

# VALVES SERIES 70

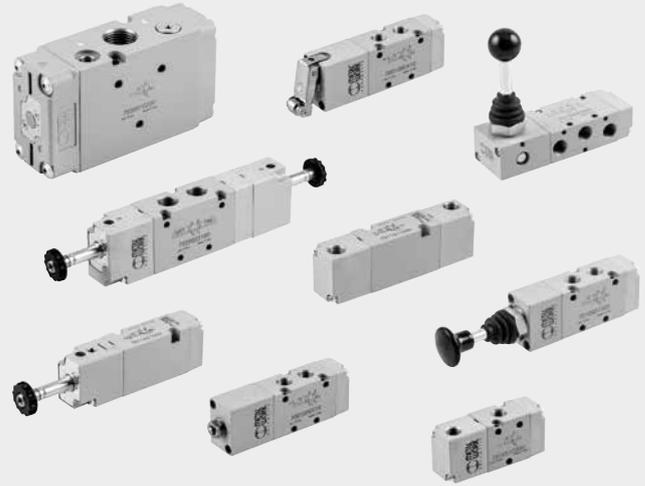
The Series 70 forms part of Metal Work's full range of traditional valves.

They are available in sizes 1/8", 1/4", 3/8" and 1/2", versions 3/2, 5/2, 5/3 and double 3/2, with mechanical, manual, pneumatic and electric drives.

They can be installed in line, onto a wall, on the cylinder (using a special bracket) or in series (on a multiple or modular base) to suit all possible applications.

A range of valves (Series 70 LT) designed using components for specific low-temperature applications is now available for the most commonly used types and sizes.

These highly reliable valves comply with the main applicable standards, including ATEX, ISO 13849 and SIL, as stated in the documents and certificates available online.

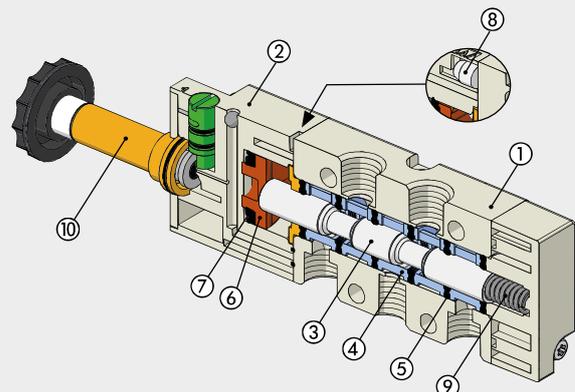


VALVES SERIES 70

TECHNICAL DATA		1/8"	1/4"	3/8"	1/2"
Thread on the valve ports		1/8"	1/4"	3/8"	1/2"
Operating pressure series 70 versions	bar			2.5 to 10	
monostable and bistable differential				1 to 10	
bistable				vacuum to 10	
asserved					
Operating pressure series 70 LT (low temperature) versions	bar				
hand operated		vacuum to 10			-
pneumatic and solenoid/pneumatic	t = -40°C to -10°C	5 to 10			-
	t = -10°C to +60°C	3 to 10			-
Minimum pilot pressure	bar			2.5	
Operating temperature range	°C				
series 70 versions				-10 to +60	
series 70 LT (low temperature) versions				-40 to +60	
Nominal diameter	mm	5	7.5	13.3	15
Conductance C	Nl/min · bar	121.43	264.26	505.52	971.43
Critical ratio b	bar/bar	0.32	0.27	0.32	0.43
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	400	750	1560	3200
Flow rate at 6 bar ΔP 1 bar	Nl/min	550	1100	2150	4600
Installation		In any position (vertical assembly is not recommended for bistable valves subjected to vibration)			
Fluid		Filtered air without lubrication; lubrication, if used, must be continuous.			
Recommended lubricant		<b>For series 70 LT (low-temperature) versions, it is recommended to use of perfectly dried air.</b> ISO and UNI FD 22			
Maximum coil nut torque	Nm	<b>For series 70 LT (low-temperature) it is not expected to be used with lubricated air.</b> 1			
Compatibility with oils		See chapter Z1			

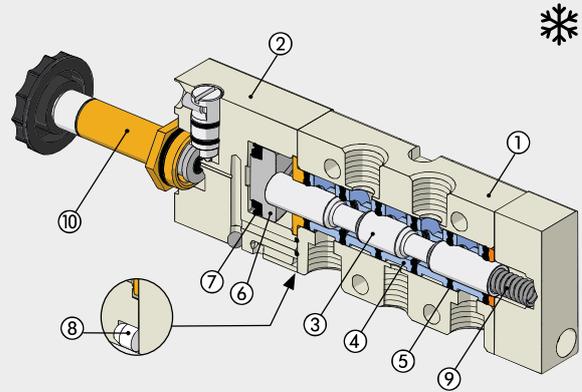
## COMPONENTS SERIES 70

- ① VALVE BODY: Aluminium
- ② CONTROL/END CAP: plastic
- ③ SPOOL: chemically nickel-plated aluminium
- ④ DISTANCE PLATES: plastic
- ⑤ GASKETS: NBR
- ⑥ PISTONS: Hostaform®
- ⑦ PISTON GASKET: NBR
- ⑧ FILTER: plastic
- ⑨ SPRINGS: special steel
- ⑩ OPERATOR: Brass pipe - Stainless steel core



**COMPONENTS SERIES 70 LT (LOW TEMPERATURE)**

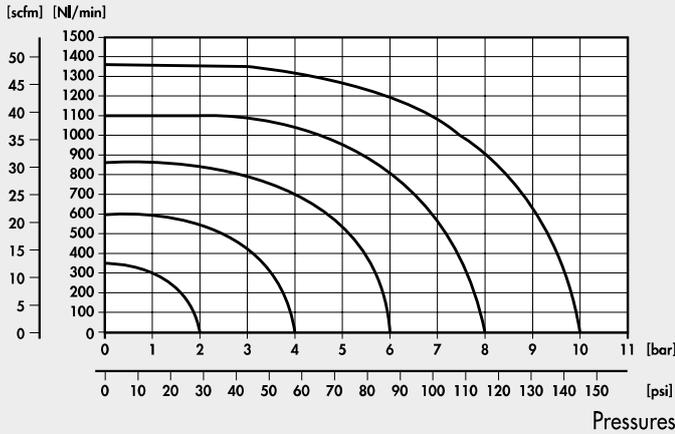
- ① VALVE BODY: aluminium
- ② CONTROL/END CAP: aluminium
- ③ SPOOL: chemically nickel-plated aluminium
- ④ DISTANCE PLATES: plastic
- ⑤ GASKETS: HNBR
- ⑥ PISTONS: aluminium
- ⑦ PISTON GASKET: HNBR
- ⑧ FILTER: plastic
- ⑨ SPRINGS: special steel
- ⑩ OPERATOR: brass pipe - Stainless steel core (version specific for low-temperature applications)



**FLOW CHARTS**

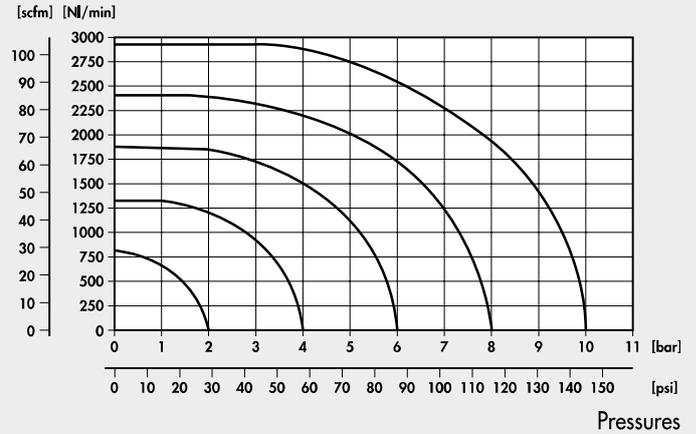
**VALVES SERIES 70 1/8"**

Flow rates



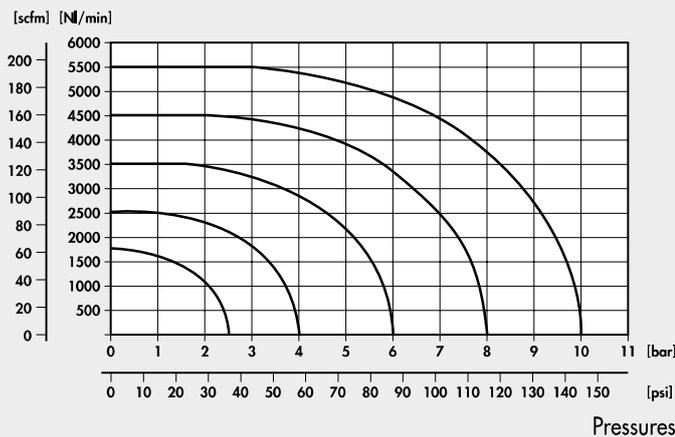
**VALVES SERIES 70 1/4"**

Flow rates



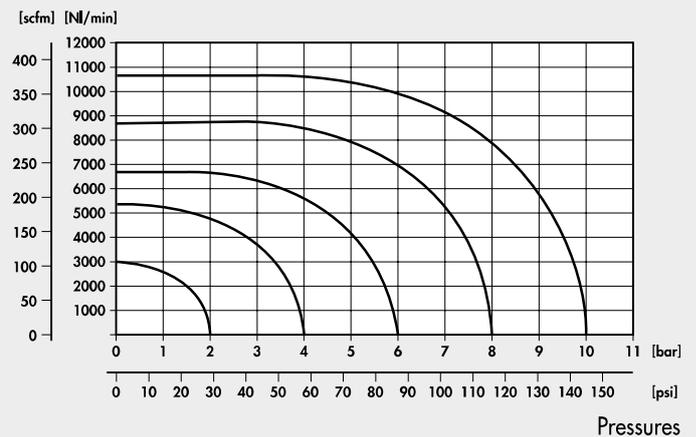
**VALVES SERIES 70 3/8"**

Flow rates



**VALVES SERIES 70 1/2"**

Flow rates



# VALVES SERIES 70, HAND OPERATED

### TECHNICAL DATA

		1/8"	1/4"	1/2"
Operating pressure range:		Vacuum to 10		
• version with direct control	bar	2.5 to 10		
• pilot-assisted version	bar	-10 to +60		
Operating temperature range	°C	-10 to +60		
Nominal diameter	mm	5	7.5	15
Conductance C	NI/min · bar	121.43	264.26	971.43
Critical ratio b	bar/bar	0.32	0.27	0.43
Flow rate at 6 bar ΔP 0.5 bar	NI/min	400	750	3200
Flow rate at 6 bar ΔP 1 bar	NI/min	550	1100	4600



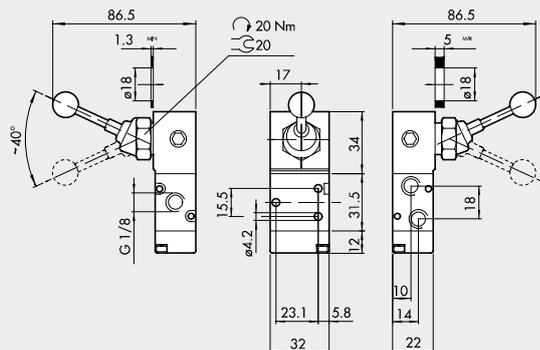
### SYNOPTIC, SIZES AND VERSIONS

M A V	2	3	PP	S	N C
FAMILY	DIMENSIONS	FUNCTION	OPERATORS 14	RESETTING (12)	FURTHER DETAILS
MAV manual valves	2 1/8"	3 3/2	PP drawer	A pneumatic/mechanical springs*	NC normally closed
	3 1/4"	5 5/2	VL axial lever	S mechanical springs	NO normally open
	4 1/2"	6 5/3	LE 90° lever	B bistable	OO no indication
		8 2 x 3/2	BRE arranged for manual panel actuators	D differential	CC closed centres
				O stable for 5/3	OC open centres
					PC pressure centres

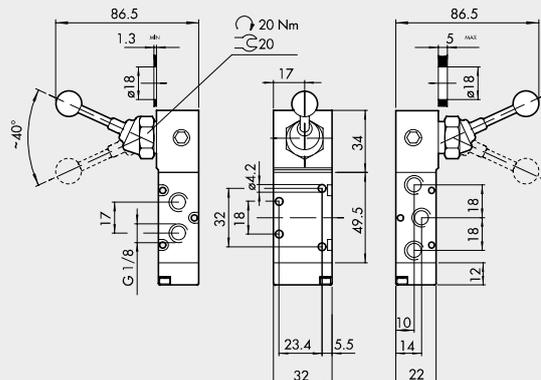
\*on demand

## VALVES SERIES 70, HAND OPERATED, 1/8"

### 90° LEVER 3/2 1/8"



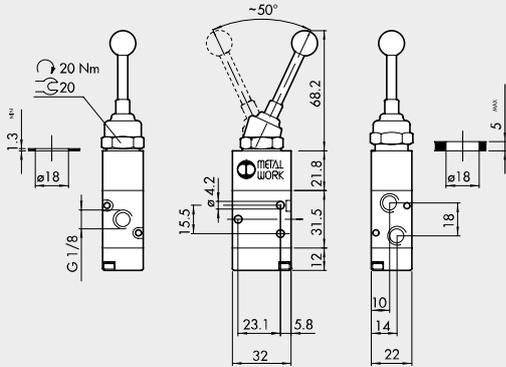
### 90° LEVER 5/2 1/8"



Symbol	Code	Abbrev.	Weight [g]
	7010000100	MAV 23 LES NC	168
	7010000200	MAV 23 LEB OO	171

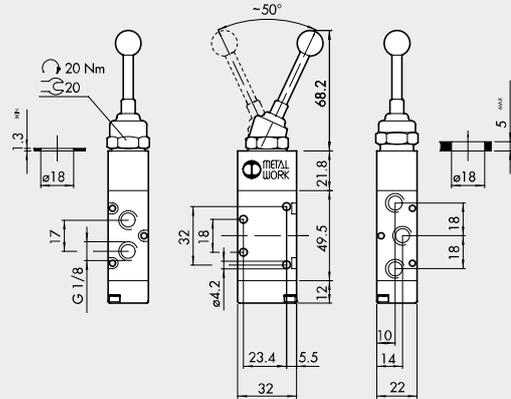
Symbol	Code	Abbrev.	Weight [g]
	7010000300	MAV 25 LES OO	194
	7010000400	MAV 25 LEB OO	197

**FRONT LEVER 3/2, 1/8"**



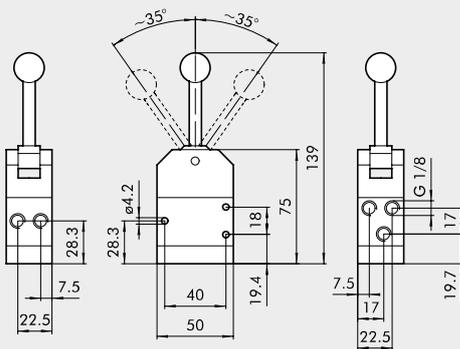
Symbol	Code	Abbrev.	Weight [g]
	7010001400	MAV 23 VLB OO	130

**FRONT LEVER 5/2, 1/8"**



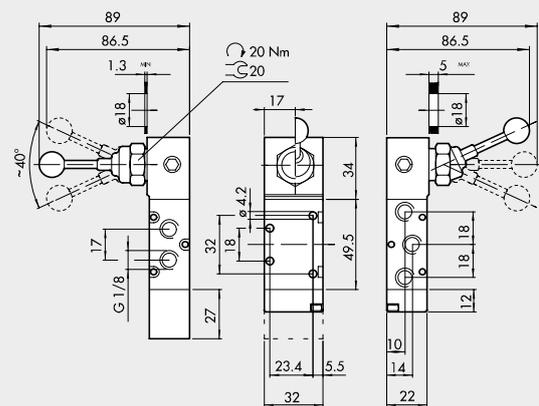
Symbol	Code	Abbrev.	Weight [g]
	7010001700	MAV 25 VLB OO	156

**FRONT LEVER 5/3, 1/8"**



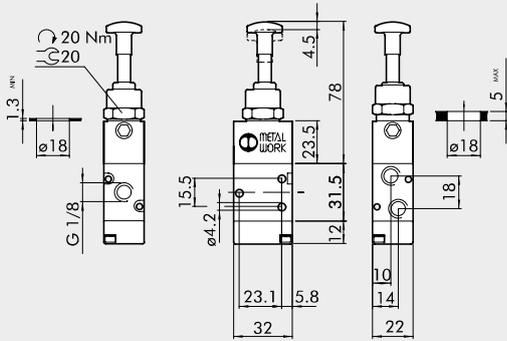
Symbol	Code	Abbrev.	Weight [g]
	7010001150	MAV 28 VLO OC	316
	7010001160	MAV 28 VLS OC	325

**90° LEVER 5/3, 1/8"**



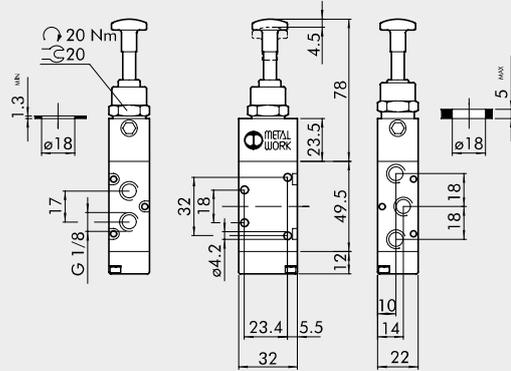
Symbol	Code	Abbrev.	Weight [g]
	7010001000	MAV 26 LES CC	242
	7010000900	MAV 26 LES OC	242
	7010001100	MAV 26 LES PC	242
	7010000500	MAV 26 LEO CC	194
	7010000600	MAV 26 LEO OC	194
	7010000700	MAV 26 LEO PC	194

**DRAWER 3/2, 1/8"**



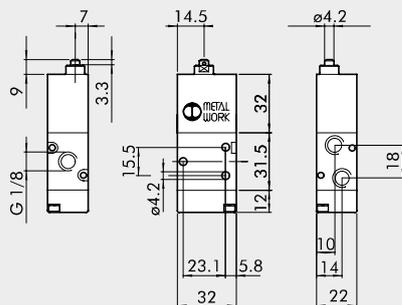
Symbol	Code	Abbrev.	Weight [g]
	7010001300	MAV 23 PPB OO	134
	7010001200	MAV 23 PPS NC	134

**DRAWER 5/2, 1/8"**



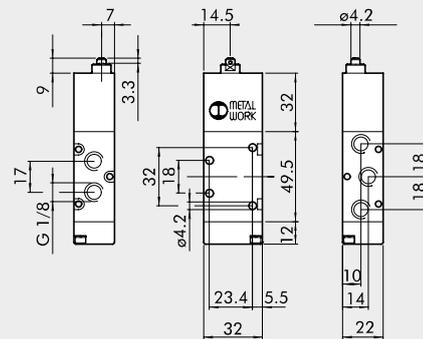
Symbol	Code	Abbrev.	Weight [g]
	7010001600	MAV 25 PPB OO	160
	7010001500	MAV 25 PPS OO	160

**PILOT-ASSISTED PLUNGER 3/2 1/8" FOR PANEL ACTUATORS**



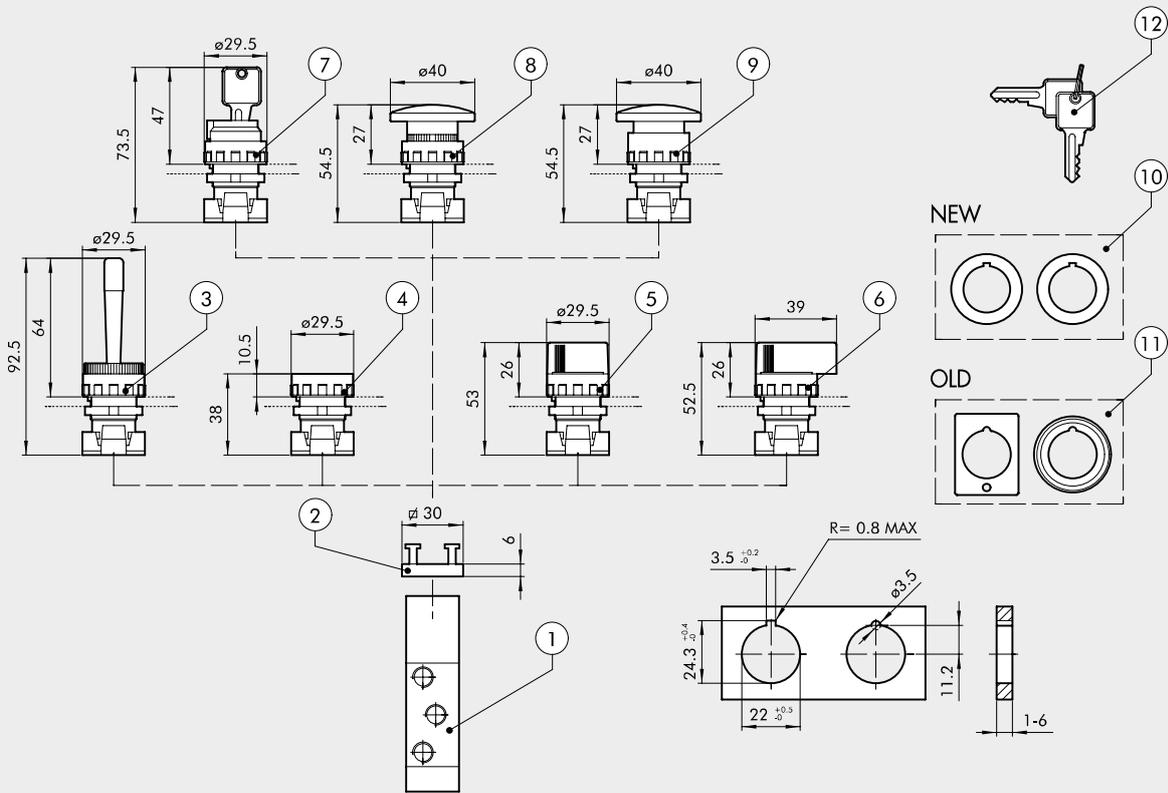
Symbol	Code	Abbrev.	Weight [g]
	7010001800	MAV 23 BRE NC	124

**PILOT-ASSISTED PLUNGER 5/2 1/8" FOR PANEL ACTUATORS**



Symbol	Code	Abbrev.	Weight [g]
	7010001900	MAV 25 BRE OO	150

ASSEMBLY DIAGRAM FOR PILOT-ASSISTED HAND-OPERATED VALVES SERIES 70 WITH PANEL ACTUATORS



VALVES  
VALVES SERIES 70, HAND OPERATED

ORDERING CODES

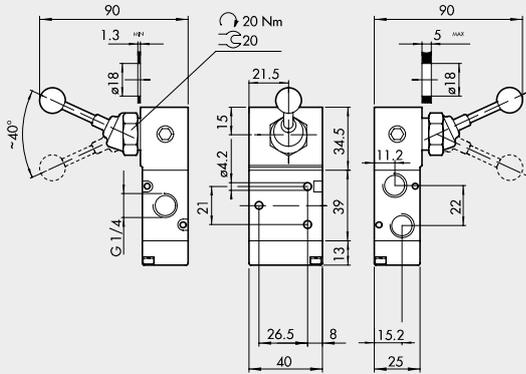
Symbol	Reference	Code	Description	Weight [g]
	①	7010001800	Pilot-assisted plunger 3/2, 1/8"	124
	①	7010001900	Pilot-assisted plunger 5/2, 1/8"	150
	②	0351000050	2 places adaptor thickness 6.8 mm	5
	③	W0351000015	Red handler with horizontally pivoted lever	25
	④	W0351000011	Fat push button + 2 red/black coloured disks ◆ Bistable fat push button without disk	15
	⑤	W0351000030	Black selector short lever at 2 positions with return	20
	⑤	W0351000031	Black selector short lever at 2 positions	20
	⑤	W0351000032	Black selector short lever at 3 positions with return	20
	⑤	W0351000033	Black selector short lever at 3 positions	20
	⑥	W0351000034	Black selector long lever at 2 positions with return	26
	⑥	W0351000035	Black selector long lever at 2 positions	26
	⑥	W0351000036	Black selector long lever at 3 positions with return	26
	⑥	W0351000037	Black selector long lever at 3 positions	26
	⑦	W0351000016	2 positions key selector with extractable key in 2 positions	50
	⑦	W0351000018	2 positions key selector with extractable key in 0	50
	⑧	W0351000013	Red mushroom-head push button Ø 40	27
	⑧	W0351000017	Black mushroom-head push button Ø 40	27
	⑨	W0351000014	Red mushroom-head push button with lock Ø 40	29
◆ It can't be supplied. As working replaced by selector with bistable short lever at 2 positions ⑤.	⑩	W0351000049	◆ Reducer from 30 to 22.5 mm	
✦ Usable only with technopolymer body selectors.	⑪	W0351000050	▲ Adapter for bore Ø 30 G2326	
▲ Usable only with metal body selectors.	⑫	W0351000021	✦ Key for ESC selectors	
		W0351000056	Green disk for push button ④	

# VALVES SERIES 70, HAND-OPERATED, 1/4"

VALVES

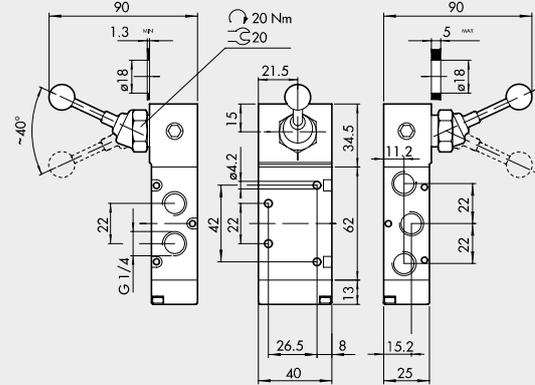
VALVES SERIES 70, HAND OPERATED

## 90° LEVER 3/2, 1/4"



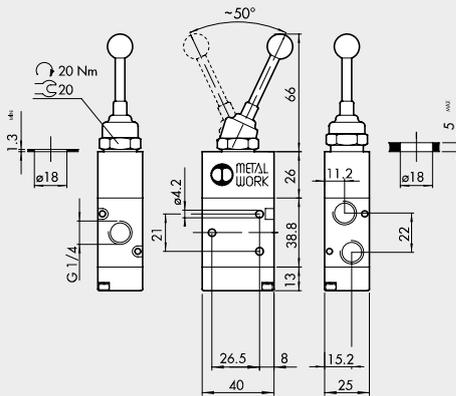
Symbol	Code	Abbrev.	Weight [g]
	7020000100	MAV 33 LES NC	244
	7020000200	MAV 33 LEB OO	244

## 90° LEVER 5/2, 1/4"



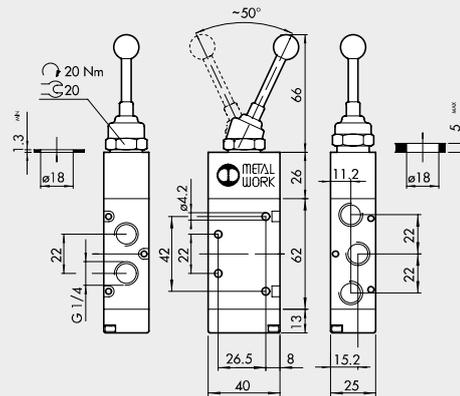
Symbol	Code	Abbrev.	Weight [g]
	7020000300	MAV 35 LES OO	290
	7020000400	MAV 35 LEB OO	290

## FRONT LEVER 3/2, 1/4"



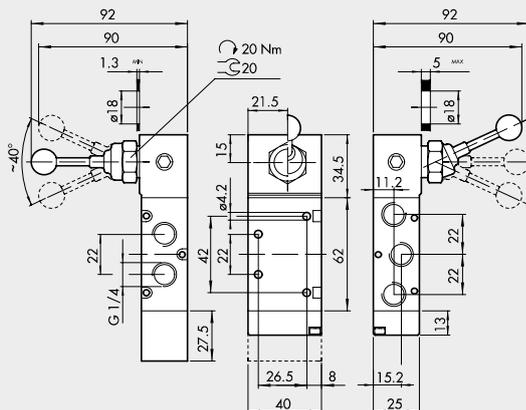
Symbol	Code	Abbrev.	Weight [g]
	7020001400	MAV 33 VLB OO	194

## FRONT LEVER 5/2, 1/4"



Symbol	Code	Abbrev.	Weight [g]
	7020001700	MAV 35 VLB OO	244

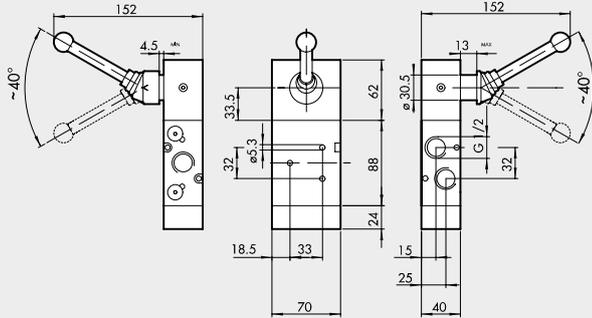
## 90° LEVER 5/3, 1/4"



Symbol	Code	Abbrev.	Weight [g]
	7020001000	MAV 36 LES CC	354
	7020000900	MAV 36 LES OC	354
	7020001100	MAV 36 LES PC	354
	7020000500	MAV 36 LEO CC	288
	7020000600	MAV 36 LEO OC	288
	7020000700	MAV 36 LEO PC	288

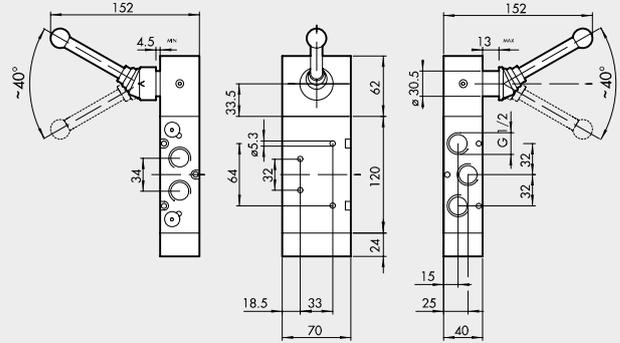
**VALVES SERIES 70, HAND OPERATED, 1/2"**

**90° LEVER 3/2, 1/2"**



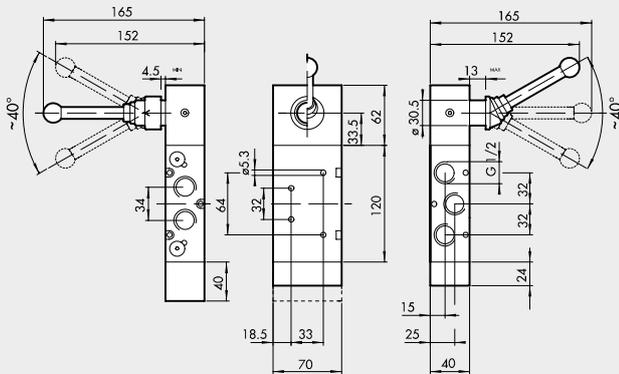
Symbol	Code	Abbrev.	Weight [g]
	7030000100	MAV 43 LES NC	1443
	7030000200	MAV 43 LEB OO	1435

**90° LEVER 5/2, 1/2"**



Symbol	Code	Abbrev.	Weight [g]
	7030000300	MAV 45 LES OO	1588
	7030000400	MAV 45 LEB OO	1630

**90° LEVER 5/3, 1/2"**



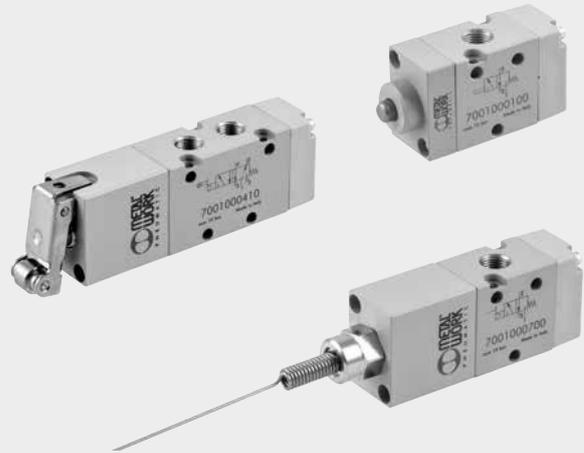
Symbol	Code	Abbrev.	Weight [g]
	7030001000	MAV 46 LES CC	1810
	7030000900	MAV 46 LES OC	1800
	7030001100	MAV 46 LES PC	1800
	7030000500	MAV 46 LEO CC	1615
	7030000600	MAV 46 LEO OC	1605
	7030000700	MAV 46 LEO PC	1605

**NOTES**

# VALVES SERIES 70, MECHANICALLY OPERATED, 1/8"

### TECHNICAL DATA

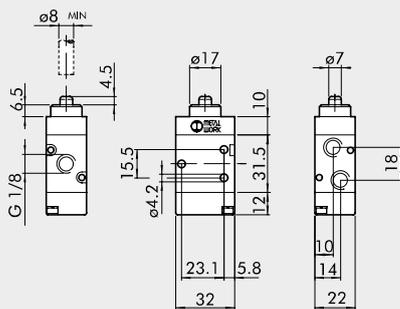
Thread at valve ports		1/8"
Operation force at 6 bar:		
• version with direct control	N	50
• pilot-assisted version	N	6
Operating pressure:		
• version with direct control	bar	Vacuum to 10
• pilot-assisted version	bar	2.5 to 10
Operating temperature range	°C	-10 to +60
Nominal diameter	mm	5
Conductance C	Nl/min · bar	121.43
Critical ratio b	bar/bar	0.32
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	400
Flow rate at 6 bar ΔP 1 bar	Nl/min	550



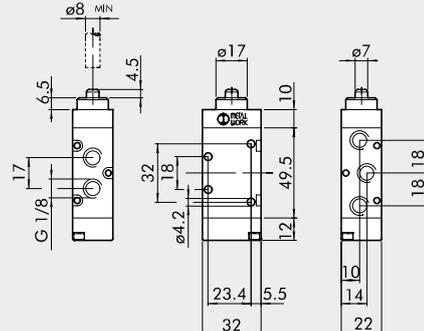
### SYNOPTIC, SIZES AND VERSIONS

M E V	2	3	T A	S	N C
FAMILY	DIMENSIONS	FUNCTION	OPERATORS 14	RESETTING (12)	FURTHER DETAILS
MEV mechanically-operated valves	2 1/8"	3 3/2 5 5/2	TA plunger BR bidirectional roller UR unidirectional roller TS sensitive plunger RS sensitive roller AS sensitive aerial LL frontal roller lever	S mechanical springs A pneumatic/mechanical spring*  *on demand	NC normally closed OO no indication

### PLUNGER 3/2, 1/8"



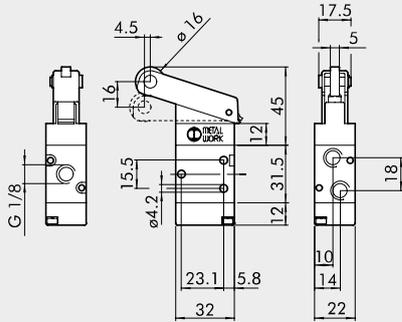
### PLUNGER 5/2, 1/8"



Symbol	Code	Abbrev.	Weight [g]
	7001000100	MEV 23 TAS NC	88

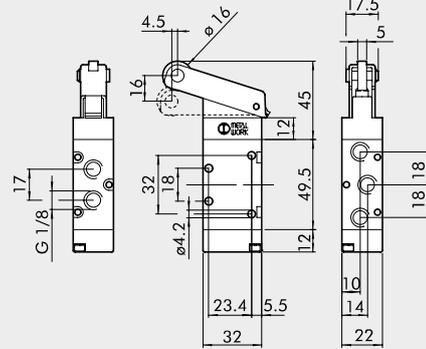
Symbol	Code	Abbrev.	Weight [g]
	7001000110	MEV 25 TAS OO	114

**ROLLER LEVER 3/2, 1/8"**



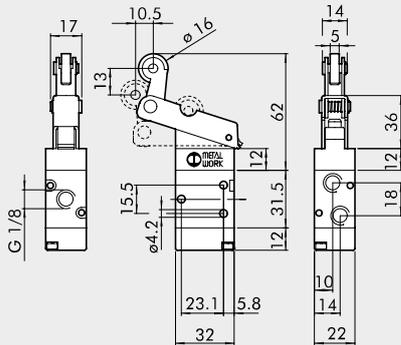
Symbol	Code	Abbrev.	Weight [g]
	7001000500	MEV 23 BRS NC	130

**ROLLER LEVER 5/2, 1/8"**



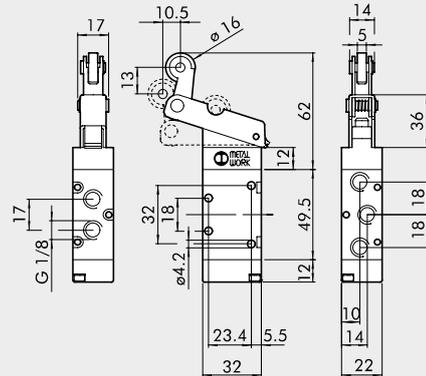
Symbol	Code	Abbrev.	Weight [g]
	7001000510	MEV 25 BRS OO	156

**UNIDIRECTIONAL ROLLER 3/2, 1/8" LEVERS**



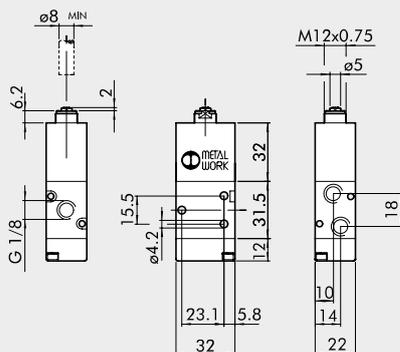
Symbol	Code	Abbrev.	Weight [g]
	7001000600	MEV 23 URS NC	136

**UNIDIRECTIONAL ROLLER 5/2, 1/8" LEVERS**



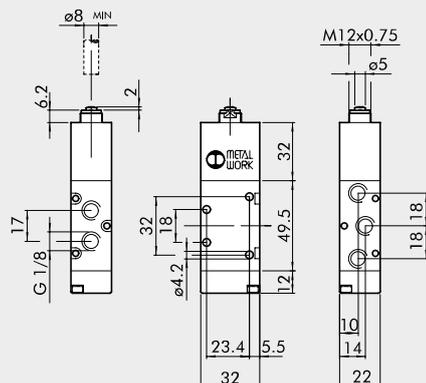
Symbol	Code	Abbrev.	Weight [g]
	7001000610	MEV 25 URS OO	162

**PILOT-ASSISTED PLUNGER 3/2 NC, 1/8"**



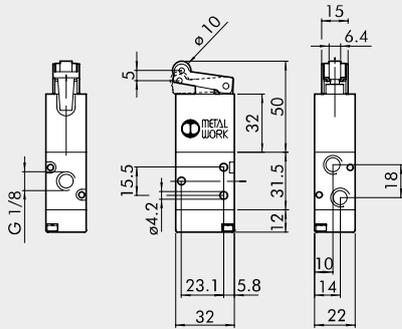
Symbol	Code	Abbrev.	Weight [g]
	7001000200	MEV 23 TSS NC	126

**PILOT-ASSISTED PLUNGER 5/2, 1/8"**



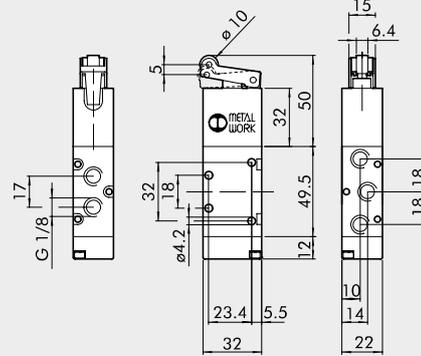
Symbol	Code	Abbrev.	Weight [g]
	7001000210	MEV 25 TSS OO	152

**PILOT-ASSISTED ROLLER LEVER 3/2 NC, 1/8"**



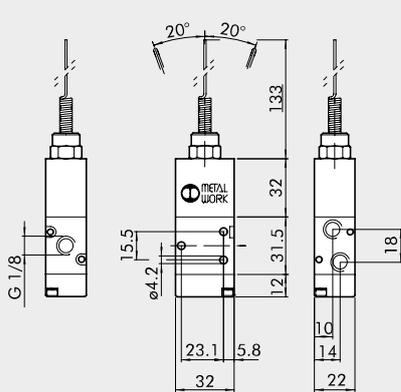
Symbol	Code	Abbrev.	Weight [g]
	7001000400	MEV 23 RSS NC	138

**PILOT-ASSISTED ROLLER LEVER 5/2, 1/8"**



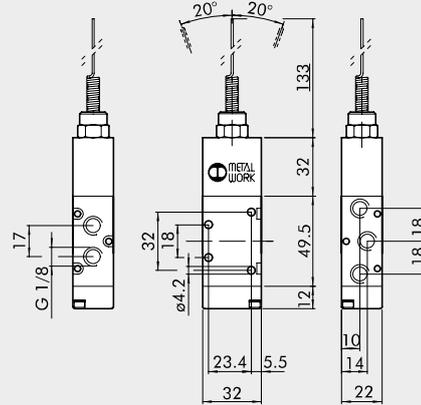
Symbol	Code	Abbrev.	Weight [g]
	7001000410	MEV 25 RSS OO	164

**PILOT-ASSISTED AERIAL 3/2 NC, 1/8"**



Symbol	Code	Abbrev.	Weight [g]
	7001000700	MEV 23 ASS NC	142

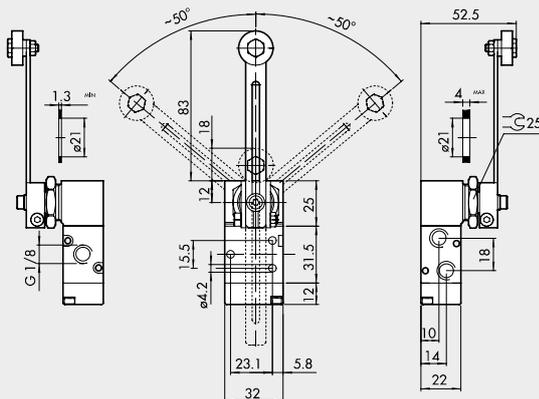
**PILOT-ASSISTED AERIAL 5/2 NC, 1/8"**



Symbol	Code	Abbrev.	Weight [g]
	7001000710	MEV 25 ASS OO	168

**ROLLER-LEVER 3/2 1/8"**

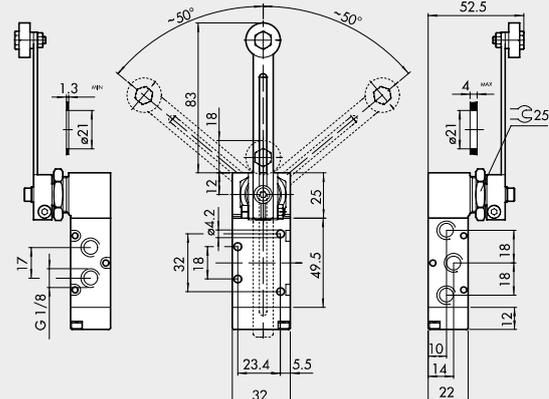
Operating torque: 0.5 Nm



Symbol	Code	Abbrev.	Weight [g]
	7001000900	MEV 23 LLS NC	189

**ROLLER-LEVER 5/2 1/8"**

Operating torque: 0.5 Nm



Symbol	Code	Abbrev.	Weight [g]
	7001000910	MEV 25 LLS OO	216

## VALVES SERIES 70, PNEUMATIC

TECHNICAL DATA		1/8"	1/4"	3/8"	1/2"
Operating pressure	bar	Vacuum to 10			
Minimum pilot pressure					
• monostable and bistable differential	bar	2.5			
• bistable	bar	1			
Operating temperature range	°C	-10 to +60			
Nominal diameter	mm	5	7.5	13.3	15
Conductance C	Nl/min · bar	121.43	264.26	505.52	971.43
Critical ratio b	bar/bar	0.32	0.27	0.32	0.43
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	400	750	1560	3200
Flow rate at 6 bar ΔP 1 bar	Nl/min	550	1100	2150	4600
TRA / TRR monostable at 6 bar	ms	6/15	7/15	5/28	16/80
TRA / TRR bistable at 6 bar	ms	7/7	7/7	13/13	25/25



VALVES SERIES 70, PNEUMATIC

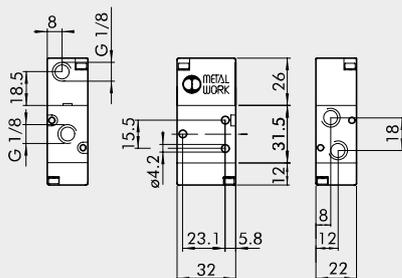
### SYNOPTIC, SIZES AND VERSIONS

P N V FAMILY	2 DIMENSIONS	3 FUNCTION	P N OPERATORS 14	S RESETTING (12)	N C FURTHER DETAILS
PNV pneumatic valves	2 1/8" 3 1/4" C 3/8" 4 1/2"	3 3/2 5 5/2 6 5/3 ■ 8 2-3/2	PN pneumatic	S mechanical springs B bistable D differential O stable for 5/3 ◆ A pneumatic/mechanical spring	OO no indication NC normally closed NO normally open CC closed centres OC open centres PC pressure centres ▲ NC-NO normally closed - normally open

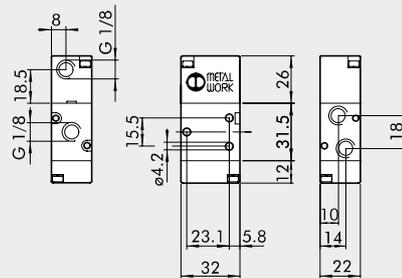
- Only available for size 1/8" and 1/4"
- ◆ On demand
- ▲ Only available for function 2-3/2

### VALVES SERIES 70, PNEUMATIC, 1/8"

#### MONOSTABLE 3/2 NO, 1/8"



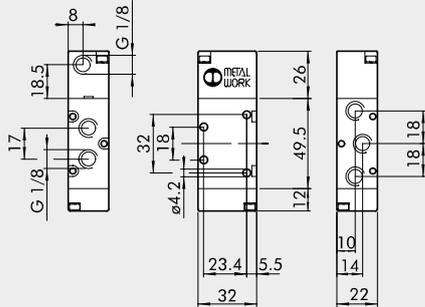
#### MONOSTABLE 3/2 NC, 1/8"



Symbol	Code	Abbrev.	Weight [g]
	7010010400	PNV 23 PNS NO	82

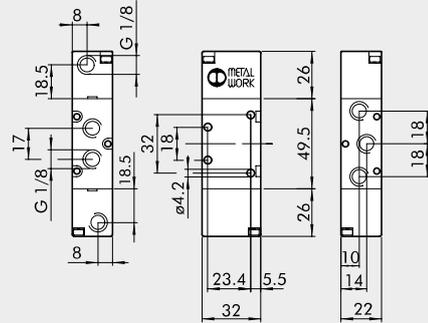
Symbol	Code	Abbrev.	Weight [g]
	7010010200	PNV 23 PNS NC	82

MONOSTABLE 5/2, 1/8"



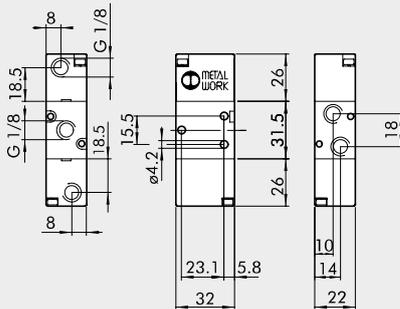
Symbol	Code	Abbrev.	Weight [g]
	7010011100	PNV 25 PNS OO	108

BISTABLE 5/2, 1/8"



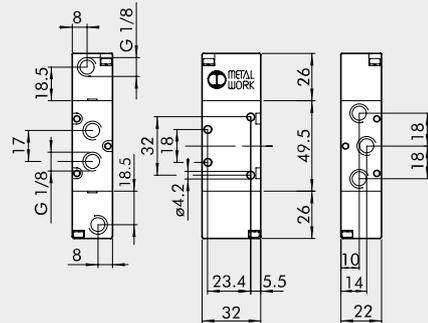
Symbol	Code	Abbrev.	Weight [g]
	7010011200	PNV 25 PNB OO	122
	7010011300	PNV 25 PND OO	128

BISTABLE 3/2, 1/8"



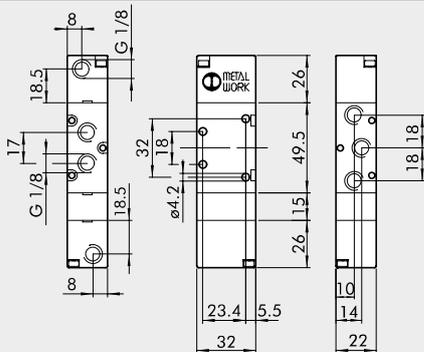
Symbol	Code	Abbrev.	Weight [g]
	7010010100	PNV 23 PNB OO	96

DOUBLE 3/2 1/8"



Symbol	Code	Abbrev.	Weight [g]
	7010013100	PNV 28 PNS NC	136
	7010013200	PNV 28 PNS NO	136
	7010013300	PNV 28 PNS NC-NO	136

MONOSTABLE 5/3, 1/8"

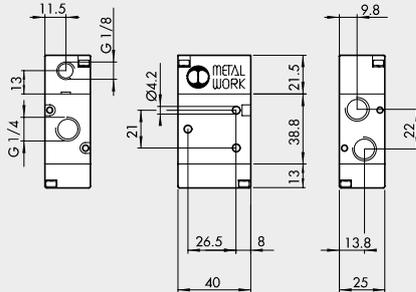


Symbol	Code	Abbrev.	Weight [g]
	7010012100	PNV 26 PNS CC	150
	7010012200	PNV 26 PNS OC	150
	7010012300	PNV 26 PNS PC	150

NOTES

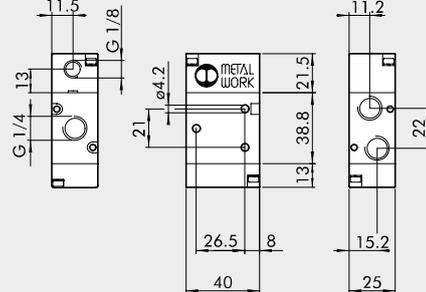
**VALVES SERIES 70, PNEUMATIC, 1/4"**

**MONOSTABLE 3/2 NO, 1/4"**



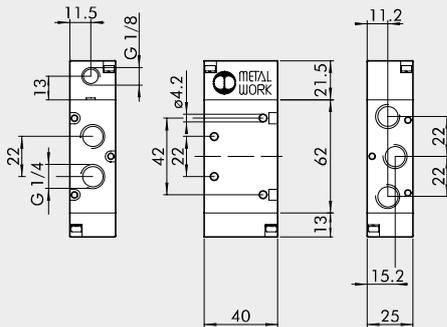
Symbol	Code	Abbrev.	Weight [g]
	7020010400	PNV 33 PNS NO	124

**MONOSTABLE 3/2 NC, 1/4"**



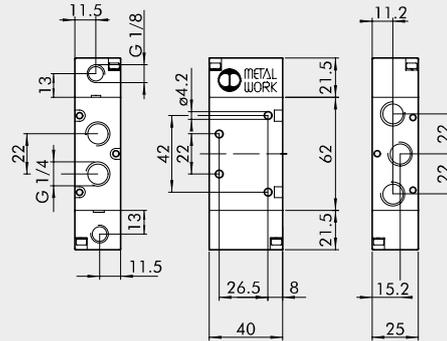
Symbol	Code	Abbrev.	Weight [g]
	7020010200	PNV 33 PNS NC	122

**MONOSTABLE 5/2, 1/4"**



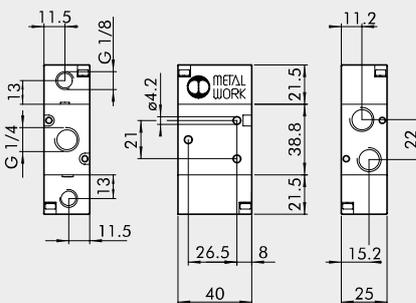
Symbol	Code	Abbrev.	Weight [g]
	7020011100	PNV 35 PNS OO	174

**BISTABLE 5/2, 1/4"**



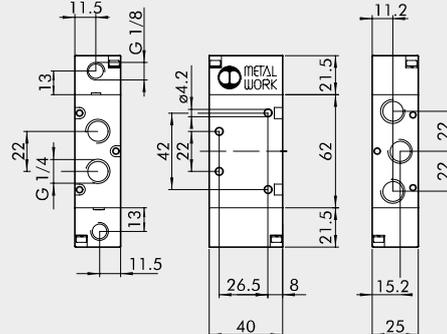
Symbol	Code	Abbrev.	Weight [g]
	7020011200	PNV 35 PNB OO	174
	7020011300	PNV 35 PND OO	198

**BISTABLE 3/2, 1/4"**



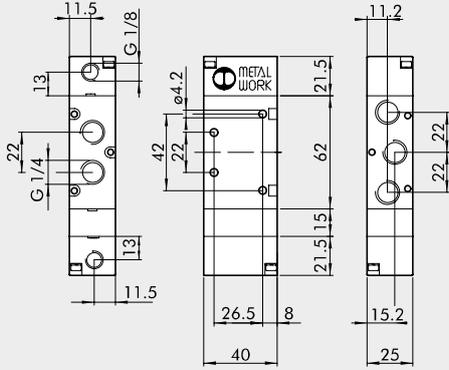
Symbol	Code	Abbrev.	Weight [g]
	7020010100	PNV 33 PNB OO	134

**DOUBLE 3/2, 1/4"**



Symbol	Code	Abbrev.	Weight [g]
	7020013100	PNV 38 PNS NC	223
	7020013200	PNV 38 PNS NO	223
	7020013300	PNV 38 PNS NC-NO	223

MONOSTABLE 5/3, 1/4"

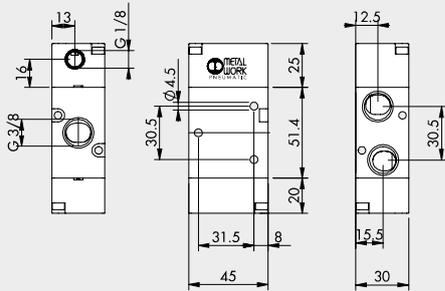


Symbol	Code	Abbrev.	Weight [g]
	7020012100	PNV 36 PNS CC	124
	7020012200	PNV 36 PNS OC	124
	7020012300	PNV 36 PNS PC	124

NOTES

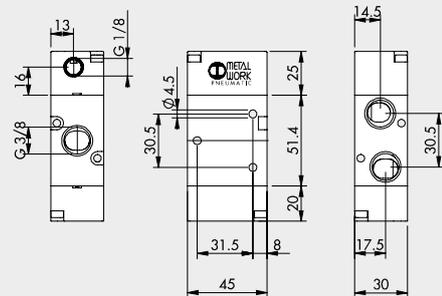
VALVES SERIES 70, PNEUMATIC, 3/8"

MONOSTABLE 3/2 NO, 3/8"



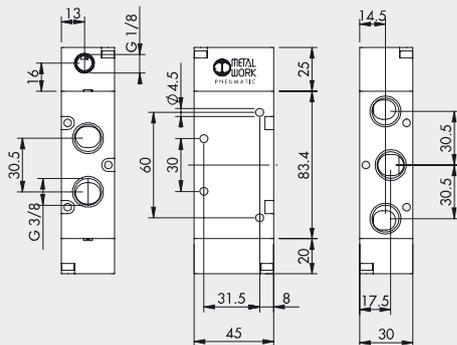
Symbol	Code	Abbrev.	Weight [g]
	7040010400	PNV C3 PNS NO	223

MONOSTABLE 3/2 NC, 3/8"



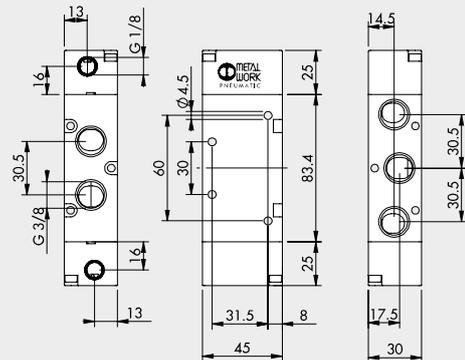
Symbol	Code	Abbrev.	Weight [g]
	7040010200	PNV C3 PNS NC	223

MONOSTABLE 5/2, 3/8"



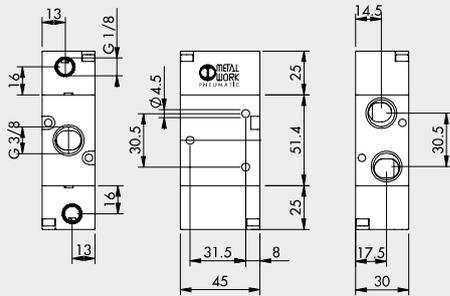
Symbol	Code	Abbrev.	Weight [g]
	7040011100	PNV C5 PNS OO	329

BISTABLE 5/2, 3/8"



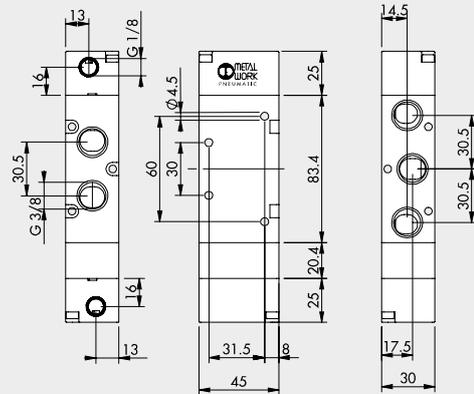
Symbol	Code	Abbrev.	Weight [g]
	7040011200	PNV C5 PNB OO	324
	7040011300	PNV C5 PND OO	360

**BISTABLE 3/2, 3/8"**



Symbol	Code	Abbrev.	Weight [g]
	7040010100	PNV C3 PNB OO	230

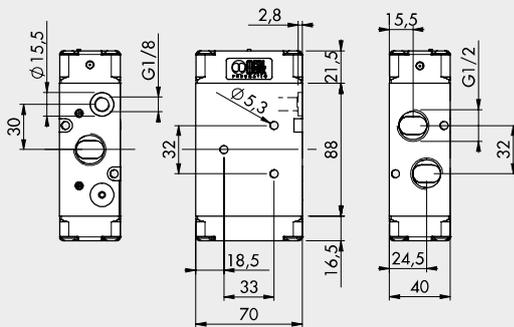
**MONOSTABLE 5/3, 3/8"**



Symbol	Code	Abbrev.	Weight [g]
	7040012100	PNV C6 PNS CC	411
	7040012200	PNV C6 PNS OC	409
	7040012300	PNV C6 PNS PC	409

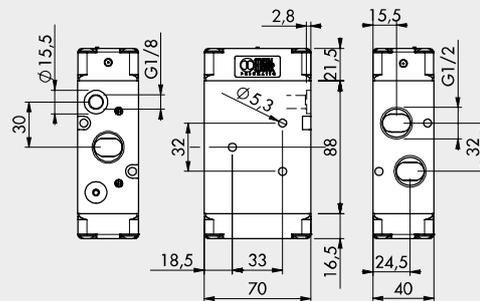
**VALVES SERIES 70, PNEUMATIC, 1/2"**

**MONOSTABLE 3/2 NO, 1/2"**



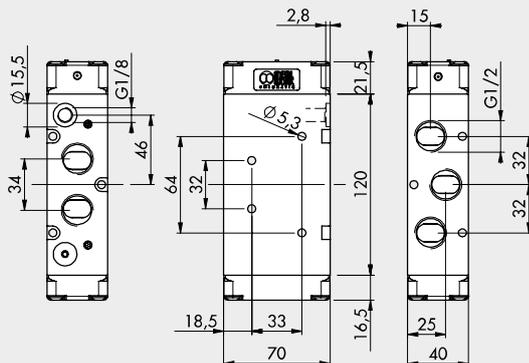
Symbol	Code	Abbrev.	Weight [g]
	7030010400	PNV 43 PNS NO	640

**MONOSTABLE 3/2 NC, 1/2"**



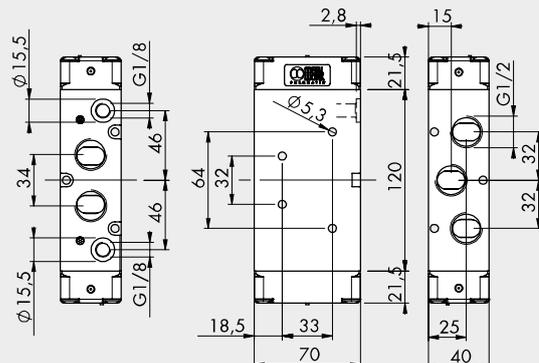
Symbol	Code	Abbrev.	Weight [g]
	7030010200	PNV 43 PNS NC	640

**MONOSTABLE 5/2, 1/2"**



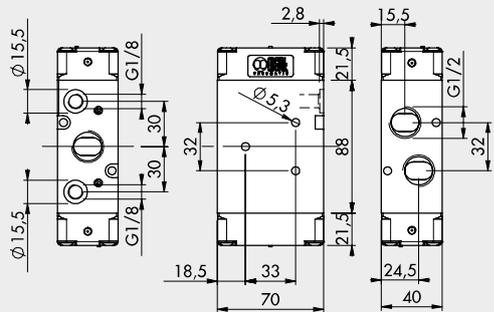
Symbol	Code	Abbrev.	Weight [g]
	7030011100	PNV 45 PNS OO	812

**BISTABLE 5/2, 1/2"**



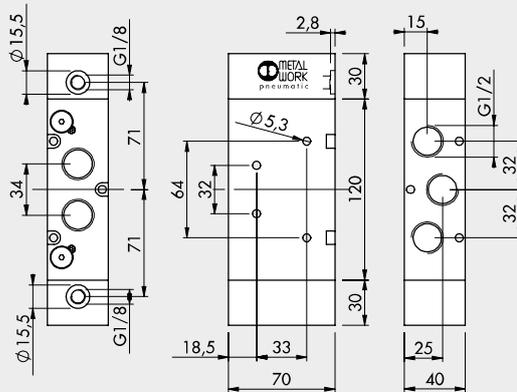
Symbol	Code	Abbrev.	Weight [g]
	7030011200	PNV 45 PNB OO	816
	7030011300	PNV 45 PND OO	828

**BISTABLE 3/2, 1/2"**



Symbol	Code	Abbrev.	Weight [g]
	7030010100	PNV 43 PNB OO	650

**MONOSTABLE 5/3, 1/2"**



Symbol	Code	Abbrev.	Weight [g]
	7030012100	PNV 46 PNS CC	1200
	7030012200	PNV 46 PNS OC	1194
	7030012300	PNV 46 PNS PC	1196

**NOTES**

## VALVES SERIES 70, SOLENOID/PNEUMATIC

TECHNICAL DATA		1/8"	1/4"	3/8"	1/2"
Operating pressure:					
• monostable and bistable differential	bar	2.5 to 10			
• bistable	bar	1 to 10			
• asserved	bar	Vacuum to 10			
Minimum pilot pressure	bar	2.5			
Operating temperature range	°C	-10 to +60			
Nominal diameter	mm	5	7.5	13.3	15
Conductance C	NI/min · bar	121.43	264.26	505.52	971.43
Critical ratio b	bar/bar	0.32	0.27	0.32	0.43
Flow rate at 6 bar ΔP 0.5 bar	NI/min	400	750	1560	3200
Flow rate at 6 bar ΔP 1 bar	NI/min	550	1100	2150	4600
TRA / TRR monostable at 6 bar	ms	15/35	19/45	21/72	36/100
TRA / TRR bistable at 6 bar	ms	20/20	21/21	18/18	25/25
Coil voltage values		12; 24 VDC - 24; 110; 220V AC 50/60Hz			
Power		2 W (DC) 3.5VA (AC)			
Voltage tolerance	%	-10 to +15			
Insulation class		F 155			
Maximum coil nut torque	Nm	1			
Hand operator		Bistable			



VALVES

### SYNOPTIC, SIZES AND VERSIONS

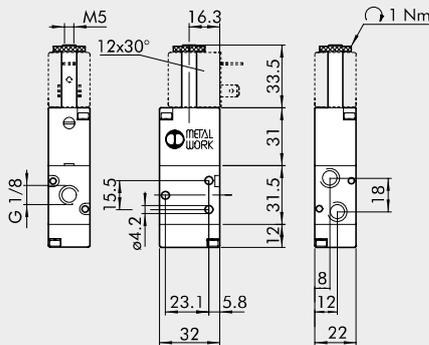
SOV FAMILY	2 DIMENSIONS	3 FUNCTION	SO OPERATORS 14	S RESETTING (12)	NC FURTHER DETAILS
SOV solenoid/ pneumatic	2 1/8"	3 3/2	SO solenoid	S mechanical springs	OO no indication
	3 1/4"	5 5/2	SE solenoid assisted	B bistable	NC normally closed
	C 3/8"	6 5/3		D differential	NO normally open
	4 1/2"	■ 8 2-3/2		P pneumatic	CC closed centres
				◆ A pneumatic/mechanical spring	OC open centres
					PC pressure centres
					▲ NC-NO normally closed - normally open

- Only available for size 1/8" and 1/4"
- ◆ On demand
- ▲ Only available for function 2-3/2

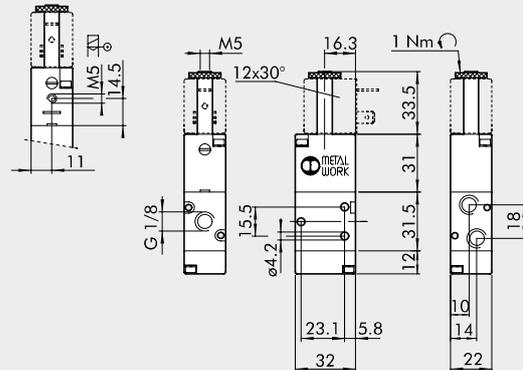
VALVES SERIES 70, PNEUMATIC

## VALVES SERIES 70, SOLENOID/PNEUMATIC, PILOT-ASSISTED SOLENOID/PNEUMATIC, 1/8"

### MONOSTABLE 3/2 NO, 1/8"



### MONOSTABLE 3/2 NC, 1/8"

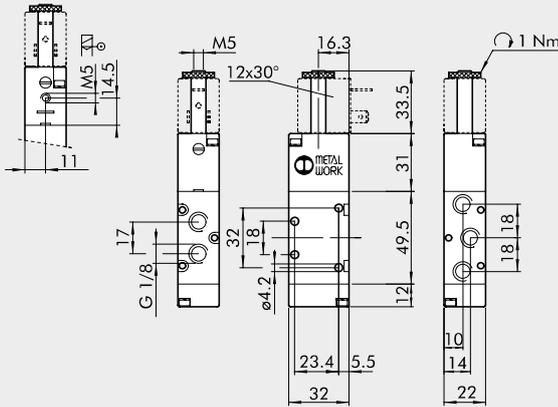


Symbol	Code	Abbrev.	Weight [g]
	7010020400	SOV 23 SOS NO	100

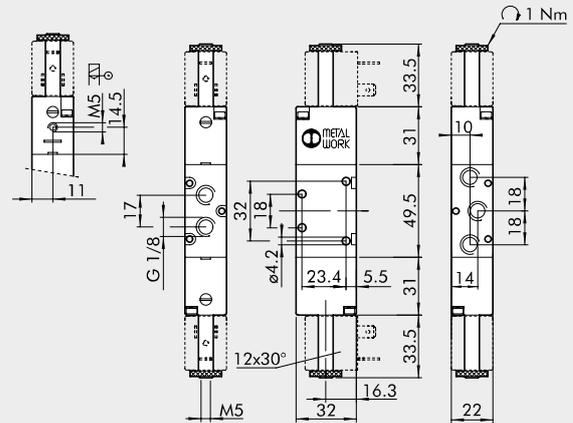
Symbol	Code	Abbrev.	Weight [g]
	7010020200	SOV 23 SOS NC	100

	7010020500	SOV 23 SES NC	100
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MONOSTABLE 5/2, 1/8"



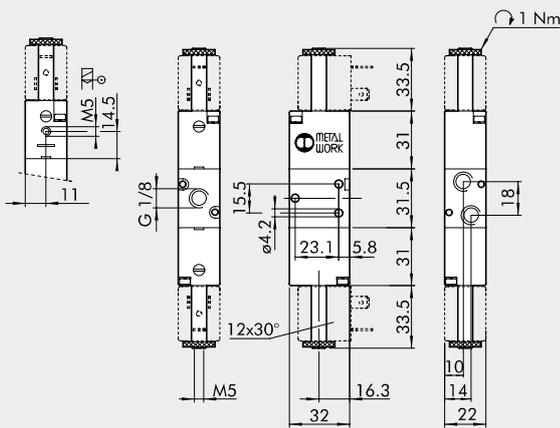
BISTABLE 5/2, 1/8"



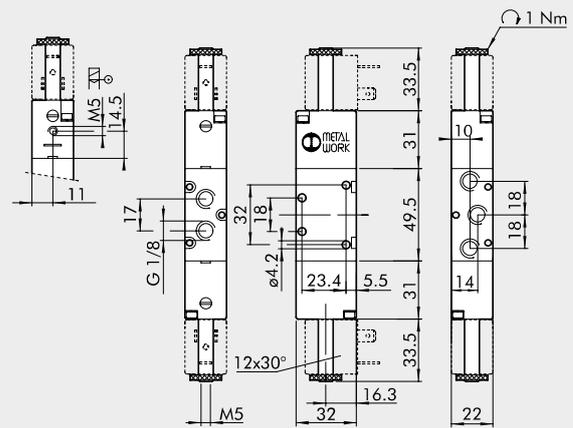
Symbol	Code	Abbrev.	Weight [g]
	7010021100	SOV 25 SOS OO	128
	7010021500	SOV 25 SES OO	129

Symbol	Code	Abbrev.	Weight [g]
	7010021200	SOV 25 SOB OO	160
	7010021300	SOV 25 SOD OO	166
	7010021600	SOV 25 SEB OO	160

BISTABLE 3/2, 1/8"



DOUBLE 3/2, 1/8"

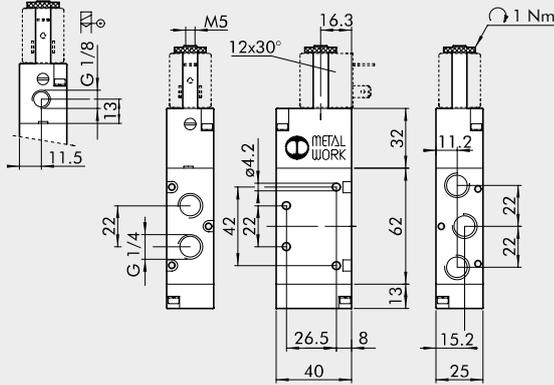


Symbol	Code	Abbrev.	Weight [g]
	7010020100	SOV 23 SOB OO	135
	7010020300	SOV 23 SEB OO	136

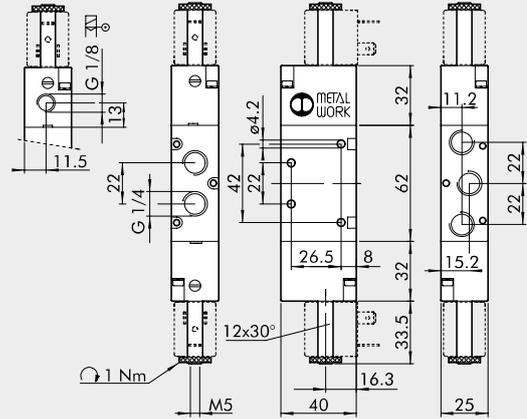
Symbol	Code	Abbrev.	Weight [g]
	7010023100	SOV 28 SOS NC	186
	7010023200	SOV 28 SOS NO	186
	7010023300	SOV 28 SOS NC-NO	186
	7010023400	SOV 28 SES NC	186
	7010023500	SOV 28 SES NO	186
	7010023600	SOV 28 SES NC-NO	186



MONOSTABLE 5/2, 1/4"



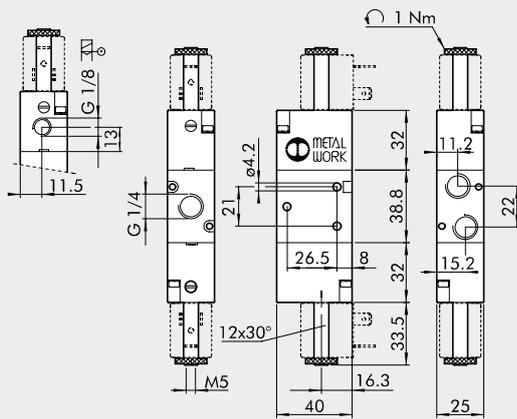
BISTABLE 5/2, 1/4"



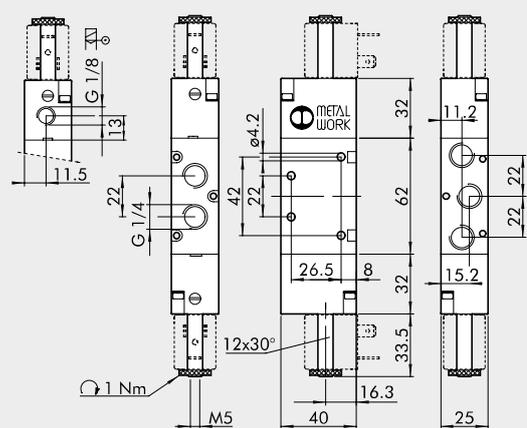
Symbol	Code	Abbrev.	Weight [g]
	7020021100	SOV 35 SOS OO	200
	7020021500	SOV 35 SES OO	200

Symbol	Code	Abbrev.	Weight [g]
	7020021200	SOV 35 SOB OO	236
	7020021300	SOV 35 SOD OO	252
	7020021600	SOV 35 SEB OO	242

BISTABLE 3/2, 1/4"



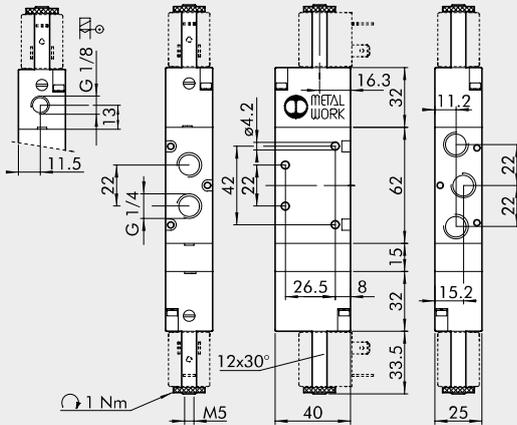
DOUBLE 3/2, 1/4"



Symbol	Code	Abbrev.	Weight [g]
	7020020100	SOV 33 SOB OO	190
	7020020300	SOV 33 SEB OO	190

Symbol	Code	Abbrev.	Weight [g]
	7020023100	SOV 38 SOS NC	286
	7020023200	SOV 38 SOS NO	286
	7020023300	SOV 38 SOS NC-NO	286
	7020023400	SOV 38 SES NC	286
	7020023500	SOV 38 SES NO	286
	7020023600	SOV 38 SES NC-NO	286

**MONOSTABLE 5/3, 1/4"**

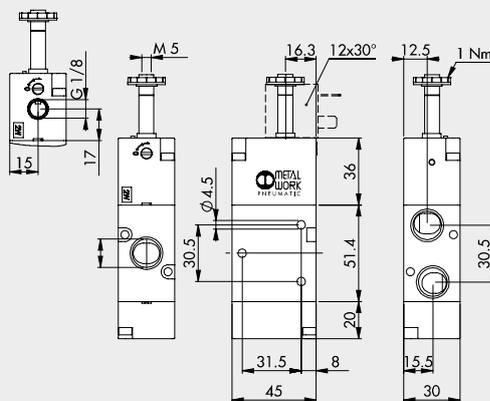


**NOTES**

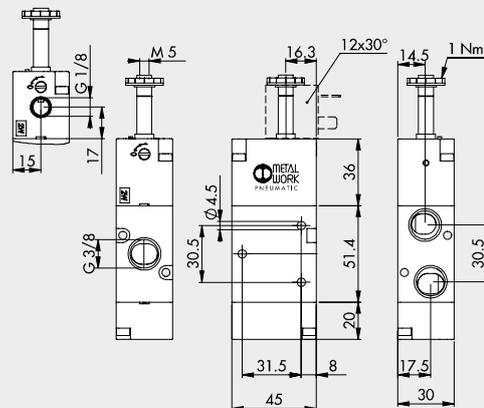
Symbol	Code	Abbrev.	Weight [g]
	7020022100	SOV 36 SOS CC	274
	7020022200	SOV 36 SOS OC	274
	7020022300	SOV 36 SOS PC	274
	7020022400	SOV 36 SES CC	277
	7020022500	SOV 36 SES OC	277
	7020022600	SOV 36 SES PC	277

**VALVES SERIES 70, SOLENOID/PNEUMATIC, PILOT-ASSISTED SOLENOID/ PNEUMATIC, 3/8"**

**MONOSTABLE 3/2 NO, 3/8"**



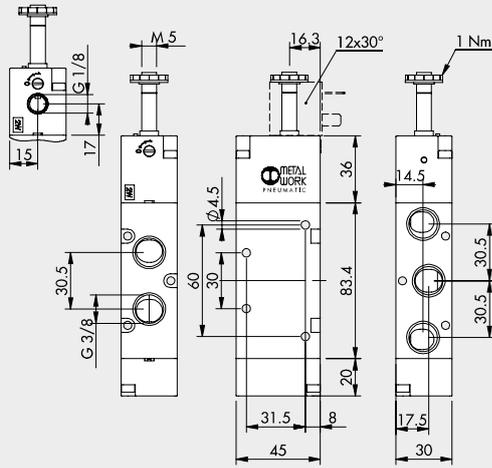
**MONOSTABLE 3/2 NC, 3/8"**



Symbol	Code	Abbrev.	Weight [g]
	7040020400	SOV C3 SOS NO	256
	7040020600	SOV C3 SES NO	255

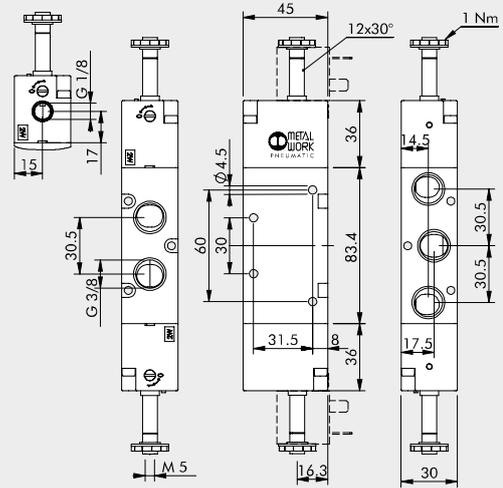
Symbol	Code	Abbrev.	Weight [g]
	7040020200	SOV C3 SOS NC	256
	7040020500	SOV C3 SES NC	255

MONOSTABLE 5/2, 3/8"



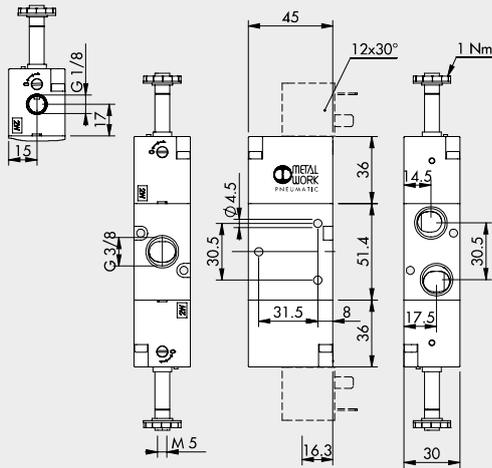
Symbol	Code	Abbrev.	Weight [g]
	7040021100	SOV C5 SOS OO	361
	7040021500	SOV C5 SES OO	361

BISTABLE 5/2, 3/8"



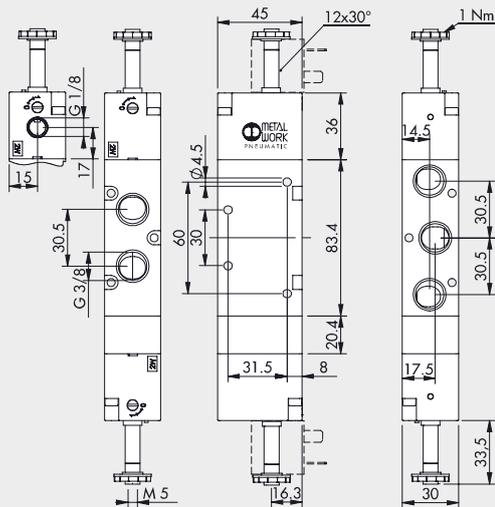
Symbol	Code	Abbrev.	Weight [g]
	7040021200	SOV C5 SOB OO	400
	7040021300	SOV C5 SOD OO	425
	7040021600	SOV C5 SEB OO	400

BISTABLE 3/2, 3/8"



Symbol	Code	Abbrev.	Weight [g]
	7040020100	SOV C3 SOB OO	307
	7040020300	SOV C3 SEB OO	307

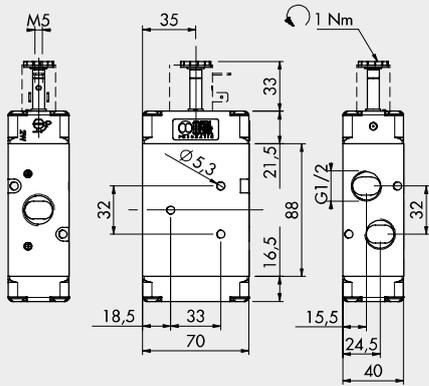
MONOSTABLE 5/3, 3/8"



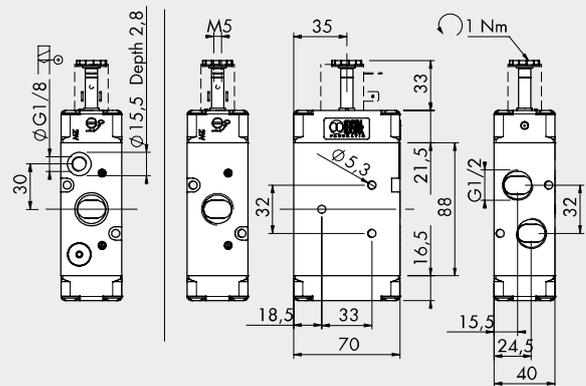
Symbol	Code	Abbrev.	Weight [g]
	7040022100	SOV C6 SOS CC	476
	7040022200	SOV C6 SOS OC	474
	7040022300	SOV C6 SOS PC	474
	7040022400	SOV C6 SES CC	476
	7040022500	SOV C6 SES OC	474
	7040022600	SOV C6 SES PC	474

**VALVES SERIES 70, SOLENOID/PNEUMATIC,  
PILOT-ASSISTED SOLENOID/PNEUMATIC, 1/2"**

**MONOSTABLE 3/2 NO, 1/2"**



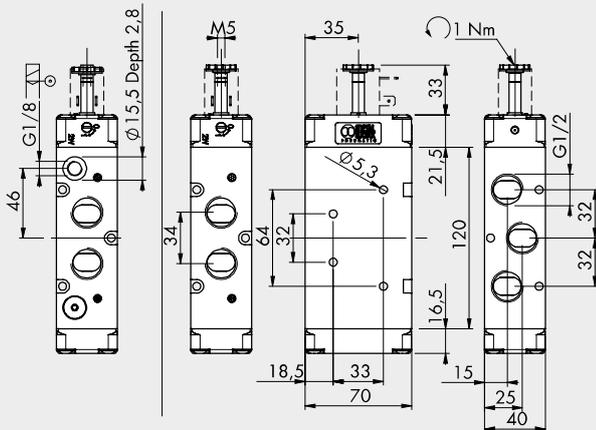
**MONOSTABLE 3/2 NC, 1/2"**



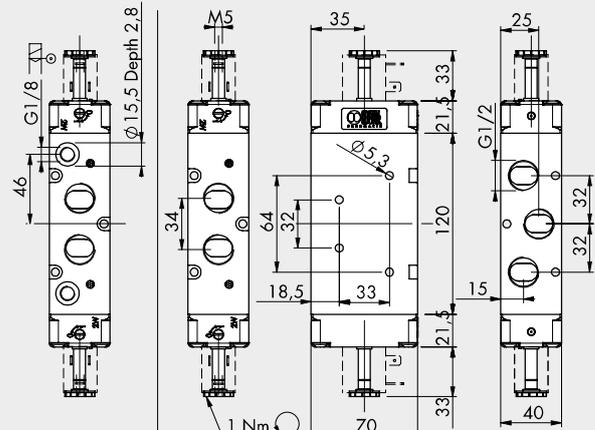
Symbol	Code	Abbrev.	Weight [g]
	7030020400	SOV 43 SOS NO	660

Symbol	Code	Abbrev.	Weight [g]
	7030020200	SOV 43 SOS NC	660
	7030020500	SOV 43 SES NC	654

**MONOSTABLE 5/2, 1/2"**



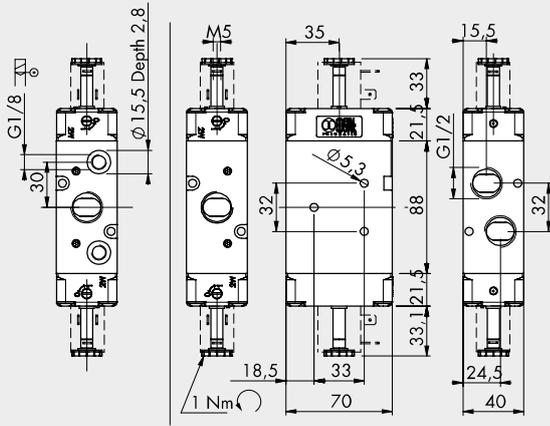
**BISTABLE 5/2, 1/2"**



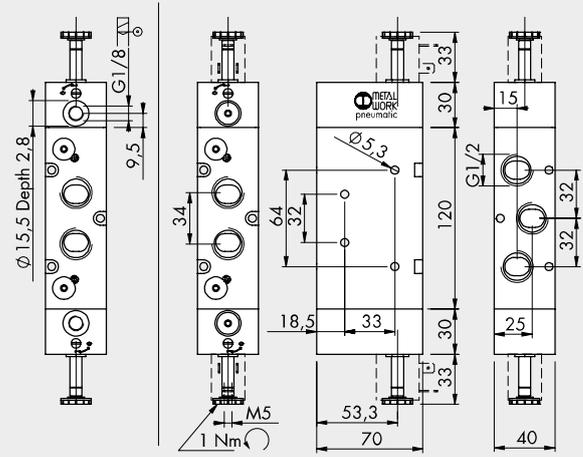
Symbol	Code	Abbrev.	Weight [g]
	7030021100	SOV 45 SOS OO	828
	7030021500	SOV 45 SES OO	830

Symbol	Code	Abbrev.	Weight [g]
	7030021200	SOV 45 SOB OO	860
	7030021300	SOV 45 SOD OO	868
	7030021600	SOV 45 SEB OO	854

**BISTABLE 3/2, 1/2"**



**MONOSTABLE 5/3, 1/2"**



Symbol	Code	Abbrev.	Weight [g]
	7030020100	SOV 43 SOB OO	686
	7030020300	SOV 43 SEB OO	678

Symbol	Code	Abbrev.	Weight [g]
	7030022100	SOV 46 SOS CC	1265
	7030022200	SOV 46 SOS OC	1265
	7030022300	SOV 46 SOS PC	1265
	7030022400	SOV 46 SES CC	1252
	7030022500	SOV 46 SES OC	1252
	7030022600	SOV 46 SES PC	1252

**ACCESSORIES FOR SERIES 70 SOLENOID/PNEUMATIC VALVES**

Refer to page B1.60 for coils and connectors



**NOTES**

## VALVES SERIES 70 LT (LOW TEMPERATURE)

TECHNICAL DATA		1/8"	1/4"	3/8"
Operating pressure standard	bar	Vacuum to 10		
hand operated		5 to 10		
pneumatic and solenoid/pneumatic	t = -40°C to -10°C	3 to 10		
	t = -10°C to +60°C			
Operating temperature range	°C	-40 to +60		
Nominal diameter	mm	5	7.5	13.3
Conductance C	Nl/min · bar	121.43	264.26	505.52
Critical ratio b	bar/bar	0.32	0.27	0.32
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	400	750	1560
Flow rate at 6 bar ΔP 1 bar	Nl/min	550	1100	2150
<b>PNEUMATIC</b>				
Minimum pilot pressure	bar			
t = -40°C to -10°C		5		
t = -10°C to +60°C		3		
TRA / TRR monostable at 6 bar (at 20°C)	ms	6/15	7/15	5/28
TRA / TRR bistable at 6 bar (at 20°C)	ms	7/7	7/7	13/13
<b>SOLENOID/PNEUMATIC</b>				
TRA / TRR monostable at 6 bar (at 20°C)	ms	15/35	19/45	21/72
TRA / TRR bistable at 6 bar (at 20°C)	ms	20/20	21/21	18/18
Coil voltage values		12; 24 VDC		
		24; 110; 220V AC 50/60Hz		
Power	t = -40°C to -10°C	5 W (DC) - 5 VA (AC)		
	t = -10°C to +60°C	2 W (DC) - 3.5 VA (AC)		
Voltage tolerance	%	-10 to +15		
Insulation class		F 155		
Maximum coil nut torque	Nm	1		
Hand operator		Bistable		
<b>Notes: after a long stop and with very low temperatures the movement of the first drives may be slower. It recommends the use of perfectly dry air.</b>				



VALVES

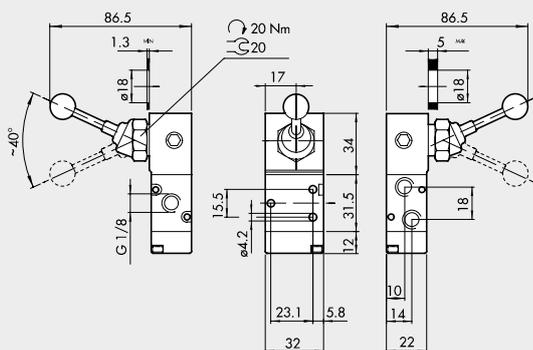
VALVES SERIES 70 LT (LOW TEMPERATURE)

### SYNOPTIC, SIZES AND VERSIONS

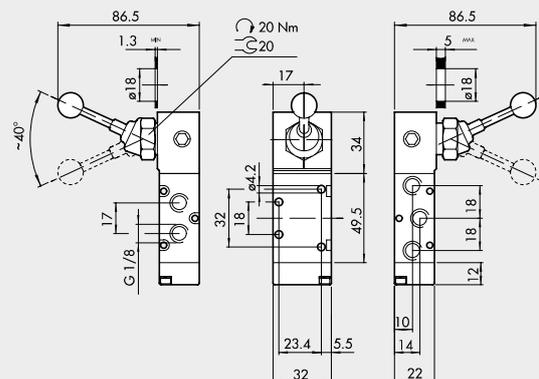
P N V FAMILY	2 DIMENSIONS	3 FUNCTION	P N OPERATORS 14	S RESETTING (12)	OO FURTHER DETAILS	LT
MAV manual valves	2 1/8"	3 3/2	LE leva 90°	S mechanical springs	OO no indication	LT low temperature
PNV pneumatic valves	3 1/4"	5 5/2	PN pneumatic	B bistable	NC normally closed	
SOV solenoid/ pneumatic	C 3/8"	6 5/3	SO solenoid	O stable for 5/3	NO normally open	
					CC closed centres	
					OC open centres	
					PC pressure centres	

## VALVES SERIES 70 LT, HAND OPERATED (LOW TEMPERATURE)

### 90° LEVER 3/2 1/8"



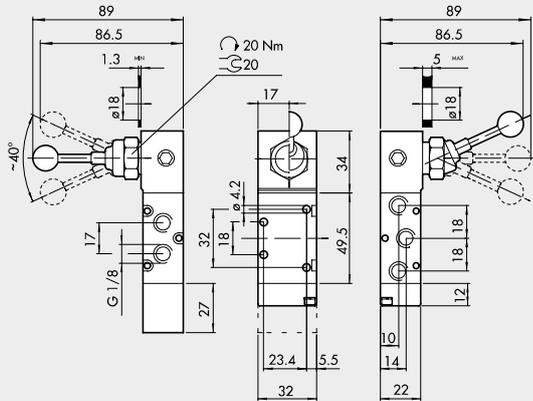
### 90° LEVER 5/2 1/8"



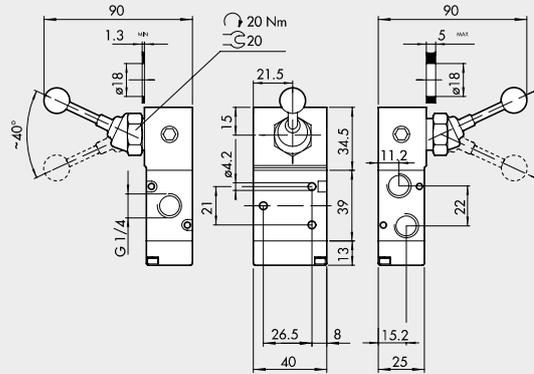
Symbol	Code	Abbrev.	Weight [g]
	* 70L1000100	MAV 23 LES NC LT	184
	* 70L1000200	MAV 23 LEB OO LT	187

Symbol	Code	Abbrev.	Weight [g]
	* 70L1000300	MAV 25 LES OO LT	210
	* 70L1000400	MAV 25 LEB OO LT	213

90° LEVER 5/3, 1/8"



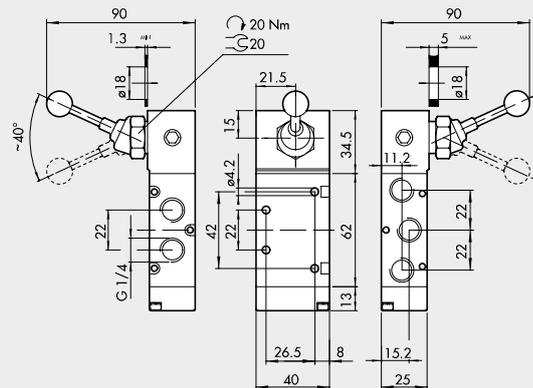
90° LEVER 3/2, 1/4"



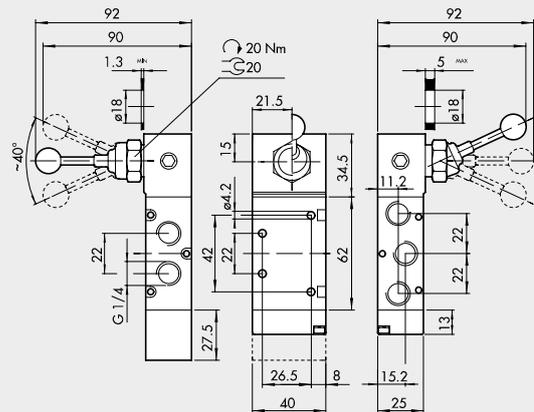
Symbol	Code	Abbrev.	Weight [g]
	* 70L1001000	MAV 26 LES CC LT	242
	* 70L1000900	MAV 26 LES OC LT	242
	* 70L1001100	MAV 26 LES PC LT	242
	* 70L1000500	MAV 26 LEO CC LT	194
	* 70L1000600	MAV 26 LEO OC LT	194
	* 70L1000700	MAV 26 LEO PC LT	194

Symbol	Code	Abbrev.	Weight [g]
	* 70L2000100	MAV 33 LES NC LT	272
	* 70L2000200	MAV 33 LEB OO LT	272

90° LEVER 5/2, 1/4"



90° LEVER 5/3, 1/4"

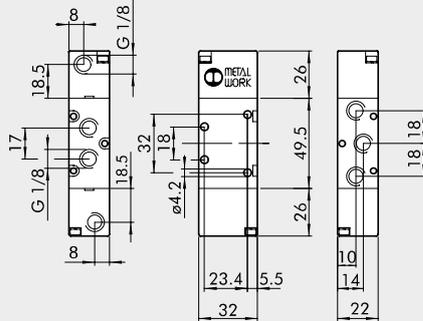


Symbol	Code	Abbrev.	Weight [g]
	* 70L2000300	MAV 35 LES OO LT	326
	* 70L2000400	MAV 35 LEB OO LT	326

Symbol	Code	Abbrev.	Weight [g]
	* 70L2001000	MAV 36 LES CC LT	354
	* 70L2000900	MAV 36 LES OC LT	354
	* 70L2001100	MAV 36 LES PC LT	354
	* 70L2000500	MAV 36 LEO CC LT	288
	* 70L2000600	MAV 36 LEO OC LT	288
	* 70L2000700	MAV 36 LEO PC LT	288

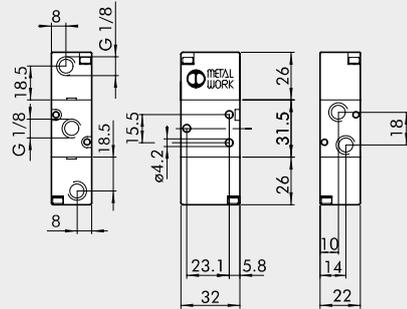
# VALVES SERIES 70 LT, PNEUMATIC (LOW TEMPERATURE)

## BISTABLE 5/2 1/8"



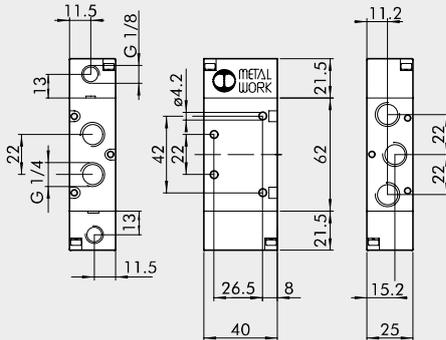
Symbol	Code	Abbrev.	Weight [g]
	* 70L1011200	PNV 25 PNB OO LT	176

## BISTABLE 3/2 1/8"



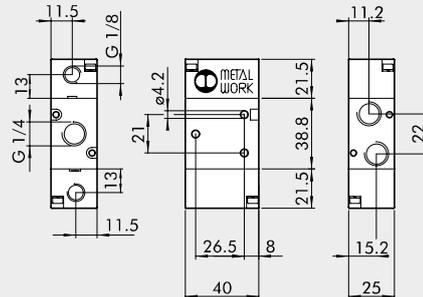
Symbol	Code	Abbrev.	Weight [g]
	* 70L1010100	PNV 23 PNB OO LT	150

## BISTABLE 5/2 1/4"



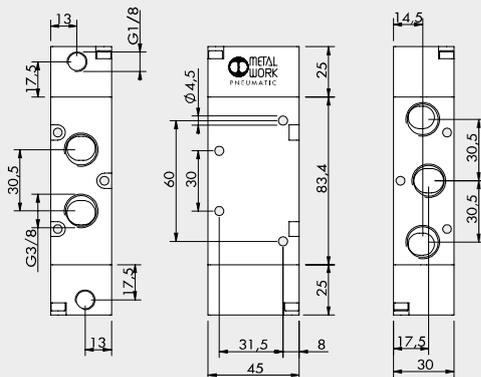
Symbol	Code	Abbrev.	Weight [g]
	* 70L2011200	PNV 35 PNB OO LT	233

## BISTABLE 3/2 1/4"



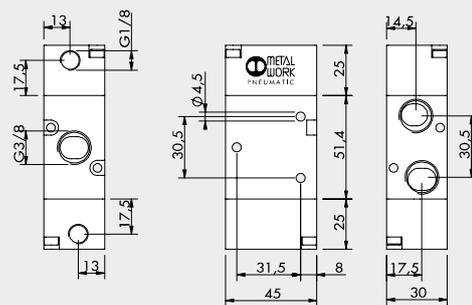
Symbol	Code	Abbrev.	Weight [g]
	* 70L2010100	PNV 33 PNB OO LT	194

## BISTABLE 5/2 3/8"



Symbol	Code	Abbrev.	Weight [g]
	* 70L4011200	PNV C5 PNB OO LT	405

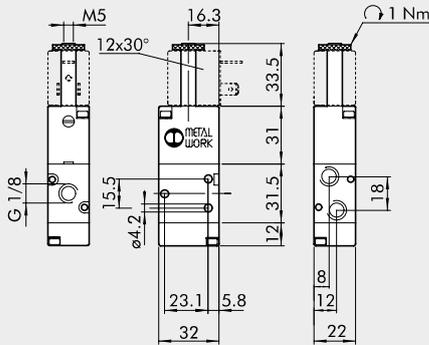
## BISTABLE 3/2 3/8"



Symbol	Code	Abbrev.	Weight [g]
	* 70L4010100	PNV C3 PNB OO LT	305

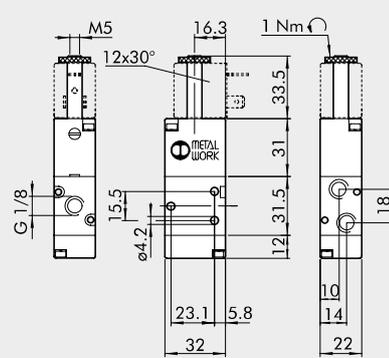
# VALVES SERIES 70 LT, SOLENOID/PNEUMATIC (LOW TEMPERATURE)

## MONOSTABLE 3/2 NO 1/8"



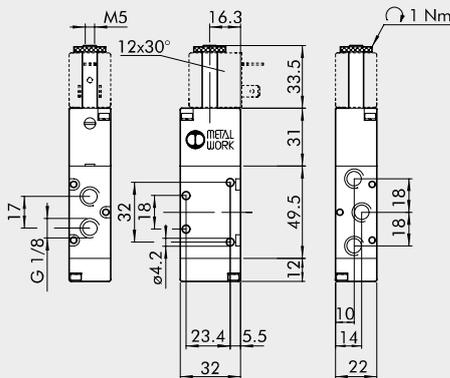
Symbol	Code	Abbrev.	Weight [g]
	* 70L1020400	SOV 23 SOS NO LT	147

## MONOSTABLE 3/2 NC 1/8"



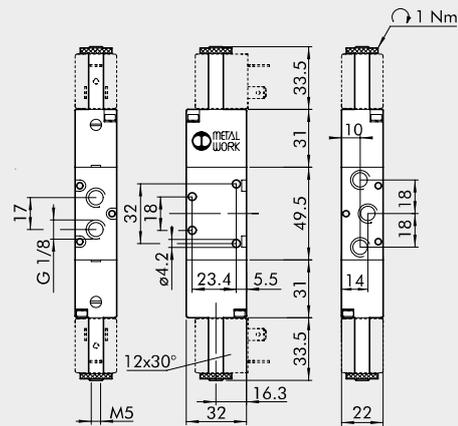
Symbol	Code	Abbrev.	Weight [g]
	* 70L1020200	SOV 23 SOS NC LT	147

## MONOSTABLE 5/2 1/8"



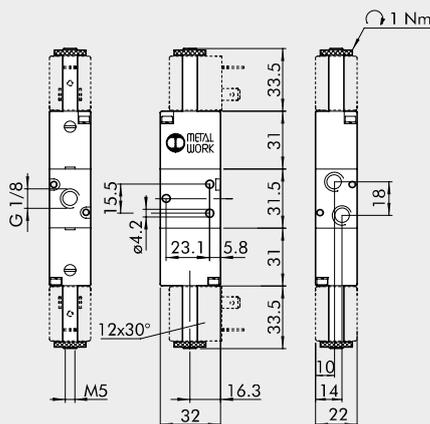
Symbol	Code	Abbrev.	Weight [g]
	* 70L1021100	SOV 25 SOS OO LT	175

## BISTABLE 5/2 1/8"



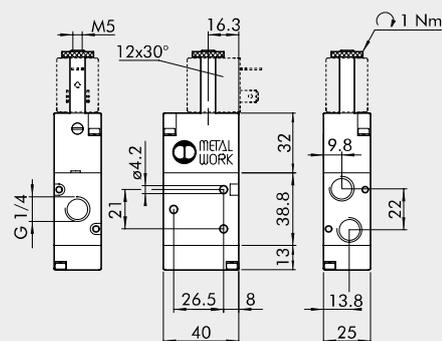
Symbol	Code	Abbrev.	Weight [g]
	* 70L1021200	SOV 25 SOB OO LT	228

## BISTABLE 3/2 1/8"



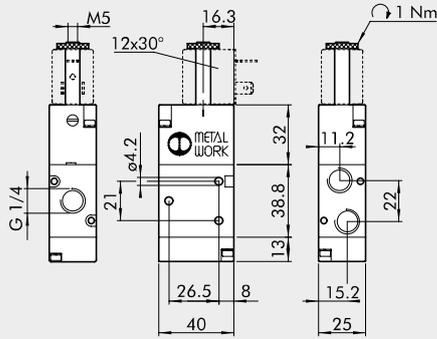
Symbol	Code	Abbrev.	Weight [g]
	* 70L1020100	SOV 23 SOB OO LT	203

## MONOSTABLE 3/2 NO 1/4"



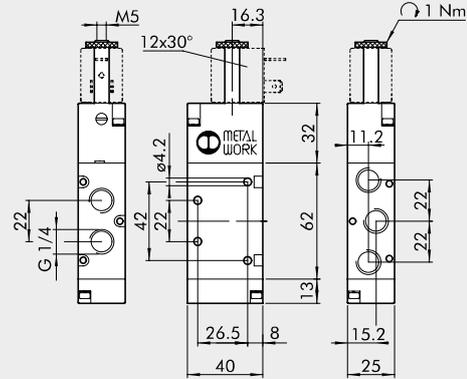
Symbol	Code	Abbrev.	Weight [g]
	* 70L2020400	SOV 33 SOS NO LT	230

**MONOSTABLE 3/2 NC 1/4"**



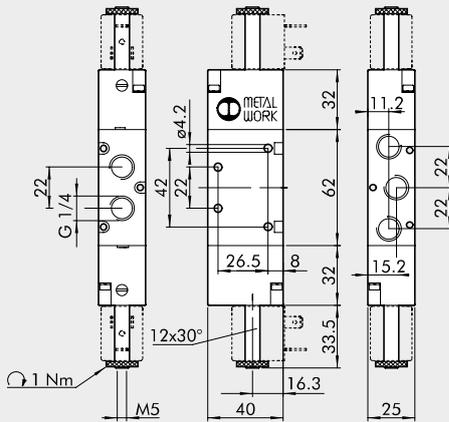
Symbol	Code	Abbrev.	Weight [g]
	* 70L2020200	SOV 33 SOS NC LT	230

**MONOSTABLE 5/2 1/4"**



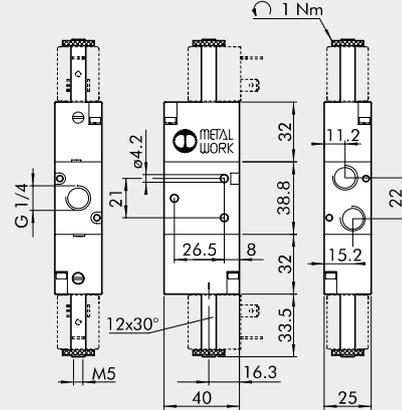
Symbol	Code	Abbrev.	Weight [g]
	* 70L2021100	SOV 35 SOS OO LT	278

**BISTABLE 5/2 1/4"**



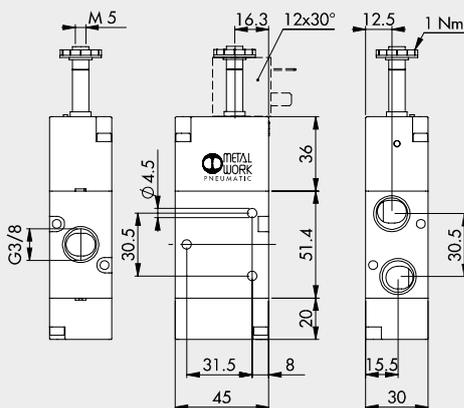
Symbol	Code	Abbrev.	Weight [g]
	* 70L2021200	SOV 35 SOB OO LT	332

**BISTABLE 3/2 1/4"**



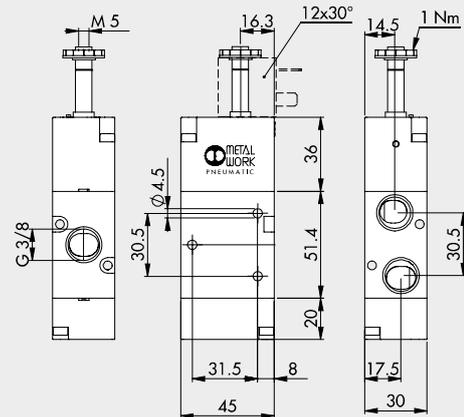
Symbol	Code	Abbrev.	Weight [g]
	* 70L2020100	SOV 33 SOB OO LT	286

**MONOSTABLE 3/2 NO 3/8"**



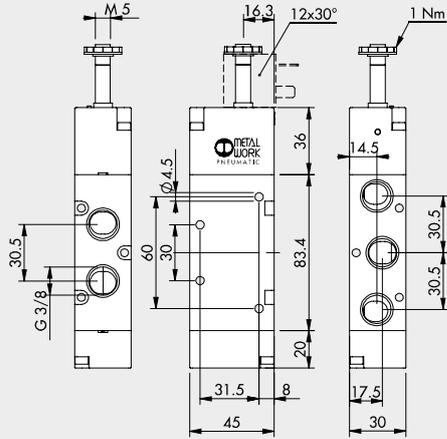
Symbol	Code	Abbrev.	Weight [g]
	* 70L4020400	SOV C3 SOS NO LT	358

**MONOSTABLE 3/2 NC 3/8"**



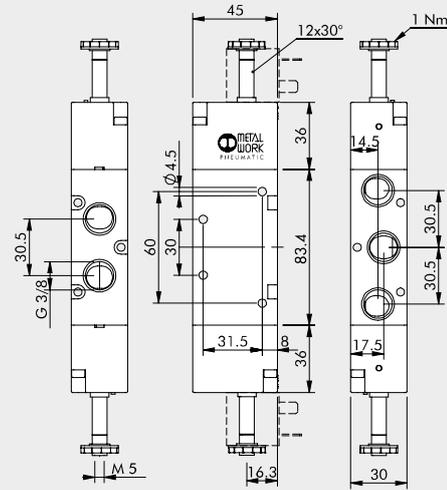
Symbol	Code	Abbrev.	Weight [g]
	* 70L4020200	SOV C3 SOS NC LT	358

MONOSTABLE 5/2 3/8"



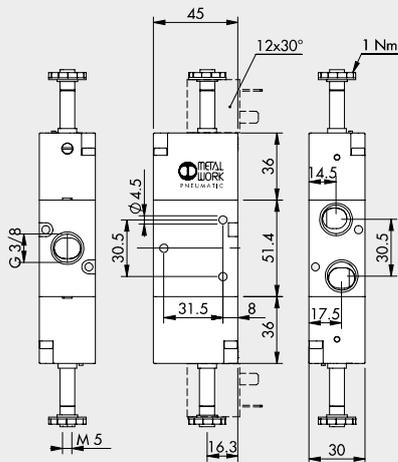
Symbol	Code	Abbrev.	Weight [g]
	* 70L4021100	SOV C5 SOS OO LT	460

BISTABLE 5/2 3/8"



Symbol	Code	Abbrev.	Weight [g]
	* 70L4021200	SOV C5 SOB OO LT	526

BISTABLE 3/2 3/8"



Symbol	Code	Abbrev.	Weight [g]
	* 70L4020100	SOV C3 SOB OO LT	426

NOTES

ACCESSORIES

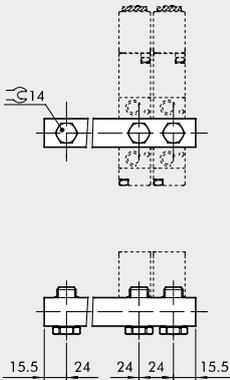
COILS AND CONNECTORS



Refer to page B1.60 for coils and connectors  
 For temperatures T < -10 ° C it is necessary to use coils side 22 mm from 5 W or 5 VA .  
 (see page B1.79)

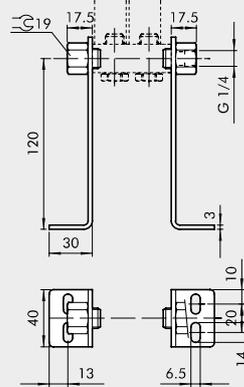
**ACCESSORIES: 1/8 MANIFOLDS FOR SERIES 70 PNV-SOV AND SERIES BASIC VALVES**

**MANIFOLD WITH 2 TO 7 POSITIONS + FITTINGS**



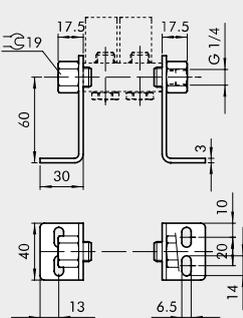
Code	Description	Weight [g]
0221000200	CSA-18-02	70
0221000300	CSA-18-03	99
0221000400	CSA-18-04	131
0221000500	CSA-18-05	162
0221000600	CSA-18-06	192
0221000700	CSA-18-07	229

**BRACKET SET H120**



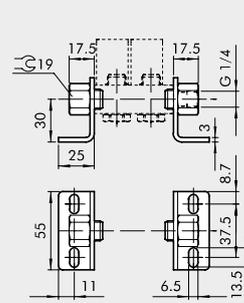
Code	Description	Weight [g]
0221000190	CSA-18-OO	309

**BRACKET SET H60**



Code	Description	Weight [g]
0221000191	CSA-18-OC	213

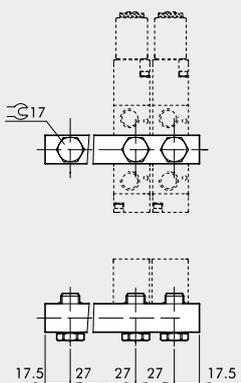
**BRACKET SET H30**



Code	Description	Weight [g]
0221000192	CSA-18-OE	181

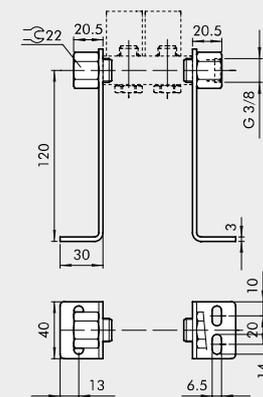
**ACCESSORIES: 1/4 MANIFOLDS FOR SERIES 70 PNV-SOV AND SERIES BASIC VALVES**

**MANIFOLD WITH 2 TO 7 POSITIONS + FITTINGS**



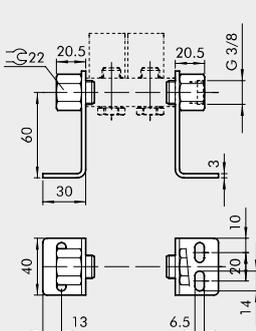
Code	Description	Weight [g]
0222000200	CSA-14-02	89
0222000300	CSA-14-03	131
0222000400	CSA-14-04	174
0222000500	CSA-14-05	213
0222000600	CSA-14-06	252
0222000700	CSA-14-07	328

**BRACKET SET H120**



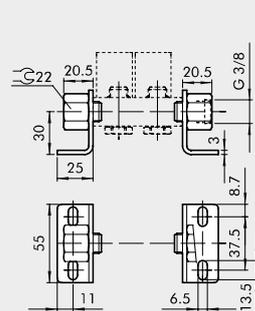
Code	Description	Weight [g]
0222000190	CSA-14-OO	338

**BRACKET SET H60**



Code	Description	Weight [g]
0222000191	CSA-14-OC	242

**BRACKET SET H30**



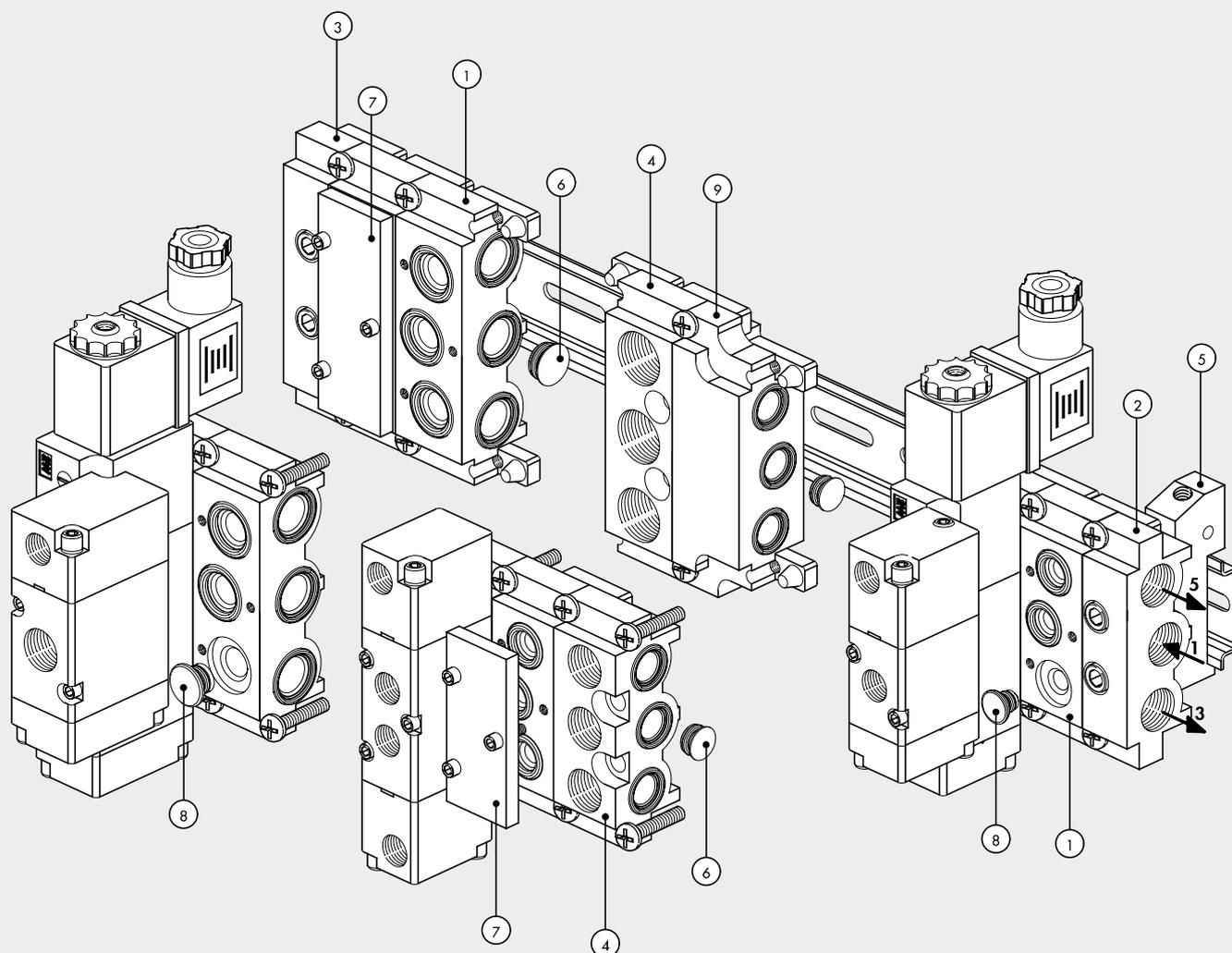
Code	Description	Weight [g]
0222000192	CSA-14-OE	209

# ACCESSORIES: MANIFOLD BASES FOR SERIES 70 PNV-SOV AND SERIES BASIC VALVES

## MODULAR BASES FOR SERIES 70 SOV-PNV VALVES

VALVES

ACCESSORIES FOR VALVES SERIES 70

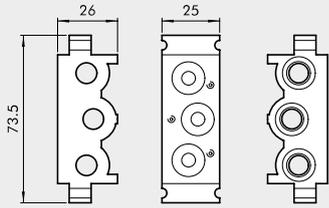


Note: Tightening torque for M4 base screws: 1.5 Nm  
 Tightening torque for M3 valve screws: 0.8 Nm

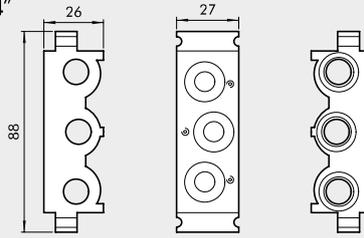
Reference	1/8"	1/4"	Description
①	0226004150	0226005150	Modular manifold base
②	0226004201	0226005201	End plate without OR
③	0226004200	0226005200	End plate with OR
④	0226004300	0226005300	Intermediate part for upper feed
⑤	0226004600	0226005600	Adapter for omega bar
⑥	0226004000	0226005000	Intermediate diaphragm
⑦	0226004500	0226005500	Blanking plate
⑧	0226004001	0226005001	3/2 cap
⑨	0226006600	-	Dimensional adapter

**1 MODULAR BASE MANIFOLD**

1/8"



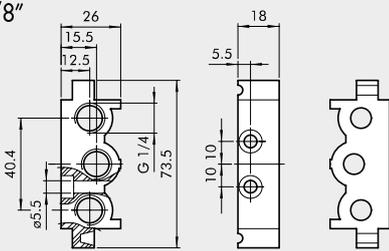
1/4"



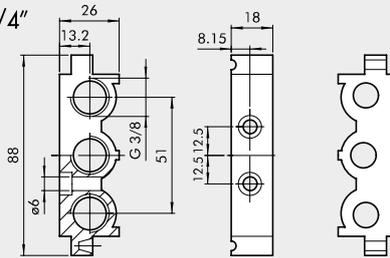
Code	Description	Weight [g]
0226004150	Modular base MANIFOLD 1/8"	110
0226005150	Modular base MANIFOLD 1/4"	131

**2 END PLATE WITHOUT OR**

1/8"



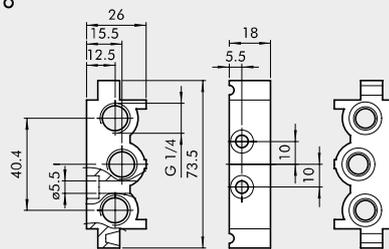
1/4"



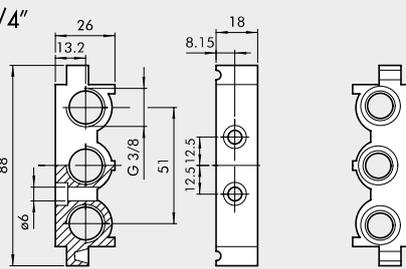
Code	Description	Weight [g]
0226004201	End plate without OR 1/8"	52
0226005201	End plate without OR 1/4"	57

**3 END PLATE WITH OR**

1/8"



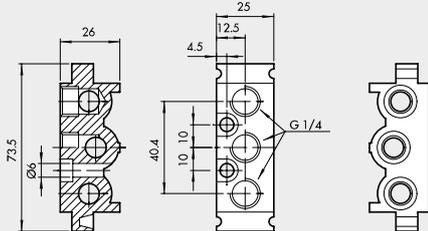
1/4"



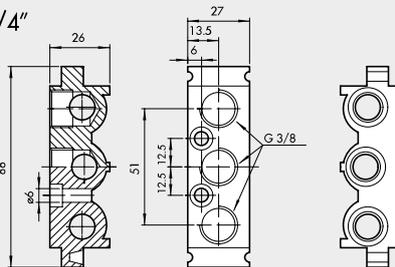
Code	Description	Weight [g]
0226004200	End plate with OR 1/8"	74
0226005200	End plate with OR 1/4"	80

**4 INTERMEDIATE PART FOR UPPER FEED**

1/8"



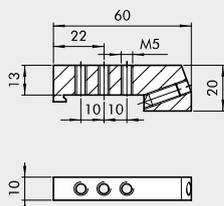
1/4"



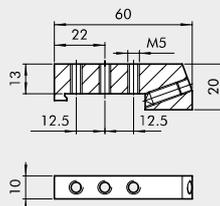
Code	Description	Weight [g]
0226004300	Intermediate part for upper feed 1/8"	93
0226005300	Intermediate part for upper feed 1/4"	109

**5 ADAPTER FOR OMEGA BAR BASES (DIN EN 50022)**

1/8"



1/4"

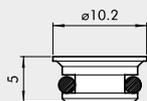


Code	Description	Weight [g]
0226004600	Adapter 1/8"	46
0226005600	Adapter 1/4"	46

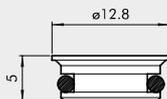
N.B.: Also for multiple bases

⑥ INTERMEDIATE DIAPHRAGM

1/8"



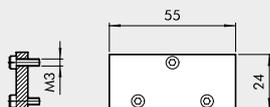
1/4"



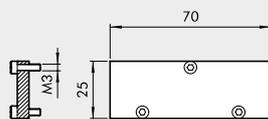
Code	Description	Weight [g]
0226004000	Intermediate diaphragm 1/8"	2
0226005000	Intermediate diaphragm 1/4"	3

⑦ BLANKING PLATE FOR UNUSED POSITIONS

1/8"



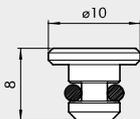
1/4"



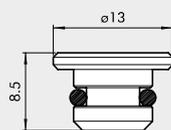
Code	Description	Weight [g]
0226004500	Blanking plate 1/8"	23
0226005500	Blanking plate 1/4"	29

⑧ PLUG FOR 3/2

1/8"

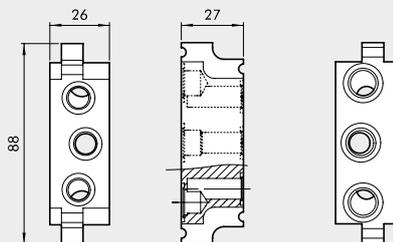


1/4"



Code	Description	Weight [g]
0226004001	Blanking plate 3/2 1/8"	2
0226005001	Blanking plate 3/2 1/4"	4

⑨ DIMENSIONAL ADAPTER 1/8" - 1/4"

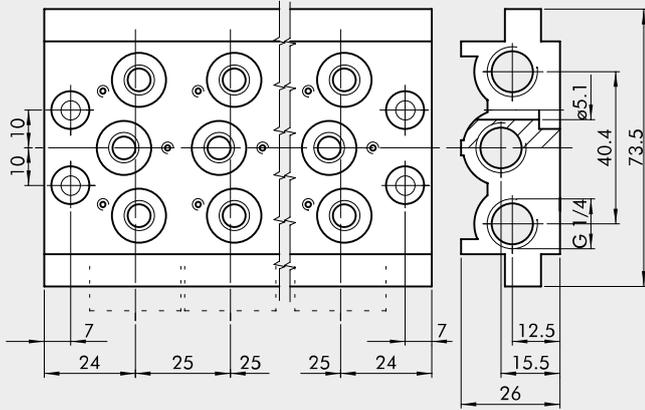


Code	Description	Weight [g]
0226006600	Adapter 1/8", 1/4"	177

NOTES

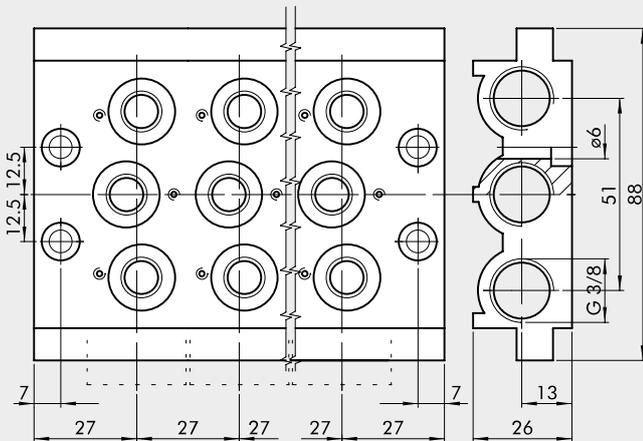
## ACCESSORIES: MULTIPLE BASES FOR SERIES 70 PNV-SOV VALVES

### MULTIPLE BASE 1/8"



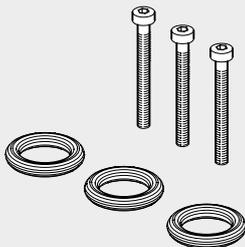
Code	Description	Abbrev.	Weight [g]
0223000201	2-position base	CVM-18-02	236
0223000301	3-position base	CVM-18-03	321
0223000401	4-position base	CVM-18-04	407
0223000501	5-position base	CVM-18-05	494
0223000601	6-position base	CVM-18-06	587
0223000701	7-position base	CVM-18-07	711
0223000801	8-position base	CVM-18-08	760
0223000901	9-position base	CVM-18-09	842
0223001001	10-position base	CVM-18-10	923

### MULTIPLE BASE 1/4"



Code	Description	Abbrev.	Weight [g]
0224000201	2-position base	CVM-14-02	296
0224000301	3-position base	CVM-14-03	406
0224000401	4-position base	CVM-14-04	515
0224000501	5-position base	CVM-14-05	624
0224000601	6-position base	CVM-14-06	733
0224000701	7-position base	CVM-14-07	845
0224000801	8-position base	CVM-14-08	956
0224000901	9-position base	CVM-14-09	1055
0224001001	10-position base	CVM-14-10	1086

### GASKET KIT



Code	Description	Weight [g]
0226004701	Gasket kit for 1/8" base	5
0226005701	Gasket kit for 1/4" base	5

# VALVES SERIES 70 ON BASE

The series 70 valves on base, available in the air- and solenoid-actuated versions, is an excellent clean solution for use when it is necessary to intervene on the valves without disconnecting the pipes. Here, the inlet, output and utility ports are in the base.



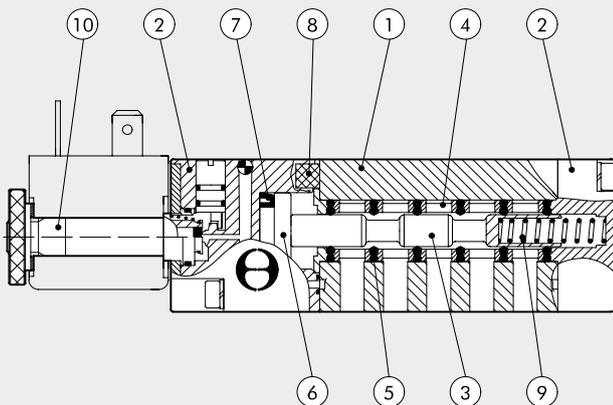
VALVES SERIES 70 ON BASE

## TECHNICAL DATA

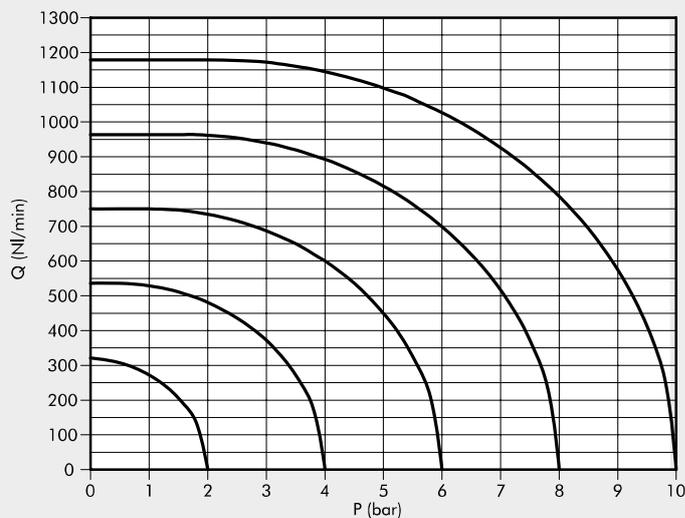
Operating pressure:		
• monostable and bistable differential	bar	2.5 to 10
• bistable	bar	1 to 10
• pilot-assisted	bar	Vacuum to 10
Minimum pilot pressure	bar	2.5
Operating temperature range	°C	-10 to +60
Nominal diameter	mm	5
Conductance C	Nl/min · bar	107.69
Critical ratio b	bar/bar	0.29
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	320
Flow rate at 6 bar ΔP 1 bar	Nl/min	450
Maximum torque coil nut	Nm	1
Tightening torque M3 valve / base screws	Nm	0.8

## COMPONENTS

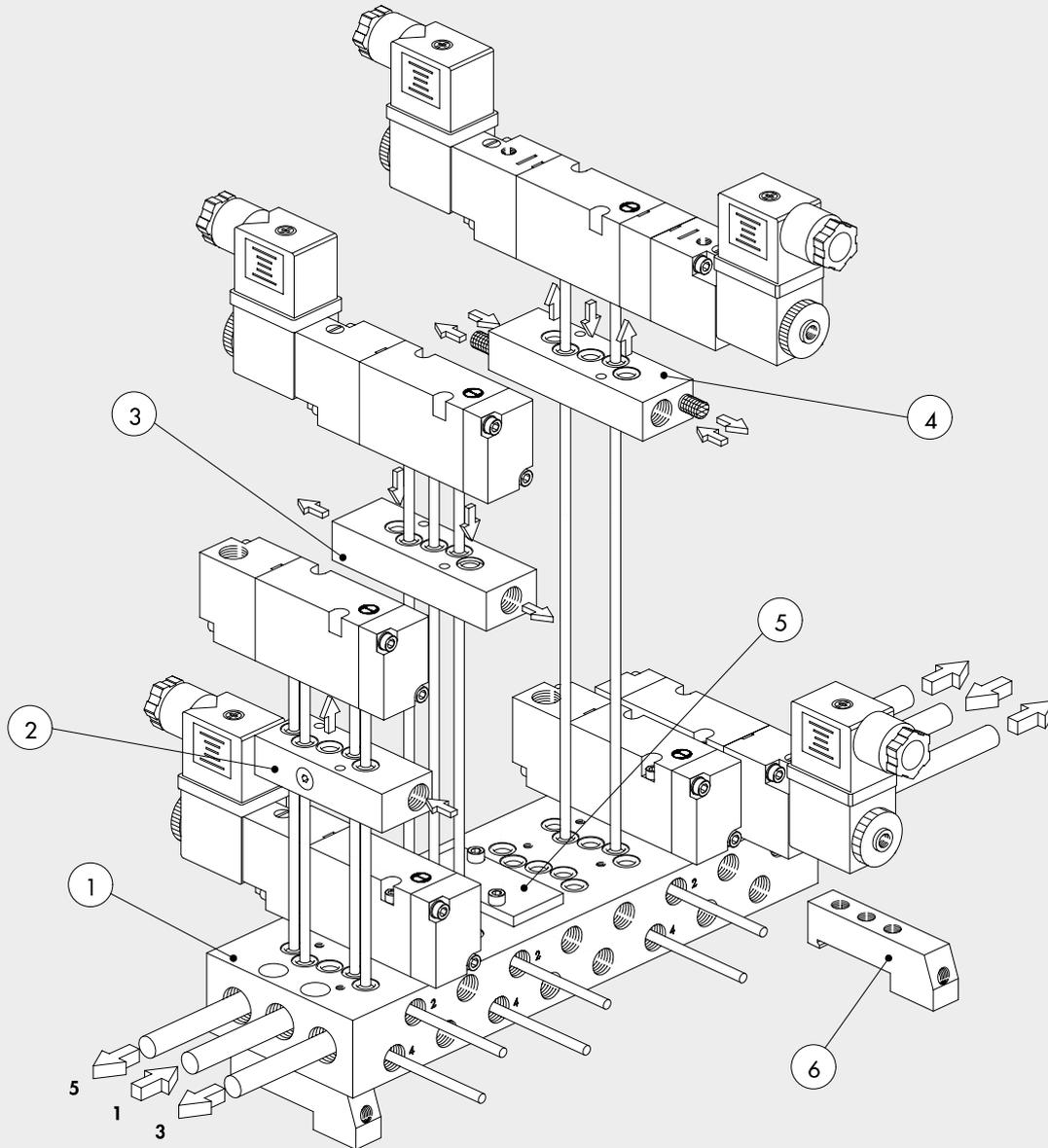
- ① VALVE BODY: Aluminium
- ② CONTROL/BASE: Hostaform®
- ③ SPOOL: chemically nickel-plated aluminium
- ④ DISTANCE PLATES: plastic
- ⑤ GASKETS: NBR
- ⑥ PISTONS: Hostaform®
- ⑦ PISTON GASKET: NBR
- ⑧ FILTER: sintered Bronze
- ⑨ SPRINGS: special steel
- ⑩ OPERATOR: Brass pipe – Stainless steel core



## FLOW CHART



**MULTI-PURPOSE BASE FOR VALVES SERIES 70 ON BASE**



**VALVES**  
VALVES SERIES 70 ON BASE

Reference	Code	Description
①	0223100201	2-position base 1/8 on base
	0223100401	4-position base 1/8 on base
	0223100601	6-position base 1/8 on base
	0223100801	8-position base 1/8 on base
	0223101001	10-position base 1/8 on base
②	0223106301	Separate feed kit
③	0223106303	Exhaust regulation kit
④	0223106302	Exhaust feed kit
⑤	0223106500	Blanking plate
⑥	0226004600	Adapter for omega bar

**SYNOPTIC, SIZES AND VERSIONS**

P N V FAMILY		B DIMENSIONS	5 FUNCTION	P N OPERATORS 14	S RESETTING (12)	O O FURTHER DETAILS
PNV	pneumatic	B 1/8" on base	5 5/2	PN pneumatic	S mechanical springs	OO no indication
SOV	electro-pneumatic		6 5/3	SO solenoid SE solenoid assisted	B bistable D differential	CC closed centres OC open centres PC pressure centres

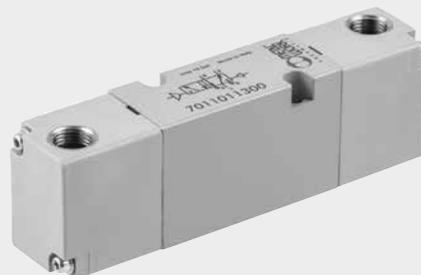
# VALVES, SERIES 70, PNEUMATIC, ON BASE

VALVES

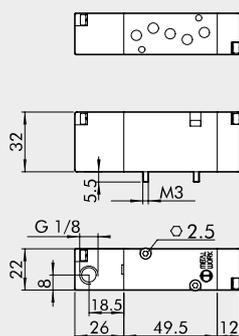
VALVES SERIES 70 ON BASE

### TECHNICAL DATA

Operating pressure	bar	Vacuum to 10
Minimum actuation pressure:		
• monostable and bistable differential	bar	2.5
• bistable	bar	1
Operating temperature range	°C	-10 to +60
Nominal diameter	mm	5
Conductance C	Nl/min · bar	107.69
Critical ratio b	bar/bar	0.29
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	320
Flow rate at 6 bar ΔP 1 bar	Nl/min	450
TRA / TRR monostable at 6 bar	ms	6/15
TRA / TRR bistable at 6 bar	ms	7/7
Tightening torque M3 valve / base screws	Nm	0.8

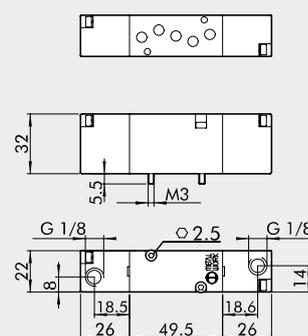


### MONOSTABLE 5/2



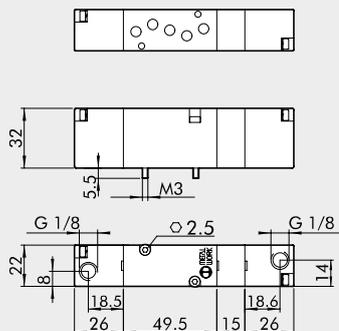
Symbol	Code	Abbrev.	Weight [g]
	7011011100	PNV B5 PNS OO	125

### BISTABLE 5/2



Symbol	Code	Abbrev.	Weight [g]
	7011011200	PNV B5 PNB OO	136
	7011011300	PNV B5 PND OO	142

### MONOSTABLE 5/3



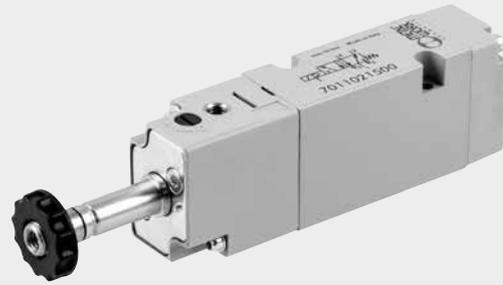
Symbol	Code	Abbrev.	Weight [g]
	7011012100	PNV B6 PNS CC	164
	7011012200	PNV B6 PNS OC	164
	7011012300	PNV B6 PNS PC	164

### NOTES

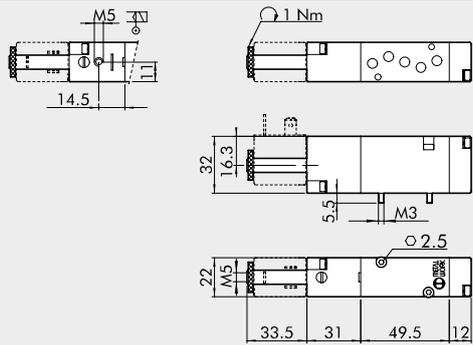
**VALVES SERIES 70, SOLENOID/PNEUMATIC ON BASE**

**TECHNICAL DATA**

Operating pressure:		
• monostable and bistable differential	bar	2.5 to 10
• bistable	bar	1 to 10
• pilot-assisted	bar	Vacuum to 10
Minimum pilot pressure	bar	2.5
Operating temperature range	°C	-10 to +60
Nominal diameter	mm	5
Conductance C	Nl/min · bar	107.69
Critical ratio b	bar/bar	0.29
Flow rate at 6 bar ΔP 0.5 bar	Nl/min	320
Flow rate at 6 bar ΔP 1 bar	Nl/min	450
TRA / TRR monostable at 6 bar	ms	15 / 35
TRA / TRR bistable at 6 bar	ms	20 / 20
<b>Electrical technical data</b>		
Coil voltage values		12; 24VDC - 24; 110; 220VAC 50/60Hz
Power		2 W (DC) 3.5VA (AC)
Voltage tolerance	%	-10 to +15
Insulation class		F 155
Maximum coil nut torque	Nm	1
Tightening torque M3 valve / base screws	Nm	0.8

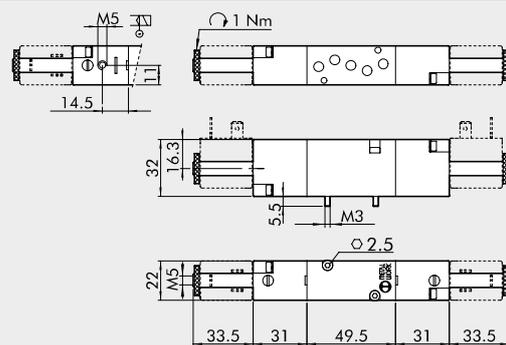


**MONOSTABLE 5/2**



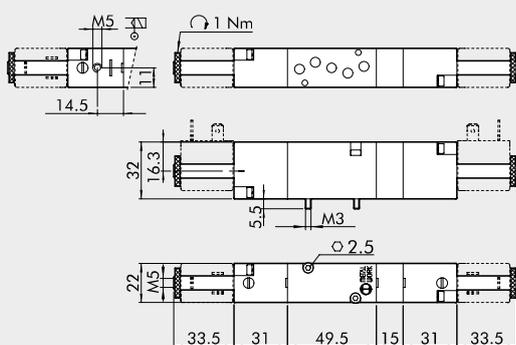
Symbol	Code	Abbrev.	Weight [g]
	7011021100	SOV B5 SOS OO	142
	7011021500	SOV B5 SES OO	143

**BISTABLE 5/2**



Symbol	Code	Abbrev.	Weight [g]
	7011021200	SOV B5 SOB OO	174
	7011021300	SOV B5 SOD OO	180
	7011021600	SOV B5 SEB OO	174

**MONOSTABLE 5/3**



Symbol	Code	Abbrev.	Weight [g]
	7011022100	SOV B6 SOS CC	204
	7011022200	SOV B6 SOS OC	204
	7011022300	SOV B6 SOS PC	204
	7011022400	SOV B6 SES CC	202
	7011022500	SOV B6 SES OC	202
	7011022600	SOV B6 SES PC	202

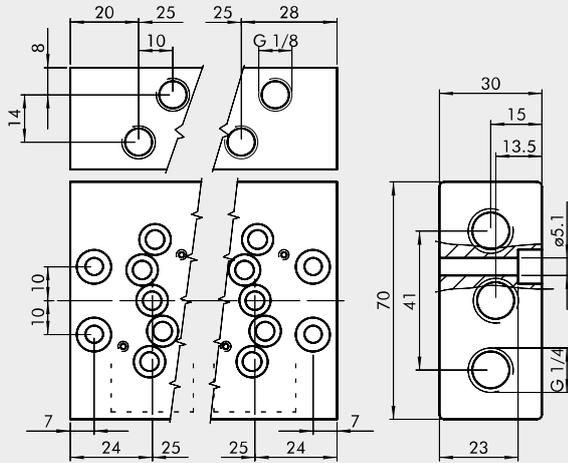
**ACCESSORIES**



Refer to page B1.60 for coils and connectors

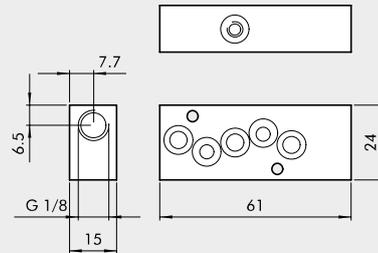
ACCESSORIES: MULTIPLE BASES

① MULTIPLE BASE



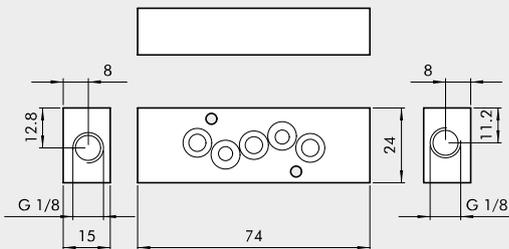
Code	Description	Weight [g]
0223100201	2-position base 1/8 on base	341
0223100401	4-position base 1/8 on base	591
0223100601	6-position base 1/8 on base	855
0223100801	8-position base 1/8 on base	1093
0223101001	10-position base 1/8 on base	1352

② SEPARATE FEED KIT



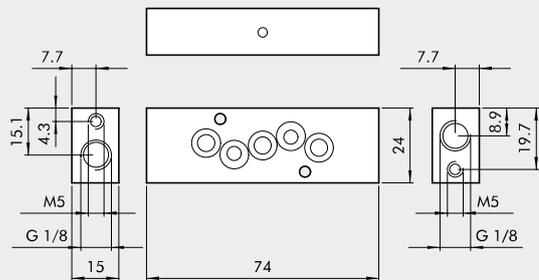
Code	Description	Weight [g]
0223106301	Separate feed kit 1/8	65

③ EXHAUST REGULATION KIT



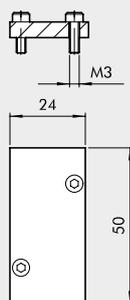
Code	Description	Weight [g]
0223106303	Exhaust regulation kit 1/8	75

④ EXHAUST FEED KIT



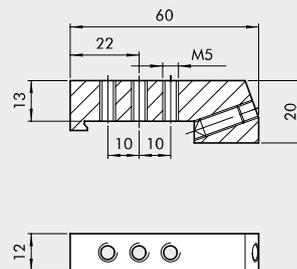
Code	Description	Weight [g]
0223106302	Exhaust feed kit 1/8	75

⑤ BLANKING PLATE



Code	Description	Weight [g]
0223106500	Blanking plate 1/8	15

⑥ ADAPTER FOR BAR OMEGA (DIN EN 50022)



Code	Description	Weight [g]
0226004600	Adapter for bar omega 1/8"	46