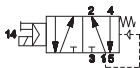
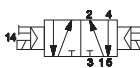
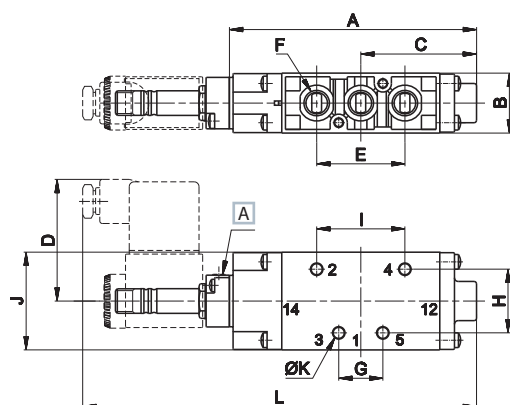


Single/double electric impulse



Symbol	Connection	Control	Return	Pressure bar	Times (ms)		Weight Kg	Part no.
SINGLE ELECTRIC IMPULSE								
	G1/8	electric amplified	pneumomechanical	1,8÷10	18	20	0,27	AC-7500
	G1/4			2,3÷10	22	22	0,28	AC-8500
	G1/2			2÷10	23	30	1,1	AC-9500
DOUBLE ELECTRIC IMPULSE								
	G1/8	electric amplified	electric amplified	1÷10	14	14	0,33	AC-7520
	G1/4			0,8÷10	14	14	0,31	AC-8520
	G1/2			0,8÷10	16	16	1,1	AC-9520

Single electric impulse

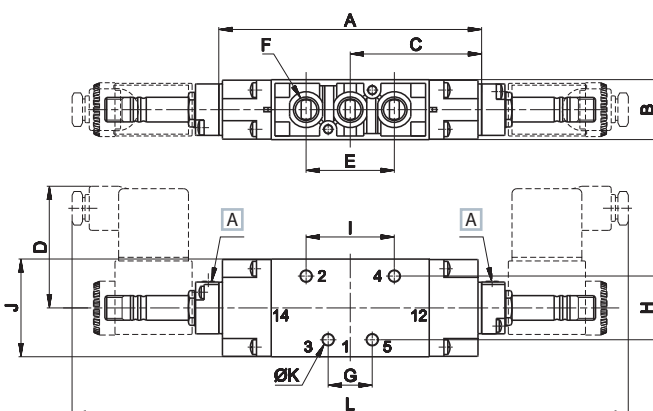


A Manual override

- 1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	A	B	C	D	E	F	G	H	I	J	K	L
G1/8	101	25	47	50	36	G1/8	18	26	36	40	4,5	164
G1/4	116	27	54	50	44	G1/4	22	40	60	50	5,5	180
G1/2	165	40	83	48	80	G1/2	40	50	108	63	6,5	241

Double electric impulse



A Manual override

- 1 = Supply port
2 - 4 = Use
3 - 5 = Exhaust
14 = Control
12 = Return

	A	B	C	D	E	F	G	H	I	J	K	L
G1/8	107	25	53,5	50	36	G1/8	18	26	36	40	4,5	227
G1/4	124	27	62	50	44	G1/4	22	40	60	50	5,5	252
G1/2	164	40	80,5	48	80	G1/2	40	50	108	63	6,5	317

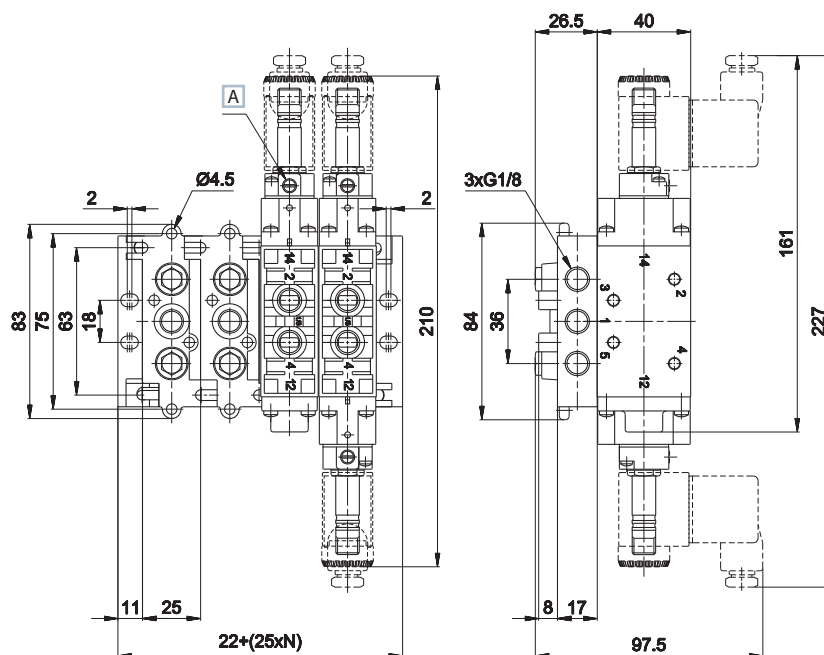
For technical data of coils, refer to section "Accessories>Coils"
For external servoassisted pilot, use AM - 5148 plates (refer to next pages)
Electrovalves are supplied without coil, connector and locking ring

Modular sub-base G1/8



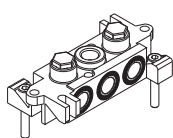
A Manual override

- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

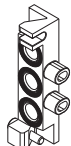


AC-7900

AC-7905



Sub-base with connections
G1/8
weight: 0,15 Kg



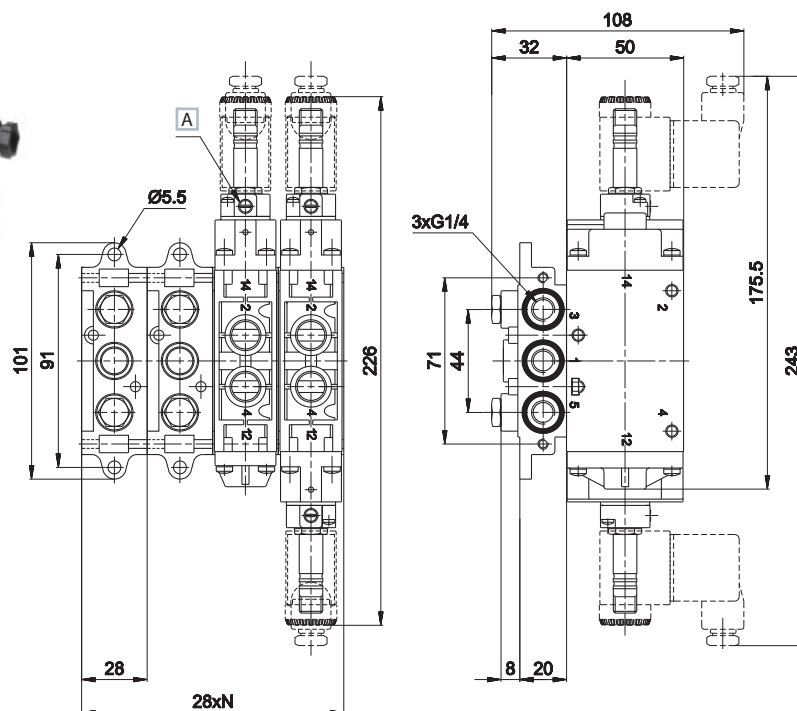
Inlet plate MIXED
system 5/2 - G1/8
weight: 0,06 Kg

Modular sub-base G1/4

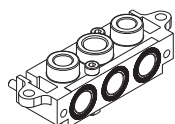


A Manual override

- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

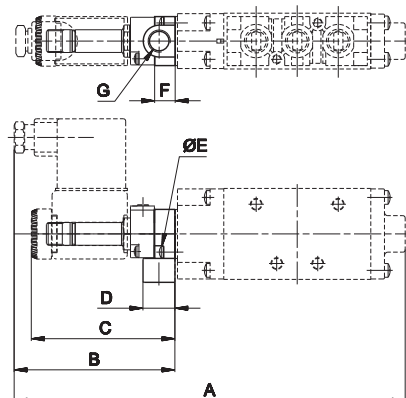
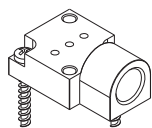


AC-8900



Sub-base with threaded
connections G1/4
Screws are supplied
separately
weight: 0,22 Kg

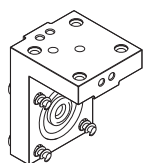
AM-5148



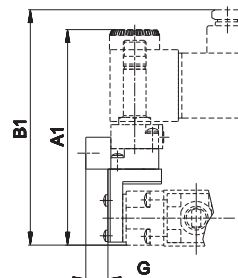
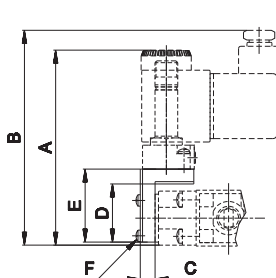
	G1/8	G1/4
A	171,5	186
B	70,5	70,5
C	63	63
D	14	14
E	2,9x10	2,9x10
F	9	9
G	G1/8	G1/8

Plate for external servoassisted pilot
weight: 0,03 Kg

AM-5151



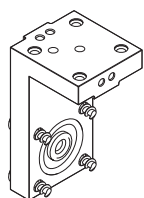
AM-5151 + AM-5148



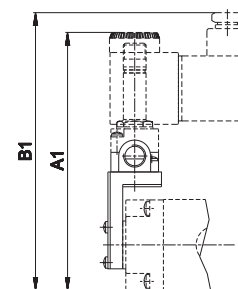
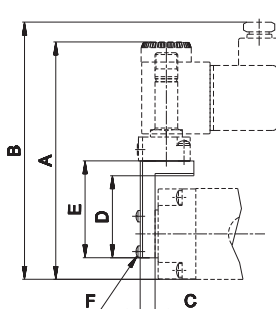
	G1/8	G1/4
A	87,7	88,7
A1	96,7	97,7
B	95,5	96,5
B1	104,5	105,5
C	6,5	6,5
D	25,5	25,5
E	32	32
F	2,9x10	2,9x10
G	9,7	9,7

"H" option solenoid square
weight: 0,035 Kg

AM-5152



AM-5152 + AM-5148



	G1/8	G1/4
A	106	111
A1	115	120
B	113,5	118,5
B1	122,5	127,5
C	6,5	6,5
D	36	36
E	42,5	42,5
F	2,9x10	2,9x10

"P" option solenoid square
weight: 0,05 Kg

CH

2/2 - 3/2 G1/8 poppet valves

Main features:

- closed centers
- high flow rate
- quick response time

Suitable for heavy duties and where the number of mechanical operation is high.



TECHNICAL CHARACTERISTICS

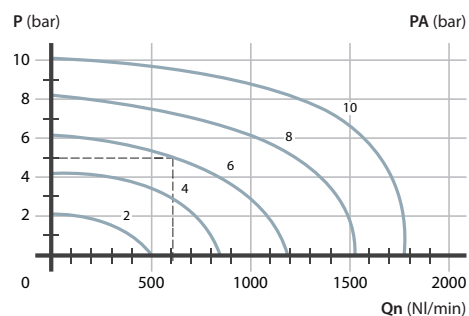
Ambient temperature	-10 ÷ +45 °C
Fluid temperature	max + 50 °C
Fluid	not dehumidified filtered air 50 µm, lubricated or not
Commutation system	poppet system
Ways/Positions	2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO
Pressure	max 10 bar
Control	manual, mechanical
Return	mechanical spring
Connections	G1/8
Nominal Ø	5 mm
Nominal flow rate (NI/min)	NC = 600 NO = 550

CONSTRUCTIVE CHARACTERISTICS

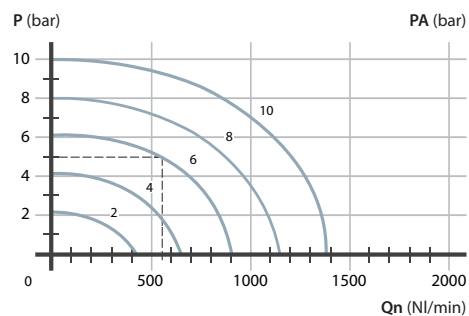
Valve body	die-cast zamak
Seals	nitrile rubber
Actuators	zinc-plated steel/technopolymer
Spool	nickel-plated brass

Flow rate characteristics

>> 3/2 NC



>> 3/2 NO

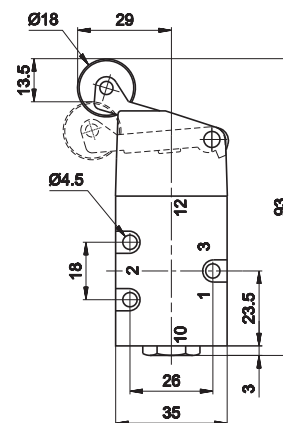
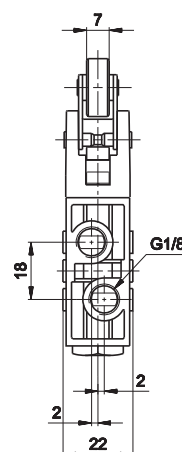


P = Working pressure
PA = Supply pressure
Qn = Flow rate

Roller lever - spring



	Symbol	Flow rate (NI/min)	Force N	Weight Kg	Part no.
3/2 NC		600	21	0,2	CH-250
2/2 NC		600	21	0,2	CH-252
3/2 NO		550	15	0,2	CH-254
2/2 NO		550	15	0,2	CH-256

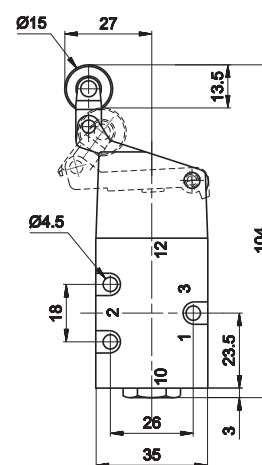
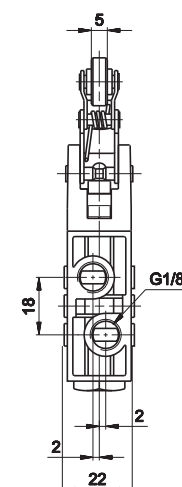


1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

Uni-directional roller lever - spring

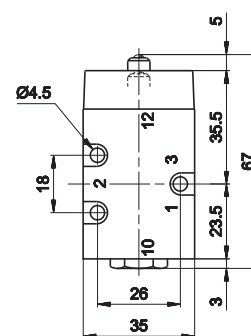
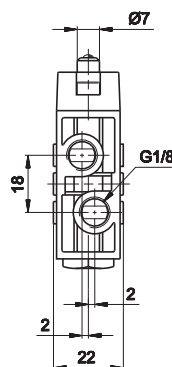


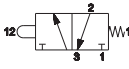
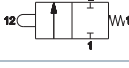
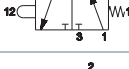
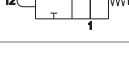
	Symbol	Flow rate (NI/min)	Force N	Weight Kg	Part no.
3/2 NC		600	16	0,21	CH-260
2/2 NC		600	16	0,21	CH-262
3/2 NO		550	12	0,21	CH-264
2/2 NO		550	12	0,21	CH-266



1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

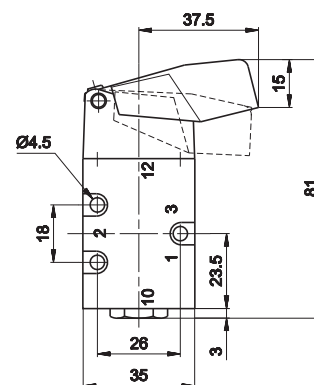
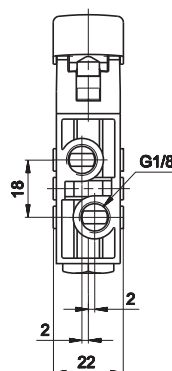
Ball-push - spring

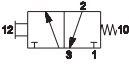
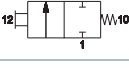
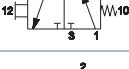
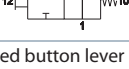


	Symbol	Flow rate (NI/min)	Force N	Weight Kg	Part no.
3/2 NC		600	51	0,18	CH-270
2/2 NC		600	51	0,18	CH-272
3/2 NO		550	39	0,18	CH-274
2/2 NO		550	39	0,18	CH-276

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

Button lever - spring



	Symbol	Flow rate (NI/min)	Force N	Weight Kg	Part no.
3/2 NC		600	18	0,18	CH-280
2/2 NC		600	18	0,18	CH-282
3/2 NO		550	14	0,18	CH-284
2/2 NO		550	14	0,18	CH-286

1 = Supply port
2 = Use
3 = Exhaust
12 = Control
10 = Return

Red button lever

AF

G1/8 ÷ G1 1/2 Poppet valves for compressed air

- Wide range: G1/8 - G1/4 - G3/8 - G1/2 - G3/4 - G1 - G1 1/2
- Original Univer poppet system appreciated for decades
- Suitable for applications where high flow rate and high cycles rates are required
- G1 - 2/2 version for blowing



TECHNICAL CHARACTERISTICS

Ambient temperature	+50 °C max						
Fluid temperature	-5 ÷ +60 °C						
Fluid	filtered air 50 µm, lubricated or not						
Commutation system	poppet						
Ways/Positions	2/2 NC (upon request), 3/2 NC, 3/2 NO, 3/2 NC-NO						
Pressure	max 10 bar						
Control	pneumatic, indirect electropneumatic						
Return	pneumomechanical spring						
Connections	G1/8	G1/4	G3/8	G1/2	G3/4	G1	G1 1/2
Nominal Ø (mm)	5,5	8	10	15	19	25	39
Nominal flow rate (NI/min)	580	1100	1500	5400	6500	13500	35000

CONSTRUCTIVE CHARACTERISTICS

Valve body	G1/8 ÷ G1 = zamak
	G1 1/2 = aluminium
Seals	nitrile rubber, polyurethane
Actuators	G1/8 ÷ G1 = zamak
	G1 1/2 = aluminium
Spool	G1/8 ÷ G3/8 = aluminium
	G1/2 ÷ G1 1/2 = steel + plastic

ELECTRIC CHARACTERISTICS

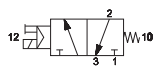
	G1/8 G1/4	G1/4 ÷ G1 1/2
Electropilot	U1	U2
Coil	DA	DB
Power consumption	3,5 W (DC) - 5 VA (AC)	11 W (DC) - 10 VA (AC)
Connector	AM-5110	AM-5111
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC	
Manual override	with 2 position screw	

G1/8 - G1/4 - G3/8 Electrovalves



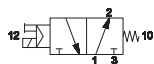
3/2 NC G1/8

AF-2500



3/2 NO G1/8

AF-2501



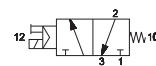
3/2 NC G1/4 - G3/8

AF-2510

AF-2517

AF-2520

AF-2524



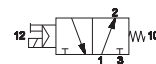
3/2 NO G1/4 - G3/8

AF-2511

AF-2518

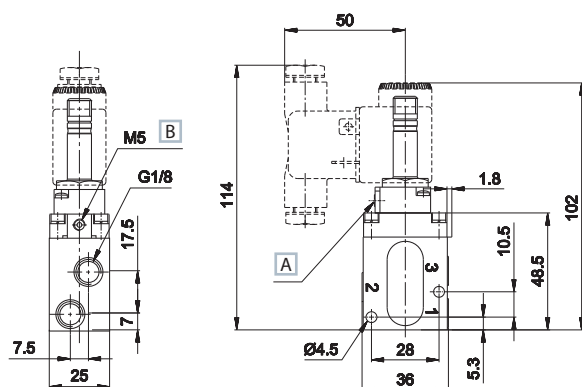
AF-2521

AF-2525



	Connect.	Control	Return	Flow rate (Nl/min)	Ø mm	Times (ms)		Pressure bar		Weight Kg	Coil	Part no.
						En.	De-en.	min.	max.			
3/2 NC	G1/8	electric amplified	pneumomechanical spring	580	5,5	15	20	1,5	10	0,25	U1	AF-2500
	G1/4	electric amplified	pneumomechanical spring	1100	8	20	23	1,6	10	0,58	U1	AF-2510
	G1/4	electric amplified	pneumomechanical spring	1100	8	20	23	1,6	10	0,70	U2	AF-2517
	G3/8	electric amplified	pneumomechanical spring	1500	10	20	23	1,6	10	0,56	U1	AF-2520
	G3/8	electric amplified	pneumomechanical spring	1500	10	20	23	1,6	10	0,70	U2	AF-2524
3/2 NO	G1/8	electric amplified	pneumomechanical spring	580	5,5	15	20	1,5	10	0,25	U1	AF-2501
	G1/4	electric amplified	pneumomechanical spring	1100	8	15	20	1,6	10	0,58	U1	AF-2511
	G1/4	electric amplified	pneumomechanical spring	1100	8	15	20	1,6	10	0,70	U2	AF-2518
	G3/8	electric amplified	pneumomechanical spring	1500	10	15	20	1,6	10	0,56	U1	AF-2521
	G3/8	electric amplified	pneumomechanical spring	1500	10	15	20	1,6	10	0,70	U2	AF-2525

■ G1/8



1 = Supply port

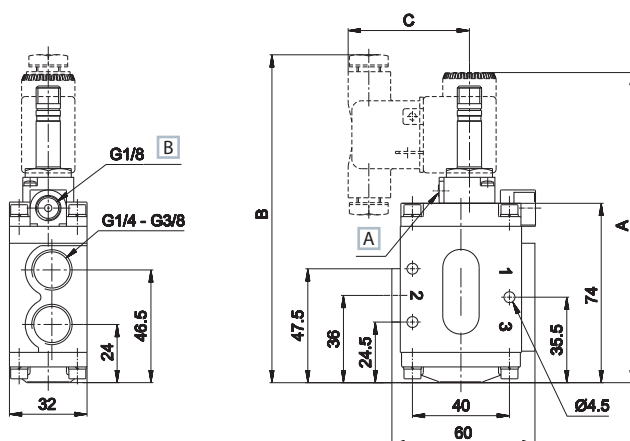
2 = Use

3 = Exhaust

A Manual override

B External servoassistance of the pilot

■ G1/4 - G3/8



1 = Supply port

2 = Use

3 = Exhaust

A Manual override

B External servoassistance of the pilot

	A	B	C
U1	129	136	50
U2	140,5	150	51,5

Upon request:

- external servoassistance of the pilot

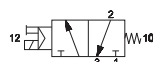
- G1/4 - G3/8 U2 without manual override

Electrovalves are supplied without coil, connector and locking ring

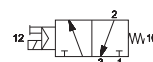
G1/2 - G3/4 - G1 - G1 1/2 Electrovalves



3/2 NC G1/2 - G3/4 - G1
AF-2530
AF-2540
AF-2545



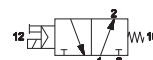
3/2 NC G1 1/2
AF-2565



3/2 NO G1/2 - G3/4 - G1
AF-2531
AF-2541
AF-2546

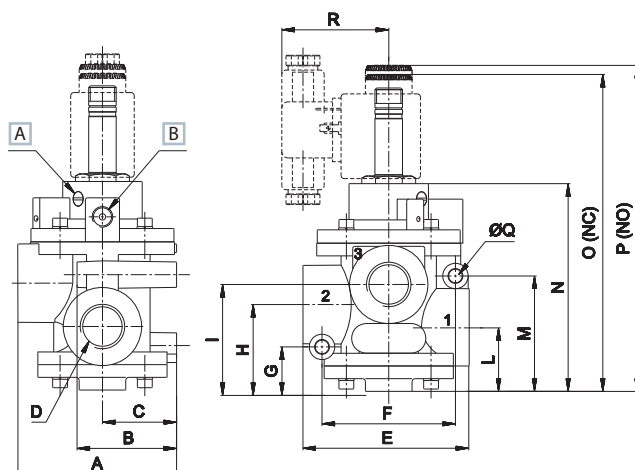


3/2 NO G1 1/2
AF-2561



Connect.	Control	Return	Flow rate (NI/min)	Ø mm	Times (ms)		Pressure bar		Weight Kg	Coil	Part no.
3/2 NC	G1/2 electric amplified	pneumomechanical spring	5400	15	En.	De-en.	min.	max.	1,19	U2	AF-2530
	G3/4 electric amplified	pneumomechanical spring	6500	19	17	27	2	10	1,13	U2	AF-2540
	G1 electric amplified	pneumomechanical spring	13500	25	20	32	2,2	10	1,62	U2	AF-2545
	G1 1/2 electric amplified	pneumomechanical spring	35000	39	47	22	2,5	10	2,27	U2	AF-2565
3/2 NO	G1/2 electric amplified	pneumomechanical spring	5400	15	30	22	3	10	1,19	U2	AF-2531
	G3/4 electric amplified	pneumomechanical spring	6500	19	30	22	3	10	1,13	U2	AF-2541
	G1 electric amplified	pneumomechanical spring	13500	25	28	23	3	10	1,62	U2	AF-2546
	G1 1/2 electric amplified	pneumomechanical spring	35000	39	55	20	3	10	2,27	U2	AF-2561

■ G1/2 - G3/4 - G1

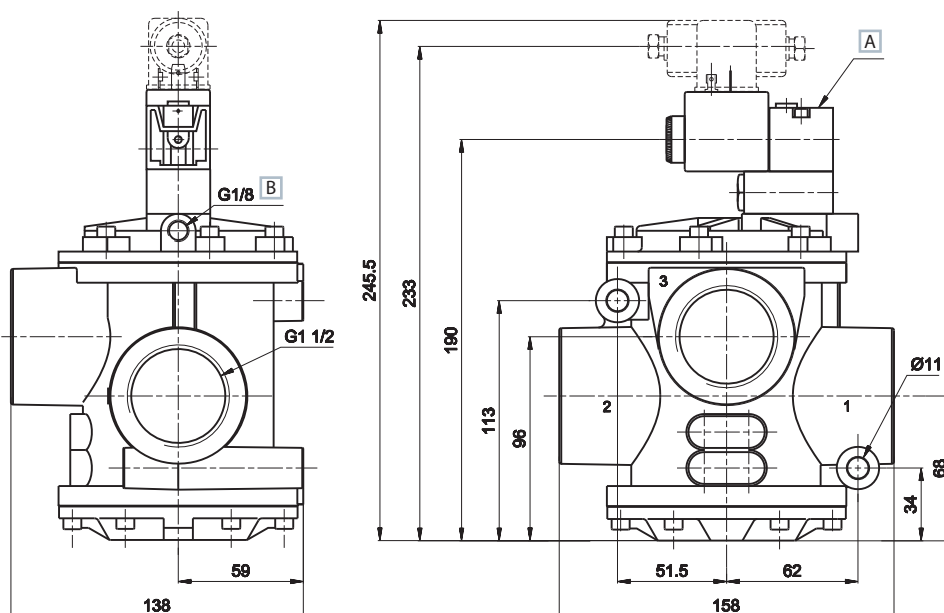


1 = Supply port
2 = Use
3 = Exhaust

A Manual override
B External servoassistance
of the pilot

	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G1	89	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	175	8,4	50

■ G1 1/2

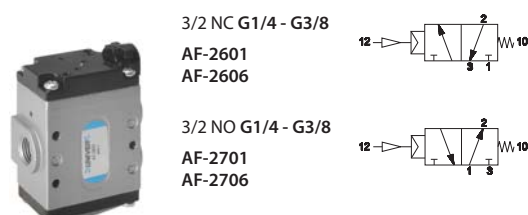
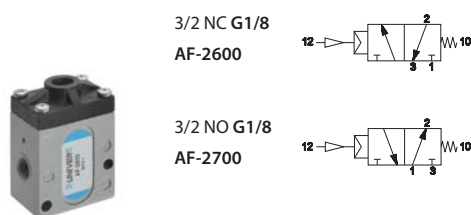


1 = Supply port
2 = Use
3 = Exhaust

A Manual override
B External servoassistance
of the pilot

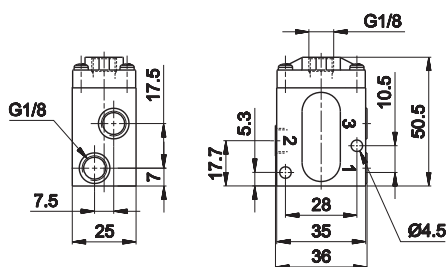
Electrovalves are supplied without coil, connector and locking ring

G1/8 - G1/4 - G3/8 Servo valves



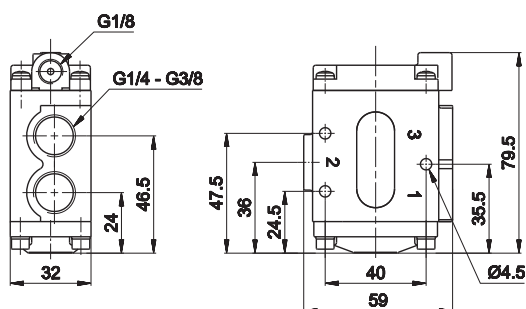
	Connect.	Control	Return	Flow rate (NI/min)	Ø mm	Times (ms)		Pressure bar		Weight Kg	Part no.
						En.	De-en.	supply	control		
3/2 NC	G1/8	pneumatic amplified	pneumomechanical spring	580	5,5	5	8	6	3,5	0,21	AF-2600
	G1/4	pneumatic amplified	pneumomechanical spring	1100	8	5	7	6	4	0,54	AF-2601
	G3/8	pneumatic amplified	pneumomechanical spring	1500	10	5	7	6	4	0,52	AF-2606
3/2 NO	G1/8	pneumatic amplified	pneumomechanical spring	580	5,5	5	8	6	3,5	0,21	AF-2700
	G1/4	pneumatic amplified	pneumomechanical spring	1100	8	5	7	6	4	0,54	AF-2701
	G3/8	pneumatic amplified	pneumomechanical spring	1500	10	5	7	6	4	0,52	AF-2706

■ G1/8



1 = Supply port
2 = Use
3 = Exhaust

■ G1/4 - G3/8



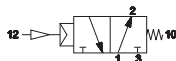
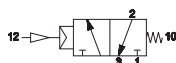
1 = Supply port
2 = Use
3 = Exhaust

G1/2 - G3/4 - G1 - G1 1/2 Servo valves



3/2 NC G1/2 - G3/4 - G1

AF-2603
AF-2610
AF-2615



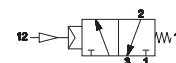
3/2 NO G1/2 - G3/4 - G1

AF-2603
AF-2610
AF-2615



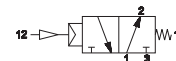
3/2 NC G1 1/2

AF-2620



3/2 NO G1 1/2

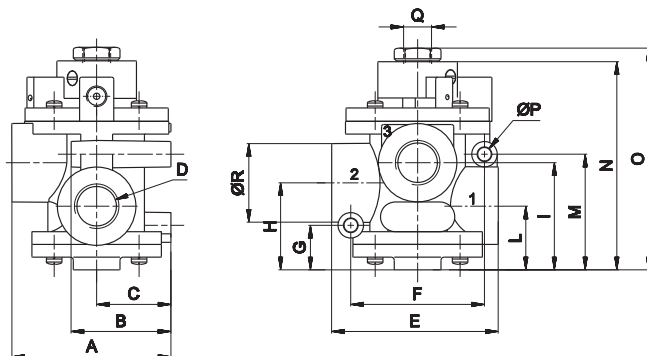
AF-2620



3/2 NC-NO

Connect.	Control	Return	Flow rate (Nl/min)	Ø mm	Times (ms)		Pressure bar		Weight Kg	Part no.
					En.	De-en.	supply	control		
G1/2	pneumatic amplified	pneumomechanical spring	5400	15	7	10	6	4	1,27	AF-2603
G3/4	pneumatic amplified	pneumomechanical spring	6500	19	7	10	6	4	1,10	AF-2610
G1	pneumatic amplified	pneumomechanical spring	13500	25	10	12	6	4	1,59	AF-2615
G1 1/2	pneumatic amplified	pneumomechanical spring	35000	39	36	15	6	4	2,19	AF-2620

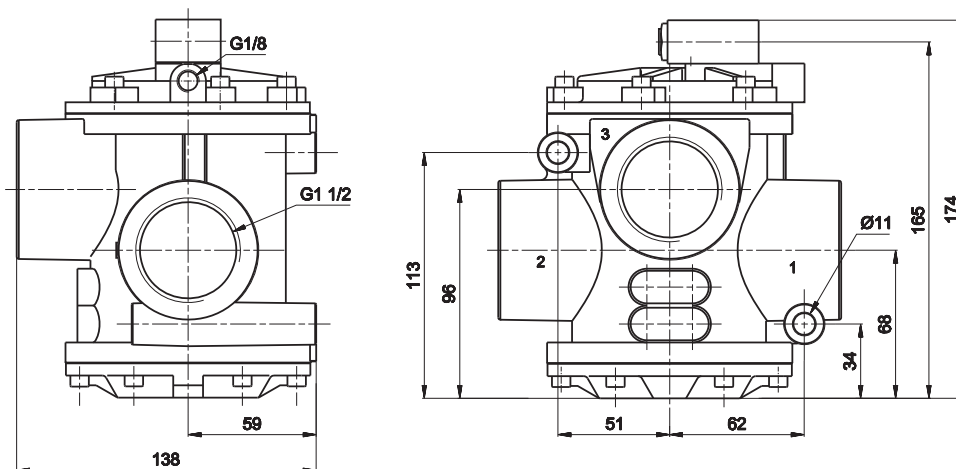
G1/2 - G3/4 - G1



1 = Supply port
2 = Use
3 = Exhaust

	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G1	88,5	55	40	G1	101	76	25,5	51	64	38	62,5	115	120,5	8,4	G1/4	45

G1 1/2

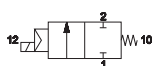


1 = Supply port
2 = Use
3 = Exhaust

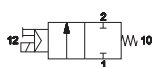
G1 - 2/2 Electrovalve for blowing



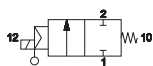
2/2 NC G1
AF-2550



2/2 NC G1
AF-2551

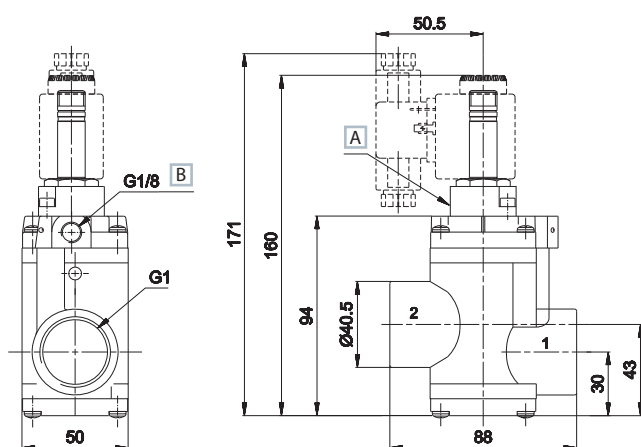


2/2 NC G1
AF-2552



2/2 NC

Connect.	Control	Return	Flow rate (NI/min)	Ø mm	Times (ms)				Pressure bar		Weight Kg	Part no.
					En.	De-en.	min.	max.	supply	control		
G1	electric amplified	pneumomechanical spring	16000	25	23	55	2	10	-	-	1,06	AF-2550
G1	electric amplified	pneumomechanical spring	16000	25	23	55	2	10	-	-	1,06	AF-2551
G1	electric amplified	pneumomechanical spring	16000	25	23	35	-	-	6	4	1,06	AF-2552



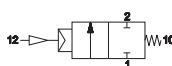
1 = Supply port
2 = Use

A Manual override AF-2551
B External servoassistance
of the pilot AF-2552

G1 - 2/2 Servovalve for blowing

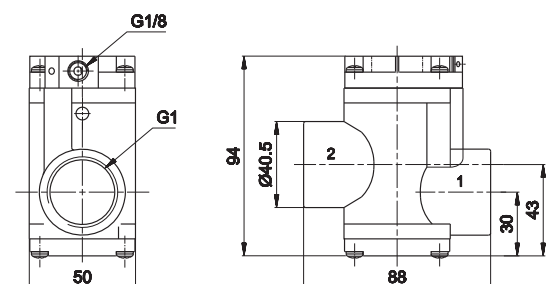


2/2 NC G1
AF-2617



2/2 NC

Connect.	Control	Return	Flow rate	Ø mm	Times (ms)				Pressure bar		Weight Kg	Part no.
					En.	De-en.	min.	max.	supply	control		
G1	pneumatic amplified	pneumomechanical spring	16000	25	12	25			6	4	1	AF-2617



1 = Supply port
2 = Use

Electrovalves are supplied without coil, connector and locking ring

AG

Poppet valves for vacuum G1/8 ÷ G1 1/2

- A complete range: G1/8 - G1/4 - G3/8 - G1/2 - G3/4 - G1 - G1 1/2
- Original Univer poppet system appreciated for decades
- Servoassisted version
- A complete range of solenoid valves and pneumatic valves for vacuum with connection from G1/8 ÷ G1 1/2 to satisfy all requirements
- The internal system ensures high reliability and long life



TECHNICAL CHARACTERISTICS

Ambient temperature	+50 °C						
Fluid temperature	-5 ÷ +60 °C						
Fluid	filtered air 50 µm lubricated or not - vacuum						
Commutation system	poppet						
Ways/Positions	2/2 NC (upon request), 3/2 NC, 3/2 NO, 3/2 NC-NO						
Pressure	max 10 bar						
Control	indirect vacuum						
Return	automatic by vacuum						
Connections	G1/8	G1/4	G3/8	G1/2	G3/4	G1	G1 1/2
Nominal Ø (mm)	5,5	8	10	15	19	25	39

CONSTRUCTIVE CHARACTERISTICS

Valve body	G1/8 ÷ G1 = zamak G1 1/2 = aluminium
Seals	solenoid operated valve, servoassisted by compressed air conical plungers and Vulkollan diaphragm solenoid operated valve, servoassisted by vacuum silicon plugs
Actuators	G1/8 ÷ G1 = zamak G1 1/2 = aluminium
Spool	G1/8 ÷ G3/8 = aluminium G1/2 ÷ G1 1/2 = steel + plastic

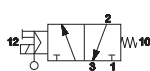
ELECTRIC CHARACTERISTICS

	G1/8 G1/4	G1/4 ÷ G1 1/2
Electropilot	U1	U2
Coil	DA	DB
Power consumption	3,5 W (DC) - 5 VA (AC)	11 W (DC) - 10 VA (AC)
Connector	AM-5110	AM-5111
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC	
Manual override	with 2 positions screw	

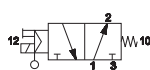
Solenoid valves 3/2 for vacuum, servoassisted by compressed air



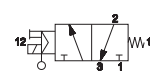
3/2 NC G1/8
AG-3001



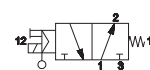
3/2 NO G1/8
AG-3002



3/2 NC G1/4 - G3/8
AG-3009
AG-3011



3/2 NO G1/4 - G3/8
AG-3010
AG-3012

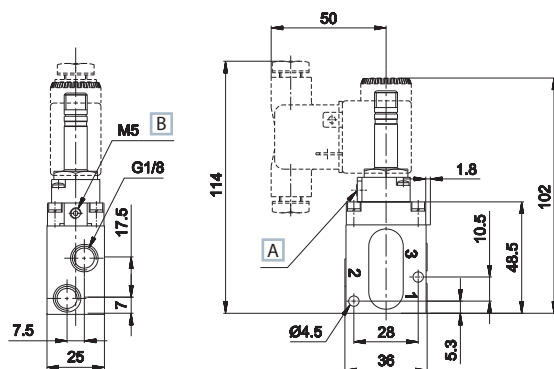


3/2 NC

3/2 NO

Connect.	Control	Return	Ø	Times (ms)		Minimum control	Pump	Max vacuum		Weight	Coil	Part no.
			mm	En.	De-en.	pressure bar	max m³/h	mm Hg	Torr	Kg		
3/2 NC	G1/8	electric	5,5	14	25	1,5	1,5	759,5	0,5	0,25	U1	AG-3001
	G1/4	amplified	8	16	27	2,5	4	759,5	0,5	0,58	U2	AG-3009
	G3/8	spring	10	16	27	2,5	10	759,5	0,5	0,56	U2	AG-3011
3/2 NO	G1/8	electric	5,5	14	25	1,5	1,5	759,5	0,5	0,25	U1	AG-3002
	G1/4	amplified	8	16	27	2,5	4	759,5	0,5	0,58	U2	AG-3010
	G3/8	spring	10	16	27	2,5	10	759,5	0,5	0,56	U2	AG-3012

G1/8



1 = Supply port (vacuum)

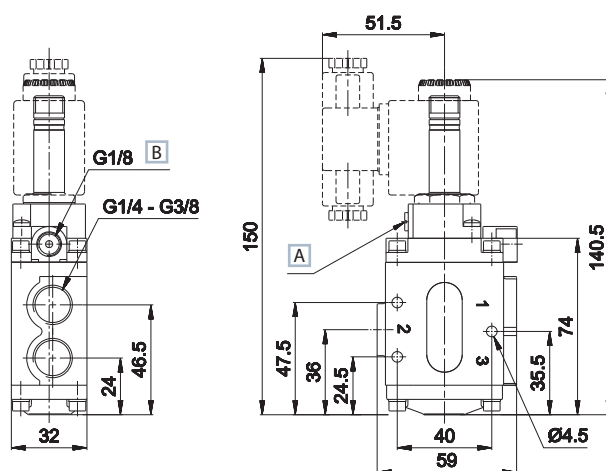
2 = Use

3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

G1/4 - G3/8



1 = Supply port (vacuum)

2 = Use

3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

Upon request:

- external servoassistance of the pilot

- G1/4 - G3/8 U2 without manual override

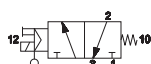
Electrovalves are supplied without coil, connector and locking ring

Solenoid valves 3/2 for vacuum, servoassisted by compressed air



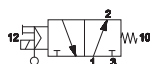
3/2 NC G1/2 - G3/4 - G1

AG-3020
AG-3040
AG-3050



3/2 NO G1/2 - G3/4 - G1

AG-3021
AG-3041
AG-3051



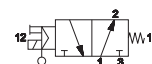
3/2 NC G1 1/2

AG-3062



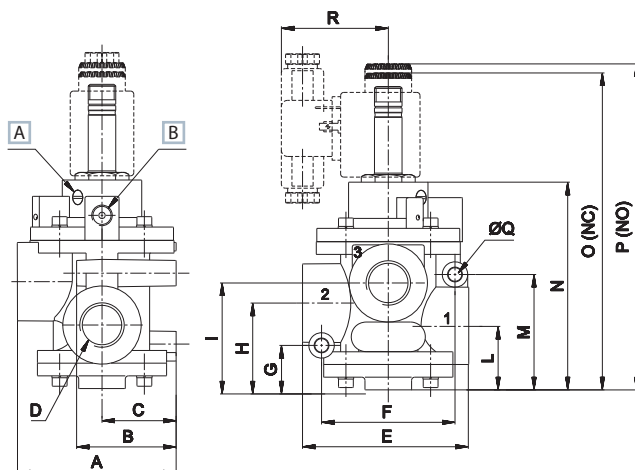
3/2 NO G1 1/2

AG-3063



Connect.	Control	Return	Ø	Times (ms)		Minimum control	Pump	Max vacuum		Weight	Coil	Part.no
			mm	En.	Dis.	pressure bar	max m³/h	mm Hg	Torr	Kg		
G1/2	electric amplified	mechanical spring	15	16	40	3	20	759,5	0,5	1,19	U2	AG-3020
G3/4			19	16	40	3	35	759,5	0,5	1,13	U2	AG-3040
G1			25	18	42	3	90	759,5	0,5	1,62	U2	AG-3050
G1 1/2			39	60	38	4	180	759,5	0,5	2,25	U2	AG-3062
G1/2	electric amplified	mechanical spring	15	16	40	3	20	759,5	0,5	1,19	U2	AG-3021
G3/4			19	16	40	3	35	759,5	0,5	1,13	U2	AG-3041
G1			25	18	42	3	90	759,5	0,5	1,62	U2	AG-3051
G1 1/2			39	60	38	4	180	759,5	0,5	2,25	U2	AG-3063

■ G1/2 - G3/4 - G1

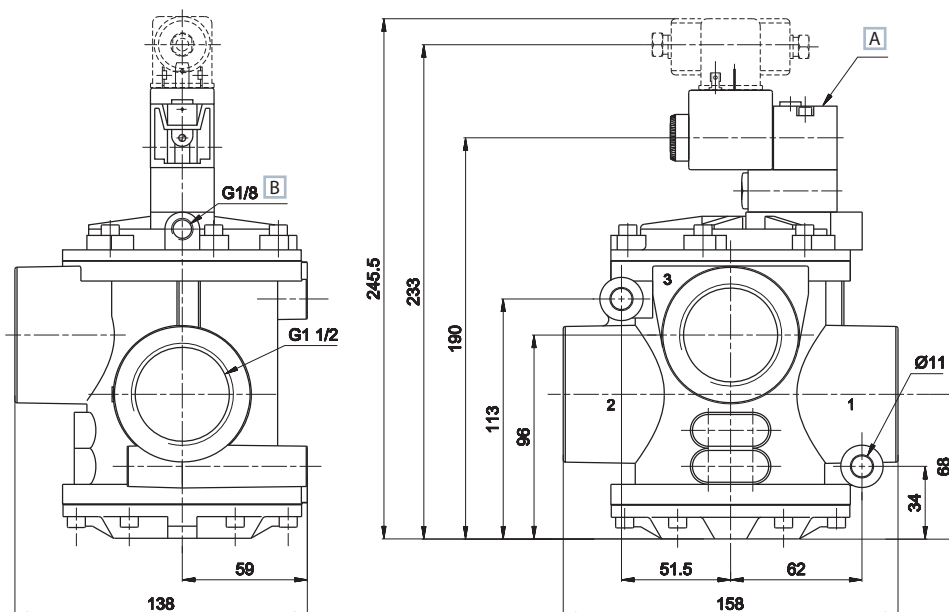


1 = Supply port
2 = Use
3 = Exhaust

A Manual override
B Supply port for external servoassistance of the pilot

	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G1	89	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	175	8,4	50

■ G1 1/2



1 = Supply port
2 = Use
3 = Exhaust

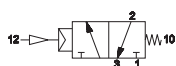
A Manual override
B Supply port for external servoassistance of the pilot

Electrovalves are supplied without coil, connector and locking ring

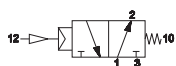
Servovalves 3/2 for vacuum servoassisted by compressed air



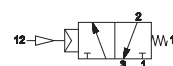
3/2 NC G1/8
AG-3071



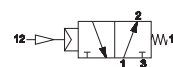
3/2 NO G1/8
AG-3072



3/2 NC G1/4 - G3/8
AG-3073
AG-3075

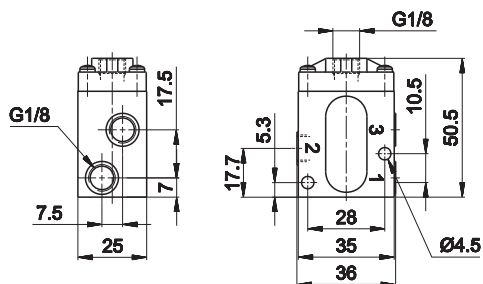


3/2 NO G1/4 - G3/8
AG-3074
AG-3076



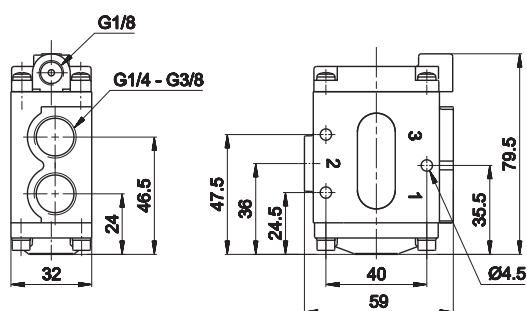
	Connect.	Control	Return	Ø	Times (ms)		Minimum control pressure bar	Pump max m³/h	Max vacuum		Weight Kg	Part no.
					En.	De-en.			mm Hg	Torr		
3/2 NC	G1/8	pneumatic amplified	mechanical spring	5,5	3	6	1,5	1,5	759,5	0,5	0,21	AG-3071
	G1/4			8	4	8	2,5	4	759,5	0,5	0,54	AG-3073
	G3/8			10	4	8	2,5	10	759,5	0,5	0,52	AG-3075
3/2 NO	G1/8	pneumatic amplified	mechanical spring	5,5	3	6	1,5	1,5	759,5	0,5	0,21	AG-3072
	G1/4			8	4	8	2,5	4	759,5	0,5	0,54	AG-3074
	G3/8			10	4	8	2,5	10	759,5	0,5	0,52	AG-3076

■ G1/8



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

■ G1/4 - G3/8



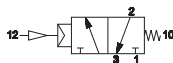
1 = Supply port (vacuum)
2 = Use
3 = Exhaust

Servovalves 3/2 for vacuum servoassisted by compressed air



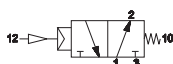
3/2 NC G1/2 - G3/4 - G1

AG-3081
AG-3091
AG-3100



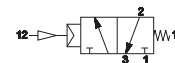
3/2 NO G1/2 - G3/4 - G1

AG-3082
AG-3092
AG-3101



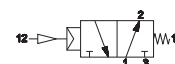
3/2 NC G1 1/2

AG-3110



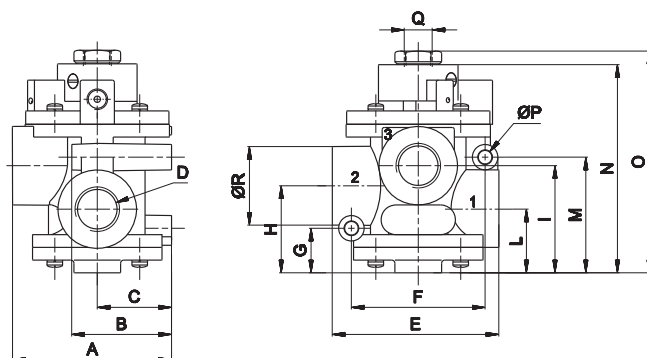
3/2 NO G1 1/2

AG-3111



Connect.	Control	Return	Ø	Times (ms)		Minimum control	Pump	Max vacuum		Weight	Part no.
			mm	En.	De-en.	pressure bar	max m³/h	mm Hg	Torr	Kg	
3/2 NC	G1/2	pneumatic amplified	15	6	15	3	20	759,5	0,5	1,16	AG-3081
	G3/4		19	6	15	3	35	759,5	0,5	1,10	AG-3091
	G1		25	7	16	3	90	759,5	0,5	1,59	AG-3100
	G1 1/2		39	65	25	4	180	759,5	0,5	2,19	AG-3110
3/2 NO	G1/2	pneumatic amplified	15	6	15	3	20	759,5	0,5	1,16	AG-3082
	G3/4		19	6	15	3	35	759,5	0,5	1,10	AG-3092
	G1		25	7	16	3	90	759,5	0,5	1,59	AG-3101
	G1 1/2		39	65	25	4	180	759,5	0,5	2,19	AG-3111

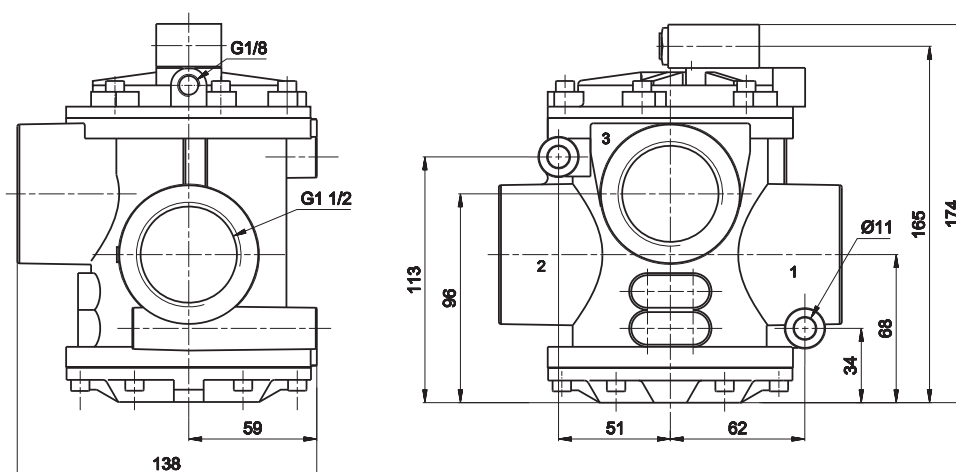
G1/2 - G3/4 - G1



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

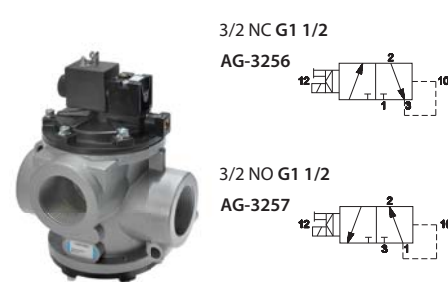
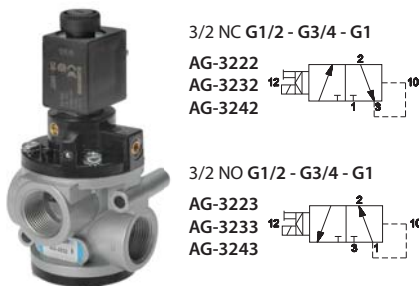
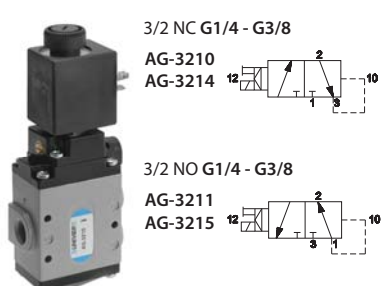
	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G1	88,5	55	40	G1	101	76	25,5	51	64	38	62,5	115	120,5	8,4	G1/4	45

G1 1/2



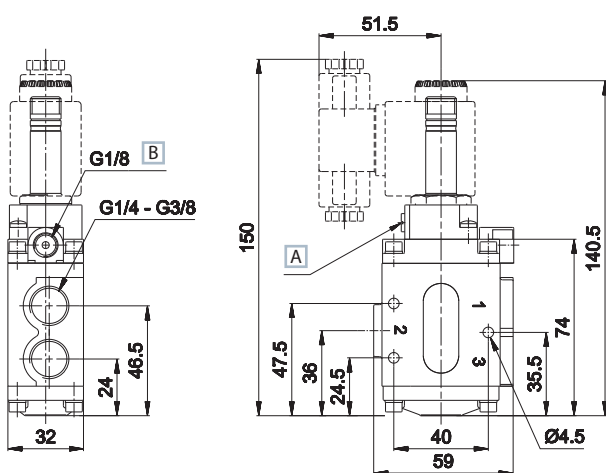
1 = Supply port (vacuum)
2 = Use
3 = Exhaust

Electrovalves 3/2 for direct vacuum servoassisted by vacuum

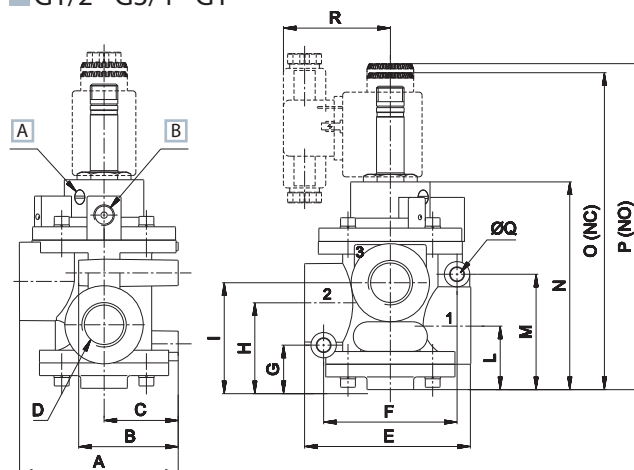


Connect.	Control	Return	Ø mm	Times (ms)			Pump max m³/h	Min. vacuum		Max vacuum		Weight Kg	Coil	Part no.
				En.	De-en.			mm Hg	Torr	mm Hg	Torr			
3/2 NC	electric amplified	vacuum	G1/4	8	25	16	4	150	610	759,5	0,5	0,52	U2	AG-3210
			G3/8	10	25	16	10	150	610	759,5	0,5	0,56	U2	AG-3214
			G1/2	15	30	15	20	150	610	759,5	0,5	1,19	U2	AG-3222
			G3/4	19	30	15	35	150	610	759,5	0,5	1,13	U2	AG-3232
			G1	25	38	18	90	150	610	759,5	0,5	1,62	U2	AG-3242
			G1 1/2	39	75	50	100	150	610	759,5	0,5	2	U2	AG-3256
3/2 NO	electric amplified	vacuum	G1/4	8	20	14	4	150	610	759,5	0,5	0,58	U2	AG-3211
			G3/8	10	20	14	10	150	610	759,5	0,5	0,56	U2	AG-3215
			G1/2	15	20	18	20	150	610	759,5	0,5	1,19	U2	AG-3223
			G3/4	19	20	18	35	150	610	759,5	0,5	1,13	U2	AG-3233
			G1	25	25	20	90	150	610	759,5	0,5	1,62	U2	AG-3243
			G1 1/2	39	70	60	100	150	610	759,5	0,5	2	U2	AG-3257

G1/4 - G3/8

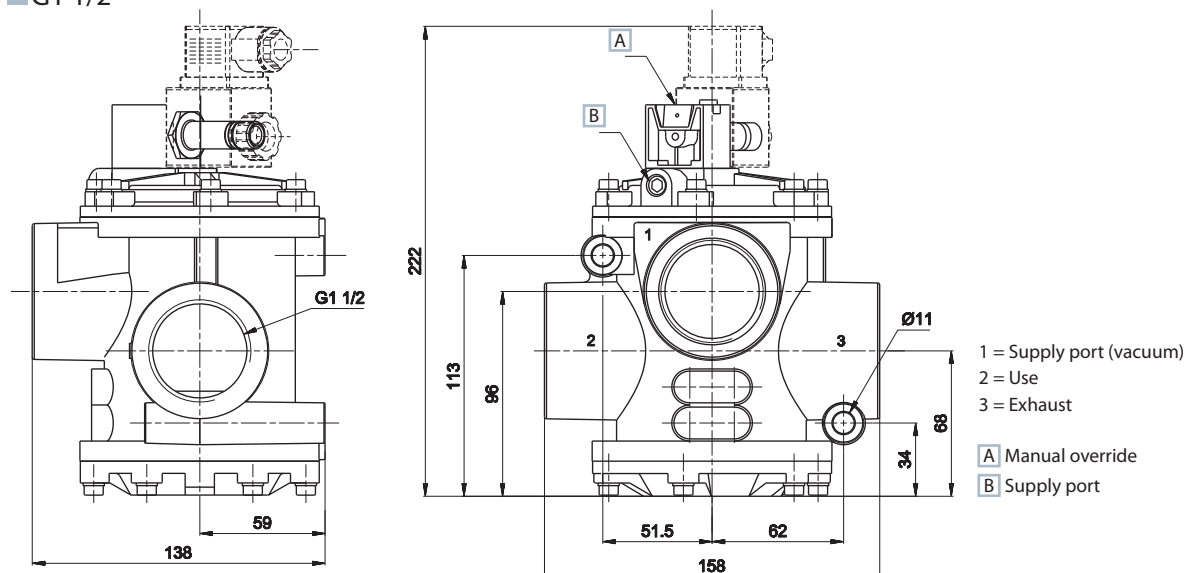


G1/2 - G3/4 - G1



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G1	89	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	175	8,4	50

G1 1/2



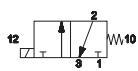
For 2/2 version put a cup on the exhaust (3)
Electrovalves are supplied without coil, connector and locking ring

Electrovalves 2/2 - 3/2 for direct vacuum servoassisted by vacuum



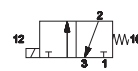
3/2 NC G1/4

AG-3310
AG-3311
AG-3312
AG-3313



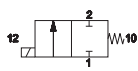
3/2 NC G1/2

AG-3330
AG-3331
AG-3332



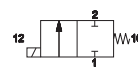
2/2 NC G1/4

AG-3300
AG-3301
AG-3302
AG-3303



2/2 NC G1/2

AG-3320
AG-3321
AG-3322

**Material:**

valve body G1/4 = brass

G1/2 = aluminium

tube/sleeve stainless steel

nucleus and spring stainless steel

seals (a) G1/4 = NBR

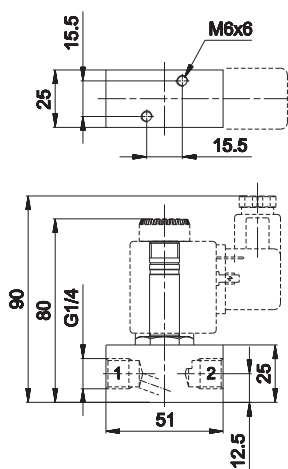
G1/2 = vulkollan

(a) = vulkollan + NBR for valves 3/2 version

Connect.	Control	Return	Ø	Times (ms)		Pump	Max vacuum		Weight	Part no.
			mm	En.	De-en.	max m³/h	mm Hg	Torr	Kg	
G1/4	electric	mechanical spring	3-3*	10	10	1,8	759,5	0,5	0,22	AG-3310
G1/4			4-3*	12	8	2,5	759,5	0,5	0,22	AG-3311
G1/4			5-3*	13	8	4	759,5	0,5	0,22	AG-3312
G1/4			6-3*	15	8	5	759,5	0,5	0,22	AG-3313
G1/2			8-3*	17	8	6	759,5	0,5	0,25	AG-3330
G1/2			10-3*	20	10	7,5	759,5	0,5	0,25	AG-3331
G1/2			11-3*	28	10	10	759,5	0,5	0,25	AG-3332
G1/4	electric	mechanical spring	3	10	-	1,8	759,5	0,5	0,22	AG-3300
G1/4			4	12	-	2,5	759,5	0,5	0,22	AG-3301
G1/4			5	13	-	4	759,5	0,5	0,22	AG-3302
G1/4			6	15	-	5	759,5	0,5	0,22	AG-3303
G1/2			8	17	-	6	759,5	0,5	0,25	AG-3320
G1/2			10	20	-	7,5	759,5	0,5	0,25	AG-3321
G1/2			11	28	-	10	759,5	0,5	0,25	AG-3322

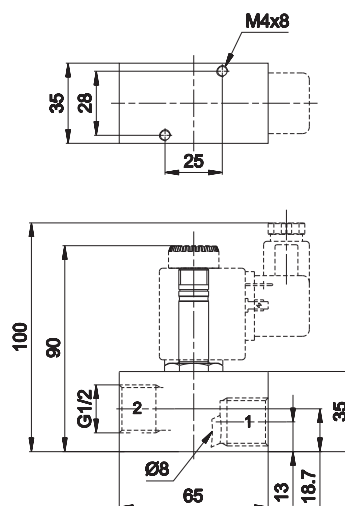
* = solenoid valves with 3 mm fixed exhaust

■ G1/4



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

■ G1/2



1 = Supply port (vacuum)
2 = Use
3 = Exhaust



Coil U2 - 17 VA

Voltage
24 V CA - 50/60 Hz DB-0607
110 V CA - 50/60 Hz DB-0608
220 V CA - 50/60 Hz DB-0610

AI

Miniature limit switches

Univer limit switches, mounted on sub-bases with threaded connections or with quick couplings, may be combined with different types of manual operators for panel mounting complying with the various need of the plant.



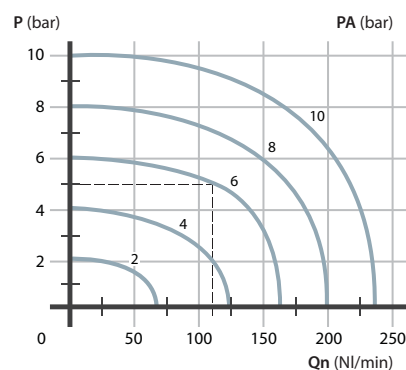
TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +90 °C
Fluid temperature	max +50 °C
Fluid	defiltered air 50 um not dehumidified, lubricated or not
Commutation system	poppet system
Ways/Positions	2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO
Pressure	max 10 bar
Control	manual, mechanical
Return	mechanical spring
Connections	interface for sub-base
Nominal Ø	2,3 mm (1,5 sensible type)
Nominal flow rate (NI/min)	110 NI/min

CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Sub-base	zamak
Spool	nickel-plated brass

Flow rate characteristics

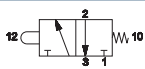
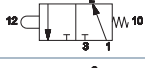
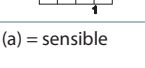


P = Working pressure
PA = Supply pressure
Qn = Flow rate

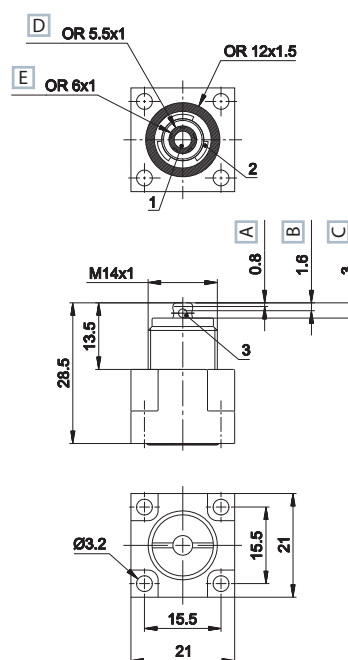
Mechanical push button - spring



- A** Pre-stroke
B Max opening
C Total stroke
D 3/2 NC - 3/2 NO - 2/2 NC
E 2/2 NO

	Symbol	Ø mm	Flow rate NI/min	Force N	Weight Kg	Part no.
3/2 NC		2,3	110	15	0,040	AI-3500
		1,5	55	4	0,040	AI-3500S (a)
3/2 NO		2,3	110	15	0,040	AI-3501
		1,3	45	4	0,040	AI-3501S(a)
2/2 NC		2,3	110	15	0,040	AI-3502
2/2 NO (b)		2,3	110	15	0,040	AI-3503

(a) = sensible (b) = 2/2 NO version available upon request



PNEUMATIC AND MECHANICAL ACTUATORS

	Pneumatic operator	AI-3550	
	Amplified pneumatic operator	AI-3551	
	Roller operator 1 position	AI-3560	
	Ball-push operator 1 position	AI-3562	
	Operator with omni-directional antenna 1 position	AI-3563	
	Roller lever operator 1 posizione	AI-3570	
	Articulated roller operator 1 position Complete actuation with stroke 2,5 mm, max stroke 4,7 mm	AI-3571	
	Key operator 1 position	AI-3572	

MANUAL PUSH

	Recessed button	■ BLACK AI-3511 ■ RED AI-3512 ■ GREEN AI-3513	
	Head button	■ RED AI-3514 ■ BLACK AI-3516 ■ RED AI-3514D ■ BLACK AI-3516D	
	Button	■ GREEN AI-3515 ■ RED AI-3517 ■ BLACK AI-3519	
	Accident prevention rotating selector	■ BLACK AI-3520 ■ BLACK AI-3521	
	Rotating lever selector	■ BLACK AI-3522 ■ BLACK AI-3523	
	Lever operator	■ BLACK AI-3524	
	Omni-directional operator	■ BLACK AI-3525	
	Push-pull operator	■ BLACK AI-3526	

For actuators dimensions see section "Accessories>Actuators"

Mechanical push button for panel mounting - spring



A 3/2 NC - 3/2 NO - 2/2
B 2/2 NO

3/2 NC

2,3
1,5110
5515
40,055
0,055AI-3500Q
AI-3500SQ (a)

3/2 NO

2,3
1,3110
4515
40,055
0,055AI-3501Q
AI-3501SQ (a)

2/2 NC



2,3

110

15

0,055

AI-3502Q

2/2 NO
(b)

2,3

110

15

0,055

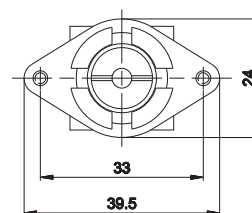
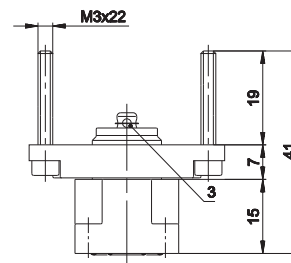
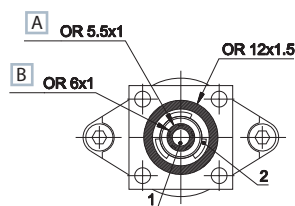
AI-3503Q

(a) = sensible (b) = upon request only 2/2 NO version

MANUAL PUSH

	Recessed button	BLACK RED GREEN AI-3511Q AI-3512Q AI-3513Q 
	Head button	RED BLACK AI-3514Q AI-3516Q  RED BLACK AI-3514QD AI-3516QD 
	Button	GREEN RED BLACK AI-3515Q AI-3517Q AI-3519Q 
	Accident prevention rotating selector	BLACK AI-3520Q  BLACK AI-3521Q 
	Rotating lever selector	BLACK AI-3522Q  BLACK AI-3523Q 
	Lever operator	BLACK AI-3524Q 
	Omni-directional operator	BLACK AI-3525Q 
	Push-pull operator	BLACK AI-3526Q 

For actuators dimensions see section "Accessories>Actuators"

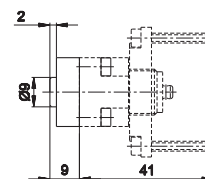
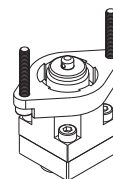
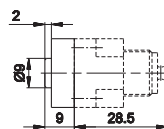
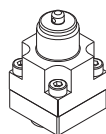
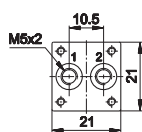
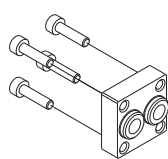


1 = Supply port
2 = Use
3 = Exhaust

AI-3610

AI-3610 + AI-3500

AI-3610 + AI-3500Q

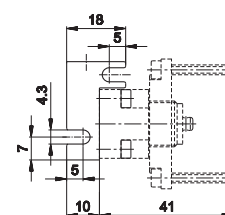
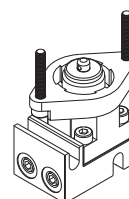
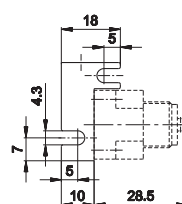
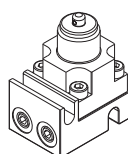
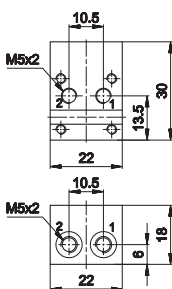
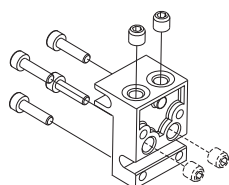


Sub-base with M5 threaded connections
weight: 0,020 Kg

AI-3612

AI-3612 + AI-3500

AI-3612 + AI-3500Q



Sub-base with side or dorsal consumptions and threaded connections M5
weight: 0,020 Kg

Part numbers include M3x12 fixing screws (4 pcs) and M5x5 dowel pins to close the unused ways.
The M5x5 dowel pins must be mounted with loctite (243 type). Be sure that loctite does not obstruct the ports or sinks inside the valve.
The dowel pins must be screwed till reaching the base surface. Avoid screwing them completely.

AI JET

Pneumatic switches JET series

- Light with compact design
- Low operating force and high response time
- M5 threaded connections or push-in fitting tube Ø4
- Wide range of actuators and manual overrides for mounting panel (Original Univer)



TECHNICAL CHARACTERISTICS

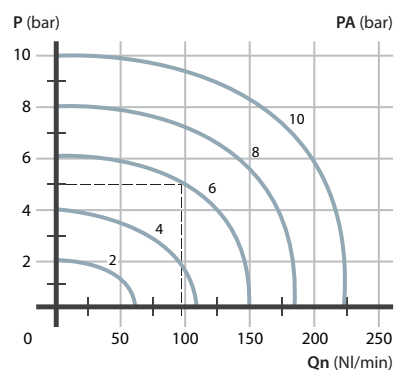
Ambient temperature	-10 ÷ +90 °C
Fluid temperature	max +50 °C
Fluid	not dehumidified filtered air 50 µm, lubricated or not
Commutation system	poppet system
Ways/Positions	2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO
Pressure	max 10 bar
Control	manual, mechanical
Return	mechanical spring
Connections	M5, tube Ø4
Nominal Ø	2,5 mm
Nominal flow rate (NI/min)	70 NI/min

CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Spool	nickel-plated brass

OTHER VERSIONS AVAILABLE

Flow rate characteristics



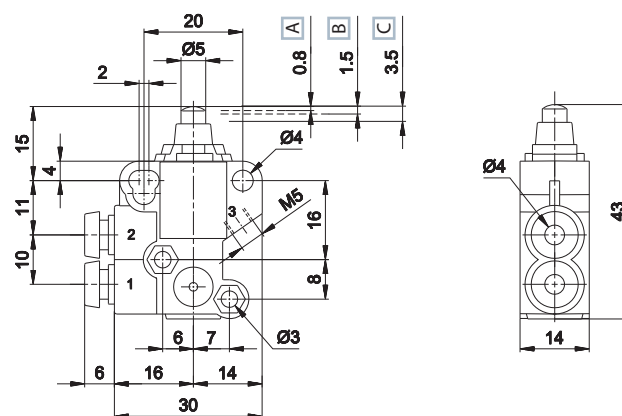
P = Working pressure
PA = Supply pressure
Qn = Flow rate



Ball-push - spring tube Ø4



	Symbol	Connection	Force (a)		Part no.
			N	Kg	
3/2 NC		tube Ø4	14	0,060	AI-9000
3/2 NO		tube Ø4	14	0,060	AI-9010
2/2 NC		tube Ø4	14	0,060	AI-9020
2/2 NO (b)		tube Ø4	14	0,060	AI-9030

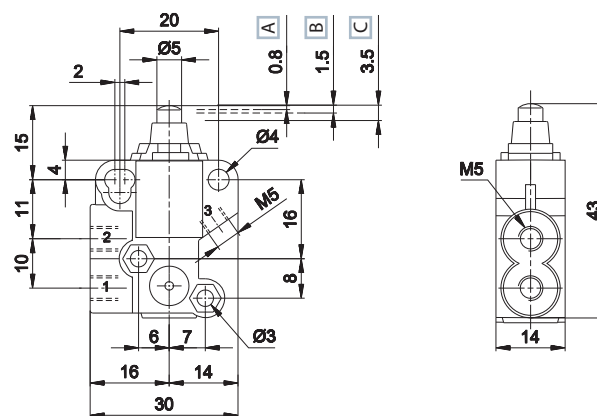


- A Pre-stroke
B Maximum opening
C Total stroke
- 1 = Supply port
2 = Use
3 = Exhaust

Ball-push - spring M5



	Symbol	Connection	Force (a)		Part no.
			N	Kg	
3/2 NC		M5	14	0,060	AI-9000M
3/2 NO		M5	14	0,060	AI-9010M
2/2 NC		M5	14	0,060	AI-9020M
2/2 NO (b)		M5	14	0,060	AI-9030M

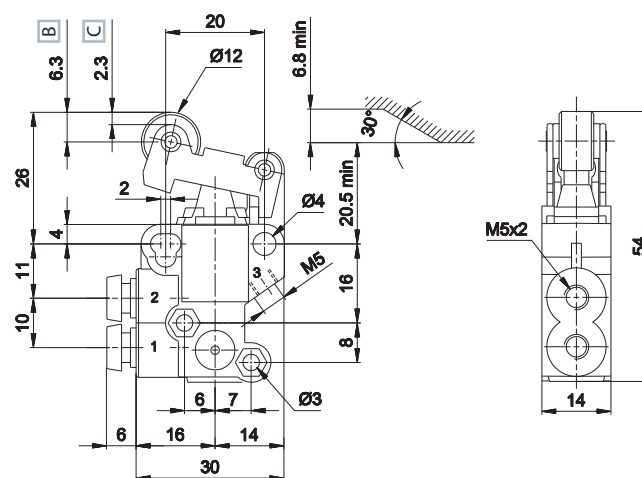


- A Pre-stroke
B Maximum opening
C Total stroke
- 1 = Supply port
2 = Use
3 = Exhaust

Roller lever - tube Ø4



	Symbol	Connection	Force (a)		Part no.
			N	Kg	
3/2 NC		tube Ø4	7	0,085	AI-9100
3/2 NO		tube Ø4	7	0,085	AI-9110
2/2 NC		tube Ø4	7	0,085	AI-9120
2/2 NO (b)		tube Ø4	7	0,085	AI-9130



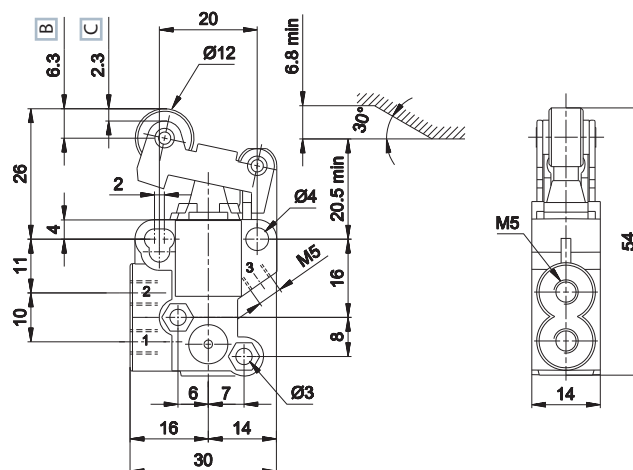
- B Maximum opening
C Total stroke
- 1 = Supply port
2 = Use
3 = Exhaust

(a) = at 6 bar (b) = upon request 2/2 NO version

Roller lever - spring M5



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		M5	7	0,085	AI-9100M
3/2 NO		M5	7	0,085	AI-9110M
2/2 NC		M5	7	0,085	AI-9120M
2/2 NO (b)		M5	7	0,085	AI-9130M



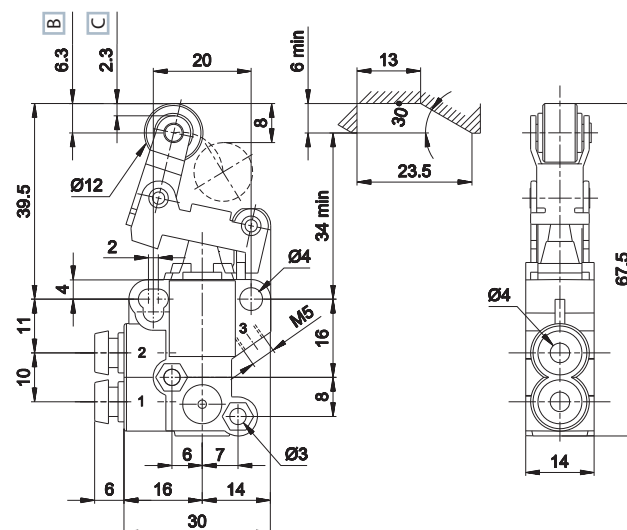
B Maximum opening
C Total stroke

1 = Supply port
2 = Use
3 = Exhaust

Uni-directional roller lever - spring tube Ø4



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		tube Ø4	4	0,085	AI-9200
3/2 NO		tube Ø4	4	0,085	AI-9210
2/2 NC		tube Ø4	4	0,085	AI-9220
2/2 NO (b)		tube Ø4	4	0,085	AI-9230



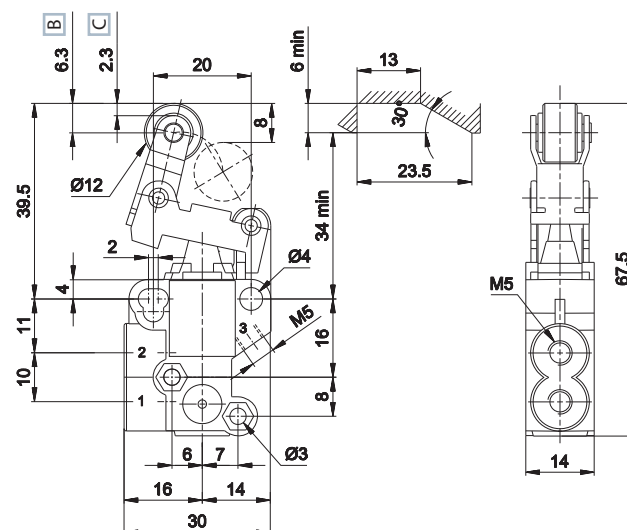
B Maximum opening
C Total stroke

1 = Supply port
2 = Use
3 = Exhaust

Uni-directional roller lever - spring M5



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		M5	4	0,085	AI-9200M
3/2 NO		M5	4	0,085	AI-9210M
2/2 NC		M5	4	0,085	AI-9220M
2/2 NO (b)		M5	4	0,085	AI-9230M



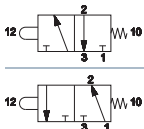
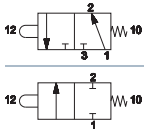
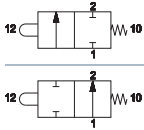
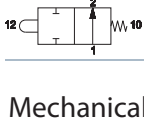
B Maximum opening
C Total stroke

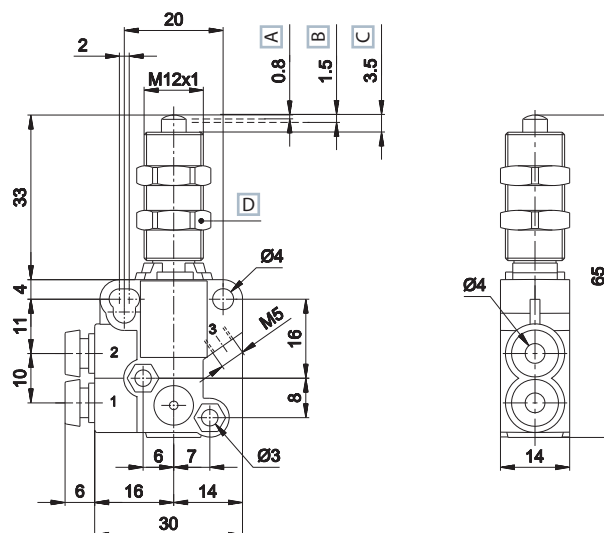
1 = Supply port
2 = Use
3 = Exhaust

(a) = at 6 bar (b) = upon request 2/2 NO version

Mechanical push button with screw mounting - spring tube Ø4



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		tube Ø4	14	0,082	AI-9300
3/2 NO		tube Ø4	14	0,082	AI-9310
2/2 NC		tube Ø4	14	0,082	AI-9320
2/2 NO (b)		tube Ø4	14	0,082	AI-9330

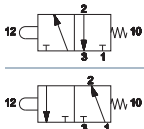
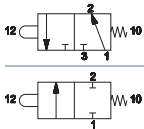
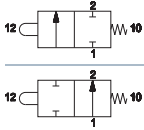
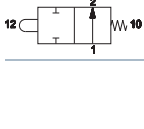


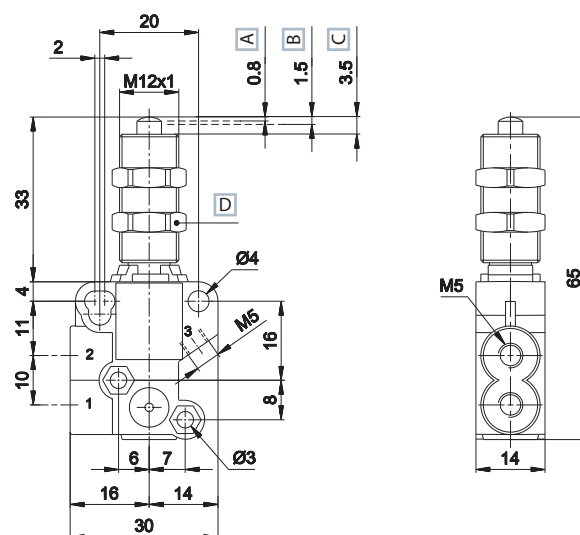
- A Pre-stroke
 B Maximum opening
 C Total stroke
 D Wrench 14

- 1 = Supply port
 2 = Use
 3 = Exhaust

Mechanical push button with screw mounting - spring M5



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		M5	14	0,082	AI-9300M
3/2 NO		M5	14	0,082	AI-9310M
2/2 NC		M5	14	0,082	AI-9320M
2/2 NO (b)		M5	14	0,082	AI-9330M



- A Pre-stroke
 B Maximum opening
 C Total stroke
 D Wrench 14

- 1 = Supply port
 2 = Use
 3 = Exhaust

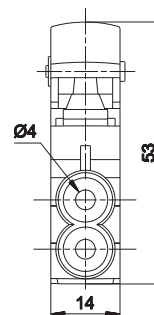
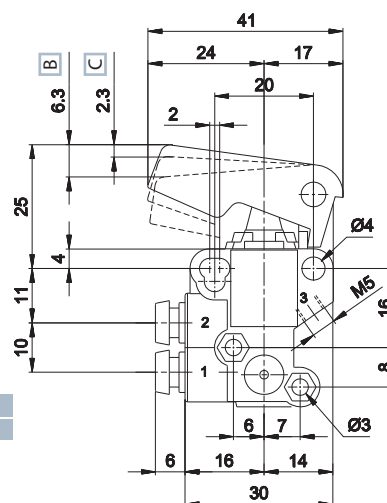
(a) = at 6 bar (b) = upon request 2/2 NO version

Button - spring tube Ø4



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		tube Ø4	7	0,065	AI-9350
3/2 NO		tube Ø4	7	0,065	AI-9360
2/2 NC		tube Ø4	7	0,065	AI-9370
2/2 NO (b)		tube Ø4	7	0,065	AI-9380

Button yellow colour



B Maximum opening
C Total stroke

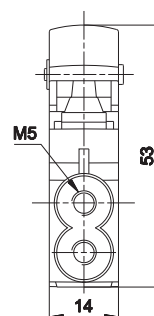
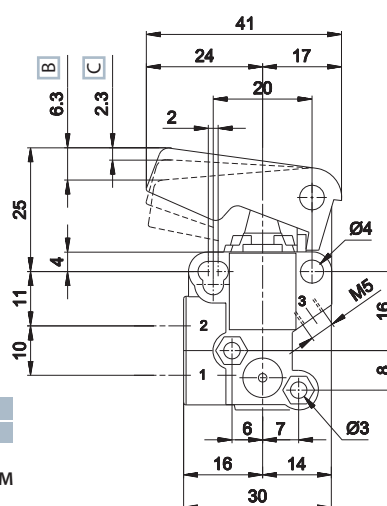
1 = Supply port
2 = Use
3 = Exhaust

Button - spring M5



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		M5	7	0,065	AI-9350M
3/2 NO		M5	7	0,065	AI-9360M
2/2 NC		M5	7	0,065	AI-9370M
2/2 NO (b)		M5	7	0,065	AI-9380M

Button yellow colour



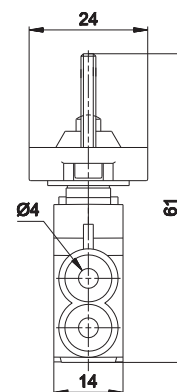
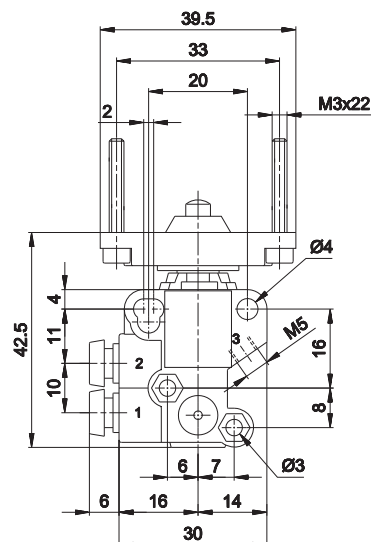
B Maximum opening
C Total stroke

1 = Supply port
2 = Use
3 = Exhaust

Mechanical push button for panel mounting - spring tube Ø4



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		tube Ø4	14	0,075	AI-9400
3/2 NO		tube Ø4	14	0,075	AI-9410
2/2 NC		tube Ø4	14	0,075	AI-9420
2/2 NO (b)		tube Ø4	14	0,075	AI-9430

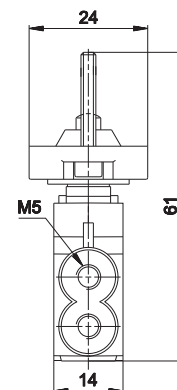
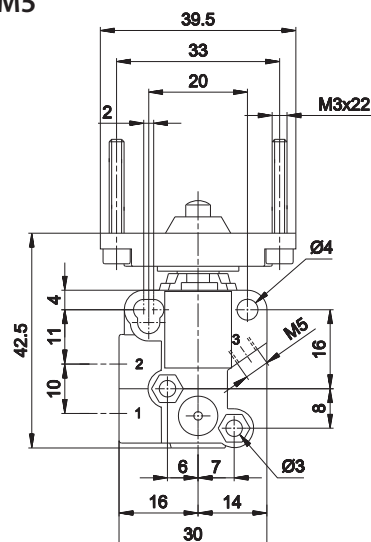


1 = Supply port
2 = Use
3 = Exhaust

Mechanical push button for panel mounting - spring M5



	Symbol	Connection	Force (a) N	Weight Kg	Part no.
3/2 NC		M5	14	0,075	AI-9400M
3/2 NO		M5	14	0,075	AI-9410M
2/2 NC		M5	14	0,075	AI-9420M
2/2 NO (b)		M5	14	0,075	AI-9430M



1 = Supply port
2 = Use
3 = Exhaust

MANUAL ACTUATORS

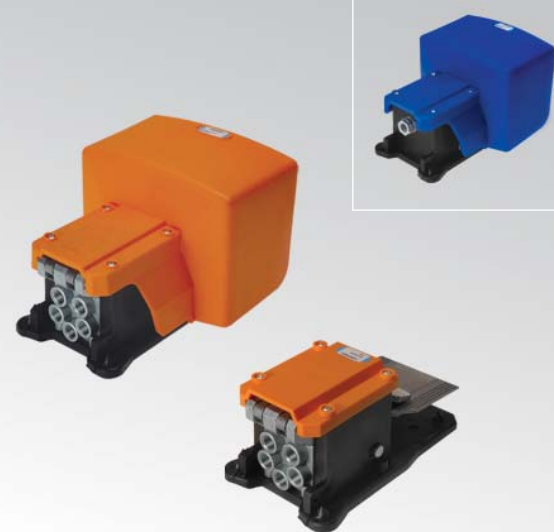
	Recessed button	■ BLACK ■ RED ■ GREEN AI-3511Q AI-3512Q AI-3513Q		Rotating lever selector	■ BLACK ■ BLACK AI-3522Q AI-3523Q
	Head button	■ RED ■ BLACK AI-3514Q AI-3516Q		Lever operator	■ BLACK AI-3524Q
	Button	■ GREEN ■ RED ■ BLACK AI-3515Q AI-3517Q AI-3519Q		Omni-directional operator	■ BLACK AI-3525Q
	Rotating selector	■ BLACK ■ BLACK AI-3520Q AI-3521Q		Push-pull operator	■ BLACK AI-3526Q

(a) = at 6 bar (b) = upon request 2/2 NO version
For actuator dimensions refer to section "Accessories>Actuators"

AM

Pneumatic and electric foot valves

- Double poppet system appreciated for its reliability and high flow rate
- Aluminium valve body and pedal lever to the max strenght
- Available with and without protection (in the latter case the protection is to be realized by the machine builder according to the current rules)
- Available with safety devices to prevent unintentional operations
- Available with pneumatic servo-assistance in case of minimum stress
- Electric foot valves with single or double microswitch complete the foot valve range



TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +70 °C	
Fluid temperature	-10 ÷ +50 °C	
Fluid	not dehumidified filtered air 50 µm, lubricated or not	
Commutation system	poppet system	
Ways/Positions	2/2 NC, 3/2 NC, 2/2 NO, 3/2 NO, 5/2	
Pressure	max 10 bar	
Control	pedal	
Return	mechanical spring, pedal	
Connections	G1/8	G1/4
Nominal Ø (mm)	2,3	8
Nominal flow rate (NI/min)	98	800

CONSTRUCTIVE CHARACTERISTICS

PNEUMATIC FOOT VALVE:

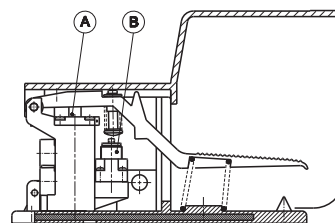
Valve body	die-cast zamak
Foot valve lever	aluminium
Pedal body and protections	nylon with steel reinforcing plate
Seals	oil/wear-resistant compound
Spool	aluminium

ELECTRIC FOOT VALVE:

Valve body, foot valve lever, protections	dielectric plastic material
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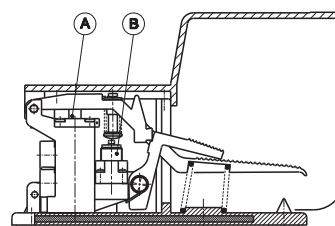
Functioning

Pedal with spring return



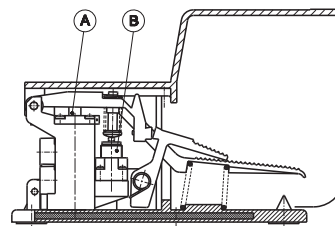
Direct operation A or pneumatic servo-assistance B.

Pedal with two positions (bistable)



The pedal must be deeply pressed. The unlocking pedal brings the pedal back to the starting position.

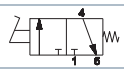
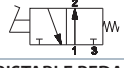
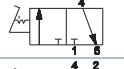
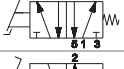
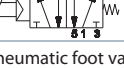
Pedal with safety device



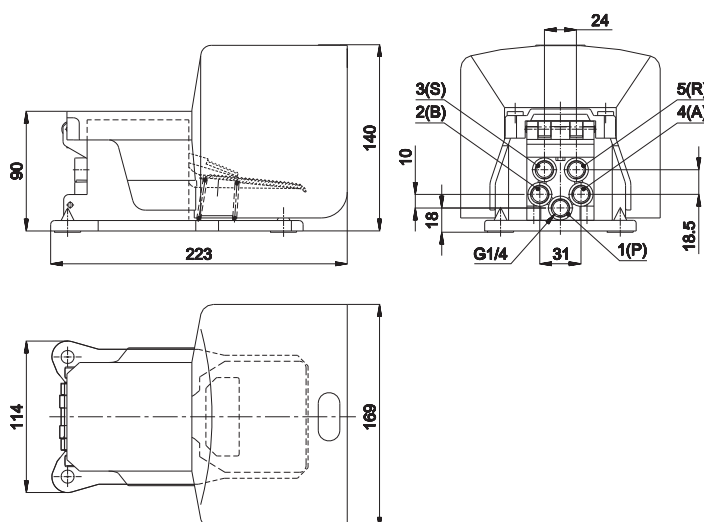
Operation is possible only by pushing both pedals at the same time. Pedals return to the starting position by releasing them. In this case unintentional operation is avoided.

G1/4 pneumatic foot valve with protection



	Symbol	Return	Force N	Weight Kg	Part no.
SPRING RETURN PEDAL					
3/2 NC		mechanical spring	20	1,25	AM-5000
5/2		mechanical spring	20	1,45	AM-5001
3/2 NO		mechanical spring	20	1,25	AM-5002
BISTABLE PEDAL					
3/2 NC		pedal	20	1,37	AM-5003
5/2		pedal	20	1,52	AM-5004
3/2 NO		pedal	20	1,37	AM-5005
PEDAL WITH SAFETY CONTROL					
5/2		mechanical spring	20	1,45	AM-5011
3/2 NO		mechanical spring	20	1,25	AM-5012
3/2 NC		mechanical spring	20	1,25	AM-5015
SERVOASSISTED PEDAL - SPRING RETURN					
5/2		mechanical spring	20	1,45	AM-5021
SERVOASSISTED BISTABLE PEDAL					
5/2		mechanical spring	20	1,45	AM-5031
SERVOASSISTED PEDAL WITH SAFETY CONTROL					
5/2		mechanical spring	20	1,45	AM-5041

Pneumatic foot valve with orange as standard protection.



1 (P) = Supply port

2 - 4 (B - A) = Use

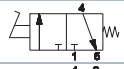
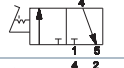
3 - 5 (S - R) = Exhaust

Threaded connections for different functions

2/2 NC	2/2 NO	3/2 NC	3/2 NO	5/2
A P B P	A P R B P S	A B P R S	A B P R S	A B P R S
4 1 2 1	4 1 5 2 1 3	4 2 1 5 3	4 2 1 5 3	4 2 1 5 3

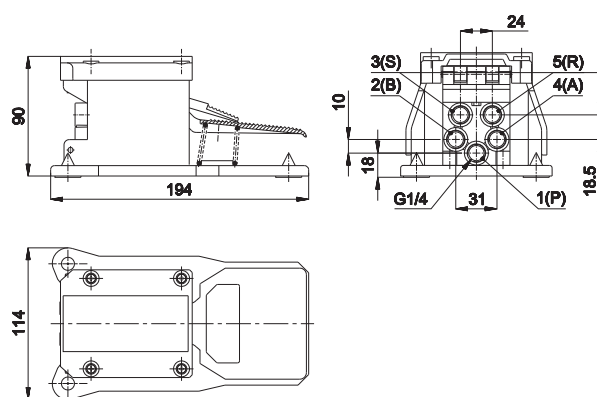
G1/4 pneumatic foot valves without protection



	Symbol	Return	Force N	Weight Kg	Part no.
PEDAL					
3/2 NC		mechanical spring	20	1,25	AM-5000A
5/2		mechanical spring	20	1,45	AM-5001A
BISTABLE PEDAL					
3/2 NC		pedal	20	1,37	AM-5003A
5/2		pedal	20	1,52	AM-5004A

Other versions upon request.

If this version is used the protection is to be realized by the user according to the current rules.



1 (P) = Supply port

2 - 4 (B - A) = Use

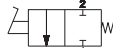
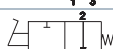
3 - 5 (S - R) = Exhaust

Threaded connections for different functions

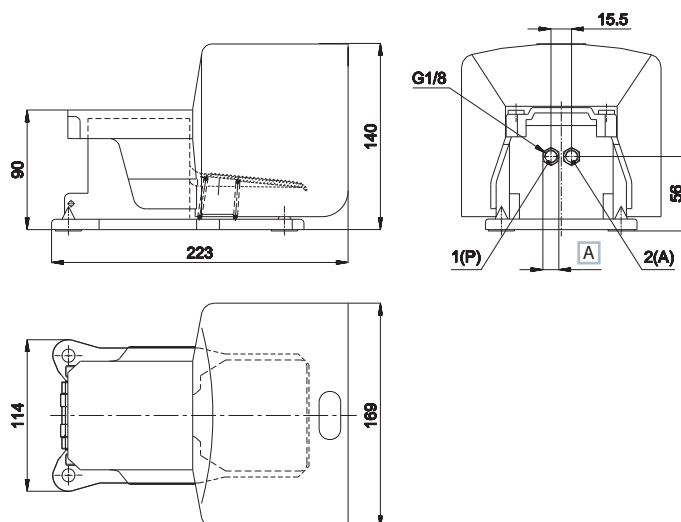
2/2 NC	2/2 NO	3/2 NC	3/2 NO	5/2
A P B P	A P R B P S	A B P R S	A B P R S	A B P R S
4 1 2 1	4 1 5 2 1 3	4 2 1 5 3	4 2 1 5 3	4 2 1 5 3

G1/8 pneumatic foot valves with protection



Symbol	Return	Force N	Weight Kg	Part no.
PEDAL				
	mechanical spring	20	0,96	AM-5043
	mechanical spring	20	0,96	AM-5043B
	mechanical spring	20	0,96	AM-5043C
	mechanical spring	20	0,96	AM-5043D

Pneumatic foot valve with orange protection.
Upon request version without protection.



A Wrench 12

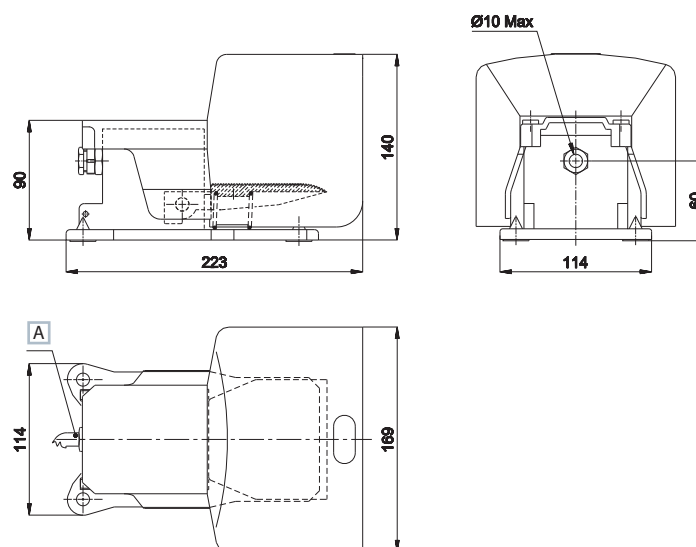
1 (P) = Supply port
2 (A) = Use

Electric foot valves

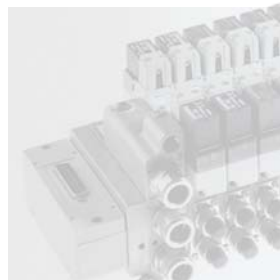
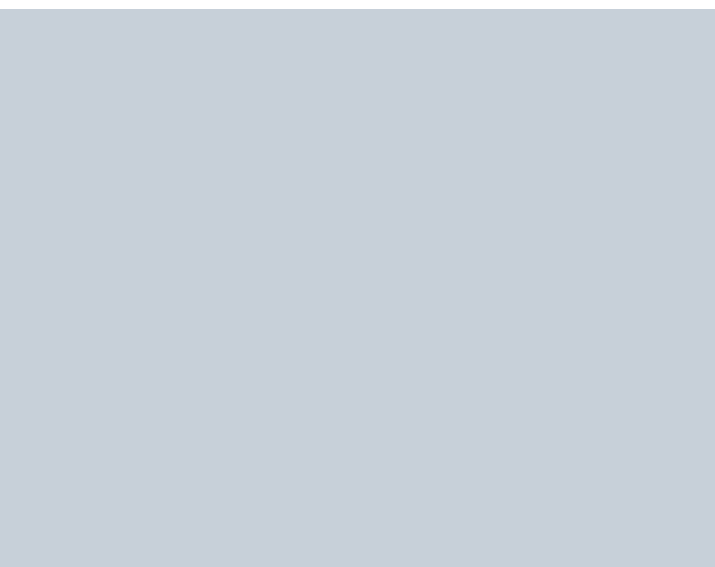


Symbol	Description	Force N	Weight Kg	Part no.
	pedal without electric microswitch	20	0,86	AM-5050
	pedal with electric microswitch	20	0,92	AM-5051
	pedal with double electric microswitch	20	0,95	AM-5052

Electric foot valve with blue protection.



A Electric cable



COMPACT VALVES

5 COMPACT valves

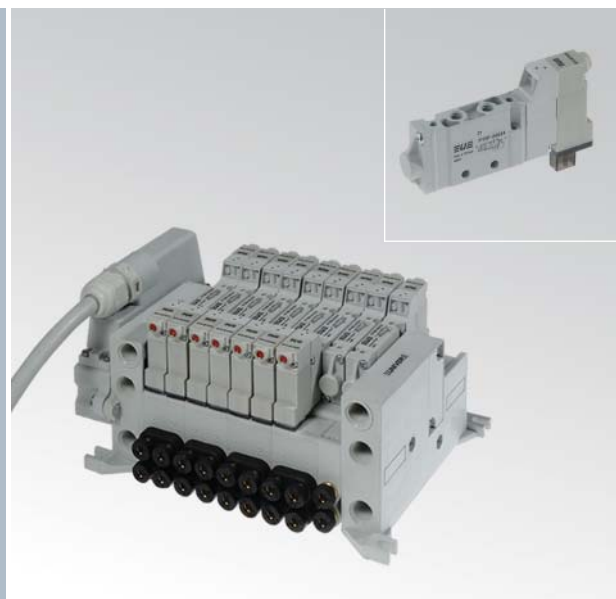
P10 COMPACT 10 mm valves **5.01**
threaded body and for sub-base mounting

P15 COMPACT 15 mm valves **5.10**
threaded body and for sub-base mounting

P10

10mm COMPACT valves - threaded body and for sub-base mounting

- Low standard power consumption (0,32W): low power consumption electropilot B10 (standard version with LED)
- Quick response times
- High flow rate: the development of the traditional UNIVER spool technology permits high flow rate values
- Compact design: the valve body (10mm) allows reduced overall dimensions
- Complete solution
- Threaded body (P10F) and body for sub-base (P10B) in the following versions: 5/2 - 5/3 - 3/2+3/2
- External and multipolar electrical connections
- TC serial transmission system
- Maximum application flexibility
- Modular sub-base (single and double) for a high versatility in the composition of the valve manifolds
- Simplified installation
- Easy installation of tubes and fittings thanks to connections being all on the same side



TECHNICAL CHARACTERISTICS

Ambient temperature	-5 ÷ +50 °C
Fluid temperature	max +50 °C
Fluid	filtered air 10 µm not dehumidified, lubricated or not
Commutation system	spool
Ways/Positions	3/2+3/2, 5/2, 5/3
Pressure	electric control = max 9 bar pneumatic control = max 10 bar
Control	indirect electro-pneumatic, pneumatic
Return	mechanical spring, pneumomechanical spring, pneumatic, electric
Connections	P10F: M5, M7 P10B: M5, M7, tube Ø 4
Nominal flow rate (NI/min)	5/2 = 310 5/3 = 230 3/2+3/2 = 250

CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Sub-base and actuators	selfextinguishing technopolymer
Spool	aluminum

ELECTRIC CHARACTERISTICS

Electropilot	B10
Voltage	24 V DC (± 10%)
Power consumption	holding 0,32 W, pick-up 5,5 W (25 ms)
Protection degree	IP65
Manual override	button with tool

CODIFICATION KEY

P	1	0	F	2	4	4	2	4	D
1	2	3	4	5	6				

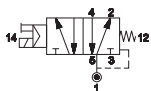
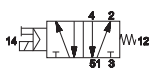
1 Series	2 Type	3 Control 14
P10F = threaded valve P10B = valve for base	2 = 5/2 3 = 5/3 c.c. 4 = 5/3 o.c. 5 = 5/3 p.c. 6 = 3/2+3/2 NC-NC 7 = 3/2+3/2 NC-NO 8 = 3/2+3/2 NO-NO	3 = pneumatic amplified 4 = electric amplified
4 Return 12	5 Voltage	6 Variant
0 = pneumomechanical spring 1 = mechanical spring 3 = pneumatic amplified 4 = electric amplified	24 = 24 V DC	D = external servo-assistance of the pilot on valve body (P10 = M3)

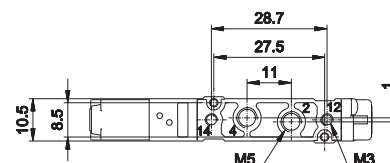
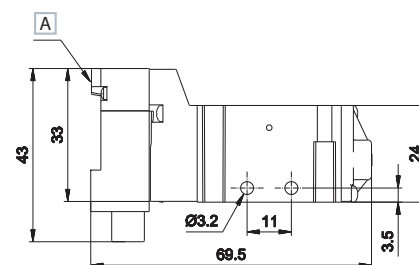
o.c. = open centres c.c. = closed centres p.c. = pressurized centres

Single electric impulse



Weight (Kg): 0,054

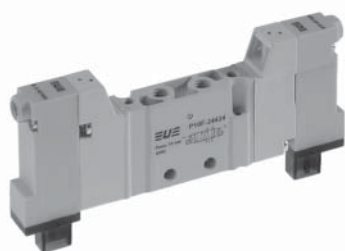
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	pneumo mechanical spring	1,5÷9	12	20	P10F24024
5/2		electric amplified	mechanical spring	1,9÷9	10	21	P10F24124



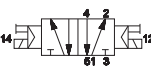
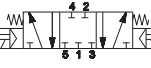
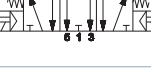
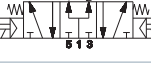
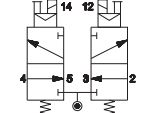
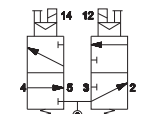
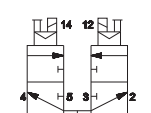
A Manual override

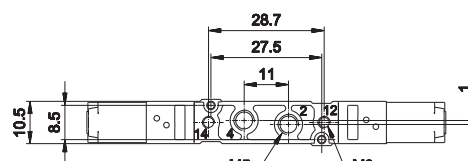
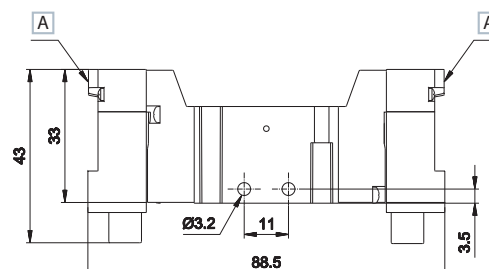
2 - 4 = Use
14 = Control
12 = Return

Double electric impulse



Weight (Kg): 0,069

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	electric amplified	0,7÷9	10	10	P10F24424
5/3 c.c.		electric amplified	electric amplified	1,5÷9	11	22	P10F34424
5/3 o.c.		electric amplified	electric amplified	1,5÷9	11	22	P10F44424
5/3 p.c.		electric amplified	electric amplified	1,5÷9	11	22	P10F54424
3/2 NC + 3/2 NC		electric amplified	electric amplified	1,3÷9	9	14	P10F64424
3/2 NC + 3/2 NO		electric amplified	electric amplified	1,3÷9	9	14	P10F74424
3/2 NO + 3/2 NO		electric amplified	electric amplified	1,3÷9	9	14	P10F84424



A Manual override

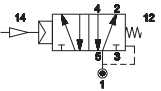
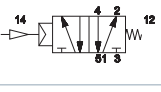
2 - 4 = Use
14 = Control
12 = Return

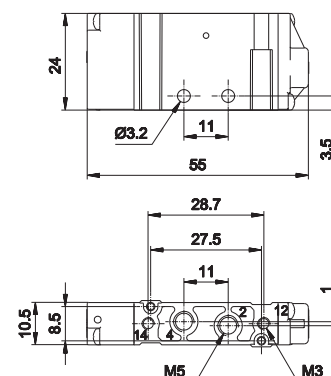
o.c. = open centres c.c. = closed centres p.c. = pressurized centres

Single electric impulse



Weight (Kg): 0,042

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumo mechanical spring	1,5÷10	8	14	P10F230
5/2		pneumatic amplified	mechanical spring	1,9÷10	7	16	P10F231

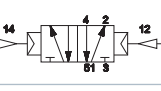
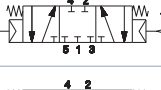
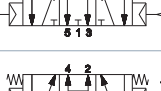
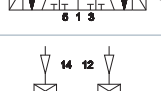
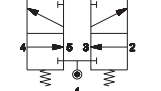
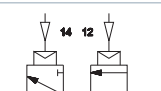
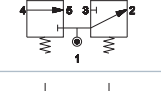


2 - 4 = Use
14 = Control
12 = Return

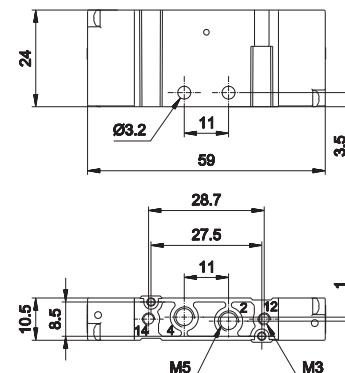
Double electric impulse



Weight (Kg): 0,044

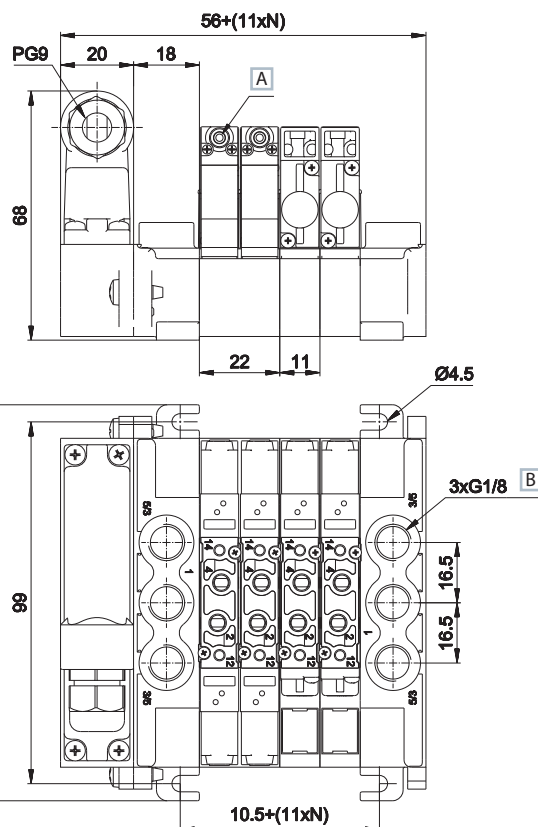
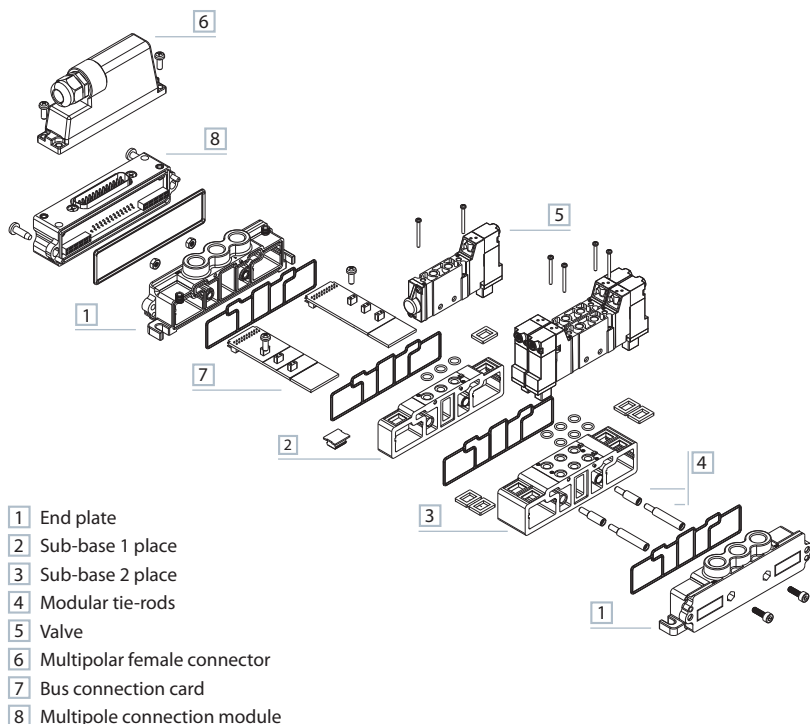
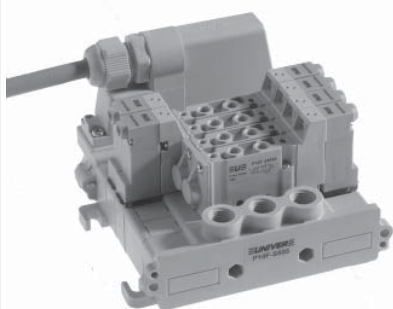
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumatic amplified	0,6÷10	6	6	P10F233
5/3 c.c.		pneumatic amplified	pneumatic amplified	1,5÷10	7	20	P10F333
5/3 o.c.		pneumatic amplified	pneumatic amplified	1,5÷10	7	20	P10F433
5/3 p.c.		pneumatic amplified	pneumatic amplified	1,5÷10	7	20	P10F533
3/2 NC + 3/2 NC		pneumatic amplified	pneumatic amplified	1,3÷10	8	14	P10F633
3/2 NC + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷10	8	14	P10F733
3/2 NO + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷10	8	14	P10F833

o.c. = open centres c.c. = closed centres p.c. = pressurized centres



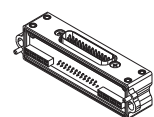
2 - 4 = Use
14 = Control
12 = Return

Integrated electric connection

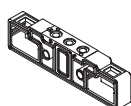


- 1 = Supply port
 2 - 4 = Use
 3 - 5 = Exhaust
 14 = Control
 12 = Return
- A Manual override
 B Tightening torque
 G1/8 = max 3 Nm
- N = Number of valve places

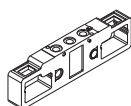
TIM1024	P10SF100	P10SF110	P10SF200	P10SF210	P10SF500
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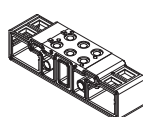
connection module
 25 poles male
 type D-sub
 weight: 0,047 Kg



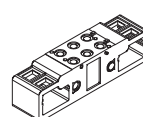
sub-base 1 place
 weight: 0,018 Kg



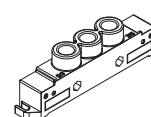
sub-base 1 place
 1-3-5 closed
 weight: 0,02 Kg



sub-base 2 places
 weight: 0,04 Kg

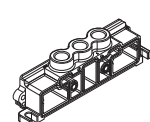


sub-base 2 places
 1-3-5 closed
 weight: 0,04 Kg



supply plate G1/8 left
 for TIM module
 weight: 0,04 Kg

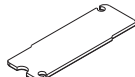
P10SF505	P10SF550	P10SF560	P10SF570	P10SS14**M	P10SS12**M
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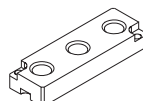
supply plate G1/8 right
 weight: 0,04 Kg



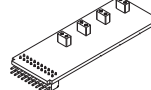
supply pressure
 separator plate
 weight: 0,002 Kg



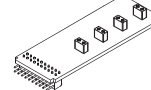
covering plate for
 unused valve place
 weight: 0,003 Kg



intermediate supply plate
 for threaded version
 weight: 0,004 Kg



bus connection card, side 14
 ** = 04, 06, 08, 10, 12 places
 weight: 0,006 Kg



bus connection card, side 12
 ** = 04, 06, 08, 10, 12 places
 weight: 0,006 Kg

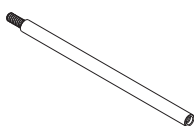
P10STR01	P10STR02	P10STR05
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modular tie-rods
 1 valve place
 (package 100 pcs.)
 weight: 0,001 Kg



modular tie-rods
 2 valve places
 (package 100 pcs.)
 weight: 0,003 Kg

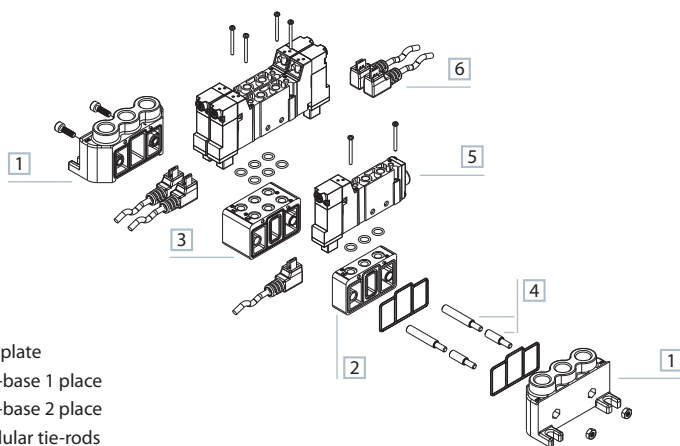
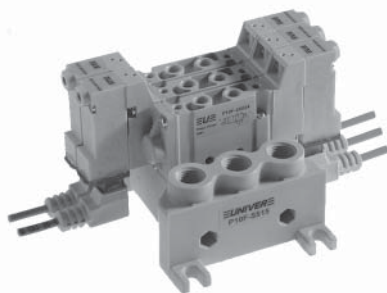


modular tie-rods
 5 valve places
 (package 100 pcs.)
 weight: 0,007 Kg

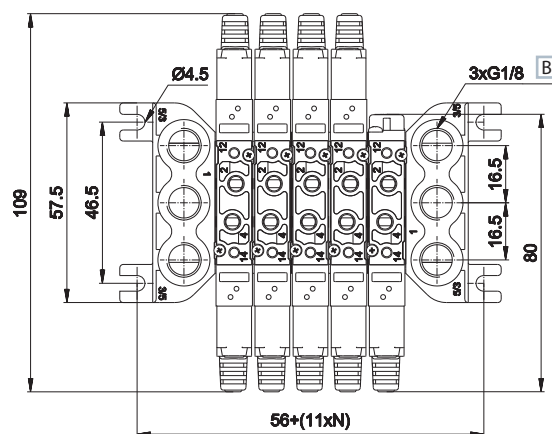
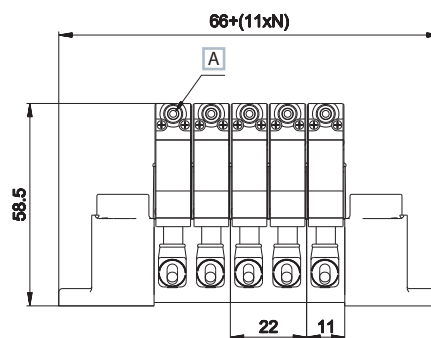
AZ4-SN003A
 100 nuts M3 for tie-rods

AZ4-VN0310
 100 screws for tie-rods

Electric connection with external connector



- 1 End plate
- 2 Sub-base 1 place
- 3 Sub-base 2 place
- 4 Modular tie-rods
- 5 Valve
- 6 Single connection



- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

- A Manual override
- B Tightening torque
G1/8 = max 3 Nm

N = Number of valve places

P10SF300	P10SF310	P10SF400	P10SF410	P10SF515	P10SF550
sub-base 1 place weight: 0,011 Kg	sub-base 1 place 1-3-5 closed weight: 0,013 Kg	sub-base 2 places weight: 0,024 Kg	sub-base 2 places 1-3-5 closed weight: 0,026	supply place G1/8 right/left weight: 0,032 Kg	supply pressure separator plate weight: 0,003 Kg
P10SF560	P10SF570	P10STR01	P10STR02	P10STR05	
covering plate for unused valve place weight: 0,003 Kg	intermediate supply plate for threaded version weight: 0,004 Kg	modular tie-rods 1 valve place (package 100 pcs.) weight: 0,001 Kg	modular tie-rods 2 valve places (package 100 pcs.) weight: 0,003 Kg	modular tie-rods 5 valve places (package 100 pcs.) weight: 0,007 Kg	

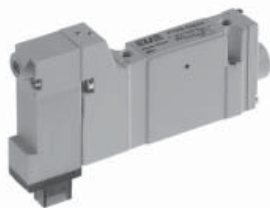
AZ4-SN003A

100 nuts for tie-rods

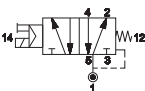
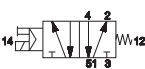
AZ4-VN0310

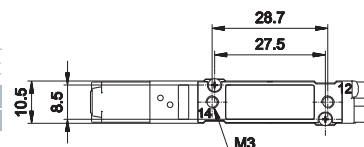
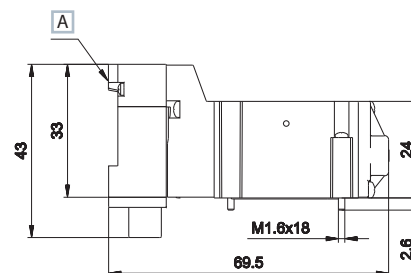
100 screws for tie-rods

Single electric impulse



Weight (Kg): 0,054

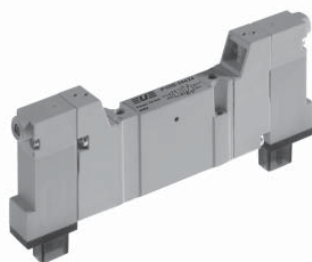
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	pneumo mechanical spring	1,5÷9	12	20	P10B24024
5/2		electric amplified	mechanical spring	1,9÷9	10	21	P10B24124



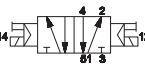
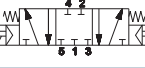
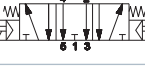
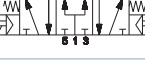
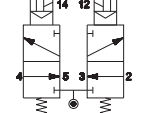
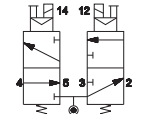
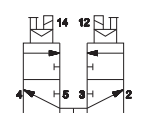
A Manual override

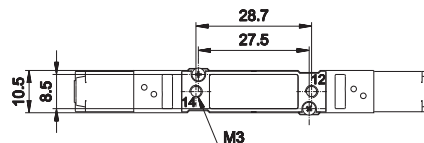
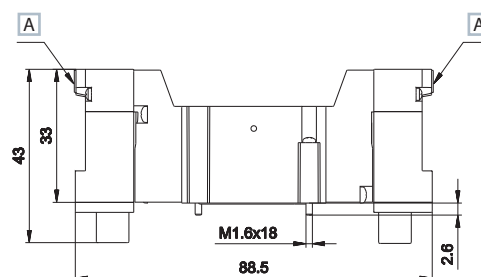
14 = Control
12 = Return

Double electric impulse



Weight (Kg): 0,069

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	electric amplified	0,7÷9	10	10	P10B24424
5/3 c.c.		electric amplified	electric amplified	1,5÷9	11	22	P10B34424
5/3 o.c.		electric amplified	electric amplified	1,5÷9	11	22	P10B44424
5/3 p.c.		electric amplified	electric amplified	1,5÷9	11	22	P10B54424
3/2 NC + 3/2 NC		electric amplified	electric amplified	1,3÷9	9	14	P10B64424
3/2 NC + 3/2 NO		electric amplified	electric amplified	1,3÷9	9	14	P10B74424
3/2 NO + 3/2 NO		electric amplified	electric amplified	1,3÷9	9	14	P10B84424



A Manual override

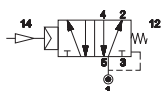
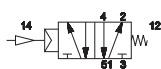
14 = Control
12 = Return

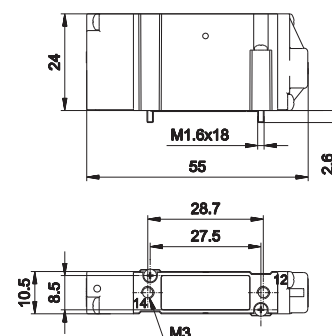
o.c. = open centres c.c. = closed centres p.c. = pressurized centres

Single pneumatic impulse



Weight (Kg): 0,042

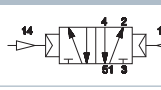
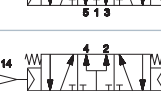
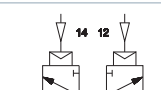
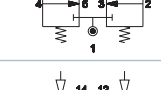
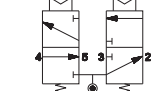
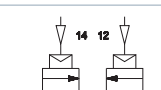
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumo mechanical spring	1,5÷9	8	14	P10B230
5/2		pneumatic amplified	mechanical spring	1,9÷9	7	16	P10B231


14 = Control
12 = Return

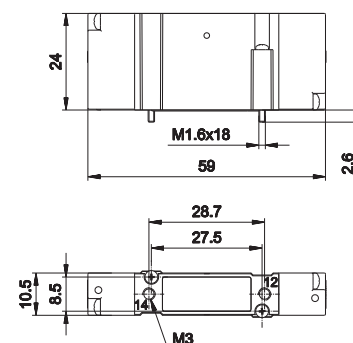
Double pneumatic impulse



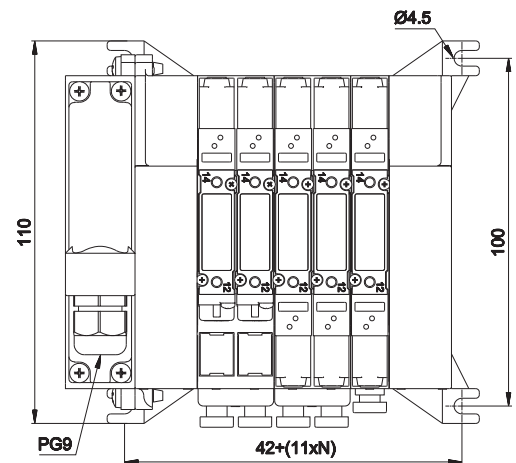
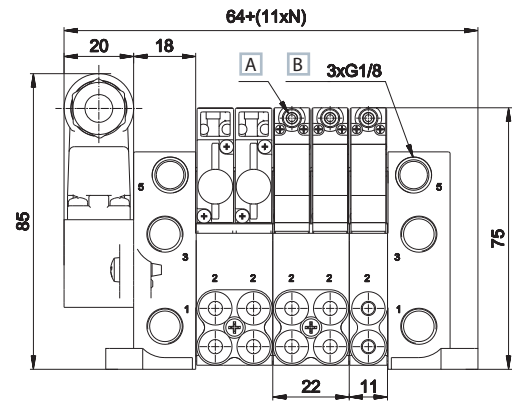
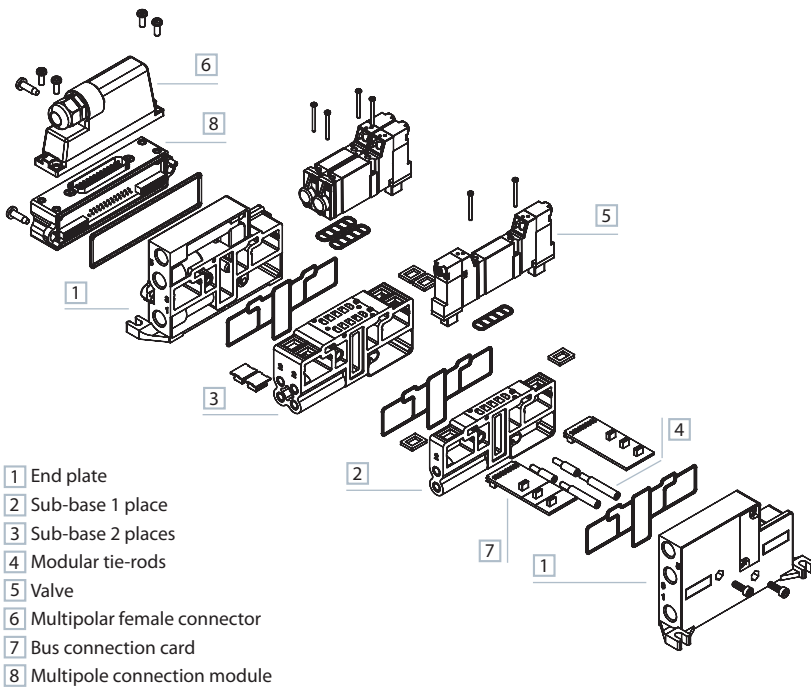
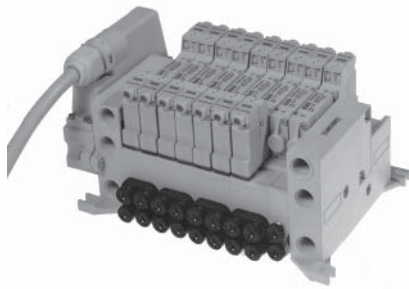
Weight (Kg): 0,044

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumatic amplified	0,6÷9	6	6	P10B233
5/3 c.c.		pneumatic amplified	pneumatic amplified	1,5÷9	7	20	P10B333
5/3 o.c.		pneumatic amplified	pneumatic amplified	1,5÷9	7	20	P10B433
5/3 p.c.		pneumatic amplified	pneumatic amplified	1,5÷9	7	20	P10B533
3/2 NC + 3/2 NC		pneumatic amplified	pneumatic amplified	1,3÷9	8	14	P10B633
3/2 NC + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷9	8	14	P10B733
3/2 NO + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷9	8	14	P10B833

o.c. = open centres c.c. = closed centres p.c. = pressurized centres


14 = Control
12 = Return

Integrated electric connection



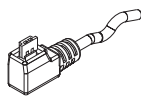
- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

- A Manual override
- B Tightening torque
- G1/8 - M5 = max 3 Nm
- M7 = 2 Nm

N = Number of valve places

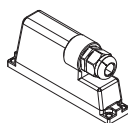
TIM1024	P10SB100/107	P10SB110/117	P10SB200/207	P10SB210/217	P10SB304	P10SB314
connection module 25 poles male type D-sub weight: 0,047 Kg	sub-base 1 place side outlets M5, M7 weight: 0,031 Kg	sub-base 1 place side outlets M5, M7 1-3-5 closed weight: 0,033 Kg	sub-base 2 places side outlets M5, M7 weight: 0,062 Kg	sub-base 2 places side outlets M5, M7 1-3-5 closed weight: 0,067 Kg	sub-base 1 place side outlets with quick couplings pipe 4 weight: 0,034 Kg	sub-base 1 place side outlets with quick couplings pipe 4 1-3-5 closed weight: 0,034 Kg
P10SB404	P10SB414	P10SB500	P10SB505	P10SB550	P10SB560	P10SB570
sub-base 2 places side outlets with quick couplings pipe 4 weight: 0,073 Kg	sub-base 1 place side outlets with quick couplings pipe 4 1-3-5 closed weight: 0,068 Kg	supply plate G1/8 left for TIM module weight: 0,074 Kg	supply plate G1/8 right weight: 0,074 Kg	supply pressure separator plate weight: 0,004 Kg	covering plate for unused valve place weight: 0,002 Kg	intermediate supply plate for sub-base weight: 0,007 Kg
P10SS14**M	P10SS12**M	P10STR01	P10STR02	P10STR05	AZ4-SN003A 100 nuts for tie-rods	
					AZ4-VN0310 100 screws for tie-rods	
bus connection card, side 14 ** = 04, 06, 08, 10, 12 places weight: 0,006 Kg	bus connection card, side 12 ** = 04, 06, 08, 10, 12 places weight: 0,006 Kg	modular tie-rods 1 valve place (package 100 pcs.) weight: 0,001 Kg	modular tie-rods 2 valve places (package 100 pcs.) weight: 0,003 Kg	modular tie-rods 5 valve places (package 100 pcs.) weight: 0,007 Kg		

D-535U40300
D-535U40500



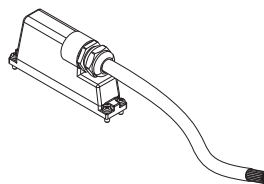
■ single connector
with cable 3-5 m

TSCFN24S000



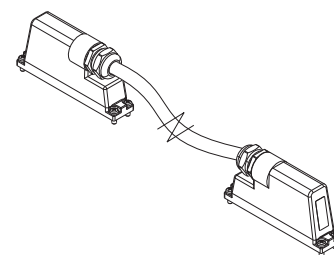
■ female connector 25 poles
type D-sub no cable
M3 x 8 fixing screws

TSCFN24S0300
TSCFN24S0500
TSCFN24S1000



■ female connector 25 poles
type sub-D cable 3-5-10 m
M3 x 8 fixing screws

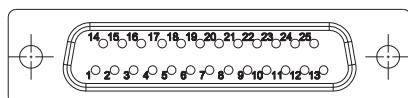
TSCFN16D0300
TSCFN16D0500
TSCFN16D1000



■ flying male/female connector
sub D (upon request) prewired
for 24 coils with cable Ø 8 mm
(3-5-10 m length) suitable
for mobile laying
M3 x 8 fixing screws

Colour identification according to standard DIN 47100

Female D-SUB 25 poles
for connection 12+12 coils



PIN No.	Colour	Coil	Control side	ValveN°
1	white	1	14	1
2	brown	2	12	1
3	green	3	14	2
4	yellow	4	12	2
5	grey	5	14	3
6	pink	6	12	3
7	blue	7	14	4
8	red	8	12	4
9	nero	9	14	5
10	black	10	12	5
11	grey-pink	11	14	6
12	red-blue	12	12	6
13	white-green	13	14	7
14	brown-green	14	12	7
15	white-yellow	15	14	8
16	yellow-brown	16	12	8
17	white-grey	17	14	9
18	grey-brown	18	12	9
19	white-pink	19	14	10
20	pink-brown	20	12	10
21	white-blue	21	14	11
22	brown-blue	22	12	11
23	white-red	23	14	12
24	brown-red brown-black shield	common low	-	-
25	white-black	24	12	12

P15

15 mm COMPACT valves - threaded and for sub-base body

- Low standard power consumption (0,32W): low power consumption electropilot B10 (standard version with LED)
- Quick response times
- High flow rate: the development of the traditional UNIVER spool technology permits high flow rate values
- Compact design: the valve body (15 mm) allows reduced overall dimensions
- Complete solution
- Threaded body (P15F) and body for sub-base (P15B) in the following versions: 5/2 - 5/3 - 3/2+3/2
- External and multipolar electrical connections
- TC serial transmission system
- Maximum application flexibility
- Modular sub-base (singles and doubles) for a high versatility in the composition of valve manifolds
- Simplified installation
- Easy installation of tubes and fittings thanks to connections being all on the same side



TECHNICAL CHARACTERISTICS

Ambient temperature	-5 ÷ +50 °C
Fluid temperature	max +50 °C
Fluid	filtered air 10 µm not dehumidified, lubricated or not
Commutation system	spool
Ways/Positions	3/2+3/2, 5/2, 5/3
Pressure	electric control = max 9 bar pneumatic control = max 10 bar
Control	indirect electro-pneumatic, pneumatic
Return	mechanical spring, pneumomechanical spring
Connections	P15F: G1/8, P15B: G1/8 - tube Ø 4-6-8
Nominal flow rate (NI/min)	5/2 = 800 5/3 = 720 3/2+3/2 = 720

CONSTRUCTIVE CHARACTERISTICS

Valve body	zamak
Seals	nitrile rubber
Sub-base and actuators	selfextinguishing technopolymer
Spool	aluminum

ELECTRIC CHARACTERISTICS

Electropilot	B10
Voltage	24 V DC (± 10%)
Power consumption	holding 0,32 W, pick-up 5,5 W (25 ms)
Protection degree	IP65
Manual override	button with tool

CODIFICATION KEY

P	1	5	F	2	4	4	2	4	D
1	2	3	4	5	6				

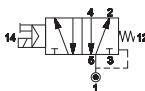
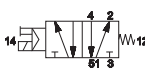
1 Series	2 Type	3 Control 14
P15F = threaded valve P15B = valve for base	2 = 5/2 3 = 5/3 c.c. 4 = 5/3 o.c. 5 = 5/3 p.c. 6 = 3/2+3/2 NC-NC 7 = 3/2+3/2 NC-NO 8 = 3/2+3/2 NO-NO	3 = pneumatic amplified 4 = electric amplified
4 Return 12	5 Voltage	6 Variant
0 = pneumomechanical spring 1 = mechanical spring 3 = pneumatic amplified 4 = electric amplified	24 = 24 V DC	D = external servo-assistance of the pilot on valve body (P15 = M5)

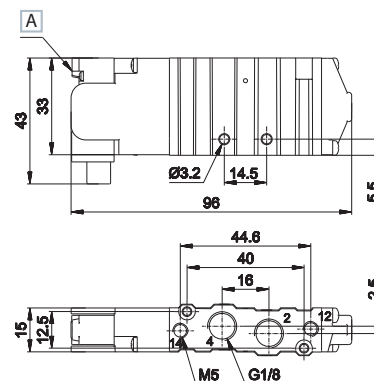
o.c. = open centres c.c. = closed centres p.c. = pressurized centres

Single electric impulse



Weight (Kg): 0,138

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					Ecc.	Dis.	
5/2		electric amplified	pneumo mechanical spring	1,9÷9	15	24	P15F24024
5/2		electric amplified	mechanical spring	2÷9	12	21	P15F24124



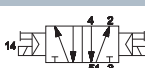
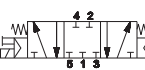
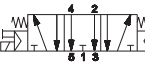
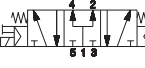
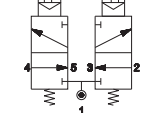
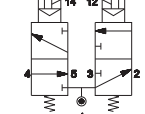
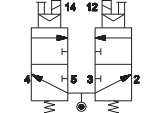
A Manual override

2 - 4 = Use
14 = Control
12 = Return

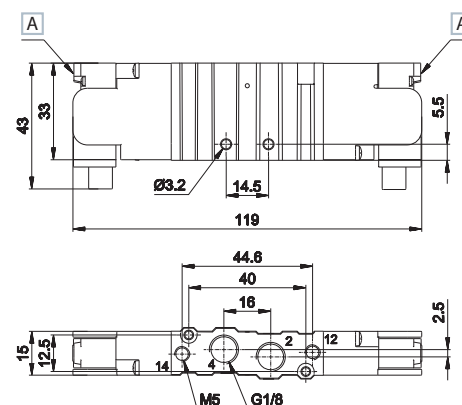
Double electric impulse



Weight (Kg): 0,158

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					Ecc.	Dis.	
5/2		electric amplified	electric amplified	0,7÷9	11	11	P15F24424
5/3 c.c.		electric amplified	electric amplified	1,6÷9	11	35	P15F34424
5/3 o.c.		electric amplified	electric amplified	1,6÷9	11	35	P15F44424
5/3 p.c.		electric amplified	electric amplified	1,6÷9	11	35	P15F54424
3/2 NC + 3/2 NC		electric amplified	electric amplified	1,5÷9	14	16	P15F64424
3/2 NC + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15F74424
3/2 NO + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15F84424

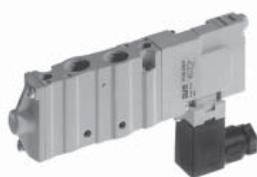
o.c. = open centres c.c. = closed centres p.c. = pressurized centres



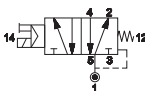
A Manual override

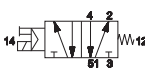
2 - 4 = Use
14 = Control
12 = Return

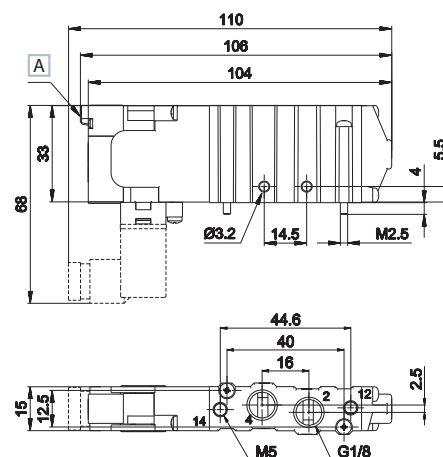
Single electric impulse



Weight (Kg): 0,142

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	pneumo mechanical spring	1,9÷9	15	24	P15D24024

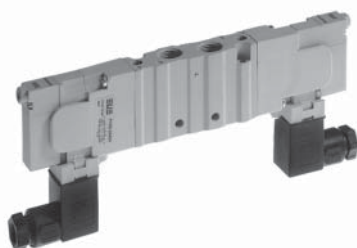
5/2		electric amplified	mechanical spring	2÷9	12	21	P15D24124
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A Manual override

2 - 4 = Use
14 = Control
12 = Return

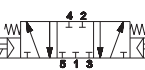
Double electric impulse

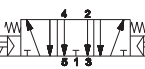


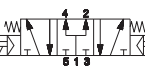
> AM-5109 connector not included

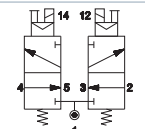
Weight (Kg): 0,166

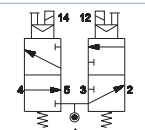
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	electric amplified	0,7÷9	16	16	P15D24424

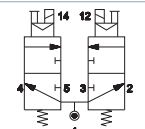
5/3 c.c.		electric amplified	electric amplified	1,6÷9	11	35	P15D34424
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5/3 o.c.		electric amplified	electric amplified	1,6÷9	11	35	P15D44424
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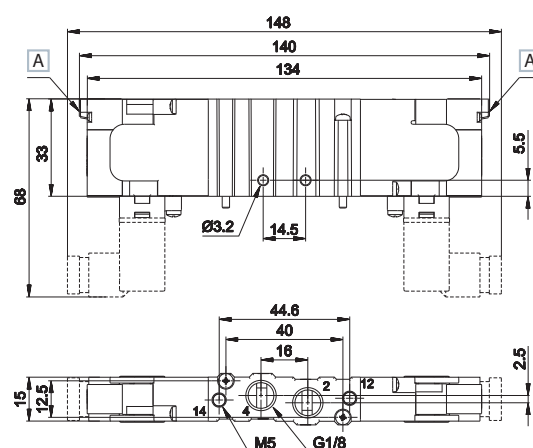
5/3 p.c.		electric amplified	electric amplified	1,6÷9	11	35	P15D54424
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3/2 NC + 3/2 NC		electric amplified	electric amplified	1,5÷9	14	16	P15D64424
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3/2 NC + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15D74424
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3/2 NO + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15D84424
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o.c. = open centres c.c. = closed centres p.c. = pressurized centres



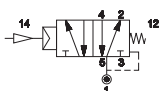
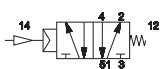
A Manual override

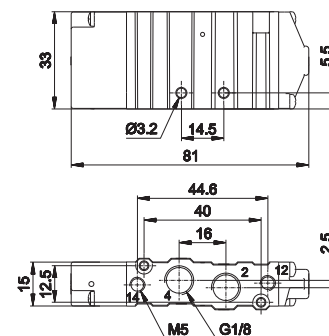
2 - 4 = Use
14 = Control
12 = Return

Single electric impulse



Weight (Kg): 0,042

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumo mechanical spring	1,9÷10	11	15	P15F230
5/2		pneumatic amplified	mechanical spring	2÷10	10	14	P15F231

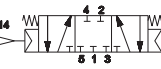
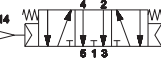
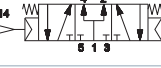
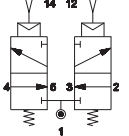
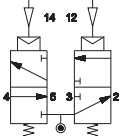
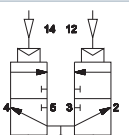


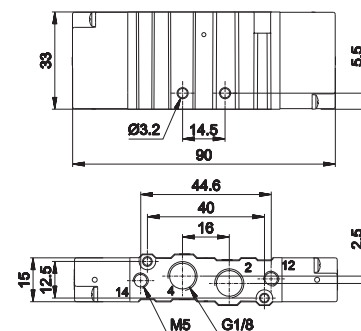
2 - 4 = Use
14 = Control
12 = Return

Double electric impulse



Weight (Kg): 0,044

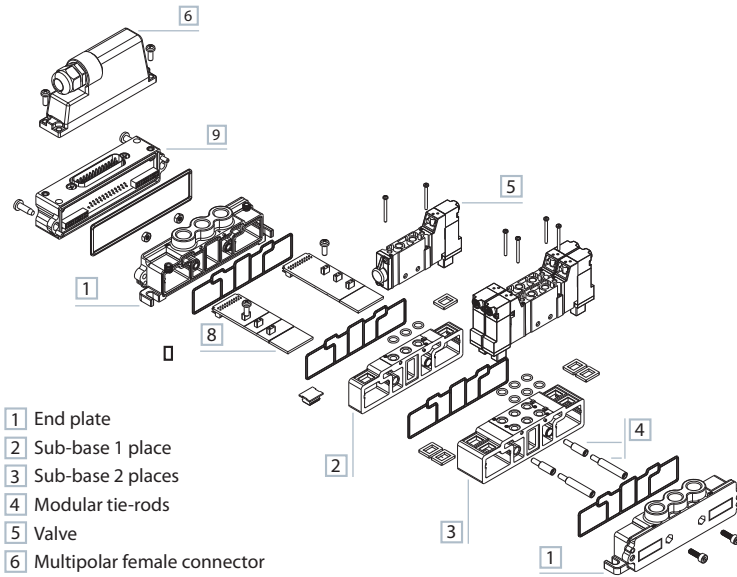
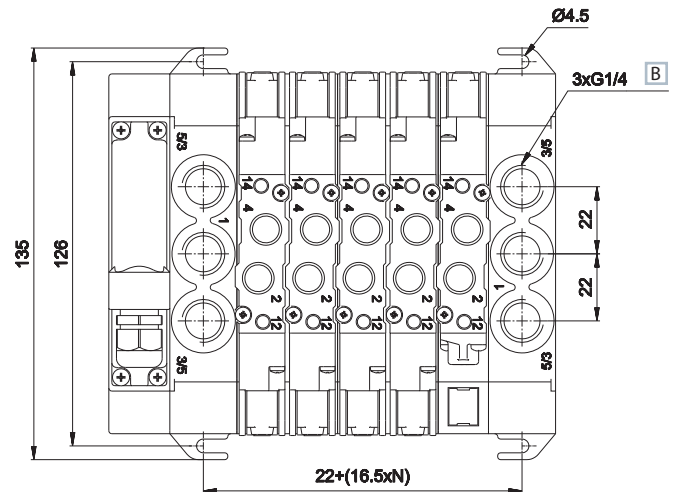
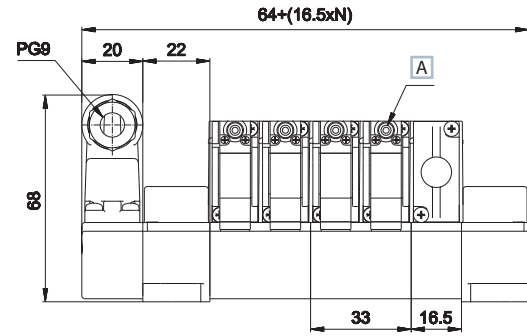
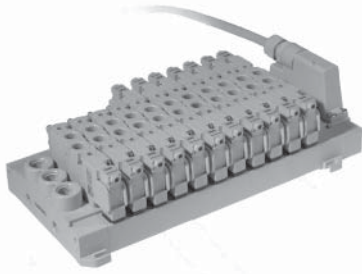
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumatic amplified	0,7÷10	10	10	P15F233
5/3 c.c.		pneumatic amplified	pneumatic amplified	1,6÷10	9	21	P15F333
5/3 o.c.		pneumatic amplified	pneumatic amplified	1,6÷10	9	21	P15F433
5/3 p.c.		pneumatic amplified	pneumatic amplified	1,6÷10	9	21	P15F533
3/2 NC + 3/2 NC		pneumatic amplified	pneumatic amplified	1,3÷10	10	14	P15F633
3/2 NC + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷10	10	14	P15F733
3/2 NO + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷10	10	14	P15F833



2 - 4 = Use
14 = Control
12 = Return

o.c. = open centres c.c. = closed centres p.c. = pressurized centres

Integrated electric connection



- 1 End plate
- 2 Sub-base 1 place
- 3 Sub-base 2 places
- 4 Modular tie-rods
- 5 Valve
- 6 Multipolar female connector
- 7 Single connector
- 8 Bus connection card
- 9 Multipole connection module

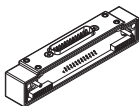
- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

- A Manual override
- B Tightening torque

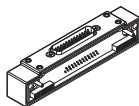
G1/4 = max 10 Nm

N = Number of valve places

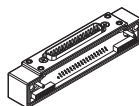
TIM1524	TIM151806	TIM1536	P15SF100	P15SF110	P15SF200	P15SF210
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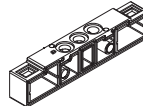
connection module
25 poles male
12+12 coils
type D-sub
weight: 0,047 Kg



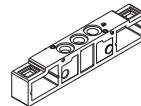
connection module
37 poles male
18 coils, side 14
6 coils, side 12
type D-sub
weight: 0,055 Kg



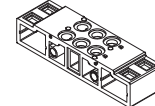
connection module
37 poles male
16+16 coils
type D-sub
weight: 0,057 Kg



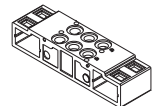
sub-base 1 place
weight: 0,037 Kg



sub-base 1 place
1-3-5 closed
weight: 0,038 Kg

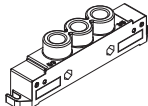


sub-base 2 places
weight: 0,073 Kg

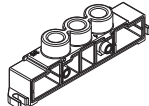


sub-base 2 places
1-3-5 closed
weight: 0,074 Kg

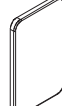
P15SF500	P15SF505	P15SF550	P15SF560	P15SF570	P15SS**01MC	P15SS**..M
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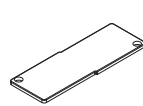
supply plate G1/4 left
for TIM module
weight: 0,064 Kg



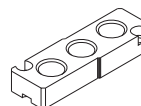
supply plate G1/4 right
weight: 0,065 Kg



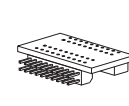
supply pressure
separator plate
weight: 0,003 Kg



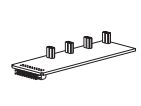
covering plate for
unused valve place
weight: 0,007 Kg



intermediate supply plate
for threaded version
weight: 0,011 Kg

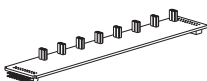


U-bus connection
card, male
** = side 14 or 12
weight: 0,004 Kg

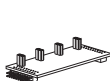


bus connection
card, male
** = side 14 or 12
.. = 04, 06, 08 places
weight: 0,009 Kg 04 places
0,010 Kg 06 places
0,013 Kg 08 places

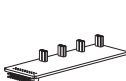
P15SS**08MF	P15SS**04MFP	P15SS**04MP	P15STR01	P15STR02	P15STR05
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bus connection card
male/female
** = side 14 or 12
weight: 0,014 Kg



bus connection card
male/female
extension
** = side 14 or 12
weight: 0,008 Kg



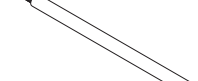
bus card
extension
** = side 14 or 12
weight: 0,006 Kg



modular tie-rods
1 valve place
(package 100 pcs.)
weight: 0,003 Kg



modular tie-rods
2 valve places
(package 100 pcs.)
weight: 0,007 Kg



modular tie-rods
5 valve places
(package 100 pcs.)
weight: 0,018 Kg

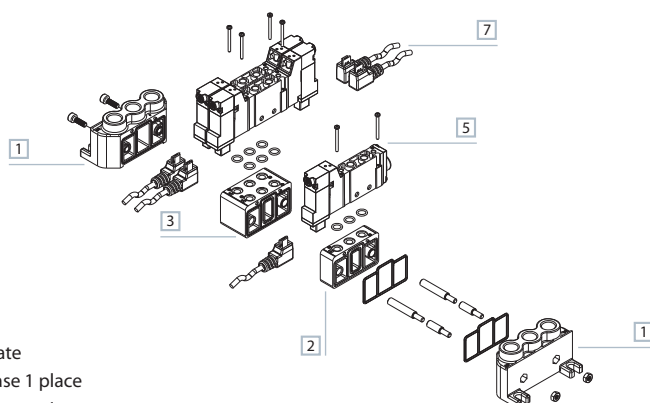
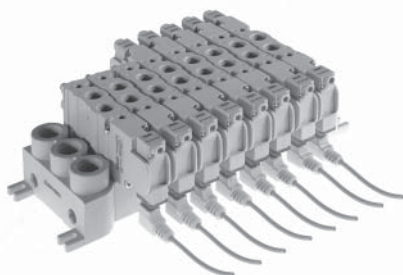
AZ4-SN004A

100 nuts M4 for tie-rods

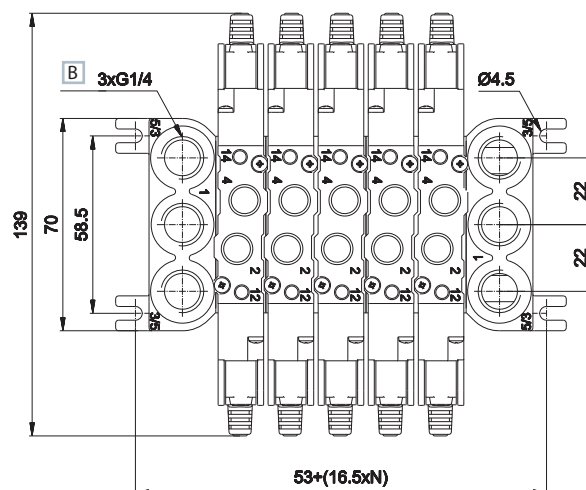
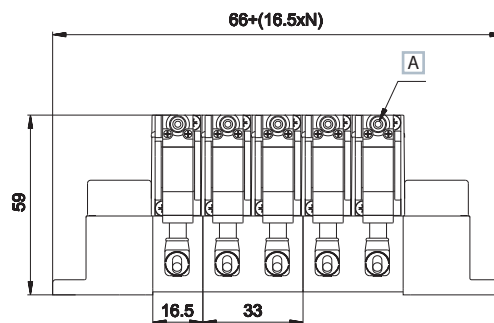
AZ4-VN0414

100 screws 4x14 for tie-rods

Electric connection with external connector



- 1 End plate
- 2 Sub-base 1 place
- 3 Sub-base 2 places
- 4 Modular tie-rods
- 5 Valve
- 6 Multipolar female connector
- 7 Single connector
- 8 Bus connection card
- 9 Multipole connection module



- 1 = Supply port
- 2 - 4 = Use
- 3 - 5 = Exhaust
- 14 = Control
- 12 = Return

- A Manual override
- B Tightening torque
- G1/4 = max 10 Nm

N = Number of valve places

P15SF300	P15SF310	P15SF400	P15SF410	P15SF515	P15SF550	P15SF560
sub-base 1 place weight: 0,023 Kg	sub-base 1 place 1-3-5 closed weight: 0,024 Kg	sub-base 2 places weight: 0,046 Kg	sub-base 2 places 1-3-5 closed weight: 0,048 Kg	supply plate right/left G1/4 weight: 0,050 Kg	supply pressure separator plate weight: 0,001 Kg	covering plate for unused valve place weight: 0,007 Kg

P15SF570	P15STR01	P15STR02	P15STR05
intermediate supply plate for threaded version weight: 0,009 Kg	modular tie-rods 1 valve place (package 100 pcs.) weight: 0,003 Kg	modular tie-rods 2 valve places (package 100 pcs.) weight: 0,007 Kg	modular tie-rods 5 valve places (package 100 pcs.) weight: 0,018 Kg

AZ4-SN004A

100 nuts M4 for tie-rods

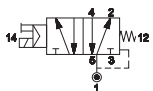
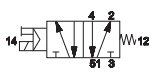
AZ4-VN0414

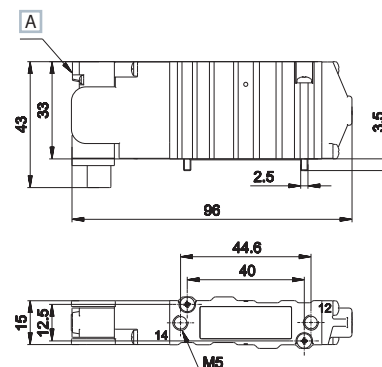
100 screws 4x14 for tie-rods

Single electric impulse



Weight (Kg): 0,138

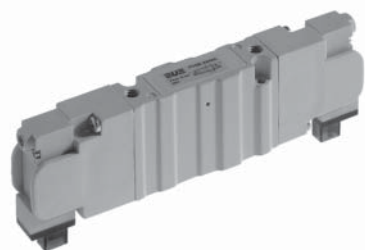
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	pneumo mechanical spring	1,9÷9	15	24	P15B24024
5/2		electric amplified	mechanical spring	2÷9	12	21	P15B24124



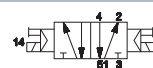
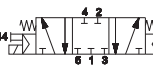
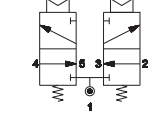
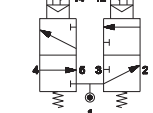
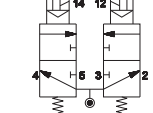
A Manual override

14 = Control
12 = Return

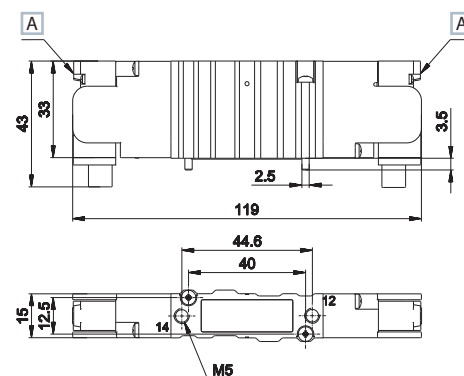
Double electric impulse



Weight (Kg): 0,158

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		electric amplified	electric amplified	0,7÷9	11	11	P15B24424
5/3 c.c.		electric amplified	electric amplified	1,6÷9	11	35	P15B34424
5/3 o.c.		electric amplified	electric amplified	1,6÷9	11	35	P15B44424
5/3 p.c.		electric amplified	electric amplified	1,6÷9	11	35	P15B54424
3/2 NC + 3/2 NC		electric amplified	electric amplified	1,5÷9	14	16	P15B64424
3/2 NC + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15B74424
3/2 NO + 3/2 NO		electric amplified	electric amplified	1,5÷9	14	16	P15B84424

o.c. = open centres c.c. = closed centres p.c. = pressurized centres



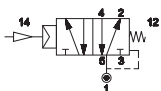
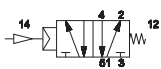
A Manual override

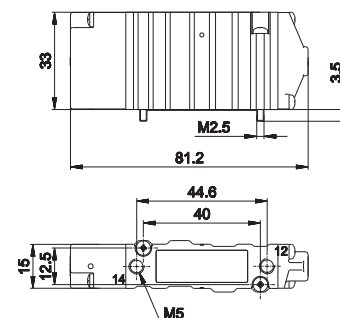
14 = Control
12 = Return

Single pneumatic impulse



Weight (Kg): 0,127

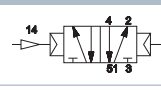
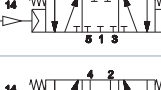
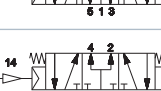
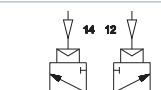
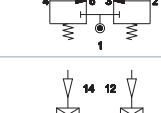
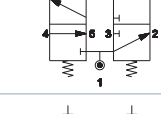
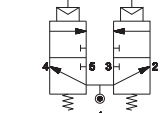
	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumo mechanical spring	1,9÷9	11	15	P15B230
5/2		pneumatic amplified	mechanical spring	2÷9	10	14	P15B231


14 = Control
12 = Return

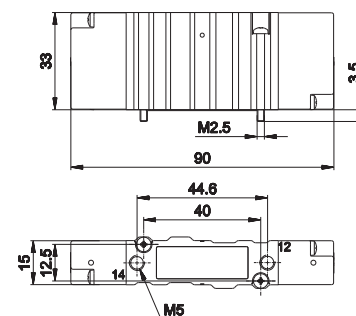
Double pneumatic impulse



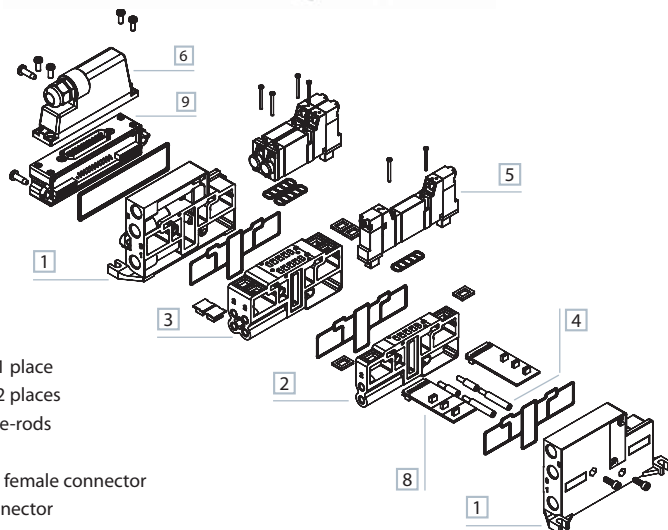
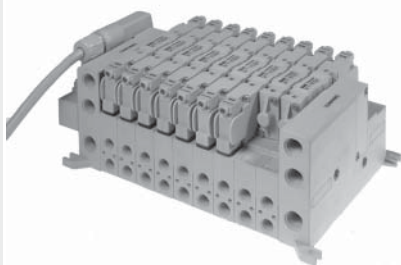
Weight (Kg): 0,132

	Symbol	Control	Return	Pressure bar	Times (ms)		Part no.
					En.	De-en.	
5/2		pneumatic amplified	pneumatic amplified	0,7÷9	10	10	P15B233
5/3 c.c.		pneumatic amplified	pneumatic amplified	1,6÷9	9	21	P15B333
5/3 o.c.		pneumatic amplified	pneumatic amplified	1,6÷9	9	21	P15B433
5/3 p.c.		pneumatic amplified	pneumatic amplified	1,6÷9	9	21	P15B533
3/2 NC + 3/2 NC		pneumatic amplified	pneumatic amplified	1,3÷9	10	14	P15B633
3/2 NC + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷9	10	14	P15B733
3/2 NO + 3/2 NO		pneumatic amplified	pneumatic amplified	1,3÷9	10	14	P15B833

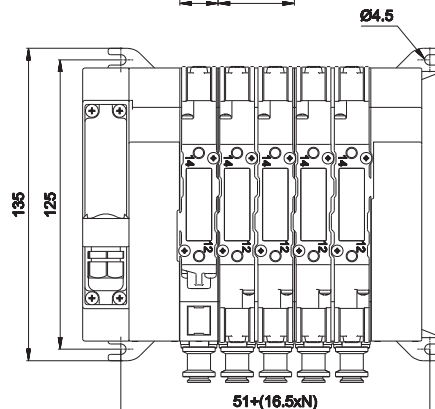
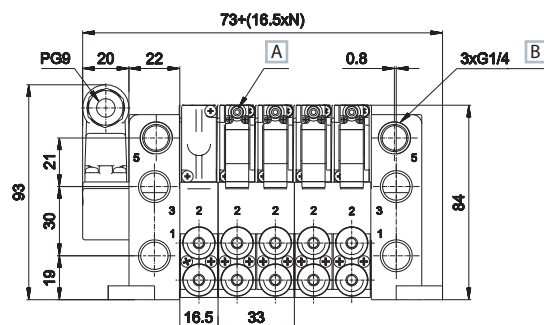
o.c. = open centres c.c. = closed centres p.c. = pressurized centres


14 = Control
12 = Return

Integrated electric connection



- 1 End plate
- 2 Sub-base 1 place
- 3 Sub-base 2 places
- 4 Modular tie-rods
- 5 Valve
- 6 Multipolar female connector
- 7 Single connector
- 8 Bus connection card
- 9 Multipole connection module



- 1 = Supply port
 - 2 - 4 = Use
 - 3 - 5 = Exhaust
 - 14 = Control
 - 12 = Return
- A Manual override
B Tightening torque
G1/4 = max 10 Nm
G1/8 = max 3 Nm

N = Number of valve places

TIM1524	TIM151806	TIM1536	P15SB100	P15SB110	P15SB200	P15SB210
connection module 25 poles male 12+12 coils type D-sub weight: 0,047 Kg	connection module 25 poles male 18 coils side 14 6 coils side 12 type D-sub weight: 0,055 Kg	connection module 37 poles male 16+16 coils type D-sub weight: 0,057 Kg	sub-base 1 place side outlets G1/8 integrated version weight: 0,060 Kg	sub-base 1 place side outlets G1/8 integrated version 1-3-5 closed weight: 0,060 Kg	sub-base 2 places side outlets G1/8 weight: 0,133 Kg	sub-base 2 places side outlets G1/8 integrated version 1-3-5 closed weight: 0,133 Kg
P15SB300	P15SB310	P15SB400	P15SB410	P15SB500	P15SB505	P15SB550
sub-base 1 place side outlets for quick couplings integrated version weight: 0,060 Kg	sub-base 1 place side outlets for quick couplings 1-3-5 closed weight: 0,060 Kg	sub-base 2 places side outlets for quick couplings integrated version weight: 0,133 Kg	sub-base 2 places side outlets for quick couplings 1-3-5 closed weight: 0,133 Kg	supply plate G1/8 for TIM module weight: 0,127 Kg	supply plate G1/4 right weight: 0,124 Kg	supply pressure separator plate weight: 0,003 Kg
P15SB560	P15SB570	P15SS**01MC	P15SS**..M	P15SS**08MF	P15SS**04MFP	P15SS**04MP
covering plate for unused valve place weight: 0,007 Kg	intermediate supply plate for sub-base weight: 0,016 Kg	U-bus connection card, male ** = lato14 o 12 weight: 0,004 Kg	bus connection card male ** = side14 or 12 .. = 04, 06, 08 places weight: 0,009 Kg 04 places 0,010 Kg 06 places 0,013 Kg 08 places	bus connection card male/female extension ** = side14 or 12 weight: 0,014 Kg	bus connection card male/female extension ** = side14 or 12 weight: 0,008 Kg	bus card extension ** = side14 or 12 weight: 0,006 Kg
P15STR01	P15STR02	P15STR05	GZR-V100..			
modular tie-rods 1 valve place (package 100 pcs.) weight: 0,003 Kg	modular tie-rods 2 valve places (package 100 pcs.) weight: 0,007 Kg	modular tie-rods 5 valve places (package 100 pcs.) weight: 0,018 Kg	fitting .. = 04, 06, 08 places weight: 0,013 Kg			

AZ4-SN004A

100 nuts M4 for tie-rods

AZ4-VN0414

100 screws 4x14 for tie-rods

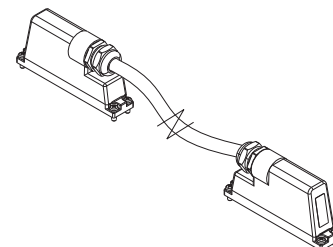
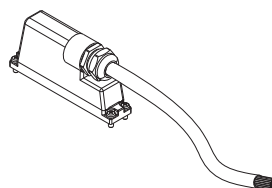
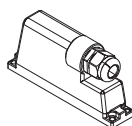
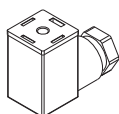
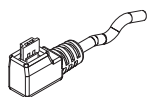
D-535U40300
D-535U40500

AM-5109

TSCFN24S000
TSCFN36S000

TSCFN24S0300
TSCFN24S0500
TSCFN24S1000
TSCFN32S0300
TSCFN32S0500
TSCFN32S1000

TSCFN16D0300
TSCFN16D0500
TSCFN16D1000



■ single connector
with cable 3-5 m

■ 15 mm connector

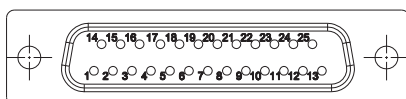
■ female connector
25/37 poles type
D-sub no cable
M3 x 8 fixing screws

■ female connector 25/37 poles
type D-sub with cable 3-5-10 m
M3 x 8 fixing screws

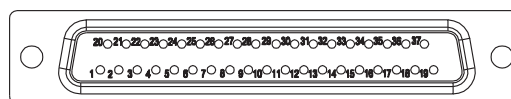
■ flying male/female connector
sub D (upon request) prewired
for 24 coils with cable Ø 8 mm
(3-5-10 m lenght) suitable
for mobile laying
M3 x 8 fixing screws

Colour identification according to standard DIN 47100

Female D-SUB 25 poles
for connection 12+12 coils

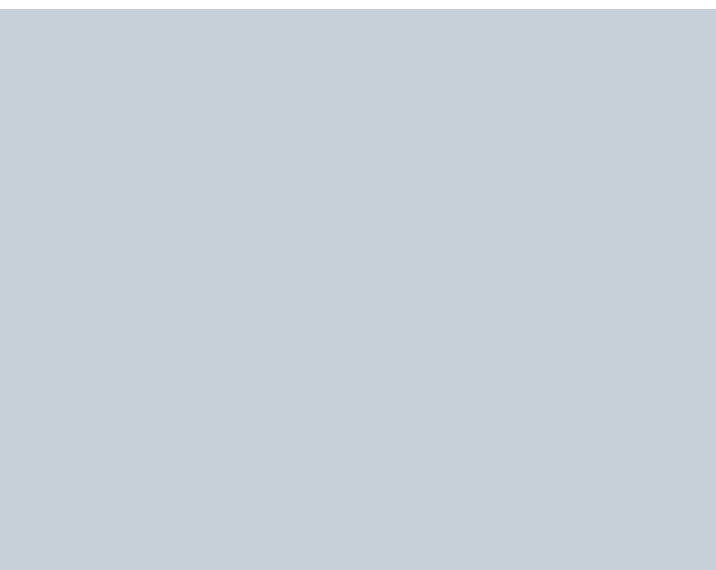


Female D-SUB 37 poles
for connection 16+16 coils



PIN No.	Colour	Coil	Control side		Valve No.
			TIM1524	TIM151806	
1	white	1	14	14	1
2	brown	2	12	12	1
3	green	3	14	14	2
4	yellow	4	12	12	2
5	grey	5	14	14	3
6	pink	6	12	12	3
7	blue	7	14	14	4
8	red	8	12	12	4
9	black	9	14	14	5
10	violet	10	12	12	5
11	grey-pink	11	14	14	6
12	red-blue	12	12	12	6
13	white-green	13	14	14	7
14	brown-green	14	12	14	7
15	white-yellow	15	14	14	8
16	yellow-brown	16	12	14	8
17	white-grey	17	14	14	9
18	grey-brown	18	12	14	9
19	white-pink	19	14	14	10
20	pink-brown	20	12	14	10
21	white-blue	21	14	14	11
22	brown-blue	22	12	14	11
23	white-red	23	14	14	12
24	brown-red brown-black shield		-	-	-
25	white-black	24	12	14	12

PIN No.	Colour	Coil	Control side		Valve No.
			TIM1536		
1	white	1	14		1
2	brown	2	12		1
3	green	3	14		2
4	yellow	4	12		2
5	grey	5	14		3
6	pink	6	12		3
7	blue	7	14		4
8	red	8	12		4
9	black	9	14		5
10	violet	10	12		5
11	grey-pink	11	14		6
12	red-blue	12	12		6
13	white-green	13	14		7
14	brown-green	14	12		7
15	white-yellow	15	14		8
16	yellow-brown	16	12		8
17	white-grey	17	14		9
18	grey-brown	18	12		9
19	white-pink	19	14		10
20	pink-brown	20	12		10
21	white-blue	21	14		11
22	brown-blue	22	12		11
23	white-red	23	14		12
24	brown-red	24	12		12
25	white-black	25	14		12
26	brown-black	26	12		13
27	grey-green	27	14		14
28	yellow-grey	28	12		14
29	pink-green	29	14		15
30	yellow-pink	30	12		15
31	green-blue	31	14		16
32	yellow-blue	32	12		16
33	-	not used	-		-
34	-	not used	-		-
35	-	not used	-		-
36	yellow-black	common	-		-
37	yellow-red shield	common law	-		-



ACCESSORIES

6 Accessories

Coils

6.01

Actuators and buttons

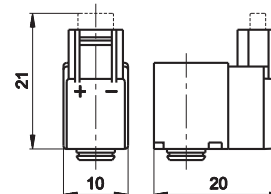
6.10

COILS



COUPLING TABLE COILS/ELECTROPILOTS ELECTROPILOTS/SOLENOID VALVES			Electropilots				
			A	B	AA(U1)	AA(U3)	AB (U2)
							
Coils	U04	10 mm					
	U05	15 mm					
	U1	22 mm					
	U2	30 mm					
	U3	30 mm					
Solenoid valves	BE		ISO 1- ISO 2 ISO 3 - ISO 4				
	AE		ISO 1 ISO 2				
	BD		ISO 01 26 mm ISO 02 18 mm				
	AC-N		NAMUR interface				
	CL CM		G1/8 G1/4				
	G6 GL6		G1/8 sub-base				
	G7		G1/8				
	PS		tube Ø 4 tube Ø 6 tube Ø 8				
	AC		G1/8 - G1/4 G1/2				
	AF		G1/8 G1/4 - G3/8 G1/2 ÷ G1 1/2				
	AG		G1/8 G1/4 ÷ G1 1/2				

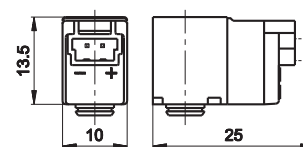
U04 coil with integrated 90° upward connector



Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		1,2	1,2	±10	24 V DC	0,013	DE-352
100		1,35	1,35	±10	24 V DC	0,013	DE-452

Upon request 12 VDC

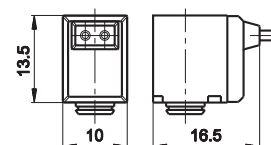
U04 coil with in-line connector



Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		1,2	1,2	±10	24 V DC	0,013	DE-552
100		1,35	1,35	±10	24 V DC	0,013	DE-652

Upon request 12 VDC

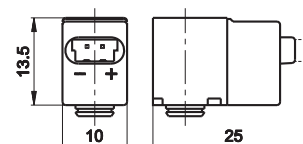
U04 coil with loose cables (length 300 mm)



Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.(b)
	%	continuo	start			
100		1,2	1,2	±10	24 VDC	0,013

Upon request 12 VDC

U04 coil with in-line connector with protecting cover for complete tightness



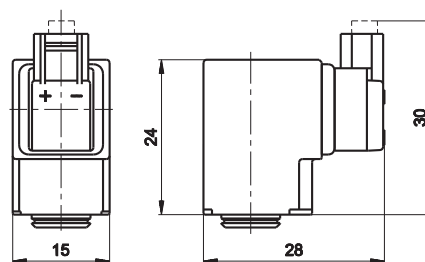
Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		1,35	1,35	±10	12 V DC	0,013	DE-642I
100		1,35	1,35	±10	24 V DC	0,013	DE-652I

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

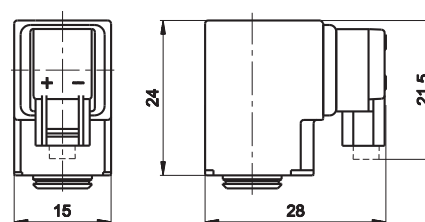
(b) = different wire lengths are available upon request

U05 coil with integrated 90° upward connector



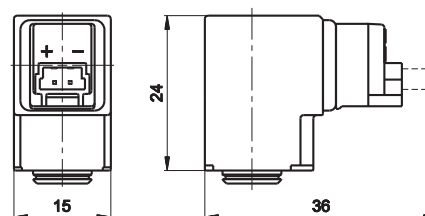
Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		2	2	±10	24 V DC	0,019	DD-351
							D-500 D-530-... D-535-...

U05 coil with integrated 90° upward connector



Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		2	2	±10	24 V DC	0,019	DD-151
							D-500 D-530-... D-535-...

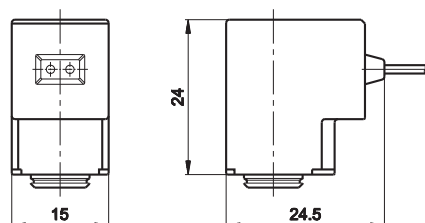
U05 coil with in-line connector



Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no.	Connector
	%	continuo	start				
100		2	2	±10	24 V DC	0,019	DD-551
							D-500 D-530-... D-535-...

Upon request: version with LED and V DC version

U05 coil with loose cables



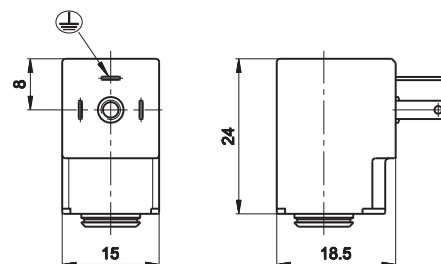
Life of ED (a)	Input W		Tension tolerance	Rated voltage	Weight	Part no. (b)
	%	continuo	start			
100		1,5	1,5	±10	12 V DC	0,019
100		2	2	±10	24 V DC	0,019
						DD-051L030
						DD-052L030

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

(b) = different wire lengths are available upon request

U05 lato 15 mm coil - Faston



Life of ED (a)	Input W				Tolerance		Rated voltage		Frequency	Weight	Part no.	Connector
	DC W		AC VA		tension %		DCV	ACV	HZ	Kg		
%	Contin.	Start	Conti.	Start	DC	AC						
100	-	-	3,5	-	-	±10	-	24	50/60	0,019	DD-011	AM-5109
100	-	-	3,5	-	-	±10	-	230	50/60	0,019	DD-013	
100	-	-	2,3	3,2	±10	±10	-	24	50/60	0,019	DD-040	
100	1,5	1,5	-	-	±10	-	12	-	-	0,019	DD-041	
100	2,5	2,5	-	-	±10	±10	12	-	-	0,019	DD-042	
100	-	-	2,3	3,2	±10	-	-	48	50/60	0,019	DD-050	
100	2	2	-	-	±10	±10	24	-	-	0,019	DD-051	
100	2,5	2,5	-	-	±10	-	24	-	-	0,019	DD-052	
100	-	-	-	-	±10	±10	-	110	50/60	0,019	DD-060	
100	-	-	2,3	3,2	±10	-	-	230	50/60	0,019	DD-070	

Connectors for U04 e U05 coils

	Length	Coil	Part no.
	mm		
MINIATURE CONNECTOR WITHOUT WIRES			
	-	U04/U05	D-500
MINIATURE CONNECTOR WITH LOOSE CABLES			
	300	U04/U05	D-530-30
	500	U04/U05	D-530-50
	2000	U04/U05	D-530-200
MINIATURE CONNECTOR WITH CABLE			
	300	U04/U05	D-535-30
	500	U04/U05	D-535-50
	2000	U04/U05	D-535-200

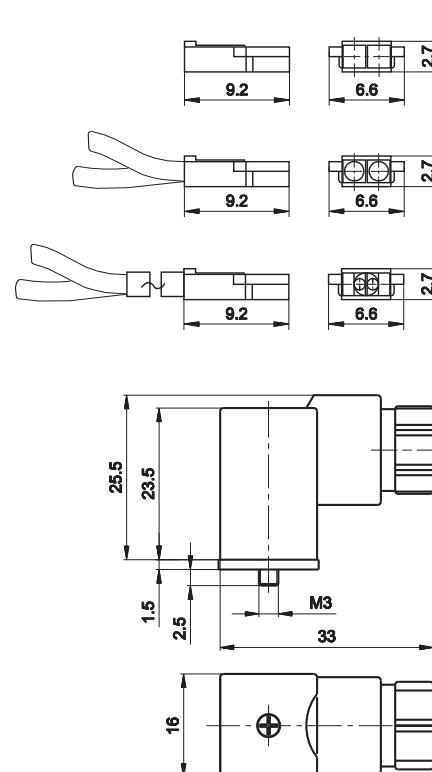
CAUTION! Do not invert the polarity when connecting to be coil with LED.

15 mm connector



- U05 AM-5109

Protection according to IP65. PG9 cable connection. 180° rotation on the coil.



Upon request version with LED:

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

Possibility of replacement without intervention in the pneumatic circuit

Other voltages available upon request

360° rotation on the pilot. Coil winding: H class

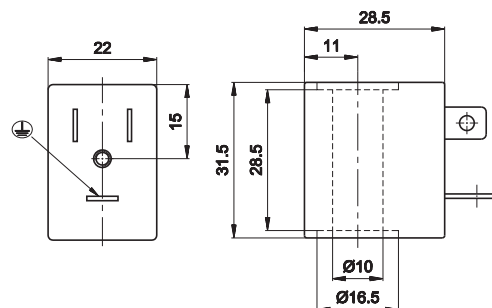
Ambient temperature: $-10 \div +45$ °C. Fluid temperature: $-10 \div +95$ °C.

The solenoid valves functioning with 100V-230V must be incorporated (EN60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated.

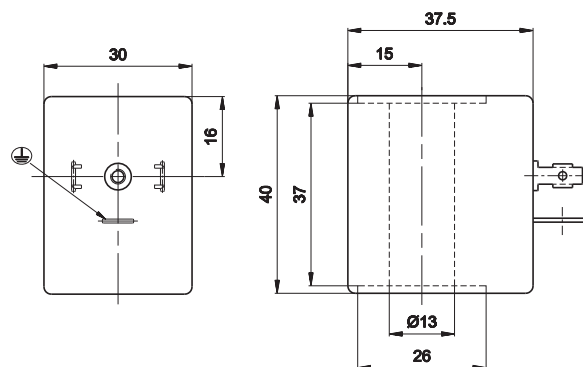


U1 22 mm coil to be used with U1 electropilot



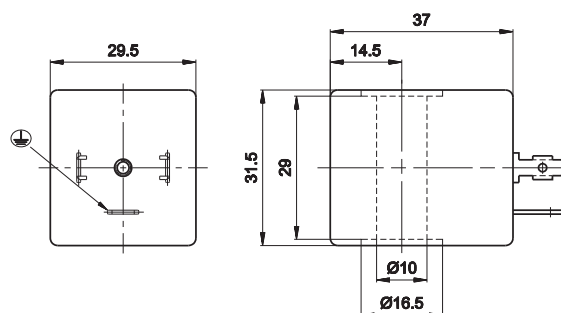
Life of ED (a)		Input W		Tolerance tension	Rated voltage	Weight	Part no.
%		continuo	start	%		Kg	
100		3,5	3,5	±10	12 V DC	0,06	DA-0050
100		3,5	3,5	±10	24 V DC	0,06	DA-0051
100		5,4 VA (max)	7,8 VA (max)	±10	24 V AC/50-60 HZ	0,06	DA-0106
100		5,4 VA (max)	7,8 VA (max)	±10	110 V AC/50-60 HZ	0,06	DA-0108
100		5,4 VA (max)	7,8 VA (max)	±10	230 V AC/50-60 HZ	0,06	DA-0124

U2 30 mm coil to be used with U2 electropilot



Life of ED (a)		Input W		Tension tolerance	Rated voltage	Weight	Part no.
%		continuous	start	%		Kg	
100		11	11	±10	12 V DC	0,10	DB-0501
100		11	11	±10	24 V DC	0,10	DB-0502
100		10 VA (max)	16 VA (max)	±10	24 V AC/50-60 HZ	0,10	DB-0507
100		10 VA (max)	16 VA (max)	±10	110 V AC/50-60 HZ	0,10	DB-0509
100		10 VA (max)	16 VA (max)	±10	230 V AC/50-60 HZ	0,10	DB-0510

U3 30 mm coil to be used with U1 electropilot



Life of ED (a)		Input W		Tension tolerance	Rated voltage	Weight	Part no.
%		continuous	start	%		Kg	
100		2,5	2,5	±10	12 V DC	0,08	DC-0301
100		2,5	2,5	±10	24 V DC	0,08	DC-0302
100		3,3 VA (max)	5 VA (max)	±10	24 V AC/50-60 HZ	0,08	DC-0307
100		3,3 VA (max)	5 VA (max)	±10	110 V AC/50-60 HZ	0,08	DC-0309
100		3,3 VA (max)	5 VA (max)	±10	230 V AC/50-60 HZ	0,08	DC-0310

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

Connector for U1 coil

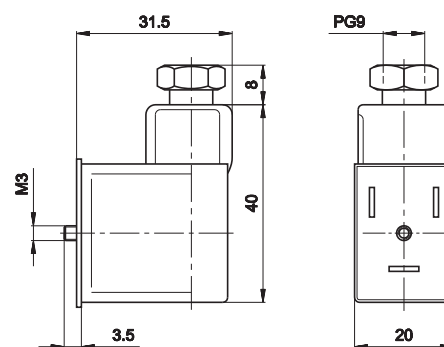
	Coil	Part no.
Connector		



U1

AM-5110

Protection according to IP 65. PG9 cable connection. 180° rotation on the coil.
LED and moulded cable are available upon request.



Connector for U2, U3 coil

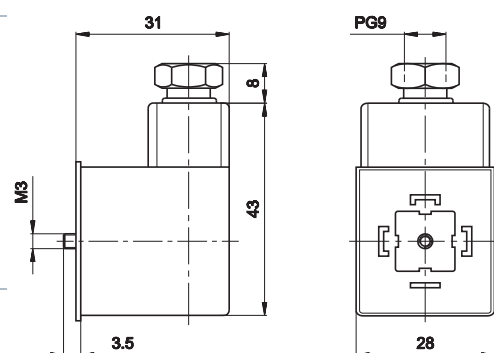
	Coil	Part no.
DIN 43650 connector		



U2/U3

AM-5111

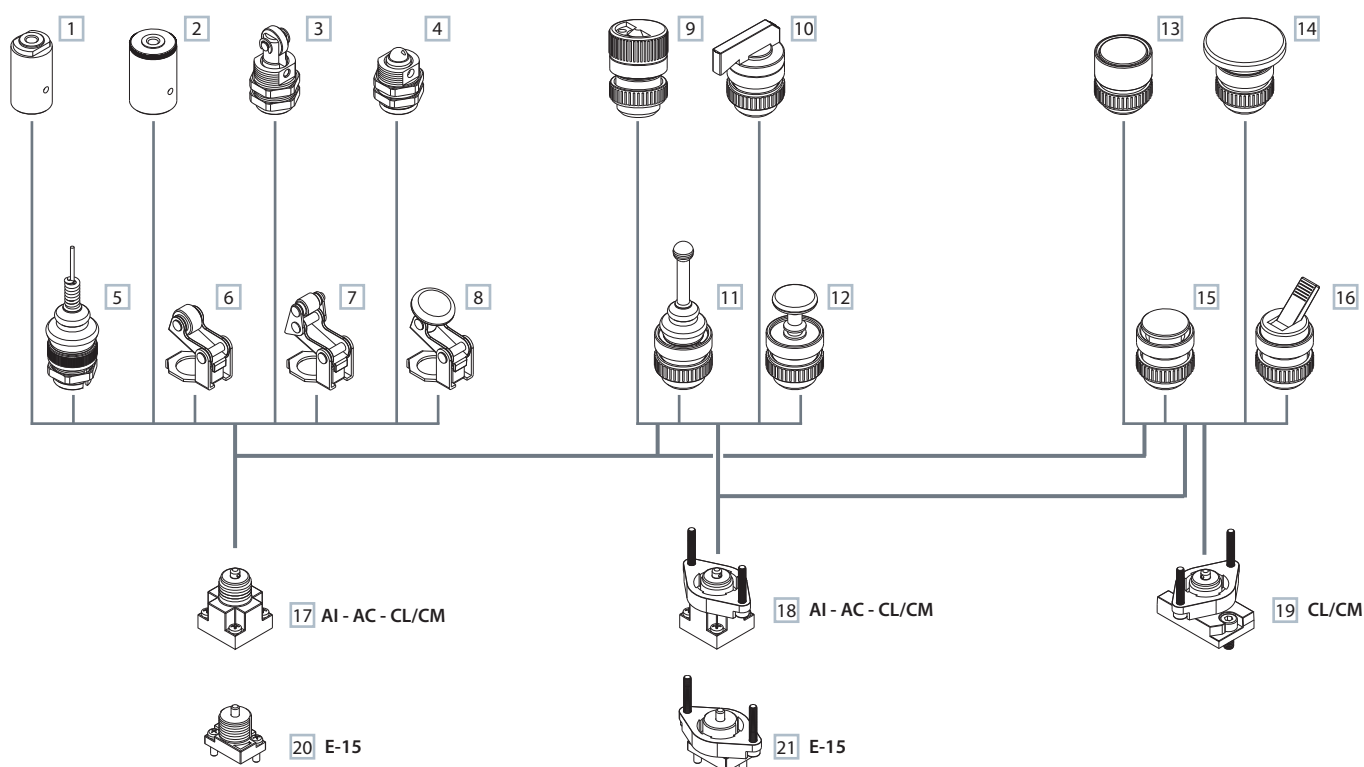
Protection according to IP 65. PG9 cable connection. 360° rotation on the coil.
LED and moulded cable are available upon request.



BUTTONS



Modular system actuators/buttons



PNEUMATIC / MECHANICAL ACTUATORS

- 1 Pneumatic actuator
- 2 Amplified pneumatic actuator
- 3 Roller operator 1 position
- 4 Ball-push operator 1 position
- 5 Operator with omni-directional antenna 1 position
- 6 Roller lever operator 1 position
- 7 Articulated roller lever operator 1 position
- 8 Key operator 1 position

MANUAL ACTUATORS

- 9 Rotating selector
- 10 Rotating lever selector
- 11 Omni-directional operator
- 12 Push-pull operator
- 13 Recessed button
- 14 Head button
- 15 Button
- 16 Lever operator

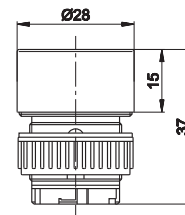
OVERRIDE

- 17 Threaded indirect operation
- 18 Indirect operation for panel mounting
- 19 Direct operation for panel mounting
- 20 Direct operation with tappet
- 21 Direct operation with tappet for panel mounting

Recessed button



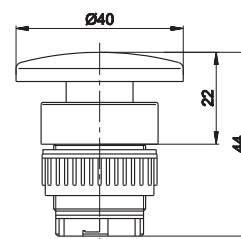
Symbol	Colour	Force ^(a) N	Weight Kg	Part no.
1 POSITION				
	black ■	16	0,031	AI-3511
	red ■	16	0,031	AI-3512
	green ■	16	0,031	AI-3513
FOR PANEL MOUNTING 1 POSITION^(b)				
	black ■	16	0,031	AI-3511Q
	red ■	16	0,031	AI-3512Q
	green ■	16	0,031	AI-3513Q



Head button



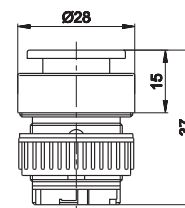
Symbol	Colour	Force ^(a) N	Weight Kg	Part
1 POSITION				
	red ■	16	0,022	AI-3514
	black ■	16	0,022	AI-3516
FOR PANEL MOUNTING 1 POSITION^(b)				
	red ■	16	0,022	AI-3514Q
	black ■	16	0,022	AI-3516Q
2 POSITIONS				
	red ■	16	0,022	AI-3514D
	black ■	16	0,022	AI-3516D
FOR PANEL MOUNTING 2 POSITIONS^(b)				
	red ■	16	0,022	AI-3514QD
	black ■	16	0,022	AI-3516QD



Button



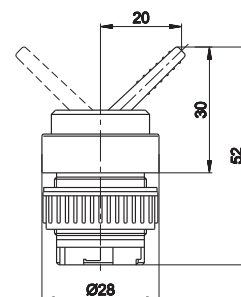
Symbol	Colour	Force ^(a) N	Weight Kg	Part no.
1 POSITION				
	green ■	12,5	0,025	AI-3515
	red ■	12,5	0,025	AI-3517
	black ■	12,5	0,025	AI-3519
FOR PANEL MOUNTING 1 POSITION^(b)				
	green ■	12,5	0,025	AI-3515Q
	red ■	12,5	0,025	AI-3517Q
	black ■	12,5	0,025	AI-3519Q



Lever operator



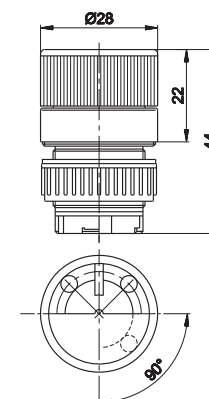
Symbol	Colour	Force ^(a) N	Weight Kg	Part no.
2 POSITIONS				
	black ■	6	0,022	AI-3524
FOR PANEL MOUNTINGS 2 POSITIONS^(b)				
	black ■	6	0,022	AI-3524Q



Accident prevention rotating selector



Symbol	Colour	Force ^(a) N	Weight Kg	Part no.
WITH INDICATOR LAMP 1 POSITION				
	black ■	12,5	0,025	AI-3521
FOR PANEL MOUNTING WITH INDICATOR LAMP 1 POSITION^(b)				
	black ■	12,5	0,025	AI-3521Q
WITH INDICATOR LAMP 2 POSITIONS				
	black ■	12,5	0,025	AI-3520
FOR PANEL MOUNTING WITH INDICATOR LAMP 2 POSITIONS^(b)				
	black ■	12,5	0,025	AI-3520Q

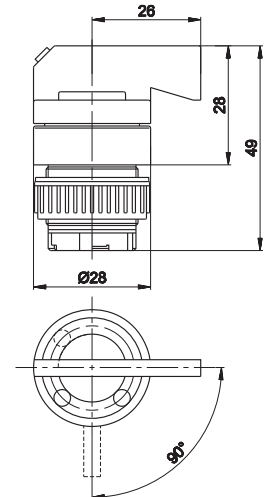


(a) = force at 6 bar with actuators assembled on AI-35.. standard limit switch
 (b) = to be used with valves preset with flange for panel mounting

Rotating lever selector



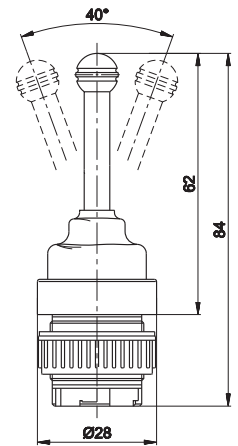
Symbol	Colour	Force (a) N	Weight Kg	Part no.
WITH INDICATOR LAMP 1 POSITION				
	black ■	12,5	0,025	AI-3523
FOR PANEL MOUNTING WITH INDICATOR LAMP 1 POSITION(b)				
	black ■	12,5	0,025	AI-3523Q
WITH INDICATOR LAMP 2 POSITIONS				
	black ■	12,5	0,025	AI-3522
FOR PANEL MOUNTING WITH INDICATOR LAMP 2 POSITIONS(b)				
	black ■	12,5	0,025	AI-3522Q



Omni-directional operator



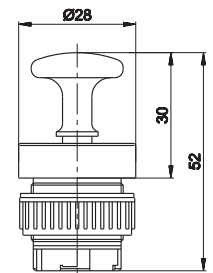
Symbol	Colour	Force (a) N	Weight Kg	Part no.
WITH CENTRE RETURN 1 POSITION				
	■	7	0,029	AI-3525
FOR PANEL MOUNTING WITH CENTRE RETURN 1 POSITION (b)				
	■	7	0,029	AI-3525Q



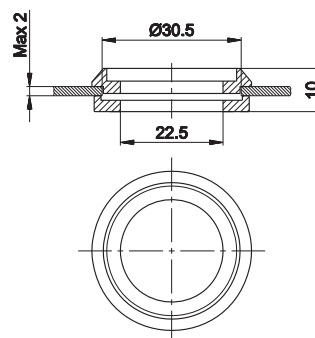
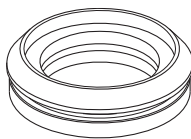
Push-pull operator



Symbol	Colour	Force (a) N	Weight Kg	Part no.
2 POSITIONS				
	black ■	16	0,029	AI-3526
FOR PANEL MOUNTING 2 POSITIONS(b)				
	black ■	16	0,029	AI-3526Q



AI-3529



reducer for Ø 30,5 to Ø 22,5, to be used with AI-35..Q limit switches
(for details refer to next page)

(a) = force at 6 bar with actuators assembled on AI-35..

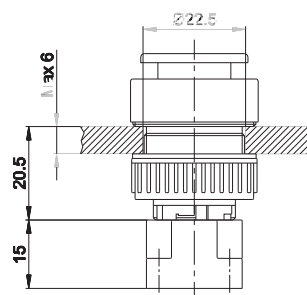
(b) = to be used with valves preset with flange for panel mounting

Reducer

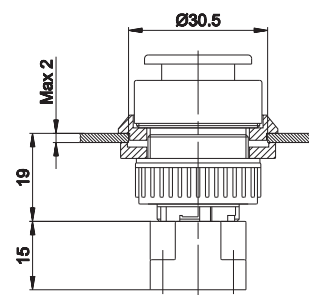


Manual actuators for screw mounting (ring nut)

Panel mounting for Ø 22,5 bore sizes

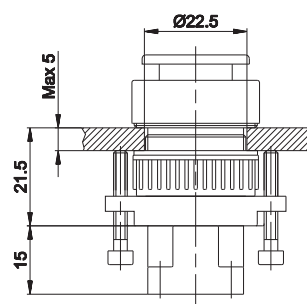


Panel mounting for Ø 30,5 bore sizes



Manual actuators for panel mounting (ring nut+screws)

Panel mounting for Ø 22,5 bore sizes

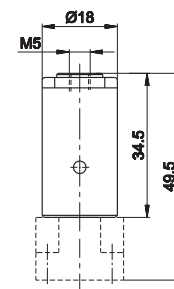


Panel mounting for Ø 30,5 bore sizes, just for manual actuators with screw

Pneumatic operator



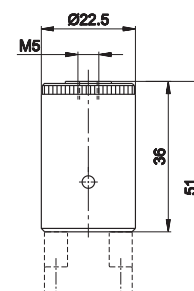
Symbol	Control pressure bar	Operating pressure bar	Weight Kg	Part no.
	1,9÷2,7	1÷9	0,020	AI-3550



Amplified pneumatic operator



Symbol	Control pressure bar	Operating pressure bar	Weight Kg	Part no.
	0,6÷0,9	1÷9	0,030	AI-3551



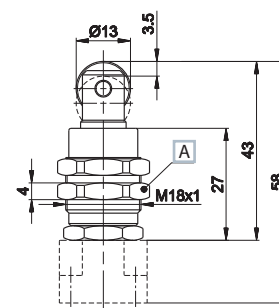
Roller operator



Symbol	Force (a) N	Weight Kg	Part no.
	-	0,031	AI-3560

 Wrench 20

WITH DUST PROTECTION



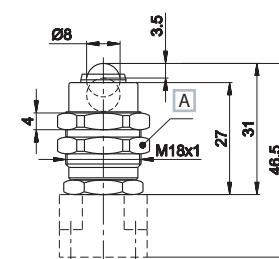
Ball-push operator



Symbol	Force (a) N	Weight Kg	Part no.
	26	0,023	AI-3562

 Wrench 20

WITH DUST PROTECTION



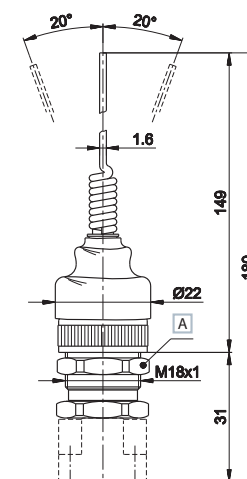
Operator with omni-directional antenna



Symbol	Force (a) N	Weight Kg	Part no.
	3,3	0,034	AI-3563

 Wrench 20

1 POSITION WITH CENTRE RETURN



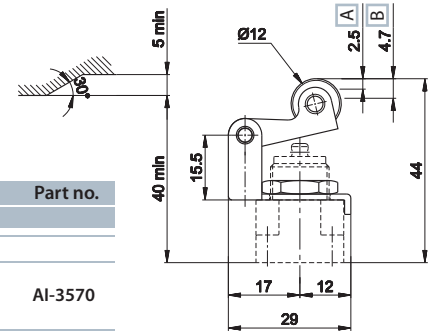
(a) = force at 6 bar with actuators assembled on AI-35..standard limit switch

Roller lever operator



A Max opening
B Total stroke

Symbol	Force (a) N	Weight Kg	Part no.
1 POSITION			
	10	0,021	AI-3570

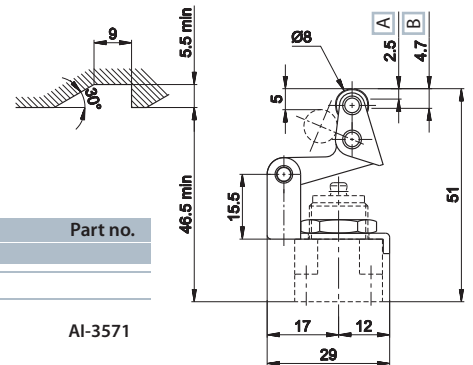


Articulated roller operator



A Max opening
B Total stroke

Symbol	Force (a) N	Weight Kg	Part no.
1 POSITION			
	10	0,021	AI-3571

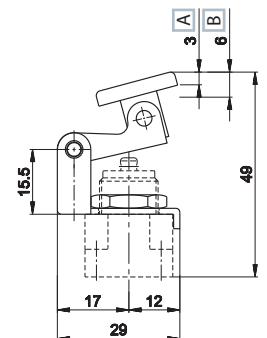


Key operator



A Max opening
B Total stroke

Symbol	Force (a) N	Weight Kg	Part no.
1 POSITION			
	10	0,021	AI-3572



(a) = force at 6 bar with actuators assembled on AI-35..