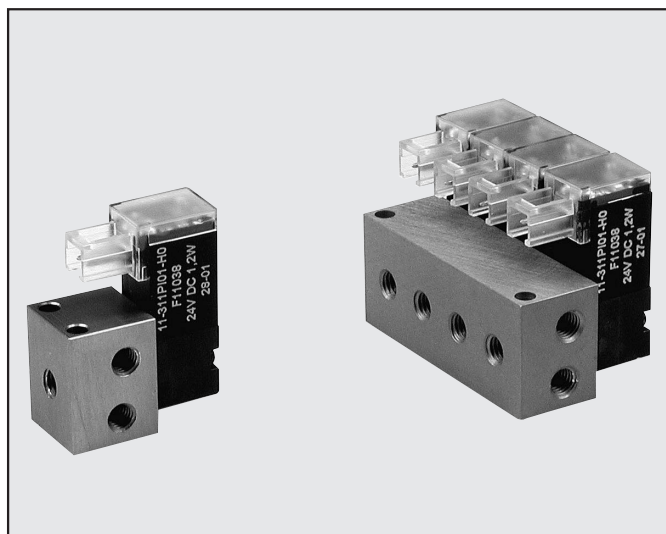


SOLENOID VALVES

PIV.P 10 mm



- 3/2 direct control microvalves
- Possible assembly on single and multiple bases
- Monostable manual actuation as standard
- Assembly in any position
- Operation with filtered lubricated or unlubricated air
- Maximum ambient temperature: 50°C
- With incorporated LED
- Low power absorption



2

TECHNICAL DATA

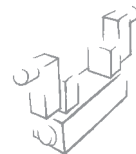
Operating temperature range	Te	5° ÷ 50°C
Fluid temperature	Tg	5° ÷ 50°C
Fluid		Filtered lubricated or unlubricated air
Working life		More than 50 million cycles
Materials		Body: technopolymer PPS Mechanics: stainless steel AISI 405 Gaskets NBR
Weight	[g]	10
Voltage tolerance	ΔV	± 10%
Maximum operation frequency	f	30 Hz
Use factor	ED	100%
Response time	t	≥ 10 msec.
Type of protection		IP 51
Electrical connection		PLUG IN
Flow rate at 6 bar ΔP=1 bar	Nl/min	15

KEY TO CODES

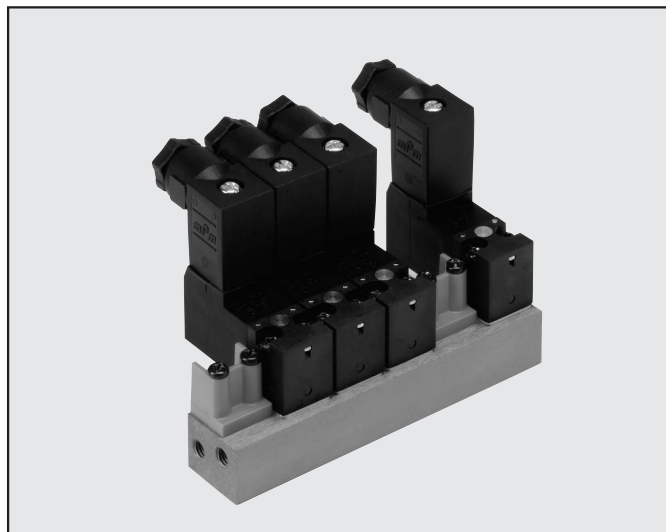
P	I	V	2	3	P	0	1	N	C					
FAMILY			AIR HOLE		NUMBER OF WAYS		DIMENSIONS		THREAD		VERSION		FURTHER DETAILS	
			2	0.8 mm	3	3 ways	P	10x10	0	on base	1	24 VDC	NC	normally closed

SOLENOID VALVES

PIV.M 15 mm



- 3/2 NC/NO direct control microvalves
- Possible assembly on single and multiple bases
- Monostable manual actuation as standard
- Assembly in any position
- Operation with filtered lubricated or unlubricated air
- Maximum ambient temperature: 50°C
- Low power absorption



2

TECHNICAL DATA

Voltage tolerance	ΔV	-10-+15%
Alternating current frequency (AC)	f	50/60 Hz
Maximum operation frequency	f	30 Hz
Solenoid rating		100% ED
Response time	t	≈ 10 msec.
Type of protection		IP 65 EH 60529
Electrical connection		9.4 mm micro centre distance
Insulation class	F	155
Ambient temperature	T_e	-10°C to 50°C
Fluid temperature	T_g	-10°C to 50°C
Fluid		Filtered lubricated or unlubricated air
Working life		100 million cycles
Materials		Body: PPS Spring: 302 stainless steel FKM/FPM gaskets
Weight	[g]	30 g
Manual control		monostable
Assembly position		in any position

KEY TO CODES

P	I	V	1	3	M	0	1	N	C
FAMILY	AIR HOLE		NUMBER OF WAYS		PORT	THREAD	VERSION		FURTHER DETAILS
	1	1 mm	3	3 ways	M	15x15	0	on base	NC normally closed NO normally open
	3	1.1 mm							
	6	1.5 mm							

PIV VALVES ON BASE

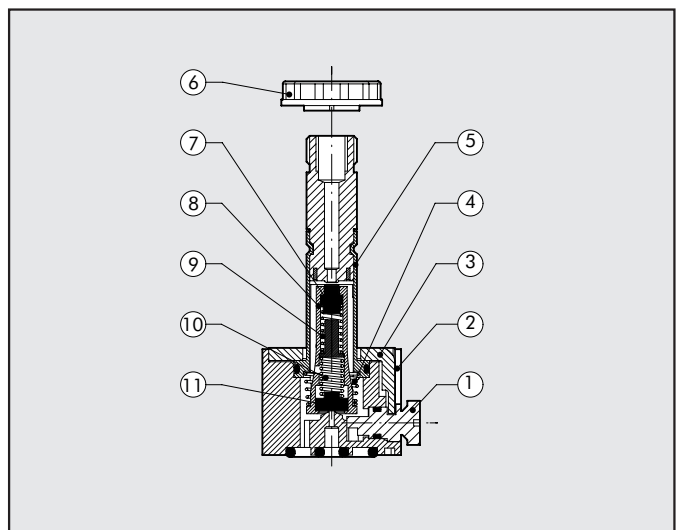
- PIV.I – PIV.T and PIV.B solenoid valves
- Assembly on base
- Bistable manual actuation
- Normally closed / normally open solenoid valves 2/2 – 3/2
- Installation in any position
- Particularly suitable for high operating frequencies and low response times



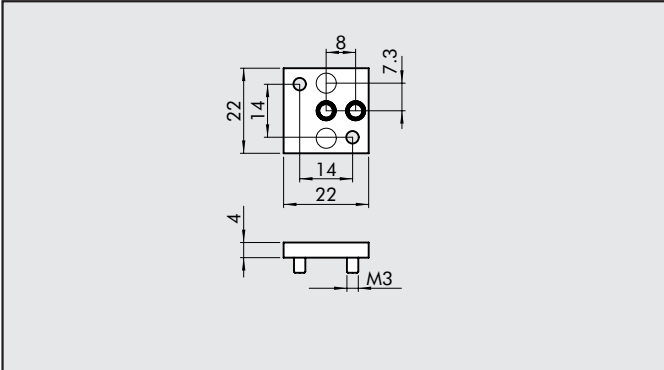
TECHNICAL DATA		PIV.I ON BASE	PIV.T ON BASE	PIV.B ON BASE
Absorption	W	2-5W - 5VA	3,8W - 2W - 6VA	10W - 16VA
Voltage available	V	12-24Vdc - 24-110-220 Vac	24Vdc - 24-110-220 Vac	24Vdc - 24-110-220 Vac
		50/60 Hz	50/60 Hz	50/60 Hz
Voltage tolerance	ΔV	-10 to +15%	-10 to +15%	-10 to +15%
Maximum operating frequency	f	30 Hz	30 Hz	15 Hz
Solenoid rating	ED	100%	100%	100%
Response time	t	8 ÷ 15 msec	8 ÷ 15 msec	10 ÷ 15 msec
Type of protection		IP 65	IP 65	IP 65
Type of coil		Coil side 22 Ø 8 DIN 43650	Coil side 22 Ø 9 DIN 43650	Coil side 30 DIN 43650
Insulation class	F	155	155	155
Ambient temperature	T_e	-15 ÷ 50°C	-15 ÷ 50°C	-15 ÷ 50°C
Fluid temperature	T_g	-15 ÷ 50°C	-15 ÷ 50°C	-15 ÷ 50°C
Fluid		Filtered lubricated or unlubricated air	Filtered lubricated or unlubricated air	Filtered lubricated or unlubricated air
Working life		25 million cycles	25 million cycles	-
Weight	[g]	80 to 120 g (according to the version)	85 g	250 g
Maximum coil/nut torque		1 Nm	1 Nm	1 Nm

COMPONENTS

- ① Manual control: technopolymer
- ② Body: technopolymer
- ③ Sleeve locking plate
- ④ Spring: stainless steel
- ⑤ Sleeve: brass OT 58
- ⑥ Ring nut for coil fixing
- ⑦ Gasket: NBR
- ⑧ Mobile core
- ⑨ Spring: stainless steel
- ⑩ Spring: stainless steel
- ⑪ Gasket: NBR

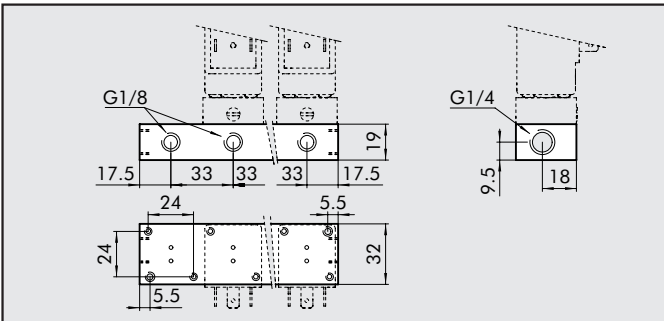


BASE BLANKING PLATE FOR PIV.T VALVES, UNUSED POSITIONS



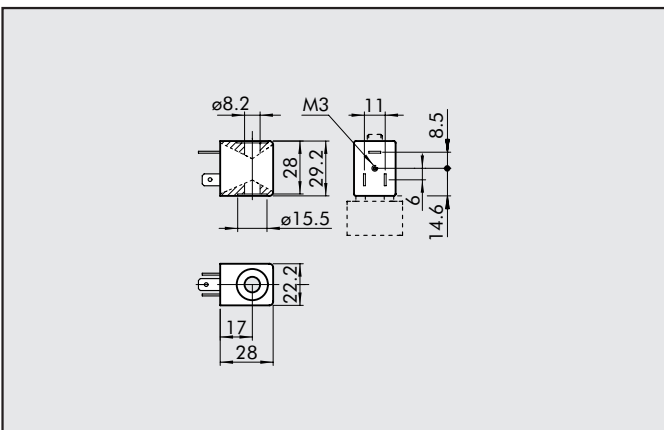
Code	Description	Abbrev.	Weight [g]
W0400112000	Accessories: blanking plate	B6000	5

MULTIPLE BASES FOR PIV.B VALVES



Code	Function	Sigla	Weight [g]
W0400101201	1 position	B4001	42
W0400101202	2 positions	B4002	94
W0400101203	3 positions	B4003	142
W0400101204	4 positions	B4004	188
W0400101205	5 positions	B4005	234
W0400101206	6 positions	B4006	280
W0400101207	7 positions	B4007	326
W0400101208	8 positions	B4008	372
W0400101209	9 positions	B4009	418

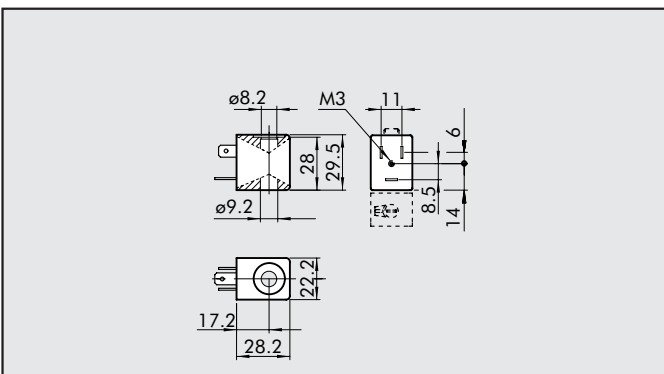
COILS, SIDE 22 mm FOR PIV.I SOLENOID VALVES, OPERATOR Ø 8



- Voltage tolerance: - 10 to + 15%
- Insulation class: F155
- Degree of protection: IP65 – EN60529 with connector
- Avoid prolonged exposure to the atmospheric agents.
- Maximum coil temperature at 100% use: 70°C at 20° ambient temperature

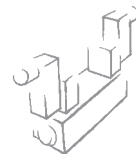
Code	Nominal voltage	Absorption		Abbrev.
		Inrush	Holding	
W 0215 000151	12Vcc	2W	2W	Coil 22 Ø8 BA 2W-12VDC
W 0215 000101	24Vcc	2W	2W	Coil 22 Ø8 BA 2W-24VDC
W 0215 000111	24V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-24VAC
W 0215 000121	110V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-110VAC
W 0215 000131	220V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-220VAC
W 0215 000051	12Vcc	5W	5W	Coil 22 Ø8 5W-12VDC
W 0215 000001	24Vcc	5W	5W	Coil 22 Ø8 5W-24VDC
W 0215 000011	24V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-24VAC
W 0215 000021	110V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-110VAC
W 0215 000031	220V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-220VAC

COILS, SIDE 22 mm FOR PIV.T SOLENOID VALVES, OPERATOR Ø 9

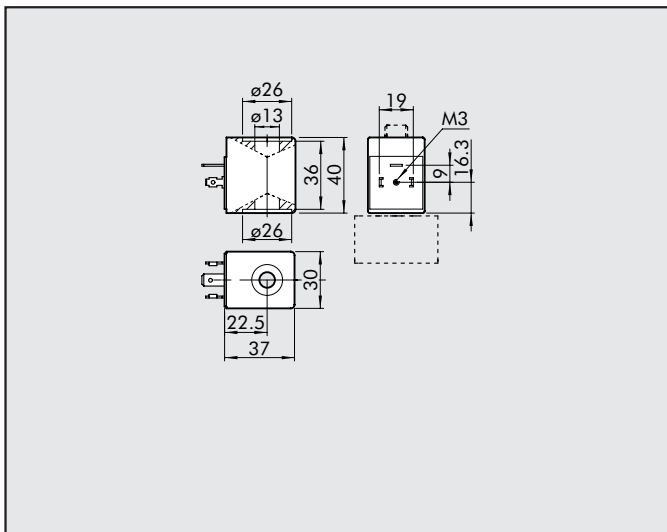


- Voltage tolerance: - 10 / + 15%
- Insulation class: F155
- Degree of protection: IP65 – EN60529 with connector
- Avoid prolonged exposure to the atmospheric agents
- Maximum coil temperature at 100% use: 70°C at 20° ambient temperature

Code	Nominal voltage	Absorption		Abbrev.
		Inrush	Holding	
W0216000101	24Vcc	2W	2W	Coil 22 Ø9 BA 2W-24VDC
W0216000111	24V 50/60Hz	5VA	3.6VA	Coil 22 Ø9 BA 3.6VA-24VAC
W0216000121	110V 50/60Hz	5VA	3.6VA	Coil 22 Ø9 BA 3.6VA-110VAC
W0216000131	220V 50/60Hz	5VA	3.6VA	Coil 22 Ø9 BA 3.6VA-220VAC
W0216000001	24Vcc	3.8W	3.8W	Coil 22 Ø9 3.8W-24VDC
W0216000011	24V 50/60Hz	9VA	6.5VA	Coil 22 Ø9 6.5VA-24VAC
W0216000021	110V 50/60Hz	9VA	6.5VA	Coil 22 Ø9 6.5VA-110VAC
W0216000031	220V 50/60Hz	9VA	6.5VA	Coil 22 Ø9 6.5VA-220VAC



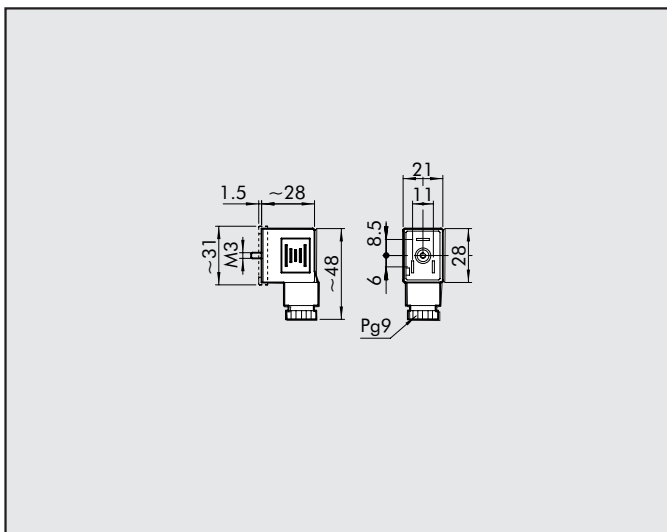
COILS, SIDE 22 mm FOR PIV.B SOLENOID VALVES



- Voltage tolerance: - 10 / + 15%
- Insulation class: M180
- Degree of protection: IP65 – EN60529 with connector
- Avoid prolonged exposure to the atmospheric agents

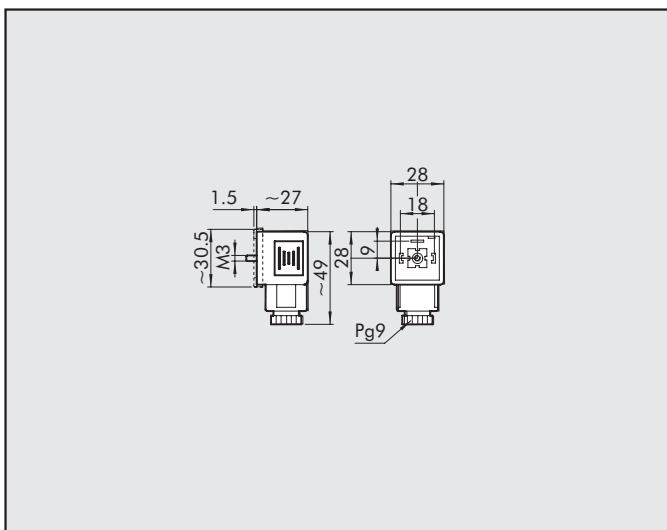
Code	Nominal voltage	Power absorption (average power input)	Abbrev.
W0216001001	24Vcc	10W	Coil 30 Ø13 10W-24VDC
W0216001011	24V 50/60Hz	13VA	Coil 30 Ø13 13VA-24VAC
W0216001021	110V 50/60Hz	13VA	Coil 30 Ø13 13VA-110VAC
W0216001031	220V 50/60Hz	13VA	Coil 30 Ø13 13VA-220VAC

CONNECTORS, SIDE 22 mm FOR PIV.I-PIV.T



Code	Colour	Cable diameter	Type
W0970510011	black	PG9	Standard
W0970510012	transparent	PG9	LED 24V
W0970510013	transparent	PG9	LED 110V
W0970510014	transparent	PG9	LED 220V
W0970510015	transparent	PG9	LED + VDR 24V
W0970510016	transparent	PG9	LED + VDR 110V
W0970510017	transparent	PG9	LED + VDR 220V

CONNECTORS, SIDE 30 mm FOR PIV.B



Code	Colour	Cable diameter	Type
W0970520033	black	PG9	Standard
W0970520034	transparent	PG9	LED 24V
W0970520035	transparent	PG9	LED 110V
W0970520036	transparent	PG9	LED 220V
W0970520037	transparent	PG9	LED + VDR 24V
W0970520038	transparent	PG9	LED + VDR 110V
W0970520039	transparent	PG9	LED + VDR 220V

PIV VALVES IN LINE

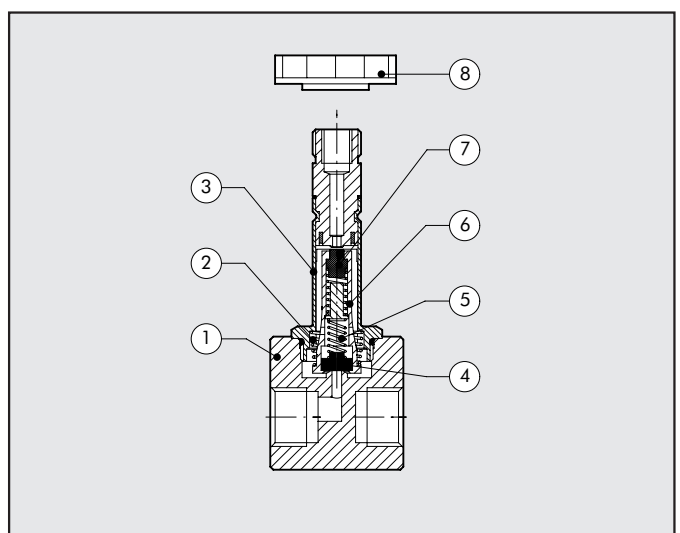
- PIV.I – PIV.B in-line solenoid valves
- Threaded ports: M5 G1/8" G1/4"
- 2/2 – 3/2 solenoid valves - normally closed/normally open
- Installation in any position
- Particularly suitable for high operating frequencies and low response times.

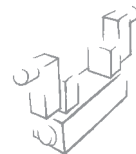


TECHNICAL DATA		PIV.I IN LINEA	PIV.B IN LINE
Absorption	W	5.5W - 5.5VA	10W - 13VA
Voltage available	V	24Vdc - 24-110-220 Vac - 50/60 Hz	24Vdc - 24-110-220 Vac - 50/60 Hz
Voltage tolerance	ΔV	-10 to +15%	-10 to +15%
Maximum operating frequency	f	30 Hz	15 Hz
Solenoid rating	ED	100%	100%
Response time	t	8 ÷ 15 msec	10 ÷ 15 msec
Type of protection		IP 65	IP 65
Type of coil		coil side 22 Ø 8 DIN 43650	coil side 30 DIN 43650
Insulation class	F	155	155
Ambient temperature	Te	-15 ÷ 50°C	-15 ÷ 50°C
Fluid temperature	Tg	-15 ÷ 50°C	-15 ÷ 50°C
Fluid		filtered lubricated or unlubricated air	filtered lubricated or unlubricated air
Working life		25 million cycles	-
Weight	[g]	35 to 140 g (depending on version)	130 g
Maximum coil/nut torque		1 Nm	1 Nm
Note on use		The 2/2 NC and 2/2 NO valves work only with inlet pressure ≥ outlet pressure	

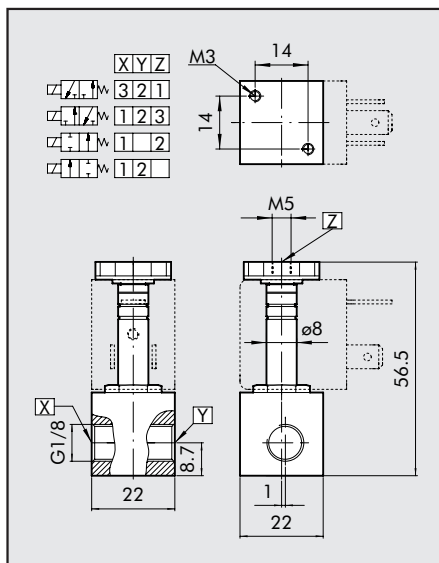
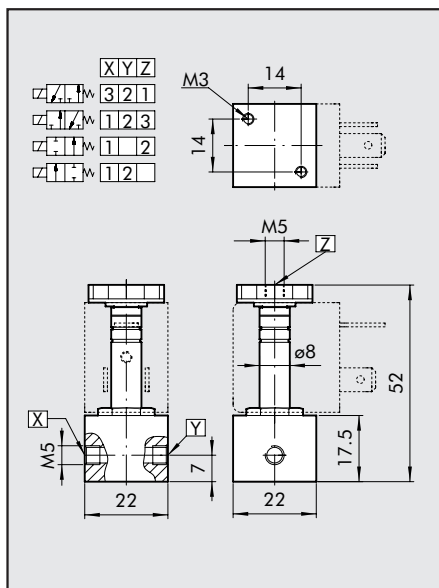
COMPONENTS

- ① Body: brass OT 58
- ② Springs: steel
- ③ Sleeve
- ④ Gasket: NBR
- ⑤ Springs: steel
- ⑥ Mobile core
- ⑦ Gasket: FKM/FPM
- ⑧ Coil locking ring



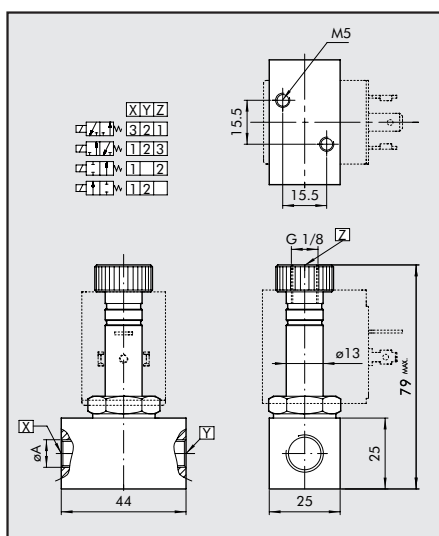


PIV.I VALVES, OPERATOR Ø 8 mm, IN LINE – M5 – 1/8"



Symbol	Ordering code	Description	Input thread	Diameter of air hole mm	Kv factor	Maximum operating pressure (bar)	
						DC = 5W	AC = 5VA
	W4017000100	PIV4215S NC	M5	1.2	0.65	30	30
	W4017001300	PIV9218S NC	G1/8"	2.4	2	6	7
	W4017001100	PIV4218S NC	G1/8"	1.2	0.65	30	30
	W4017001200	PIV7218S NC	G1/8"	1.6	1.2	15	14
	W4017000101	PIV7215S NO	M5	1.4	0.8	10	10
	W4017001201	PIV7218S NO	G1/8"	1.4	0.8	10	10
	W4017003100	PIV4315S NC	M5	1.2	0.65	10	10
	W4017004100	PIV4318S NC	G1/8"	1.2	0.65	10	10
	W4017004200	PIV7318S NC	G1/8"	1.6	1	6.5	6.5
	W4017004201	PIV7318S NO	G1/8"	1.4	0.7	6	7

PIV.B VALVES, OPERATOR Ø 13, IN LINE

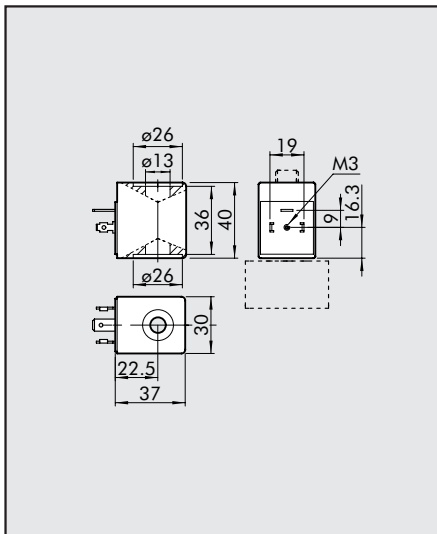


Symbol	Ordering code	Description	Input thread	Diameter of air hole mm	Kv factor	Maximum operating pressure (bar)	
						DC = 10W	AC = 13VA
	W4026005001	PIV73B8S NO	G1/8"	1.6	1.2	6	12
	W4026005101	PIV73B4S NO	G1/4"	1.6	1.2	6	12
	W4026005111	PIV93B4S NO	G1/4"	2.4	2	3	4
	W4026005010	PIV93B8S NC	G1/8"	2.4	2.8	8	10
	W4026005020	PIVW3B8S NC	G1/8"	3	4	5.5	6
	W4026005000	PIV73B8S NC	G1/8"	1.6	1.4	14	17
	W4026005100	PIV73B4S NC	G1/4"	1.6	1.4	14	17
	W4026005110	PIV93B4S NC	G1/4"	2.4	2.8	8	8
	W4026005120	PIVW3B4S NC	G1/4"	3	4	5.5	6
	W4026004000	PIV92B4S NC	G1/4"	2.4	3	15	30
	W4026004010	PIVX2B4S NC	G1/4"	4	7	3	18
	W4026004020	PIV22B4S NC	G1/4"	6	9	1.5	5
	W4026004001	PIV92B4S NO	G1/4"	2.4	2.6	13	15

KEY TO CODES

P	I	V	7	2	B	4	S	N	C			
FAMILY			AIR HOLE		NUMBER OF WAYS	CONNECTION		THREAD		VERSION	FURTHER DETAILS	
			4	1.2 mm	2 2 ways	I	22x22	5	M5	S	Standard	NC normally closed
			7	1.6 mm	3 3 ways		operator Ø 8	4	G1/4"			NO normally open
			9	2.4 mm		B	30x30	8	G1/8"			
			W	3 mm			operator Ø 13					
			X	4 mm								
			Z	6 mm								

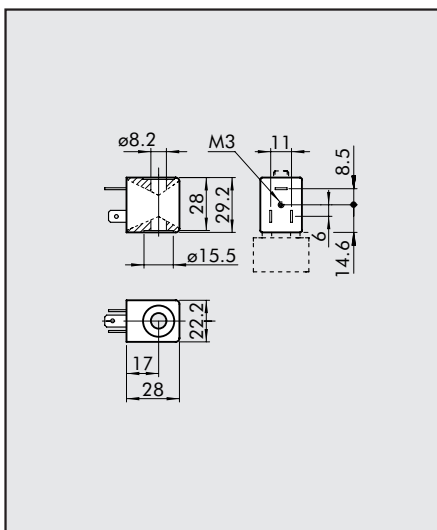
COIL, SIDE 30 mm - FOR PIV.B SOLENOID VALVES



- Voltage tolerance: - 10 / + 15%
- Insulation class: M180
- Degree of protection: IP65 – EN60529 with connector
- Avoid prolonged exposure to the atmospheric agents

Code	Nominal voltage	Absorption (average)	Abbrev.
W0216001001	24Vcc	10W	Coil 30 Ø13 10W-24VDC
W0216001011	24V 50/60Hz	13VA	Coil 30 Ø13 13VA-24VAC
W0216001021	110V 50/60Hz	13VA	Coil 30 Ø13 13VA-110VAC
W0216001031	220V 50/60Hz	13VA	Coil 30 Ø13 13VA-220VAC

COIL, SIDE 30 mm - FOR PIV.I SOLENOID VALVES



- Voltage tolerance: - 10 / + 15%
- Insulation class: F155
- Degree of protection: IP65 – EN60529 with connector
- Avoid prolonged exposure to the atmospheric agents
- Maximum temperature of coil at 100% use: 70°C at 20° ambient temperature

Code	Nominal voltage	Absorption		Abbrev.
		Inrush	Holding	
W 0215 000151	12Vcc	2W	2W	Coil 22 Ø8 BA 2W-12VDC
W 0215 000101	24Vcc	2W	2W	Coil 22 Ø8 BA 2W-24VDC
W 0215 000111	24V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-24VAC
W 0215 000121	110V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-110VAC
W 0215 000131	220V 50/60Hz	4VA	3VA	Coil 22 Ø8 BA 3VA-220VAC
W 0215 000051	12Vcc	5W	5W	Coil 22 Ø8 5W-12VDC
W 0215 000001	24Vcc	5W	5W	Coil 22 Ø8 5W-24VDC
W 0215 000011	24V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-24VAC
W 0215 000021	110V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-110VAC
W 0215 000031	220V 50/60Hz	8VA	5VA	Coil 22 Ø8 5VA-220VAC

