

Pressure regulator manifold LRB-K

FESTO



Characteristics

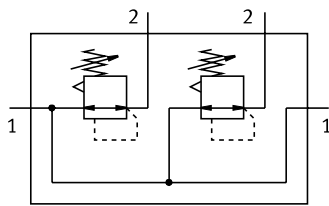
At a glance

Pressure regulator combinations with continuous pressure supply for manifold assembly.

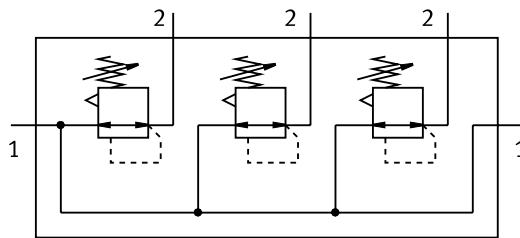
- Good control characteristics with minimal hysteresis and primary pressure compensation
- Manifold assembly with through air supply
- For configuring a regulator manifold with independent pressure regulation ranges
- Two pressure regulation ranges: 0.5...7 bar and 0.5...12 bar
- Settings secured via latch on rotary knob and push-in anti-tamper lock
- Directly actuated diaphragm regulator

Pressure regulator

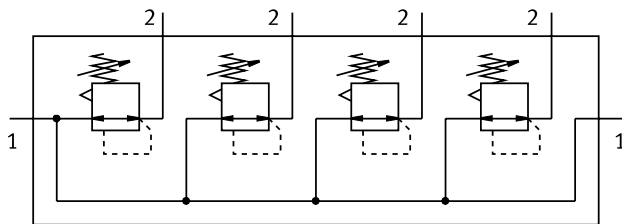
[K2] Regulator manifold, 2 positions



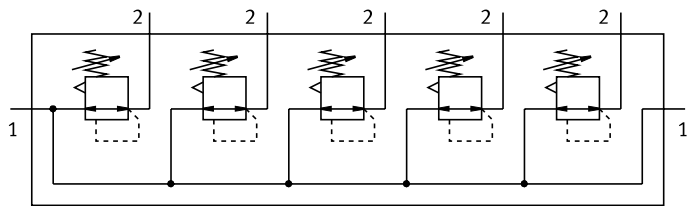
[K3] Regulator manifold, 3 positions



[K4] Regulator manifold, 4 positions



[K5] Regulator manifold, 5 positions



Type code

001	Series	
LRB	Pressure regulator	
002	Pneumatic connection	
1/4	Female thread G1/4	
3/8	Female thread G3/8	
1/2	Female thread G1/2	
003	Version	
D	D series, metal	
004	Pressure regulation range	
	0.5 ... 12 bar (0.05 ... 1.2 MPa)	
7	0.5 ... 7 bar (0.05 ... 0.7 MPa)	

005	Pressure gauge	
0	Without pressure gauge	
006	Pressure regulator	
K2	Regulator manifold, 2 positions	
K3	Regulator manifold, 3 positions	
K4	Regulator manifold, 4 positions	
K5	Regulator manifold, 5 positions	
007	Size	
MINI	Grid dimension 40 mm (without connecting plates)	
MIDI	Grid dimension 55 mm (without connecting plates)	

Datasheet

General technical data								
Size	Midi				Mini			
Pressure regulation range	0.5 ... 12 bar (0.05 ... 1.2 MPa)		0.5 ... 7 bar (0.05 ... 0.7 MPa)		0.5 ... 12 bar (0.05 ... 1.2 MPa)		0.5 ... 7 bar (0.05 ... 0.7 MPa)	
Pneumatic connection, port 1	G3/8	G1/2	G3/8	G1/2	G1/4	G3/8	G1/4	G3/8
Pneumatic connection, port 2	G3/8				G1/4			
Design	Directly actuated diaphragm regulator With through compressed air supply							
Controller function	Output pressure constant Via primary pressure compensation With secondary venting							
Type of mounting	With accessories							
Mounting position	optional							
Actuator lock	Rotary knob with detent							
Pressure regulation range	0.05 ... 1.2 MPa		0.05 ... 0.7 MPa		0.05 ... 1.2 MPa		0.05 ... 0.7 MPa	
Pressure regulation range	0.5 ... 12 bar		0.5 ... 7 bar		0.5 ... 12 bar		0.5 ... 7 bar	
Pressure regulation range	7.25 ... 174 psi		7.25 ... 101.5 psi		7.25 ... 174 psi		7.25 ... 101.5 psi	
Max. pressure hysteresis	0.02 MPa							
Max. pressure hysteresis	0.2 bar							
Max. pressure hysteresis	2.9 psi							
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	Prepared for G1/4				Prepared for G1/8			

Standard nominal flow rate q_{nN} (measured at $p_1 = 10$ bar, $p_2 = 6$ bar and $\Delta p = 1$ bar)				
Pressure regulation range	0.5 ... 12 bar (0.05 ... 1.2 MPa)		0.5 ... 7 bar (0.05 ... 0.7 MPa)	
Standard nominal flow rate (standardised to DIN 1343)	3,200 l/min		3,800 l/min	
			1,600 l/min	
			1,800 l/min	

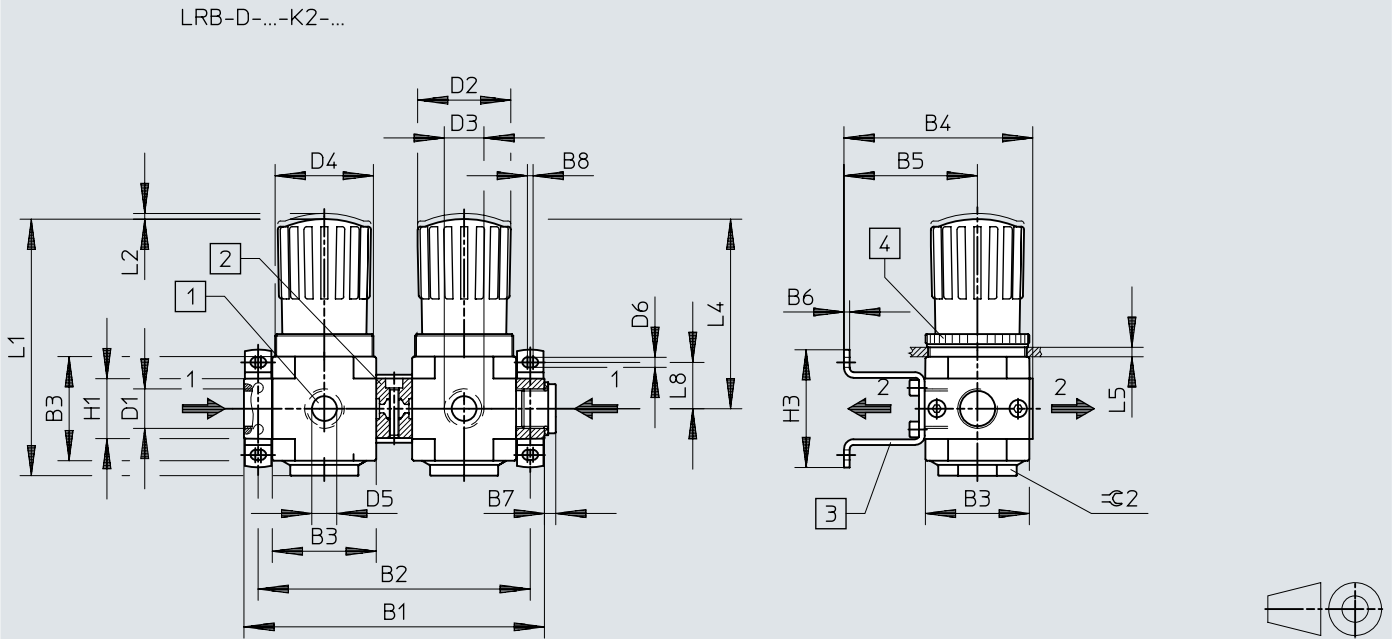
Operating and environmental conditions	
Operating pressure	0.1 ... 1.6 MPa
Operating pressure	1 ... 16 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C

Materials	
Material housing	Die-cast zinc
Material control panel	PA
Material sub-base	Die-cast zinc
Material seals	NBR
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Dimensions

Dimensions – LRB-...-D-...-K2-...

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- [1] Pressure gauge connection
- [2] Connecting kit HRBC-D-...
- [3] Mounting bracket HRB-D-...
- [4] Knurled nut or hex nut (not included in the scope of delivery) for front panel mounting

	B1	B2	B3	B4	B5	B6	B7	B8	D1	D2	D3	D4
LRB-1/4-D-...-K2-MINI	119	~107	40	80,7	59,2	2,5	5	3	G1/4	31	G1/4	M36x1,5
LRB-3/8-D-...-K2-MINI	125								G3/8			
LRB-3/8-D-...-K2-MIDI	159	~144	55	99,9	70,6	3	5	3	G3/8	49,3	G3/8	M52x1,5
LRB-1/2-D-...-K2-MIDI							6		G1/2			

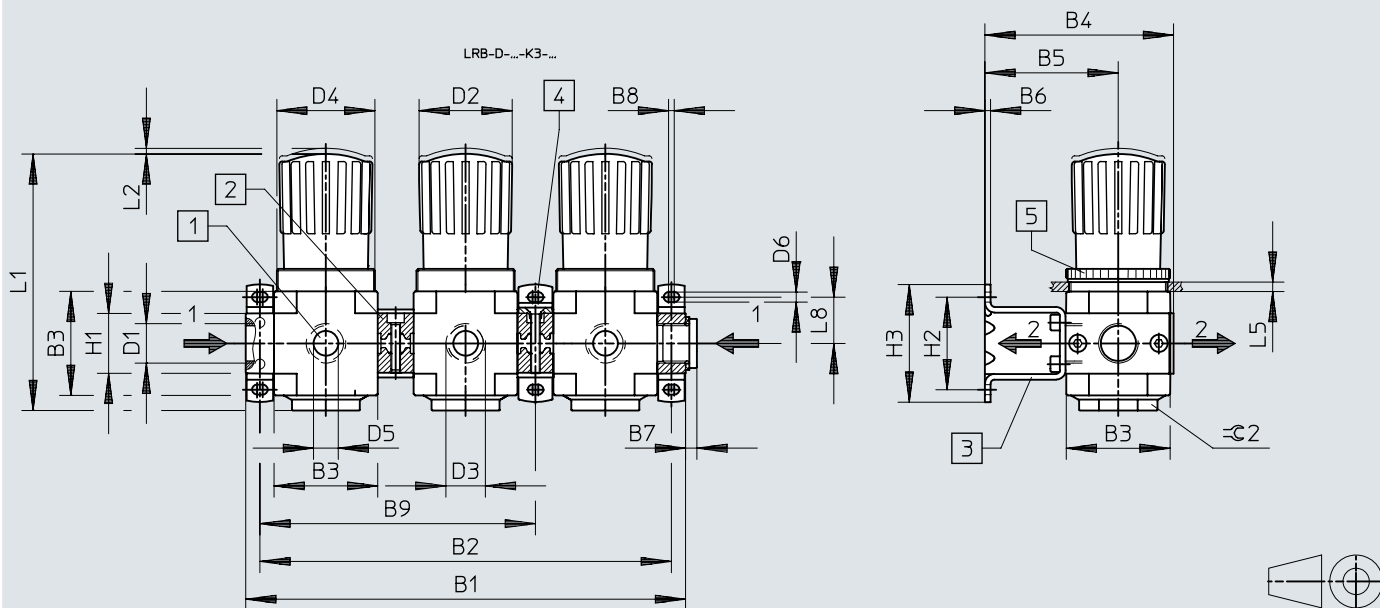
	D5	D6	H1	H2 $\pm 0,2$	H3 $\pm 0,5$	L1	L2	L4	L5 max.	L8	$\pm 0,2$
LRB-1/4-D-...-K2-MINI	G1/8	4,3	20	35	47,3	~95,4	3	~68,9	3	17,5	17
LRB-3/8-D-...-K2-MINI											
LRB-3/8-D-...-K2-MIDI	G1/4	5,3	32	49	62	~135,8	3	~100,3	5	24,5	36
LRB-1/2-D-...-K2-MIDI											

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Dimensions

Dimensions – LRB-...-D-...-K3-...

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- [1] Pressure gauge connection
- [2] Connecting kit HRBC-D-...
- [3] Mounting bracket HRB-D-...
- [4] Mounting bracket HRBK-D-...
- [5] Knurled nut or hex nut (not included in the scope of delivery) for front panel mounting

	B1	B2	B3	B4	B5	B6	B7	B8	B9	D1	D2	D3
LRB-1/4-D-...-K3-MINI	174	~162	40	80,7	59,2	2,5	5	3	108,5	G1/4	31	G1/4
LRB-3/8-D-...-K3-MINI	180									G3/8		
LRB-3/8-D-...-K3-MIDI	233	~218	55	99,9	70,6	3	5	3	146	G3/8	49,3	G3/8
LRB-1/2-D-...-K3-MIDI							6			G1/2		

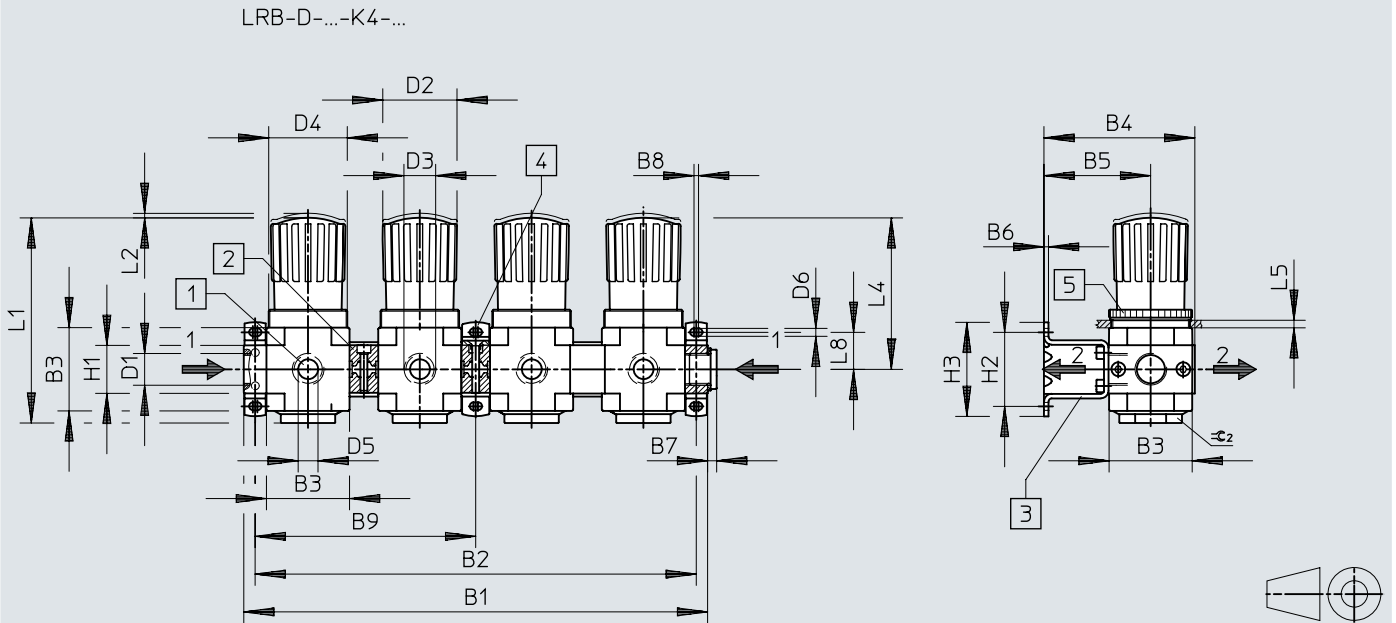
	D4	D5	D6	H1	H2 ±0,2	H3 ±0,5	L1	L2	L4	L5 max.	L8	≅ 2
LRB-1/4-D-...-K3-MINI	M36x1,5	G1/8	4,3	20	35	47,3	~95,4	3	~68,9	3	17,5	17
LRB-3/8-D-...-K3-MINI												
LRB-3/8-D-...-K3-MIDI	M52x1,5	G1/4	5,3	32	49	62	~135,8	3	~100,3	5	24,5	36
LRB-1/2-D-...-K3-MIDI												

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Dimensions

Dimensions – LRB-...-D-...-K4-...

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- [1] Pressure gauge connection
- [2] Connecting kit HRBC-D-...
- [3] Mounting bracket HRB-D-...
- [4] Mounting bracket HRBK-D-...
- [5] Knurled nut or hex nut (not included in the scope of delivery) for front panel mounting

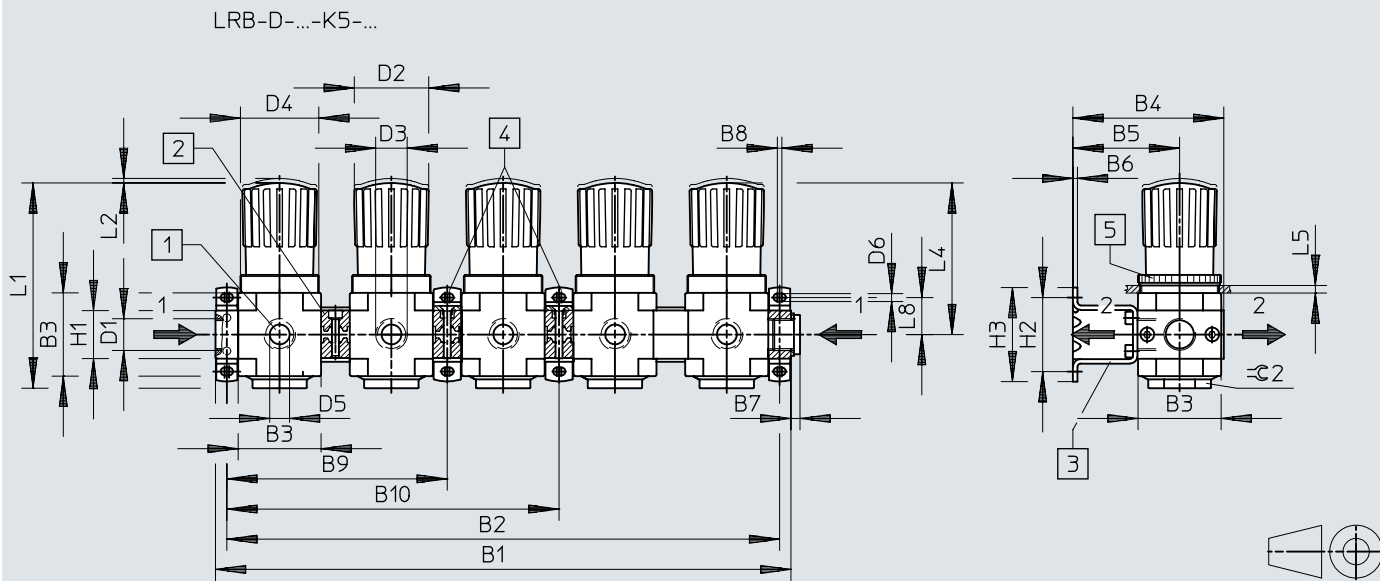
	B1	B2	B3	B4	B5	B6	B7	B8	B9	D1	D2	D3	D4
LRB-1/4-D-...-K4-MINI	229	~217	40	80,7	59,2	2,5	5	3	108,5	G1/4	31	G1/4	M36x1,5
LRB-3/8-D-...-K4-MINI	235									G3/8			
LRB-3/8-D-...-K4-MIDI	307	~292	55	99,9	70,6	3	5	3	146	G3/8	49,3	G3/8	M52x1,5
LRB-1/2-D-...-K4-MIDI							6			G1/2			
	D5	D6	H1	H2 ±0,2	H3 ±0,5	L1	L2	L4	L5 max.	L8	±0,2		
LRB-1/4-D-...-K4-MINI	G1/8	4,3	20	35	47,3	~95,4	3	~68,9	3	17,5	17		
LRB-3/8-D-...-K4-MINI													
LRB-3/8-D-...-K4-MIDI	G1/4	5,3	32	49	62	~135,8	3	~100,3	5	24,5	36		
LRB-1/2-D-...-K4-MIDI													

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Dimensions

Dimensions – LRB-...-D-...-K5-...

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- [1] Pressure gauge connection
- [2] Connecting kit HRBC-D-...
- [3] Mounting bracket HRB-D-...
- [4] Mounting bracket HRBK-D-...
- [5] Knurled nut or hex nut (not included in the scope of delivery) for front panel mounting


	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	D1	D2	D3
LRB-1/4-D-...-K5-MINI	284	~272	40	80,7	59,2	2,5	5	3	108,5	163,5	G1/4	31	G1/4
LRB-3/8-D-...-K5-MINI	290										G3/8		
LRB-3/8-D-...-K5-MIDI	381	~366	55	99,9	70,6	3	5	3	146	220	G3/8	49,3	G3/8
LRB-1/2-D-...-K5-MIDI							6				G1/2		


	D4	D5	D6	H1	H2 ±0,2	H3 ±0,5	L1	L2	L4	L5 max.	L8	≅ 2
LRB-1/4-D-...-K5-MINI	M36x1,5	G1/8	4,3	20	35	47,3	~95,4	3	~68,9	3	17,5	17
LRB-3/8-D-...-K5-MINI												
LRB-3/8-D-...-K5-MIDI	M52x1,5	G1/4	5,3	32	49	62	~135,8	3	~100,3	5	24,5	36
LRB-1/2-D-...-K5-MIDI												


1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Ordering data

Regulator manifold, 2 positions						
	Size	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Midi	G3/8	G3/8	1,950 g	528956	LRB-3/8-D-7-O-K2-MIDI
					528958	LRB-3/8-D-O-K2-MIDI
		G1/2			528959	LRB-1/2-D-O-K2-MIDI
					528957	LRB-1/2-D-7-O-K2-MIDI
	Mini	G1/4	G1/4	760 g	528954	LRB-1/4-D-O-K2-MINI
					528952	LRB-1/4-D-7-O-K2-MINI
		G3/8			528953	LRB-3/8-D-7-O-K2-MINI
					528955	LRB-3/8-D-O-K2-MINI

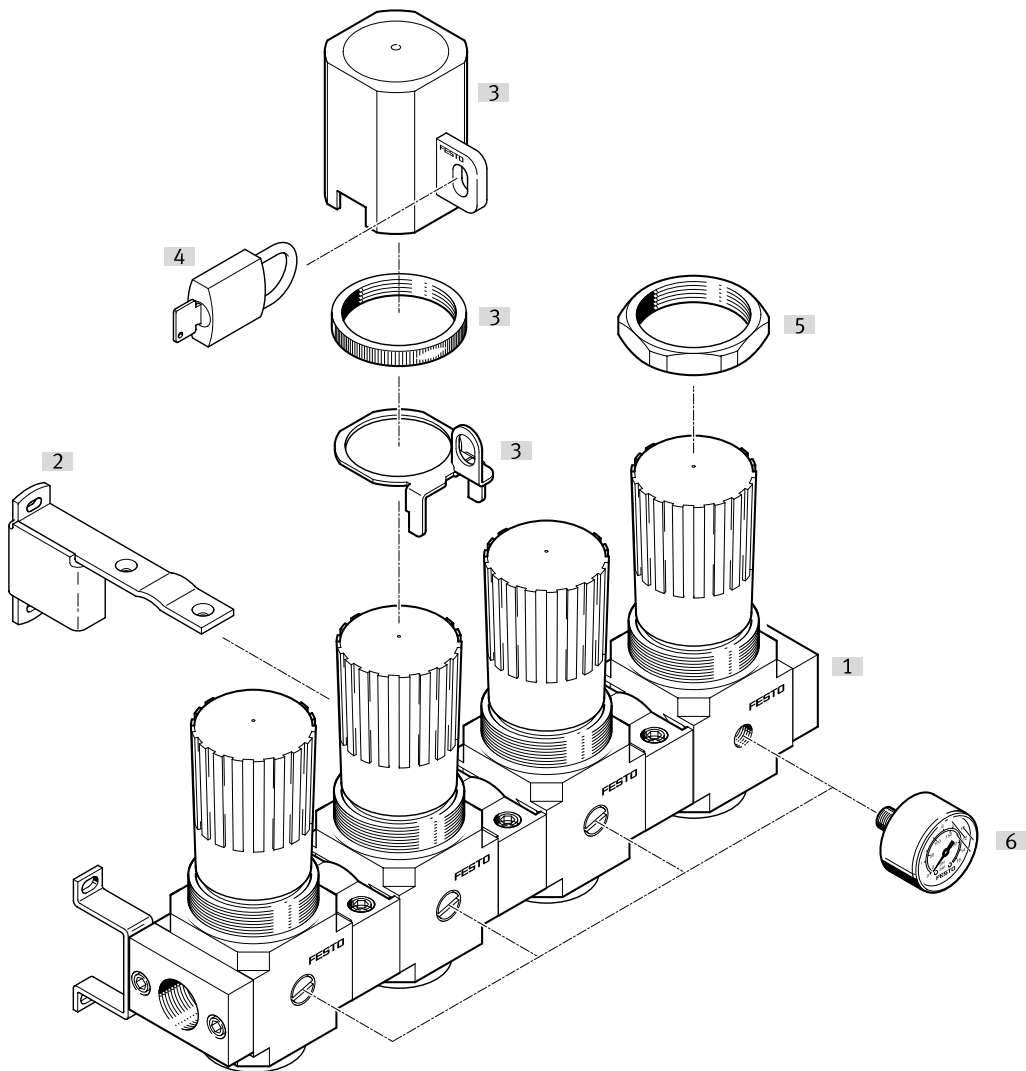
Regular manifold 3 positions						
	Size	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Midi	G3/8	G3/8	3,144 g	528972	LRB-3/8-D-7-O-K3-MIDI
					528974	LRB-3/8-D-O-K3-MIDI
		G1/2			528973	LRB-1/2-D-7-O-K3-MIDI
					528975	LRB-1/2-D-O-K3-MIDI
	Mini	G1/4	G1/4	1,090 g	528970	LRB-1/4-D-O-K3-MINI
					528968	LRB-1/4-D-7-O-K3-MINI
		G3/8			528971	LRB-3/8-D-O-K3-MINI
					528969	LRB-3/8-D-7-O-K3-MINI

Regulator manifold, 4 positions						
	Size	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Midi	G3/8	G3/8	3,834 g	528988	LRB-3/8-D-7-O-K4-MIDI
					528990	LRB-3/8-D-O-K4-MIDI
		G1/2			528989	LRB-1/2-D-7-O-K4-MIDI
					528991	LRB-1/2-D-O-K4-MIDI
	Mini	G1/4	G1/4	1,480 g	528986	LRB-1/4-D-O-K4-MINI
					528984	LRB-1/4-D-7-O-K4-MINI
		G3/8			528985	LRB-3/8-D-7-O-K4-MINI
					528987	LRB-3/8-D-O-K4-MINI

Regulator manifold 5 positions						
	Size	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Midi	G3/8	G3/8	4,828 g	529004	LRB-3/8-D-7-O-K5-MIDI
					529006	LRB-3/8-D-O-K5-MIDI
		G1/2			529005	LRB-1/2-D-7-O-K5-MIDI
					529007	LRB-1/2-D-O-K5-MIDI
	Mini	G1/4	G1/4	1,860 g	529000	LRB-1/4-D-7-O-K5-MINI
					529002	LRB-1/4-D-O-K5-MINI
		G3/8			529003	LRB-3/8-D-O-K5-MINI
					529001	LRB-3/8-D-7-O-K5-MINI

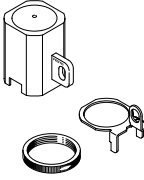
Peripherals

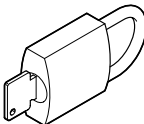
Pressure regulator manifold LRB-K

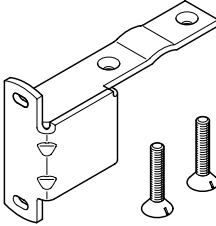



Accessories		→ Link
Type/order code	Description	
[1] Pressure regulator manifold LRB-K		lrb
[2] Mounting bracket HRBK	Included in the scope of delivery. The mounting bracket must be fitted after every second pressure regulator.	11
[3] Regulator lock LRVS		11
[4] Padlock LRVS-D		11
[5] Knurled nut HMR	For front panel installation	11
[6] Pressure gauge MA		11


Accessories

Regulator lock LRVS					
	LABS (PWIS) conformity		Product weight	Part no.	Type
	VDMA24364-B1/B2-L		40 g	193781	LRVS-D-MINI
			60 g	193782	LRVS-D-MIDI

Padlock LRVS-D						
	Corrosion resistance class CRC	LABS (PWIS) conformity	Note on materials	Product weight	Part no.	Type
	2 - Moderate corrosion stress	VDMA24364-B1/B2-L	RoHS-compliant	120 g	193786	LRVS-D

Mounting bracket HRBK					
	LABS (PWIS) conformity			Part no.	Type
	VDMA24364-B1/B2-L			525031	HRBK-D-MINI
				525032	HRBK-D-MIDI

Pressure gauge MA							
	Nominal size of pressure gauge	Pneumatic connection	Scale	Product weight	Part no.	Type	
	40	G1/8	Double scale, Bar (outside scale), psi (inner scale)	60 g	345395	MA-40-16-1/8	
					359874	MA-40-10-1/8	
			Single scale, MPa (outer scale)	192733	MA-40-1,6-G1/8-MPA		
		G1/4	Double scale, psi (inner scale), Bar (outside scale)	80 g	192732	MA-40-1-G1/8-MPA	
			Double scale, Bar (outside scale), psi (inner scale)		159596	FMA-40-10-1/4-EN	
					183900	MA-40-10-G1/4-EN	
	50	R1/8			80 g	159597	FMA-40-16-1/4-EN
					60 g	162835	MA-40-10-1/8-EN
					70 g	356759	MA-50-16-1/4
		G1/4			70 g	359873	MA-50-10-1/4
					100 g	159600	FMA-50-16-1/4-EN
					70 g	159599	FMA-50-10-1/4-EN
	Single scale, MPa (outer scale)		70 g	192734	MA-50-1-G1/4-MPA		
				192735	MA-50-1,6-G1/4-MPA		

Hex nut HMR					
	LABS (PWIS) conformity			Part no.	Type
	VDMA24364-B1/B2-L			530025	HMR-D-MINI/MAXI