

PRESSURE

boosters



Find out our
key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



Pressure boosters

Main features and certifications

Series of pressure boosters with manual regulation or remote pneumatic regulation.
Supplied as standard in compliance to Reach and RoHS directives.

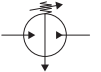


Type MLTR, 1/4" - 3/8" - 1/2"

from page 4.50.10



Series pressure boosters, available in size 1/4", 3/8" and 1/2", with manual regulation, with 2:1 ratio. For size 1/4" is also available version with 4:1 ratio (regulation from 2:1 to 4:1), and for size 1/2" is also available version with 16 bar maximum inlet pressure (with 2:1 ratio)

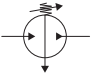


Type MLTP, 3/8" - 1/2"

from page 4.50.30



Series pressure boosters, available in size 3/8" and 1/2", with remote pneumatic regulation, with 2:1 ratio.



Pressure boosters

Code key*

Series	Regulation	Size	Thread	Ratio	Pressure
MLT	R	2		A	09
MLT	R = Manual pressure regulation P = Pneumatic remote piloting	2 ⁽¹⁾ = 1/4" 3 = 3/8" 4 = 1/2"	= Gas N = NTP	A = 2:1 B ⁽²⁾ = 4:1	09 = 9 bar (max. inlet pressure) 16 ⁽³⁾ = 16 bar (max. inlet pressure)

How to order

Series	Regulation	Size	Thread	Ratio	Pressure
MLT	R	2		A	09

Notes

*Supplied complete with inlet and outlet analogic pressure-gauges and one exhaust silencer.

(1) Available for MLTR type only;

(2) Available for 1/4" MLTR type only;

(3) Available for 1/2" MLTR type only.

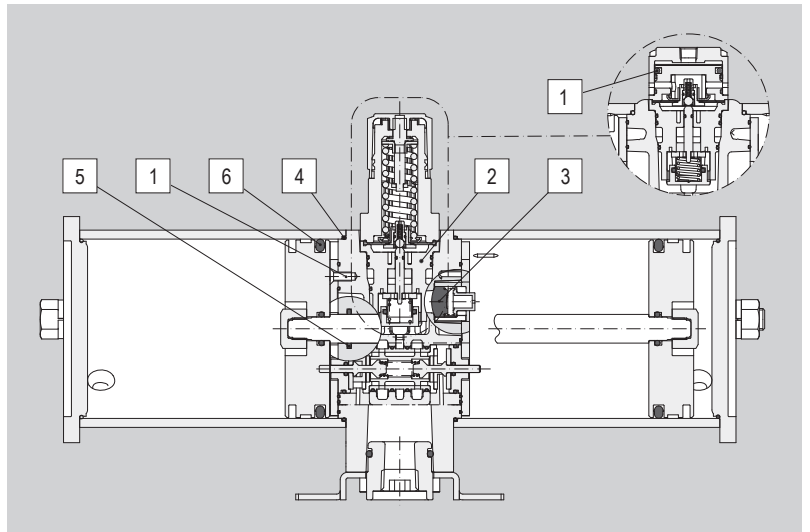
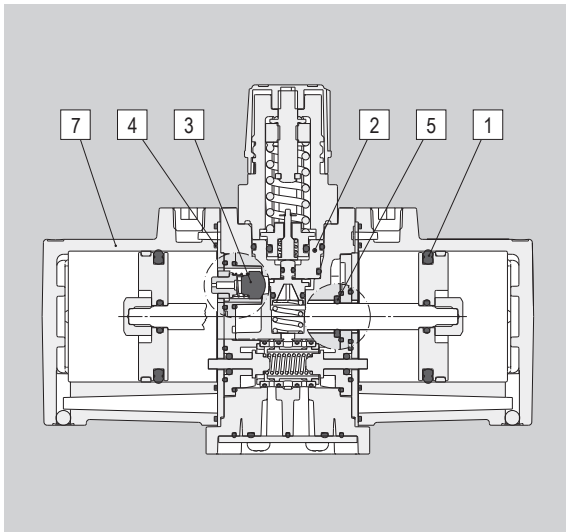
For spare part kits see page 4.50.4.

Standard accessories

Tipo			Inlet pressure-gauge	Outlet pressure-gauge	Exhaust silencer
					
MLTR			•	•	•
MLTP			•	•	•

Pressure boosters

Spare part kits

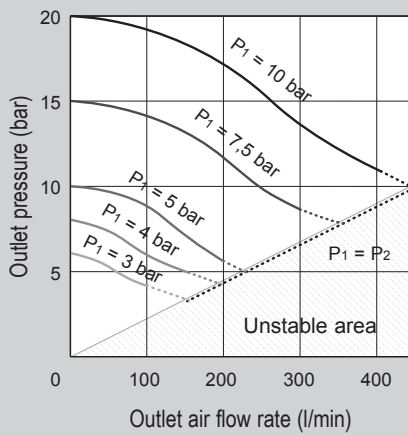


N.	Description	MLTR2A09	MLTR3A09	MLTR4A09	MLTP3A09	MLTP4A09	MLTR4A16	MLTR2B09
		Quantity						
1	Piston seal	2			2 large; 1 small		2	1 large; 1 small
2	Governor assembly	1						
3	Check valve	4						2
4	Gasket	2						
5	Rod seal	1						
6	Mounting screws	-	8	12	8	12		-
7	Cover assembly	-						1
-	Grease pack	1		2	1	2		1

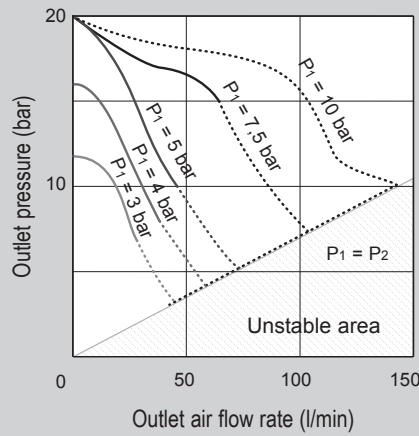
Pressure boosters

Flow rate features

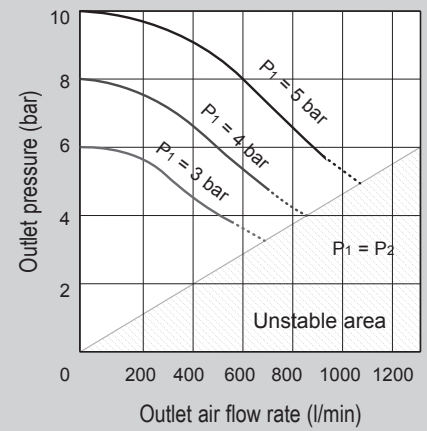
Type: **MLTR2A09**



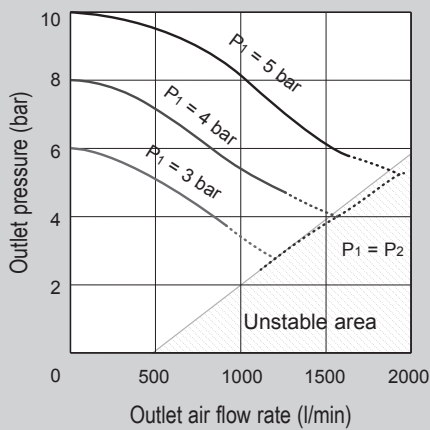
Type: **MLTR2B09**



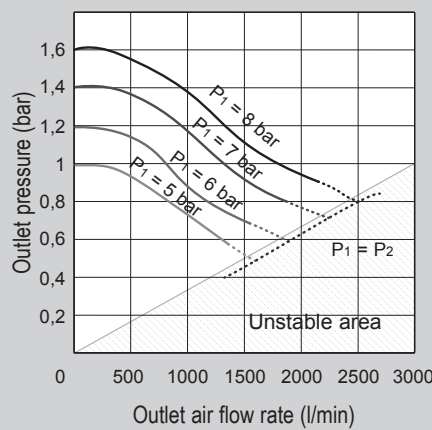
Type: **MLTR3A09**
MLTP3A09



Type: **MLTR4A09**
MLTP4A09



Type: **MLTR4A16**



Warning: when operated at a flow rate that falls within the unstable area ($P_2 < P_1$ conditions) as shown in the graphs above, the booster regulator may not operate normally and may therefore fail to increase the pressure.

Key

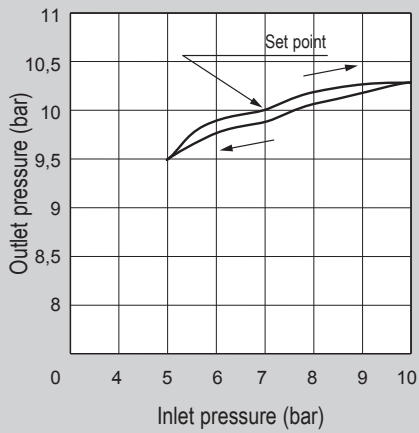
Solid line = operating range; **Dotted line** = outside of the set pressure range; P_1 = inlet pressure; P_2 = outlet pressure

Pressure boosters

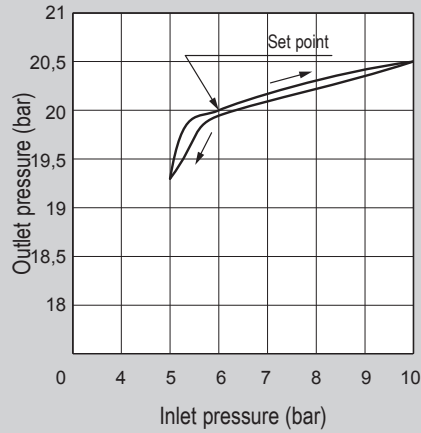
Pressure features

Flow*: 10 l/min

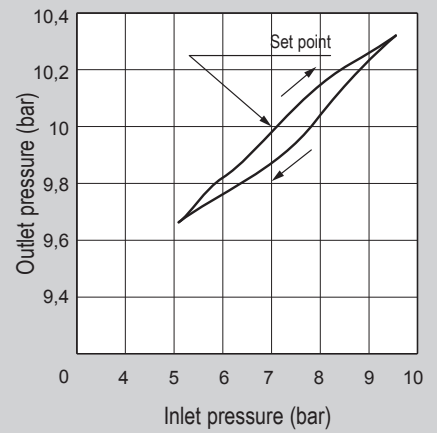
Type: **MLTR2A09**



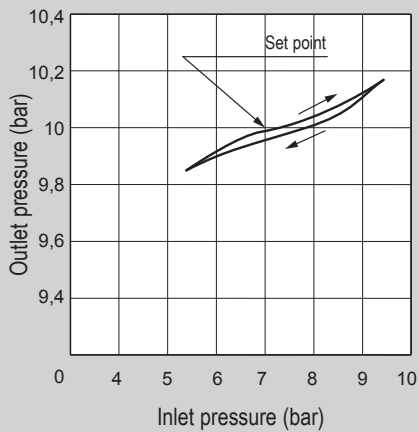
Type: **MLTR2B09**



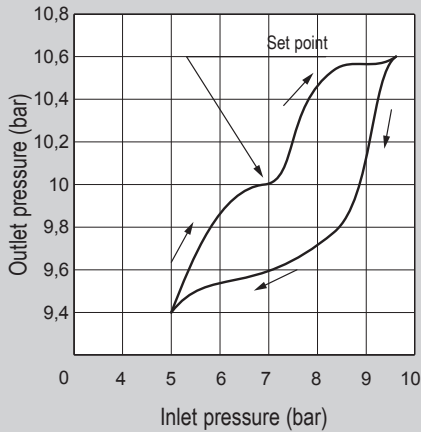
Type: **MLTR3A09**
MLTP3A09



Type: **MLTR4A09**
MLTP4A09



Type: **MLTR4A16**



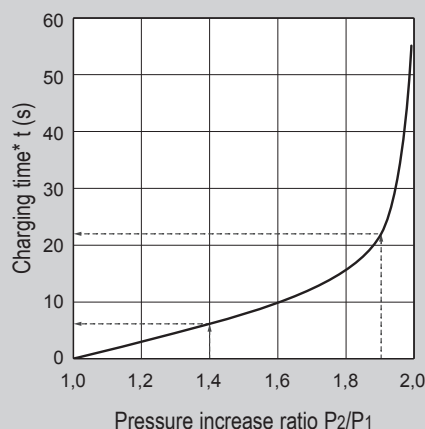
***Note:** with 7 bar inlet pressure and 10 bar outlet pressure; for type MLTR2B09 flow is 10 l/min with 6 bar inlet pressure and 20 bar outlet pressure.

Pressure boosters

Charge features

Ratio: 2:1

Type: **MLTR2A09**



***Note:** for 10 L

Required time to charge pressure in the air-reservoir from 7 bar to 9,5 bar at 5 bar supply pressure:

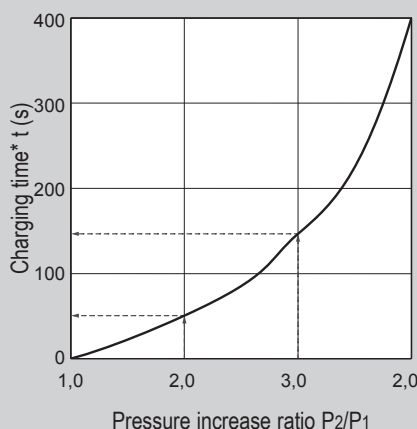
$$\frac{P_2}{P_1} = \frac{7}{5} = 1,4 \quad \frac{P_2}{P_1} = \frac{9,5}{5} = 1,9$$

With pressure increase ratio from 1,4 to 1,9, charge time of 23 – 6 = 17 s (t) is given by the table above.

Therefore, the charge time (T) for 10 L air-reservoir is:

$$T = t \times \frac{V}{10} = 17 \times \frac{10}{10} = 17 \text{ s}$$

Type: **MLTR2B09**



***Note:** for 10 L

Required time to charge pressure in the air-reservoir from 10 to 15 bar at 5 bar supply pressure:

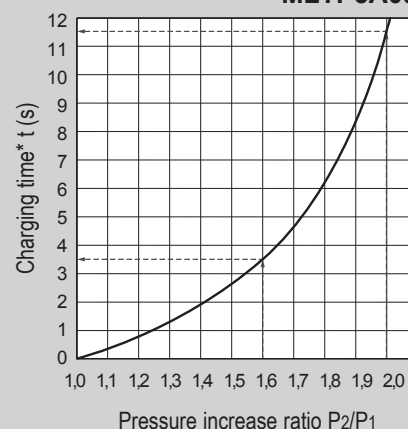
$$\frac{P_2}{P_1} = \frac{10}{5} = 2,0 \quad \frac{P_2}{P_1} = \frac{15}{5} = 3,0$$

With pressure increase ratio from 2,0 to 3,0, charge time of 147 – 58 = 89 s (t) is given by the table above.

Therefore, the charge time (T) for 10 L air-reservoir is:

$$T = t \times \frac{V}{10} = 89 \times \frac{10}{10} = 89 \text{ s}$$

Type: **MLTR3A09**
MLTP3A09



***Note:** for 10 L

Required time to charge pressure in the air-reservoir from 8 bar to 10 bar at 5 bar supply pressure:

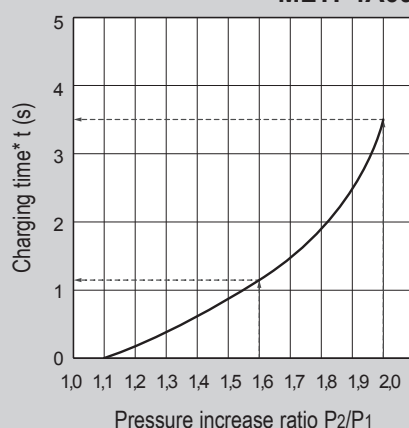
$$\frac{P_2}{P_1} = \frac{8}{5} = 1,6 \quad \frac{P_2}{P_1} = \frac{10}{5} = 2,0$$

With pressure increase ratio from 1,6 to 2,0, charge time of 11,5 – 3,8 = 7,7 s (t) is given by the table above.

Therefore, the charge time (T) for 10 L air-reservoir is:

$$T = t \times \frac{V}{10} = 7,7 \times \frac{100}{10} = 17 \text{ s}$$

Type: **MLTR4A09**
MLTP4A09



***Note:** for 10 L

Required time to charge pressure in the air-reservoir from 8 bar to 10 bar at 5 bar supply pressure:

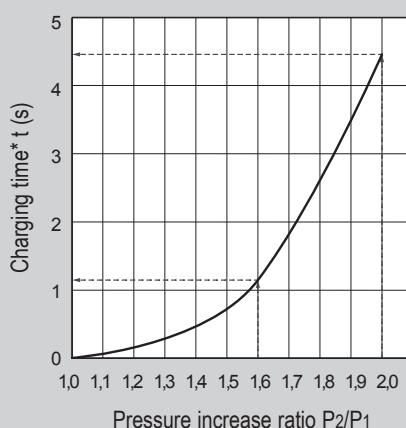
$$\frac{P_2}{P_1} = \frac{8}{5} = 1,6 \quad \frac{P_2}{P_1} = \frac{10}{5} = 2,0$$

With pressure increase ratio from 1,6 to 2,0, charge time of 3,5 – 1,1 = 2,4 s (t) is given by the table above.

Therefore, the charge time (T) for 10 L air-reservoir is:

$$T = t \times \frac{V}{10} = 2,4 \times \frac{100}{10} = 24 \text{ s}$$

Type: **MLTR4A16**



***Note:** for 10 L

Required time to charge pressure in the air-reservoir from 8 bar to 10 bar at 5 bar supply pressure:

$$\frac{P_2}{P_1} = \frac{8}{5} = 1,6 \quad \frac{P_2}{P_1} = \frac{10}{5} = 2,0$$

With pressure increase ratio from 1,6 to 2,0, charge time of 4,3 – 1,3 = 3,2 s (t) is given by the table above.

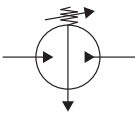
Therefore, the charge time (T) for 10 L air-reservoir is:

$$T = t \times \frac{V}{10} = 3,2 \times \frac{100}{10} = 32 \text{ s}$$

Pressure boosters

Type MLTR, 1/4" - 3/8" - 1/2"

Main features

Type	Code	Item	Symbol
Manual regulation, 1/4", ratio 2:1, maximum inlet pressure 9 bar	024700	MLTR2A09	
Manual regulation, 1/4", ratio 4:1, maximum inlet pressure 9 bar	024701	MLTR2B09	
Manual regulation, 3/8", ratio 2:1, maximum inlet pressure 9 bar	024702	MLTR3A09	
Manual regulation, 1/2", ratio 2:1, maximum inlet pressure 9 bar	024703	MLTR4A09	
Manual regulation, 1/2", ratio 2:1, maximum inlet pressure 16 bar	024704	MLTR4A16	



Technical data

Type	MLTR2A09	MLTR2B09	MLTR3A09	MLTR4A09	MLTR4A16
Code	024700	024701	024702	024703	024704
Size	1/4"		3/8"	1/2"	
Fluid	Compressed air				
Pressure range	1 ÷ 9 bar				1 ÷ 16 bar
Temperature range	+2°C ÷ +50°C				
Pressure multiplication ratio	2:1	4:1	2:1		
Pressure regulation	Manual				
Flow	230 l/min	70 l/min	1000 l/min	1900 l/min	1600 l/min
Installation	Horizontal				
Pressure-gauges connection	1/8"				
Exhaust silencer connection	1/4"		3/8"	1/2"	
Weight	840 g	890 g	3900 g	8600 g	8600 g

Options

MLTR2B09	MLTR4A16
	

Notes

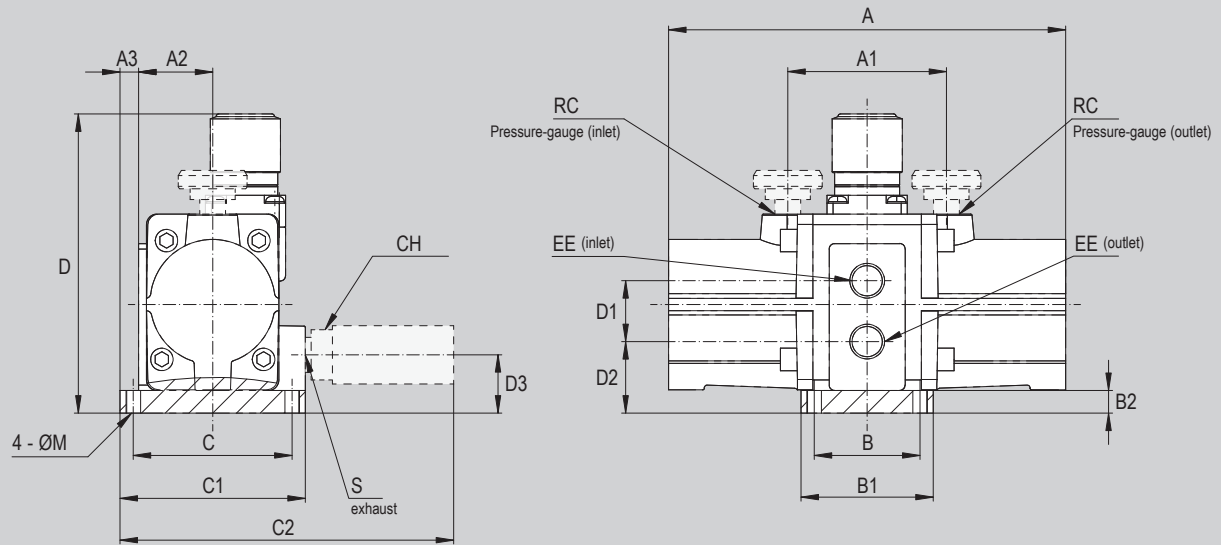
Plastic silencer and pressure-gauges for inlet and outlet pressure detection supplied as standard, see page 4.50.3
For spare part kits see page 4.50.4

Pressure boosters

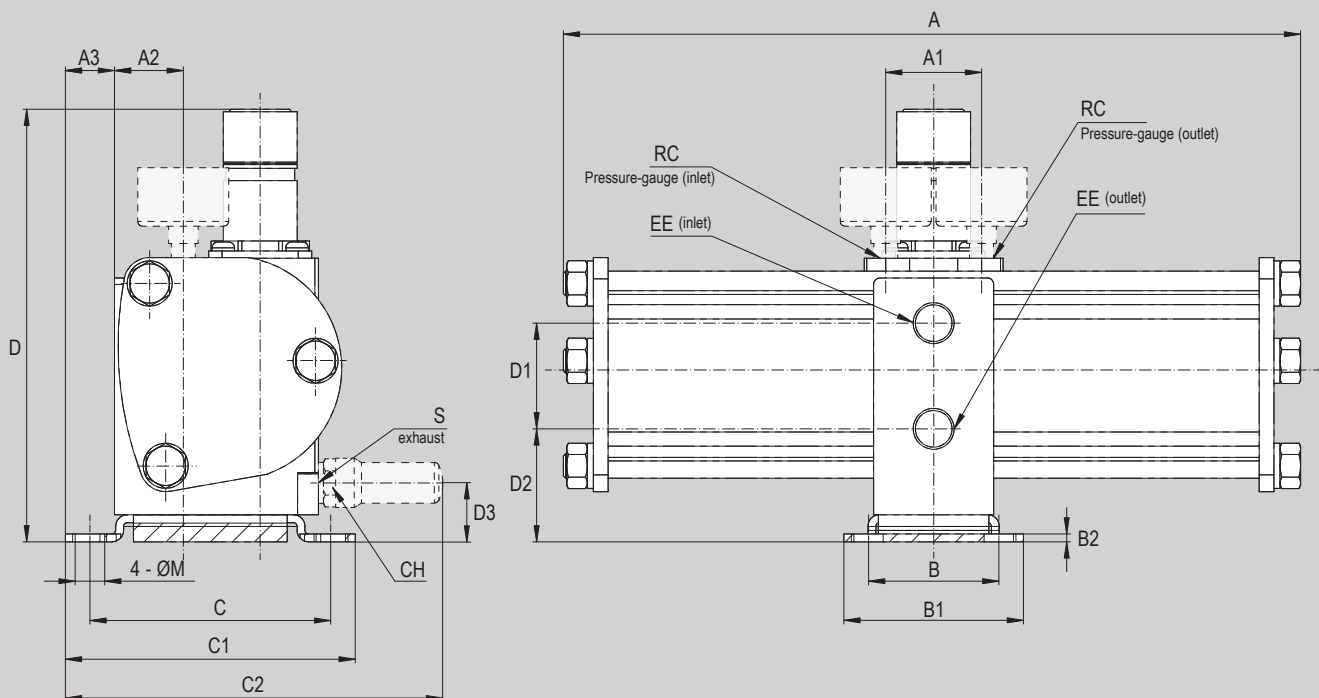
Type MLTR, 1/4" - 3/8" - 1/2"

Standard dimensions

Type: MLTR 1/4"



Type: MLTR 3/8" - 1/2"

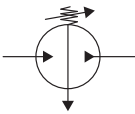


Code	Item	EE (size)	RC	A	A1	A2	A3	B	B1	B2	ØM	C	C1	C2	D	D1	D2	D3	S	CH
024700	MLTR2A09	1/4"	1/8"	150	60	28	7	40	50	8,5	5,5	60	70	126	113	23	22	27	1/4"	14
024701	MLTR2B09	1/4"	1/8"	150	60	28	7	40	50	8,5	5,5	60	70	126	113	23	22	27	1/4"	14
024702	MLTR3A09	3/8"	1/8"	300	39	28	20	53	73	3,2	12	98	118	153,5	176	43	24	46	3/8"	17
024703	MLTR4A09	1/2"	1/8"	404	40	-	-	96	116	3,2	12	130	150	200	215	62	32	62,8	1/2"	21
024704	MLTR4A16	1/2"	1/8"	404	40	-	-	96	116	3,2	12	130	150	200	215	62	32	62,8	1/2"	21

Pressure boosters

Type MLTP, 3/8" - 1/2"

Main features

Type	Code	Item	Symbol
Pneumatic piloting, 3/8", ratio 2:1, maximum inlet pressure 9 bar	024705	MLTP3A09	
Pneumatic piloting, 1/2", ratio 2:1, maximum inlet pressure 9 bar	024706	MLTP4A09	



Technical data

Type	MLTP3A09	MLTP4A09
Code	024705	024706
Size	3/8"	1/2"
Fluid	Compressed air	
Pressure range	1 ÷ 9 bar	
Temperature range	+2°C ÷ +50°C	
Pressure multiplication ratio	2:1	
Pressure regulation	Pneumatic piloting	
Flow	1000 l/min	1900 l/min
Installation	Horizontal	
Pressure-gauges connection	1/8"	
Exhaust silencer connection	3/8"	1/2"
Weight	3900 g	8600 g

Notes

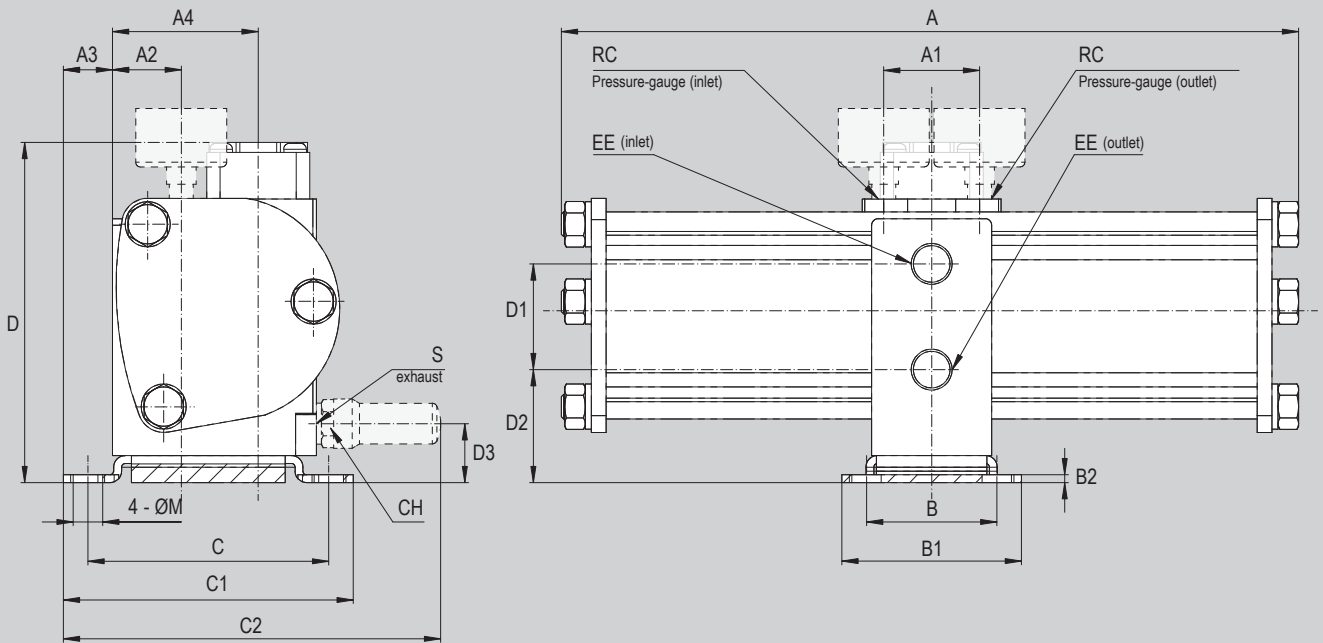
Plastic silencer and pressure-gauges for inlet and outlet pressure detection supplied as standard, see page 4.50.3
For spare part kits see page 4.50.4

Pressure boosters

Type MLTP, 3/8" - 1/2"

Standard dimensions

Type: **MLTP 3/8" - 1/2"**



Code	Item	EE (size)	RC	A	A1	A2	A3	A4	B	B1	B2	ØM	C	C1	C2	D	D1	D2	D3	S	CH
024705	MLTP3A09	3/8"	1/8"	300	39	28	20	59	53	73	3,2	12	98	118	153,5	139	43	46	24	3/8"	17
024706	MLTP4A09	1/2"	1/8"	404	40	22	43	85	96	116	3,2	12	130	150	200	172	62	62,8	32	1/2"	21