

VEMA Pnömatik



www.vema.com.tr



Product Catalog

AT UYGUNLUK BEYANI
CE DECLARATION OF CONFORMITY



Üretici Adı / Manufacturer Name	: VEMA Pnömatik San. ve Tic. A.Ş.
Üretici Adresi / Manufacturer Address	: İkitelli Sanayi Bölgesi, Bıksan Sitesi, B2-4, İkitelli 34670 İSTANBUL
Ürün Adı / Product Name	: Pnömatik Devre Elemanları Pneumatic Components
Uygulanan Direktifler / Applied Directives	: 98/37/AT Makine Direktifi 98/37/EC Machinery Directive
Uygulanan Standartlar / Harmonized Standards	: TS EN 983+A1 Makinelerde Güvenlik - Akışkan Güç Sistemleri ve Bileşenleri için Güvenlik Kuralları - Pnömatik EN 983+A1 Safety of Machinery - Safety Requirements for Fluid Power Systems and Their Components - Pneumatic

Beyan / Declaration :

Vema Pnömatik San. ve Tic. A.Ş., bu belgenin konusu olan pnömatik devre elemanlarının **TS EN 983+A1** numaralı standarda uygun olarak tasarlanıp, **98/37/AT** numaralı makine direktifine uygun olarak üretildiğini beyan etmektedir.

*VEMA Pnömatik San. ve Tic. A.Ş. declares that pneumatic components referred to in this certificate have been designed in accordance with **EN 983+A1** and they are in conformity with **98/37/EC (Machinery Directive)**.*

İstanbul, 2010

Hakkı AKÇALAR
Yönetim Kurulu Başkanı /
Chief Executive

İstanbul, 2010

Sezai YILANLIOĞLU
Genel Müdür Yard. /
Vice General Director

Contents

Your Powerful Assistant: Compressed Air	4
Pneumatic Systems and Applications	5
Tips & Hints	6
Pneumatic Calculus Tables	7
Air Service Units	10
Servo Regulators	13
Automatic Water Drainers.....	14
Bowl Shells.....	15
ECO Series Manuel Operated Valves	16
ECO Series Electric Operated Valves	18
ECO Series Pressure Operated Valves.....	21
ECO Series Base Plates	23
Manual & Foot Operated Valves.....	26
Manually Operated Valves.....	28
Electric Operated Valves	32
Pressure Operated Valves.....	37
Mechanically Operated Valves	39
Namur Valves	43
Vacuum Valves	44
Poppet Valves.....	46
Poppet Type Flying Cutter Valves.....	48
Press Safety Valves.....	50
High Performance Silencers.....	52
Electropilot Valves	53
Manifold Attachment Systems	53
Subbase & Subplate Valves	54
Auxiliary Products.....	55
Pneumatic Cylinders.....	56



Your Powerful Assistant: Compressed Air

Compressed air is a clean, environment friendly and flexible tool for complex actions in your applications. In special environments where other types of power are not allowed, such as natural gas plants where you do not want electricity, pneumatic circuits can replace electricity. The ease of application, and the simplicity of the pneumatic circuits are among many advantages of compressed air.

VEMA is the first manufacturer of the pneumatic equipments in Turkey. With our engineering knowhow, R&D and accumulated experience since 1970, we are serving to our customers with reliable and dependable products.

Our stringent quality control procedures ensures that you will receive the highest possible quality in our products.

VEMA, with a product range of more than 1500 products, is still the leading company in the production of pneumatic components in Turkey.

Product Range

Air Service Units (Filters, Regulators, Lubricators)
Heavy Duty series pneumatic valves
ECO series pneumatic valves
Vacuum valves
Press Safety Valves
Fast Response High Flow valves
Pneumatic Cylinders
Special valves
Fittings & Tubes

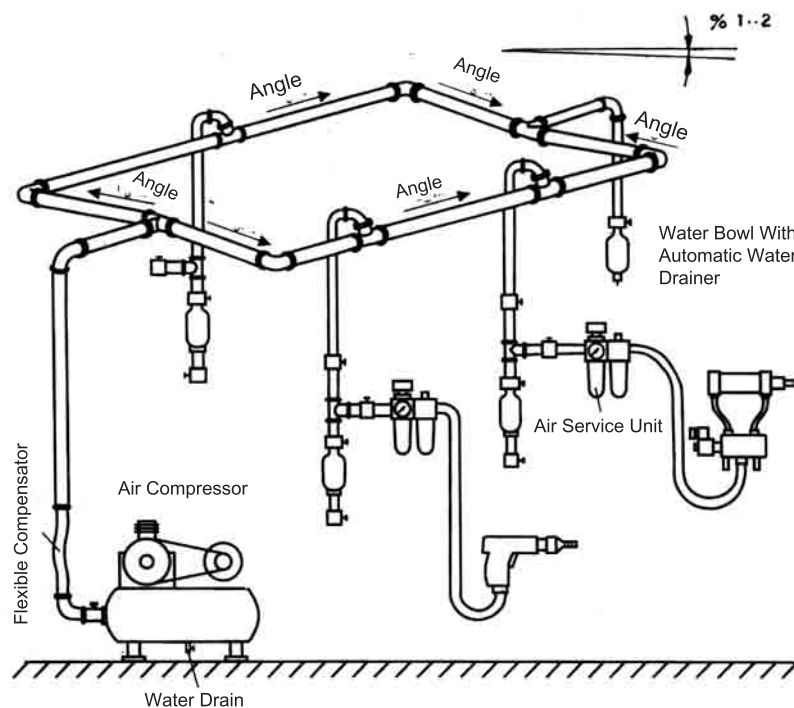
Services

Pneumatic Automation Engineering
Technical Consultation
Educational Courses

The following technical informations must be respected to assure a long life and accurate working of the pneumatic components.

Installation:

The air compressor should be chosen according the consumption and connected by means of a flexible hose to the installation. As shown in the figure, the upper horizontal lines should be installed with a slope of %1 – 2 (or 1-2 cm per meter) in the flow direction, and at the end a condensate tube with an automatic water drain must be also mounted. The vertical lines must be connected from the top of the main lines, with a drain valve at the end. Also, condensate must be drained periodically from the compressor and the installation.



Applications:

The air lines must be cleaned with compressed air before mounting the pneumatic components. The service unit (filter, regulator, lubricator) should be mounted in a distance –2mt max.- from the utilization point in order to avoid a residual of the oil particles contained in the compressed air, flowing through the long lines. The water condensate must be drained periodically from the bottom of the filter.

The lubricator must contain appropriate oil indicated on the bowl and oil quantity adjusted according the need of the application, which can be observed from the exhaust of the valves.



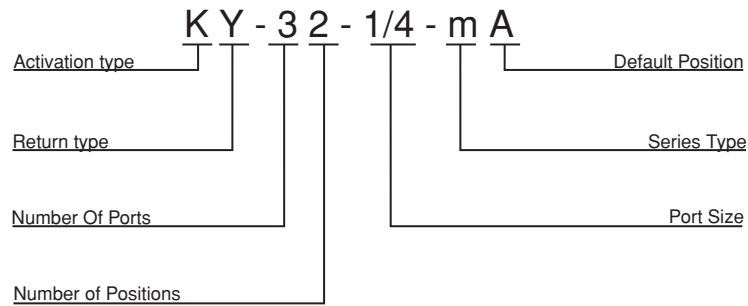
Nomenclature

P: Compressed air supply port
 A, B, C : Outlet ports
 R, S, T : Exhaust ports
 Z, Y, X : Pilot air ports

Type Designation

The designation codes include important information about valves and other components.

Example:



Ordering Information

For orders, the following specifications should be indicated along with PRODUCT CODE.

Air pressure range (min. and max.) used in the application.
 Voltage and current (AC/DC) in electrical valves

In case of unknown Product Code, please indicate:

Operation (solenoid/air/manual etc.)
 Return (solenoid/air/spring/manual/etc.)
 Port number
 Positions
 Connection size
 Valve body size
 Function (Normally open/closed, open/closed center)

Cylinders:

Type
 Single / double acting
 Cylinder diameter
 Stroke
 Mounting (foot, flange, clevis etc.)
 Other features (if any).



Valve Selection According to the Cylinder Load & Speed

Example:

Working Pressure: 6 bar.

Load: 170 kp

Cylinder Bore: 80mm

Cylinder Speed: 500mm/s

In order to choose the right valve to obtain above goals: Find 80mm bore from the cylinder bore column on the table below. Continue right until find the 174kp load value column. Continue up until you cross the grey area borderline, from that point continue left until you found 560mm/sec and continue down until 80mm bore line where you will find 1/2" valve size.

Cylinder Speed (mm/s)

Working Pressure 6 bar

710	180	200	100	1000	500	250	125	62,5
630	160	180	90	900	450	225	112	56
560	142	160	80	800	400	200	100	50
500	126	142	71	710	335	180	90	45
450	112	126	63	630	315	160	80	40
400	100	112	56	560	280	140	70	35
355	90	100	50	500	250	125	63	31
315	80	90	45	450	225	112	56	28
280	71	80	40	400	200	100	50	25
250	63	71	35	355	180	90	45	22
224	56	63	31	315	160	80	40	20
200	50	56	28	280	140	70	35	18
180	45	50	25	250	125	63	31	16
160	40	45	22	224	112	56	28	14
140	36	40	20	200	100	50	25	12
125	32	36	18	180	90	45	22	11
112	28	32	16	160	80	40	20	10
100	25	28	14	140	70	35	18	9
90	22	25	12	125	63	31	16	8
80	20	22	11	112	56	28	14	7

Economical Application Area

Port Size (R... inch)

Cylinder Bore (mm)

Cylinder Load (kp ~ kg)

					M5				6	.015	.030	.045	.060	.075	.090	.120	.150	.300	.450	.600	.750	.900	1.2	1.5
					M5				8	.030	.060	.090	.120	.150	.180	.240	.300	.600	.900	1.2	1.5	1.8	2.4	3.0
					M5				10	.50	.090	.140	.190	.240	.280	.380	.470	.940	1.4	1.9	2.4	2.8	3.8	4.7
					M5				12	.060	.100	.200	.250	.300	.400	.500	.620	1.3	1.9	2.5	3.1	3.8	5.0	6.3
					1/8				16	.100	.250	.400	.500	.600	.750	1.0	1.3	2.5	3.8	5.0	6.3	7.5	10.0	12.5
					1/8				20	.190	.380	.560	.750	.940	1.1	1.5	1.9	3.8	5.6	7.5	9.4	11.3	15.0	18.8
					M5				25	.200	.500	.750	1.0	1.3	1.5	2.0	2.5	5.0	7.5	10.0	12.5	15.0	20.0	25.0
					1/4				32	.450	.900	1.4	1.8	2.3	2.7	3.6	4.5	9.0	13.5	18.0	22.5	27.0	36.0	45.0
					1/4				35	.500	1.0	1.5	2.0	2.5	3.0	4.0	5.0	10.0	15.0	20.0	25.0	30.0	40.0	50.0
1/4	1/8								40	.700	1.4	2.1	2.8	3.5	4.2	5.6	7.0	14.0	21.0	28.0	35.0	42.0	56.0	70.0
					1/4				50	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	20.0	30.0	40.0	50.0	60.0	80.0	100
					1/4				63	1.8	3.6	5.4	7.2	9.0	10.8	14.4	18.0	36.0	54.0	72.0	90.0	108	144	180
					1/2				70	2.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	40.0	60.0	80.0	100	120	160	200
					1/2				80	2.9	5.8	8.7	11.6	14.5	17.4	23.2	29.0	58.0	87.0	116	145	174	232	290
					1/2				100	4.0	8.0	12.0	16.0	20.0	24.0	32.0	40.0	80.0	120	160	200	240	320	400
					1/2				125	7.4	14.2	22.0	29.4	36.8	44.1	58.9	73.6	147	221	294	368	442	589	736
					1/2				160	12.0	24.1	36.2	48.2	60.3	72.4	96.5	121	241	362	482	603	724	965	1206
									200	17.0	34.0	51.0	68.0	85.0	102	135	170	340	510	680	850	1020	1350	1700
									250	26.0	57.0	78.0	104	130	156	208	260	520	780	1040	1300	1560	2080	2600

All rights are preserved

Pneumatic Cylinder Air Consumption Table



Cylinder Dia. (mm)	Pressure (bar)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Consumption (lt.) per cm of cylinder stroke														
6	0.0005	0.0008	0.0011	0.0014	0.0016	0.0019	0.0022	0.0025	0.0027	0.0030	0.0033	0.0036	0.0038	0.0041	0.0044
12	0.002	0.003	0.004	0.006	0.007	0.008	0.009	0.010	0.011	0.012	0.013	0.014	0.015	0.016	0.018
16	0.004	0.006	0.008	0.010	0.011	0.014	0.016	0.018	0.020	0.022	0.024	0.026	0.028	0.029	0.032
25	0.010	0.014	0.019	0.024	0.029	0.033	0.038	0.043	0.048	0.052	0.057	0.062	0.067	0.071	0.076
35	0.019	0.028	0.038	0.047	0.056	0.066	0.075	0.084	0.093	0.103	0.112	0.121	0.131	0.140	0.149
40	0.025	0.037	0.049	0.061	0.073	0.085	0.097	0.110	0.122	0.135	0.146	0.157	0.171	0.183	0.195
50	0.039	0.058	0.077	0.096	0.115	0.134	0.153	0.172	0.191	0.210	0.229	0.248	0.267	0.286	0.305
70	0.076	0.113	0.150	0.187	0.225	0.262	0.299	0.335	0.374	0.411	0.448	0.485	0.523	0.560	0.597
100	0.155	0.231	0.307	0.383	0.459	0.535	0.611	0.687	0.763	0.839	0.915	0.991	1.067	1.143	1.219
140	0.303	0.452	0.601	0.750	0.899	1.048	1.197	1.346	1.495	1.644	1.793	1.942	2.091	2.240	2.389
200	0.618	0.923	1.227	1.531	1.835	2.139	2.433	2.747	3.052	3.356	3.660	3.964	4.268	4.572	4.876
250	0.966	1.441	1.916	2.392	2.867	3.342	3.817	4.292	4.768	5.243	5.718	6.193	6.668	7.144	7.619

Pneumatic Cylinder Push Force Table

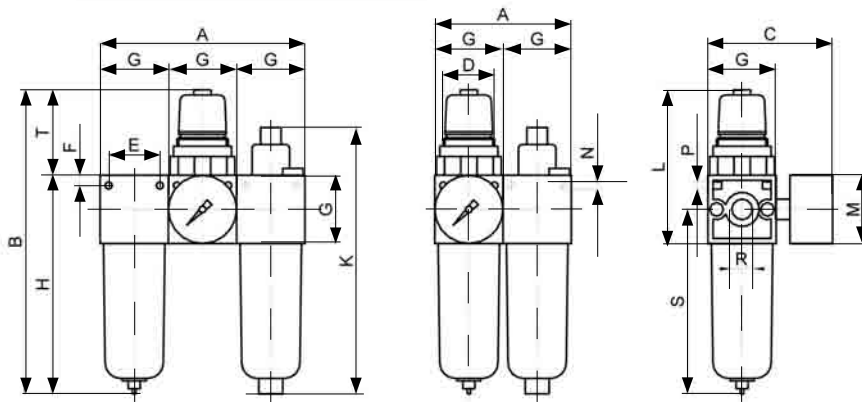
Cylinder Dia. (mm)	Pressure (bar)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Piston thrust force (Kp)														
6	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3
12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
25	4	9	13	17	21	24	30	34	38	42	46	50	55	60	63
32	7	16	25	32	40	48	56	64	72	80	88	96	105	113	120
35	8	17	26	35	43	52	61	70	78	86	95	104	113	122	129
40	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
50	17	35	53	71	88	106	124	142	159	176	194	212	230	248	264
63	27	62	94	125	156	187	218	250	281	312	343	374	408	442	475
70	34	69	104	139	173	208	243	278	312	346	381	416	451	486	519
80	65	100	150	201	250	300	351	402	452	500	550	600	650	700	750
100	70	141	212	283	353	424	495	566	636	706	777	848	919	990	1059
125	125	246	368	491	615	738	878	982	1105	1230	1346	1476	1601	1725	1840
140	138	277	416	555	693	832	971	1110	1248	1386	1525	1664	1803	1942	2079
160	201	402	603	804	1005	1206	1407	1608	1809	2010	2211	2412	2624	2818	3020
200	283	566	850	1133	1416	1700	1983	2266	2550	2832	3116	3400	3683	3966	4248
250	433	866	1300	1733	2166	2600	3033	3466	3800	4332	4766	5200	5633	6066	6498

Unit Conversion Table

	Symbol	SI Units	Symbol	Metrik Teknik Birimler			British Units		
				Unit	Symbol	Conversion Factor(*)	Unit	Symbol	Conversion Factor
Length	l	Metre	m	Metre	m	-	Foot İnç	ft in	0.3048 m 0.0254 m
Area	A	Metrekare	m ²	Metrekare	m ²	-	İnçkare	in ²	6.45x10 ⁻⁴ m ²
Volume	V	Metreküp	m ³	Metreküp	m ³	-	İnçküp Galon (U.K.)	in ³ gal	16.39x10 ⁻⁶ m ³ 0.004546 m ³
Time	t	Saniye	s	Litre	l	0.001m ³	Galon (U.S.A.) Foot küp	gal ft ³	0.003785 m ³ 0.02832 m ³
Flow	Q	Metreküp / Saniye	m ³ /s	Dakika	dk	60s	Dakika	dk	60 s
Angular Speed	ω	Radyan / Saniye	rad/s	Metreküp / Saniye Litre / Dakika	m ³ /s lt/dk	-	İnçküp/dakika Galon (U.K.) / dakika Galon (U.S.A.) / dakika	in ³ /dk gal/dk gal/dk	0.273x10 ⁻⁶ m ³ /s 75.8x10 ⁻⁶ m ³ /s 63.1x10 ⁻⁶ m ³ /s
Linear Speed	V	Metre / Saniye	m/s	Radyan / Saniye	rad/s	-	Radyan / Saniye	rad/s	-
Acceleration	a	Metre / Saniyekare	m/s ²	Metre / Dakika	m/dk	1/60 m/s	Foot / Saniye	ft/s	0.3048 m/s
Rotation Frequency	n	1 / saniye	s ⁻¹	Metre / Saniyekare	m/s ²	-	Foot / Saniyekare	ft/s ²	0.3048 m/s ²
Mass	m	Kilogram	kg	Devir / Dakika	dev/dk	1/60 dev/s	Devir / Dakika	dev/dk	1/60 dev/s
Density	ρ	Kilogram / Metreküp	kg/m ³	Kilogram - Kuvvet. Saniyekare / Metre	kgf.s ² /m	9.81 kg	Pound Slug	lb	0.4536 kg 14.5939 kg
Force	F	Newton	N	-	-	-	Pound / İnçküp	lb/in ³	27.68x10 ⁻³ kgf /m ³
Specific Gravity	Y	Newton / Metreküp	N/m ³	Kilogram - Kuvvet	kgf	9.81 N= 9.81 kg.m/s ²	Pound - Kuvvet	lbf	4.45 N
Momentum	M	Newton.metre	N.m	Kilogram - Kuvvet / Metreküp	kgf/m ³	9.81 N/m ³	Pound - Kuvvet / İnçküp	lbf/in ³	27.68x10 ⁻³ kgf/m ³
Pressure	p	Newton/metre-kare	N/m ² bar	Kilogram - Kuvvet. Metre	kgf.m	9.81 N/m	Pound - Kuvvet.foot	lbf.ft	1.356 N.m
Dynamic Viscosity	η	Newton.saniye/ Metrekare	N.s/m ²	Kilogram - Kuvvet/ Santimetrekare	kgf.cm ²	9.81 N/m ² N/m ²	Pound - Kuvvet / İnçkare	lbf/in ²	6898 N/m ²
Kinematic Viscosity	ν	Newton.saniye/ Metrekare	N.s/m ²	Poise Centipoise	P cP	0.1 N.s/m ² 0.001 N.s/m ²	Pound - Kuvvet . Saniye/footkare	lbf.s/ft ²	47.9 N.s/m ²
Energy	E	Joule	J	Stokes Centistokes	St cSt	1/10 ⁴ m ² /s 1/10 ⁶ m ² /s	Footkare/Saniye	ft ² /s	0.0929 m ² /s
Heat	Q	Joule	J	Kilogram - Kuvvet.Metre	kgf.m	9.81 J	Foot.Pound-Kuvvet	ft.lbf	1.356 J
Power	P	Watt	W	I.T. Kilokalori	kcal	4187 J	İngiliz Isı Birimi	Btu	1055 J
Temperature	t	Kelvin - derece	K ⁰	Kilogram - Kuvvet. Metre / Saniye	kgf.m/s	75 kgf.m/s=735.5W	Foot pund-Kuvvet/saniye	ft.lbf/s	1.356 W
				Metrik beygirgücü	PS	75 kgf.m/s=735.5W	Beygirgücü (İngiliz)	HP	745.7 W
				Celcius - derece	C ⁰	(C ⁰ +273.15) K	Fahrenheit-Derece	F ⁰	[5/9 (F ⁰ -32) +273.15] K

All rights are preserved

Air Service Units (R 1/4" - R 1/8")



		R(in) B.S.P.	Size (mm)														
			A	B	C	D	E	F	G	H	K	L	M	N	P	S	T
Service Unit (F+R+L)	FRL-1/4	1/4	120	180	75	30	30	6	40	130	155	90	40	4,2	4,2	110	50
	FRL-1/8	1/8															
Service Unit (FR+L)	R/FL-1/4	1/4	80	180	75	30	30	6	40	130	155	90	40	4,2	4,2	110	50
	R/FL-1/8	1/8															
Filter	F-1/4	1/4				30	6	40						4,2	4,2	110	
	F-1/8	1/8															
Regulator	RE-1/4	1/4			75	30	30	6	40			90	40	4,2	4,2		50
	RE-1/8	1/8															
Mini Regulator	RE-1/4m	1/4			75	30		40			75	40					50
	RE-1/8m	1/8															
Filter Regulator	R/F-1/4	1/4		180	75	30	30	6	40	130		90	40	4,2	4,2	110	50
	R/F-1/8	1/8															
Lubricator	L-1/4	1/4					30	6	40	130	155					110	
	L-1/8	1/8															

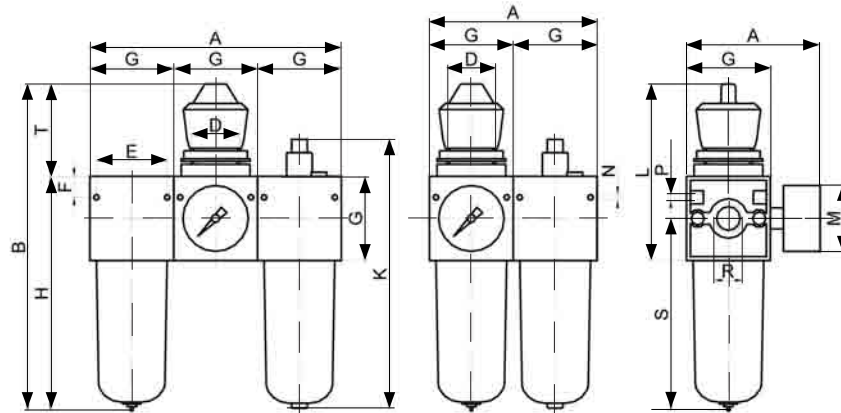
Attention:

The flow direction indicated by the arrow should be respected when mounting the unit. Drain the water condensate periodically. Never use solvents or petrol chemicals for cleaning the bowl, use soap or water only. Fill with suitable oil and regulate the droplet rate with the adjusting screw. Cut -off the air supply to use the top plug to fill oil, or to disassemble the unit.

All rights are preserved



Air Service Units (R 1/2" - R 3/8")



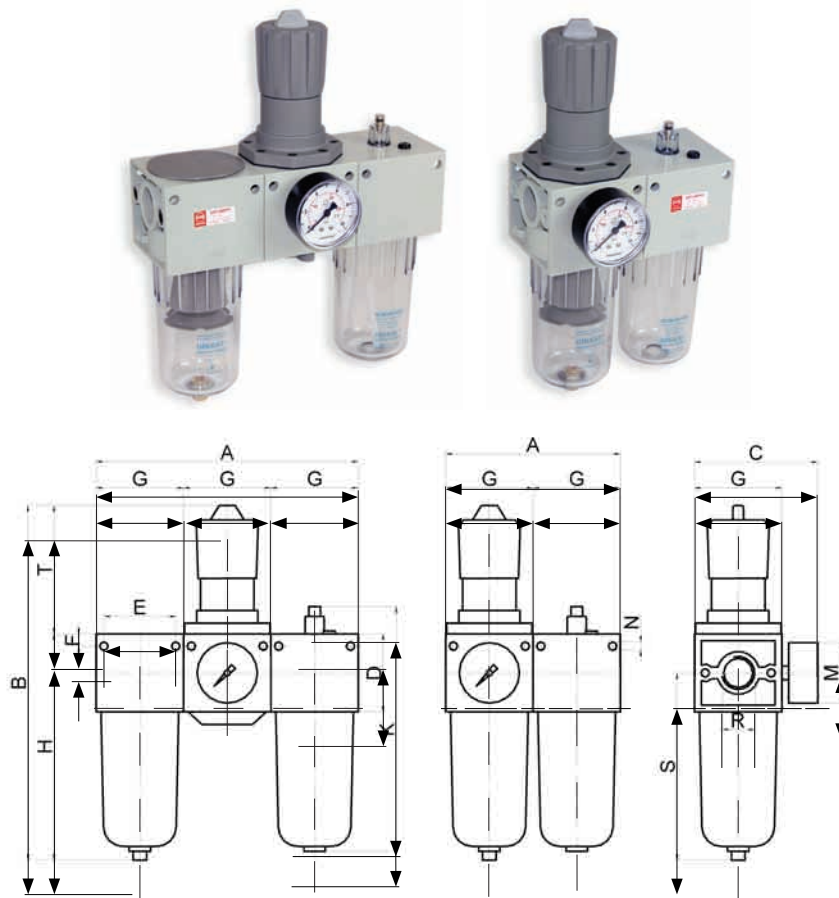
		R (inch) B.S.P.	Size (mm)														
			A	B	C	D	E	F	G	H	K	L	M	N	P	S	T
Service Unit (F+R+L)	FRL-1/2	1/2	195	250	105	38	54	16	64	180	204	134	50	4,2	M5	148	70
	FRL-3/8	3/8															
Service Unit (FR+L)	R/FL-1/2	1/2	128	250	105	38	54	16	64	180	204	134	50	4,2	M5	148	70
	R/FL-3/8	3/8															
Filter	F-1/2	1/2					54	16	64	180				4,2	M5	148	
	F-3/8	3/8															
Regulator	RE-1/2	1/2			105		54	16	64			134	50	4,2	M5		70
	RE-3/8	3/8															
Filter Regulator	R/F-1/2	1/2		250	105	38	54	16	64	180		134	50	4,2	M5	148	70
	R/F-3/8	3/8															
Lubricator	L-1/2	1/2					54	16	64	180	204			4,2	M5	148	
	L-3/8	3/8															

Attention:

The flow direction indicated by the arrow should be respected when mounting the unit. Drain the water condensate periodically. Never use solvents or petrol chemicals for cleaning the bowl, use soap or water only. Fill with suitable oil and regulate the droplet rate with the adjusting screw. Cut -off the air supply to use the top plug to fill oil, or to disassemble the unit.

All rights are preserved

Air Service Units (R 1" - R 3/4")



		R (inch) B.S.P.	Size (mm)													
			A	B	C	D	E	F	G	H	K	L	M	N	S	T
Service Unit (F+R+L)	FRL-1	1	270	363	135	80	74	12,5	90	230	251	225	63	8,5	200	130
	FRL-3/4	3/4														
Service Unit (FR+L)	R/FL-1	1	180	363	135	80	74	12,5	90	230	251	225	63	8,5	200	130
	R/FL-3/4	3/4														
Filter	F-1	1				80	74	12,5	90	230				8,5	200	
	F-3/4	3/4														
Regulator	RE-1	1			135	80	74	12,5	90	230			63	8,5		130
	RE-3/4	3/4														
Filter Regulator	R/F-1	1		363	135	80	74	12,5	90	230			63	8,5	200	130
	R/F-3/4	3/4														
Lubricator	L-1	1					74	12,5	90	230	251			8,5	200	
	L-3/4	3/4														

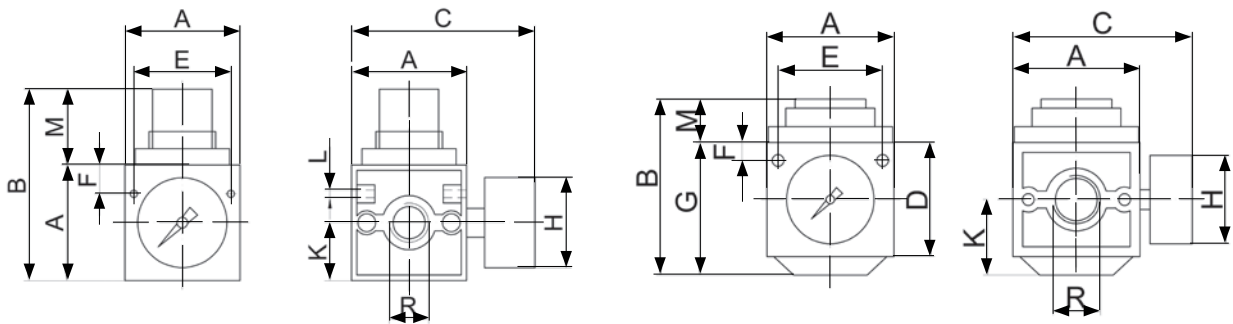
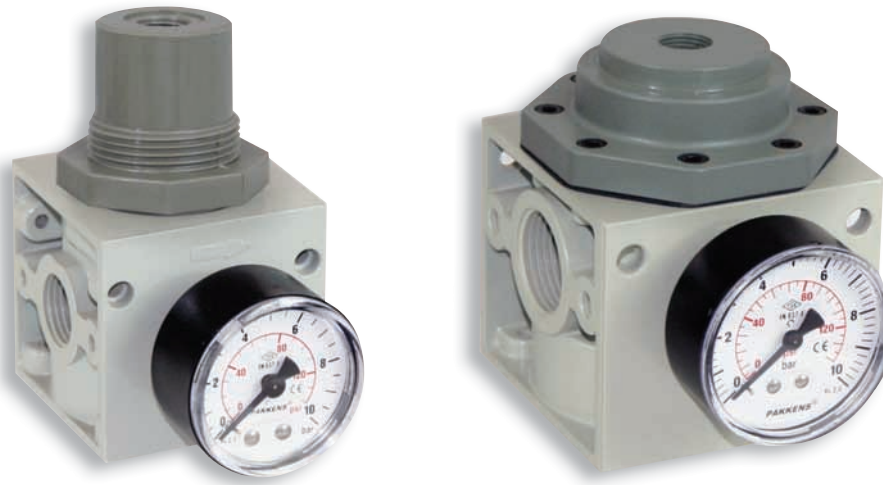
Attention:

The flow direction indicated by the arrow should be respected when mounting the unit. Drain the water condensate periodically. Never use solvents or petrol chemicals for cleaning the bowl, use soap or water only. Fill with suitable oil and regulate the droplet rate with the adjusting screw. Cut-off the air supply to use the top plug to fill oil, or to disassemble the unit.

All rights are preserved

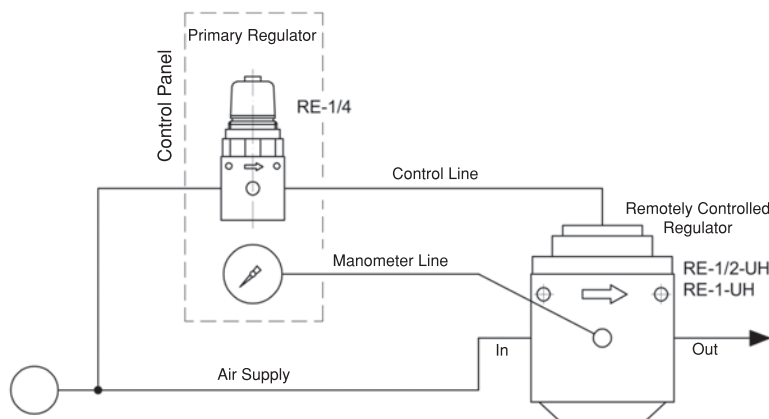


Remote controlled Servo Regulators (R 1/2 ve R 1)



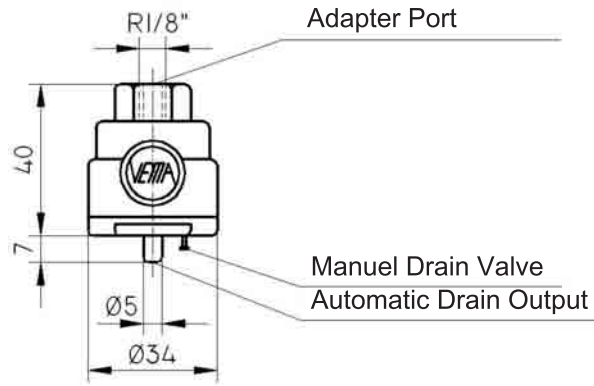
Servo Regulators	R (inç) B.S.P.	Dimensions (mm)									
		A	B	C	D	E	F	G	H	K	L
RE - 1/2 - UH	1/2	64	106	105		54	16		50	32	M5
RE - 1 - UH	1	90	126	135	80	74	12,5	94	63	64	

Connection scheme



All rights are preserved

Automatic Water Drainer



Field of Application	Automatic water drain in pneumatic filters, filter/regulator units and service units
External Water Drainer (for all sizes)	OSB - 1/8
Internal float type (1/4" and 1/2" sizes)	YOSB-300
Internal float type (1/2" and 1" sizes)	YOSB-302

Condensated water contained in the compressed air can cause malfunctions in the pneumatic components. Therefore, after the water is separated in the appropriate filters, it must be drained periodically before its level reaches to the indicated maximum level on the bowl. The OSB unit drains out the condensate automatically. The automatic water drainers, compatible with different sizes of filters, filter / regulator units and service units, assures the reliability of the pneumatic systems.



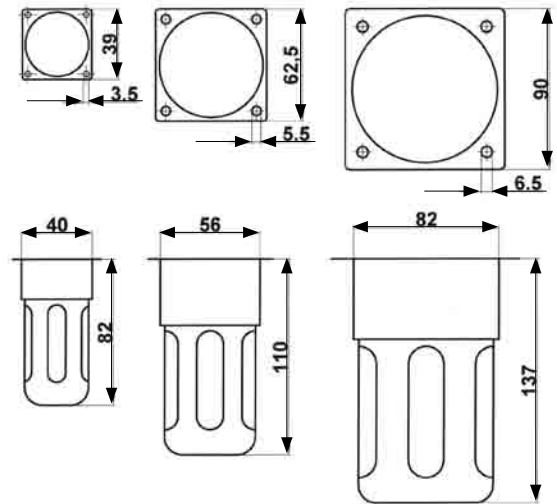
Bowl Protectors



HK - 1/4

HK - 1/2

HK - 1



Bowl Protectors are recommended where the products are exposed to chemicals and corrosive substances in order to help workplace safety. NEVER place the air filters and lubricators above waist level, for safety reasons.

ECO Series Manual type Pneumatic Valves

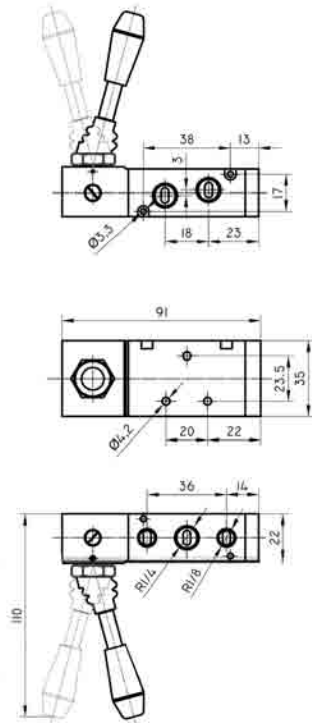


Product Code	KK - 52 - 1/4 eco	KY - 52 - 1/4 eco	CC - 52 - 1/4 eco	CY - 52 - 1/4 eco
Port Size	R 1/4" B.S.P.			
Activation & Return	Stick - Stick	Stick - Spring	Push - Pull	Push - Spring
Fluid	40micron Filtered & Lubricated Air			
Command type	Manual			
Default Position	B port active			
Working Pressure	P: 0 - 10 bar			
Ambient Temperature	0 / +60°C			

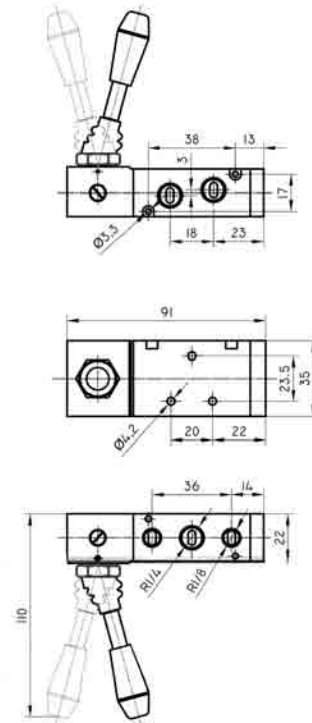
All rights are preserved

ECO Series Manual type Pneumatic Valves (Dimensions)

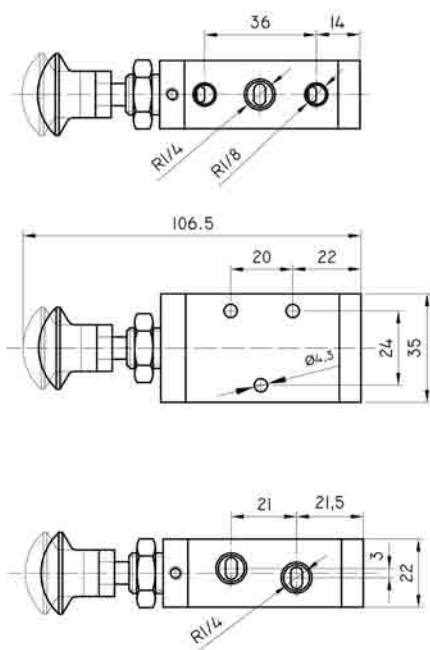
KK - 52 - 1/4 eco



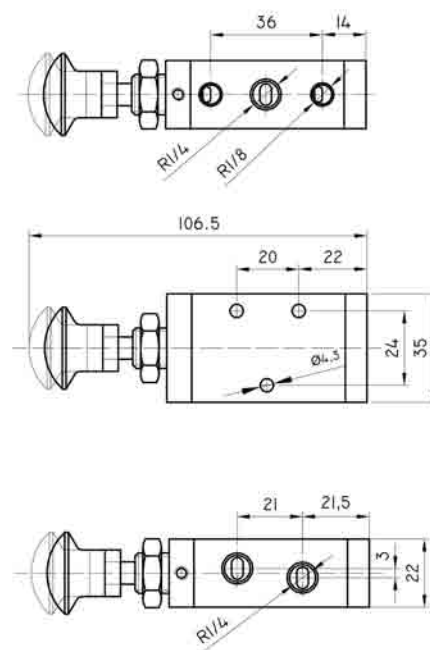
KY - 52 - 1/4 eco



CC - 52 - 1/4 eco



CY - 52 - 1/4 eco



ECO Series Electric type Pneumatic Valves



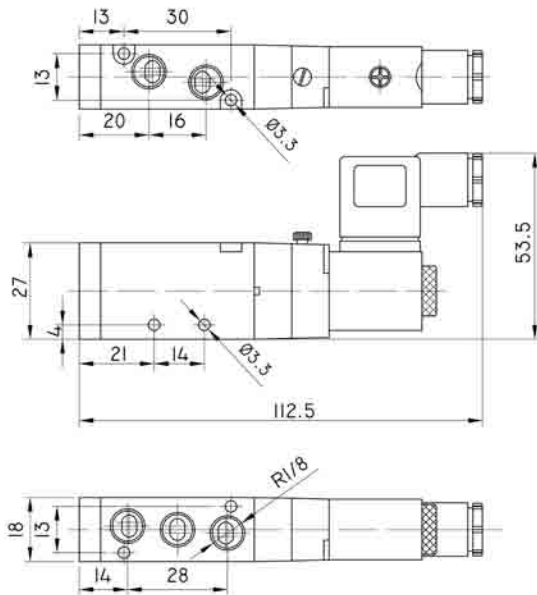
Product Code	ESY-32-1/4 eco	ESY-52-1/8 eco	ESY-52-1/4 eco	ESY-52-1/2 eco	EES-52-1/8 eco	EES-52-1/4 eco	EES-52-1/2 eco
Port Size	R 1/4 B.S.P	R 1/8 B.S.P	R 1/4 B.S.P	R 1/2 B.S.P	R 1/8 B.S.P	R 1/4 B.S.P	R 1/2 B.S.P
Activation & Return	Electric - Spring				Electric - Electric		
Fluid	40micron Filtered & Lubricated Air						
Command Type	Internal Pilot Line						
Default Position	Closed						
Working Pressure	P: 1,5 - 9 bar						
Ambient Temperature	+5 / +50°C						
Solenoid Voltage	220V AC / 110V AC / 24V AC / 12V AC / 24V DC / 12V DC						
Solenoid Power	AC: 5VA DC: 5W						

All rights are preserved

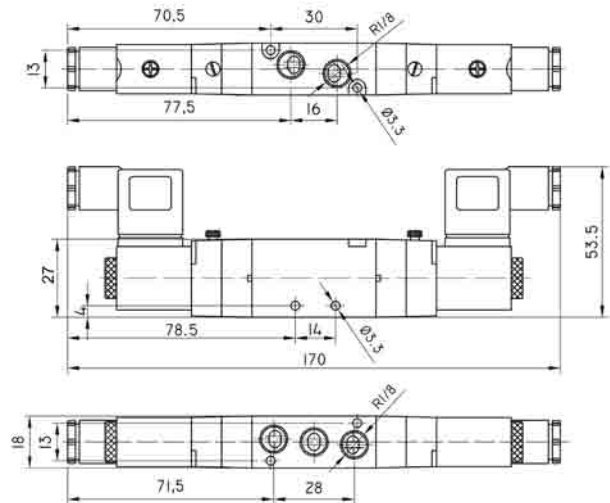


ECO Series Electric type Pneumatic Valves (Dimensions)

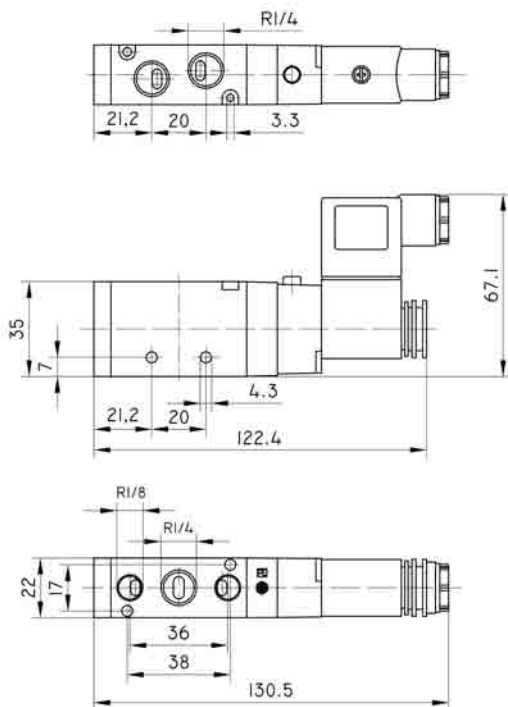
ESY - 52 - 1/8 eco



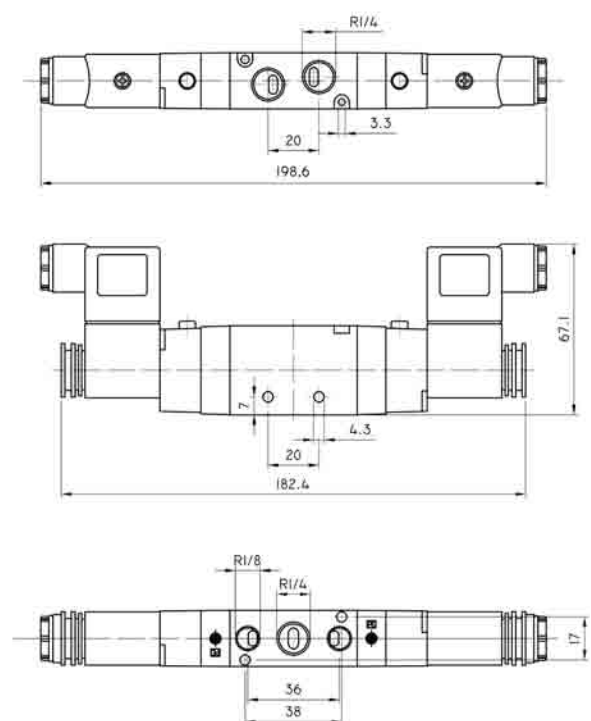
EES - 52 - 1/8 eco



ESY - 52 - 1/4 eco



EES - 52 - 1/4 eco

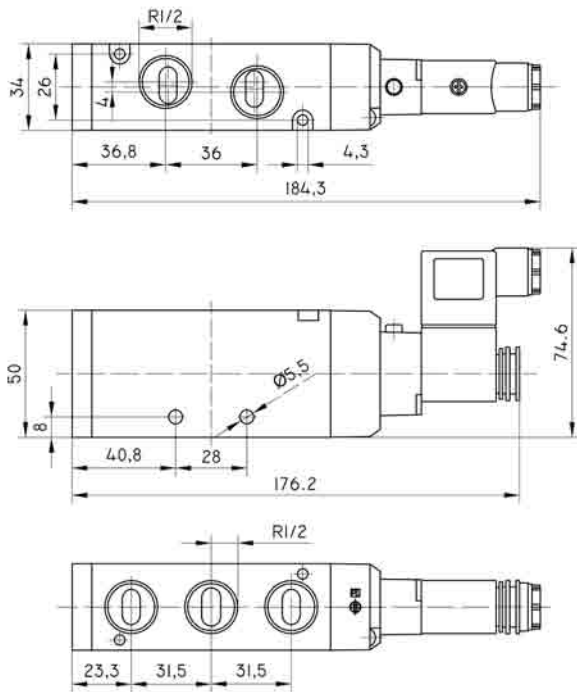


All rights are preserved

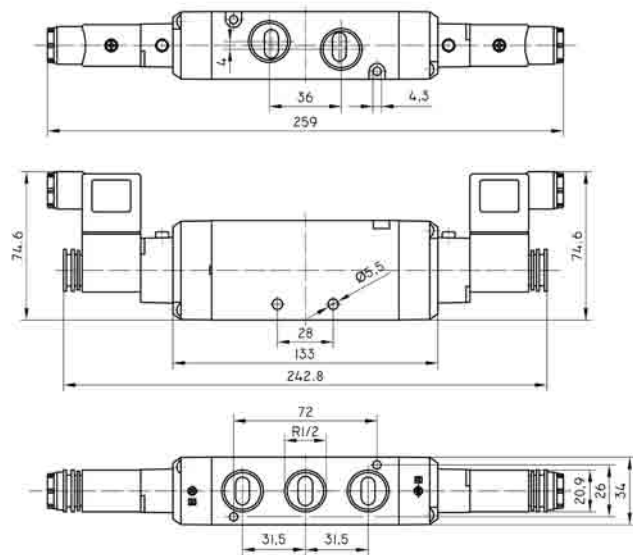
ECO Series Electric type Pneumatic Valves (Dimensions)



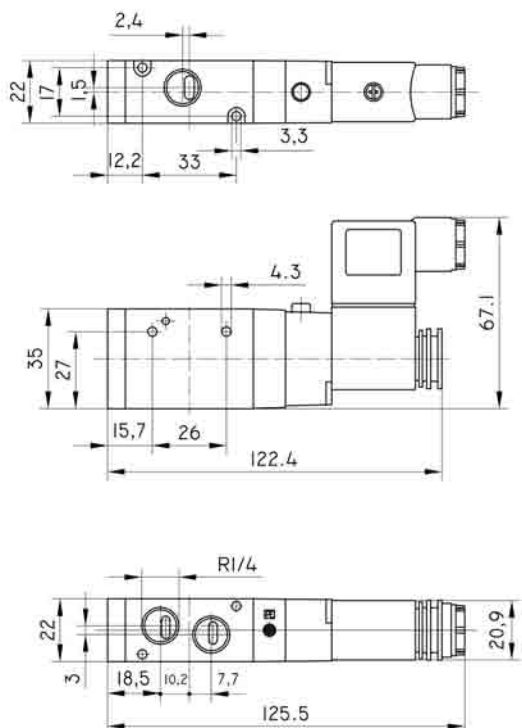
ESY - 52 - 1/2 eco



EES - 52 - 1/2 eco



ESY - 32 - 1/4 eco



All rights are preserved



ECO Series Pressure type Pneumatic Valves



Product Code	PY - 52 1/8 eco	PY - 52 1/4 eco	PP - 52 1/8 eco	PP - 52 1/4 eco
Port Size	R 1/8 B.S.P.	R 1/4 B.S.P.	R 1/8 B.S.P.	R 1/4 B.S.P.
Activation & Return	Air - Spring		Air - Air	
Fluid	Filtered & Lubricated Air			
Command Type	Direct Pressured Air Signal			
Default Position	Closed			
Working Pressure	P: 1,5 - 9 bar			
Ambient Temperature	+5 / +50°C			



ECO Series Manifold Connections

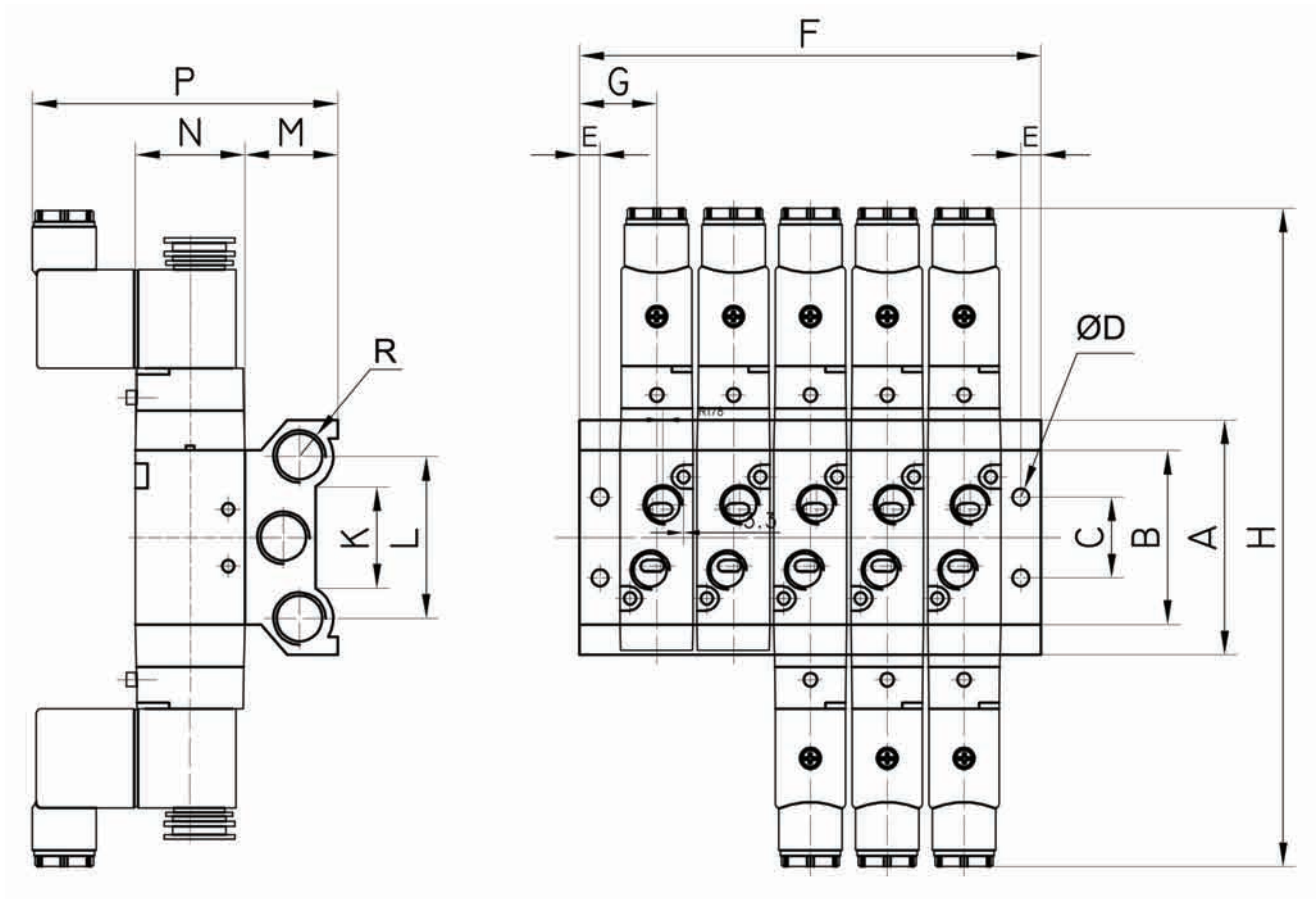


Manifolds for ECO series with 1/8" port size	
Product Code	Valve Amount
PTE-02-1/8	Two
PTE-03-1/8	Three
PTE-04-1/8	Four
PTE-05-1/8	Five
PTE-06-1/8	Six
PTE-07-1/8	Seven
PTE-08-1/8	Eight
PTE-09-1/8	Nine
PTE-10-1/8	Ten

Manifolds for ECO series with 1/4" port size	
Product Code	Valve Amount
PTE-02-1/4	Two
PTE-03-1/4	Three
PTE-04-1/4	Four
PTE-05-1/4	Five
PTE-06-1/4	Six
PTE-07-1/4	Seven
PTE-08-1/4	Eight
PTE-09-1/4	Nine
PTE-10-1/4	Ten

All rights are preserved

ECO Series Manifold Connections (Dimensions)



	R (inç) B.S.P													
		A	B	C	D	E	F	G	H	K	L	M	N	P
PTE-1/8 Series	R1/4	58	43	20	4,4	5	(N-1)*19+38	19	170	25	40	23	27	76,5
PTE-1/4 Series	R1/4	59	50	21	4,5	6	(N-1)*23+46	23	198	25	42	23	35	90

All rights are preserved



Heavy Duty Series Manual And Foot Operated Valves

Foot operated – 2 positions		
	AA-32-1/4m	
	AA-52-1/4m	

Foot operated – Spring return		
	AY-32-1/4m	
	AY-52-1/4m	

Foot operated – Controlled air return		
	AP-32-1/4m	
	AP-52-1/4m	

Foot operated – 3 positions spring centering		
	AYA-53-1/4mA	
	AYA-53-1/4mK	

Foot operated lever 3 positions - detented		
	ASA-53-1/4mA	
	ASA-53-1/4mK	

Flush push button Spring return		
	DG-32-1/8	
	DG-32-1/4m	

Mushroom button Spring return		
	DM-32-1/8	
	DM-32-1/4m	

Rotary switch – 2 positions		
	DC-32-1/8	
	DC-32-1/4m	

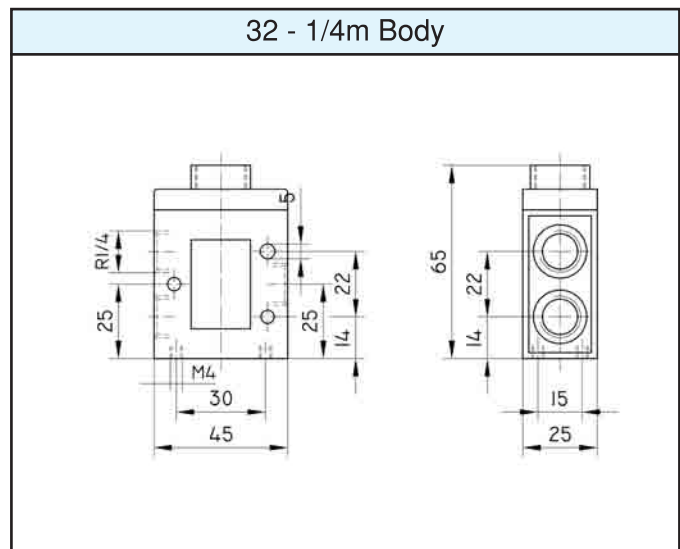
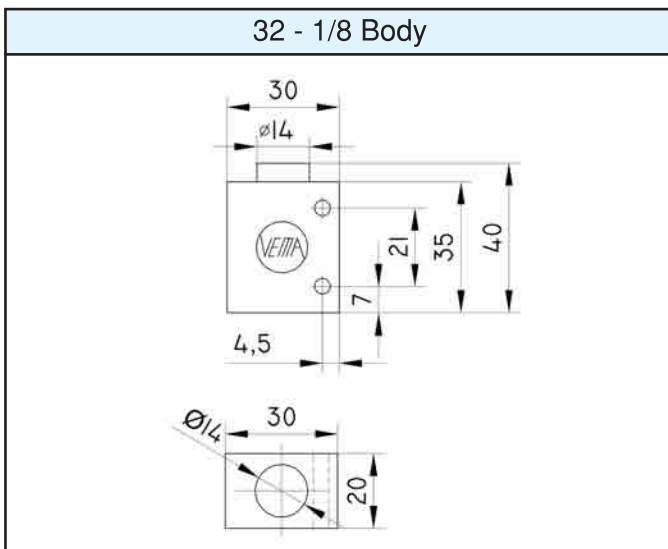
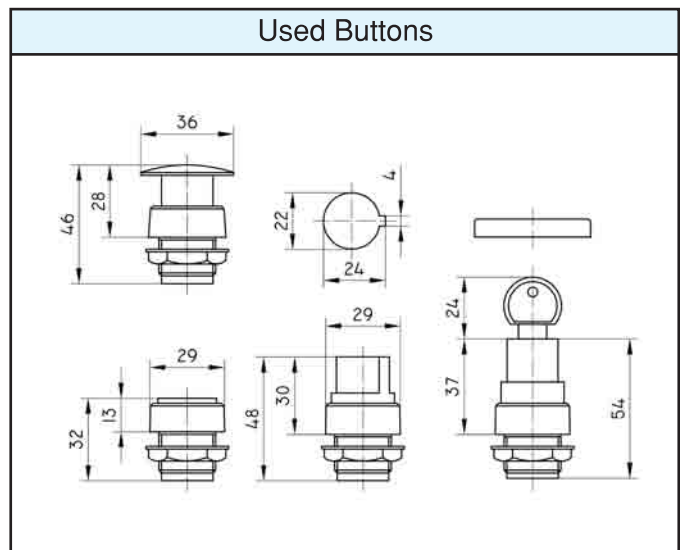
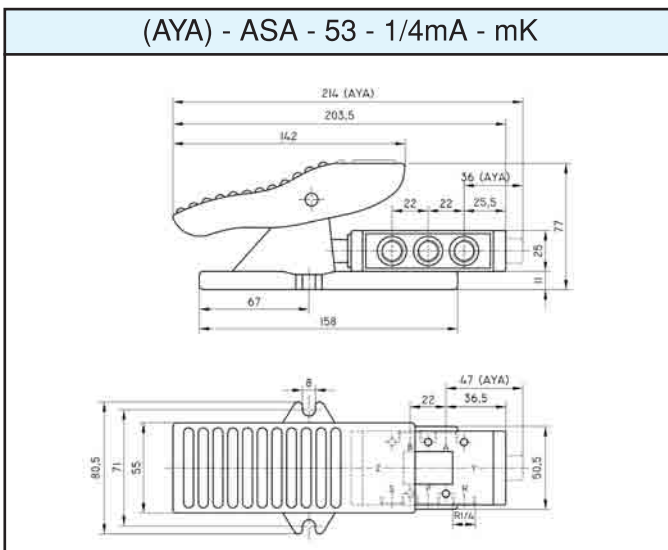
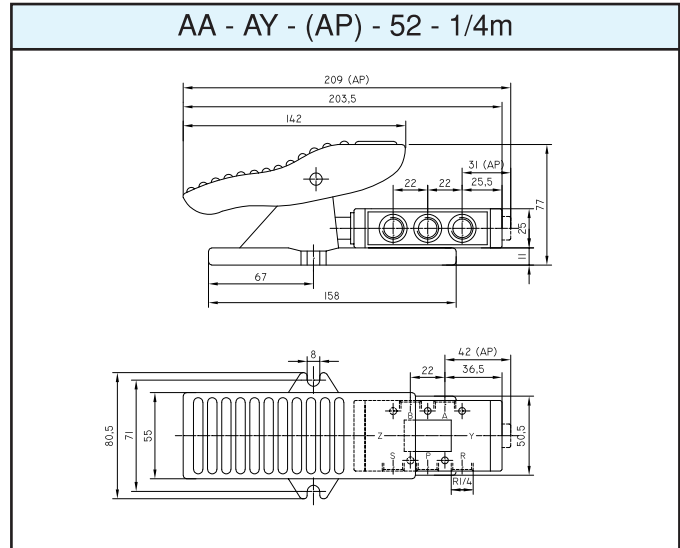
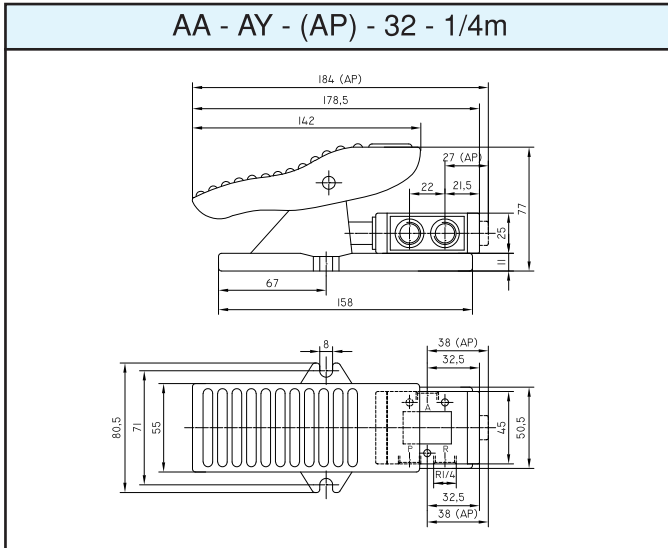
Key operated – 2 positions		
	DA-32-1/8	
	DA-32-1/4m	

Lever switch – 2 positions detented		
	LL-32-1/8	
	LL-32-1/4m	

Lever switch - Spring return		
	LY-32-1/8	
	LY-32-1/4m	

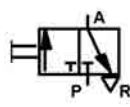

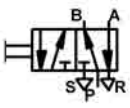
All rights are preserved

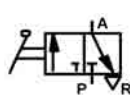

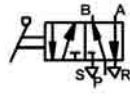
Heavy Duty Series Manual & Foot Operated Valves (Dimensions)



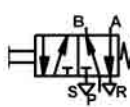


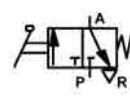

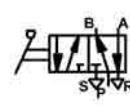
All rights are preserved

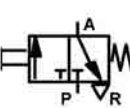

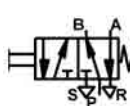
Heavy Duty Series Manual Operated Valves

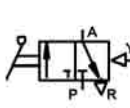

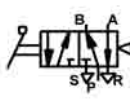
Push – Pull button – 2 positions		
	CC-32-1/4m	
	CC-32-1/2	
	CC-32-3/4	
	CC-52-1/4m	
	CC-52-1/2	
	CC-52-3/4	

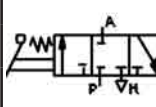

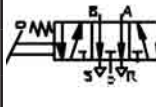
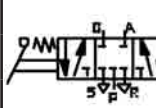
Lever - Lever		
	KK-32-1/4m	
	KK-32-1/2	
	KK-32-3/4	
	KK-52-1/4m	
	KK-52-1/2	
	KK-52-3/4	

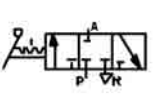


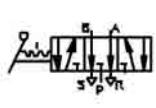
Push button – Spring return		
	CY-32-1/4m	
	CY-32-1/2	
	CY-32-3/4	
	CY-52-1/4m	
	CY-52-1/2	
	CY-52-3/4	

Lever – Spring return		
	KY-32-1/4m	
	KY-32-1/2	
	KY-32-3/4	
	KY-52-1/4m	
	KY-52-1/2	
	KY-52-3/4	

Push button – Controlled air return		
	CP-32-1/4m	
	CP-32-1/2	
	CP-32-3/4	
	CP-52-1/4m	
	CP-52-1/2	
	CP-52-3/4	

Lever – Controlled air return		
	KP-32-1/4m	
	KP-32-1/2	
	KP-32-3/4	
	KP-52-1/4m	
	KP-52-1/2	
	KP-52-3/4	

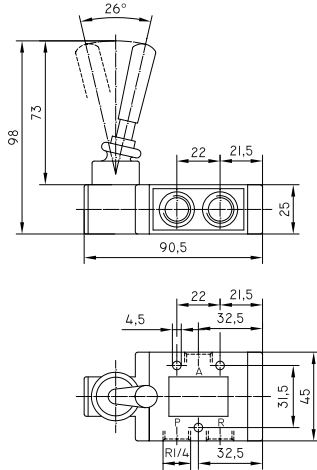
Lever – 3 positions – Spring centered		
	KYK-33-1/4m	
	KYK-33-1/2	
	KYK-33-3/4	
	KYK-53-1/4mA	
	KYK-53-1/2-A	
	KYK-53-3/4mA	
	KYK-53-1/4mK	
	KYK-53-1/2-K	
	KYK-53-3/4-K	

Lever – 3 positions - Detended		
	KSK-33-1/4	
	KSK-33-1/2	
	KSK-33-3/4	
	KSK-53-1/4mA	
	KSK-53-1/2-A	
	KSK-53-3/4-A	
	KSK-53-1/4mK	
	KSK-53-1/2-K	
	KSK-53-3/4-K	

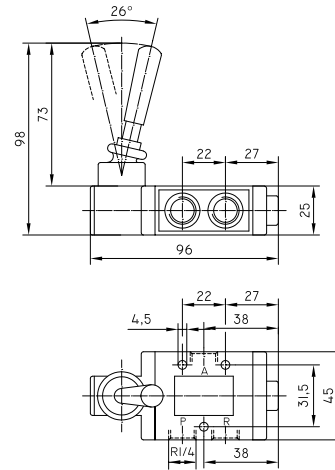
Heavy Duty Series Manual Controlled Valves (Dimensions)



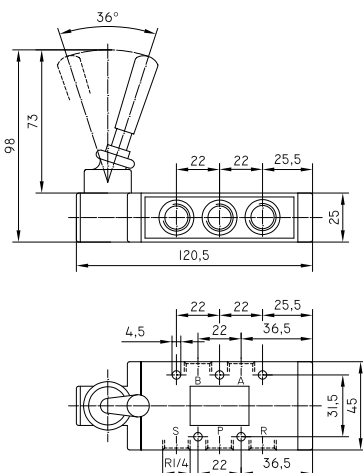
KK - KY - 32 - 1/4m



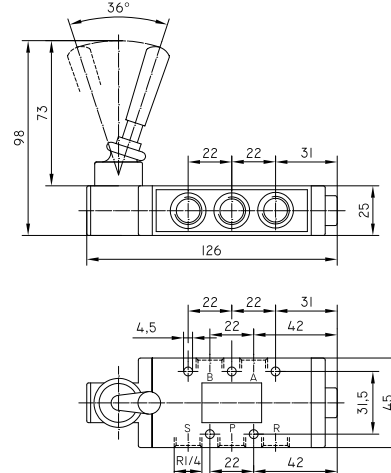
KP - 32 - 1/4m



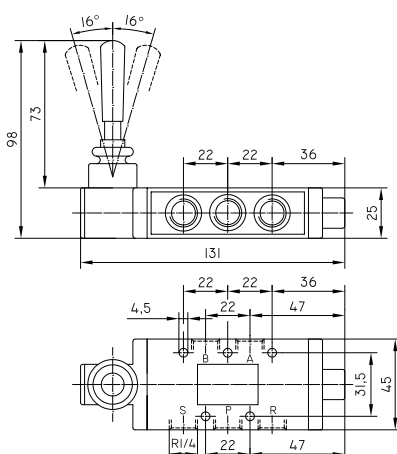
KK - KY - 52 - 1/4m



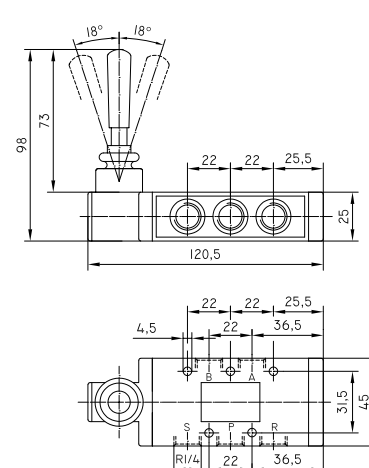
KP - 52 - 1/4m



KYK - 53 - 1/4mA - mK



KSK - 53 - 1/4mA - mK

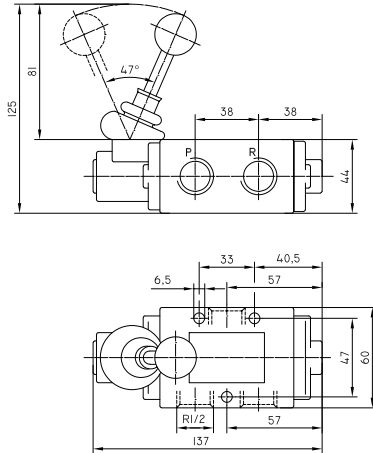


All rights are preserved

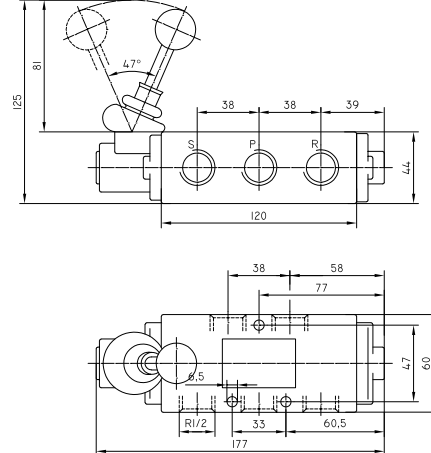


Heavy Duty Series Manual Controlled Valves (Dimensions)

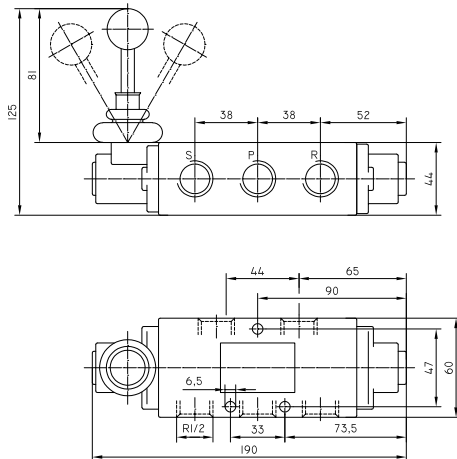
KK - KY - KP - 32 - 1/2



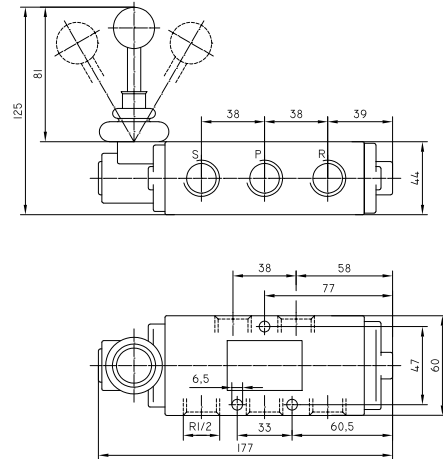
KK - KY - KP - 52 - 1/2



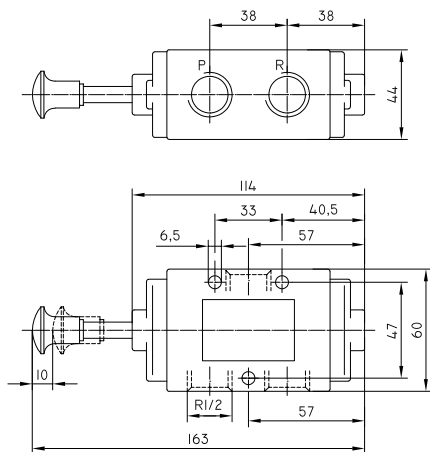
KYK - 53 - 1/2 - A - K



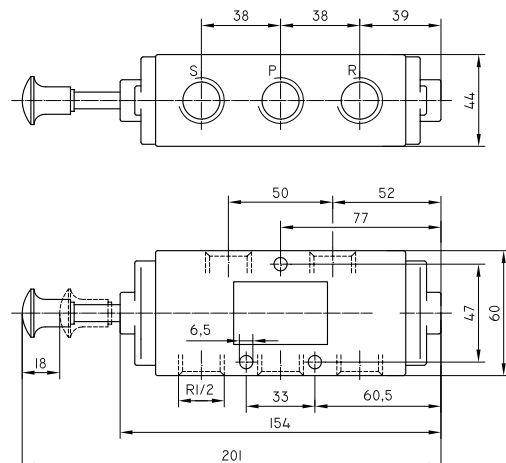
KSK - 53 - 1/2 - A - K



CC - CY - CP - 32 - 1/2



CC - CY - CP - 52 - 1/2

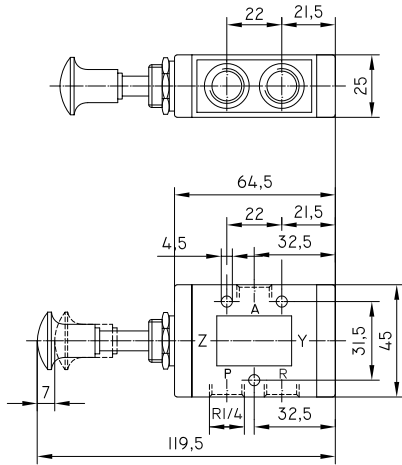


All rights are preserved

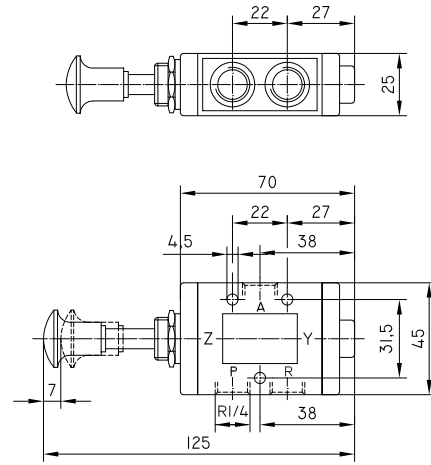
Heavy Duty Series Manual Controlled Valves (Dimensions)



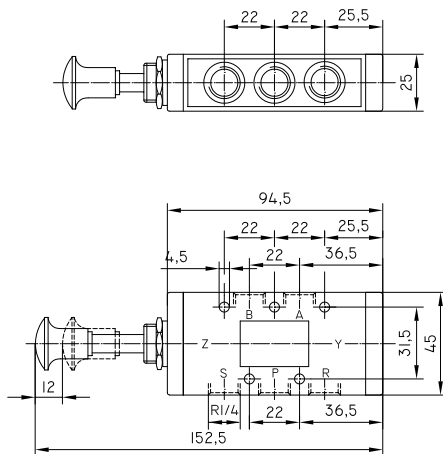
CC - CY - 32 - 1/4m



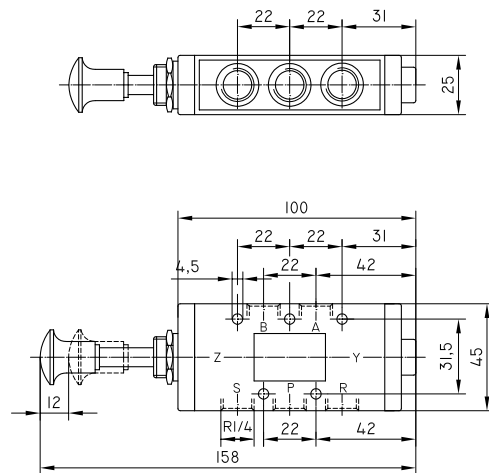
CP - 32 - 1/4m



CC - CY - 52 - 1/4m



CP - 52 - 1/4m





PNÖMATİK

Heavy Duty Series Solenoid Actuated Valves

Single solenoid valve- spring return	
	ESY-32-1/4m
	ESY-32-1/2
	ESY-32-3/4
	ESY-32-1
	ESY-32-1/4mA
	ESY-32-1/2-A
	ESY-32-3/4-A
	ESY-52-1/4m
	ESY-52-1/2
	ESY-52-3/4



Single solenoid valve – spring return separate pilot air	
	EPY-32-1/4m
	EPY-32-1/2
	EPY-32-3/4
	EPY-32-1
	EPY-32-1/4mA
	EPY-32-1/2-A
	EPY-32-3/4-A
	EPY-52-1/4m
	EPY-52-1/2
	EPY-52-3/4



Single solenoid valve – Controlled air return	
	ESP-32-1/4m
	ESP-32-1/2
	ESP-32-3/4
	ESP-32-1/4mA
	ESP-32-1/2-A
	ESP-32-3/4-A
	ESP-52-1/4m
	ESP-52-1/2
	ESP-52-3/4



Single solenoid valve – Controlled air return Separate pilot air	
	EPP-32-1/4m
	EPP-32-1/2
	EPP-32-3/4
	EPP-32-1/4mA
	EPP-32-1/2-A
	EPP-32-3/4-A
	EPP-52-1/4m
	EPP-52-1/2
	EPP-52-3/4



Single solenoid valve – Self air return	
	ESO-32-1/4m
	ESO-32-1/2
	ESO-32-3/4
	ESO-32-1/4mA
	ESO-32-1/2-A
	ESO-32-3/4-A
	ESO-52-1/4m
	ESO-52-1/2
	ESO-52-3/4



Single solenoid valve Self air return - Separate pilot air	
	EPO-32-1/4m
	EPO-32-1/2
	EPO-32-3/4
	EPO-32-1/4mA
	EPO-32-1/2-A
	EPO-32-3/4-A
	EPO-52-1/4m
	EPO-52-1/2
	EPO-52-3/4



All rights are preserved

Heavy Duty Series Solenoid Actuated Valves



Single solenoid valve Manual operated in one direction	
	ESC-32-1/4m
	ESC-32-1/2
	ESC-32-3/4
	ESC-32-1/4mA
	ESC-32-1/2-A
	ESC-32-3/4-A
	ESC-52-1/4m
	ESC-52-1/2
	ESC-52-3/4



Single solenoid valve – Seperate pilot air Manual operated in one direction	
	EPC-32-1/4m
	EPC-32-1/2
	EPC-32-3/4
	EPC-32-1/4mA
	EPC-32-1/2-A
	EPC-32-3/4-A
	EPC-52-1/4m
	EPC-52-1/2
	EPC-52-3/4



Double solenoid valve	
	EES-32-1/4m
	EES-32-1/2
	EES-32-3/4
	EES-52-1/4m
	EES-52-1/2
	EES-52-3/4



Double solenoid valve – Seperate pilot air	
	EEP-32-1/4m
	EEP-32-1/2
	EEP-32-3/4
	EEP-52-1/4m
	EEP-52-1/2
	EEP-52-3/4



Double solenoid valve – 3 positions Spring centering	
	EYE-33-1/4m
	EYE-33-1/2
	EYE-33-3/4
	EYE-53-1/4mA
	EYE-53-1/2-A
	EYE-53-3/4-A
	EYE-53-1/4mK
	EYE-53-1/2-K
	EYE-53-3/4-K



Single solenoid valve – 3 positions Spring centering – Controlled air in one direction	
	EYP-33-1/4m
	EYP-33-1/2
	EYP-33-3/4
	EYP-53-1/4mA
	EYP-53-1/2-A
	EYP-53-3/4-A
	EYP-53-1/4mK
	EYP-53-1/2-K
	EYP-53-3/4-K



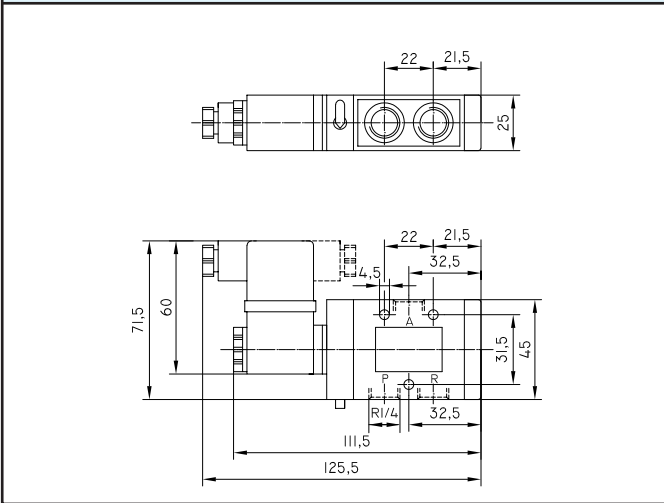
Solenoid priority operated – Solenoid return	
	EEF-32-1/4m
	EEF-32-1/2
	EEF-32-3/4
	EEF-52-1/4m
	EEF-52-1/2
	EEF-52-3/4



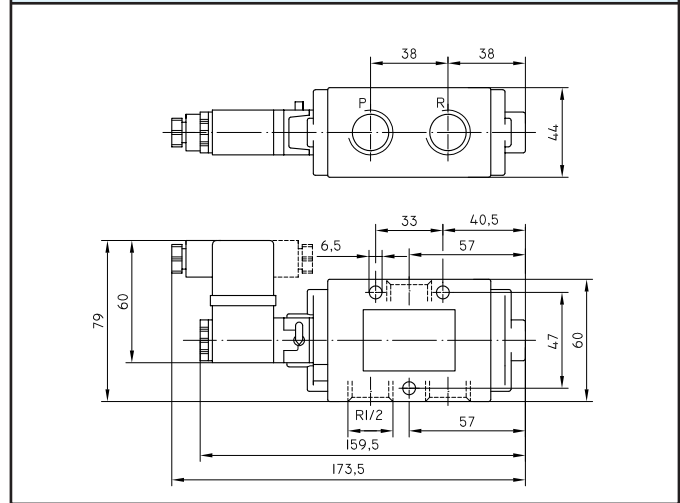
All rights are preserved

Heavy Duty Series Solenoid Actuated Valves (Dimensions)

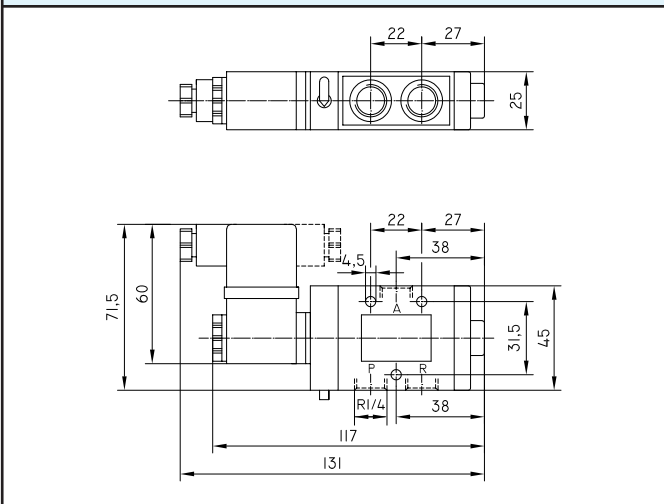
ESY - ESO - EPY - EPO - 32 - 1/4m



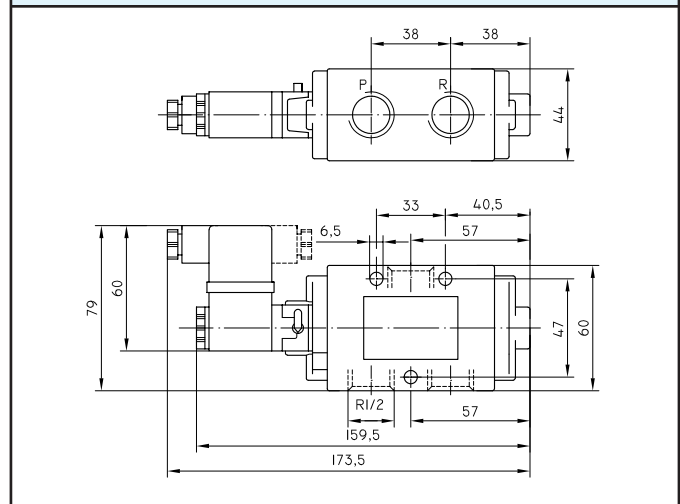
ESY - ESO - EPY - EPO - 32 - 1/2



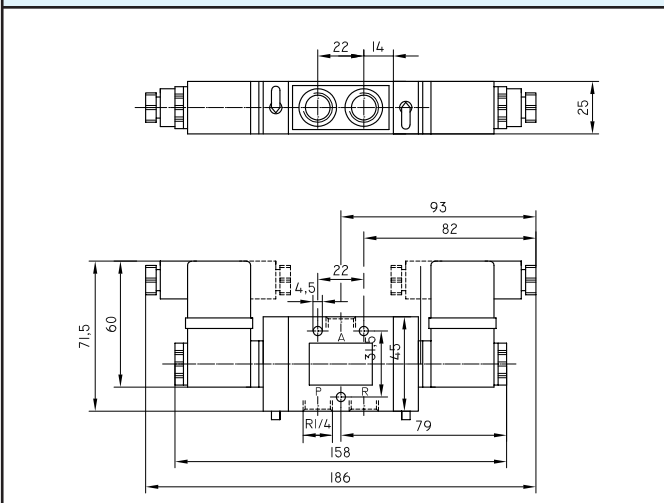
ESP - EPP - 32 - 1/4-m



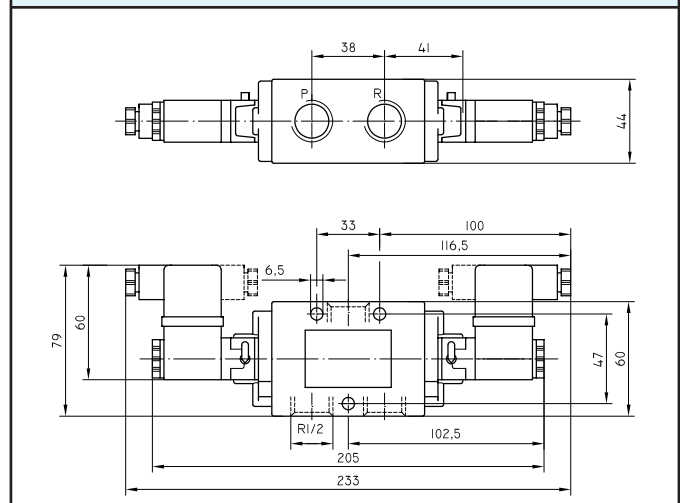
ESP - EPP - 32 - 1/2



EES - EEP - EEF - 32 - 1/4m

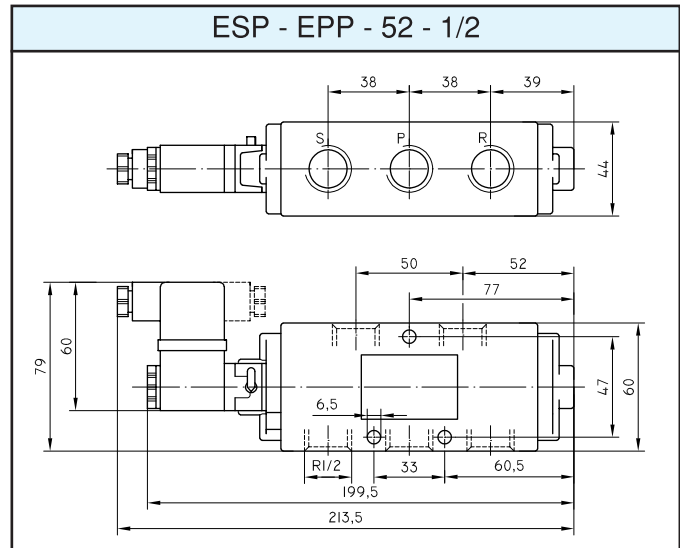
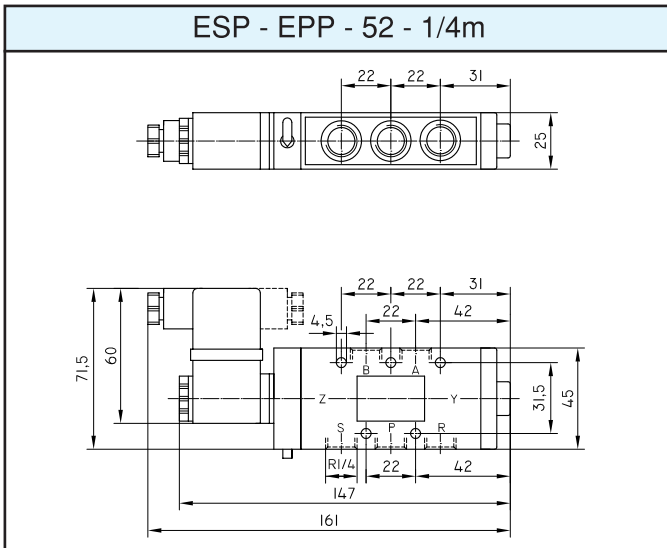
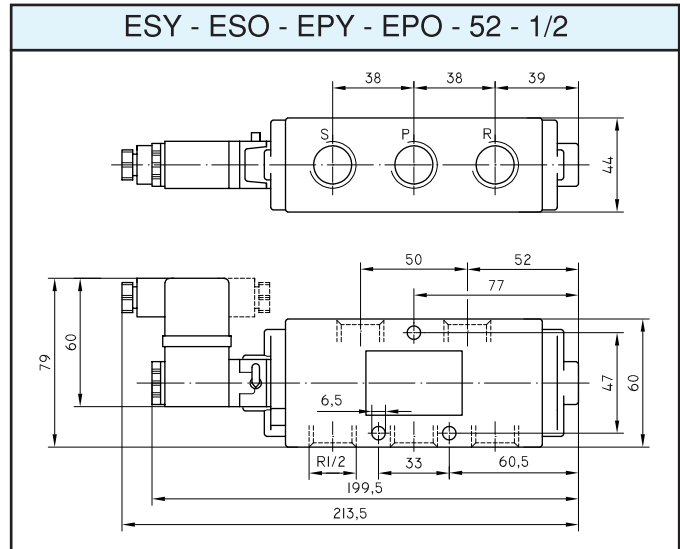
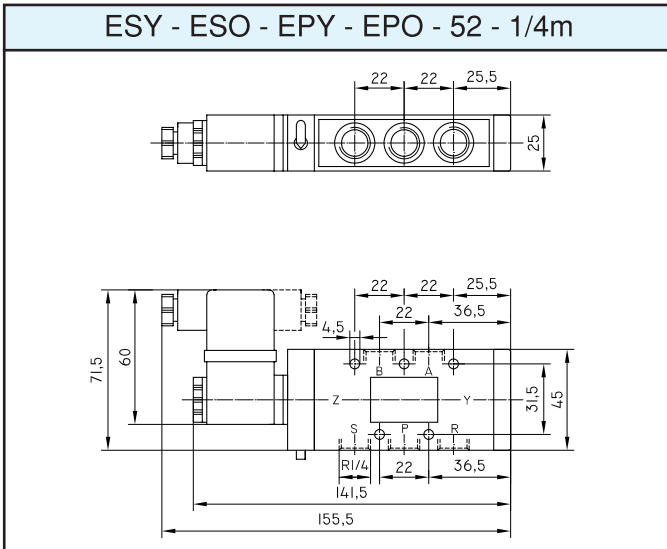
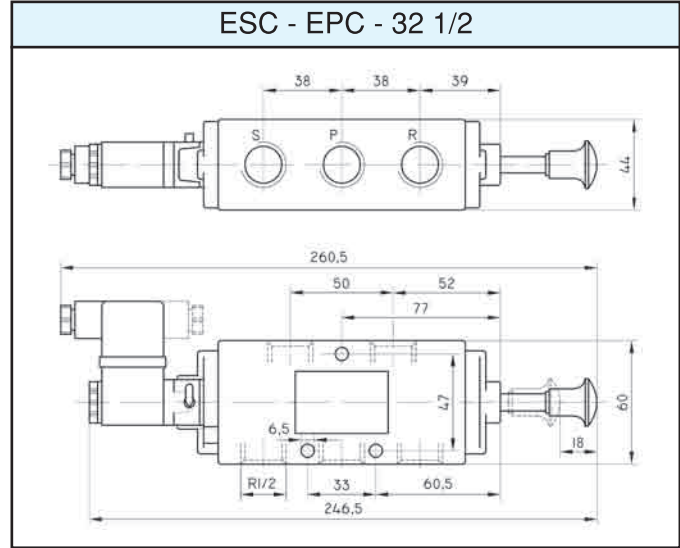
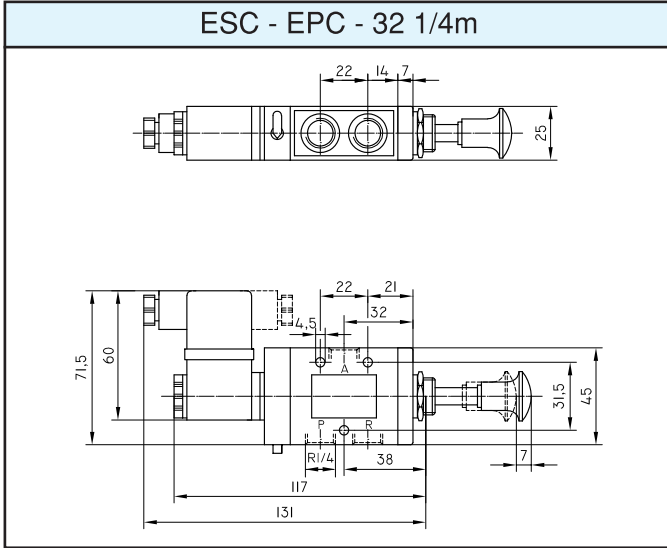


EES - EEP - EEF - 32 - 1/2



All rights are preserved

Heavy Duty Series Solenoid Actuated Valves (Dimensions)

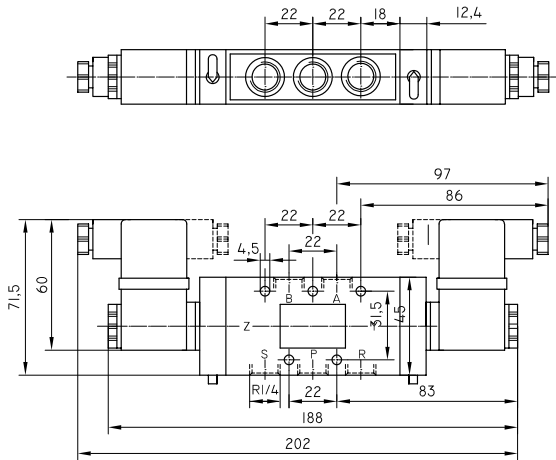


All rights are preserved

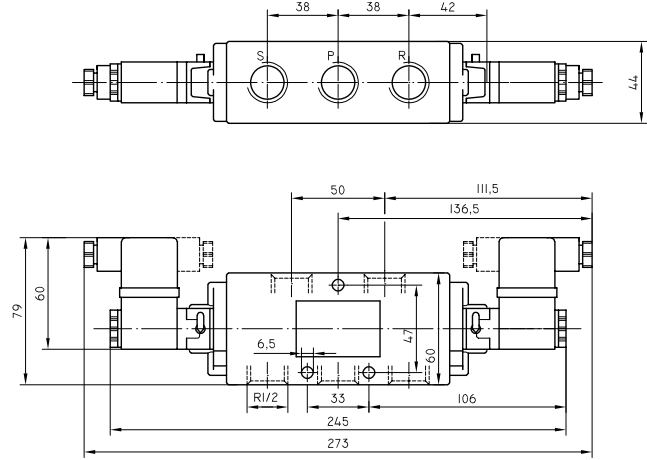


Heavy Duty Series Solenoid Actuated Valves (Dimensions)

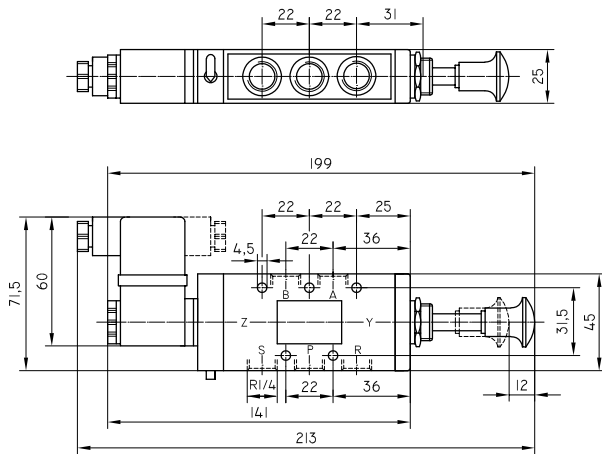
EES - EEP - EEF - 52 - 1/4m



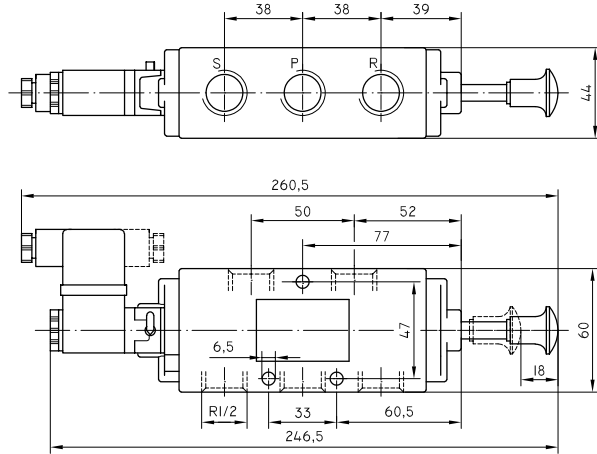
EES - EEP - EEF - 52 - 1/2



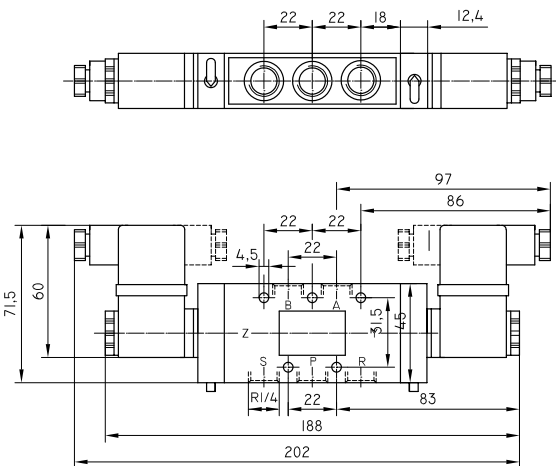
EES - EPC - 52 - 1/4m



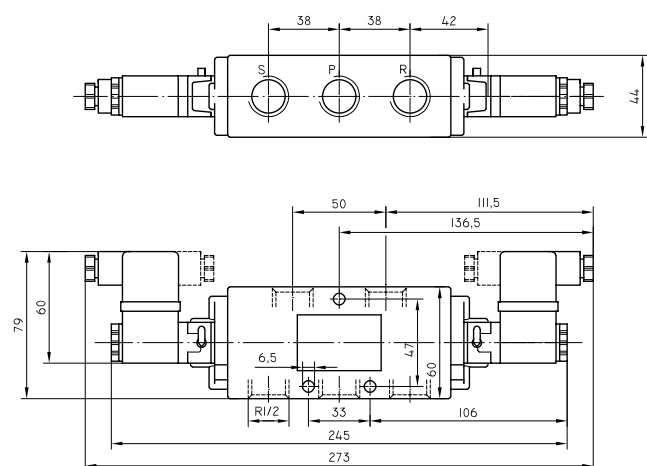
ESC - EPC - 52 - 1/2



EYE - 53 - 1/4mA-mK



EYE - 53 - 1/2 - A - K



All rights are preserved

Heavy Duty Series Pneumatically Actuated Valves



Air operated – Spring return		
	PY-32-1/4m	
	PY-32-1/2	
	PY-32-3/4	
	PY-52-1/4m	
	PY-52-1/2	
	PY-52-3/4	

Reduced pressure operated – Spring return		
	PFY-32-1/4m	
	PFY-32-1/2	
	PFY-52-1/4m	
	PFY-52-1/2	

Double air operated – Spring return priority		
	PPY-32-1/4m	
	PPY-32-1/2	
	PPY-32-3/4	
	PPY-52-1/4m	
	PPY-52-1/2	
	PPY-52-3/4	

Double air operated – 3 positions spring centering		
	PYP-33-1/4m	
	PYP-33-1/2	
	PYP-33-3/4	
	PYP-53-1/4mA	
	PYP-53-1/2-A	
	PYP-53-3/4-A	
	PYP-53-1/4mK	
	PYP-53-1/2-K	
	PYP-53-3/4-K	

Air operated – Self air return		
	PFO-32-1/4m	
	PFO-32-1/2	
	PFO-32-3/4	
	PFO-32-1/4mA	
	PFO-32-1/2-A	
	PFO-32-3/4-A	
	PFO-52-1/4m	
	PFO-52-1/2	
	PFO-52-3/4	

Double air operated (Pressure controlled actuation)		
	PP-32-1/4m	
	PP-32-1/2	
	PP-32-3/4	
	PP-52-1/4m	
	PP-52-1/2	
	PP-52-3/4	

Double air operated (Pressure discharge controlled actuation)		
	PPN-32-1/4m	
	PPN-32-1/2	
	PPN-32-3/4	
	PPN-52-1/4m	
	PPN-52-1/2	
	PPN-52-3/4	

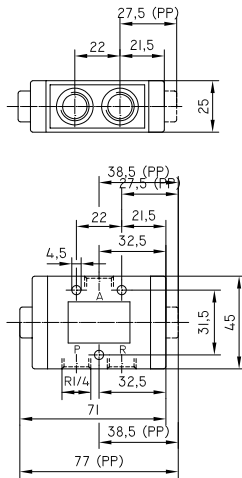
Air priority operated – Air return		
	PFP-32-1/4m	
	PFP-32-1/2	
	PFP-32-3/4	
	PFP-52-1/4m	
	PFP-52-1/2	
	PFP-52-3/4	

All rights are preserved

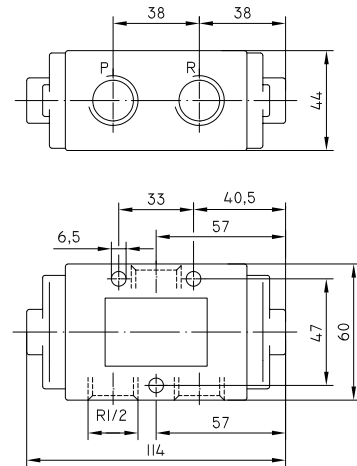


Heavy Duty Series Pneumatically Actuated Valves (Dimensions)

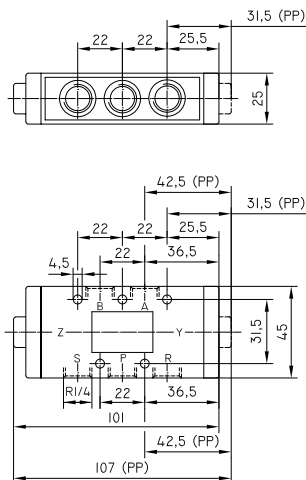
PY - PFO - PFY - (PP - PPY - PPN) - 32 - 1/4m



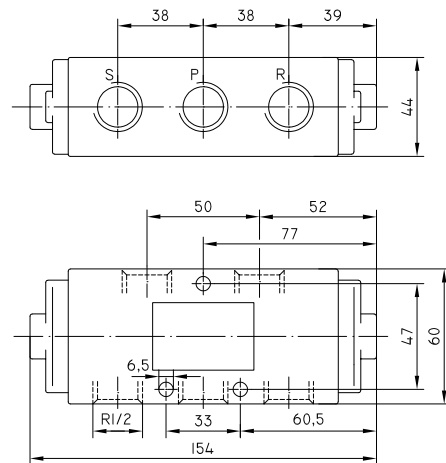
PY - PFO - PFY - PP - PPY - PPN - 32 - 1/2



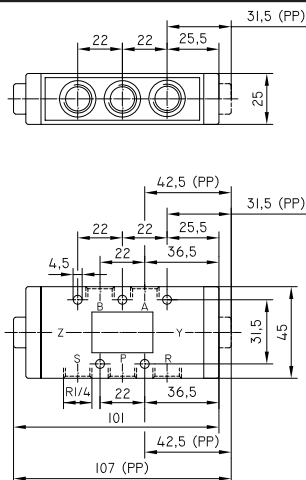
PY - PFO - PFY - (PP - PPY - PPN) - 52 - 1/4m



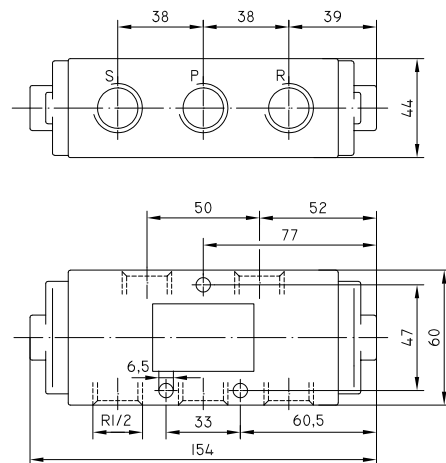
PY - PFO - PFY - PP - PPY - PPN - 52 - 1/2



PY - 53 - 1/4mA - mK




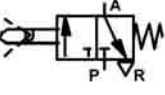
PYP - 53 - 1/2 - A - K


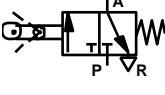


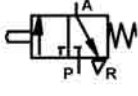

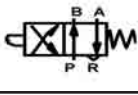


All rights are preserved

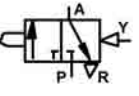

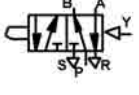
Heavy Duty Series Mechanically Actuated Valves

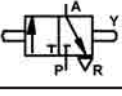

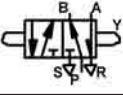




Swivel actuated Spring return		
	TY - 32 - 1/8m	
	TY - 32 - 1/4m	

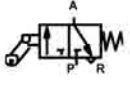

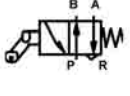
Swivel actuated roller Spring return		
	TMY - 32 - 1/8m	
	TMY - 32 - 1/4m	

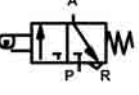


Stem actuated – Spring return		
	BLY - 32 - 1/8	
	BLY - 32 - 1/4m	
	BLY - 32 - 1/4	
	BY - 42 - 1/4	
	BY - 52 - 1/8m	
	BY - 52 - 1/4m	

Stem actuated – Controlled air return		
	BP - 32 - 1/8m	
	BP - 32 - 1/4m	
	BP - 52 - 1/8m	
	BP - 52 - 1/4m	

Double stem actuated		
	BB - 32 - 1/8	
	BB - 32 - 1/4m	
	BB - 52 - 1/8m	
	BB - 52 - 1/4m	

Low force stem actuated		
	BSO - 32 - 1/4m	
	BSO - 52 - 1/4m	

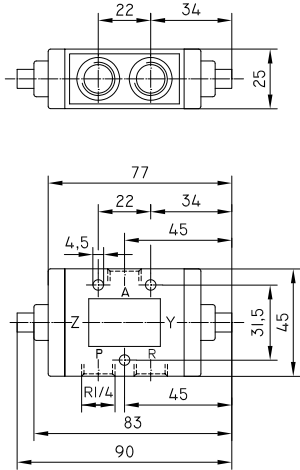
One way roller lever – Spring return		
	MTY - 32 - 1/4	
	MTY - 42 - 1/4	

Roller Lever – Spring return		
	MY - 32 - 1/4	
	MY - 42 - 1/4	

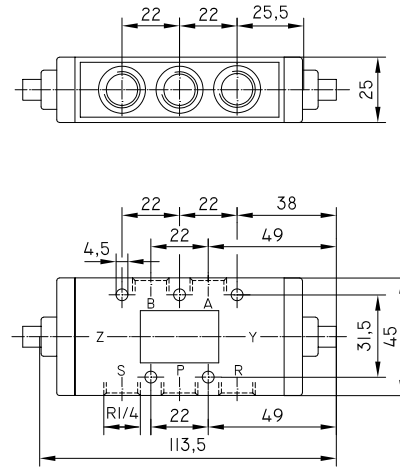
All rights are preserved

Heavy Duty Series Mechanically Actuated Valves (Dimensions)

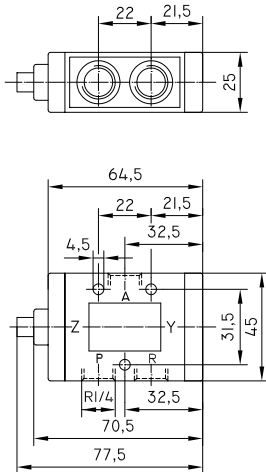
BB - 32 - 1/4m



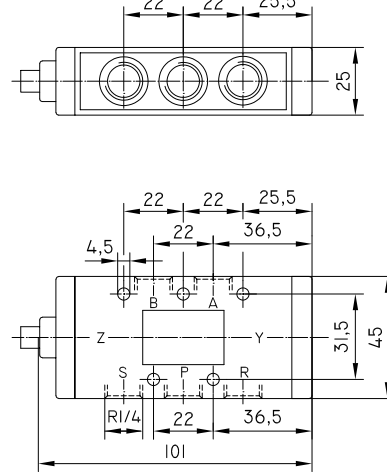
BB - 52 - 1/4m



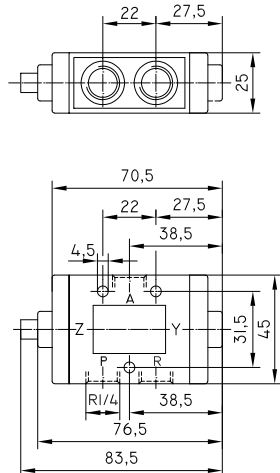
BY - 32 - 1/4m



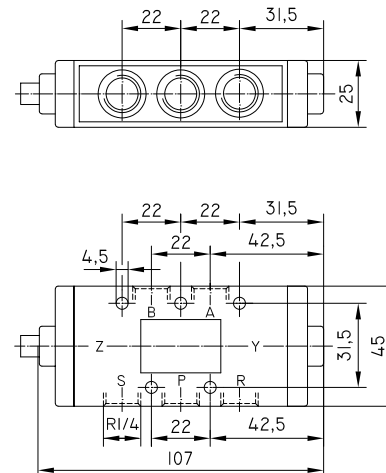
BY - 52 - 1/4m



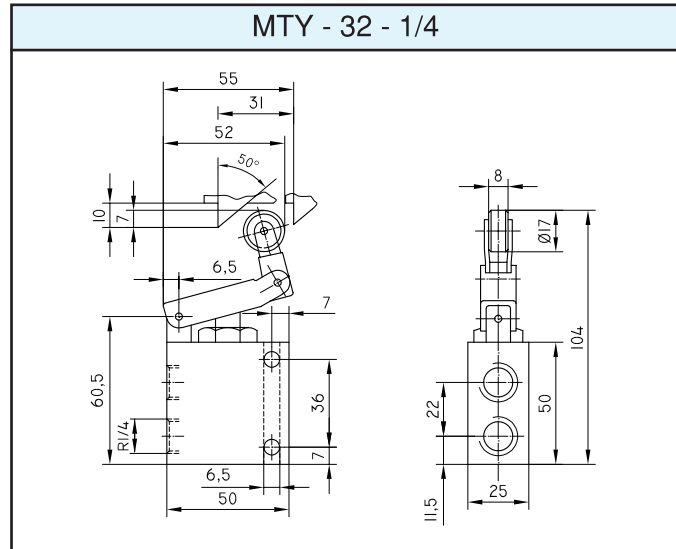
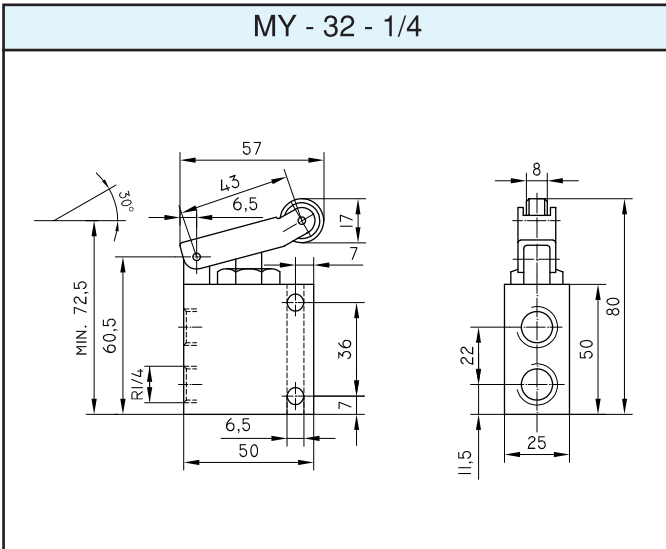
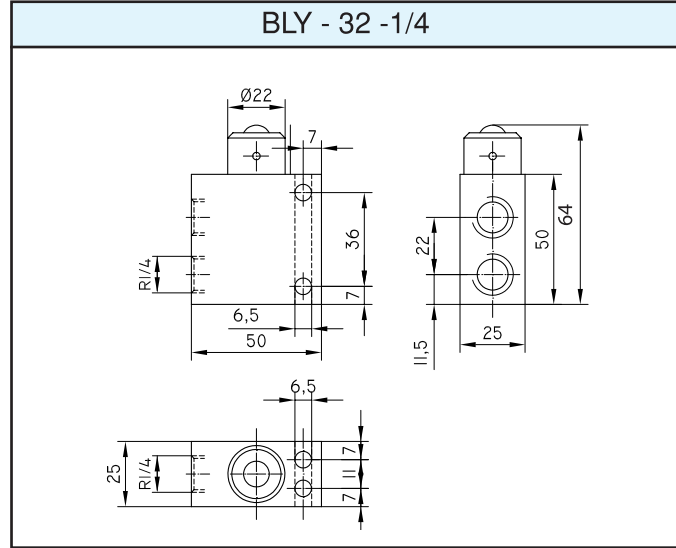
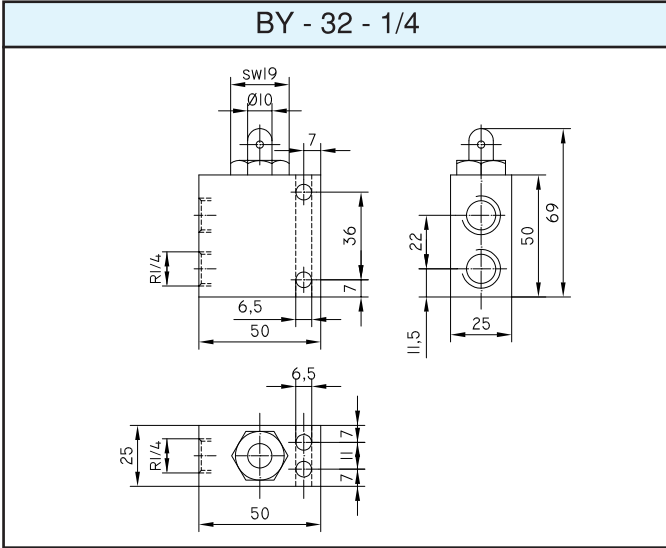
BP - 32 - 1/4m



BP - 52 - 14m



Heavy Duty Series Mechanically Actuated Valves (Dimensions)



Heavy Duty Series Namur Type Solenoid Valves

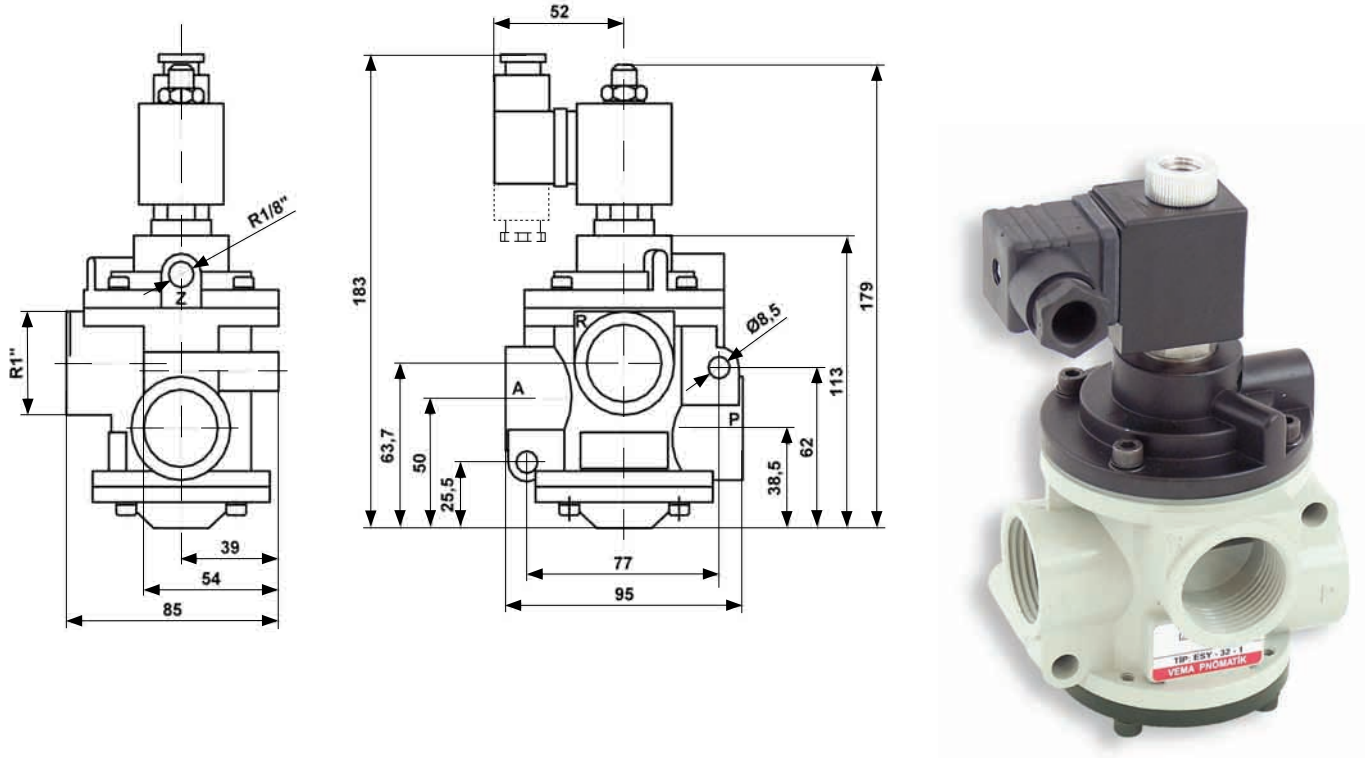


Product Code		Type	Working Pressure
ESY-52-1/4-mN		Single Solenoid - Spring Return - 2 positions	3-10 bar
ESO-52-1/4-mN		Single Solenoid - Air Return - 2 positions	1-10 bar
EES-52-1/4-mN		Double Solenoid - 2 positions	3-10 bar
EYE-53-1/4-mKN		Double Solenoid - 3 positions - Closed Center	3-10 bar
EYE-53-1/4-mAN		Double Solenoid - 3 positions - Open Center	3-10 bar
PY-52-1/4-mN		Air Operated - Spring Return - 2 positions	3-10 bar
PP-52-1/4-mN		Air Operated - Air Return - 2 positions	1-10 bar
PYP-53-1/4-mKN		Air Operated - 3 positions - Closed Center	3-10 bar
PYP-53-1/4-mAN		Air Operated - 3 positions - Open Center	3-10 bar

All rights are preserved



Solenoid Actuated Vacuum Valves R1" - 3 Ports - 2 Positions



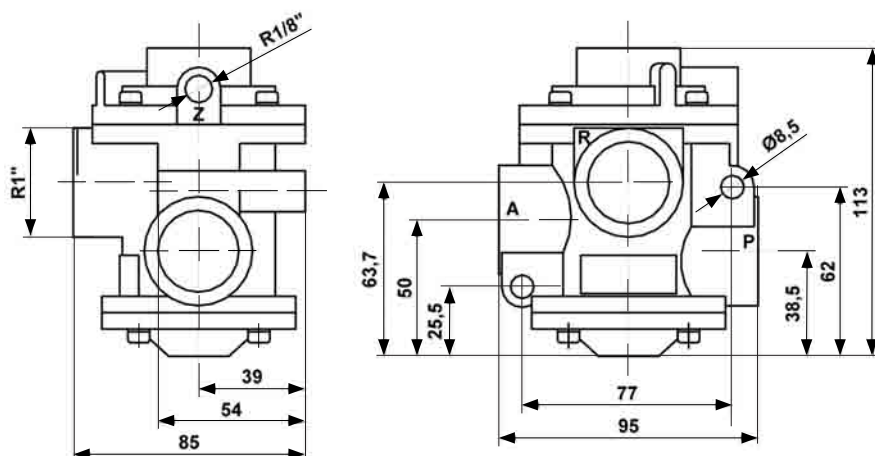
NOTE: In case of a need, vacuum valves can be used as a 2 ports valve after plugging the exhaust port.

	ESO-32-1-V	ESO-32-1-VA	EPY-32-1-V	EPY-32-1-VA
Vacuum pump	R	P	P	R
Outlet	A	A	A	A
Exhaust	P	R	R	P
Auxiliary air supply	-	-	Z	Z

Type No	ESO-32-1-V	ESO-32-1-VA	EPY-32-1-V	EPY-32-1-VA
Fluid	Filtered - Dry or lubricated air - Neutral gas			
Design	Poppet-diaphragm, One way solenoid actuated, Spring return			
Operation	Self pilot air (with vacuum)		Separate pilot air	
Function	Normally Closed	Normally Open	Normally Closed	Normally Open
Connection	R1 B.S.P			
Flow Rate	1500 NI/min.			
Vacuum	Min. 150mmHG Max. 759.5mmHG		Max. 759.5mmHG	
Operating voltage	220V AC / 110V AC / 24V AC / 12V AC / 24V DC / 12V DC			
Power consumption			AC: 16 VA	DC: 8.5 W
Weight	1745 gr.		1780 gr.	

All rights are preserved

Pneumatically Actuated Vacuum Valves R1" - 3 Ports - 2 Positions



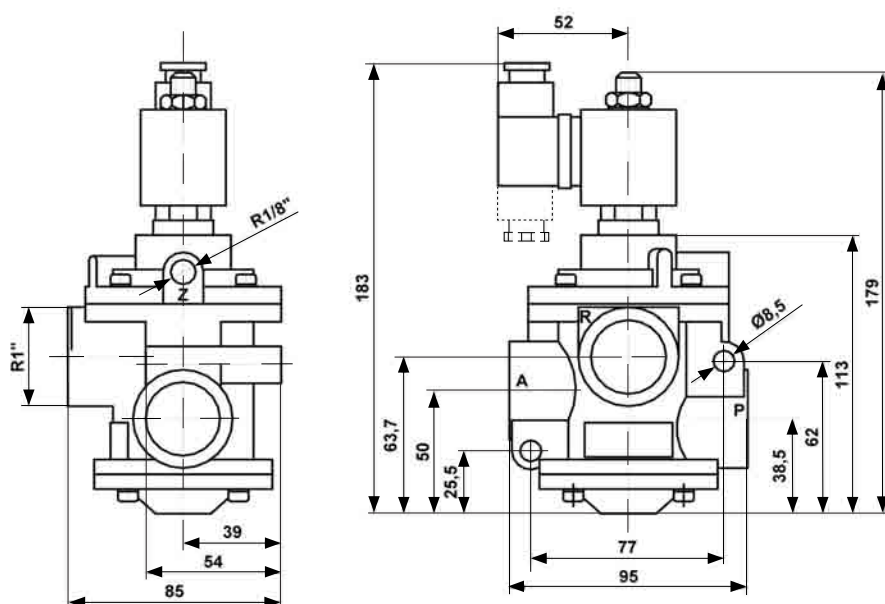
	EPY - 32 - 1 - V	EPY - 32 - 1 - VA
Vacuum pump	P	R
Outlet	A	A
Exhaust	R	P
Auxiliary air supply	Z	Z

Note: 3 port vacuum valves can be used as an 2 port valve by plugging the exhaust port.

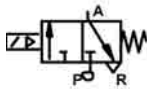

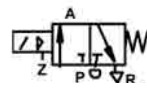
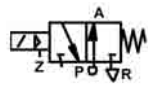
Type	PY-32-1-V	PY-32-1-VA
Fluid	Filtered - Dry or lubricated air - Neutral gas	
System	Poppet-diaphragm, One way air actuated, Spring return	
Control	Air actuated	
Function	Normally closed	Normally open
Connection	R 1 B.S.P.	
Pressure range	P: 2-10 bar	P: 0-10 bar Z:2-10 bar
Flow rate	1500 NI/min.	
Vacuum	Max. 759.5mmHG	
Control pressure	Min. 3 bar.	
Weight	1575 gr.	

All rights are preserved

Solenoid Actuated Valves R1" - 3 Ports - 2 Positions

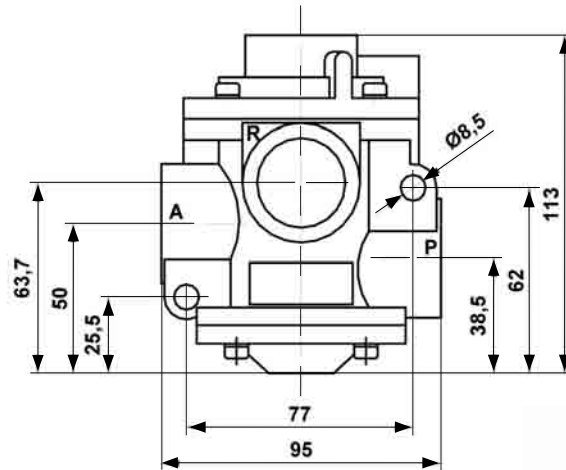
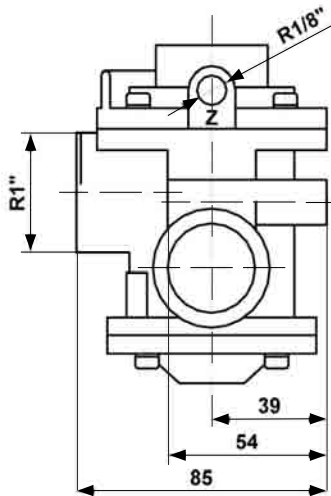


P: Compressed air inlet
A: Outlet
R: Exhaust
Z: Auxiliary air supply (for type EPY)

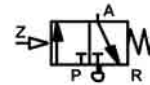
				
Type No	ESY-32-1	ESY-32-1-A	EPY-32-1	EPY-32-1-A
Fluid	Filtered - Dry or lubricated air - Neutral gas			
Design	Poppet-diaphragm, One way solenoid actuated, Spring return			
Operation	Self pilot air		Separate pilot air	
Function	Normally Closed	Normally Open	Normally Closed	Normally Open
Connection	R1			
Pressure Range	P: 2-10 bar		P: 0-10 bar Z: 2-10 bar	
Flow Rate	13500 NI/min.			
Ambient Temp.	0 / +50°C			
Fluid Temp.	-5 / +60°C			
Solenoid Voltage	220V AC / 110V AC / 24V AC / 12V AC / 24V DC / 12V DC			
Power consumption	AC: 16 VA DC: 8.5 W			
Weight	1780 gr.			

All rights are preserved

Pneumatically Actuated Valves R1" - 3 Ports - 2 Positions



- P: Compressed air inlet
- A: Outlet
- R: Exhaust
- Z: Air signal port

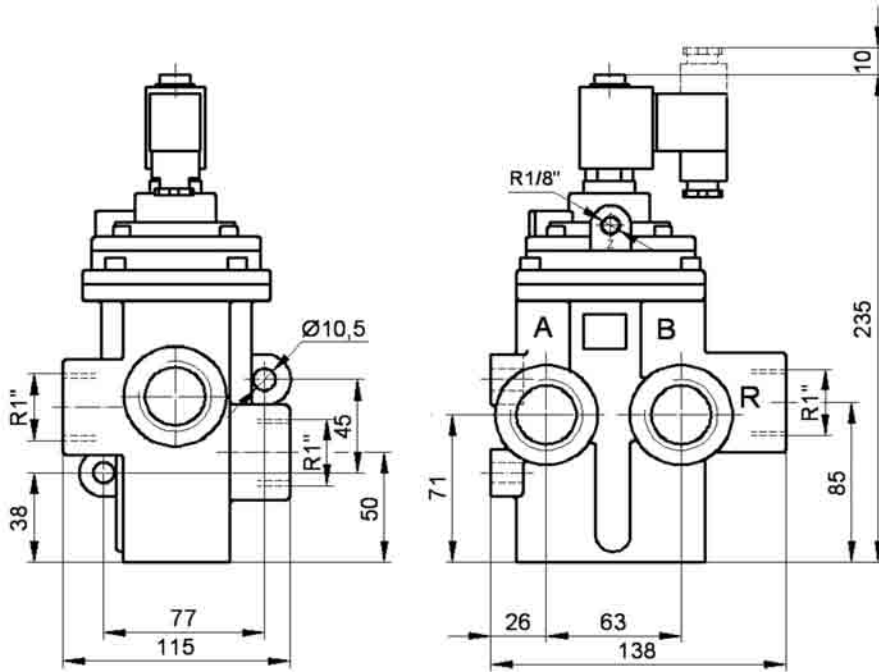


Type No.	PY-32-1
Fluid	Filtered - Dry or lubricated air - Neutral gas
Design	Poppet-diaphragm, air actuated, spring return
Operation	Air operated
Function	Normally closed
Connection	R 1 B.S.P.
Pressure range	P: 0-10 bar Z: 2-10 bar
Flow Rate	13500 Nl/min.
Ambient temp.	0 / +50°C
Fluid temp.	-5 / +50°C
Weight	1575 gr.

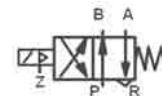
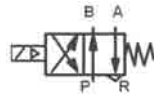
All rights are preserved



Fast Response High Flow Valves R1" - 4 ports - 2 positions



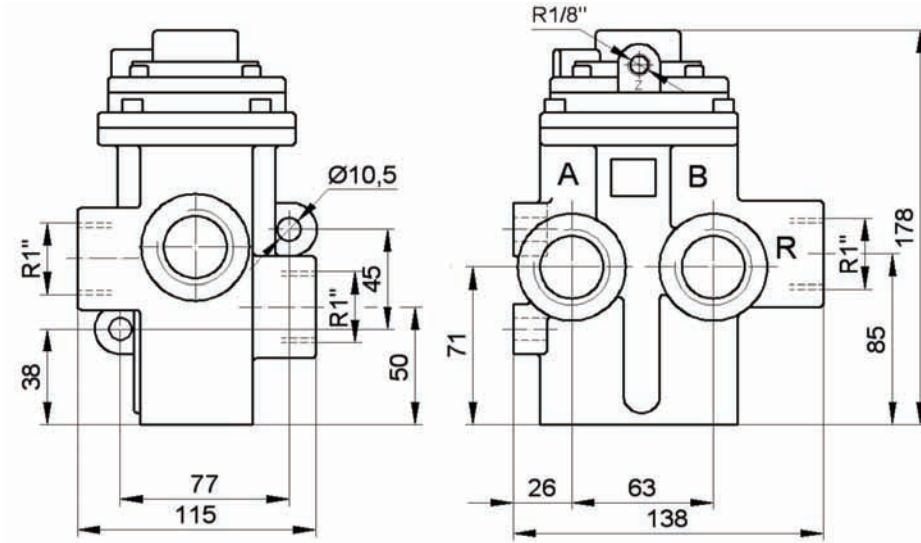
- P: Compressed air inlet
- A: Outlet
- B: Outlet
- R: Egzost
- Z: Air signal port



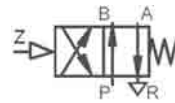
Type No.	ESY-42-1	EPY-42-1
Fluid	Filtered	
Design	Poppet type, Solenoid Actuated - Spring Return	
Operation	Internal Pilot	External Pilot
Function	P→B A→R	
Connection	R 1 B.S.P	
Pressure range	P: 2-10 bar	P: 0-10 bar, Pz: 2-10 bar (Pz>P)
Flow Rate	15000 NI/dk.	
Ambient temp.	0 / +50°C	
Fluid temp.	-5 / +60°C	
Solenoid Voltage	220V AC / 110V AC / 24V AC / 12V AC / 24V DC / 12V DC	
Power consumption	AC: 16 VA DC: 8.5 W	
Weight	2460 gr.	

All rights are preserved

Pneumatically Actuated Valves R1" - 4 Ports - 2 Positions



- P: Compressed air inlet
- A: Outlet
- B: Outlet
- R: Egzost
- Z: Air signal port

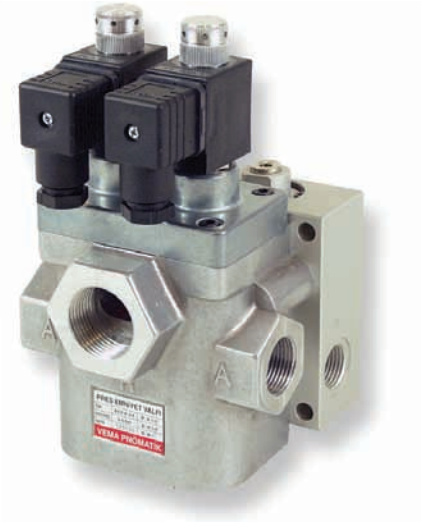
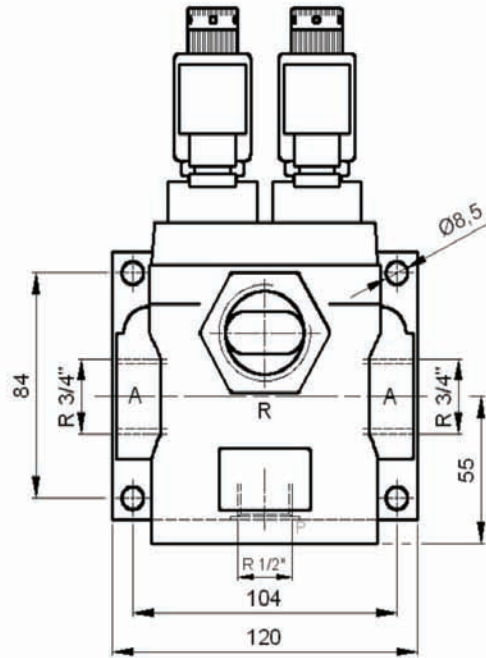
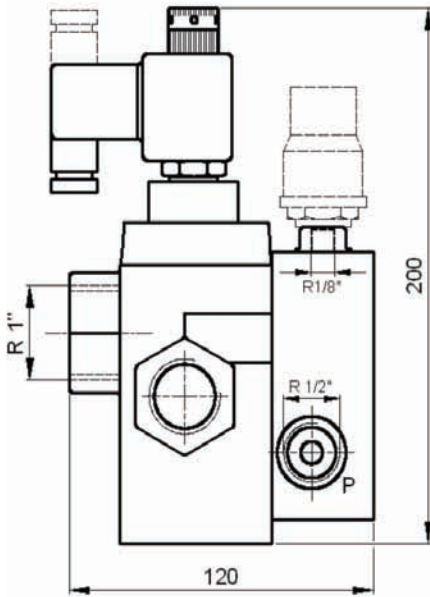


Product Code		PY-42-1
Fluid		Filtered
Activation & Return		Poppet type, Air Actuated - Spring Return
Command Type		Direct Pilot Pressure
Default Position		P → B A → R
Port Size		R 1 B.S.P
Working Pressure	P: 0-10 bar	Pilot Pressure Pz: 2-10 bar (Pz > P)
Flow Rate		15000 NI/dk.
Ambient Temp.		0 / +50°C
Fluid temp.		-5 / +50°C
Weight		2230 gr.

All rights are preserved



Press Safety Valve R3/4''



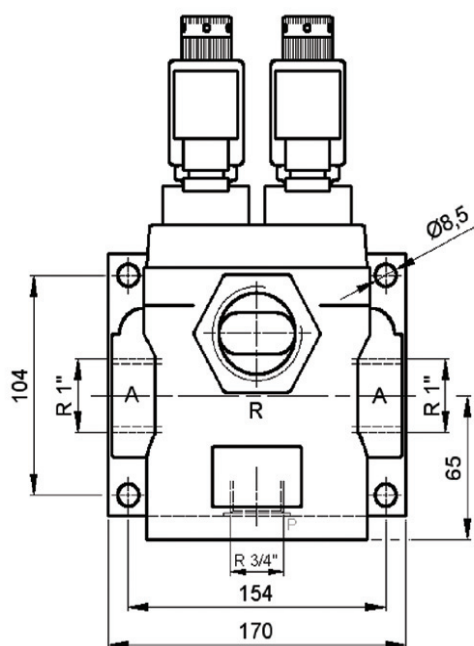
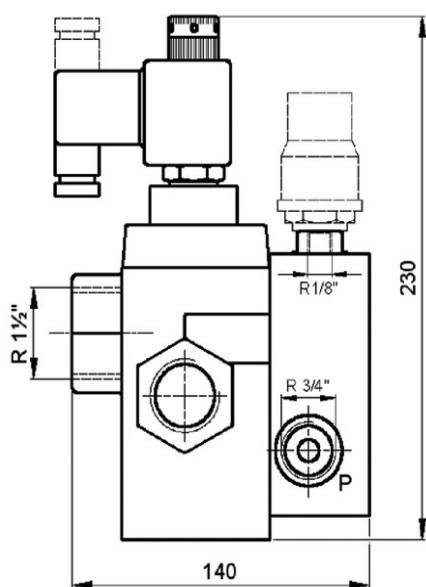
- P: R1/2 Air input
A: R3/4 Air Output
R: R 1 Air Exhaust

Warning:

The original VEMA Exhaust Silencer and FRL unit MUST be used with this product in order to ensure the safe operation of this product.

Product Code	PEV-A 3/4
Fluid	Filtered & Lubricated Air
Valve Type	3 ways, 2 positions, Double Solenoid activated, Spring return
Valve Activation	Simultaneous activation of both solenoids in 500msec
Normal Position	Normally Closed (N.C.)
Connections	P : R 1/2, A : R 3/4, R : R 1 (B.S.P)
Working Pressure	P: 2-8 bar
Working Temperature	-10 / +50°C
Fluid Temperature	-5 / +60°C
Coil Voltages	220V AC, 110V AC, 24V AC, 12V AC, 24V DC, 12V DC
Energy Consumption	AC: 16 VA DC: 8.5 W
Weight	3460 gr.

Press Safety Valve R1''



- P: R3/4 Air input
- A: R 1 Air Output
- R: R1½ Air Exhaust

Warning:

The original VEMA Exhaust Silencer and FRL unit MUST be used with this product in order to ensure the safe operation of this product.

Product Code	PEV-A-1
Fluid	Filtered & Lubricated Air
Valve Type	3 ways, 2 positions, Double Solenoid activated, Spring return
Valve Activation	Simultaneous activation of both solenoids in 500msec
Normal Position	Normally Closed (N.C.)
Connections	P : R 3/4, A : R 1, R : R 1½ (B.S.P)
Working Pressure	P: 2-8 bar
Working Temperature	-10 / +50°C
Fluid Temperature	-5 / +60°C
Coil Voltages	220V AC, 110V AC, 24V AC, 12V AC, 24V DC, 12V DC
Energy Consumption	AC: 16 VA DC: 8.5 W
Weight	5600 gr.

AT UYGUNLUK BEYANI
CE DECLARATION OF CONFORMITY



Üretici Adı / Manufacturer Name	: VEMA Pnömatik San. ve Tic. A.Ş.
Üretici Adresi / Manufacturer Address	: İkitelli Sanayi Bölgesi, Bixsan Sitesi, B2-4, İkitelli 34670 İSTANBUL
Ürün Adı / Product Name	: PEV-A 3/4 Pres Emniyet Valfi PEV-A 3/4 Press Safety Valve
Uygulanan Direktifler / Applied Directives	: 98/37/AT Makina Direktifi 98/37/EC Machinery Directive
Uygulanan Standartlar / Hamonized Standards	: TS EN 692 Mekanik Presler – Güvenlik EN 692 Mechanical Presses – Safety

Beyan / Declaration :

Bu belgenin konusu olan PEV-A 3/4 Pres emniyet valfi, **TS EN 692** numaralı standarda uygun olarak tasarlanmış olup, mekanik preslerin kavrama-fren devresindeki akışkanı direkt olarak kontrol eden çift gövdeli bir valfidir ve kullanımı mekanik preslerin pnömatik kontrollü kavrama-fren sistemlerinin emniyet kontrolü için öngörülmektedir. VEMA Pnömatik San. Ve Tic. A.Ş. bu güvenlik elemanının **98/37/AT** numaralı direktife uygun olarak üretildiğini beyan etmektedir.

*PEV-A 3/4 Press safety valve referred to in this certificate, which has been designed in accordance with **European Standard EN 692**, is a double body valve with dynamic monitoring and is foreseen for a safe control of pneumatically actuated clutch-brake systems of mechanical presses. VEMA Pnömatik San. ve Tic. A.Ş. declare that this safety component is in conformity with directive **98/37/EC**.*

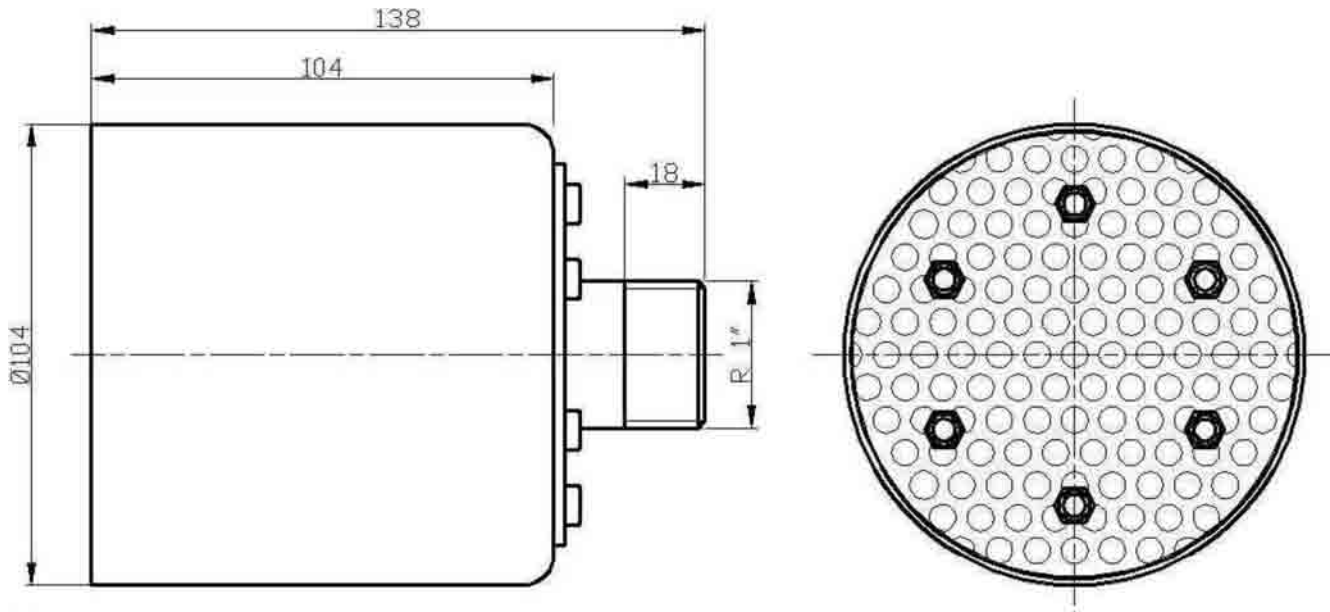
Istanbul, 2009


Hakkı AKÇALAR
Yönetim Kurulu Başkanı /
Chief Executive

Istanbul, 2009

Sezai YILANLIOĞLU
Genel Müdür Yard. /
Vice General Director

High Performance Silencers

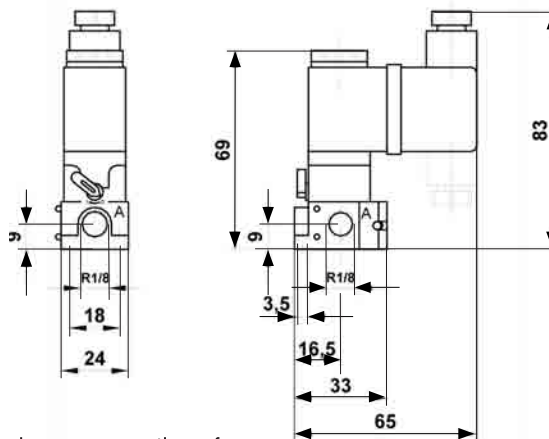


		
Product Code	S-1	S-1½
Fluid	Compressed Air	
Port Size	R1"	R1½"
Ambient Temperature	-10 / +50°C	
Fluid Temperature	-5 / +60°C	
Weight	620 gr.	

All rights are preserved



Stackable ElectroPilot Valves R 1/8" 3 Ports 2 Positions



Applications:

Solenoid control valves can be used easily in applications where low consumption of compressed air required. Also, with single acting small size cylinders (without using any other control valve) and as a pilot valve to actuate high flow pneumatic valves.

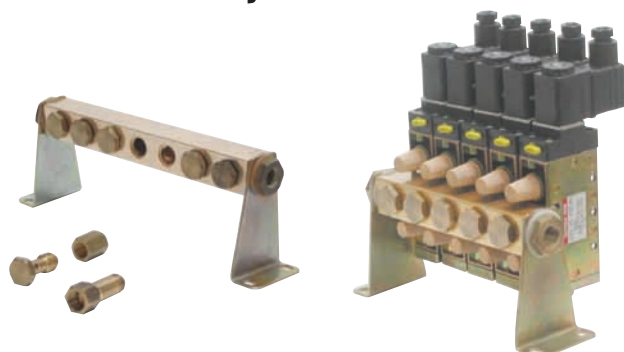
Advantages:

- Working with dry air.
- Small dimensions.
- Ability to group valves with a single screw.
- All valves in the group can be pressurized from one main air port.
- Manual on/off switch



Type No.	EY - 32 - 1/8m	
Fluid	Filtered, dry or lubricated air or neutral gas	
System	Solenoid poppet valve – Spring return	
Operation	Electric control	
Function	Normally closed	
Connection	R 1/8 B.S.P.	
Pressure range	0-10 Bar	
Ambient Temperature	-25 / +50°C	
Temperature range	-25 / +60°C	
Flow rate	50 NI/min at 6 Bar	
Solenoid voltage	220V AC, 110V AC, 24V AC, 12V AC	24V DC, 12V DC
Power consumption	8VA	5W
Weight	175gr.	

Manifold Mounting Systems For 3 and 5 Way Valves



Air supply connection	R3/8"
Valve connection	R1/4"
No. of valves connected	2-20
Pressure range	0-10 bar

Manifold mounting systems help users to minimize price, mounting elements and place. Supply air is directed to all air supply ports of the valves. Special air supply bolts can be mounted on the manifold for the valves that need to be supplied with different pressures.

All rights are preserved

Subbase & Subplate Valves



PP, PY - 52 - 1/4p+PA



PP, PY - 52 - 1/4p+PD



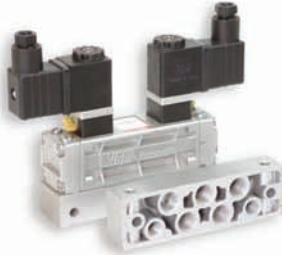
ESY - 52 - 1/4p+PA



ESY - 52 - 1/4p+PD



EES - 52- 1/4p+PA



EES - 52- 1/4p+PD

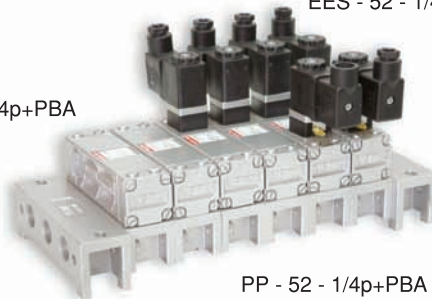


ESY - 52 - 1/4p+PBA

EES - 52 - 1/4p+PBA



PY - 52 - 1/4p+PBA


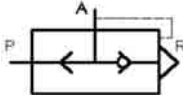
PP - 52 - 1/4p+PBA






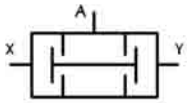
Connection	R1/4 B.S.P	
Pressure range	Max. 10 bar	
Temperature range	-10 +45°C	
Solenoid voltage	220V AC, 110V AC, 24V AC, 12V AC	24V DC, 12V DC
Power consumption	8VA	5W


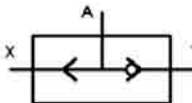
All rights are preserved

Flow control valve (One way)		
	TKS - 1/8	
	TKS - 1/4	
	TKS - 1/2	

Quick exhaust valve		
	CE - 1/8	
	CE - 1/4	
	CE - 1/2	

Silencer		
	S - 1/8	
	S - 1/4	
	S - 1/2	

"And" Gate		
	VE - 1/4	

"Or" Gate		
	VY - 1/4	

Pneumatic Cylinders Cetop RP 43 P



Cylinder Dia. (mm)	6 Bar Pressure	
	Thrust force (kg)	Return force (kg)
VPS 32	48	41
VPS 40	75	63
VPS 50	118	99
VPS 63	187	168
VPS 80	301	272
VPS 100	471	441



Cylinder Dia. (mm)	A	B	B1	C	C1	D	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	E	F	F1	F2	F3	F4	F5
VPS 32	30	20	32.5	32	24	12	M10X1.25	36	30	58	45	46	M5	7	77	7	64	10	10	5.5	4	32	45	10	20	12	40
VPS 40	34	24	39.6	38	28	16	M12X1.25	45	35	71	54	56	M5	9	90	9	72	12	10	5.5	5	36	54	12	24	14	48
VPS 50	44	32	48	42	32	20	M16X1.5	55	40	85	65	68	M6	9	110	9	90	12	11	6.5	6	45	65	16	32	19	64
VPS 63	44	32	59.4	50	35	20	M16X1.5	68	42	105	80	84	M6	9	125	9	100	16	11	6.5	6	50	80	16	32	19	64
VPS 80	54	40	70.7	60	43	25	M20X1.5	86	48	125	96	100	M8	12	154	12	126	16	13.5	9	8	63	96	20	40	25	80
VPS 100	53	40	93.4	57	43	25	M20X1.5	107	52	166	126	132	M8	14	186	14	150	20	13.5	9	8	75	126	20	40	25	80

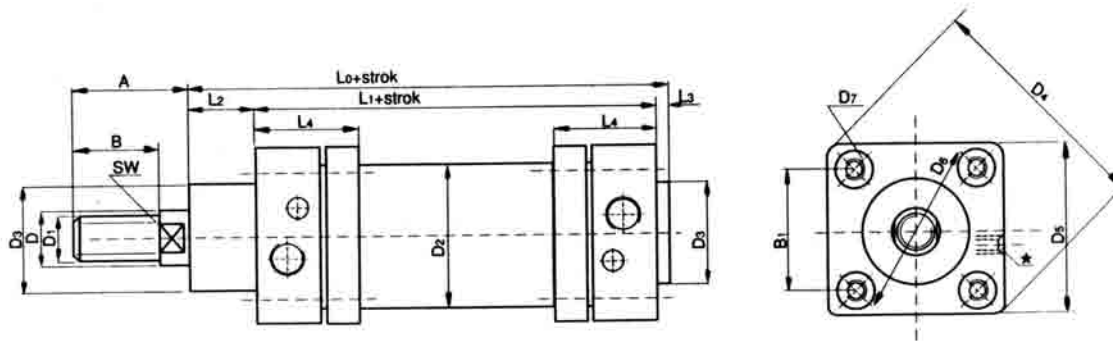
Cylinder Dia. (mm)	F6	H	H1	K	K1	L	L0	L1	L2	L3	L4	L5	L6	L7	L8	M	N	O	P	R	R1	S	SW	T	U	V	*
VPS 32	32	10	24	45	26	22	114	94	16	4	40	142	16	130	142	8	31	18	32	10	10	8	10	27.5	51	38	R1/8"
VPS 40	38	10	25	52	28	25	130.5	105	20	5	38	161	20	145	160	9	35	22	36	13	11	10	14	30.5	54	41	R1/4"
VPS 50	51	12	32	60	32	27	136	106	25	5	40	170	25	155	170	11	45	30	45	16	13	12	17	40.5	65	50	R1/4"
VPS 63	51	15	36	70	40	35	149	115	28	6	46	185	25	170	190	12	50	35	50	18	15	12	17	40.5	67	52	R3/8"
VPS 80	65	18	47	90	50	38	164	124	34	6	50	210	30	190	210	14	60	40	63	18	15	14	22	57	86	66	R3/8"
VPS 100	65	18	54	110	60	43	181	134	40	7	56	220	35	205	230	15	70	50	71	23	19	15	22	65	96	76	R1/2"

All rights are preserved

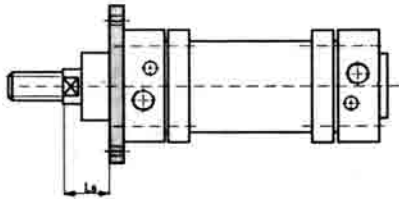


PNÖMATİK

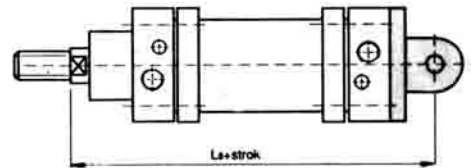
Pneumatic Cylinders Cetop RP 43 P



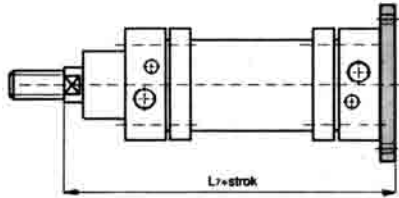
ÖFB - Front Flange Mounting



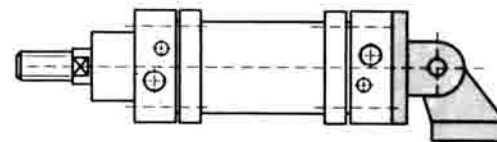
EB - Rear Clevis



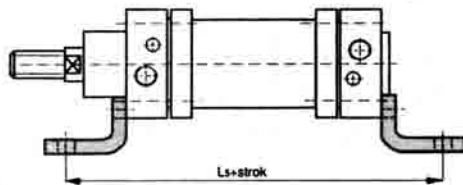
AFB - Rear Flange Mounting



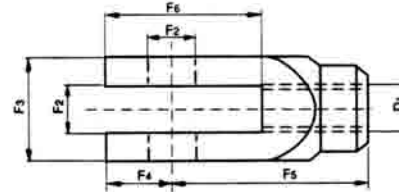
EYB - Rear Clevis With Foot Mounting



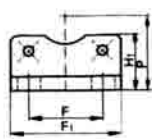
AB - Foot Mounting



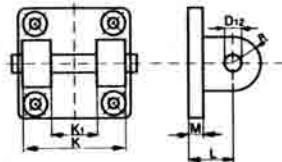
CB - Rod Clevis Mounting



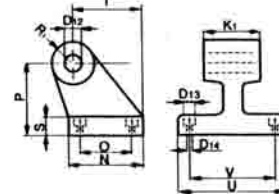
AB - Foot Mounting



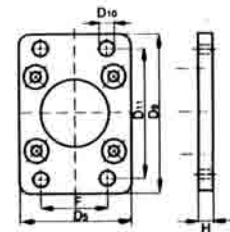
EB - Rear Clevis Mounting



YB - Clevis Foot Mounting



FB - Flange Mounting





www.vema.com.tr

VEMA Pnömatik San. ve Tic. A.Ş.

İkitelli Organize Sanayi Bölgesi Biksan Sitesi, B2-4
Küçükçekmece 34670 İstanbul / Türkiye
Tel: +90 212 485 16 85 (Pbx) Faks: +90 212 485 16 84
E-mail: vema@vema.com.tr