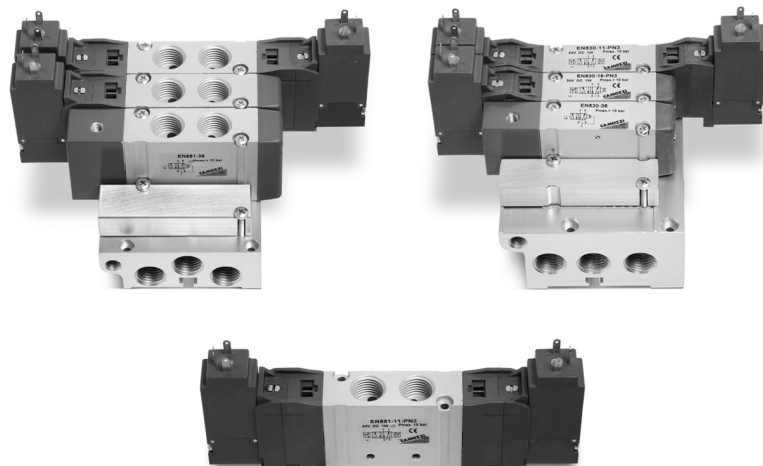


Valves and Solenoid valves Series EN

5/2-way, 5/3-way CC - CO - CP

With outlets on the body - For individual or manifold assembly

Size 16 - 19 mm



- » Mounting on any flat surface
- » Reduced dimensions
- » Aluminium body and end-covers in technopolymer
- » Space saving

Camozzi has developed a new series of valves to be used in applications requiring a reduced space of installation and in situations where the valves need to be located as near as possible to the operating elements. The single valves can be mounted on any flat surface, allowing compact machine design, which is also enhanced by the reduced dimensions of the valve itself. Thanks to their robust aluminium bodies, the valves Series EN offer the highest reliability.

This new generation of solenoid valves is the evolution of the previous Series E, size 16 - 19 mm valve with ports threaded into the body. As this valve is completely interchangeable with Series E, part of the code is maintained though the valve has a completely new shape and new components.

GENERAL DATA

Construction	spool-type
Valve functions	5/2 - 5/3 CC - 5/3 CO - 5/3 CP
Materials	body, spool, bases = AL end-covers = technopolymer joints = NBR PU
Ports	G1/8 - G1/4
Temperature	0°C min. + 50° C max
Fluid	filtered air without lubricant. If lubricated air is used, it is recommended to use ISOVG32 oil and to never interrupt lubrication.
Voltage	see coding
Voltage tolerance	± 10%
Power consumption	2W, 1W
Class of insulation	class F
Protection class	IP65 with connector DIN 40050

CODING EXAMPLE

EN	5	3	1	-	11	-	PN3
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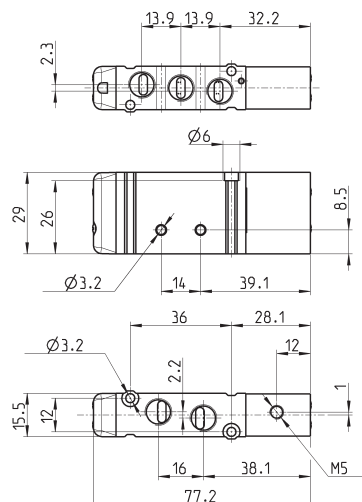
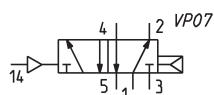
EN	SERIES
5	FUNCTION: 5 = 5/2 6 = 5/3 Centre Closed 7 = 5/3 Centre Open 8 = 5/3 Pressure Centre
3	SIZE: 3 = size 16 5 = size 19
1	BODY TYPE: 1 = body with threaded plate
11	ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable 36 = pneumatic monostable E11 = electro-pneumatic, bistable with external servo-pilot supply E16 = electro-pneumatic, monostable with external servo-pilot supply
PN3	TYPE OF SOLENOID: PN3 = 24V DC - 1W PN4 = 48V DC - 2W PN6 = 110V DC - 2W PN7 = 230V - 2W P13 = 24V DC - 1W P54 = 48V DC - 2W P56 = 110V DC - 2W W53 = 24V DC - 2W W54 = 48V DC - 2W In case of applications with alternate current, use a bridge rectifier connector (see pag. 2/2.07.39)



Pneumatically actuated valve, monostable - size 16

5/2-way

Note: the pilot pressure should never be lower than the operating pressure.

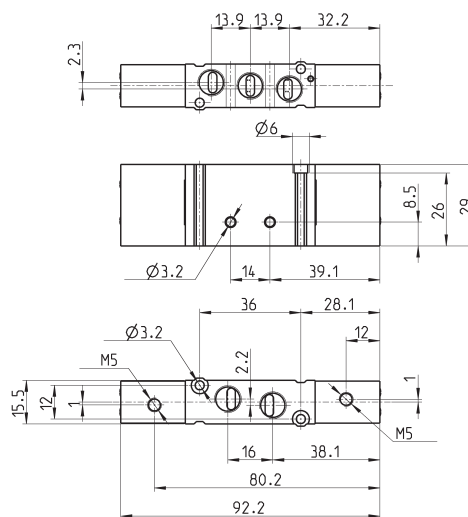
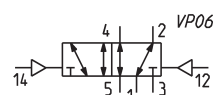


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-36	G1/8	M5	2,5 ÷ 10	-0,9 ÷ 10	550



Pneumatically actuated valve, bistable - size 16

5/2-way



Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-33	G1/8	M5	2 ÷ 10	-0,9 ÷ 10	550

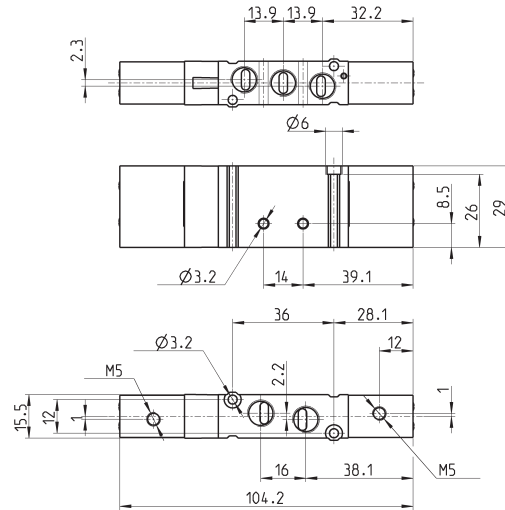
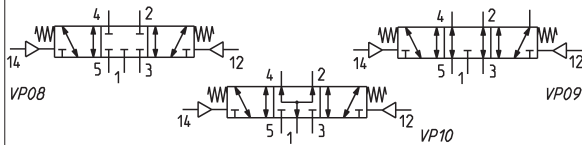
Pneumatically actuated valve - size 16

5/3-way

CC = Centres closed

CO = Centres open

CP = Pressure Centres

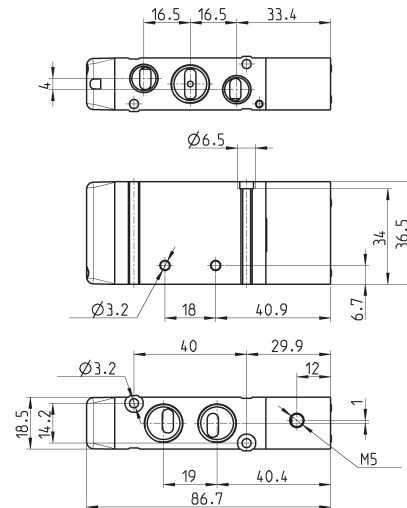
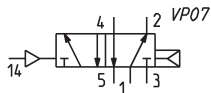


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
EN631-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP08
EN731-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP09
EN831-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP10

Pneumatically actuated valve, monostable - size 19

5/2-way

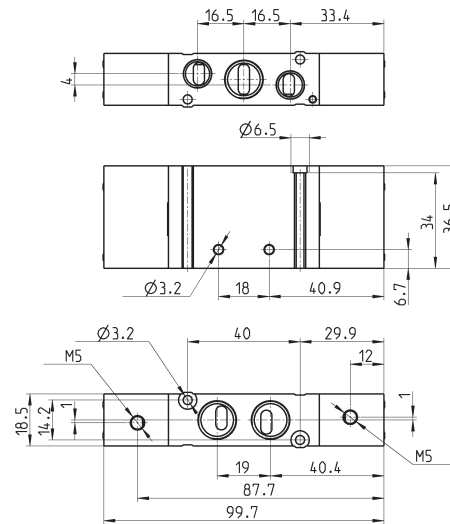
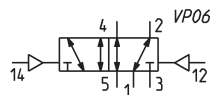
Note: the pilot pressure should never be lower than the operating pressure.



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN551-36	G1/4	G1/8	M5	2.5 ÷ 10	-0.9 ÷ 10	920

Pneumatically actuated valve, bistable - size 19

5/2-way



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (l/min)
EN551-33	G1/4	G1/8	M5	2 ÷ 10	-0,9 ÷ 10	920

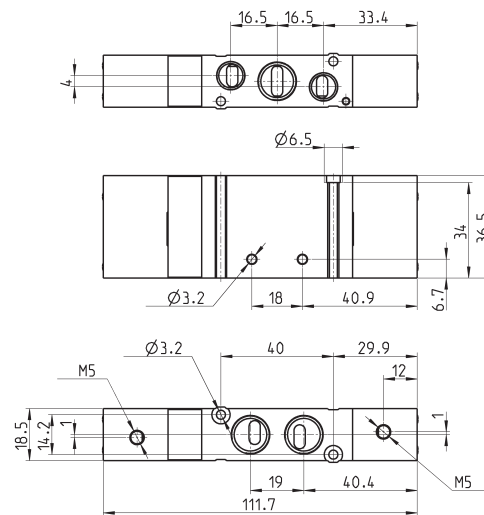
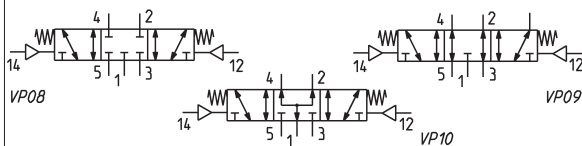
Pneumatically actuated valve - size 19

5/3-way

CC = Centres closed

CO = Centres open

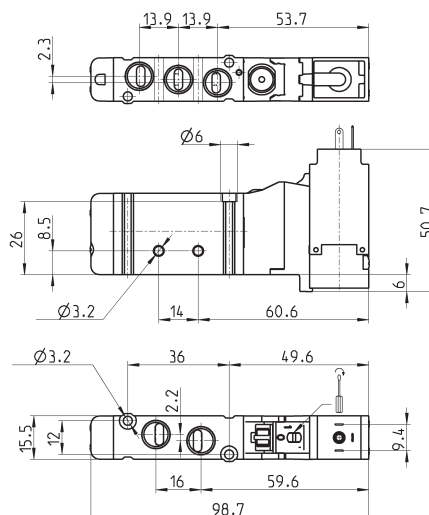
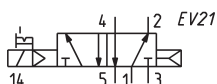
CP = Pressure Centres



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (l/min)	Symbol
EN651-33	G1/4	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	920	VP08
EN751-33	G1/4	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	920	VP09
EN851-33	G1/4	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	920	VP10

Electro-pneumatically actuated valve, monostable - size 16

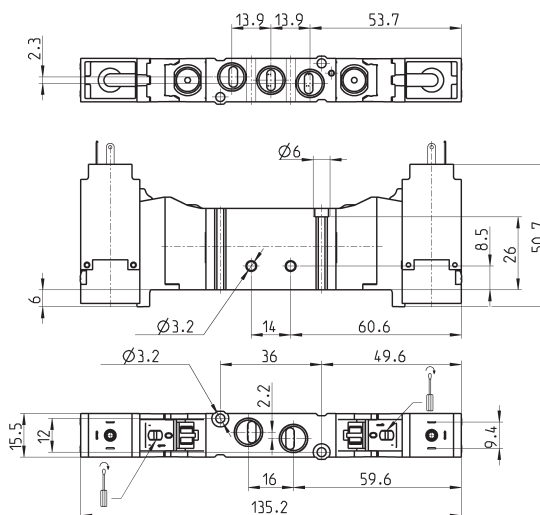
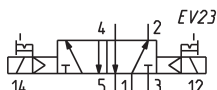
5/2-way

Connectors: see pages
2/2.07.39-40

Mod.	Ports	Operating pressure (bar)	Flow (NI/min)
EN531-16-PN..	G1/8	2,5 ÷ 10	550

Electro-pneumatically actuated valve, bistable - size 16

5/2-way

Connectors: see pages
2/2.07.39-40.

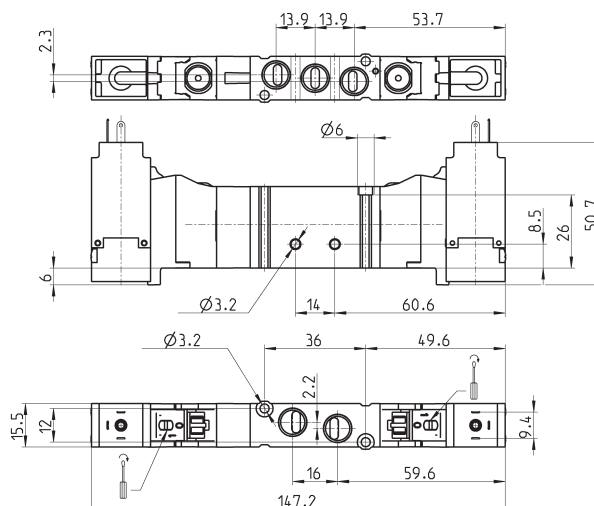
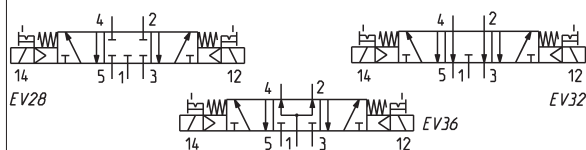
Mod.	Ports	Operating pressure (bar)	Flow (NI/min)
EN531-11-PN..	G1/8	2 ÷ 10	550

Electro-pneumatically actuated valve - size 16

5/3-way
CC = Centres Closed
CO = Centres Open
CP = Pressure Centres



Connectors: see pages
2/2.07.39-40.



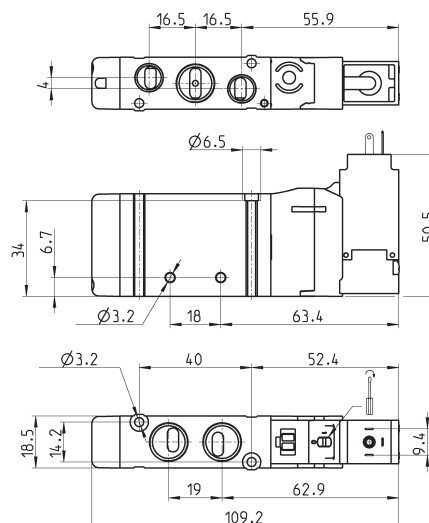
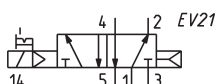
Mod.	Ports	Operating pressure (bar)	Flow (NI/min)	Symbol
EN631-11-PN..	G1/8	3 ÷ 10	550	EV28
EN731-11-PN..	G1/8	3 ÷ 10	550	EV32
EN831-11-PN..	G1/8	3 ÷ 10	550	EV36

Electro-pneumatically actuated valve, monostable - size 19

5/2-way



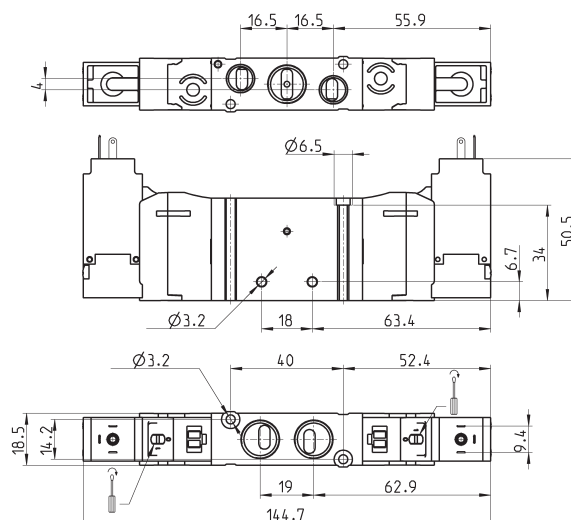
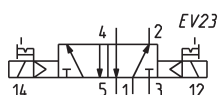
Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	Operating pressure (bar)	Flow (NI/min)
EN551-16-PN..	G1/4	G1/8	2,5 ÷ 10	920

Electro-pneumatically actuated valve, bistable - size 19

5/2-way

Connectors: see pages
2/2.07.39-40.

Mod.	Ports 1-2-4	Ports 3-5	Operating pressure (bar)	Flow (NI/min)
EN551-11-PN..	G1/4	G1/8	2 ÷ 10	920

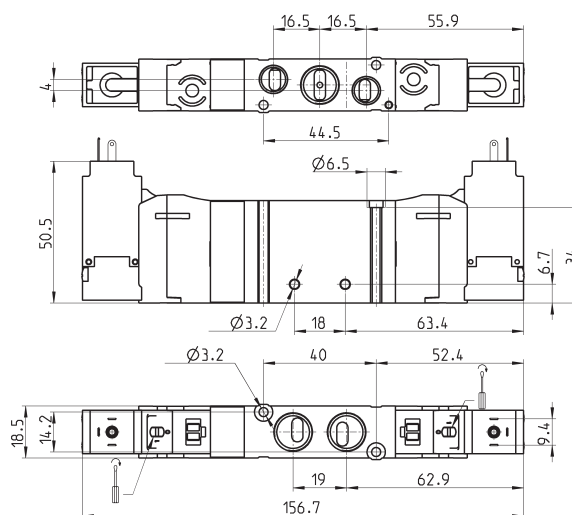
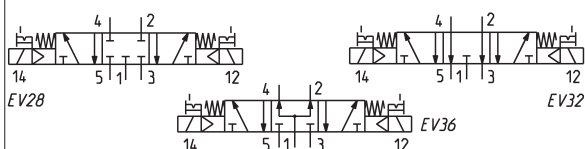
Electro-pneumatically actuated valve - size 19

5/3-way

CC = Centres Closed

CO = Centres Open

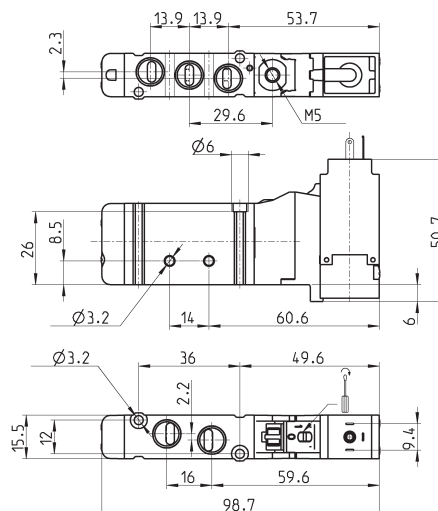
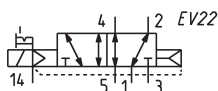
CP = Pressure Centres

Connectors: see pages
2/2.07.39-40.

Mod.	Ports 1-2-4	Ports 3-5	Operating pressure (bar)	Flow (NI/min)	Symbol
EN651-11-PN..	G1/4	G1/8	3 ÷ 10	920	EV28
EN751-11-PN..	G1/4	G1/8	3 ÷ 10	920	EV32
EN851-11-PN..	G1/4	G1/8	3 ÷ 10	920	EV36

Electro-pneum. valve, monostable - ext. servo-pilot supply - size 16

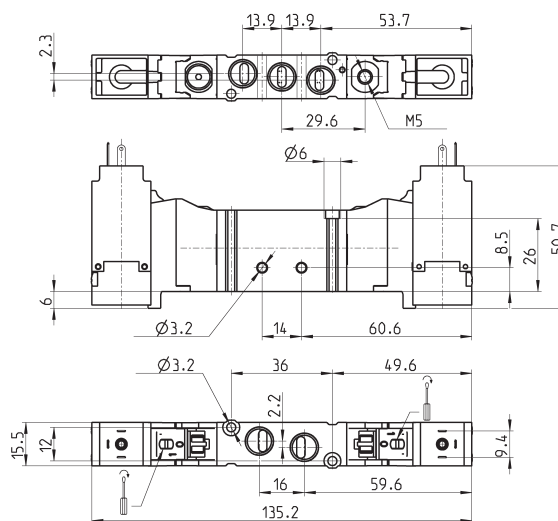
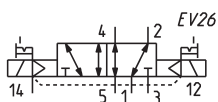
5/2-way


Connectors: see pages
2/2.07.39-40.


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-E16-PN..	G1/8	M5	2,5 ÷ 10	- 0,9 ÷ 10	550

Electro-pneum. valve, bistable - ext. servo-pilot supply - size 16

5/2-way


Connectors: see pages
2/2.07.39-40.


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-E11-PN..	G1/8	M5	2 ÷ 10	-0,9 ÷ 10	550

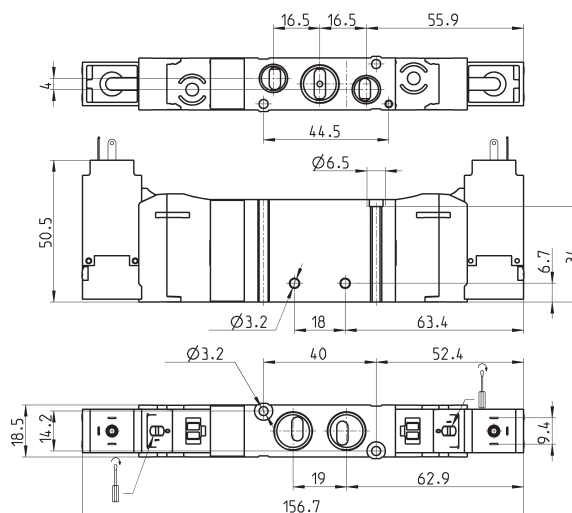
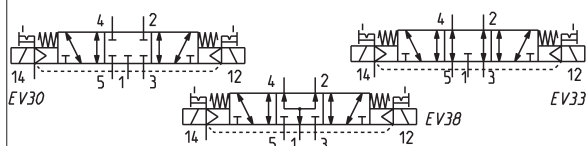
Electro-pneum. valve - ext. servo-pilot supply - size 16

5/3-way

CC = Centres Closed

CO = Centres Open

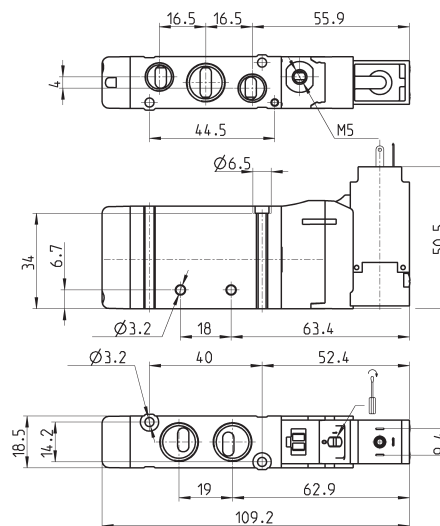
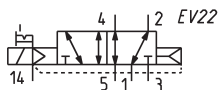
CP = Pressure Centres

Connectors: see pages
2/2.07.39-40.

Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
EN631-E11-PN..	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV30
EN731-E11-PN..	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV33
EN831-E11-PN..	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV38

Electro-pneum. valve, monostable - ext. servo-pilot supply - size 19

5/2-way

Connectors see pages
2/2.07.39-40.

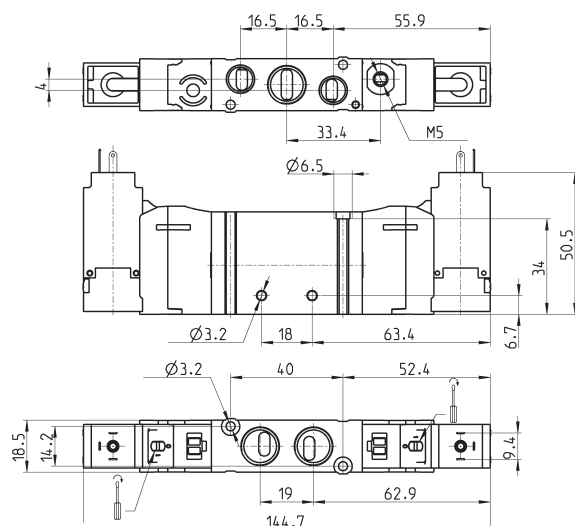
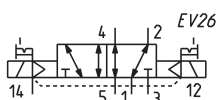
Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN551-E16-PN..	G1/4	G1/8	M5	2,5 ÷ 10	- 0,9 ÷ 10	920

Electro-pneum. valve, bistable - ext. servo-pilot supply - size 19

5/2-way



Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN551-E11-PN..	G1/4	G1/8	M5	2 ÷ 10	-0,9 ÷ 10	920

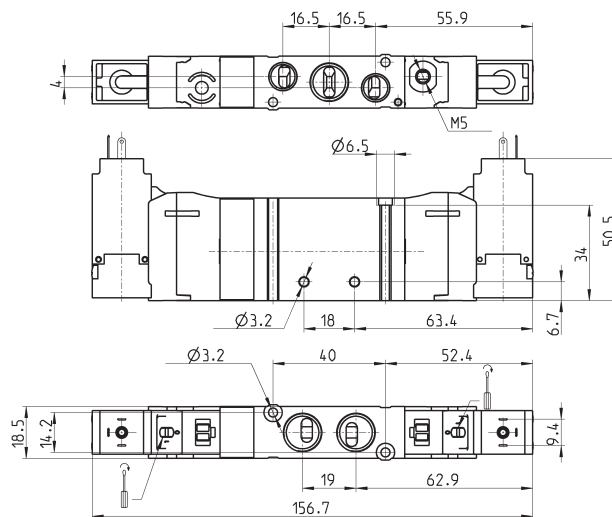
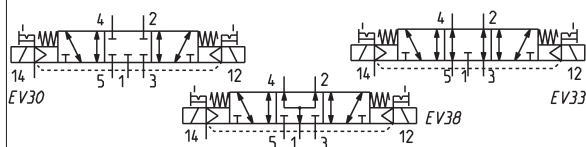
Electro-pneum. valve - ext. servo-pilot supply - size 19

5/3-way

CC = Centres Closed
CO = Centres Open
CP = Pressure Centres



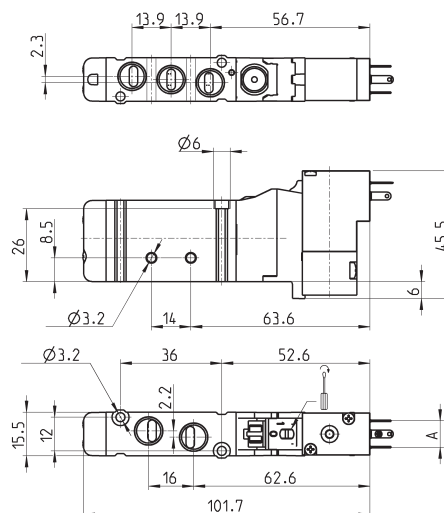
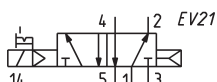
Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
EN651-E11-PN..	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV30
EN751-E11-PN..	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV33
EN851-E11-PN..	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV38

Electro-pneum. valve, monostable, solenoid P, W - size 16

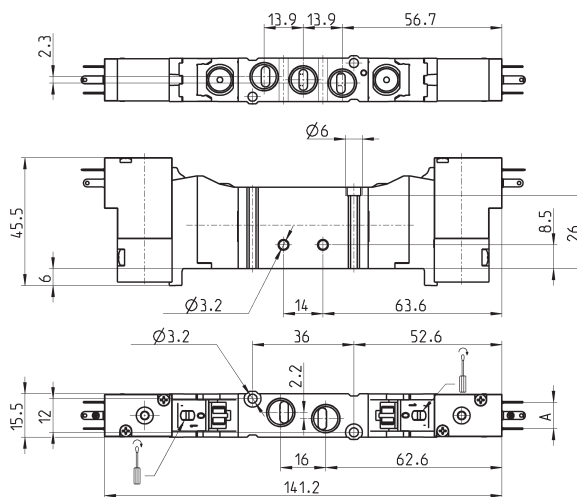
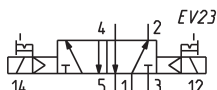
5/2-way

Connectors: see pages
2/2.07.39-40.

Mod.	Ports	A	Operating pressure (bar)	Flow (Nl/min)
EN531-16-P13	G1/8	9,4	2,5 ÷ 10	550
EN531-16-P54	G1/8	9,4	2,5 ÷ 10	550
EN531-16-P56	G1/8	9,4	2,5 ÷ 10	550
EN531-16-W53	G1/8	8	2,5 ÷ 10	550
EN531-16-W54	G1/8	8	2,5 ÷ 10	550

Electro-pneum. valve, bistable, solenoid P, W - size 16

5/2-way

Connectors: see pages
2/2.07.39-40.

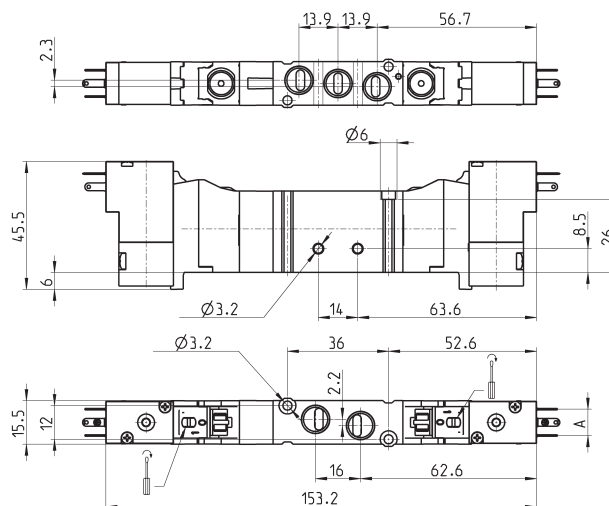
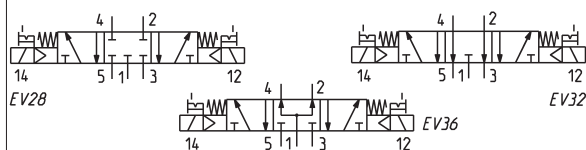
Mod.	Ports	A	Operating pressure (bar)	Flow (Nl/min)
EN531-11-P13	G1/8	9,4	2 ÷ 10	550
EN531-11-P54	G1/8	9,4	2 ÷ 10	550
EN531-11-P56	G1/8	9,4	2 ÷ 10	550
EN531-11-W53	G1/8	8	2 ÷ 10	550
EN531-11-W54	G1/8	8	2 ÷ 10	550

Electro-pneumatic valve, solenoid P, W - size 16

5/3-way
CC = Centres Closed
CO = Centres Open
CP = Pressure Centres



Connectors: see pages
2/2.07.39-40.



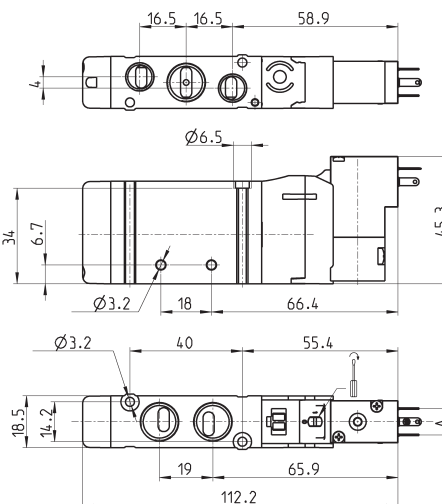
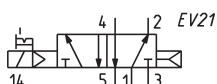
Mod.	Ports	A	Operating pressure (bar)	Flow (NI/min)	Symbol
EN631-11-P..	G1/8	9,4	3 + 10	550	EV28
EN731-11-P..	G1/8	9,4	3 + 10	550	EV32
EN831-11-P..	G1/8	9,4	3 + 10	550	EV36
EN631-11-W..	G1/8	8	3 + 10	550	EV28
EN731-11-W..	G1/8	8	3 + 10	550	EV32
EN831-11-W..	G1/8	8	3 + 10	550	EV36

Electro-pneum. valve, monostable, solenoid P, W - size 19

5/2-way



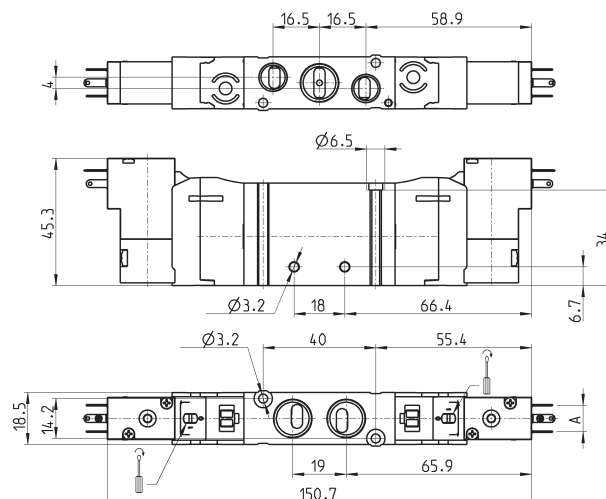
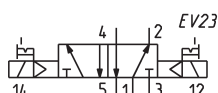
Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	A	Operating pressure (bar)	Flow (NI/min)
EN551-16-P13	G1/4	G1/8	9,4	2,5 + 10	920
EN551-16-P54	G1/4	G1/8	9,4	2,5 + 10	920
EN551-16-P56	G1/4	G1/8	9,4	2,5 + 10	920
EN551-16-W53	G1/4	G1/8	8	2,5 + 10	920
EN551-16-W54	G1/4	G1/8	8	2,5 + 10	920

Electro-pneum. valve, bistable, solenoid P, W - size 19

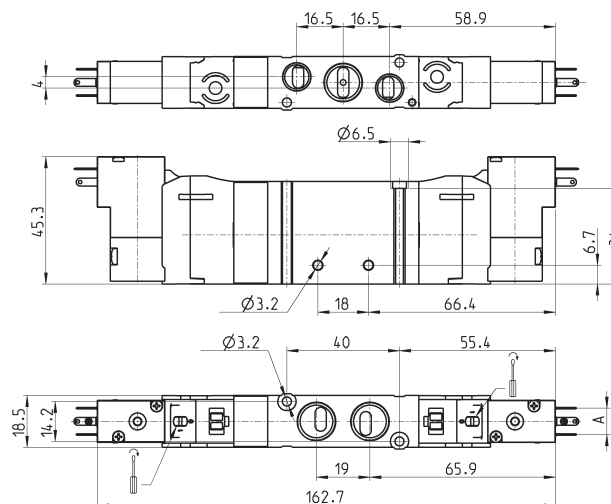
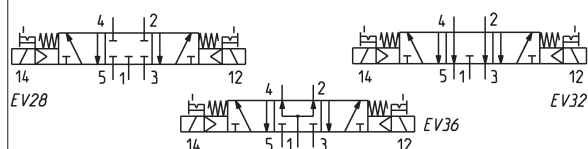
5/2-way

Connectors: see pages
2/2.07.39-40.

Mod.	Ports 1-2-4	Ports 3-5	A	Operating pressure (bar)	Flow (NI/min)
EN551-11-P13	G1/4	G1/8	9,4	2 ÷ 10	920
EN551-11-P54	G1/4	G1/8	9,4	2 ÷ 10	920
EN551-11-P56	G1/4	G1/8	9,4	2 ÷ 10	920
EN551-11-W53	G1/4	G1/8	8	2 ÷ 10	920
EN551-11-W54	G1/4	G1/8	8	2 ÷ 10	920

Electro-pneumatic valve, solenoid P, W - size 19

5/3-way

CC = Centres Closed
CO = Centres Open
CP = Pressure CentresConnectors: see pages
2/2.07.39-40.

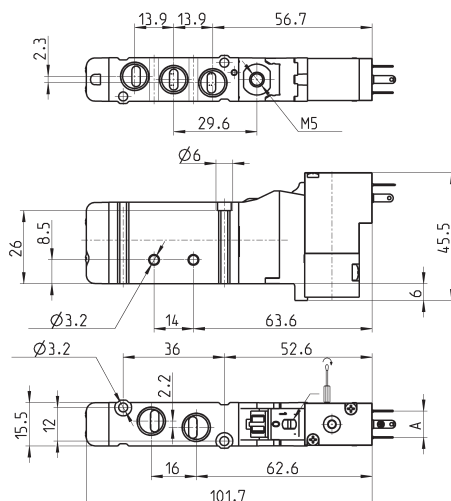
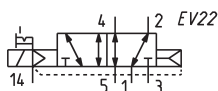
Mod.	Ports 1-2-4	Ports 3-5	A	Operating pressure (bar)	Flow (NI/min)	Symbol
EN651-11-P..	G1/4	G1/8	9,4	3 ÷ 10	920	EV28
EN751-11-P..	G1/4	G1/8	9,4	3 ÷ 10	920	EV32
EN851-11-P..	G1/4	G1/8	9,4	3 ÷ 10	920	EV36
EN651-11-W..	G1/4	G1/8	8	3 ÷ 10	920	EV28
EN751-11-W..	G1/4	G1/8	8	3 ÷ 10	920	EV32
EN851-11-W..	G1/4	G1/8	8	3 ÷ 10	920	EV36

Electro-pneum. valve, monost. ext. servo-pilot sup., sol. P/W - size 16

5/2-way



Connectors: see pages
2/2.07.39-40.



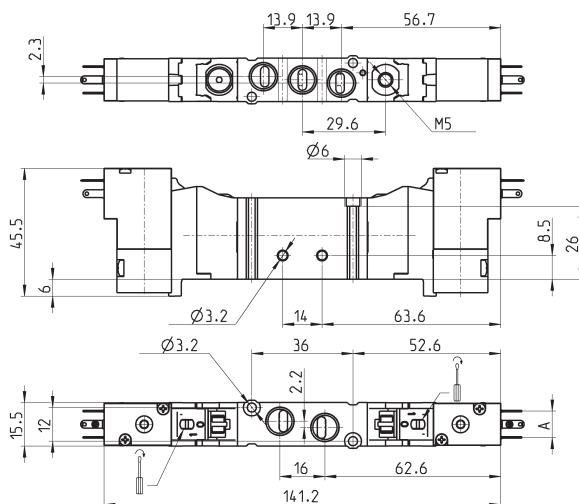
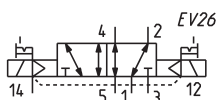
Mod.	Ports	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (l/min)
EN531-E16-P..	G1/8	9,4	M5	2,5 ÷ 10	-0,9 ÷ 10	550
EN531-E16-W..	G1/8	8	M5	2,5 ÷ 10	-0,9 ÷ 10	550

Electro-pneum. valve, bistable ext. servo-pilot sup., sol. P/W - size 16

5/2-way



Connectors: see pages
2/2.07.39-40.



Mod.	Ports	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (l/min)
EN531-E11-P..	G1/8	9,4	M5	2 ÷ 10	-0,9 ÷ 10	550
EN531-E11-W..	G1/8	8	M5	2 ÷ 10	-0,9 ÷ 10	550

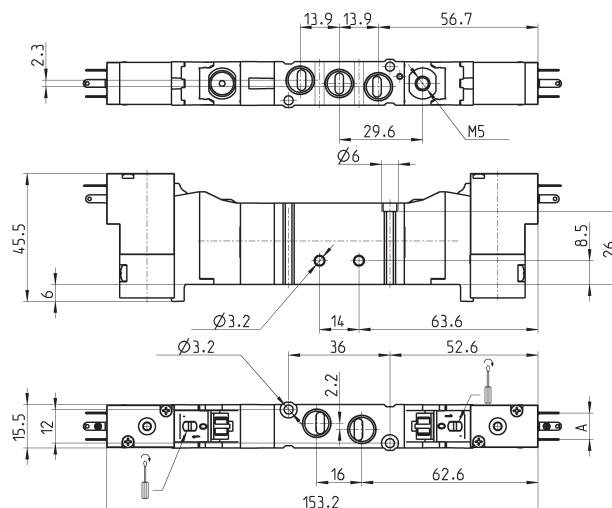
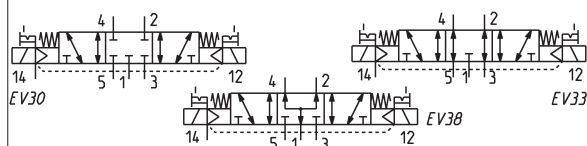
Electro-pneum. valve, ext. servo-pilot supply, solenoid P, W - size 16

5/3-way

CC = Centres Closed

CO = Centres Open

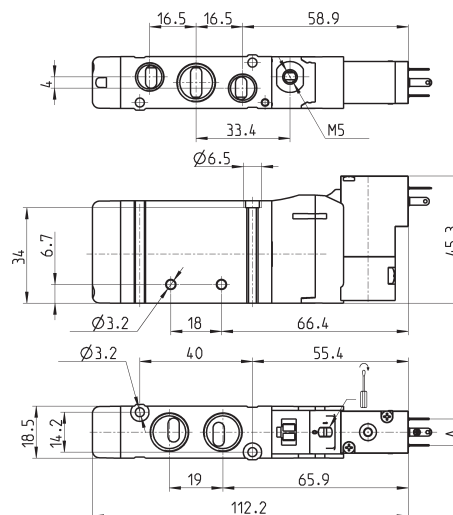
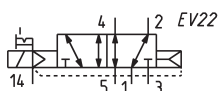
CP = Pressure Centres

Connectors: see pages
2/2.07.39-40.

Mod.	Ports	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
EN631-E11-P..	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	550	EV30
EN731-E11-P..	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	550	EV33
EN831-E11-P..	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	550	EV38
EN631-E11-W..	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV30
EN731-E11-W..	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV33
EN831-E11-W..	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	550	EV38

Electro-pneum. valve, monost. ext. servo-pilot sup., sol. P/W - size 19

5/2-way

Connectors: see pages
2/2.07.40-41.

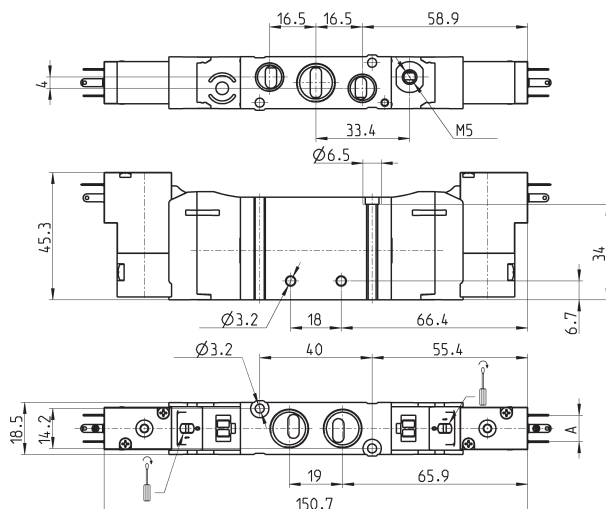
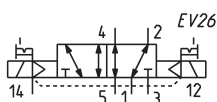
Mod.	Ports 1-2-4	Ports 3-5	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN551-E16-P..	G1/4	G1/8	9,4	M5	2,5 ÷ 10	-0,9 ÷ 10	920
EN551-E16-W..	G1/4	G1/8	8	M5	2,5 ÷ 10	-0,9 ÷ 10	920

Electro-pneum. valve, bistable ext. servo-pilot sup., sol. P/W - size 19

5/2-way



Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN551-E11-P..	G1/4	G1/8	9,4	M5	2 ÷ 10	-0,9 ÷ 10	920
EN551-E11-W..	G1/4	G1/8	8	M5	2 ÷ 10	-0,9 ÷ 10	920

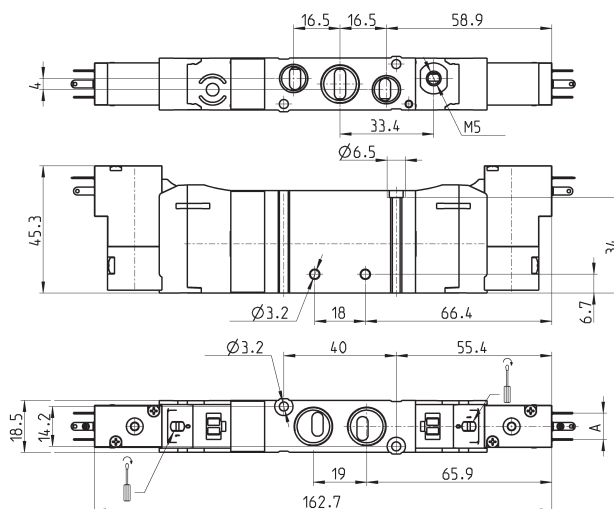
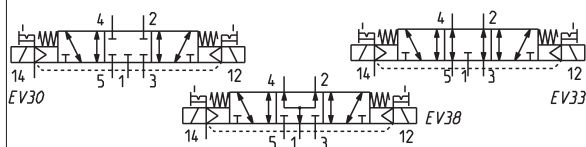
Electro-pneum. valve, ext. servo-pilot supply, solenoid P, W - size 19

5/3-way

CC = Centres Closed
CO = Centres Open
CP = Pressure Centres



Connectors: see pages
2/2.07.39-40.



Mod.	Ports 1-2-4	Ports 3-5	A	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
EN651-E11-P..	G1/4	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	920	EV30
EN751-E11-P..	G1/4	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	920	EV33
EN851-E11-P..	G1/4	G1/8	9,4	M5	3 ÷ 10	-0,9 ÷ 10	920	EV38
EN651-E11-W..	G1/4	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV30
EN751-E11-W..	G1/4	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV33
EN851-E11-W..	G1/4	G1/8	8	M5	3 ÷ 10	-0,9 ÷ 10	920	EV38