

# NAMUR VALVES

## TECHNICAL DATA

Operating pressure	
• Monostable, electric	2.5 ÷ 10 bar
• Bistable, electric	1 ÷ 10 bar
• pilot-assisted, electric	vacuum at 10 bar
Minimum pilot pressure	
• monostable, pneumatic	2.5 bar
• bistable, pneumatic	1 bar
Operating temperature range	-10° to 60°C
Nominal diameter	7.5 mm
Conductance C	264.26 NI/min · bar
Critical ratio b	0.27 bar/bar
Flow rate at 6 bar ΔP 0.5 bar	750 NI/min
Flow rate at 6 bar ΔP 1 bar (0.1 Mpa ÷ 14.5 psi)	1100 NI/min
Response time at 6 bar:	
• TRA/TRR monostable, pneum. at 6 bar	7 ms / 15 ms
• TRA /TRR bistable, pneum. at 6 bar	7 ms / 7 ms
• TRA/TRR monostable, electric, at 6 bar	19 ms/ 45 ms
• TRA /TRR bistable, electric, at 6 bar	21 ms / 21 ms
Compatibility with oils:	please refer to page 6.1/08

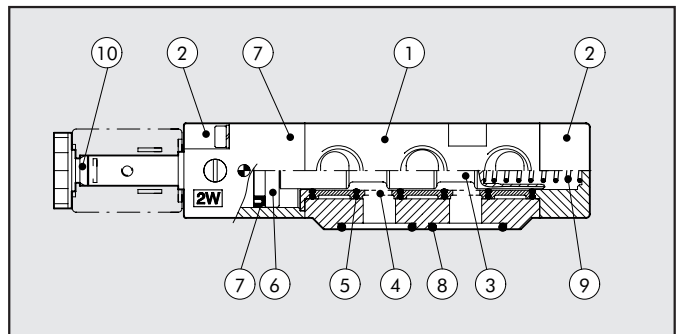


## KEY TO CODES

P	N	V	A		5	P	N	S	O	O		
FAMILY			PORT		FUNCTION		OPERATORS 14		RESETTING 12		FURTHER DETAILS	
PNV	pneum.		A	Namur	4	4/2	PN	pneum.	S	mechanical spring	OO	5/2
SOV	electro-pneum.				5	5/2	SO	solenoid	B	bistable	NC	normally closed

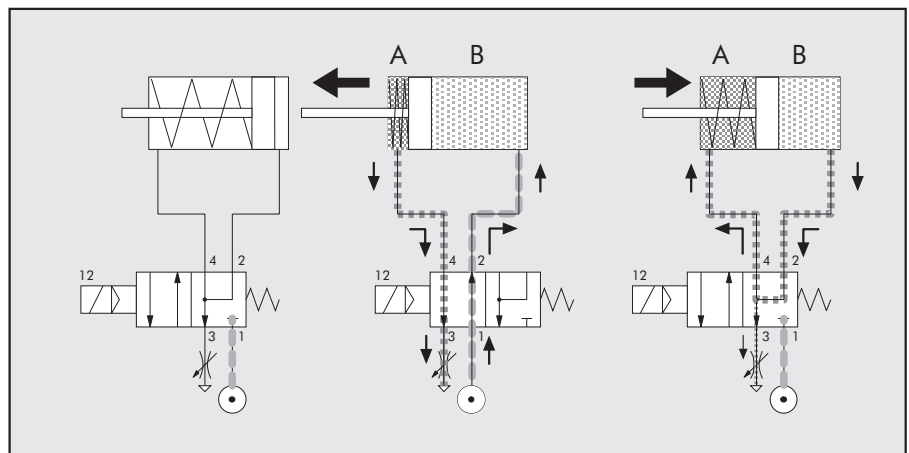
## COMPONENTS

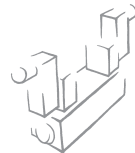
- ① VALVE BODY: Aluminium
- ② CONTROL/BASE: HOSTAFORM®
- ③ SPOOL: chemically nickel-plated aluminium
- ④ DISTANCE PLATES: plastic
- ⑤ GASKETS: NBR nitrile rubber
- ⑥ PISTONS: HOSTAFORM®
- ⑦ PISTON GASKET: NBR nitrile rubber
- ⑧ INTERFACE GASKETS: NBR nitrile rubber
- ⑨ SPRINGS: special steel
- ⑩ OPERATOR: Brass pipe – Stainless steel core



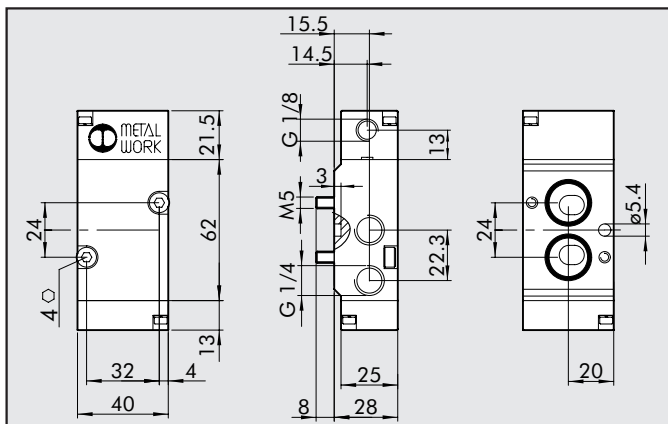
## FUNCTIONING DIAGRAM 4/2 NAMUR VALVE

During the piston retraction stage, the air for chamber A is taken from the air leaving chamber B. This prevents the dirty air from getting in from the outside environment.



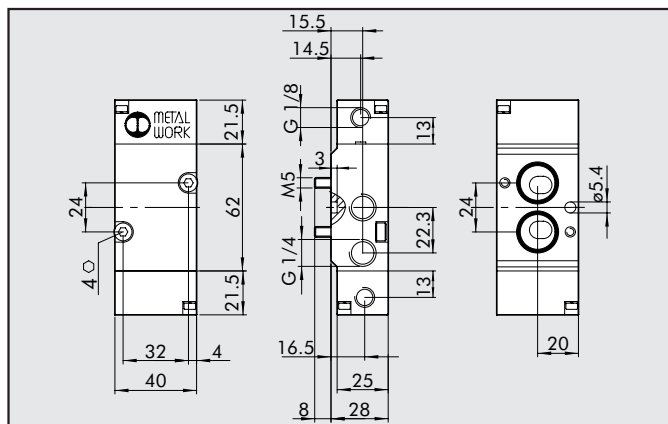


### MONOSTABLE, PNEUMATIC 4/2



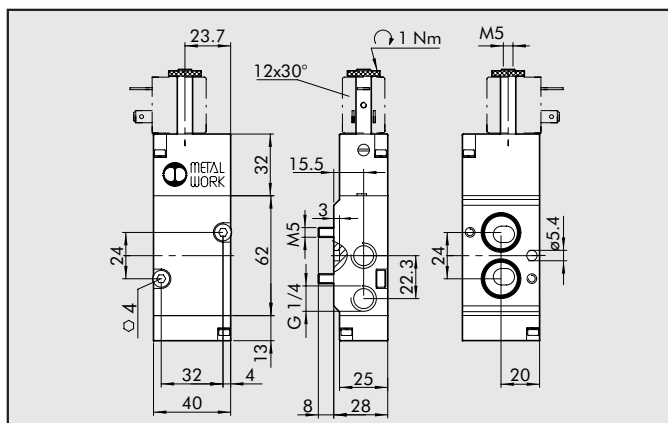
Symbol	Abbrev.	Code	Weight [g]
	PNV A4 PNS NC	7021010110	208

### BISTABLE, PNEUMATIC 4/2



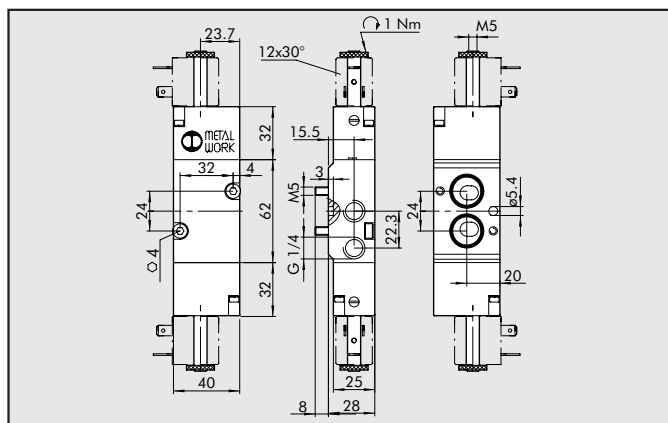
Symbol	Abbrev.	Code	Weight [g]
	PNV A4 PNB OO	7021010210	216

### MONOSTABLE, SOLENOID/PNEUMATIC 4/2



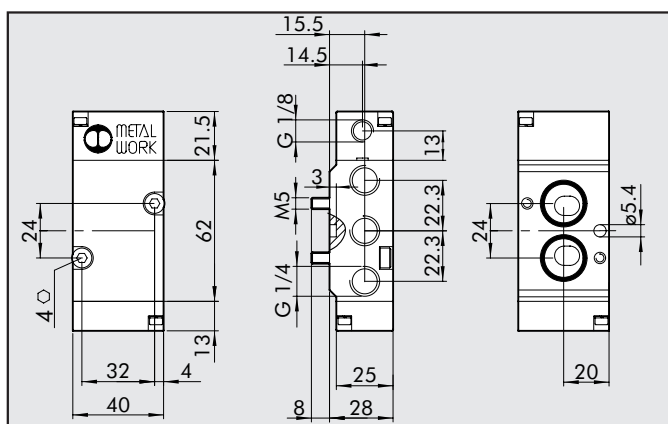
Symbol	Abbrev.	Code	Weight [g]
	SOV A4 SOS NC	7021020110	234

### BISTABLE, SOLENOID/PNEUMATIC 4/2



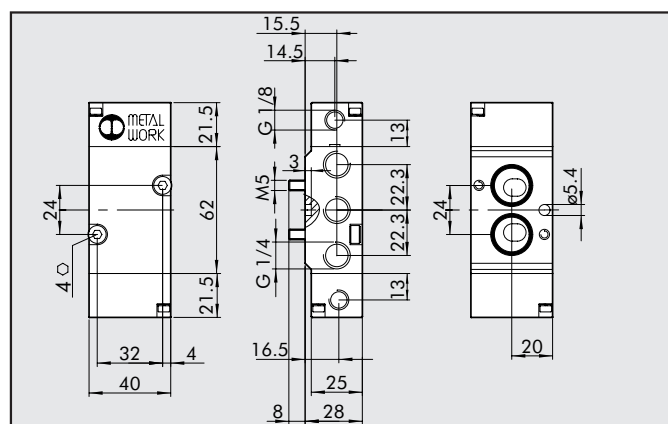
Symbol	Abbrev.	Code	Weight [g]
	SOV A4 SOB OO	7021020210	270

### MONOSTABLE, PNEUMATIC 5/2



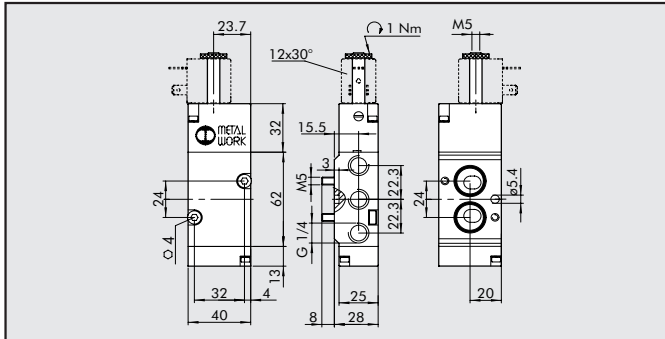
Symbol	Abbrev.	Code	Weight [g]
	PNV A5 PNS OO	7021010100	208


### BISTABLE, PNEUMATIC 5/2



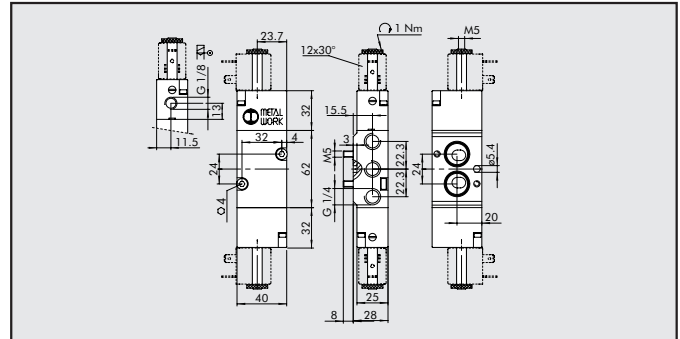
Symbol	Abbrev.	Code	Weight [g]
	PNV A5 PNB OO	7021010200	216


### MONOSTABLE, SOLENOID/PNEUMATIC 5/2



Symbol	Abbrev.	Code	Weight [g]
	SOV A5 SOS OO	7021020100	234

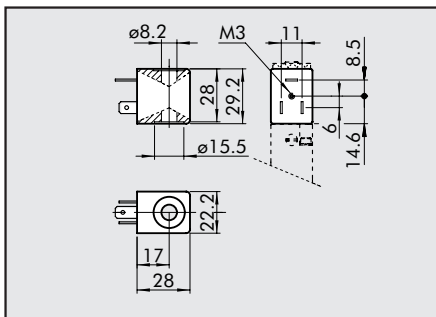
### BISTABLE, SOLENOID/PNEUMATIC 5/2



Symbol	Abbrev.	Code	Weight [g]
	SOV A5 SOB OO	7021020200	270

## ACCESSORIES: NAMUR VALVES

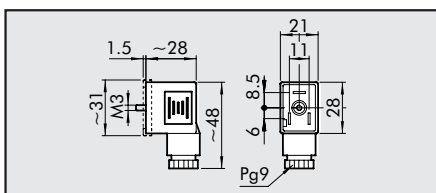
### COILS



- Voltage tolerance: -10% + 15%
- Insulation class: F155
- Degree of protection: IP65 DIN 40050 with connector
- Avoid prolonged exposure to atmospheric agents
- Coil temperature 100% ED: from 70°C to 20°C – Ambient temperature
- According to Atex 94/9 CE rule, group 2, category 3 GD

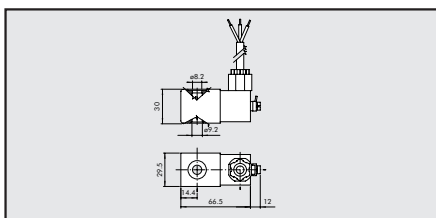
Nominal voltage	Absorption		Abbrev.	Code
	Inrush	Holding		
12Vcc	2W	2W	Coil 22 Ø8 BA 2W-12VDC	W0215000151
24Vcc	2W	2W	Coil 22 Ø8 BA 2W-24VDC	W0215000101
24V 50/60Hz	5.3VA	3.5VA	Coil 22 Ø8 BA 3.5VA-24VAC	W0215000111
110V 50/60Hz	5.3VA	3.5VA	Coil 22 Ø8 BA 3.5VA-110VAC	W0215000121
220V 50/60Hz	5.3VA	3.5VA	Coil 22 Ø8 BA 3.5VA-220VAC	W0215000131

### COIL CONNECTORS



Colour	Ø Cable	Type	Code
Black	PG9	Standard	W 097051 0011
Transparent	PG9	LED 24V	W 097051 0012
Transparent	PG9	LED 110V	W 097051 0013
Transparent	PG9	LED 220V	W 097051 0014
Transparent	PG9	LED + VDR 24V	W 097051 0015
Transparent	PG9	LED + VDR 110V	W 097051 0016
Transparent	PG9	LED + VDR 220V	W 097051 0017

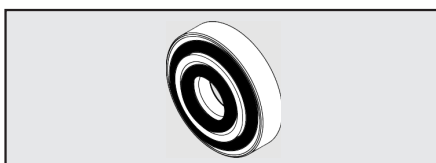
### KIT COIL EEXM



Code	Description
0227606913	KIT FOR COIL 30 24 VDC EEXMT5 CABLE 3M
0227606915	KIT FOR COIL 30 24 VDC EEXMT5 CABLE 5M
0227608013	KIT FOR COIL 30 24 VAC EEXMT5 CABLE 3M
0227608015	KIT FOR COIL 30 24 VAC EEXMT5 CABLE 5M
0227608023	KIT FOR COIL 30 110 VAC EEXMT5 CABLE 3M
0227608025	KIT FOR COIL 30 110 VAC EEXMT5 CABLE 5M
0227608033	KIT FOR COIL 30 230 VAC EEXMT5 CABLE 3M
0227608035	KIT FOR COIL 30 230 VAC EEXMT5 CABLE 5M

according to Atex 94/9 CE rule,  
group 2, category 2 GD

### KIT COILS SIDE 22 IP65



Code	Description
0222100100	KIT FOR COILS 22 - IP65

Improved IP65 protection, even after prolonged exposure to atmospheric agents.  
Applicable to valves with a technopolymer control.