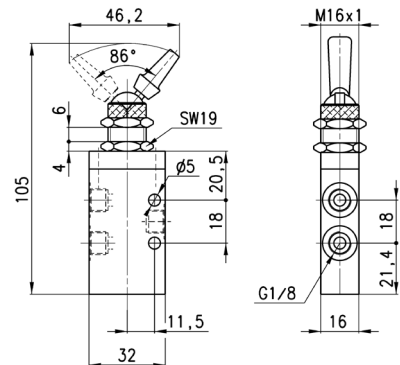
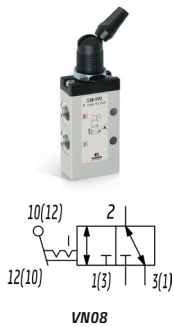
## SERIES 1, 3, 4 AND VMS - CODING EXAMPLES

## Coding Example

<b>3</b>	<b>5</b>	<b>8</b>	<b>-</b>	<b>900</b>
<b>3</b>	SERIES 1 3 4			
<b>5</b>	FUNCTION 3 = 3/2-way NC 5 = 5/2-way 6 = 5/3-way CC 7 = 5/3-way CO 8 = 5/3-way CP			
<b>8</b>	PORTS 8 = G1/8 4 = G1/4			
<b>900</b>	RESETTING 895 = Pushbutton, monostable, black 896 = Pushbutton, monostable, green 897 = Pushbutton, monostable, red 900 = Lever, bistable 905 = Lever, monostable 910 = Knob, bistable 915 = Knob, monostable 935 = Digital monostable 975 = Palm-switch, monostable, black 976 = Palm-switch, monostable, green 977 = Palm-switch, monostable, red 990 = Switch, bistable			

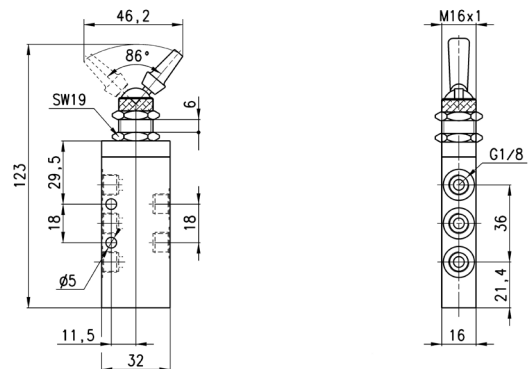
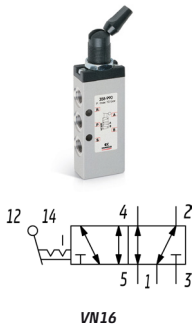
**6**

## Valve Mod. 338-990



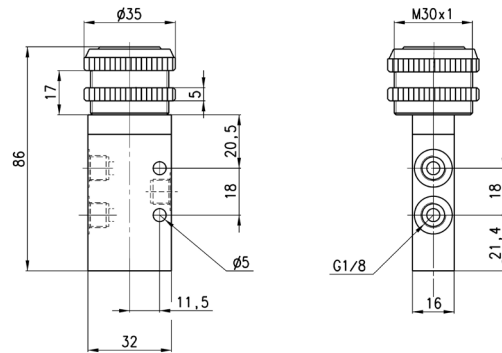
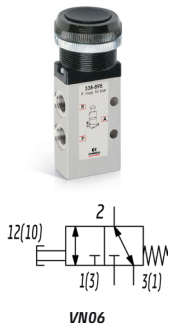
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]
338-990	-0,9 ÷ 10	700	18

## Valve Mod. 358-990



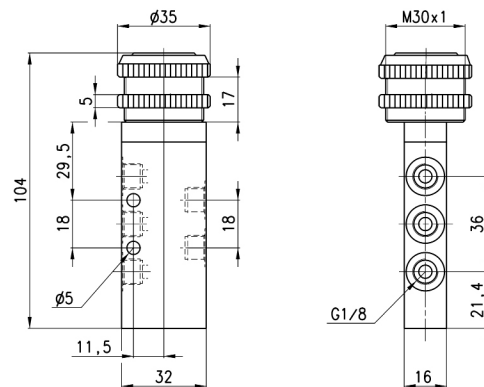
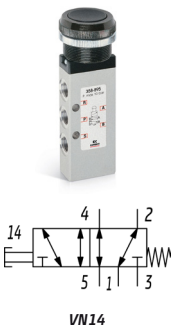
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]
358-990	-0,9 ÷ 10	700	18

### Valves Mod. 338-89



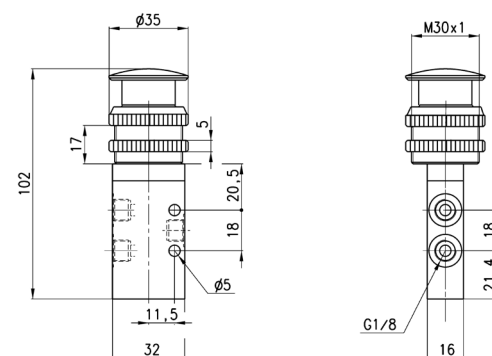
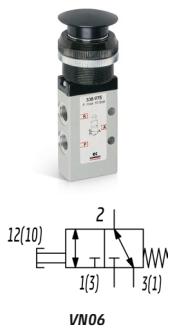
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Colors
338-895	-0,9 ÷ 10	700	35	Black
338-896	-0,9 ÷ 10	700	35	Green
338-897	-0,9 ÷ 10	700	35	Red

### Valves Mod. 358-89



Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Colors
358-895	-0,9 ÷ 10	700	35	Black
358-896	-0,9 ÷ 10	700	35	Green
358-897	-0,9 ÷ 10	700	35	Red

### Valves Mod. 338-97

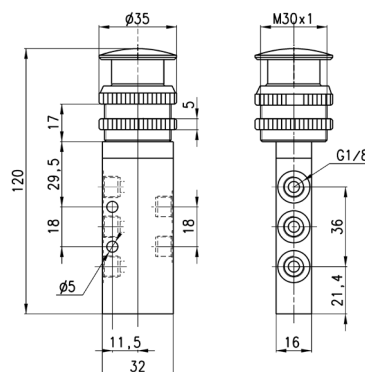


Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Colors
338-975	-0,9 ÷ 10	700	35	Black
338-976	-0,9 ÷ 10	700	35	Green
338-977	-0,9 ÷ 10	700	35	Red

## MANUALLY OPERATED VALVES

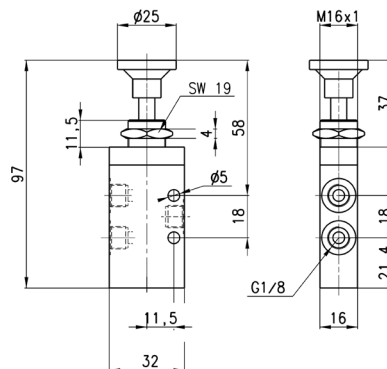
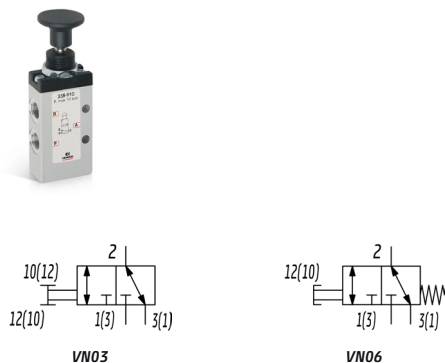
## SERIES 1, 3, 4 AND VMS - DIMENSIONS

## Valves Mod. 358-97



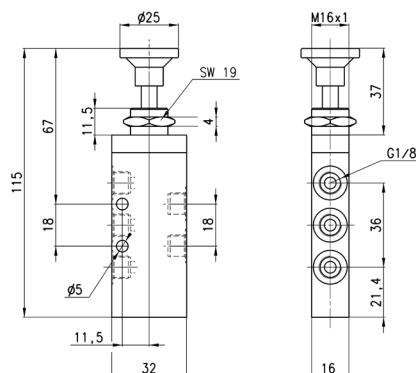
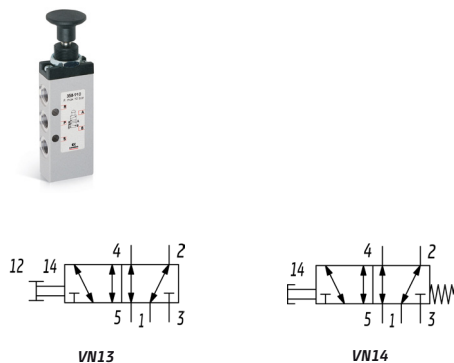
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Colors
358-975	-0,9 ÷ 10	700	35	Black
358-976	-0,9 ÷ 10	700	35	Green
358-977	-0,9 ÷ 10	700	35	Red

## Valves Mod. 338-91



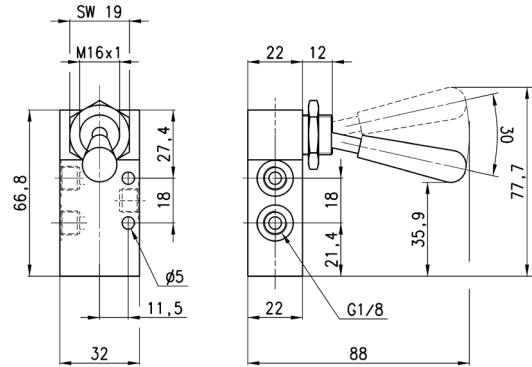
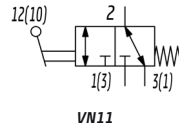
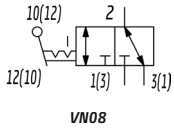
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
338-910	-0,9 ÷ 10	700	6	VN03
338-915	-0,9 ÷ 10	700	35	VN06

## Valves Mod. 358-91



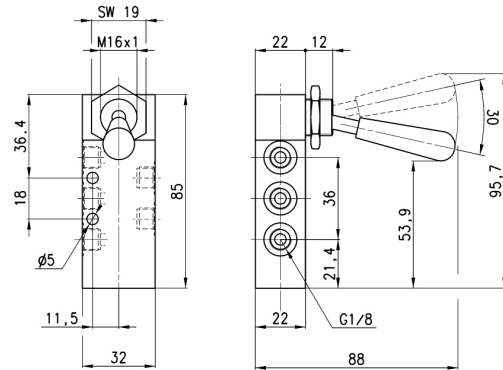
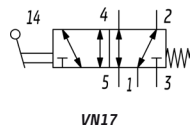
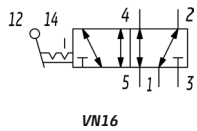
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
358-910	-0,9 ÷ 10	700	6	VN13
358-915	-0,9 ÷ 10	700	35	VN14

**Valves Mod. 338-90**



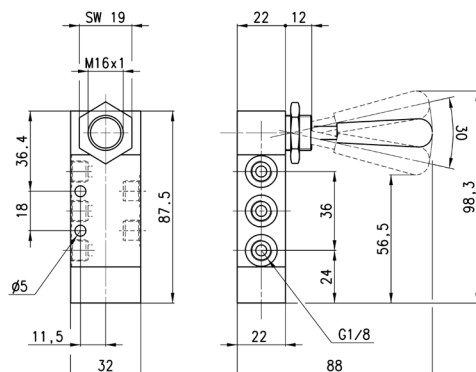
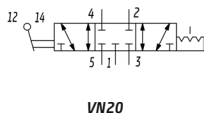
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
338-900	-0,9 ÷ 10	700	5	VN08
338-905	-0,9 ÷ 10	700	22	VN11

**Valves Mod. 358-90**



Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
358-900	-0,9 ÷ 10	700	5	VN16
358-905	-0,9 ÷ 10	700	22	VN17

**Valve Mod. 368-900**



Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]
368-900	-0,9 ÷ 10	500	5

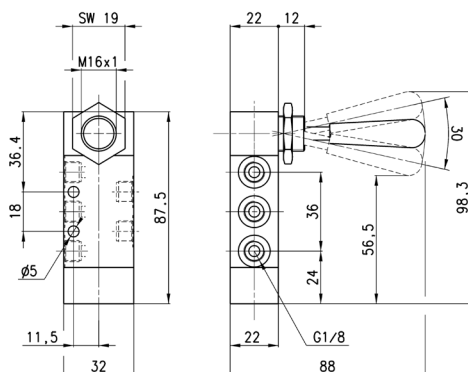
## MANUALLY OPERATED VALVES

## SERIES 1, 3, 4 AND VMS - DIMENSIONS

## Valve Mod. 368-905



VN21

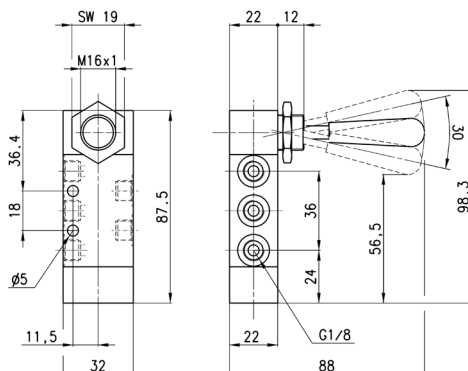


Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
368-905	-0,9 ÷ 10	500	20

## Valve Mod. 378-900



VN23

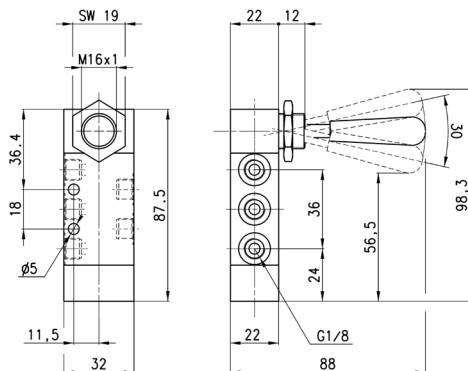


Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
378-900	-0,9 ÷ 10	500	5
388-900	-0,9 ÷ 10	500	5

## Valve Mod. 378-905

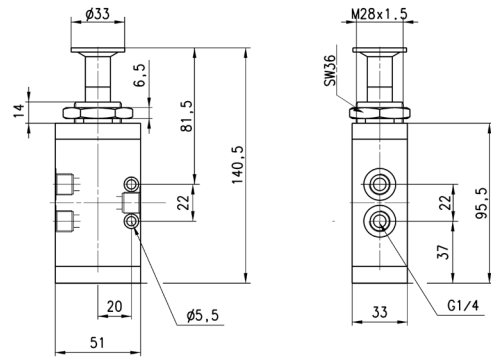
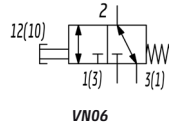
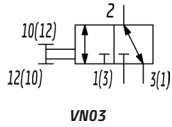


VN24



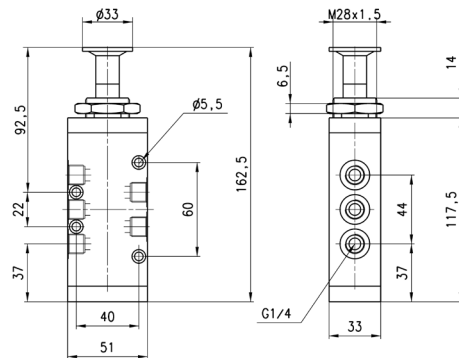
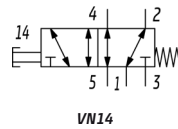
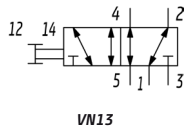
Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
378-905	-0,9 ÷ 10	500	20
388-905	-0,9 ÷ 10	500	5

Valves Mod. 434-91



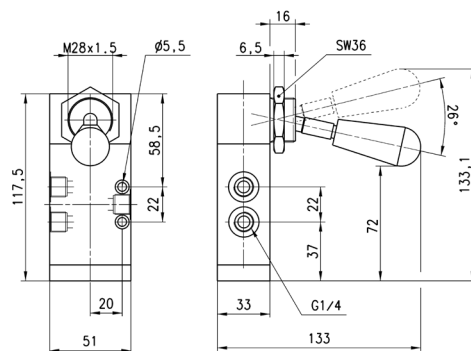
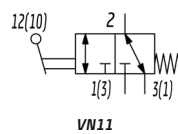
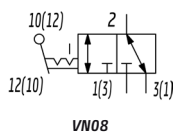
Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
434-910	-0,9 ÷ 10	1250	10	VN03
434-915	-0,9 ÷ 10	1250	37	VN06

Valves Mod. 454-91



Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
454-910	-0,9 ÷ 10	1250	10	VN13
454-915	-0,9 ÷ 10	1250	37	VN14

Valves Mod. 434-90

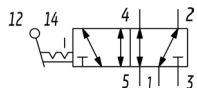


Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
434-900	-0,9 ÷ 10	1250	5	VN08
434-905	-0,9 ÷ 10	1250	37	VN11

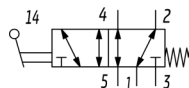
## MANUALLY OPERATED VALVES

## SERIES 1, 3, 4 AND VMS - DIMENSIONS

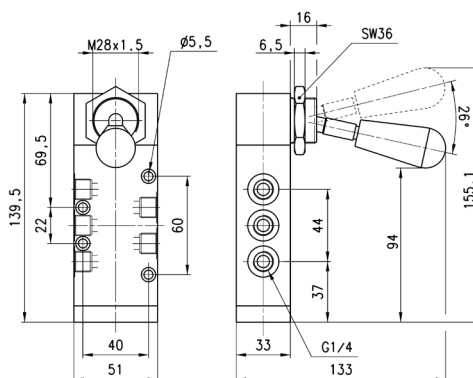
## Valves Mod. 454-90



VN16



VN17

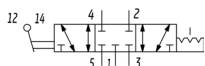


Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]	Symbol
454-900	-0,9 ÷ 10	1250	5	VN16
454-905	-0,9 ÷ 10	1250	37	VN17

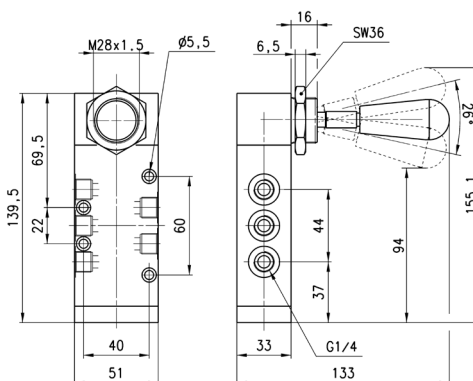
VALVES AND SOLENOID VALVES

## 6

## Valve Mod. 464-900



VN20

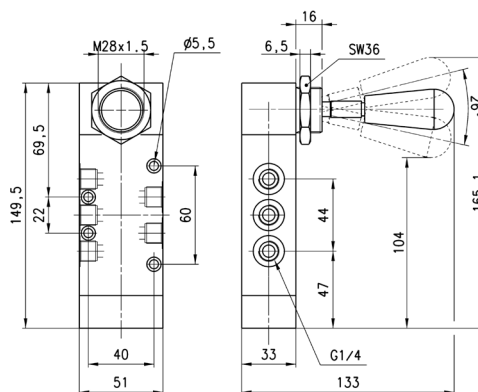


Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]
464-900	-0,9 ÷ 10	1250	5

## Valve Mod. 464-905



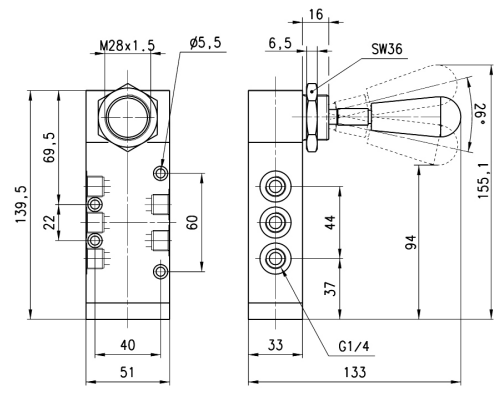
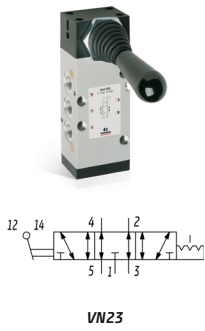
VN21



Mod.	Operating pressure [bar]	Flow [NL/min]	Actuating force [N]
464-905	-0,9 ÷ 10	1250	10

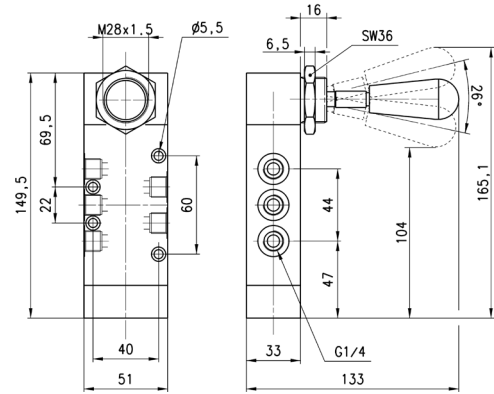
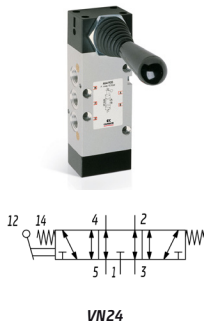
**MANUALLY OPERATED VALVES**  
**SERIES 1, 3, 4 AND VMS - DIMENSIONS**

**Valve Mod. 474-900**



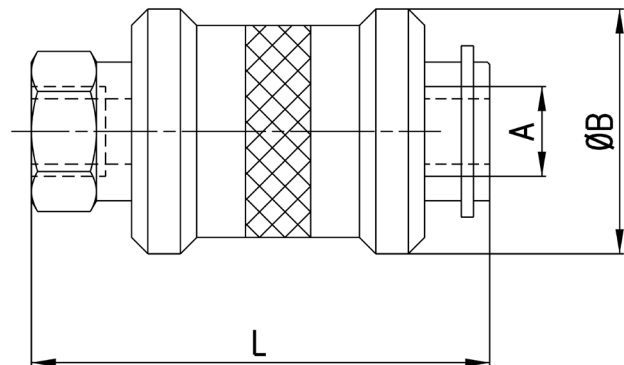
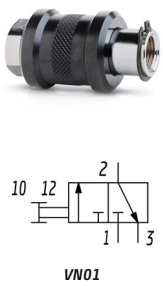
Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
474-900	-0,9 ÷ 10	1250	5

**Valve Mod. 474-905**



Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
474-905	-0,9 ÷ 10	1250	10

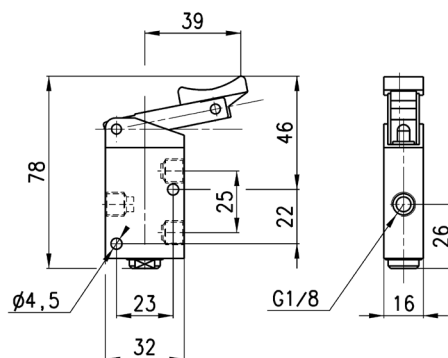
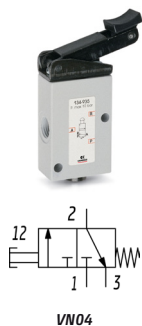
**Series VMS slide valves**



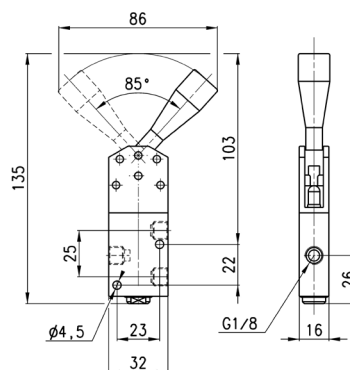
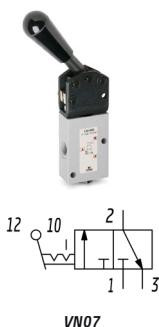
Mod.	A	ØB	L	Flow at 6 bar ΔP 1 [Nl/min] 1-2	Flow at 6 bar ΔP 1 [Nl/min] 2-3	Operating press. [bar]	Operating temp. [°C]
VMS-105-M5	M5	15	33,5	140	145	0 ÷ 15	-10 ÷ 80
VMS-118-1/8	G1/8	25	48	600	740	0 ÷ 15	-10 ÷ 80
VMS-114-1/4	G1/4	30	58	1200	1780	0 ÷ 15	-10 ÷ 80
VMS-138-3/8	G3/8	35	70	2100	1830	0 ÷ 15	-10 ÷ 80
VMS-112-1/2	G1/2	40	80	3350	4030	0 ÷ 15	-10 ÷ 80
VMS-134-3/4	G3/4	49,5	83	5350	5000	0 ÷ 15	-10 ÷ 80

## MANUALLY OPERATED VALVES

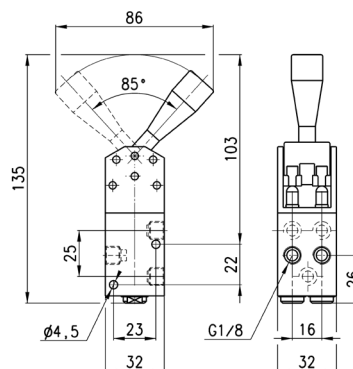
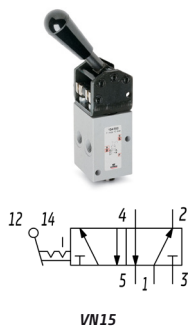
## SERIES 1, 3, 4 AND VMS - DIMENSIONS

**Valve Mod. 138-935**


Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
138-935	0 ÷ 10	500	38

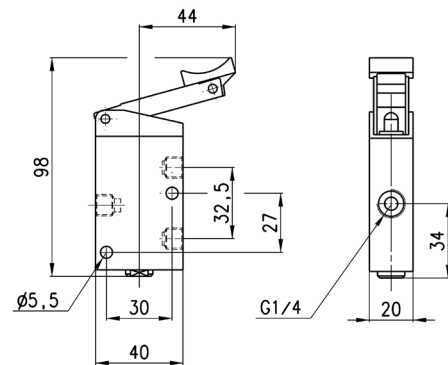
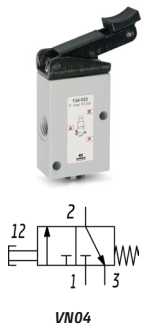
**Valve Mod. 138-900**


Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
138-900	0 ÷ 10	500	25

**Valve Mod. 158-900**


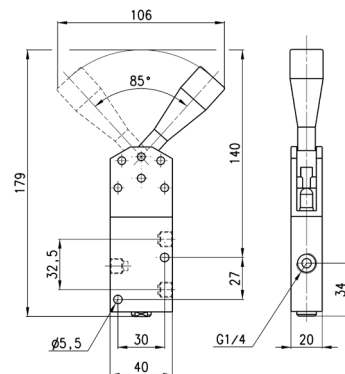
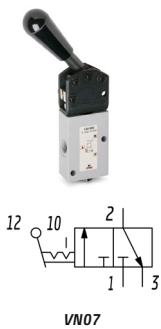
Mod.	Operating pressure [bar]	Flow [Nl/min]	Actuating force [N]
158-900	0 ÷ 10	500	45

**Valve Mod. 134-935**



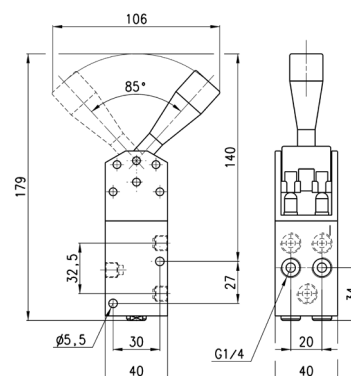
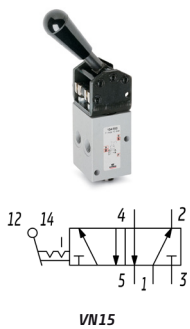
Mod.	Operating pressure [bar]	Flow [l/min]	Actuating force [N]
134-935	0 ÷ 10	1250	40

**Valve Mod. 134-900**



Mod.	Operating pressure [bar]	Flow [l/min]	Actuating force [N]
134-900	0 ÷ 10	1250	30

**Valve Mod. 154-900**



Mod.	Operating pressure [bar]	Flow [l/min]	Actuating force [N]
154-900	0 ÷ 10	1250	55