

# Pressure regulator LR-DB

**FESTO**



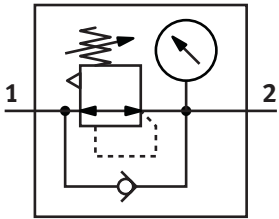
## Characteristics

### At a glance

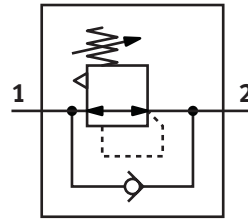
- Setting values are secured by locking the rotary knob
- Good regulation characteristics with minimal pressure hysteresis
- High flow rate performance

### Pressure gauge

[ ] With pressure gauge



[0] Without pressure gauge



## Type code

001	Series	
LR	Pressure regulator	
002	Pneumatic connection	
1/4	Female thread G1/4	
003	Version	
DB	D series, polymer	

004	Pressure regulation range	
7	0.5 ... 7 bar (0.05 ... 0.7 MPa)	
005	Pressure gauge	
	With pressure gauge	
0	Without pressure gauge	
006	Size	
MINI	Grid dimension 40 mm (without connecting plates)	

## Datasheet

### General technical data

Pneumatic connection, port 1	G1/4
Pneumatic connection, port 2	G1/4
Size	Mini
Design	Pressure regulator with pressure gauge Pressure regulator without pressure gauge
Controller function	With secondary venting With return flow function
Type of mounting	Either: Front panel mounting In-line installation With through-hole Via mounting bracket
Mounting position	optional
Actuator lock	Rotary knob with detent
Max. pressure hysteresis	0.5 bar
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	Prepared for G1/8 With pressure gauge

### Operating and environmental conditions

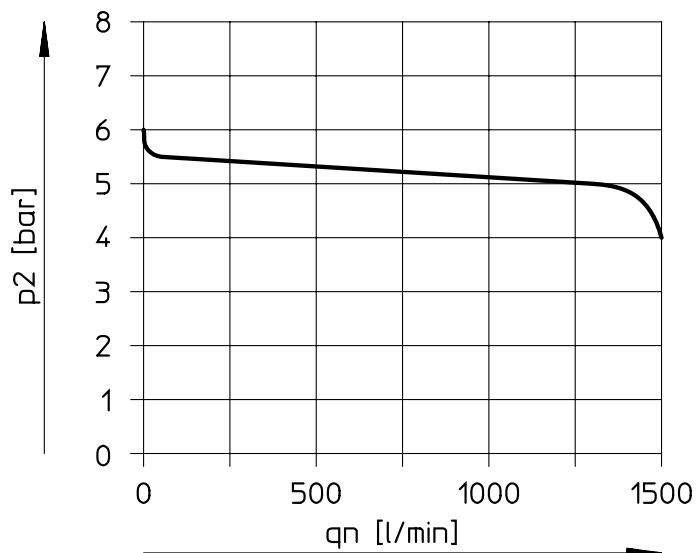
Operating pressure	0.1 ... 1 MPa
Operating pressure	1.5 ... 10 bar
Operating pressure	21 ... 145 psi
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	-5 ... 50°C
Media temperature	-5 ... 50°C
Corrosion resistance class CRC <sup>1)</sup>	1 - Low corrosion stress

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

### Materials

Material housing	PA-reinforced
Material rotary knob	POM
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

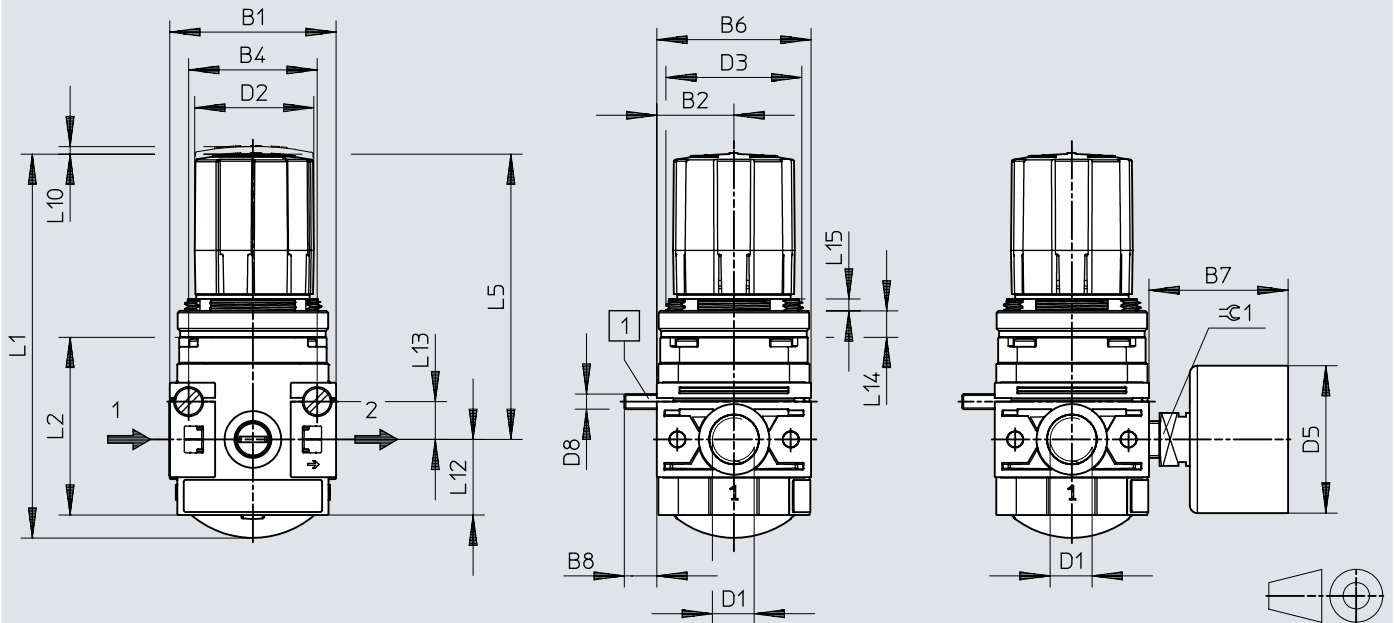
### Standard flow rate $q_n$ as a function of output pressure $p_2$ ( $p_1 = 10$ bar)



## Dimensions

### Dimensions – Mini, with pressure gauge

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



[1] Socket head screw for wall mounting (2 included in the scope of delivery)

	B1	B2	B4	B6	B7 max.	B8	D1	D2 ∅	D3	D5 ∅	D8
LR-1/4-DB	44	20,5	34	41	37	9	G1/4	32	M36x1,5	39	M4
	L1	L2	L5	L10	L12	L13	L14	L15	≈∅ 1		
LR-1/4-DB	102	47	75,9	2	20	10	7	3,2	14		

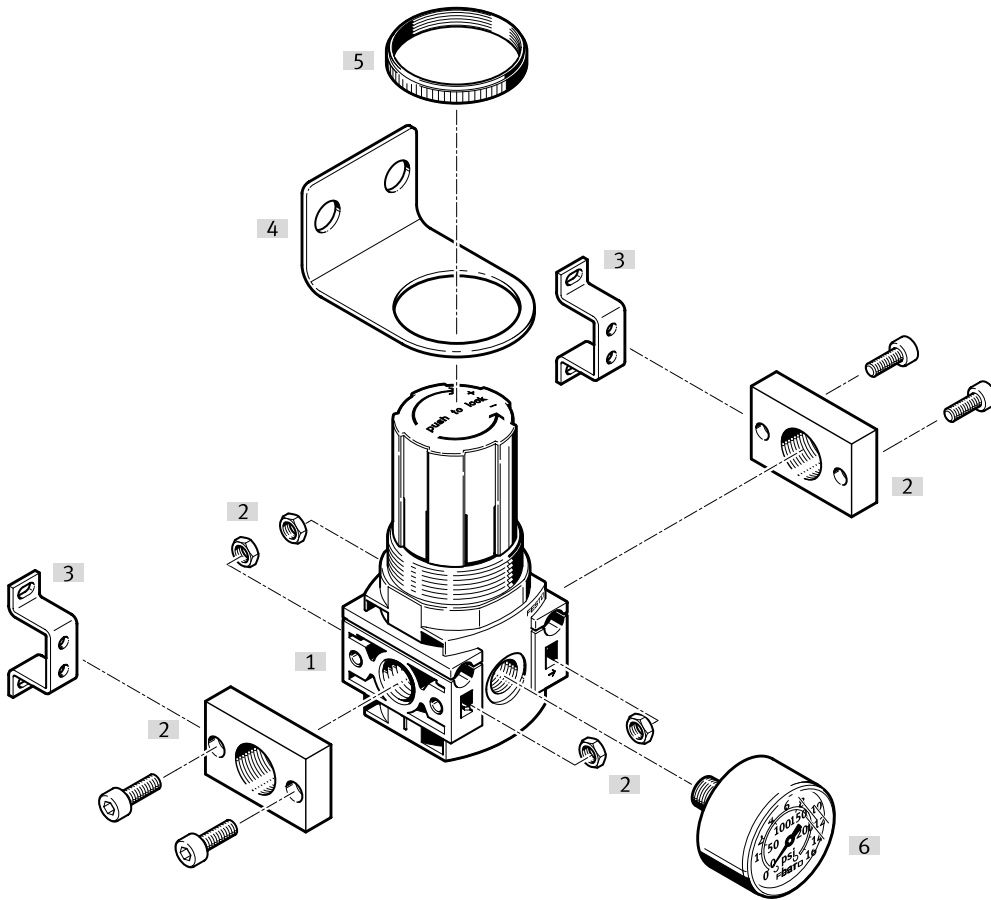
## Ordering data

Pressure regulators LR-DB (with pressure gauge, outer scale in bar, inner scale in psi)						
Size	Pneumatic connection, port 1	Pressure regulation range	Standard nominal flow rate (standardised to DIN 1343)	Product weight	Part no.	Type
Mini	G1/4	0.5 ... 7 bar	1,300 l/min	150 g	<b>539682</b>	<b>LR-1/4-DB-7-MINI</b>

Pressure regulators LR-DB (without pressure gauge)						
Size	Pneumatic connection, port 1	Pressure regulation range	Standard nominal flow rate (standardised to DIN 1343)	Product weight	Part no.	Type
Mini	G1/4	0.5 ... 12 bar	1,300 l/min	150 g	<b>537643</b>	<b>LR-1/4-DB-7-O-MINI</b>

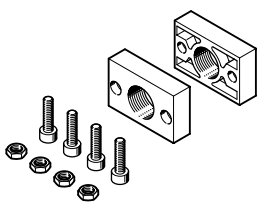
## Peripherals

### Pressure regulator LR-DB

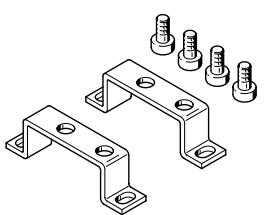


Accessories		→ Link
Type/order code	Description	
[1]	Pressure regulator LR-DB	<a href="#">lr-db</a>
[2]	Connection kit PBL	8
[3]	Mounting bracket HFOE	8
[4]	Mounting bracket HR-D	8
[5]	Knurled nut HMR	<a href="#">-</a>
[6]	Pressure gauge MA	8

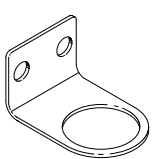
## Accessories

Connection kit PBL					
	Corrosion resistance class CRC <sup>1)</sup>	LABS (PWIS) conformity	Part no.	Type	
	1 - Low corrosion stress	VDMA24364-B1/B2-L	542788	PBL-1/4-DB-MINI	

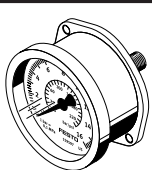
1) More information: [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

Mounting bracket HFOE					
	Corrosion resistance class CRC <sup>1)</sup>	LABS (PWIS) conformity	Part no.	Type	
	2 - Moderate corrosion stress	VDMA24364-B2-L	159593	HFOE-D-MIDI/MAXI	
		VDMA24364-B1/B2-L	159638	HFOE-D-MINI	

1) More information: [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

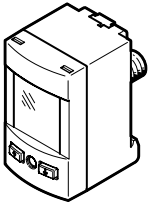
Mounting bracket HR-D					
	Corrosion resistance class CRC <sup>1)</sup>	LABS (PWIS) conformity	Part no.	Type	
	1 - Low corrosion stress 2 - Moderate corrosion stress	VDMA24364-B1/B2-L	164936	HR-D-MINI	
			162804	HR-D-MIDI	
			162805	HR-D-MAXI	
			193802	HR-D-DI-MAXI	

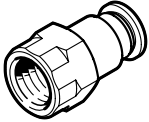
1) More information: [www.festo.com/x/topic/kbk](http://www.festo.com/x/topic/kbk)

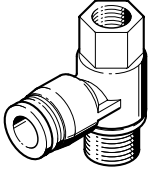
Pressure gauge MA						
	Nominal size of pressure gauge	Pneumatic connection	Scale	Product weight	Part no.	Type
	40	G1/8	Double scale, Bar (outside scale), psi (inner scale)	60 g	345395	MA-40-16-1/8
					359874	MA-40-10-1/8
			Single scale, MPa (outer scale)	80 g	192733	MA-40-1,6-G1/8-MPA
		G1/4	Double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

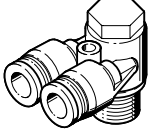


## Accessories

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