

Pressure regulator for manifold assembly LRB, LRBS

FESTO



Characteristics

At a glance

The pressure regulator is suitable for manifold assemblies with through air supply, for configuring a regulator manifold with separate, independent pressure ranges. The pressure output is at the front or rear.

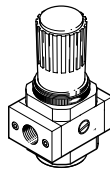
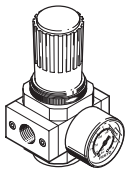
- Good control characteristics with minimal hysteresis and primary pressure compensation
- Manifold assembly with through air supply
- For configuring a regulator manifold with independent pressure regulation ranges
- Settings secured via latch on rotary knob and push-in anti-tamper lock

Pressure regulation range

Two pressure regulation ranges: 0.5...7 bar and 0.5...12 bar

Pressure gauge

[] With pressure gauge [0] Without pressure gauge



Type code

001	Series
LRB	Pressure regulator
LRBS	Pressure regulator, lockable

002	Version
D	D series, metal

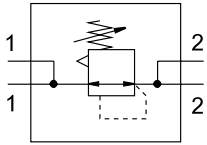
003	Pressure regulation range
	0.5 ... 12 bar (0.05 ... 1.2 MPa)
7	0.5 ... 7 bar (0.05 ... 0.7 MPa)

004	Pressure gauge
0	Without pressure gauge

005	Size
MINI	Grid dimension 40 mm (without connecting plates)
MIDI	Grid dimension 55 mm (without connecting plates)

Datasheet

General technical data



Pneumatic connection, port 1	Sub-base
Pneumatic connection, port 2	G1/4, G3/8
Size	Midi, Mini
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	In-line installation With accessories
Mounting position	optional
Actuator lock	Rotary knob with detent Rotary knob with integrated lock
Max. pressure hysteresis	0.2 bar
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	Prepared for G1/4 Prepared for G1/8

Operating and environmental conditions

Operating pressure	0.1 ... 1.6 MPa
Operating pressure	1 ... 16 bar
Operating pressure	14.5 ... 232 psi
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gases
Note on operating and pilot medium	–
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C
Corrosion resistance class CRC ¹⁾	–

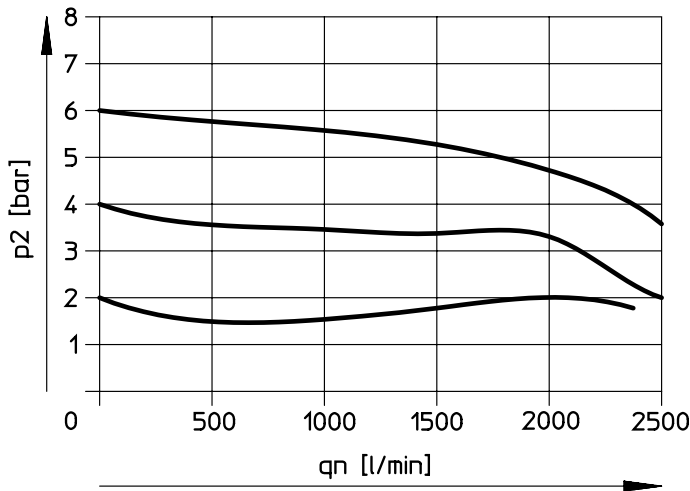
1) More information www.festo.com/x/topic/crc

Materials

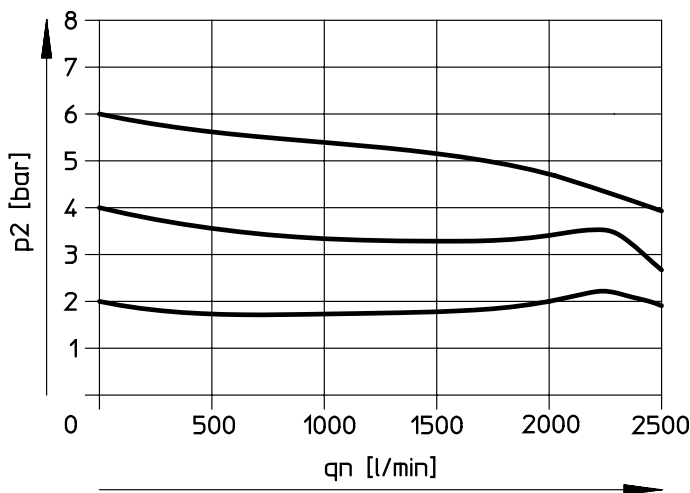
Material housing	Die-cast zinc
Material membrane	–
Material sub-base	Die-cast zinc
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

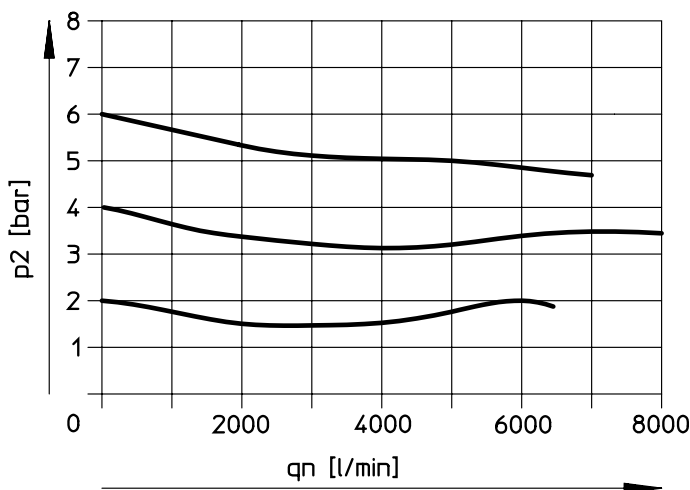
Standard flow rate q_n as a function of output pressure p_2 ($p_1 = 10$ bar) – Mini (pressure regulation range 0.5 ... 7 bar)



Standard flow rate q_n as a function of the output pressure p_2 ($p_1 = 10$ bar) – Mini (pressure regulation range 0.5 ... 12 bar)

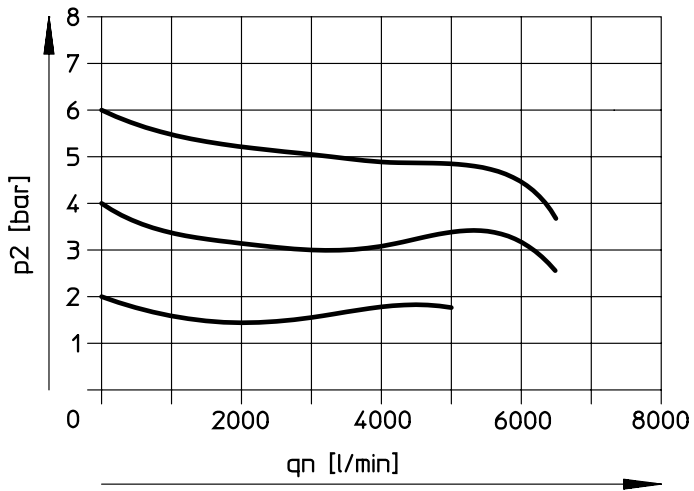


Standard flow q_n as a function of the outlet pressure p_2 ($p_1 = 10$ bar) – Midi (pressure regulation range 0.5 ... 7 bar)



Datasheet

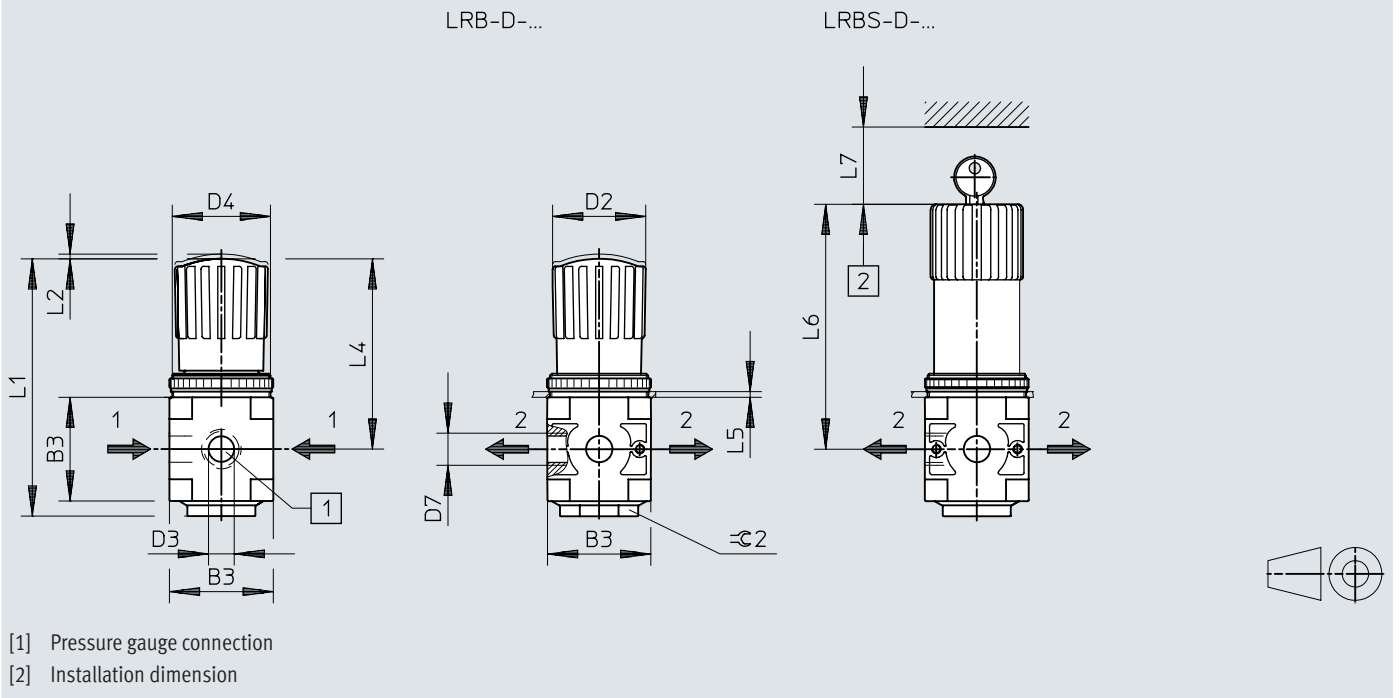
Normal flow q_n as a function of output pressure p_2 ($p_1 = 10$ bar) – Midi (pressure regulation range 0.5 ... 12 bar)



Dimensions

Dimensions – Mini/Midi

Download CAD data www.festo.com



	B3	D2	D3	D4	D7	L1	L2	L4	L5 max.	L6	L7 min.	$\varnothing 2$
LRB-D-...-MINI	40	31	G1/8	M36x1,5	G1/4	~95,4	3	~68,9	3	98	60	17
LRBS-D-...-MINI												
LRB-D-...-MIDI	55	49,3	G1/4	M52x1,5	G3/8	~135,8	3	~100,3	5	129,2	60	36
LRBS-D-...-MIDI												

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

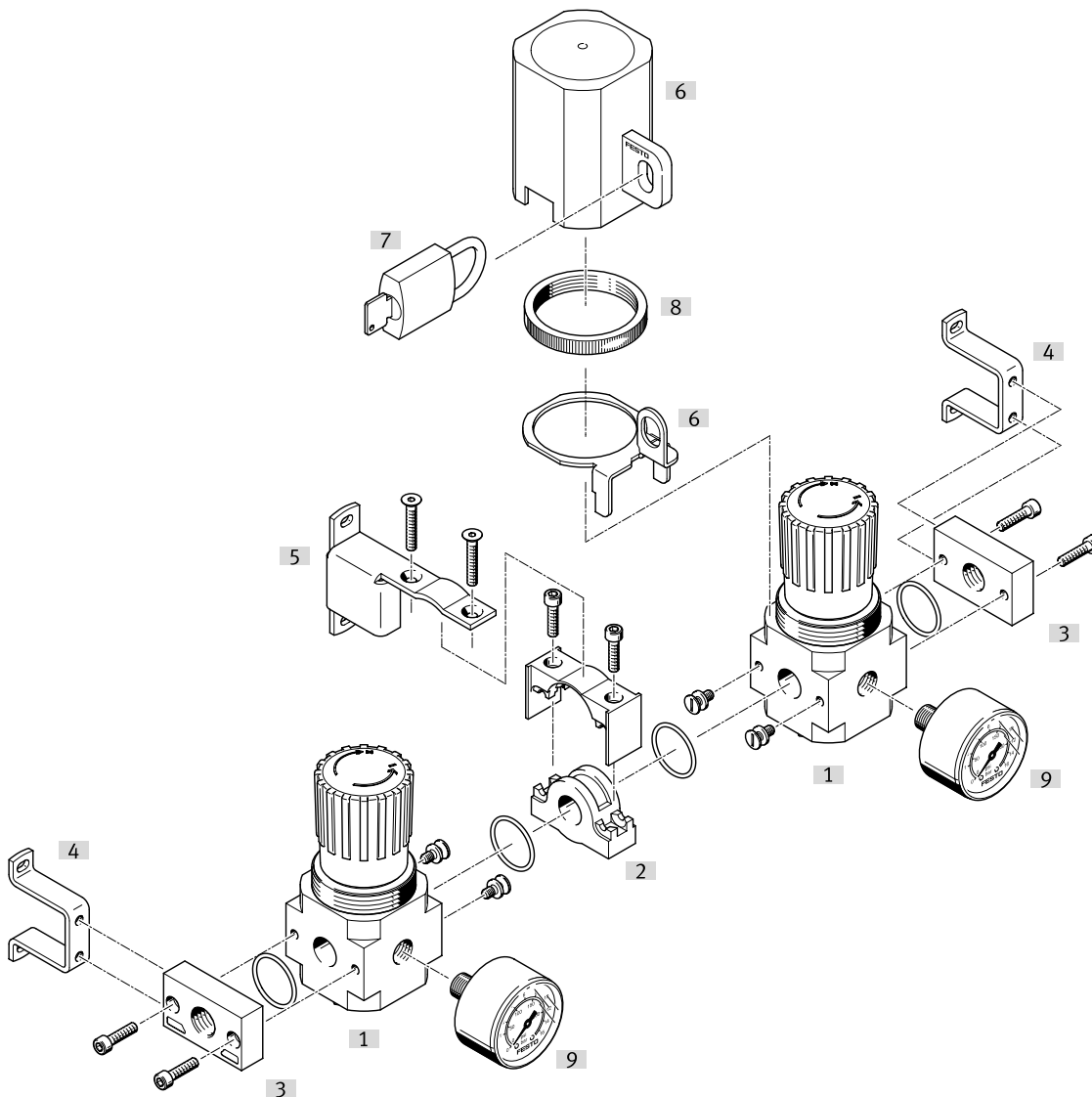
Ordering data

Pressure regulators LRB						
Size	Pneumatic connection, port 1	Pressure regulation range	Standard nominal flow rate (standardised to DIN 1343)	Product weight	Part no.	Type
Midi	Sub-base	0.5 ... 7 bar	3,800 l/min	700 g	197538	LRB-D-7-O-MIDI
		0.5 ... 12 bar	3,200 l/min		197539	LRB-D-O-MIDI
Mini		0.5 ... 7 bar	1,800 l/min	250 g	197534	LRB-D-7-O-MINI
		0.5 ... 12 bar	1,600 l/min		197535	LRB-D-O-MINI

Pressure regulator, lockable LRBS						
Size	Pneumatic connection, port 1	Pressure regulation range	Standard nominal flow rate (standardised to DIN 1343)	Product weight	Part no.	Type
Midi	Sub-base	0.5 ... 7 bar	3,200 l/min	940 g	194687	LRBS-D-7-O-MIDI
		0.5 ... 12 bar	3,800 l/min		194686	LRBS-D-O-MIDI
Mini		0.5 ... 7 bar	1,600 l/min	350 g	194683	LRBS-D-7-O-MINI
		0.5 ... 12 bar	1,800 l/min		194682	LRBS-D-O-MINI

Peripherals

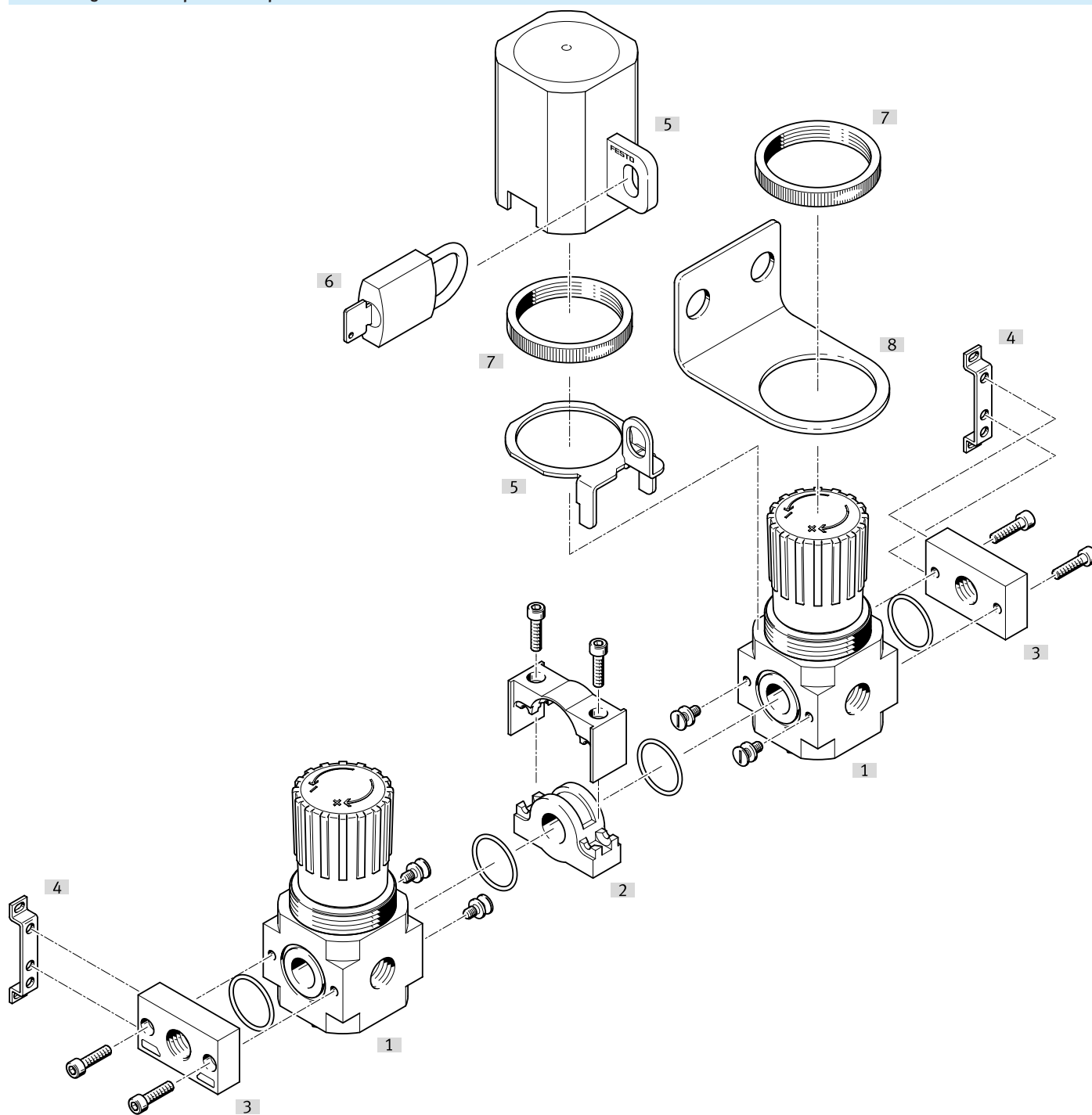
Pressure regulators LRB – pressure output at the rear



Accessories		→ Link
Type/order code	Description	
[1] Pressure regulator LRB		lrb
[2] Connecting kit HRBC		13
[3] Connecting plates LRBAS		13
[4] Mounting bracket HRB		13
[5] Mounting bracket HRBK	A mounting bracket must be fitted after every second pressure regulator.	14
[6] Regulator lock LRVS		
[7] Padlock LRVS-D		13
[8] Knurled nut HMR	Included in the scope of delivery	-
[9] Pressure gauge MA		14

Peripherals

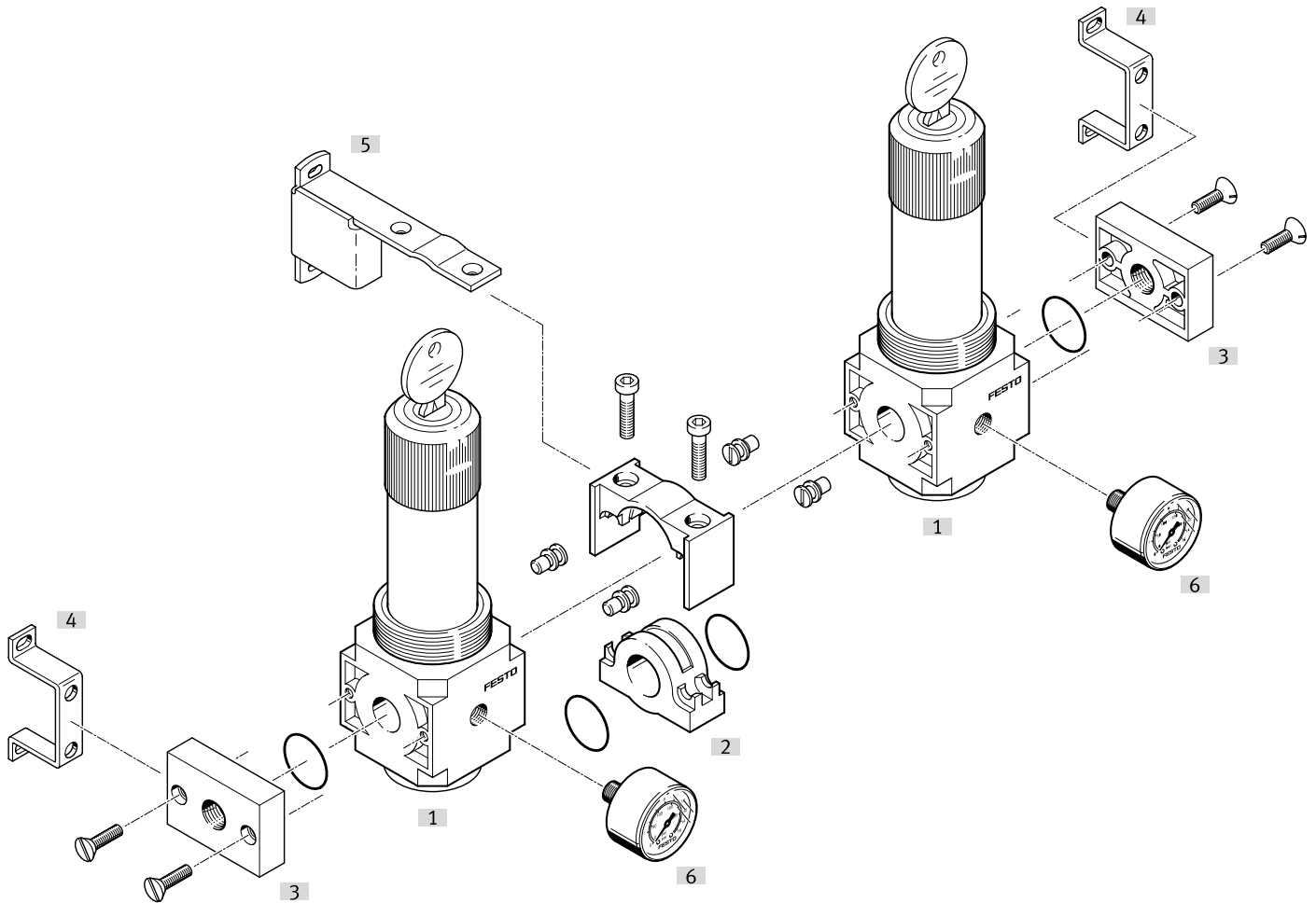
Pressure regulator LRB – pressure output at the front



Accessories		→ Link
Type/order code	Description	
[1]	Pressure regulator LRB	lrb
[2]	Connecting kit HRBC	13
[3]	Connecting plates LRBAS	13
[4]	Mounting bracket HFOE	13
[5]	Regulator lock LRVS	
[6]	Padlock LRVS-D	13
[7]	Knurled nut HMR	Included in the scope of delivery -
[8]	Mounting bracket HR-D	14

Peripherals

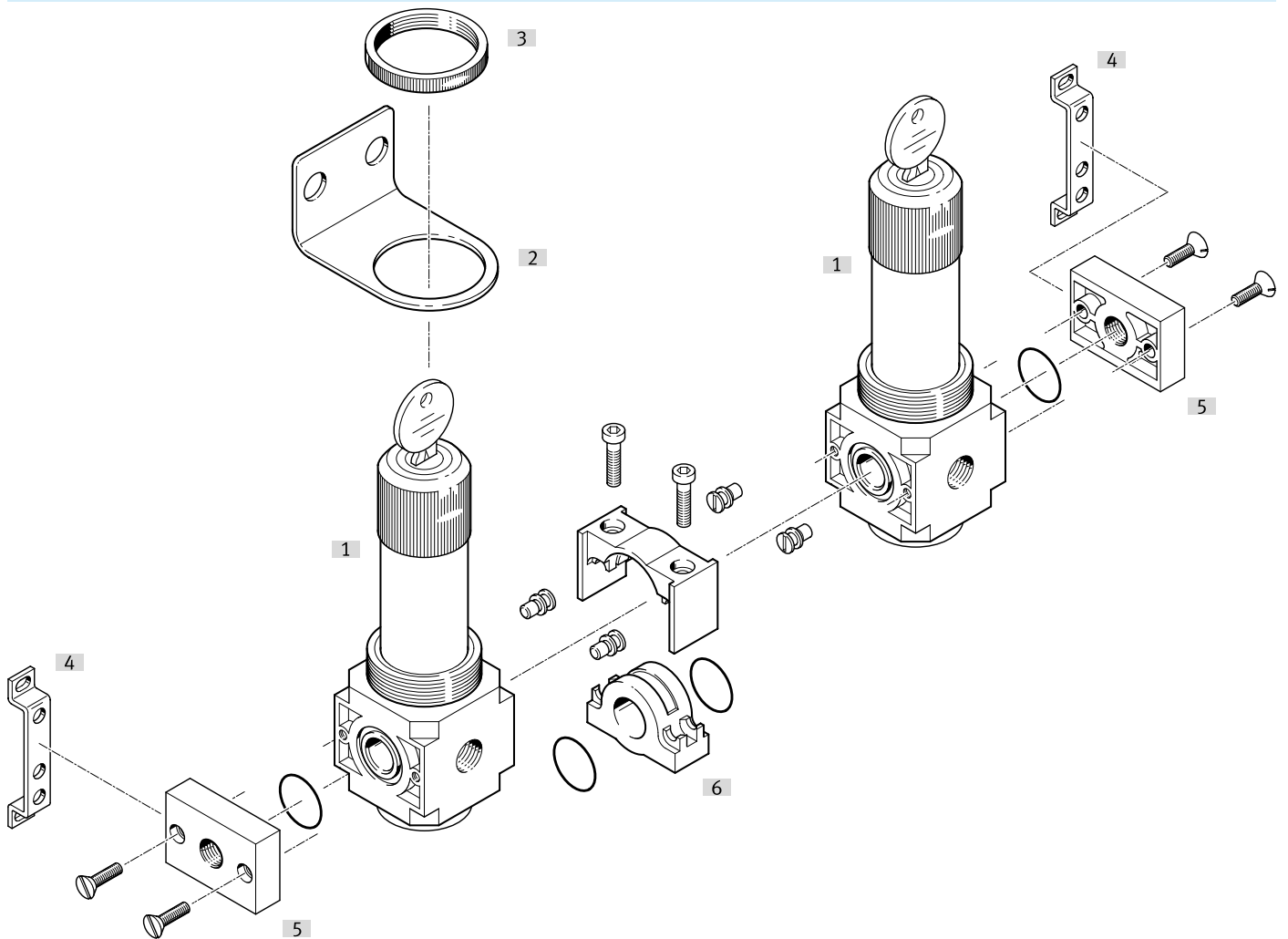
Pressure regulator LRBS, lockable – pressure output at the rear



Accessories			→ Link
Type/order code	Description		
[1] Pressure regulator LRBS			lrs
[2] Connecting kit HRBC			13
[3] Connecting plates LRBAS			13
[4] Mounting bracket HRB			13
[5] Mounting bracket HRBK	A mounting bracket must be fitted after every second pressure regulator.		14
[6] Pressure gauge MA			14
[7] Knurled nut HMR	Not shown (included in the scope of delivery)		-

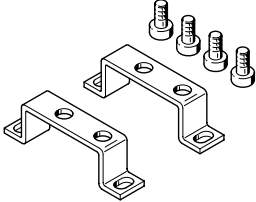
Peripherals

Pressure regulator LRBS, lockable – pressure output at the front

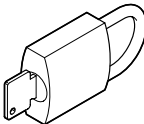


Accessories		→ Link
Type/order code	Description	
[1] Pressure regulator LRBS		lrs
[2] Mounting bracket HR-D		14
[3] Knurled nut HMR	Included in the scope of delivery	-
[4] Mounting bracket HFOE		13
[5] Connecting plates LRBAS		13
[6] Connecting kit HRBC		13

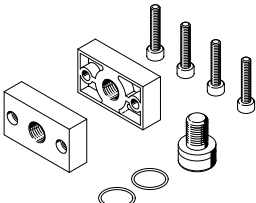
Accessories

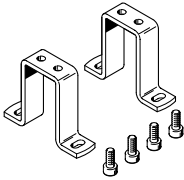
Mounting bracket HFOE				
	Corrosion resistance class CRC ¹⁾	LABS (PWIS) conformity	Part no.	Type
		VDMA24364-B1/B2-L	197534	LRB-D-7-O-MINI
			197535	LRB-D-O-MINI
			197538	LRB-D-7-O-MIDI
			197539	LRB-D-O-MIDI

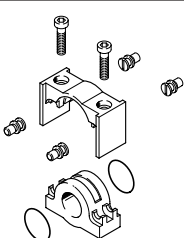
1) More information: www.festo.com/x/topic/crc

Padlock LRVS-D						
	Corrosion resistance class CRC ¹⁾	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

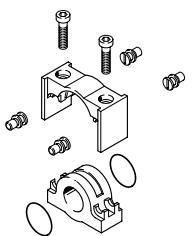
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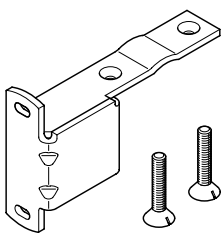
Connecting plates LRBAS			
	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B1/B2-L	525033	LRBAS-1/4-D-MINI
		525035	LRBAS-3/8-D-MIDI
		525034	LRBAS-3/8-D-MINI
		525036	LRBAS-1/2-D-MIDI

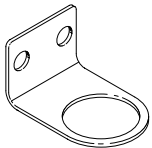
Mounting bracket HRB			
	LABS (PWIS) conformity	Part no.	Type
	VDMA24364-B1/B2-L	525029	HRB-D-MINI
		525030	HRB-D-MIDI

Connecting kit HRBC				
	LABS (PWIS) conformity	Product weight	Part no.	Type
	VDMA24364-B1/B2-L	65 g	529022	HRBC-D-MINI

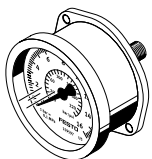
Accessories

Connecting kit HRBC				
	LABS (PWIS) conformity	Product weight	Part no.	Type
	VDMA24364-B1/B2-L	188 g	529023	HRBC-D-MIDI

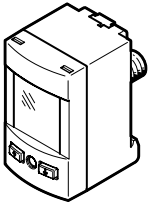
Mounting bracket HRBK				
	LABS (PWIS) conformity	Part no.	Type	
	VDMA24364-B1/B2-L	525031	HRBK-D-MINI	
		525032	HRBK-D-MIDI	

Mounting bracket HR-D				
	Corrosion resistance class CRC ¹⁾	LABS (PWIS) conformity	Part no.	Type
	1 - Low corrosion stress 2 - Moderate corrosion stress	VDMA24364-B1/B2-L	164936	HR-D-MINI
			162804	HR-D-MIDI
			162805	HR-D-MAXI
			193802	HR-D-DI-MAXI

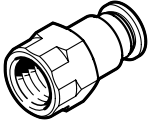
1) More information: www.festo.com/x/topic/crc

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	159596	FMA-40-10-1/4-EN
					Double scale, Bar (outside scale), psi (inner scale)	70 g
			80 g	159597	FMA-40-16-1/4-EN	
	50	R1/8	Double scale, Bar (outside scale), psi (inner scale)	60 g	162835	MA-40-10-1/8-EN
				70 g	356759	MA-50-16-1/4
					359873	MA-50-10-1/4
		G1/4	Double scale, Bar (outside scale), psi (inner scale)	100 g	159600	FMA-50-16-1/4-EN
					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					

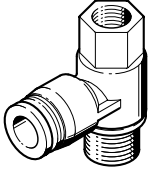
Accessories

Pressure sensor SPAU for direct mounting on the service unit component with pressure gauge connection (adapter for pneumatic connection included in the scope of delivery)						
	Pneumatic connection	Switching output	Display type	Electrical connection 1, connector system	Part no.	Type
	R1/8	2 x PNP or 2 x NPN, switchable	Illuminated LCD	M12x1, A-coded to EN 61076-2-101	8001206	SPAU-P10R-T-R18M-L-PNLK-PNVBA-M12D
				M8x1, A-coded, to EN 61076-2-104	8001203	SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D
	R1/4			M12x1, A-coded to EN 61076-2-101	8001208	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M12D
	M8x1, A-coded, to EN 61076-2-104			8001209	SPAU-P10R-T-R14M-L-PNLK-PNVBA-M8D	

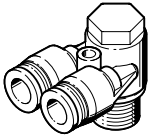
Push-in fitting QSF, female thread with external hex

	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Female thread G1/4	For tubing outside diameter of 8 mm	24 g	★ 153026	QSF-1/4-8-B

Push-in T-fitting QSTF, rotatable 360°, with female and male thread

	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Male thread G1/4	Female thread G1/4, For tubing outside diameter of 8 mm	44 g	186203	QSTF-G1/4-8

Push-in Y-fitting QSYLV, rotatable 360°, male thread with external hex

	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	Male thread G1/4	For tubing outside diameter of 8 mm	48 g	186210	QSYLV-G1/4-8