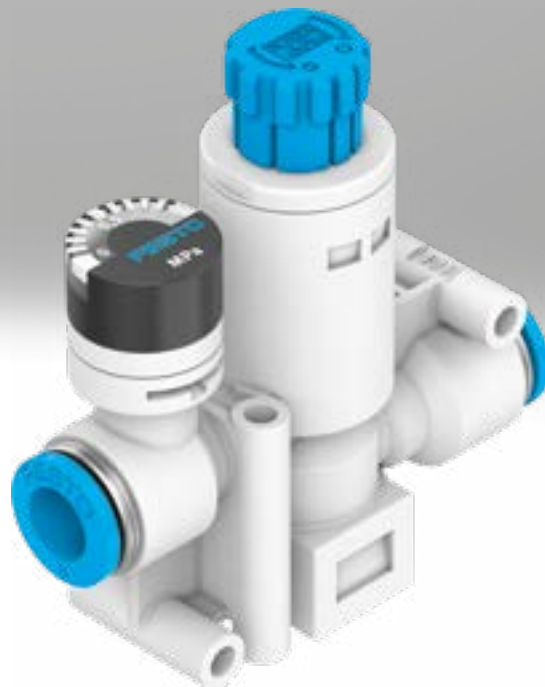


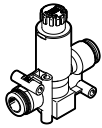
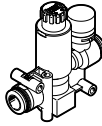
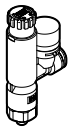
Pressure regulator VRPA, NPT

FESTO



Product range overview and type codes

Product range overview

Design type	Feature	Type	Pneumatic connection		Standard nominal flow rate [l/min]	Pressure gauge scale		
			1	2		MPa	psi	
Inline	Without pressure gauge							
		VRPA-C	QS-4	QS-4	80	-	-	
			QS-6	QS-6	90	-	-	
			QS-8	QS-8	130	-	-	
	With pressure gauge							
		VRPA-CM	QS-4	QS-4	80	■	-	
			QS-6	QS-6	90	■	-	
			QS-8	QS-8	125	■	-	
			QS-1/4	QS-1/4	95	-	■	
	L-shape	With pressure gauge						
		VRPA-LM	M5	QS-4	80	■	-	
				QS-6	90	■	-	
			R1/8	QS-4	90	■	-	
				QS-6	100	■	-	
				QS-8	110	■	-	
			R1/4	QS-6	115	■	-	
				QS-8	130	■	-	
			1/8 NPT	QS-1/4	110	-	■	
				QS-5/16	130	-	■	
			1/4 NPT	QS-1/4	110	-	■	
				QS-5/16	130	-	■	

Type codes

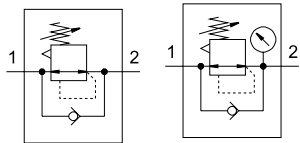
001	Series	
VRPA	Pressure regulator	
002	Design	
C	Inline	
L	L-shape	
003	Pressure indication	
	Without pressure gauge	
M	With pressure gauge	


004	Pneumatic connection 1	
Q4	Push-in connector 4 mm	
Q6	Push-in connector 6 mm	
Q8	Push-in connector 8 mm	
T14	Push-in connector for 1/4"	
M5	M5	
R18	R1/8	
R14	R1/4	
N18	1/8 NPT	
N14	1/4 NPT	

005	Pneumatic connection 2	
Q4	Push-in connector 4 mm	
Q6	Push-in connector 6 mm	
Q8	Push-in connector 8 mm	
T14	Push-in connector for 1/4"	
T516	Push-in connector for 5/16"	
E	Same size as connection 1	

Data sheet

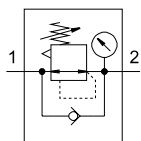
Inline, with/without pressure gauge




-  - Standard nominal flow rate
80 ... 130 l/min



L-shape, with pressure gauge



-  - Standard nominal flow rate
80 ... 130 l/min



General technical data

Pneumatic connection 1		QS-4	QS-6	QS-8	QS-1/4	M5	R1/8	R1/4	1/8 NPT	1/4 NPT
Pneumatic connection 2		QS-4	QS-6	QS-8	QS-1/4	QS-4, QS-6	QS-4, QS-6, QS-8	QS-6, QS-8	QS-1/4, QS-5/16	QS-1/4, QS-5/16
Controller function		Outlet pressure constant, with secondary venting, with return flow action								
Pressure regulation range	[MPa]	0.1 ... 0.8			-	0.1 ... 0.8			-	
	[psi]	-			14.5 ... 116	-			14.5 ... 116	
Actuation type		Manual								
Mounting position		Optional								
Adjusting element		Rotary knob with detent								
Pressure indicator		With/without pressure gauge			With pressure gauge					
Type of mounting		With through-hole				Screw-in				
Type of seal on screwed trunnion		-				Sealing ring	Coating			
Rotatability		-				360°/continuous rotation not permitted				
Nominal tightening torque	[Nm]	-				0.8 ±20%		-		

Operating and environmental conditions

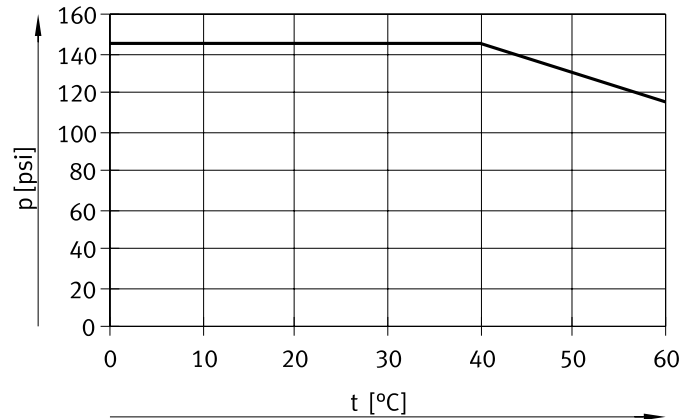
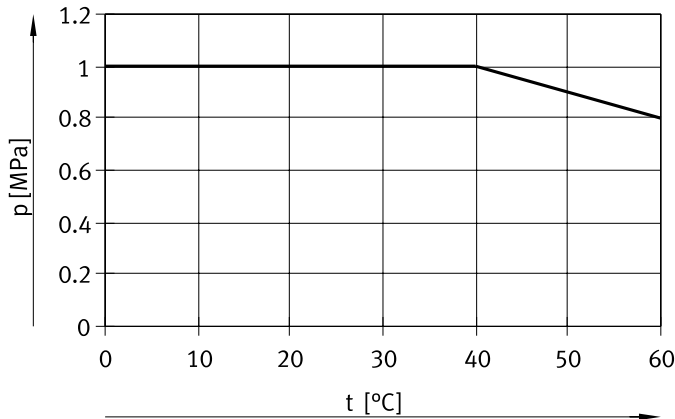
Operating pressure		See graph → page 5
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	[°C]	0 ... +60

Materials

Pneumatic connection 1		QS-4	QS-6	QS-8	QS-1/4	M5	R1/8	R1/4	1/8 NPT	1/4 NPT
Housing		PBT				PBT				
Screwed trunnion		-				Nickel-plated brass				
Threaded seal		-				-	PTFE			
Static seals		NBR								
Note on materials		RoHS-compliant								
PWIS conformity		VDMA24364-B2-L								
Cleanroom class		Class 4 to ISO 14644-1								

Data sheet

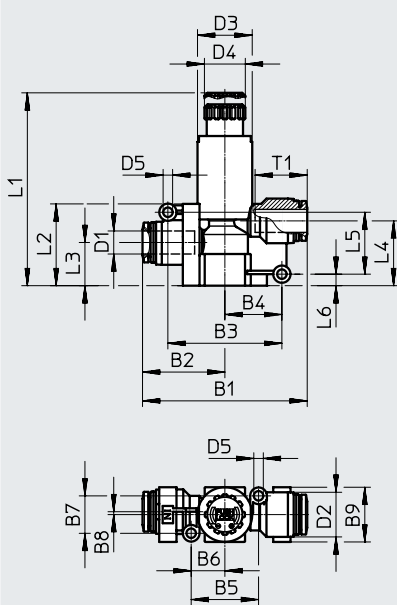
Operating pressure p as a function of temperature t



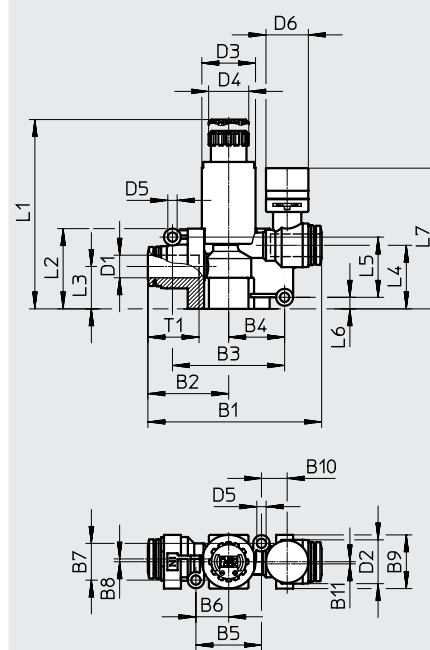
Dimensions – Inline

Download CAD data → www.festo.com

VRPA-C, without pressure gauge



VRPA-CM, with pressure gauge



Type	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	D1 ∅	D2 ∅
VRPA-C-Q4-E	44.4	22.2	30	15	20.6	10.3	9	1	15	-	-	4	11.5
VRPA-C-Q6-E	44.6	22.3	30	15	20.6	10.3	9	1	15	-	-	6	11.5
VRPA-C-Q8-E	57.2	28.6	39.6	19.8	23.4	11.7	13	1	19	-	-	8	15.5
VRPA-CM-Q4-E	53.4	22.2	30	15	20.2	10.1	9	1	15	10.2	1	4	11.5
VRPA-CM-Q6-E	53.6	22.3	30	15	20.2	10.1	9	1	15	10.2	1	6	11.5
VRPA-CM-Q8-E	61.5	28.6	39.7	19.9	23.2	11.6	13	1	19	9.1	0	8	15.5
VRPA-CM-T14-E	54	22.5	30	15	20.2	10.1	9	1	15	10.2	1	1/4	11.5

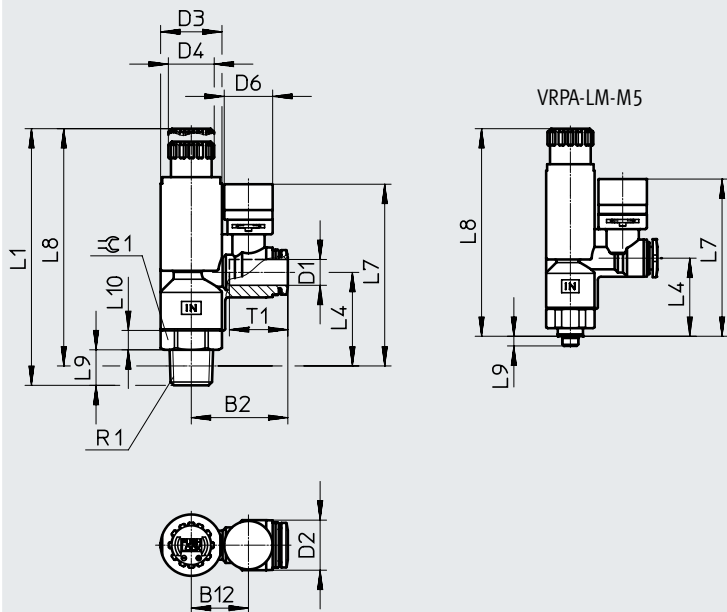
Type	D3 ∅	D4 ∅	D5 ∅	D6 ∅	L1		L2	L3	L4	L5	L6	L7	T1
					Unlocked	Locked							
VRPA-C-Q4-E	15	14.2	3.3	-	61.6	58.9	24.5	13	18.8	17	4.2	-	11.6
VRPA-C-Q6-E	15	14.2	3.3	-	61.6	58.9	24.5	13	18.8	17	4.2	-	11.9
VRPA-C-Q8-E	19	14.2	3.3	-	65.7	63	28.4	15	22.5	21.5	4	-	18.1
VRPA-CM-Q4-E	15	14.2	3.3	15	61.6	58.9	24.5	13	18.8	17	4.2	43.3	11.6
VRPA-CM-Q6-E	15	14.2	3.3	15	61.6	58.9	24.5	13	18.8	17	4.2	43.3	11.9
VRPA-CM-Q8-E	19	14.2	3.3	15	65.7	63	28.4	15	22.5	21.3	4.1	49.8	18.1
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

Data sheet

Dimensions – L-shape

Download CAD data → www.festo.com

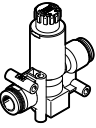
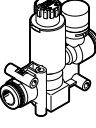
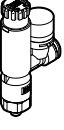
VRPA-LM, with pressure gauge



Type	B2	B12	D1 ∅	D2 ∅	D3 ∅	D4 ∅	D6 ∅
VRPA-LM-M5-Q4	26.9	16.2	4	11.5	15	14.2	15
VRPA-LM-M5-Q6	27	16.2	6	11.5	15	14.2	15
VRPA-LM-R18-Q4	26.9	16.2	4	11.5	15	14.2	15
VRPA-LM-R18-Q6	27	16.2	6	11.5	15	14.2	15
VRPA-LM-R18-Q8	28.4	16.2	8	15.5	15	14.2	15
VRPA-LM-R14-Q6	30	17.7	6	15.5	19	14.2	15
VRPA-LM-R14-Q8	29.9	17.7	8	15.5	19	14.2	15
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

Type	L1		L4	L7	L8		L9	L10	R1	T1	≈ 1
	Unlocked	Locked			Unlocked	Locked					
VRPA-LM-M5-Q4	70	67.3	24.2	48.7	66.8	64.3	3	6	M5x0.8	11.6	14
VRPA-LM-M5-Q6	70	67.3	24.2	48.7	66.8	64.3	3	6	M5x0.8	11.9	14
VRPA-LM-R18-Q4	71.5	68.8	24.7	49.2	67.3	64.8	8	5	R1/8	11.6	14
VRPA-LM-R18-Q6	71.5	68.8	24.7	49.2	67.3	64.8	8	5	R1/8	11.9	14
VRPA-LM-R18-Q8	71.5	68.8	24.7	52	67.3	64.8	8	5	R1/8	18.1	14
VRPA-LM-R14-Q6	78.2	75.5	29	56.3	72	69.5	11	6	R1/4	17	17
VRPA-LM-R14-Q8	78.2	75.5	29	56.3	72	69.5	11	6	R1/4	18.1	17
VRPA-LM-N18-T14	71.5	68.8	24.6	49.1	67.2	64.7	8	5	1/8NPT	11.7	9/16
VRPA-LM-N18-T516	71.5	68.8	24.6	51.9	67.2	64.7	8	5	1/8NPT	18.1	9/16
VRPA-LM-N14-T14	78.2	75.5	29.2	56.5	72.2	69.7	11	6	1/4NPT	17	11/16
VRPA-LM-N14-T516	78.2	75.5	29.2	56.5	72.2	69.7	11	6	1/4NPT	18.1	11/16

Data sheet

Ordering data		Pneumatic connection		Standard nominal flow rate [l/min]	Weight [g]	Pressure gauge scale		Part no.	Type
		1	2			MPa	psi		
Inline, without pressure gauge									
	QS-4	QS-4	80	19	–	–	8086000	VRPA-C-Q4-E	
	QS-6	QS-6	90	20	–	–	8086001	VRPA-C-Q6-E	
	QS-8	QS-8	130	33	–	–	8086002	VRPA-C-Q8-E	
Inline, with pressure gauge									
	QS-4	QS-4	80	23	■	–	8086003	VRPA-CM-Q4-E	
	QS-6	QS-6	90	23	■	–	8086004	VRPA-CM-Q6-E	
	QS-8	QS-8	125	36	■	–	8086005	VRPA-CM-Q8-E	
	QS-1/4	QS-1/4	95	23	–	■	8086006	VRPA-CM-T14-E	
L-shape, with pressure gauge									
	M5	QS-4	80	29	■	–	8086007	VRPA-LM-M5-Q4	
		QS-6	90	29	■	–	8086008	VRPA-LM-M5-Q6	
	R1/8	QS-4	90	29	■	–	8086009	VRPA-LM-R18-Q4	
		QS-6	100	29	■	–	8086010	VRPA-LM-R18-Q6	
		QS-8	110	31	■	–	8086011	VRPA-LM-R18-Q8	
	R1/4	QS-6	115	49	■	–	8086012	VRPA-LM-R14-Q6	
		QS-8	130	49	■	–	8086013	VRPA-LM-R14-Q8	
	1/8 NPT	QS-1/4	110	29	–	■	8086014	VRPA-LM-N18-T14	
		QS-5/16	130	32	–	■	8086015	VRPA-LM-N18-T516	
	1/4 NPT	QS-1/4	110	50	–	■	8086016	VRPA-LM-N14-T14	
QS-5/16		130	50	–	■	8086017	VRPA-LM-N14-T516		