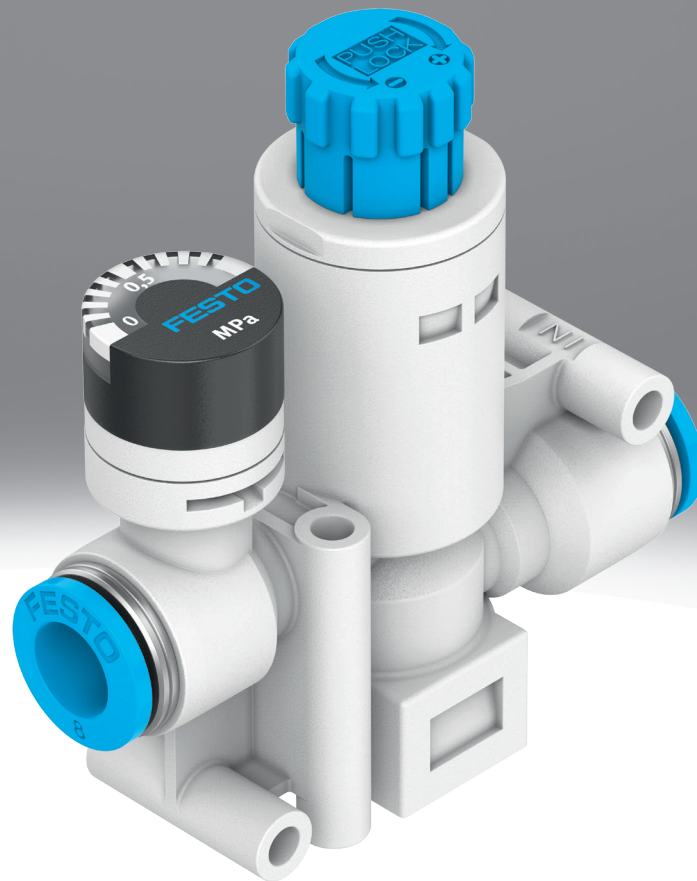


## Pressure regulator, inch VRPA

**FESTO**



## Characteristics

### At a glance

- Regulates the operating pressure independently of the fluctuating input pressure
- With secondary exhaust and with return flow function
- Piston regulator with through pressure supply
- Increased energy efficiency thanks to motion-specific pressure adjustment
- Directly actuated
- With pressure gauge
- Connections: push-in connector at both ends, thread/push-in connector

### Diagrams

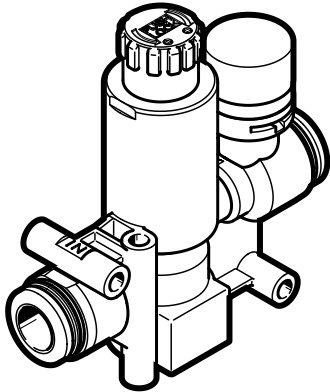
Further information → [vrpa](#)



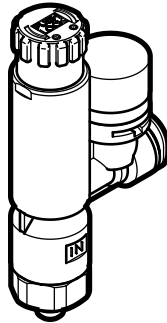
The diagrams shown in this document are also available online. These can be used to display precise values.

### Design

[C] Inline



[L] L-shape



## Type code

001	Series	
VRPA	Pressure regulator	
002	Design	
C	Inline	
L	L-shape	
003	Pressure indication	
M	With pressure gauge	

004	Pneumatic connection 1	
N14	1/4 NPT	
N18	1/8 NPT	
T14	Push-in connector for 1/4"	
005	Pneumatic connection 2	
E	Same size as connection 1	
T14	Push-in connector for 1/4"	
T516	Push-in connector for 5/16"	

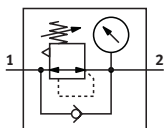
## Datasheet

### General technical data

Pneumatic connection, port 1	1/8 NPT	1/4 NPT	QS-1/4
Pneumatic connection, port 2	QS-1/4, QS-5/16		QS-1/4
Controller function	Output pressure constant, With secondary venting, With return flow function		
Pressure regulation range	0.1 ... 0.8 MPa		
Pressure regulation range	1 ... 8 bar		
Pressure regulation range	14.5 ... 116 psi		
Type of actuation	Manual		
Mounting position	optional		
Adjustment component	Rotary knob with detent		
Pressure gauge (ANALOG) or Pressure display (DIGITAL) <sup>1)</sup>	With pressure gauge		
Type of mounting	Screw-in	With through-hole	
Type of seal on screwed plug	Coating		-
Rotatability	360°/no continuous swivelling permissible		-
Nominal torque	-		
Tolerance for nominal tightening torque	-		

1) For VRPA-CM-... and VRPA-LM-...

### Function



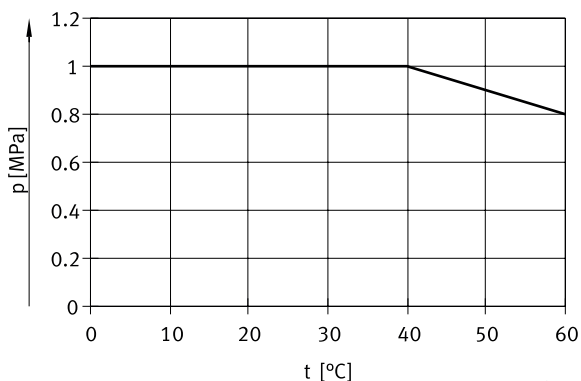
### Operating and environmental conditions

Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	0 ... 60°C

### Materials

Material housing	PBT
Material screwed plug	Nickel-plated brass
Material thread seal	PTFE
Material static seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom class	Class 4 according to ISO 14644-1

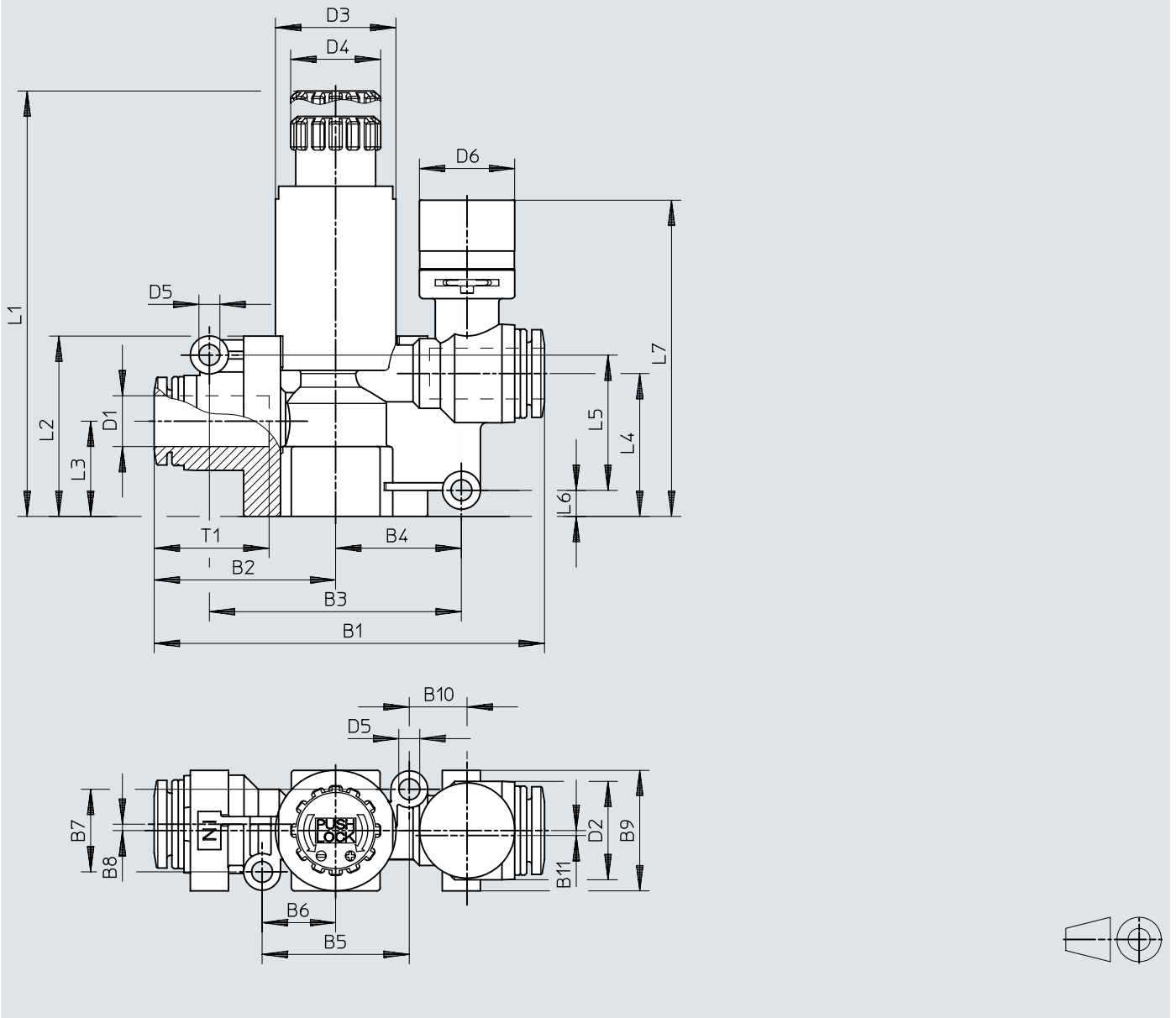
### Operating pressure p as a function of temperature t



## Dimensions

Dimensions – In-line, VRPA-CM, with pressure gauge

Download CAD data → [www.festo.com](http://www.festo.com)



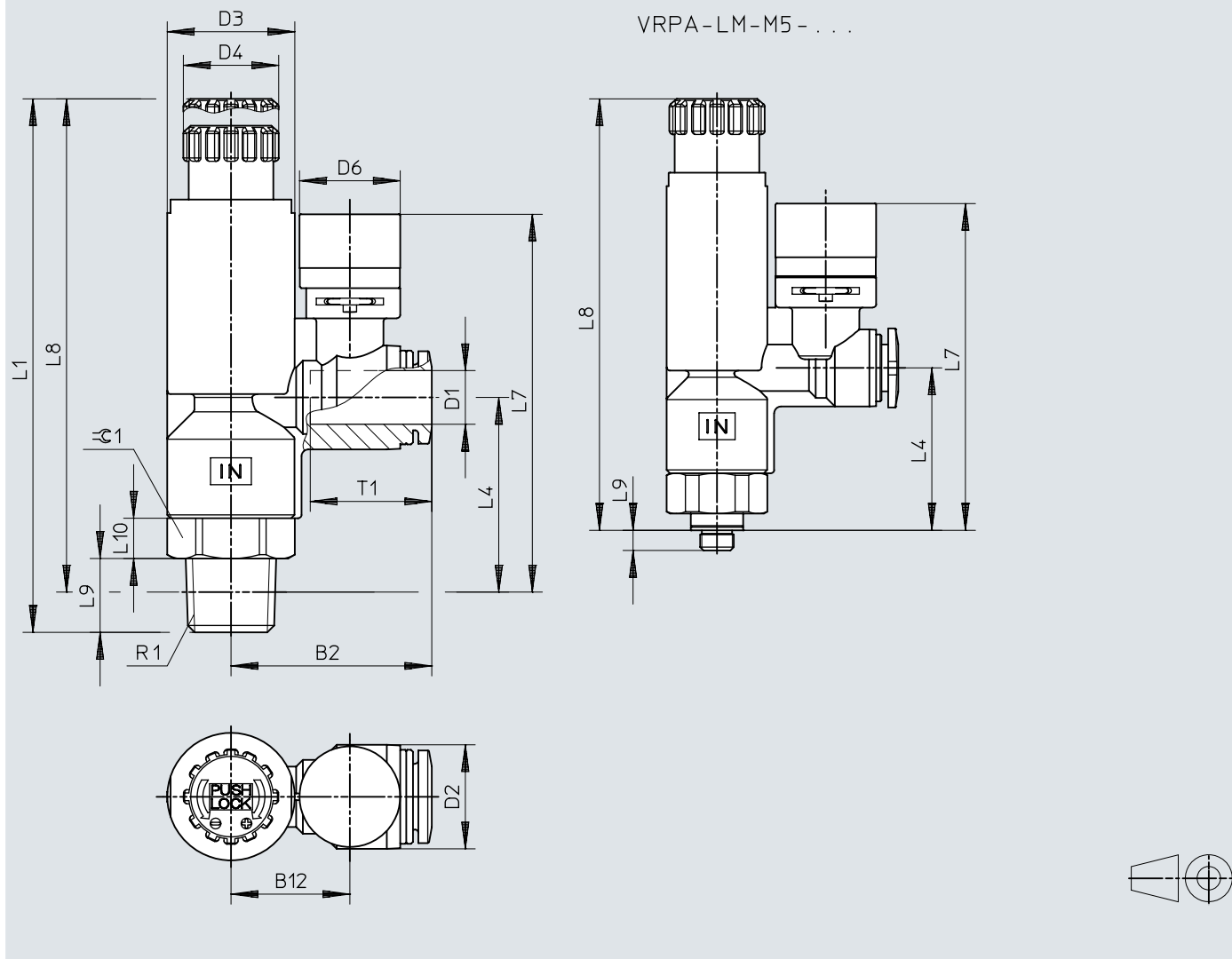
	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	D1 ∅	D2 ∅
VRPA-CM-T14-E	54	22,5	30	15	20,2	10,1	9	1	15	10,2	1	1/4	11,5
	D3 ∅	D4 ∅	D5 ∅	D6 ∅	L1		L2	L3	L4	L5	L6	L7	T1
					1)	2)							
VRPA-CM-T14-E	15	14,2	3,3	15	61,6	58,9	24,5	13	18,8	17	4,2	43,3	11,7

- 1) Unlocked
- 2) locked

## Dimensions

Dimensions – L-shape, VRPA-LM, with pressure gauge

Download CAD data → [www.festo.com](http://www.festo.com)




	B2	B12	D1 ø	D2 ø	D3 ø	D4 ø	D6 ø
VRPA-LM-N18-T14	27,2	16,2	1/4	11,5	15	14,2	15
VRPA-LM-N18-T516	28,4	16,2	5/16	15,5	15	14,2	15
VRPA-LM-N14-T14	30	17,7	1/4	15,5	19	14,2	15
VRPA-LM-N14-T516	29,9	17,7	5/16	15,5	19	14,2	15

	L1		L4	L7	L8		L9	L10	R1	T1	≅ 1
	1)	2)			1)	2)					
VRPA-LM-N18-T14	71,5	68,8	24,6	49,1	67,2	64,7	8	5	1/8 NPT	11,7	9/16
VRPA-LM-N18-T516	71,5	68,8	24,6	51,9	67,2	64,7	8	5	1/8 NPT	18,1	9/16
VRPA-LM-N14-T14	78,2	75,5	29,2	56,5	72,2	69,7	11	6	1/4 NPT	17	11/16
VRPA-LM-N14-T516	78,2	75,5	29,2	56,5	72,2	69,7	11	6	1/4 NPT	18,1	11/16


- 1) Unlocked
- 2) locked

## Ordering data

## Ordering data – inline

	Pneumatic connection, port 1	Pneumatic connection, port 2	Standard nominal flow rate	Product weight	Part no.	Type
	QS-1/4	QS-1/4	95 l/min	23 g	<b>8086006</b>	<b>VRPA-CM-T14-E</b>

## Ordering data – L-shape

	Pneumatic connection, port 1	Pneumatic connection, port 2	Standard nominal flow rate	Product weight	Part no.	Type
	1/8 NPT	QS-1/4	110 l/min	29 g	<b>8086014</b>	<b>VRPA-LM-N18-T14</b>
		QS-5/16	130 l/min	32 g	<b>8086015</b>	<b>VRPA-LM-N18-T516</b>
	1/4 NPT	QS-1/4	110 l/min	50 g	<b>8086016</b>	<b>VRPA-LM-N14-T14</b>
		QS-5/16	130 l/min		<b>8086017</b>	<b>VRPA-LM-N14-T516</b>