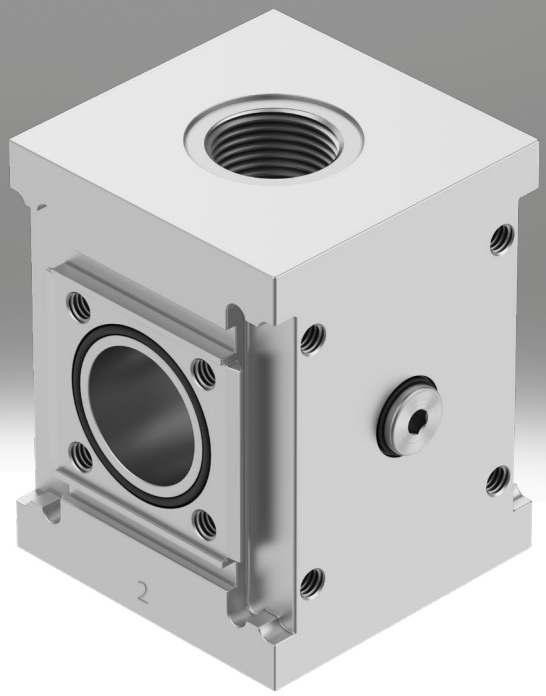
Branching module PMBL



Characteristics

At a glance

Air distributors for high-pressure applications with various connections.

- Sizes: 90 mm, 186 mm
- Can be used as an intermediate distributor for varying compressed air qualities
- Support for additional modules

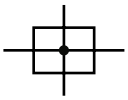
Outlets PMBL-90-HP3: Female thread G1 at the top and bottom; female thread G1/4 at the rear and front (behind cover plate), closed with blanking plug.

Outlets PMBL-90-HP3-E: Female thread G1 at the top, rear and bottom (exhaust connection); female thread G1/4 at the front (behind cover plate), closed with blanking plug.

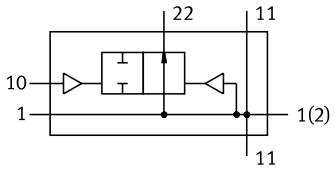
Outlets PMBL-186-HP3-H: Female thread G1 at the top, bottom and front; female thread G1/4 at the front (2x) and rear.

Additional function

[_]	None



[E]	Pneumatically actuated exhaust



Type code

001	Series	
PMBL	Branching module	

002	Size	
90	90 mm	
186	186 mm	

003	Pressure application range	
HP3	Up to 50 bar	

004	Additional function	
	None	
E	Pneumatically actuated exhaust	

005	Width	
	Standard	
H	Half width	

Datasheet

General technical data			
Size	90		186
Additional function	None [_]	Pneumatically actuated exhaust [E]	None [_]
Nominal size DN	36		54
Pneumatic connection, port 3	G1	–	G1
Pneumatic connection, port 4	–	G1	–
Pneumatic connection, port 11	–	G1/4	–
Pilot air port 10	–	G1	–
Design	Branching module		
Type of mounting	In-line installation		
Mounting position	optional		

Operating and environmental conditions			
Size	90		186
Additional function	None [_]	Pneumatically actuated exhaust [E]	None [_]
Operating pressure	0 ... 5 MPa		
Operating pressure	0 ... 50 bar		
Pilot pressure	–	0 ... 50 bar	–
Operating medium	Compressed air to ISO 8573-1:2010 [-:-:-]	Compressed air to ISO 8573-1:2010 [7:4:4]	Compressed air to ISO 8573-1:2010 [-:-:-]
Note on operating and pilot medium	Lubricated operation not possible		
Ambient temperature	5 ... 60°C		
Media temperature	5 ... 60°C		
Storage temperature	-10 ... 60°C		
Corrosion resistance class KBK [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity) [3]	to UK Pressure Equipment Regulations		
Suitable for use with food [4]	See supplementary material information		

1) More information www.festo.com/x/topic/crc
2) More information: www.festo.com/catalogue/pmbl → Downloads.
3) More information: www.festo.com/catalogue/pmbl → Downloads.
4) More information: www.festo.com/catalogue/pmbl → Downloads.

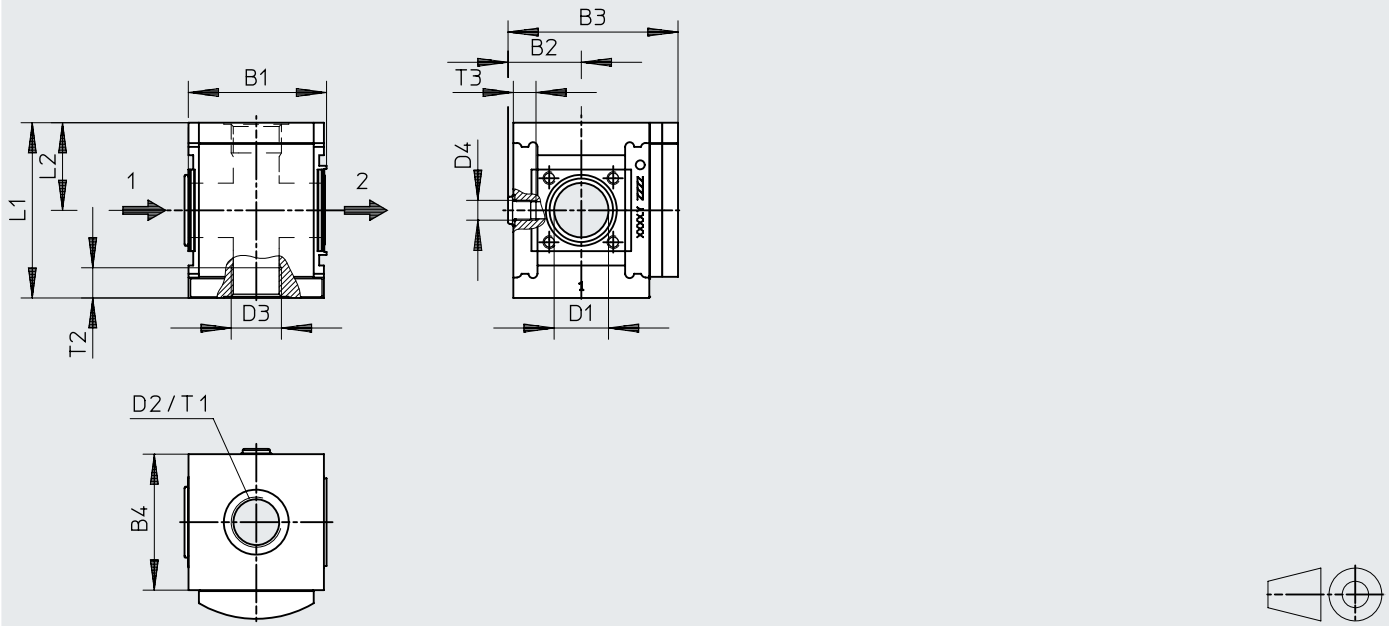
Characteristic flow rate values			
Size	90		186
Additional function	None [_]	Pneumatically actuated exhaust [E]	None [_]
Standard nominal flow rate in main flow direction 1->2 [1]	49,000 l/min		117,240 l/min
Standard nominal flow rate for exhaust [1]	–	13,000 l/min	–

1) Measured at p1 = 6 bar and p2 = 5 bar, Δp = 1 bar

Materials			
Size	90		186
Additional function	None [_]	Pneumatically actuated exhaust [E]	None [_]
Material housing	Wrought aluminium alloy		
Material seals	NBR	NBR, PE	NBR
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364 zone III		

Dimensions

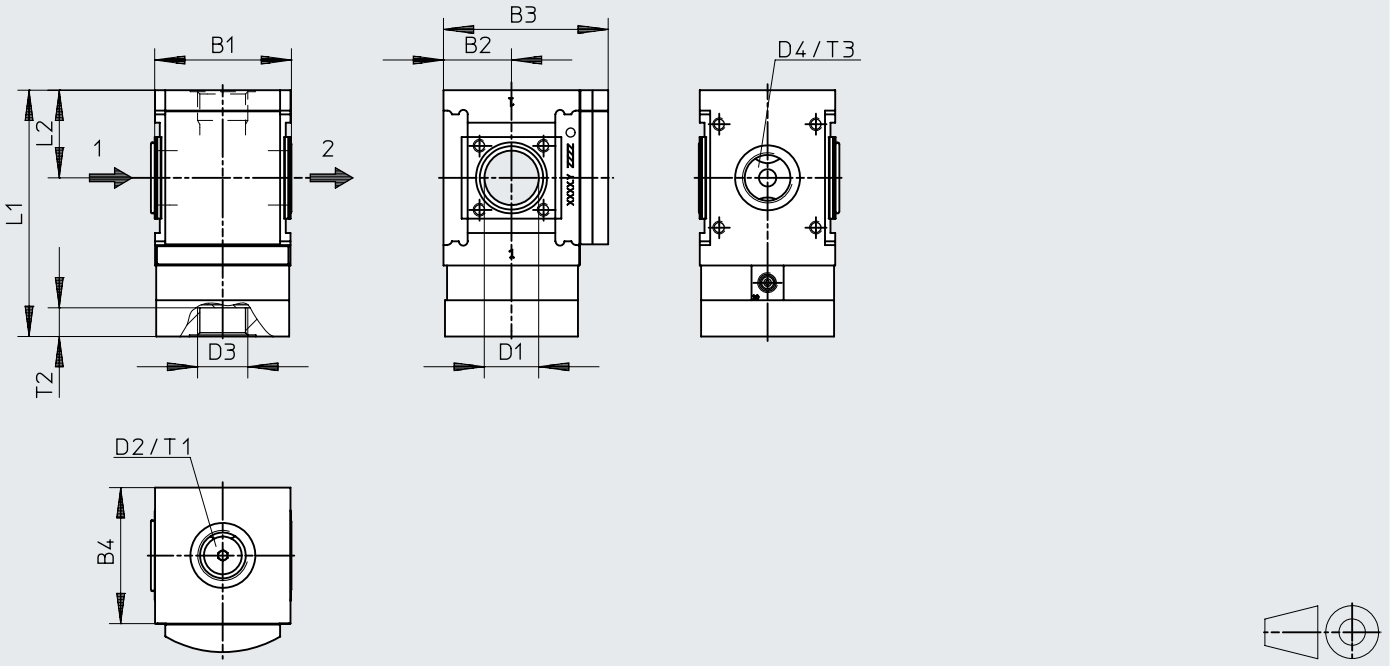
Dimensions – PMBL-90-HP3 Download CAD data www.festo.com



	B1	B2	B3	B4	D1 ø	D2	D3	D4	L1	L2	T1	T2	T3
PMBL-90-HP3	~92	~49	~113	90	36	G1	G1	G1/4	116	58	20	20	15

Dimensions

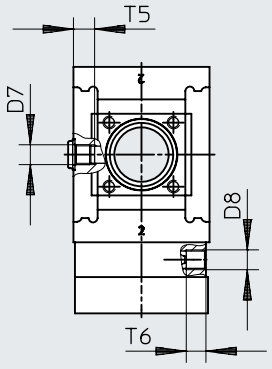
Dimensions – PMBL-90-HP3-E Download CAD data www.festo.com



	B1	B2	B3	B4	D1 ø	D2	D3	D4	D7	D8	L1	L2	T1	T2	T3	T5	T6
PMBL-90-HP3-E	90	45	109	90	36	G1	G1	G1	G1/4	G1/4	163	58	20	19	20	14	13

Dimensions

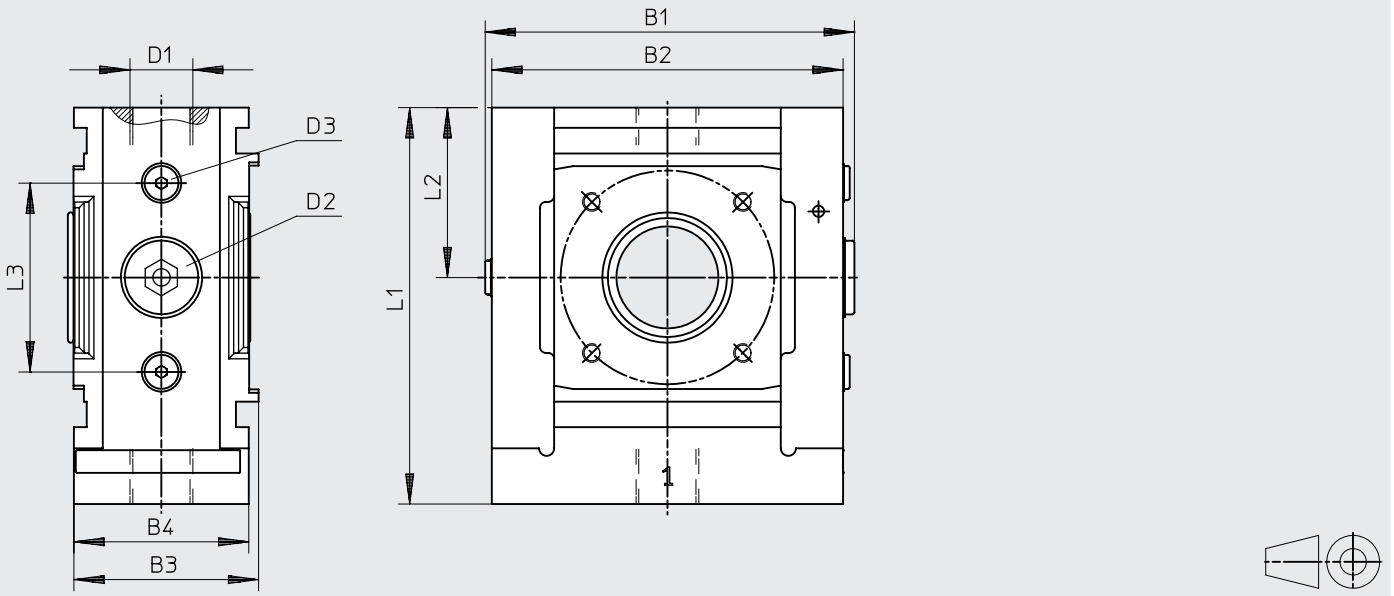
Dimensions – PMBL-90-HP3-E, shown without cover plate Download CAD data www.festo.com



	D7	D8	T5	T6
PMBL-90-HP3-E	G1/4	G1/4	14	13

Dimensions

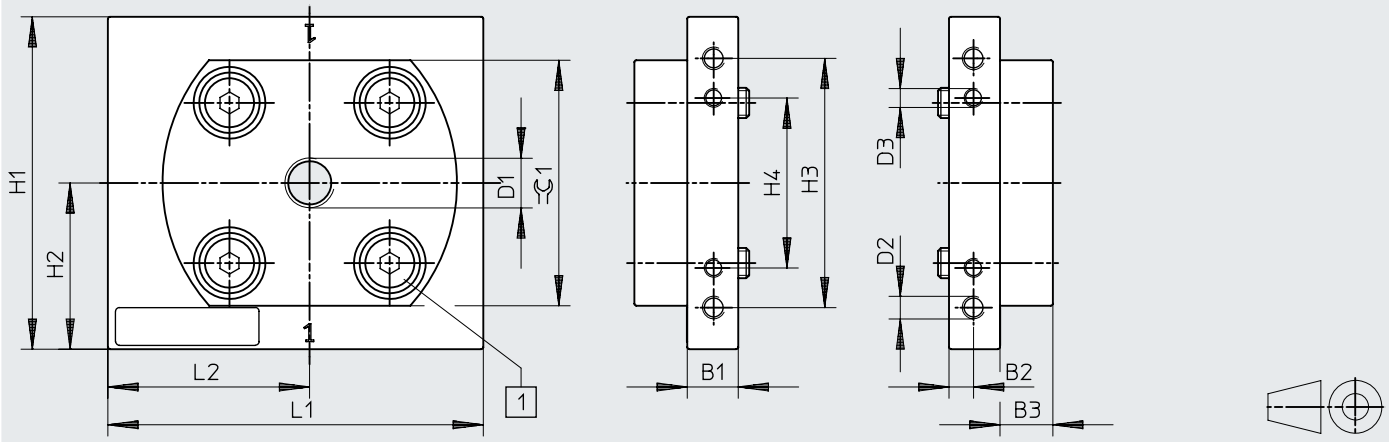
Dimensions – PMBL-186-HP3-H Download CAD data www.festo.com



	B1	B2	B3	B4	D1	D2	D3	L1	L2	L3
PMBL-186-HP3-H	196	186	98	93	G1	G1	G1/4	210	90	100

Dimensions

Dimensions – Connecting plate PAML-CP-90-HP3-G14/G12/G34/G1 Download CAD data www.festo.com



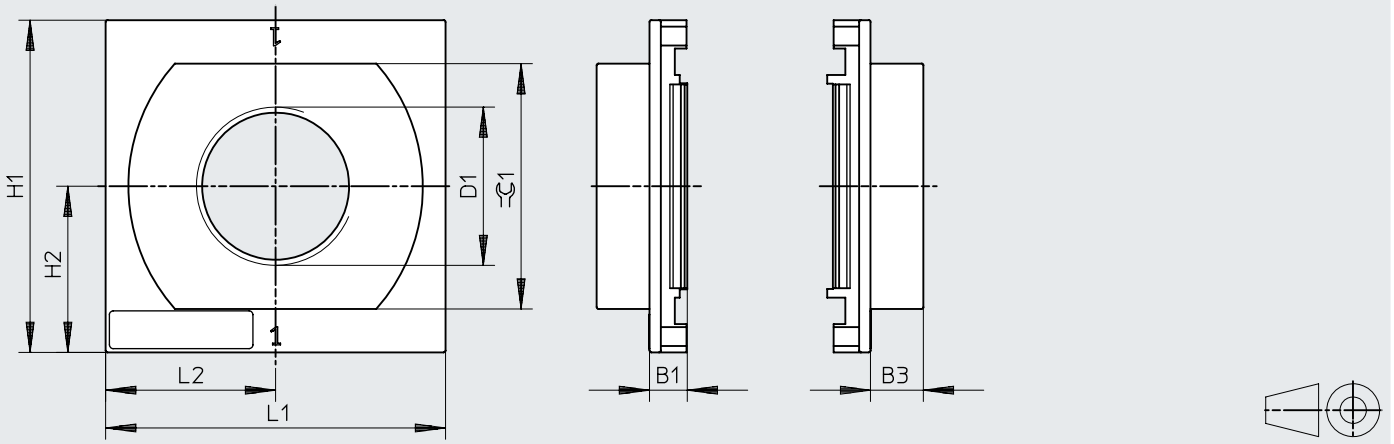
[1] Cylinder screw M8x25

	B1	B2	B3	D1	D2[1)]	D3	H1	H2	H3	H4	L1	L2	⊂ 1
PAML-CP-90-HP3-G14	13,5	6,5	14	G1/4	M6x10	M5x9	88	44	66	45	~99	~53	65
PAML-CP-90-HP3-G14				G1/2									
PAML-CP-90-HP3-G14				G3/4									
PAML-CP-90-HP3-G14				G1									

1) Thread for mounting the service unit component on a wall without mounting bracket

Dimensions

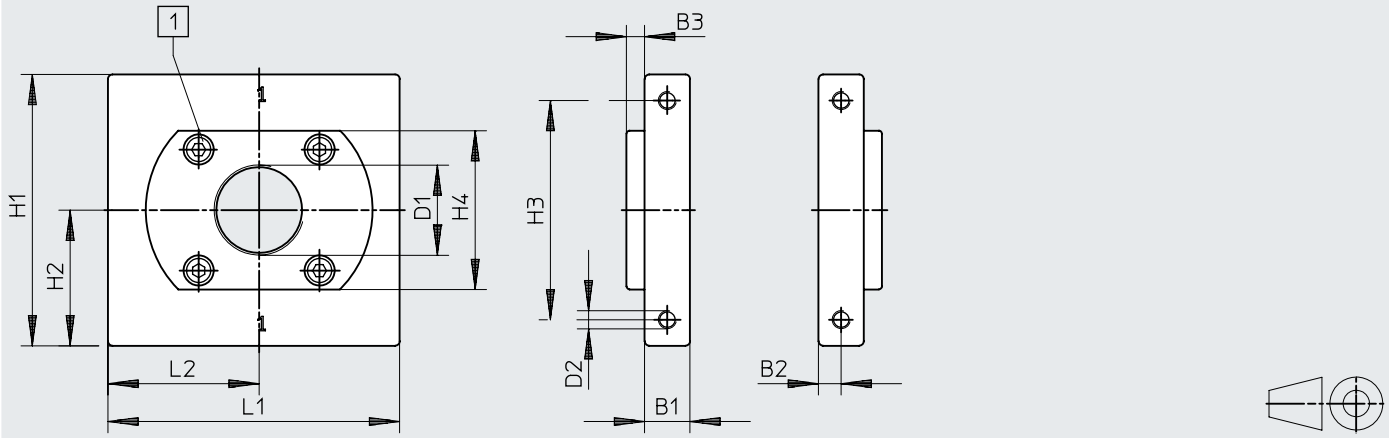
Dimensions – Connecting plate PAML-CP-90-HP3-G114 Download CAD data www.festo.com



	B1	B3	D1	D3	H1	H2	L1	L2	⌀1
PAML-CP-90-HP3-G114	10	14	G1 1/4	M5x9	88	44	90	45	65

Dimensions

Dimensions – Connecting plate PAML-CP-186 Download CAD data www.festo.com

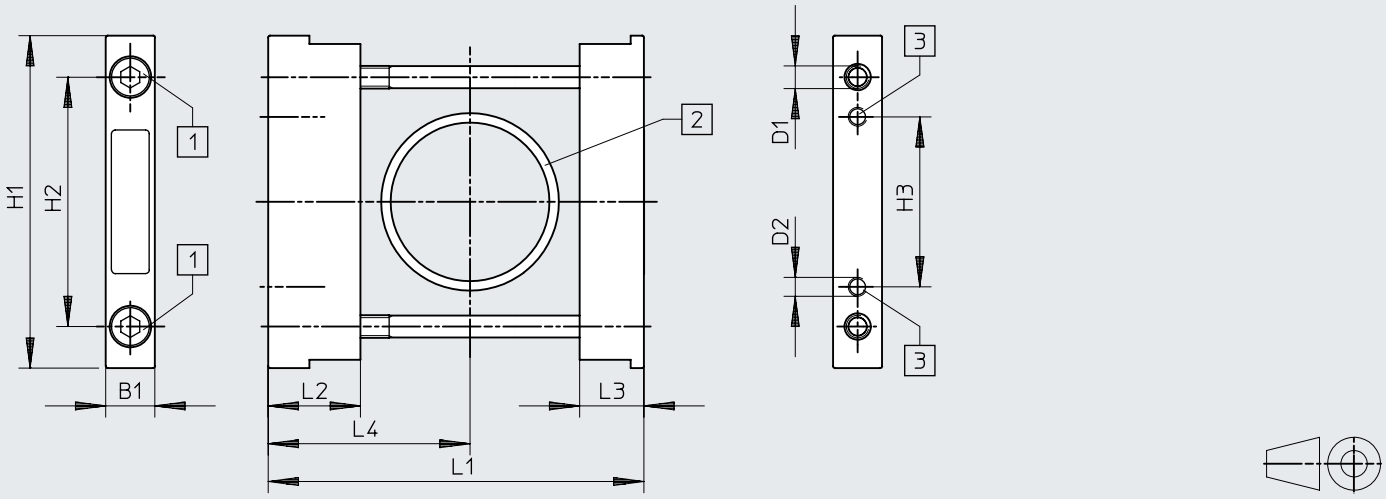


[1] Cylinder screw M10x30

	B1	B2	B3	D1	D2	H1	H2	H3	H4	L1	L2
PAML-CP-186-HP3-G14	30	15	12	G1/4	M12	180	90	145	105	193	100
PAML-CP-186-HP3-G114				G1 1/4							
PAML-CP-186-HP3-G112				G1 1/2							
PAML-CP-186-HP3-G2				G2							
PAML-CP-186-HP3-G212			25	G2 1/2							

Dimensions

Dimensions – Mounting bracket PAML-MK Download CAD data www.festo.com



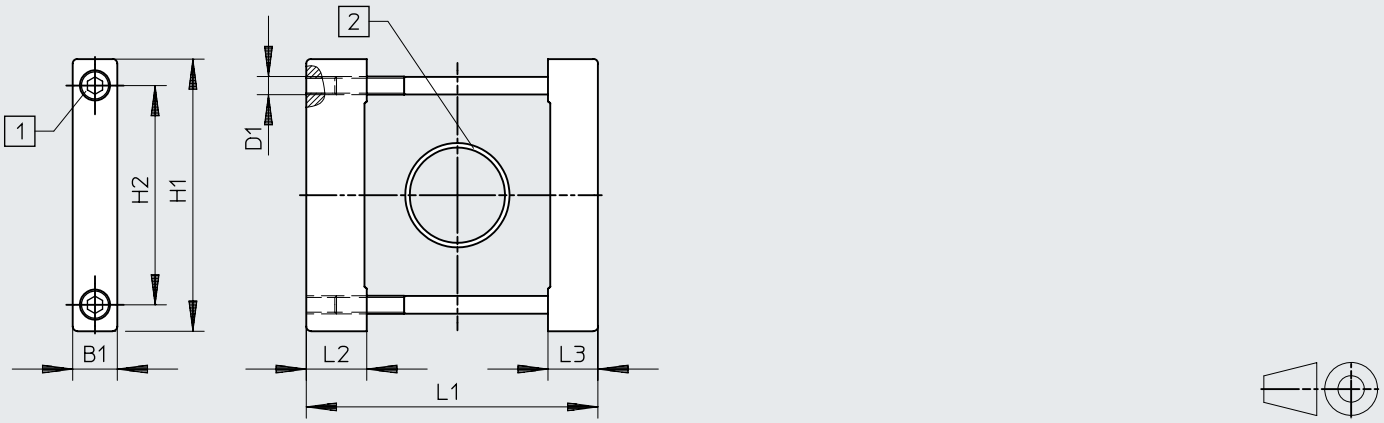
[1] Cylinder screw M6x85
[2] O-ring 42x2.5
[3] Thread for mounting the service unit component on a wall

	B1	D1	D2	H1	H2	H3	L1[1)]	L2	L3	L4[1)]
PAML-MK-90-HP3	13	M6	M5x9	88	66	45	99	24,4	17	~53

1) Dimension when mounted

Dimensions

Dimensions – Mounting bracket PAML-MK-186 Download CAD data www.festo.com



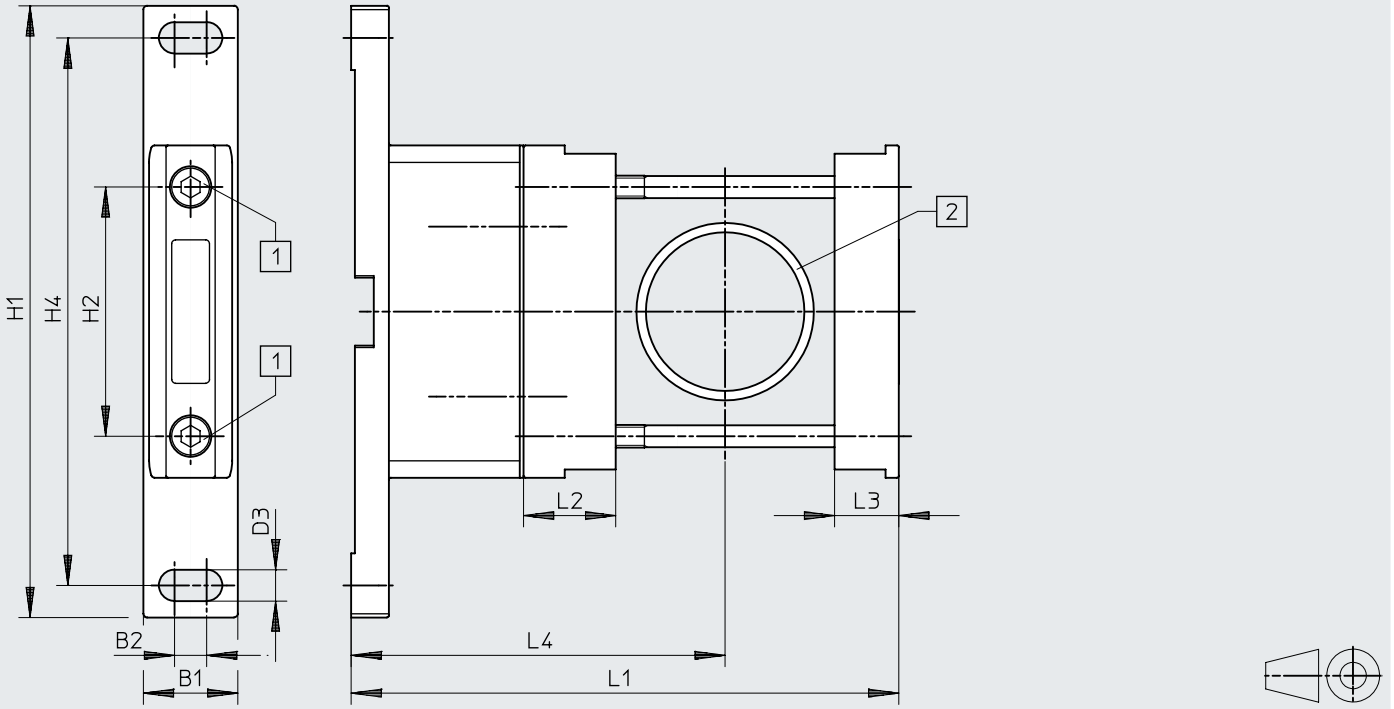
[1] Cylinder screw M12x160
[2] O-ring 63x3

	B1	D1	H1	H2	L1[1)]	L2	L3
PAML-MK-186-HP3	29,5	M12	180	145	193	40	33

1) Dimension when mounted

Dimensions

Dimensions – Module connector PAML-MB Download CAD data www.festo.com



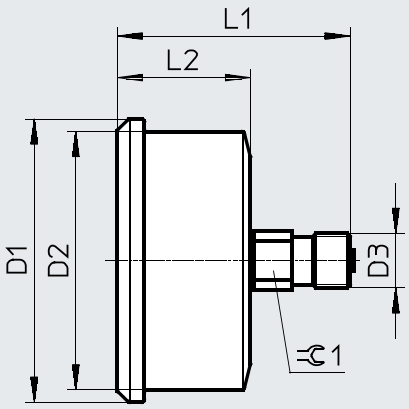
[1] Cylinder screw M5x18
[2] O-ring 42x2.5

	B1	B2	D3	H1	H2	H4	L1[1)]	L2	L3	L4[1)]
PAML-MB-90-HP3	25	8,5	8,3	162	66	145	~145	24,4	17	~99

1) Dimension when mounted

Dimensions

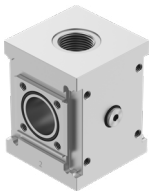
Dimensions – Pressure gauge PAGL-HP3-63-60-G14 Download CAD data www.festo.com



	D1 ø	D2 ø	D3	L1 ±0,5	L2 ±0,5	⊂ 1
PAGL-HP3-63-60-G14	68	62	G1/4	56	32	14

Ordering data

Ordering data – PMBL-90-HP3

	Size	Design	Additional function	Product weight	Part no.	Type
	90	Branching module	None	2,000 g	**1401366**	**PMBL-90-HP3**

Ordering data – PMBL-90-HP3-E

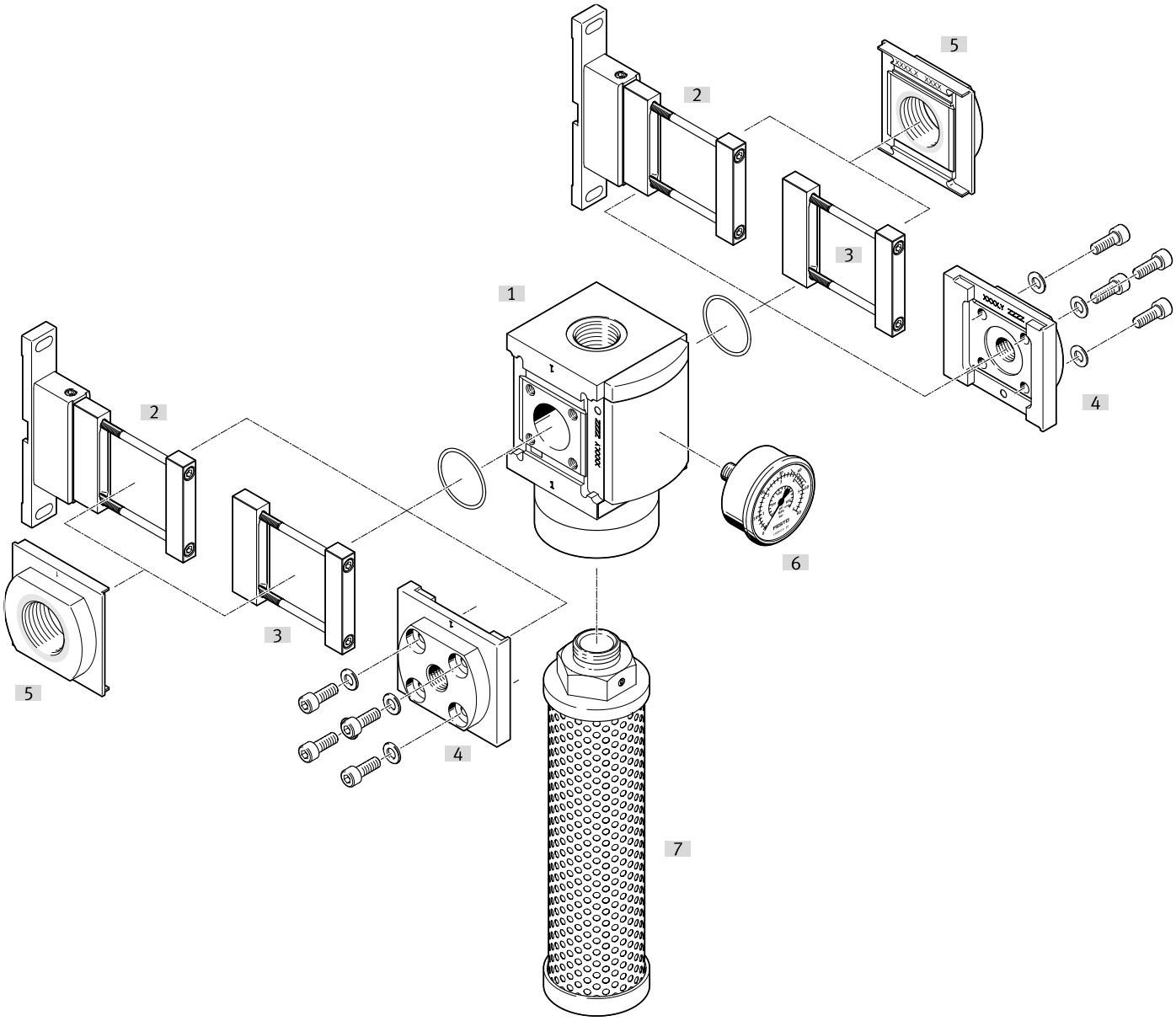
	Size	Design	Additional function	Product weight	Part no.	Type
	90	Branching module	Pneumatically actuated exhaust	2,600 g	**2663892**	**PMBL-90-HP3-E**

Ordering data – PMBL-186-HP3-H

	Size	Design	Additional function	Product weight	Part no.	Type
	186	Branching module	None	7,500 g	**1609073**	**PMBL-186-HP3-H**

Peripherals

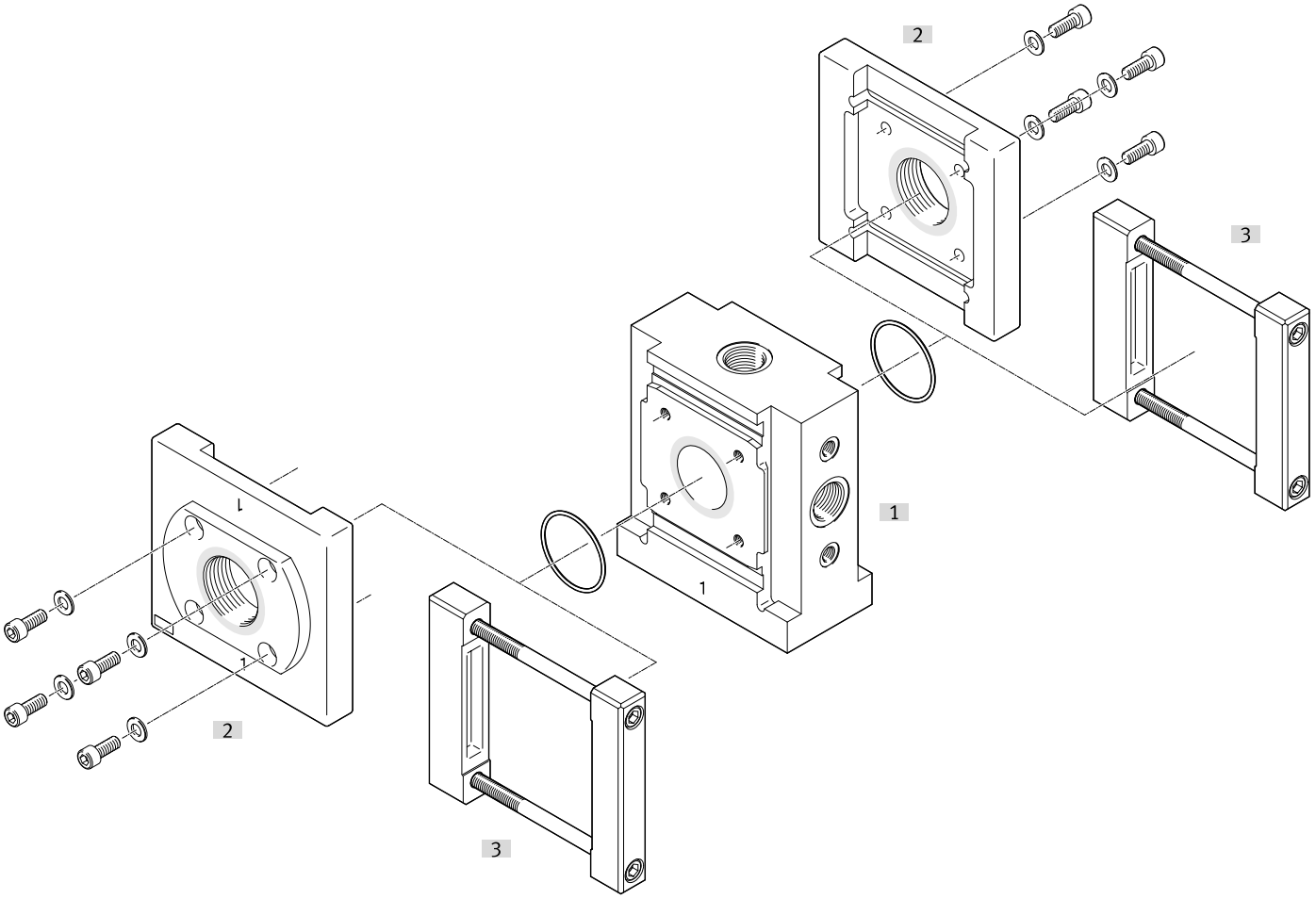
Size 90



Accessories			→ Link
	Type/order code	Description	
[1]	Branching modules PMBL		pmbl
[2]	Sub-bases PAML-CP-...-G14/G12/G34/G1		19
[3]	Module connector PAML-MK		19
[4]	Mounting bracket PAML-MB		19
[5]	Sub-bases PAML-CP-...-G114		19
[6]	Pressure gauge PAGL		19
[7]	Silencer U-G1-HD-SA	On request	

Peripherals

Size 186



Accessories			→ Link
	Type/order code	Description	
[1]	Branching modules PMBL		pmbl
[2]	Connecting plate PAML-CP		19
[3]	Module connector PAML-MK		19

Accessories

Pressure gauge PAGL

	Nominal size of pressure gauge	Pneumatic connection	Position of connection	Product weight	Part no.	Type
	63	G1/4	Radial underneath	80 g	**1908519**	**PAGL-HP3-63-60-G14-RC**
			Centred, rear side		**1166938**	**PAGL-HP3-63-60-G14**

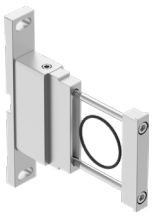
Connecting plates PAML-CP

	Size	Pneumatic connection, port 1	Pneumatic connection, port 2	Product weight	Part no.	Type
	90	G1/4	G1/4	800 g	**1651540**	**PAML-CP-90-HP3-G14**
		G1/2	G1/2	770 g	**1651541**	**PAML-CP-90-HP3-G12**
		G3/4	G3/4	750 g	**1651542**	**PAML-CP-90-HP3-G34**
		G1	G1	730 g	**1651543**	**PAML-CP-90-HP3-G1**
		G1 1/4	G1 1/4	500 g	**1448978**	**PAML-CP-90-HP3-G114**
	186	G1/4	G1/4	4,700 g	**1629300**	**PAML-CP-186-HP3-G14**
		G1 1/4	G1 1/4	4,600 g	**1629296**	**PAML-CP-186-HP3-G114**
		G1 1/2	G1 1/2	4,500 g	**1629297**	**PAML-CP-186-HP3-G112**
		G2	G2	4,400 g	**1629298**	**PAML-CP-186-HP3-G2**
		G2 1/2	G2 1/2	4,900 g	**1629299**	**PAML-CP-186-HP3-G212**

Module connector PAML-MK

	Size	Product weight	Part no.	Type
	90	150 g	**1367005**	**PAML-MK-90-HP3**
	186	1,300 g	**1629377**	**PAML-MK-186-HP3**

Mounting bracket PAML-MB

	Size	Product weight	Part no.	Type
	90	300 g	**1367323**	**PAML-MB-90-HP3**