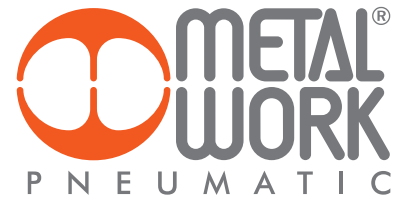


# SUMMARY VARIOUS ACCESSORIES



● AIR-AIR PRESSURE MULTIPLIER (BOOSTER)

🛒 E5.2



● IN-LINE PROGRESSIVE STARTER VAP 1/4" AND 1/2"

🛒 E5.11



● ROTARY JOINTS AND DISTRIBUTION FRAMES

DISTRIBUTION  
FRAMES  
🛒

ROTARY  
JOINTS  
🛒

E5.13



● SILENCERS AND EXHAUST REGULATOR

🛒 E5.17

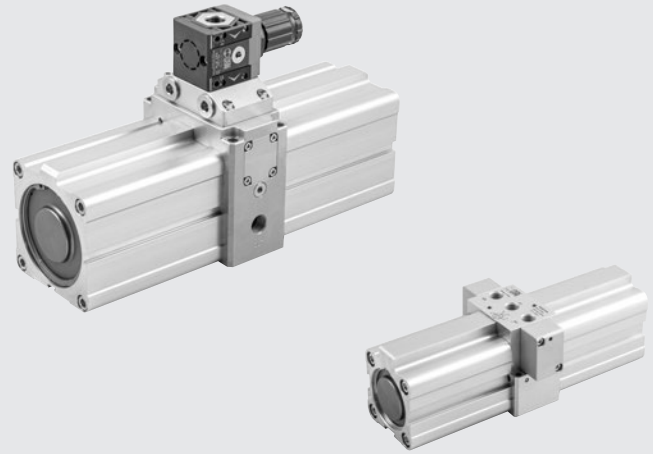


● PNEUMO-POWER

🛒 E5.22

# AIR-AIR PRESSURE MULTIPLIER (BOOSTER)

The air-air pressure multiplier, or booster, is an automatic device that compresses air to give an outlet pressure that is double the inlet pressure. It is normally used to locally intensify the input pressure of one or more actuators. As it is entirely pneumatic it can be used when electric devices are not recommended. The booster can be supplied with or without a pressure regulator. It is fitted with check valves that maintain the outlet pressure even when the supply of compressed air is switched off. This means it is necessary to interrupt the supply and relieve the circuit before intervening on the device in any way. It is advisable to install a tank after the booster to prevent fluctuations in outlet pressure.



TECHNICAL DATA	BOOSTER Ø40		BOOSTER Ø63		BOOSTER Ø100		
	without regulator	with regulator	without regulator	with regulator	without regulator	with regulator	
Fluid	Filtered unlubricated compressed air, Lubrication, if used, must be continuous.						
Threaded port	1/8"		3/8"		1/2"		
Inlet pressure	MPa		0.2 - 1		2 - 10		
	bar		29 - 145		psi		
Outlet pressure	MPa	max 2	max 1.6 (regulated)	max 2	max 1.6 (regulated)	max 2	max 1.6 (regulated)
	bar	max 20	max 16 (regulated)	max 20	max 16 (regulated)	max 20	max 16 (regulated)
	psi	max 290	max 232 (regulated)	max 290	max 232 (regulated)	max 290	max 232 (regulated)
Operating temperature	°C	-10 to +60	-10 to +50	-10 to +60	-10 to +50	-10 to +60	-10 to +50
	°F	14 to 140	14 to 122	14 to 140	14 to 122	14 to 140	14 to 122
Weight	g	1.380	1.600	4.240	5.350	13.100	14.050
Mounting	Wall or panel						
Installation	In any position						

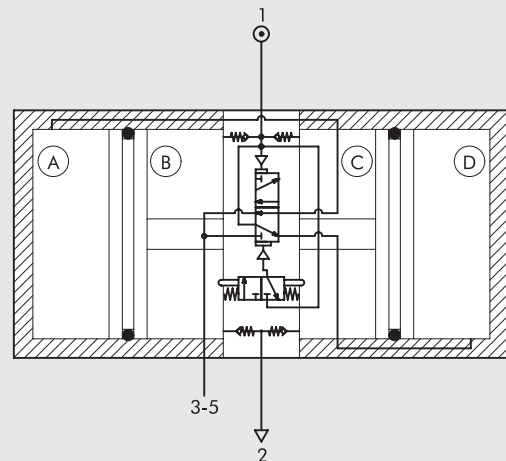
## OPERATING LAYOUT

The pressure booster is comprised of a central body (with one 3-2 valve, one 5-2 valve and four check valves), two side liners and a through rod on which two pistons are mounted.

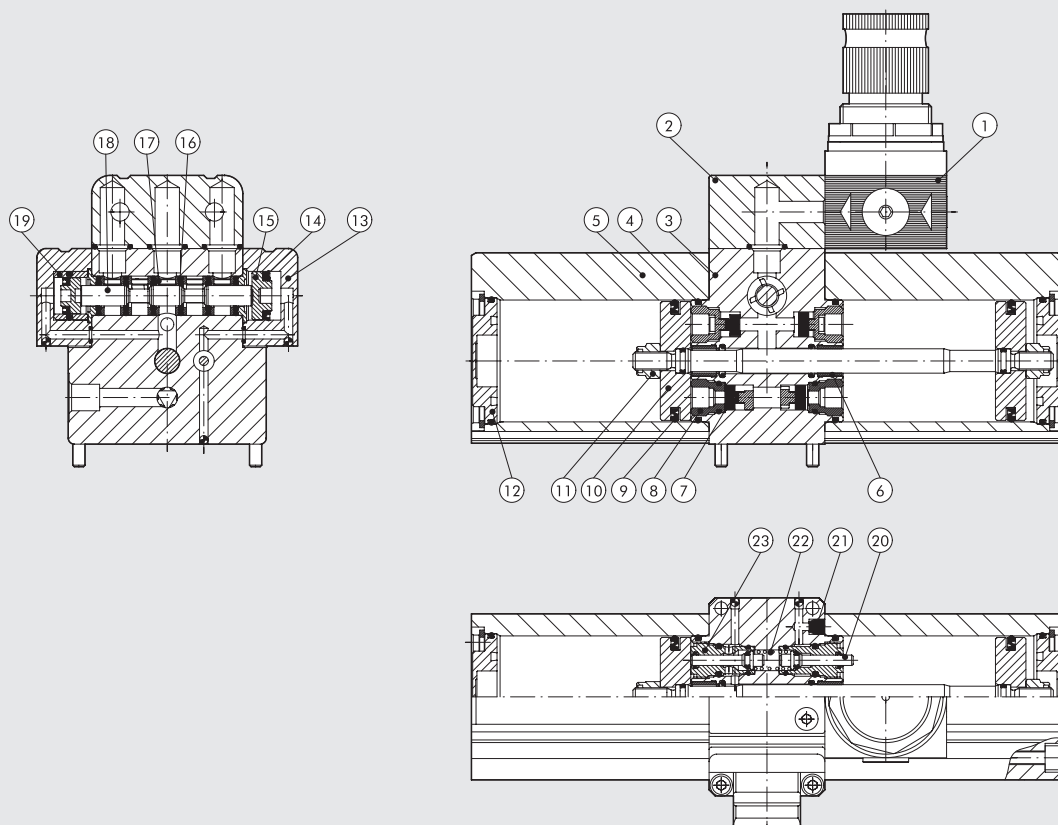
The supply air is compressed alternately by the two pistons in one of the two central chambers (B and C); the other central chamber and one of the two side chambers (A and D) operate the pistons; the external chamber, which is not involved in compression, is relieved.

Air compressed at a ratio of 2:1 passes through a check valve that maintains the output pressure even when compressed air is no longer supplied.

The valves in the central body, which are operated by mechanical pusher pistons, switch the function of the two pairs of chambers (A and D, B and C) at each piston stroke.



## COMPONENTS

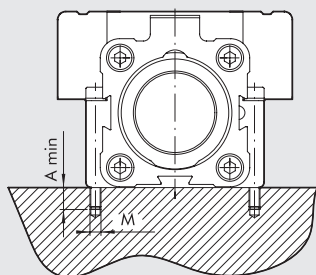


- ① PRESSURE REGULATOR (only for version with regulator)
- ② INTERFACE BLOCK (only for version with regulator): anodized aluminium
- ③ CENTRAL BODY: anodized aluminium
- ④ OR SEAL: NBR rubber
- ⑤ BARREL: anodized aluminium alloy section
- ⑥ GUIDE BUSHING: steel strip with bronze and PTFE insert
- ⑦ POPPET: NBR rubber
- ⑧ CHECK VALVE: brass
- ⑨ PISTON GASKET: NBR rubber
- ⑩ PISTON: aluminium
- ⑪ SELF-LOCKING NUT: stainless steel

- ⑫ CYLINDER BASE: anodized aluminium
- ⑬ VALVE CONTROL: anodized aluminium
- ⑭ VALVE CONTROL GASKET: NBR rubber
- ⑮ VALVE PISTON: technopolymer
- ⑯ GASKET: NBR rubber
- ⑰ SPACER: technopolymer
- ⑱ SPOOL: nickel-plated aluminium
- ⑲ DIFFERENTIAL BUSHING: brass
- ⑳ PUSHER: stainless steel
- ㉑ SILENCER: technopolymer
- ㉒ SPRING: stainless steel
- ㉓ GUIDE BUSHING: brass

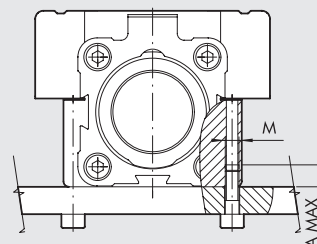
## MOUNTING

On a wall using the screws provided with the Booster.



	Ø40	Ø63	Ø100
A	8	12	11.5
M	M4	M6	M10

On a panel using screws (only for Ø40 and Ø63).

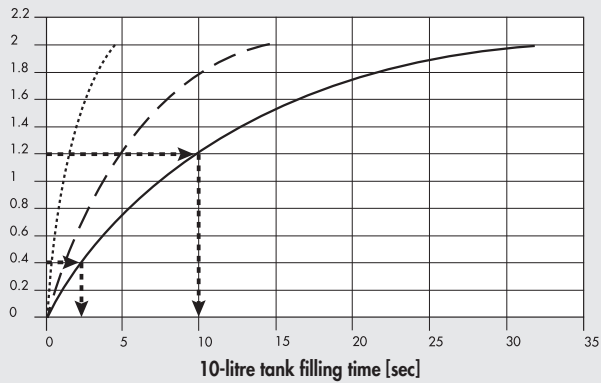


	Ø40	Ø63
A	8	10
M	M5	M8

TANK FILLING CURVES

WITHOUT REGULATOR

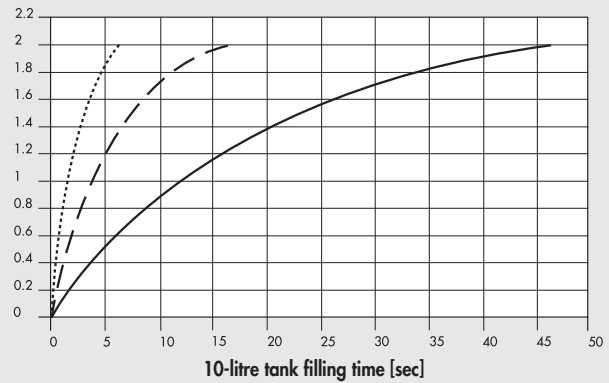
Compression ratio [p2/p1]



- Ø40
- - - Ø63
- ..... Ø100

WITH REGULATOR

Compression ratio [p2/p1]



The graphs refer to the filling of a 10-litre tank and show the ratio of outlet to inlet pressure (= p2:p1) as a function of time (sec).  
 The graphs are valid for any inlet pressure between 2 and 10 bar.  
 The following formula can be used to calculate the time t (sec) required to switch from pressure ratio 1 to pressure ratio 2 in a tank of volume V (litres):

$$t = \frac{V (t_2 - t_1)}{10}$$

where t1 and t2 are the times shown on the x-axis, corresponding to ratios 1 and 2.

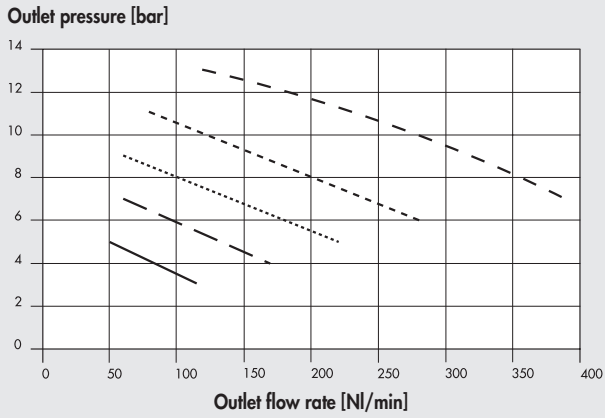
E.g.  
 1 = 0.4 => t1 = 2.5 sec  
 2 = 1.2 => t2 = 10 sec

The time required to switch from 1 to 2 with a 25-litre tank is:

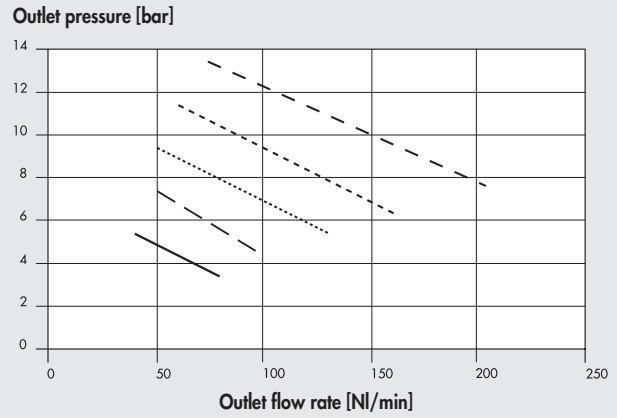
$$t = \frac{25 (10 - 2.5)}{10} \text{ sec} = 18.75 \text{ sec}$$

**FLOW CHARTS**

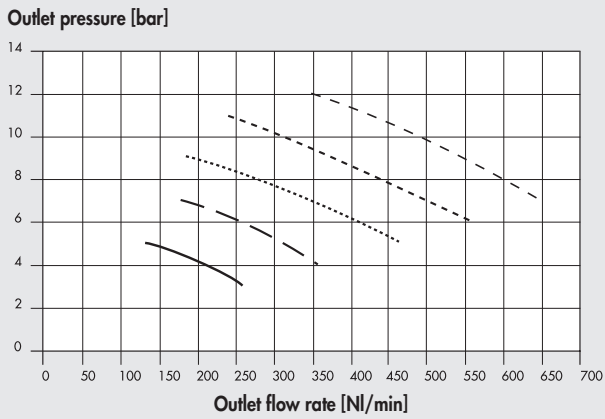
**WITHOUT REGULATOR Ø40**



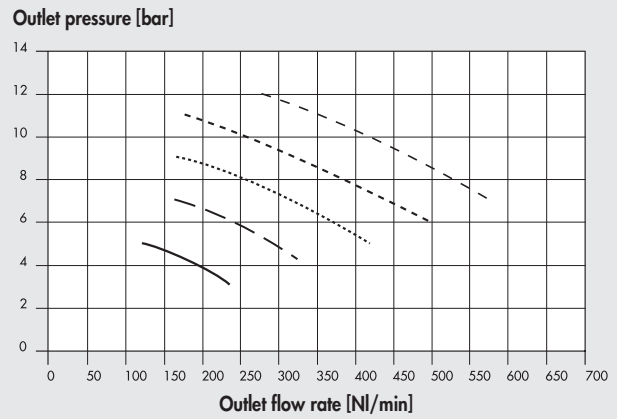
**WITH REGULATOR Ø40**



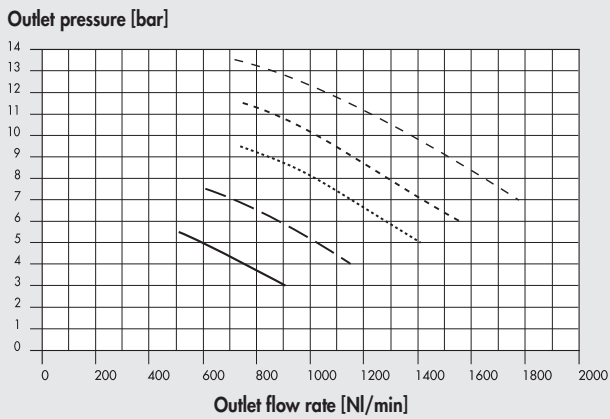
**WITHOUT REGULATOR Ø63**



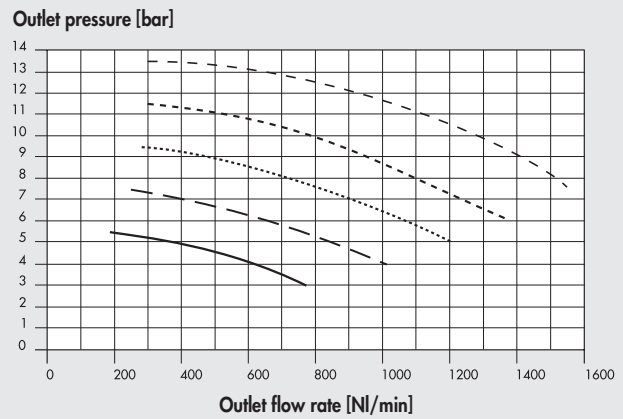
**WITH REGULATOR Ø63**



**WITHOUT REGULATOR Ø100**



**WITH REGULATOR Ø100**

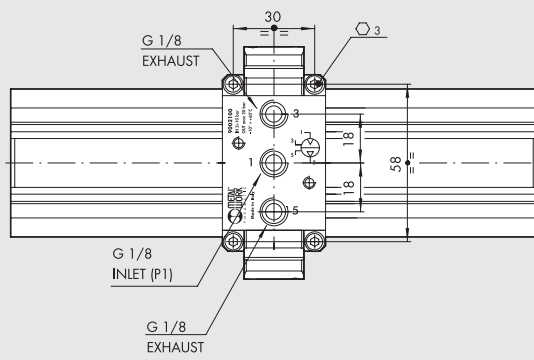
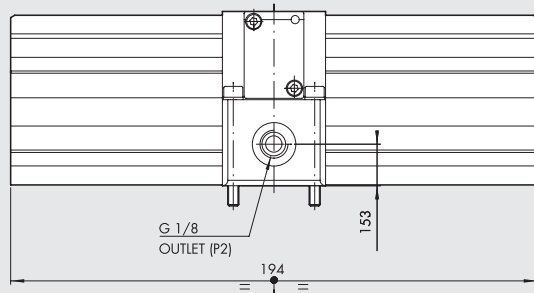
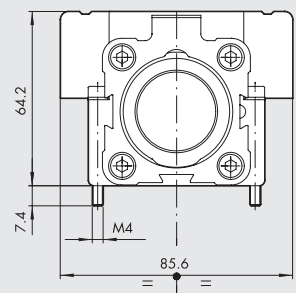


**INLET PRESSURE**

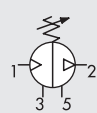
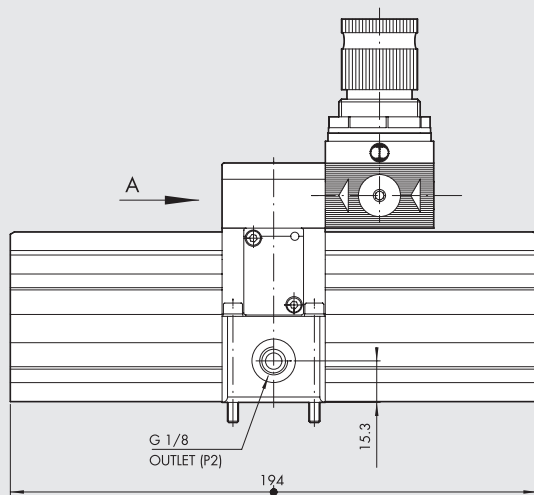
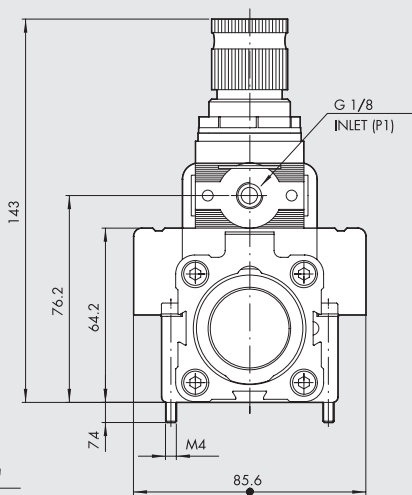
- - - - - p1 = 7 bar     
 - · - · - · p1 = 6 bar     
 · · · · · p1 = 5 bar     
 - - - - - p1 = 4 bar     
 ——— p1 = 3 bar

**DIMENSIONS PRESSURE MULTIPLIER Ø40 (BOOSTER)**

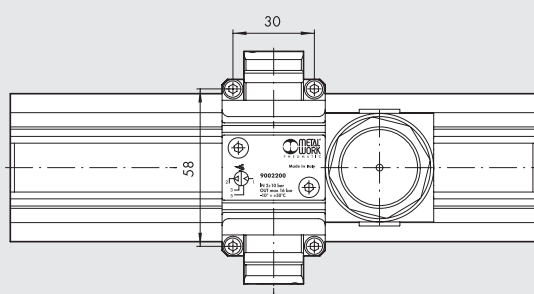
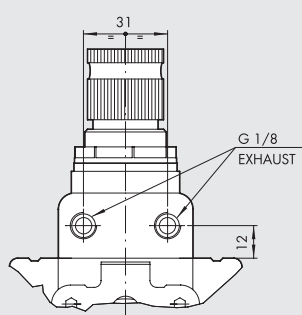
**WITHOUT REGULATOR**



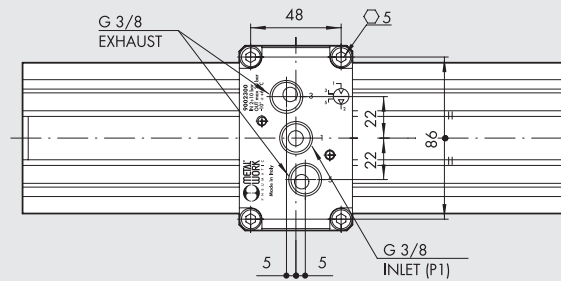
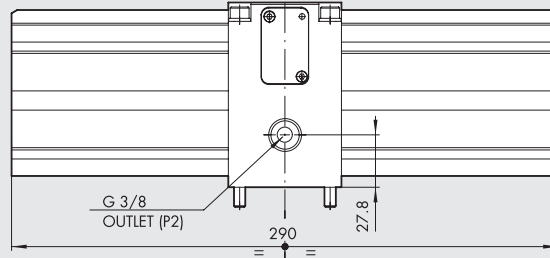
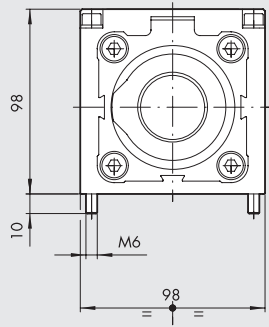
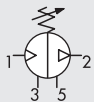
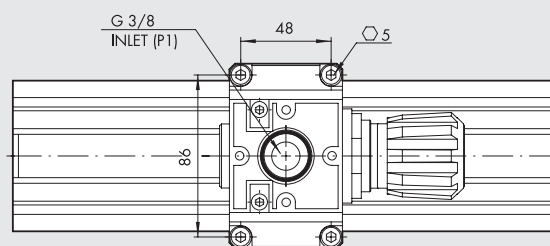
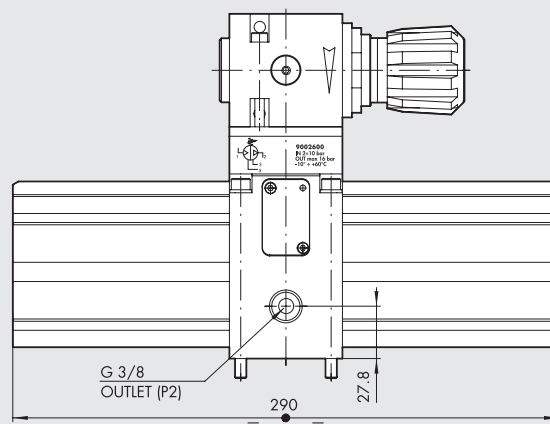
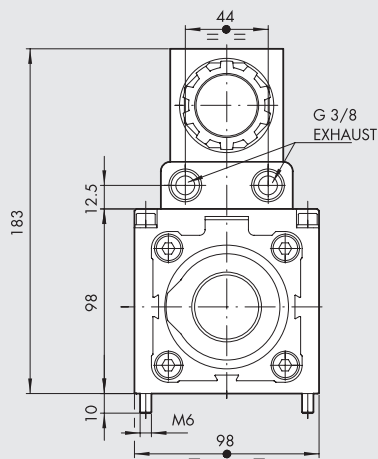
**WITH REGULATOR**



VIEW FROM "A"



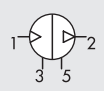
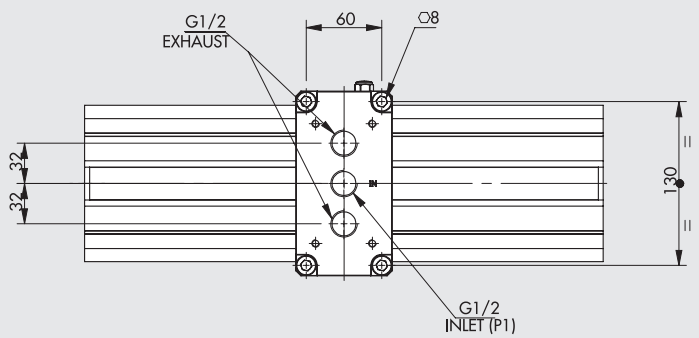
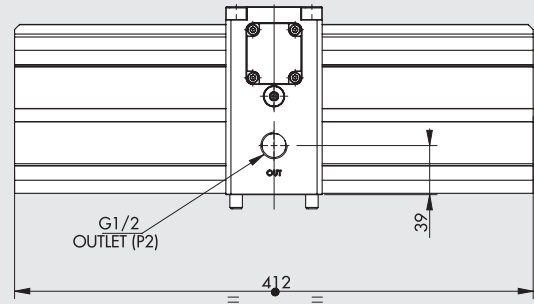
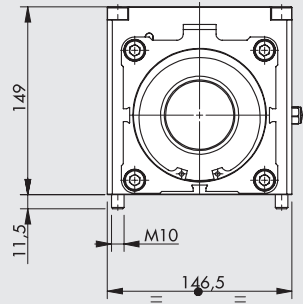
Code	Description
9002100	Booster Ø40
9002200	Booster Ø40 with regulator

**DIMENSIONS PRESSURE MULTIPLIER Ø63 (BOOSTER)**
**WITHOUT REGULATOR**

**WITH REGULATOR**


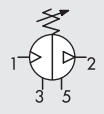
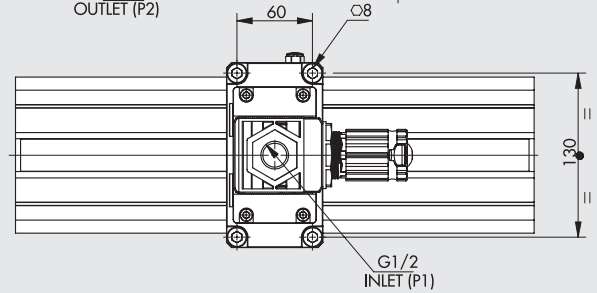
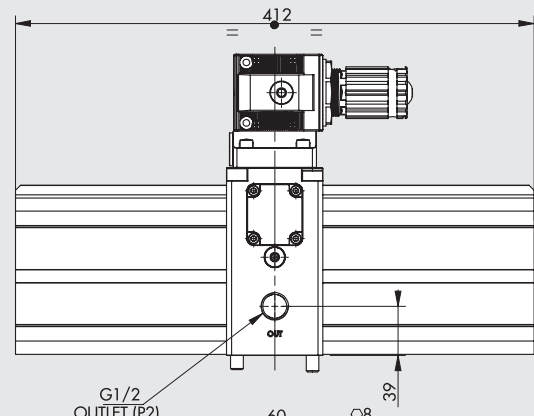
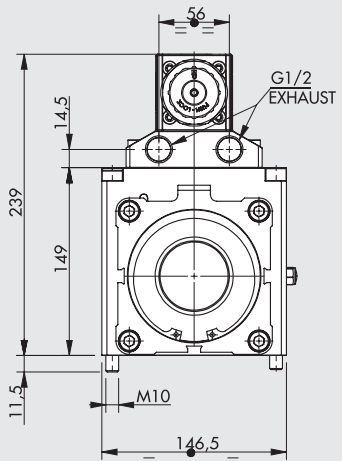
Code	Description
9002300	Booster Ø63
9002600	Booster Ø63 with regulator

DIMENSIONS PRESSURE MULTIPLIER Ø100 (BOOSTER)

WITHOUT REGULATOR



WITH REGULATOR



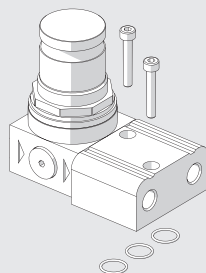
Code	Description
9002700	Booster Ø100
9002800	Booster Ø100 with regulator



## ACCESSORIES

### REGULATOR UNIT

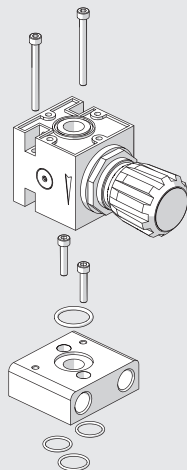
Ø40



Code	Description
9002180	Ø40 regulator unit

Note: Supplied with 2 screws, 3 O-ring

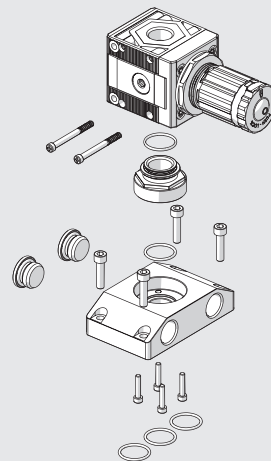
Ø63



Code	Description
9002380	Ø63 regulator unit

Note: Supplied with 4 screws, 4 O-ring

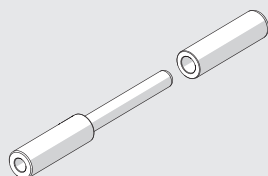
Ø100



Code	Description
9002780	Ø100 regulator unit

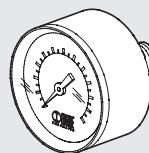
Note: Supplied with 10 screws, 5 O-ring

### ACCESSORY FOR ASSEMBLING Ø100 BOOSTER VALVE GASKETS AND SPACERS



Code	Description
9002791	Accessory for assembling Ø100 Booster valve gaskets

### PRESSURE GAUGE



Code	Description
9700101	M 40 1/8 012
9700110	M 40x40 1/8 012

**N.B.:** In case of use of the pressure gauge with Booster Ø100 it is necessary to purchase the appropriate adapter cod. 9210005

### SILENCER

Ø40



Ø63



Ø100



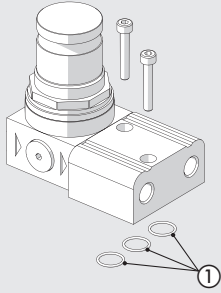
Code	Description
W0970530072	MW SPL-F silencer for Booster Ø40
W0970530014	MW SCQ silencer for Booster Ø63
W0970530055	MW SFE silencer for Booster Ø100

### NOTES

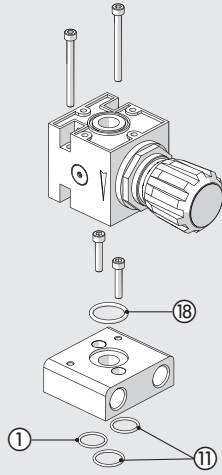
# SPARE PARTS

## SET OF GASKETS

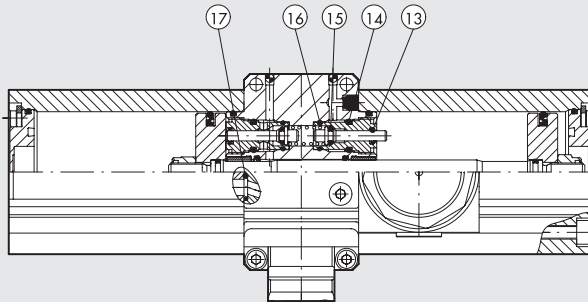
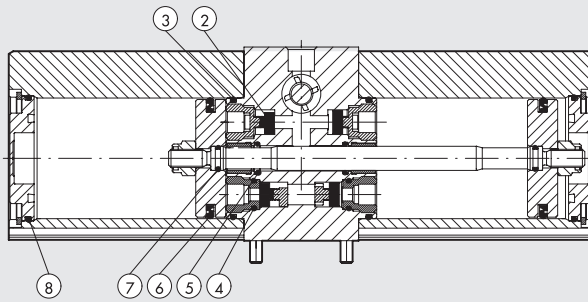
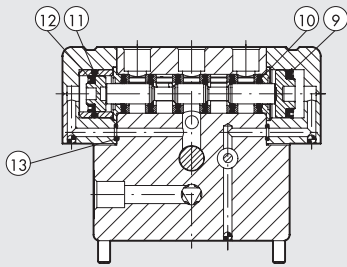
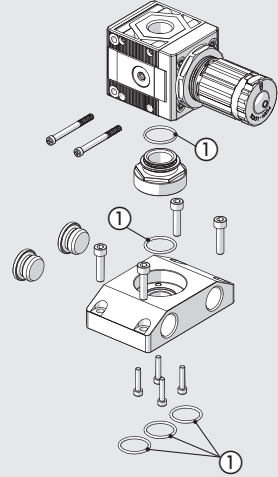
Ø40



Ø63



Ø100



Code	Description
9002190	Set of gaskets for Ø40 Booster (includes all indicated gaskets)
9002390	Set of gaskets for Ø63 Booster (includes all indicated gaskets)
9002790	Set of gaskets for Ø100 Booster (includes all indicated gaskets)

# IN-LINE PROGRESSIVE STARTER VAP 1/4" AND 1/2"



The in-line progressive starter is a valve that regulates the flow of air until the outlet pressure reaches a certain value, at which the valve opens and allows air to flow at full rate.

This valve can be used to control a group of valves or a single valve, or it can be mounted between another valve and an actuator.

The air that enters inlet 1 passes through a choke that has a knob adjustment to control the flow. The valve opens completely when the outlet pressure reaches about 60% of the inlet pressure.

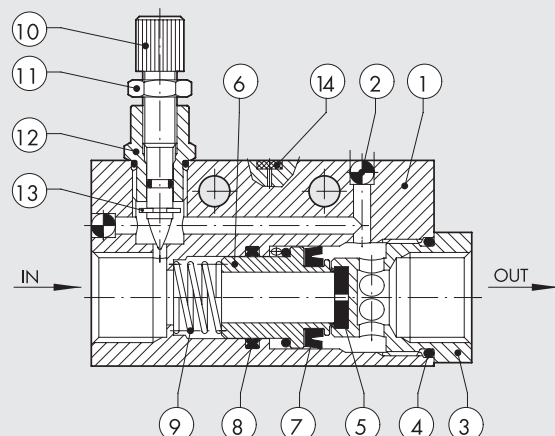
If the air supply is switched off, the valve discharges air from outlet 2 to inlet 1.



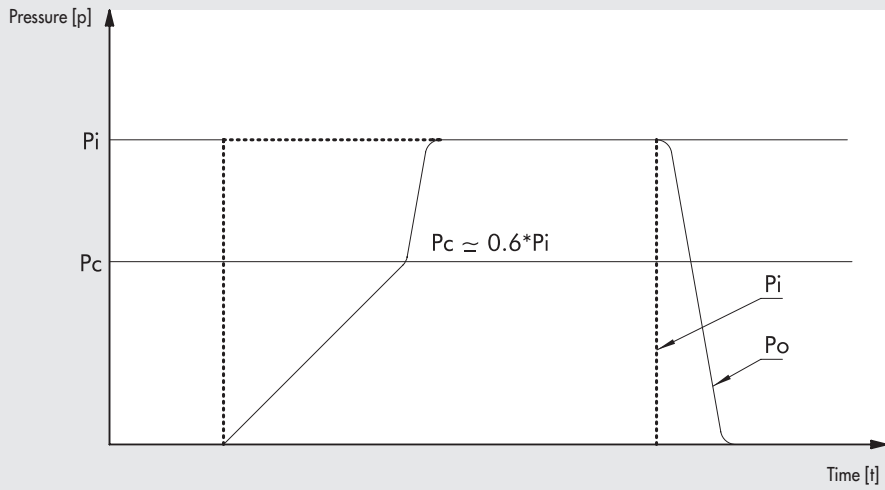
TECHNICAL DATA		VAP 1/4	VAP 1/2
Threaded ports		1/4"	1/2"
Type of valve		2/2 NC	
Minimum operating pressure	bar	2	
	psi	29	
	MPa	0.2	
Maximum operating pressure	bar	10	
	psi	145	
	MPa	1	
Switching pressure		About 60% of inlet pressure	
Operating frequency	Hz	max 5	
Flow rate at 6.3 bar, ΔP=0.5 bar:	Nl/min	1050	2350
	scfm	37	83
Flow rate at 6.3 bar, ΔP=1 bar:	Nl/min	1500	3100
	scfm	53	110
Maximum flow rate through flow regulator at 6.3 bar:	Nl/min	200	300
	scfm	7	11
Operating temperature	°C	from -10 to 70	
	°F	from 14 to 158	
Fluid		Filtered, lubricated or unlubricated, compressed air. Lubrication, if used, must be continuous.	
Weight	g	90	220
Wall fixing screws		Min. M4x25	Min. M4x35
Mounting		In any position	

## COMPONENTS

- ① BODY: anodized aluminium
- ② BALL: steel
- ③ INSERT: nickel-plated brass
- ④ O-Ring: NBR
- ⑤ POPPET: NBR
- ⑥ PISTON: anodized aluminium
- ⑦ PISTON GASKET: NBR
- ⑧ O-Ring: NBR
- ⑨ SPRING : steel
- ⑩ PIN: nickel-plated brass
- ⑪ NUT: nickel-plated brass
- ⑫ PIN HOLDER: nickel-plated brass
- ⑬ SNAP RING: zinc-plated steel
- ⑭ SILENCER

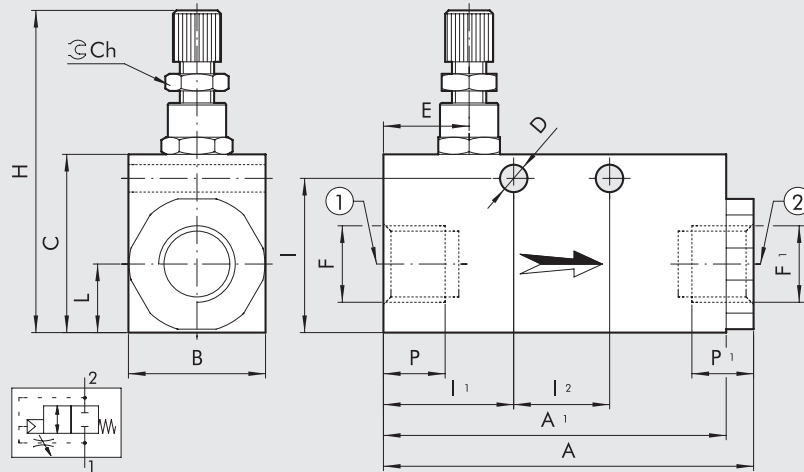


OPERATION



$P_i$  = inlet pressure  
 $P_o$  = outlet pressure  
 $P_c$  = switching pressure

DIMENSION

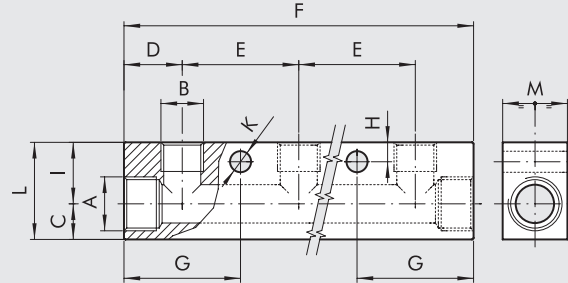


Code	Description	F	F'	A	A'	B	C	Ch	D	E	H	I	I'	I <sup>2</sup>	L	P	P'
W3606000002	VAP 1/4	G1/4	G1/4	56	50	20	30	8	4.5	10	49-52	25.5	18	16	10	9	9
W3606000004	VAP 1/2	G1/2	G1/2	75.8	65	30	40	8	4.5	13	59-62	35.5	26.5	16	15	12	12

NOTES

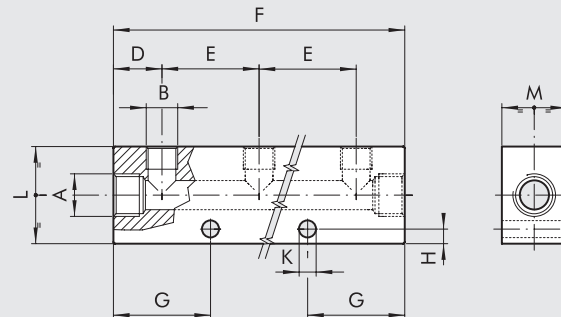


## DISTRIBUTION FRAME WITH MULTIPLE STRAIGHT 1/4" OUTLETS



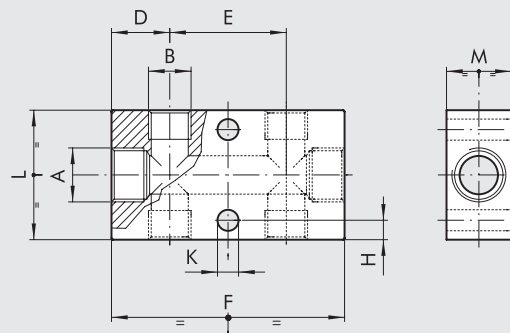
Code	INLETS			OUTLETS										
	N°	A	N°	B	D	E	F	G	H	K	I	C	L	M
W0502121006	2	G 3/8	3	G 1/4	18	36	108	36	6	6.5	19	11	30	20
W0502121008	2	G 3/8	4	G 1/4	18	36	144	36	6	6.5	19	11	30	20
W0502121010	2	G 3/8	5	G 1/4	18	36	180	36	6	6.5	19	11	30	20
W0502121012	2	G 3/8	6	G 1/4	18	36	216	36	6	6.5	19	11	30	20
W0502131006	2	G 1/2	3	G 1/4	18	36	108	36	6	6.5	24	16	40	30
W0502131008	2	G 1/2	4	G 1/4	18	36	144	36	6	6.5	24	16	40	30
W0502131010	2	G 1/2	5	G 1/4	18	36	180	36	6	6.5	24	16	40	30
W0502131012	2	G 1/2	6	G 1/4	18	36	216	36	6	6.5	24	16	40	30

## DISTRIBUTION FRAME WITH MULTIPLE STRAIGHT 1/8" OUTLETS

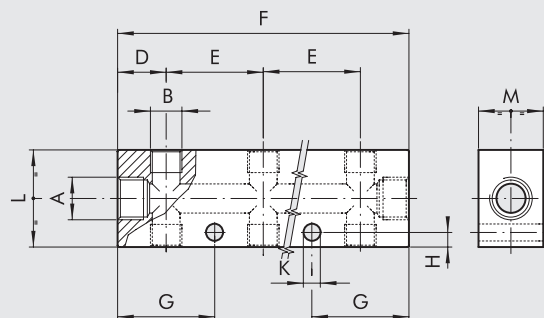


Code	INLETS			OUTLETS										
	N°	A	N°	B	D	E	F	G	H	K	L	M		
W0502111005	2	G 1/4	3	G 1/8	15	30	90	30	4.5	5.3	30	20		
W0502111007	2	G 1/4	4	G 1/8	15	30	120	30	4.5	5.3	30	20		
W0502111009	2	G 1/4	5	G 1/8	15	30	150	30	4.5	5.3	30	20		
W0502111011	2	G 1/4	6	G 1/8	15	30	180	30	4.5	5.3	30	20		

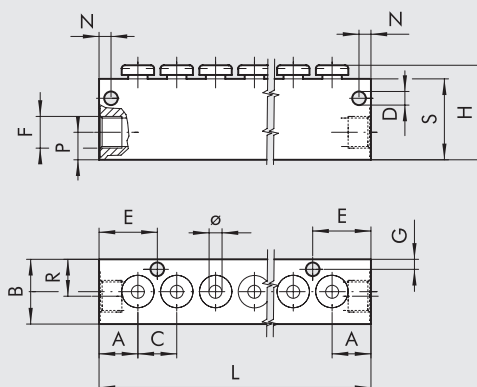
## DISTRIBUTION FRAME WITH 2 OPPOSED OULETS



Code	INLETS			OUTLETS										
	N°	A	N°	B	D	E	F	H	K	L	M			
W0503111013	2	G 1/4	2+2	G 1/8	15	30	60	4.5	5.3	30	20			
W0503121014	2	G 3/8	2+2	G 1/4	18	36	72	6	6.5	40	20			
W0503131014	2	G 1/2	2+2	G 1/4	22	36	80	6	6.5	40	30			

**DISTRIBUTION FRAME WITH 1/8"-1/4" OPPOSED OUTLETS**


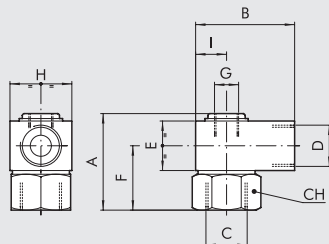
Code	INLETS		OUTLETS		D	E	F	G	H	K	L	M
	N°	A	N°	B								
W0503111015	2	G 1/4	3+3	G 1/8	15	30	90	30	4.5	5.3	30	20
W0503111017	2	G 1/4	4+4	G 1/8	15	30	120	30	4.5	5.3	30	20
W0503111019	2	G 1/4	5+5	G 1/8	15	30	150	30	4.5	5.3	30	20
W0503121016	2	G 3/8	3+3	G 1/4	18	36	108	36	6	6.5	40	20
W0503121018	2	G 3/8	4+4	G 1/4	18	36	144	36	6	6.5	40	20
W0503121020	2	G 3/8	5+5	G 1/4	18	36	180	36	6	6.5	40	20
W0503131016	2	G 1/2	3+3	G 1/4	22	36	116	40	6	6.5	40	30
W0503131018	2	G 1/2	4+4	G 1/4	22	36	152	40	6	6.5	40	30
W0503131020	2	G 1/2	5+5	G 1/4	22	36	188	40	6	6.5	40	30

**DISTRIBUTOR, Ø 4-6-8 mm**


Code	N. positions	Ø	F	A	B	C	D	E	G	H	L	M	N	P	R	S
7304106	6	4	1/8	12	20	12	4.2	3.7	3.1	29	84	6	3.7	8.5	11.4	25
7304112	12	4									156					
7306206	6	6	1/4	14	20	14.6	4.2	21.3	3.1	34	101	6	3.7	10	11	30
7306212	12	6									188.6					
7308306	6	8	3/8	18	25	16.6	4.2	26.3	4.2	39	119	5	5	14	14	35
7308312	12	8									218.6					

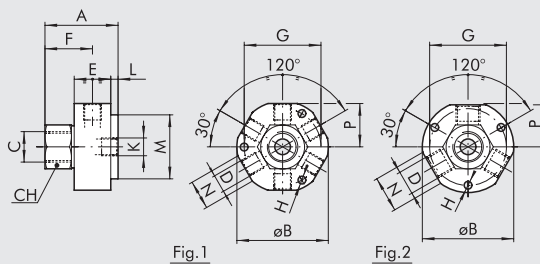
# ROTARY JOINT

## SINGLE ROTARY JOINT



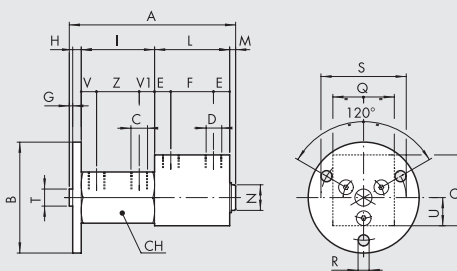
Code	A	B	C	D	E	F	G	H	I	CH	r.p.m.
W0511101101	32.5	30	G 1/8	G 1/8	16	22	-	16	8	16	550
W0511121121	32.5	30	G 1/4	G 1/4	16	22	-	16	8	16	550
W0511131131	44	40	G 3/8	G 3/8	25	28.5	G 1/8	25	12.5	22	300
W0511141141	55	65	G 1/2	G 1/2	30	35	G 3/8	40	20	30	200
W0511151151	70	65	G 3/4	G 3/4	40	45	G 1/2	40	20	36	160
W0511161161	80	80	G 1	G 1	45	52.5	G 3/4	50	26	45	140

## MULTIPLE ROTARY JOINT



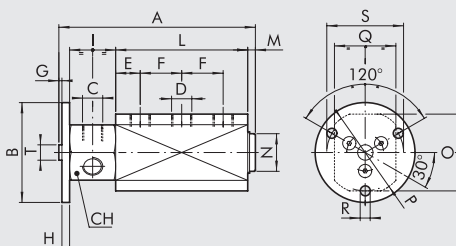
Code	Figure	INLETS				OUTLETS				H	K	L	M	N	P	CH	r.p.m.	
		A	B	N°	C	N°	D	E	F									G
W0513131101	1	45	49	1	G 3/8	6	G 1/8	25	28.5	42	4.2	G 1/8	4	35	17	22.6	22	300
W0512131121	2	45	49	1	G 3/8	3	G 1/4	25	28.5	42	4.2	G 1/8	4	35	19	23	22	300

## 2 INDEPENDENT WAY ROTARY JOINTS



Code	A	B	INLETS		OUTLETS		E	F	G	H	I	L	M	N	O	Q	R	S	T	U	V	V1	Z	CH	r.p.m.
			N°	C	N°	D																			
W0514101101	97	65	2	G 1/8	2	G 1/8	12	20	2	5	43	44	3	15	40	25	6.3	50	10	20	11.5	11.5	20	30	300
W0514121121	128	65	2	G 1/4	2	G 1/4	15	30	2	5	56	60	5	24	50	40	6.3	50	10	25	15	12	30	36	200

## 3 INDEPENDENT WAY ROTARY JOINTS

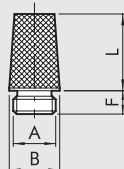


Code	A	B	INLETS		OUTLETS		E	F	G	H	I	L	M	N	O	P	Q	R	S	T	CH	r.p.m.
			N°	C	N°	D																
W0515121121	128	64	3	G 1/4	3	G 1/4	16	27	2	5	30	86	5	29	50	54	45	6.3	50	10	36	200



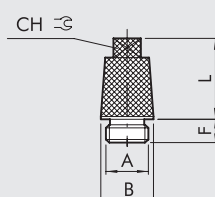
# SILENCERS AND EXHAUST REGULATOR

## SILENCER MW SC



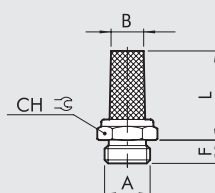
	Code	A	B ±0.2	F	L ±3%
Materials:	W0970530001	M5	6	4.5 ±0.5	10
Nickel-plated brass	W0970530002	G 1/8	12	6 ±0.5	15
Sintered nickel-plated bronze	W0970530003	G 1/4	15	6.7 ±0.5	19
	W0970530004	G 3/8	19	8.5 ±0.5	28.5
	W0970530005	G 1/2	23	8.7 ±0.5	33
Features:	W0970530006	G 3/4	29	11 ±1	40.5
Pmax: 12 bar	W0970530007	G 1	36	11.5 ±1	50.5
Temp.: -10°C - +80°C					

## SILENCER MW SCQ



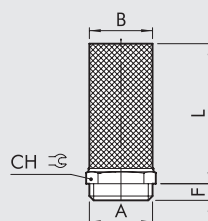
	Code	A	B ±0.2	F	L ±3%	CH
Materials:	W0970530012	G 1/8	12	6 ±0.5	15	7
Nickel-plated brass	W0970530013	G 1/4	15	7.5 ±0.5	19	8
Sintered nickel-plated bronze	W0970530014	G 3/8	19	8.5 ±0.5	29.2	10
	W0970530015	G 1/2	23	9 ±0.5	31.5	14
	W0970530016	G 3/4	29	10 ±1	41.5	17
Features:	W0970530017	G 1	36	12 ±1	51.2	23
Pmax: 12 bar						
Temp.: -10°C - +80°C						

## SILENCER MW SE



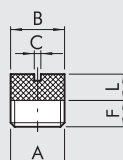
	Code	A	B ±0.5	F	L ±5%	CH
Materials:	W0970530021	M5	4	4 ±0.5	13	8
Nickel-plated brass	W0970530020	M7	5	5 ±0.5	21	10
Sintered nickel-plated bronze	W0970530022	G 1/8	7	6 ±0.5	21	13
	W0970530023	G 1/4	8.5	8 ±0.5	23.5	16
	W0970530024	G 3/8	11	8 ±0.5	33	19
Features:	W0970530025	G 1/2	15	9 ±0.5	37	24
Pmax: 12 bar	W0970530026	G 3/4	21.5	9 ±1	43.5	30
Temp.: -10°C - +80°C	W0970530027	G 1	27	10 ±1	56	36

## HIGH-CAPACITY SILENCER MW SL



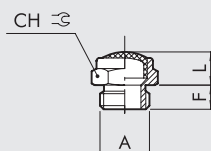
	Code	A	B ±1	F	L ±5%	CH
Materials:	W0970530036	G 3/4	37	12 ±1	215	50
Nickel-plated brass	W0970530037	G 1	37	12 ±1	215	50
Sintered nickel-plated bronze	W0970530038	G 1 1/4	37	15 ±1.5	215	50
	W0970530039	G 1 1/2	37	15 ±1.5	215	50
	W0970530040	G 2	37	17 ±1.5	220	65
Features:						
Pmax: 12 bar						
Temp.: -10°C - +80°C						

## SILENCER MW STT



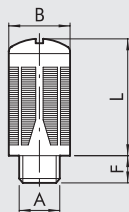
	Code	A	B ±0.2	F	L ±3%	C
Materials:	W0970530042	G 1/8	9.5	6.5 ±0.5	6	2
Nickel-plated brass	W0970530043	G 1/4	12.6	6 ±0.5	7	1.5
Sintered nickel-plated bronze	W0970530044	G 3/8	16.2	7.5 ±0.5	8.5	1.5
	W0970530045	G 1/2	20.5	10 ±0.5	9.6	2.5
	W0970530046	G 3/4	26	11 ±1	12	1.5
Features:	W0970530047	G 1	33	13 ±1	11	-
Pmax: 12 bar						
Temp.: -10°C - +80°C						

## SILENCER MW SFE



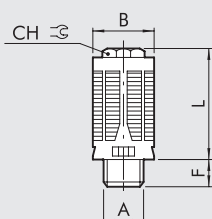
	Code	A	F	L ±3%	CH
Materials:	W0970530051	M5	3.7 ±0.5	4.7	8
Nickel-plated brass	W0970530052	G 1/8	6.2 ±0.5	8.2	13
Stainless steel wire	W0970530053	G 1/4	7.7 ±0.5	11.3	16
	W0970530054	G 3/8	8 ±0.5	11.5	19
	W0970530055	G 1/2	9 ±0.5	13	24
Features:	W0970530056	G 3/4	9 ±1	15	30
Pmax: 12 bar	W0970530057	G 1	10 ±1	18	36
Temp.: -10°C - +80°C					

## DYNAMIC SILENCER MW SPL



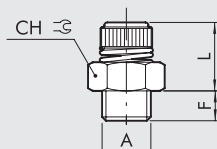
	Code	A	B ±0.2	F	L ±3%
Materials:	W0970530062	G 1/8	15.4	6.2 ±0.5	27
Black acetal resin	W0970530063	G 1/4	19.6	8 ±0.5	35
Acoustic insulation	W0970530064	G 3/8	24.7	11.3 ±0.5	47
	W0970530065	G 1/2	24.7	10.7 ±0.5	47
	W0970530066	G 3/4	48	18 ±1	96
Features:	W0970530067	G 1	48	18 ±1	97
Pmax:	6 bar				
Temp.:	-10°C - +60°C				

## SILENCER MW SPL-F



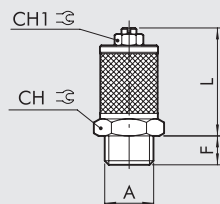
	Code	A	B ±0.2	F ±0.5	L ±3%	CH
Materials:	W0970530072	G 1/8	16.3	5.5	29	10
Black acetal resin	W0970530073	G 1/4	20	7.4	36.5	13
Felt	W0970530074	G 3/8	24.8	11	47	17
	W0970530075	G 1/2	24.8	11	47	17
Features:						
Pmax:	12 bar					
Temp.:	-10°C - +60°C					

## SILENCED EXHAUST REGULATOR MW SVE



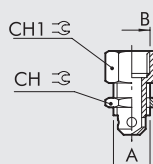
	Code	A	F	L ±0.5	CH
Materials:	W0970520001	G 1/8	6.7 ±0.5	19 - 23	13
Nickel-plated brass	W0970520002	G 1/4	7.4 ±0.5	21 - 24.5	15
Sintered nickel-plated bronze	W0970520003	G 3/8	9.7 ±0.5	23.5 - 29.5	22
Stainless steel spring	W0970520004	G 1/2	10.6 ±0.5	23 - 28	22
	W0970520005	G 3/4	12 ±1	29 - 35	30
Features:	W0970520006	G 1	13.8 ±1	27 - 34	36
Pmax:	12 bar				
Temp.:	-10°C - +80°C				

## SILENCED EXHAUST REGULATOR MW SVL



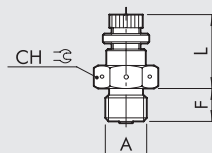
	Code	A	F	L ±0.5	CH	CH1
Materials:	W0970520010	M5	4 ±0.5	17 ÷ 27	8	6
Nickel-plated brass	W0970520009	M7	4.5 ±0.5	19 ÷ 31	8	5.5
Sintered nickel-plated bronze	W0970520011	G 1/8	7 ±0.5	31 ÷ 40	16	9
	W0970520012	G 1/4	7.5 ±0.5	30 ÷ 37.5	16	9
	W0970520013	G 3/8	10.5 ±0.5	37.5 ÷ 51.5	22	9
Features:	W0970520014	G 1/2	12.4 ±0.5	39.5 ÷ 47.5	22	9
Pmax:	W0970520015	G 3/4	12.4 ±1	56.5 ÷ 81	30	13
Temp.:	W0970520016	G 1	12.4 ±1	58.5 ÷ 84.5	36	13

## EXHAUST REGULATOR MW DSN



	Code	A	B	CH	CH1
Materials:	W0970520021	G 1/8	G 1/8	12	12
Nickel-plated brass	W0970520022	G 1/4	G 1/8	14	16
	W0970520023	G 3/8	G 1/4	19	17
	W0970520024	G 1/2	G 1/4	24	22
Features:					
Pmax:	12 bar				
Temp.:	-10°C - +80°C				

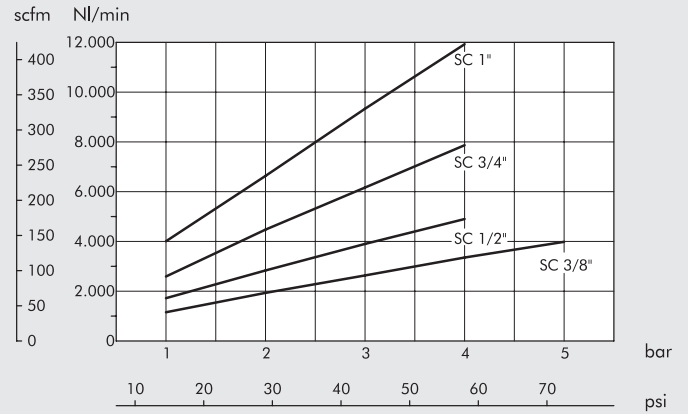
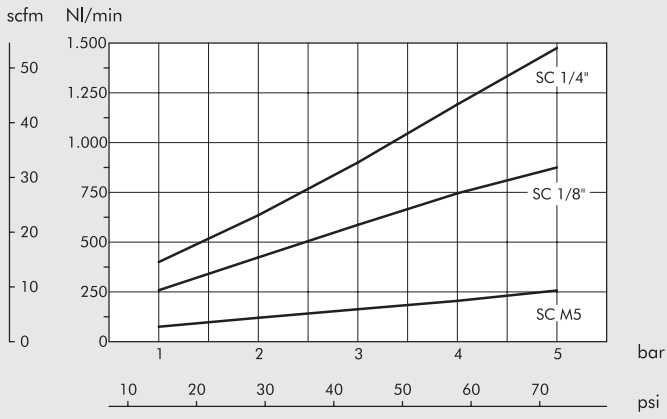
## EXHAUST REGULATOR MW DSE



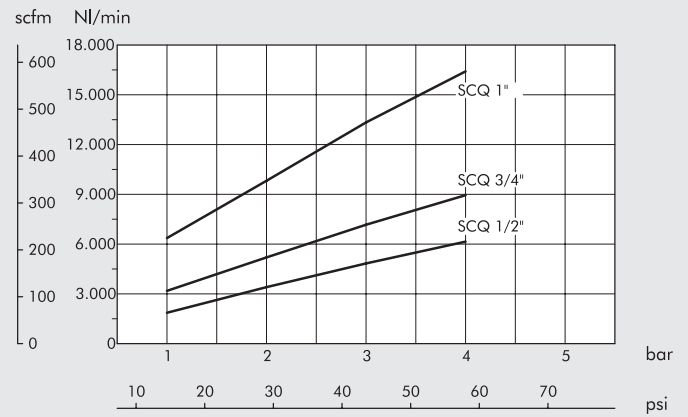
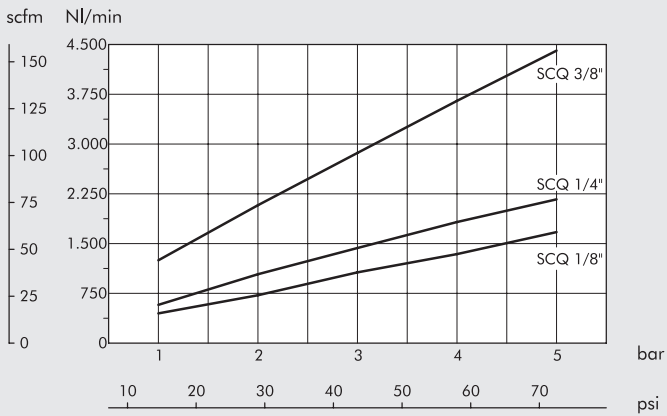
	Code	A	F	L ±0.5	CH
Materials:	W0970520031	G 1/8	7.5 ±0.5	16.8 - 20	14
Nickel-plated brass	W0970520032	G 1/4	10 ±0.5	21.5 - 29	17
Features:					
Pmax:	12 bar				
Temp.:	-10°C - +80°C				

**FLOW CHARTS**

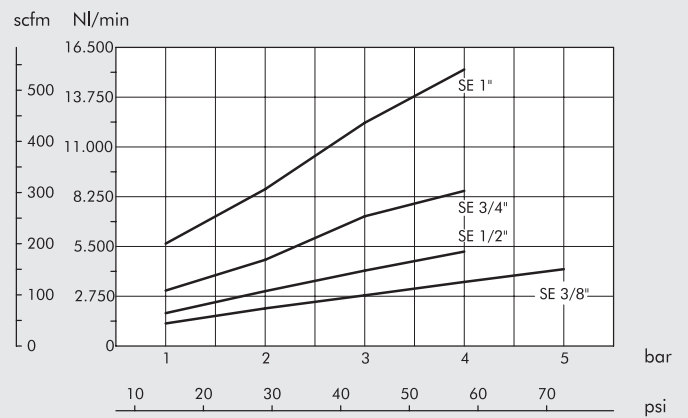
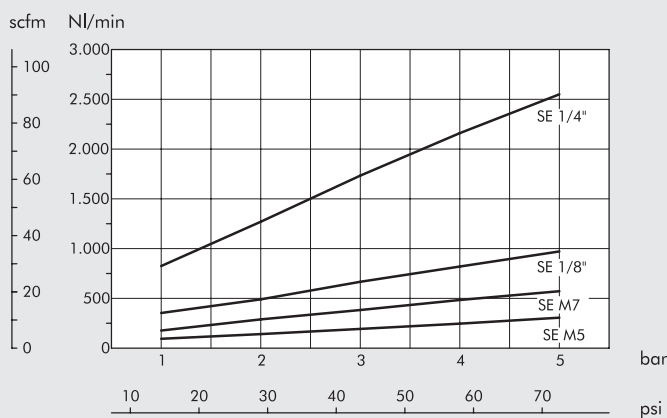
**SILENCER MW SC**



**SILENCER MW SCQ**

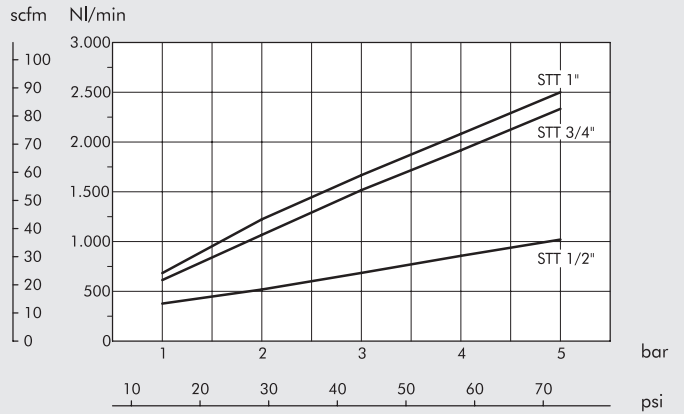
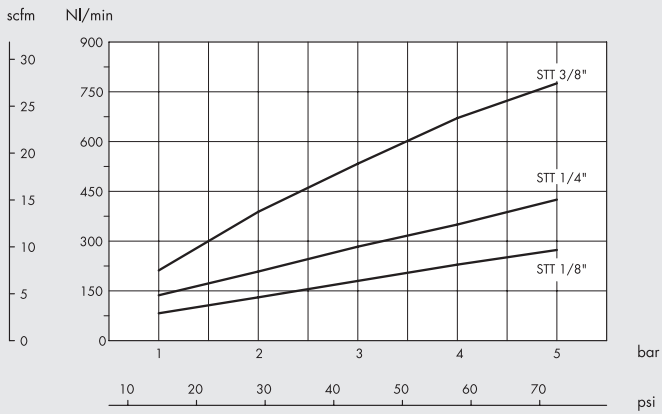


**SILENCER MW SE**

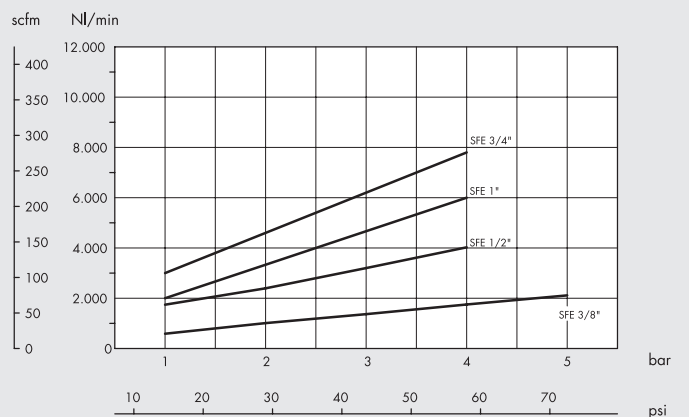
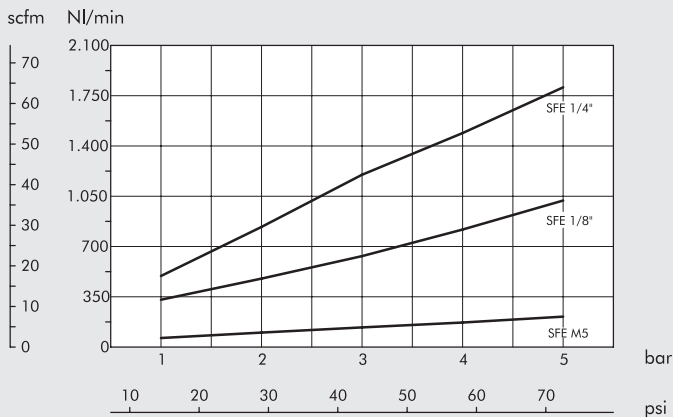


FLOW CHARTS

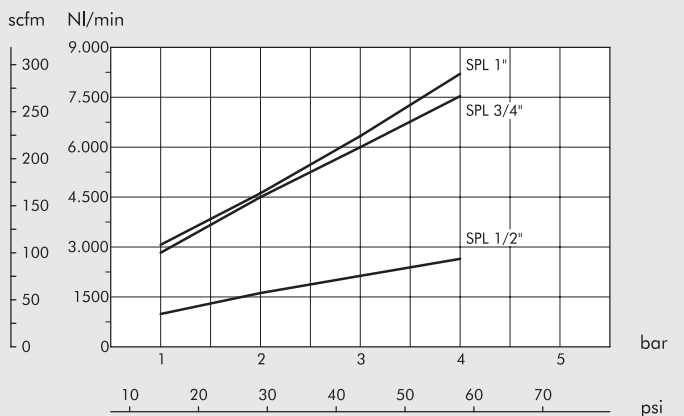
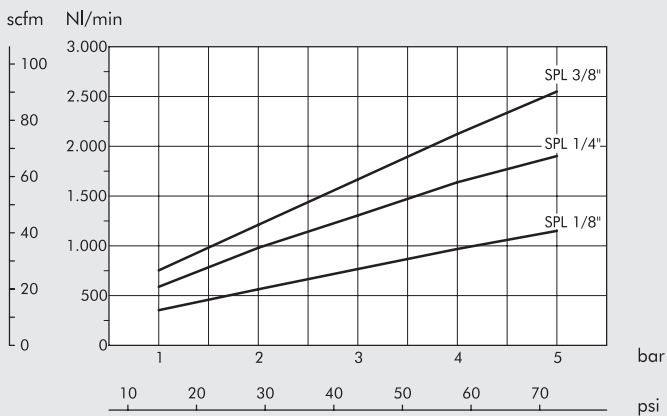
SILENCER MW STT



SILENCER MW SFE

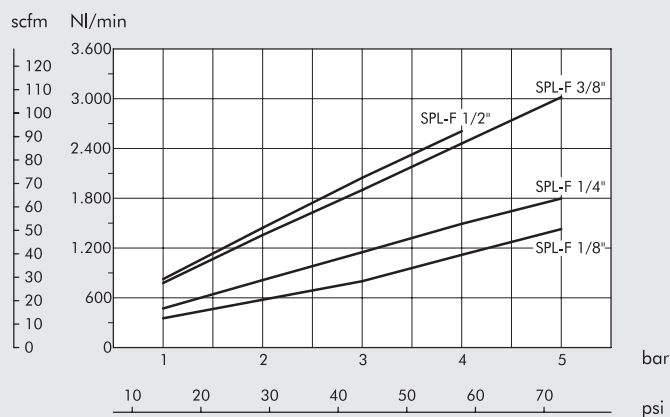


SILENCER MW SPL

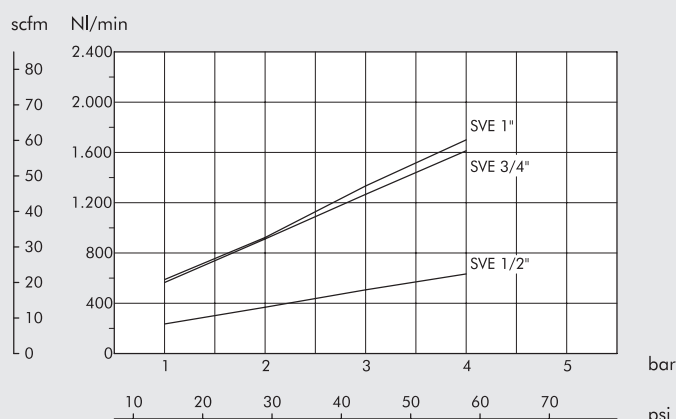
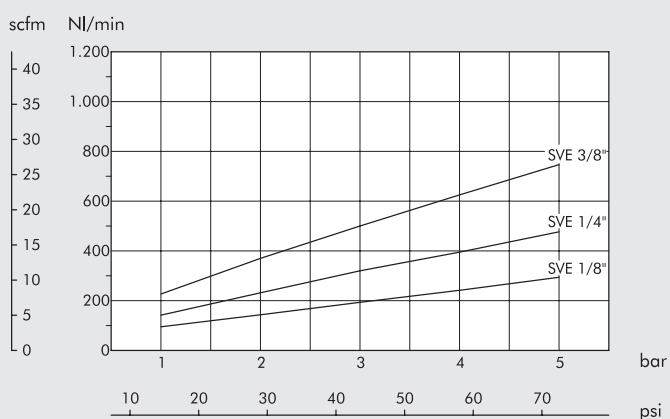


## FLOW CHARTS

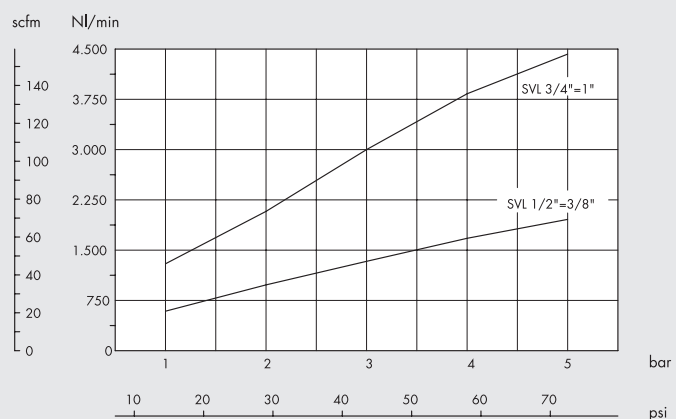
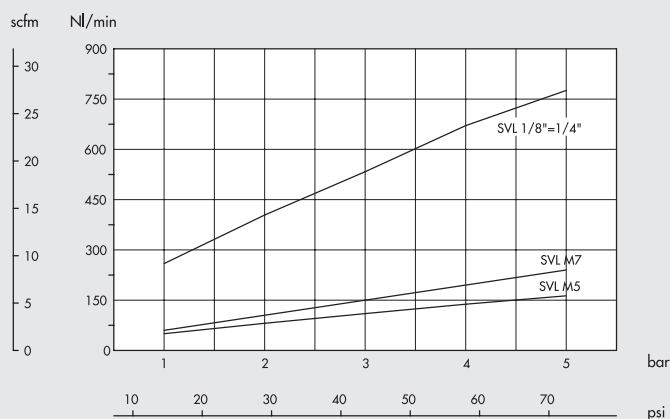
### SILENCER MW SPL-F



### SILENCER MW SVE



### SILENCER MW SVL



## NOISE ABATEMENT

Reduction of the noise that you obtain mounting a silencer on a compressed air exhaust, measured by feeding at 5 bar, at a distance of 1 m with 45° angle to the axis of the silencer (for SFE model at 90° in order to avoid the direct jet).

Middle values in the sizes.

MW SC - 35 Db  
 MW SCQ - 35 Db  
 MW SE - 28 Db  
 MW STT - 32 Db  
 MW SFE - 30 Db

MW SPL - 30 Db  
 MW SPL-F - 35 Db  
 MW SVE - 25 Db  
 MW SVL - 25 Db

Supplies 24V electric power via an M8 connector. Compressed air to power the generator can be supplied merely by connecting a pipe to the 1/8" threaded port. To interrupt energy production, all you have to do is to switch off the compressed air supply by means of a cock or solenoid valve. Voltage remains constant irrespective of changes in input pressure or the load applied (within the limits specified in the catalogue). An easy-to-read light display shows the status of the appliance at all times.



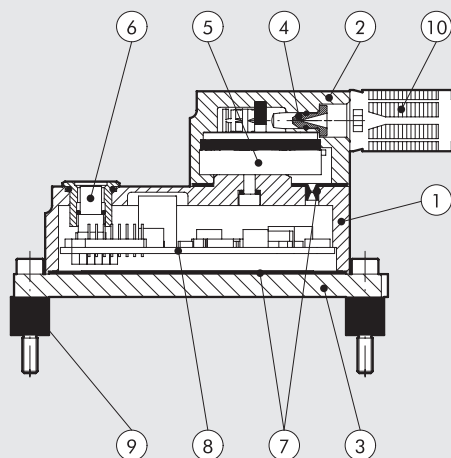
TECHNICAL DATA		50-1	50-2	50-3
Maximum power at 7 bar	W	3	7.5	12
Nominal voltage supplied		24 VDC		
Voltage tolerance		±3%		
Ripple and Noise		Including line regulation, load regulation and factory setup mMax 250 mV p-p o 79 mV rms		
Rise time at 7 bar at max. load	sec	2.5	1.5	1
Hold time at 7 bar at 50% of load	sec	1.3	0.9	0.8
Electrical connector		M8 - 3 poles		
Overload protection and short-circuit		"Hiccup mode" with automatic recovery upon cessation of overload		
Overvoltage protection		Intervention if output voltage > 120% than nominal value		
Electromagnetic compatibility		In compliance with the following standards: EN 61000-2: Part 6-2: Generic standards - Immunity for industrial environments EN 61000-2: Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments		
Life at 6.3 bar	h	20.000		
Signals		LED diagnostics. Visual signals are flanked by a diagnostic pin on the M8 connector, which closes a GND contact when the voltage is 24 VDC ±3%		
Index of protection for electronic devices		IP 65		
Input fluid		Filter unlubricated air		
Minimum input pressure	bar	4	3	3
Maximum input pressure	bar	7	7	7
Max air consumption at 7 bar (Leq)	NI/min	32	50	75
Air ports		Input: G1/8" Exhaust: G1/8"		
Temperature range	°C	0 - 50		
Max noise level at 7 bar		75 dB		
Casing material		Painted aluminium		
Assembly position		Any		
Fixing		Using 3 M4x10 screws		
Weight	g	The device can be stabilised using rubber vibration dampers forniti in dotazione 330		

#### LED DIAGNOSTICS OVERVIEW

LED off or red LED flashing	Temporarily on start-up: the output voltage has not yet reached 24V If this condition persists, the applied load is probably excessive with respect to the input pressure.
Green LED fixed	Normal operation: the output voltage has reached 24V Optimal use of the compressed air supply.
Green LED flashing	Normal operation: the output voltage has reached 24V but the generator is used below capacity (can supply more power at the same compressed air supply)
Red and Green LED flashing	Charge short-circuited: output voltage is automatically cut off. It will return within the tolerance range upon elimination of overload.
Red LED fixed	The maximum supply pressure has been exceeded and the device risks getting damaged.

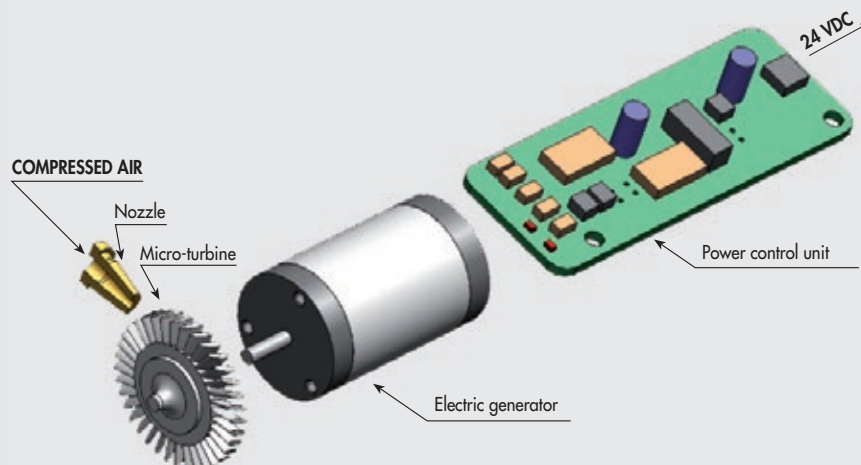
## COMPONENTS

- ① Aluminium body, treated and painted
- ② Aluminium body, treated and painted
- ③ Aluminium base, treated and painted
- ④ Brass nozzle
- ⑤ Turbine and electrical generator unit
- ⑥ M8 3-pin connector
- ⑦ NBR gaskets
- ⑧ Electronic board
- ⑨ Vibration dampers
- ⑩ Silencer



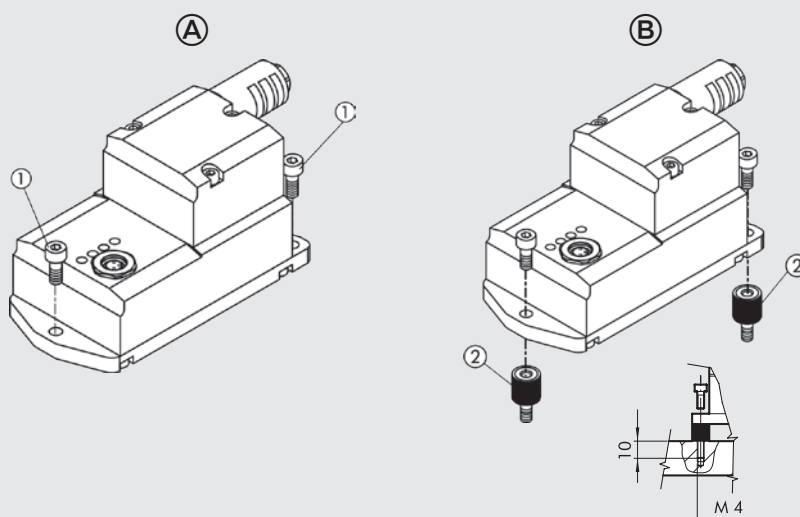
## FUNCTION DIAGRAM

The compressed air is supplied via a nozzle that converts pressure energy into kinetic energy. The supersonic jet of air strikes the blades of a micro-turbine, which is integral with an electrical generator. An electronic power management unit ensures constant voltage output at varying input pressures and applied electrical loads. The electrical power thus generated can supply any type of utility.

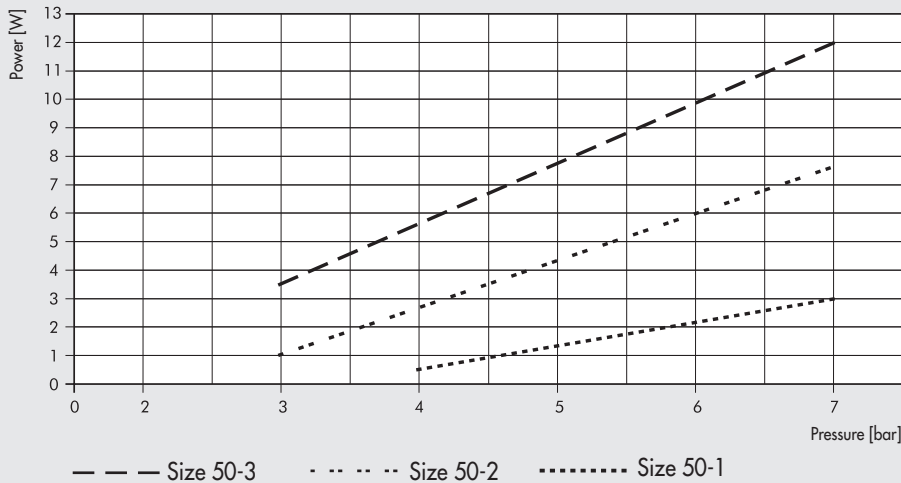


## FIXING

The generator can be fixed on a flat surface using the 3 M4x10 screws ① (fig. A), and the 3 vibration dampers ② supplied with the device (fig. B).

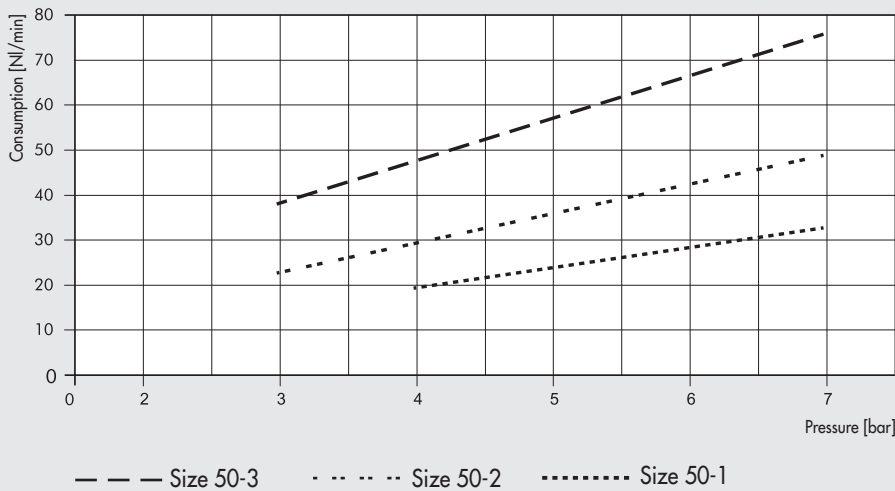


### PRESSURE / AVAILABLE POWER

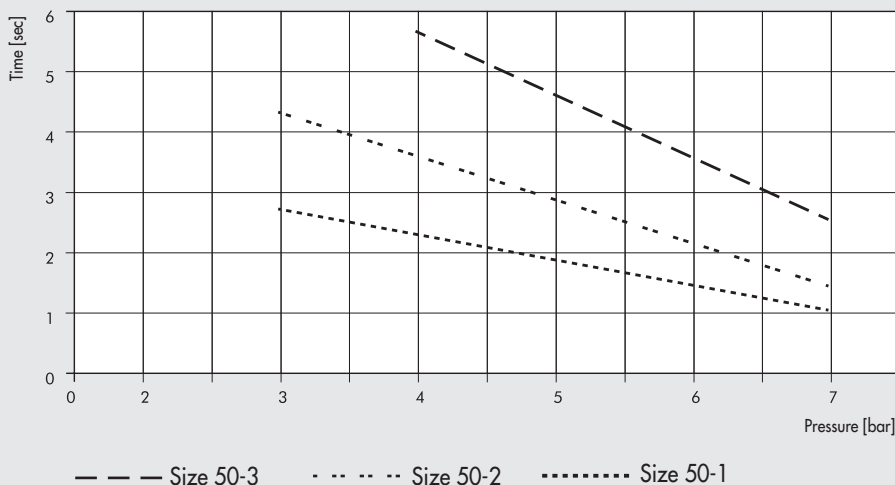


**Important:** if the input pressure is not sufficient to generate the power required by the electric load, the generator keeps switching on and off (intermittently). You only need to increase the air pressure (as shown in the chart) to get the required power.

### PRESSURE / AIR CONSUMPTION



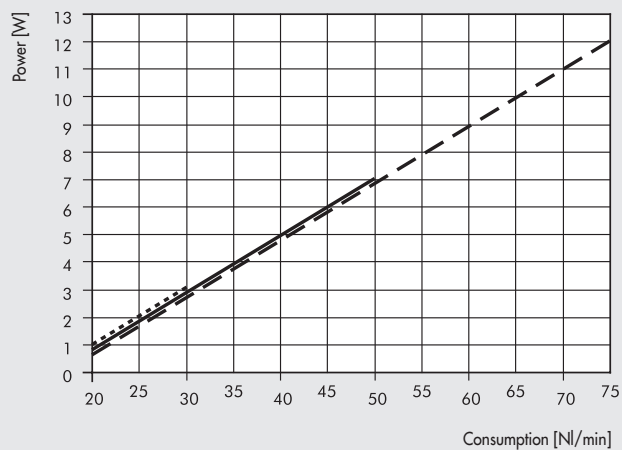
### PRESSURE AND ACTUATION TIME WITH ELECTRICAL LOAD



The above graph shows, for a set input pressure, the maximum time required to reach the rated output voltage (with maximum electrical load applicable for this pressure) as the size of the device changes. For example, with a size 50-2 device having an input pressure of 5.2 bar, a 24VDC output voltage will be available about two seconds after start-up.

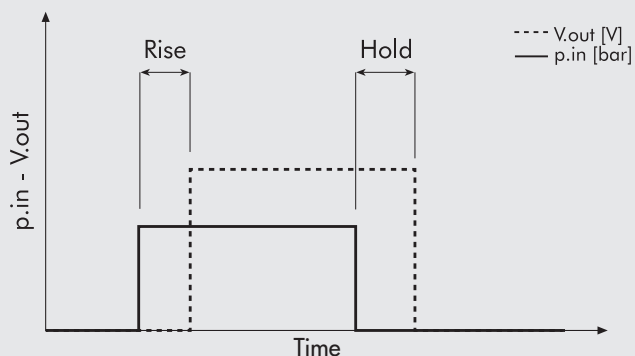


## AVAILABLE AIR / POWER CONSUMPTION



--- Size 50-3    ——— Size 50-2    ..... Size 50-1

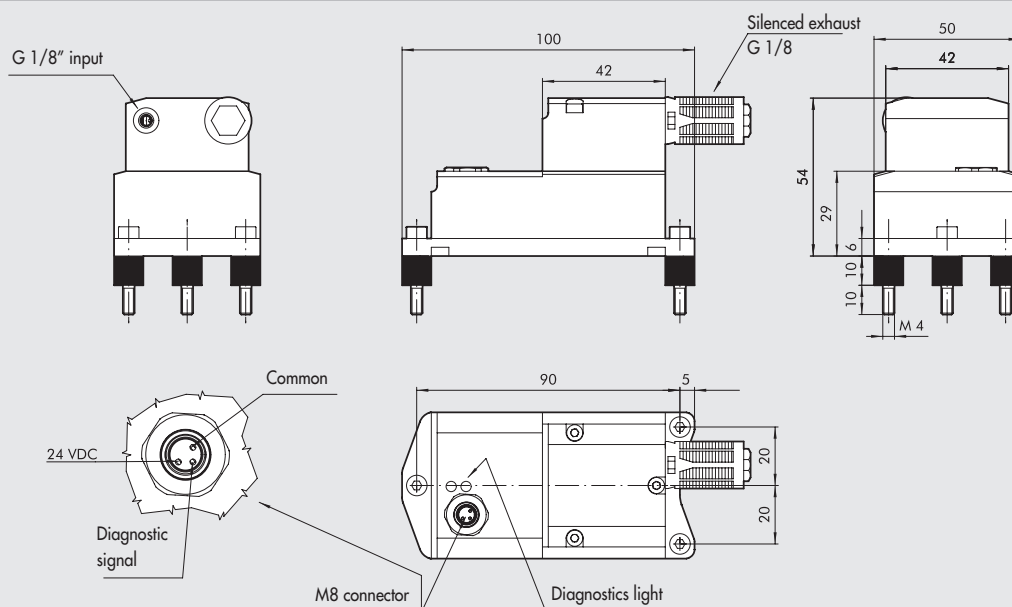
## RISE TIME AND HOLD TIME GRAPH



**Rise time:** the delay from activation of the compressed air supply to 24V power supply to the M8 connector.

**Hold time:** the time for which 24V is maintained after the compressed air supply has been switched off.

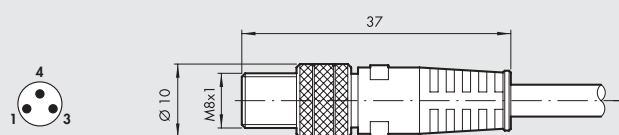
## DIMENSIONS



Code	Description
0251530000	PNEUMO POWER 50-1 3 W 24 VDC
0251550000	PNEUMO POWER 50-2 7.5 W 24 VDC
0251570000	PNEUMO POWER 50-3 12 W 24 VDC

## ACCESSORIES

## M8 CONNECTOR WITH CABLE



Pin	Wire color	
1	Brown	+ 24V
3	Blue	GND
4	Black	Diagnostics

Code	Description
0240009053	M8 male 3-pin connector with 2.5 metres of cable