

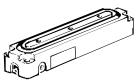
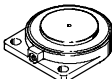
Clamping modules EV



# Clamping modules EV

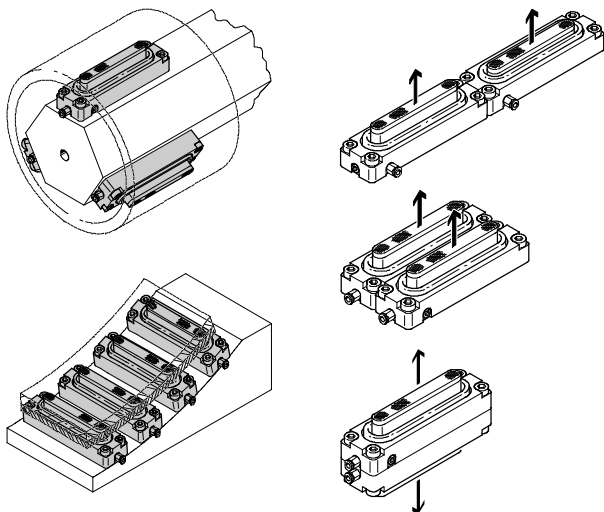
Product range overview

FESTO

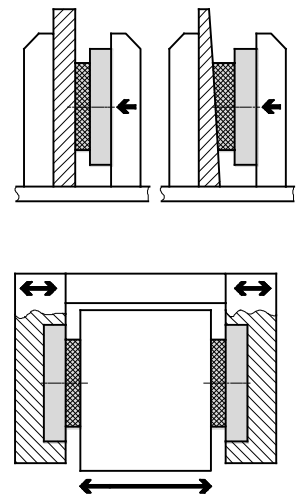
Function	Version	Type	Clamping area [mm]	Stroke [mm]
Single-acting	<b>Clamping module, block shaped</b>			
		EV	10x30	3
			15x40	4
			15x63	4
			20x75	5
			20x120	5
			20x180	5
	<b>Clamping module, round</b>			
		EV	∅ 12	3
			∅ 16	4
			∅ 20	4
			∅ 25	4
			∅ 32	5
			∅ 40	5
∅ 50			5	
∅ 63			5	

## Examples of applications and installations

Clamping module, block shaped

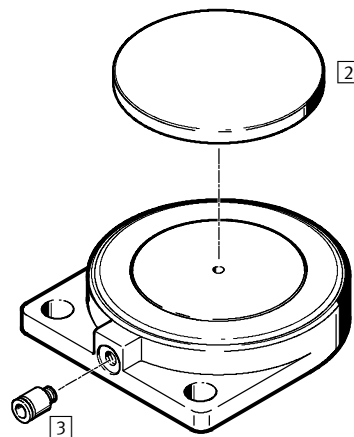
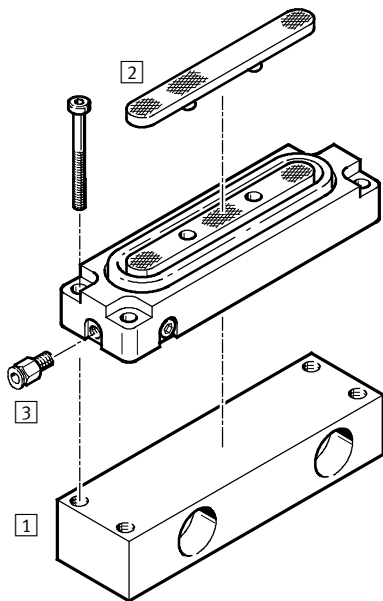


Clamping module, round



# Clamping modules EV

Peripherals overview and type code



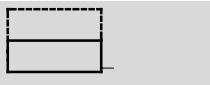
Mounting attachments and accessories					
	Brief description	Clamping module, block shaped	Clamping module, round	→ Page/Internet	
1	Foot mounting HBEV	For horizontal clamping direction	■	-	8
2	Pressure plate EV-...-DP	Protects the diaphragm against external damage	■	■	8
3	Push-in fitting QS	For connecting compressed air tubing with standard O.D.	■	■	quick star




	EV	-	20/75	-	5
Type					
Single-acting					
EV	Clamping module				
Clamping area [mm]					
Stroke [mm]					

# Clamping modules EV

Technical data

## Function



-  - Diameter  
Clamping module, block shaped:  
approx.  $\varnothing$  20 ... 68 mm  
Clamping module, round:  
 $\varnothing$  12 ... 63 mm
-  - Stroke length  
3 ... 5 mm
-  - [www.festo.com](http://www.festo.com)



General technical data – Clamping module, block shaped						
Clamping area	10x30	15x40	15x63	20x75	20x120	20x180
Equivalent piston $\varnothing$	20	28	35	44	55	68
Pneumatic connection	M3	M5				
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:--:-]					
Constructional design	Diaphragm					
Cushioning	No					
Position sensing	No					
Type of mounting	Via through holes With accessories					
Mounting position	Any					

General technical data – Clamping module, round								
Clamping area $\varnothing$	12	16	20	25	32	40	50	63
Pneumatic connection	M3							
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:--:-]							
Constructional design	Diaphragm							
Cushioning	No							
Position sensing	No							
Type of mounting	Via through holes							
Mounting position	Any							

Operating conditions – Clamping module, block shaped						
Clamping area	10x30	15x40	15x63	20x75	20x120	20x180
Operating pressure [bar]	$\leq 6$		2 ... 6			
Ambient temperature [°C]	-20 ... +40					

Operating conditions – Clamping module, round								
Clamping area $\varnothing$	12	16	20	25	32	40	50	63
Operating pressure [bar]	$\leq 6$							
Ambient temperature [°C]	-10 ... +40							


# Clamping modules EV

Technical data

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Forces [N] – Clamping module, block shaped						
Clamping area	10x30	15x40	15x63	20x75	20x120	20x180
Clamping force at 6 bar, stroke 1 mm	95	195	350	660	1 100	1 690
Clamping force at 6 bar, maximum stroke	80	165	290	600	1 000	1 480

Forces [N] – Clamping module, round								
Clamping area $\varnothing$	12	16	20	25	32	40	50	63
Clamping force at 6 bar, stroke 1 mm	55	102	162	226	376	680	1 090	1 660
Clamping force at 6 bar, maximum stroke	56	125	187	271	456	675	1 075	1 640

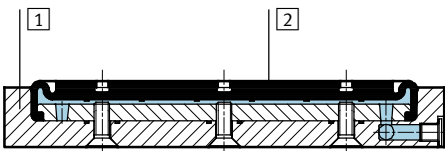
-  - Note  
Clamping module must be operated against a stop.

Weights [g] – Clamping module, block shaped						
Clamping area	10x30	15x40	15x63	20x75	20x120	20x180
Product weight	20	45	65	130	190	270

Weights [g] – Clamping module, round								
Clamping area $\varnothing$	12	16	20	25	32	40	50	63
Product weight	11	15	19	24	34	52	68	100

## Materials

Sectional view



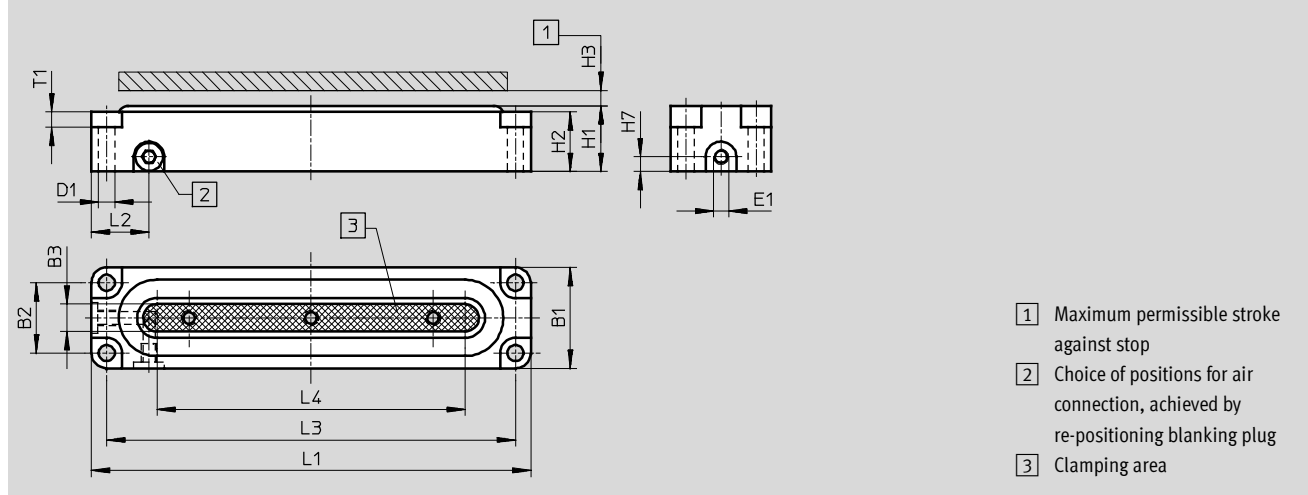
Clamping module	
1	Housing Die-cast aluminium
2	Diaphragm Polyurethane
-	Note on material Versions free of copper, PTFE and silicone → Ordering data Conforms to RoHS

# Clamping modules EV

Technical data

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

Clamping module, block shaped



- 1 Maximum permissible stroke against stop
- 2 Choice of positions for air connection, achieved by re-positioning blanking plug
- 3 Clamping area

Clamp- ing area [mm]	B1	B2	B3	D1 ∅	E1	H1	H2	H3	H7	L1	L2	L3	L4	T1
10x30	17	9	3	3.3	M3	14.5 ±0.3	12.5	3	3	45	13.5	37	16	4.6
15x40	23	15.5	4.9	4.3	M5	18 ±0.54	16	4	4.8	55	13	47	25	3
15x63										80	13	72	50	3
20x75	33	23	9.5	5.3	M5	21.5 ±0.57	19.5	5	4.8	98	18.9	88	55	5.2
20x120										144	18.9	134	103	5.2
20x180										204	18.9	194	161	5.2

# Clamping modules EV

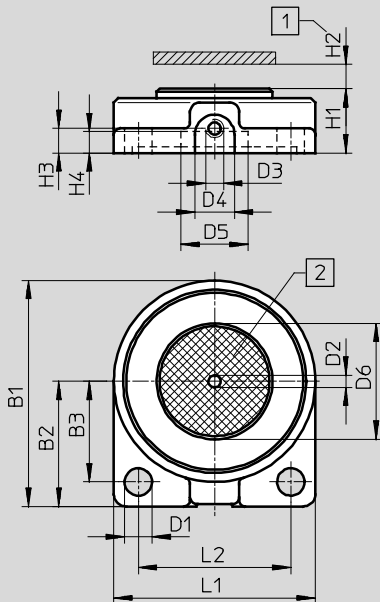
Technical data

FESTO

## Dimensions

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

Clamping module, round



- 1) Maximum permissible stroke against stop
- 2) Clamping area

Clamping area ∅ [mm]	B1	B2	B3	D1 ∅	D2 ∅	D3	D4 ∅	D5 ∅	H1	H2	H3	H4	L1	L2
12	29	16.5	13	3.5	2	M3	6.5	3	10.5	3	4	3.5	25	18
16	33	18.5	15	3.5	2	M3	6.5	7	10.5	4	4	3.5	29	22
20	37	20.5	16.5	4.5	2	M3	6.5	11	10.5	4	4	3.5	33	25
25	42	23	18.5	5.5	2	M3	6.5	16	10.5	4	4	3.5	38	28
32	49	26.5	21	5.5	2	M3	6.5	23	10.5	5	4	3.5	45	34
40	57	30.5	25	5.5	2	M3	6.5	31	10.5	5	4	2.5	53	42
50	67	35.5	29	5.5	2	M3	6.5	41	10.5	5	4	2.5	63	49
63	80	42	34	5.5	2	M3	6.5	54	10.5	5	4	2.5	76	60

### Ordering data – Clamping module, block shaped

Clamping area [mm]	Stroke [mm]	Part No.	Type
10x30	3	151 993	EV-10/30-3
15x40	4	13 289	EV-15/40-4
15x63	4	13 290	EV-15/63-4
20x75	5	13 291	EV-20/75-5
20x120	5	13 292	EV-20/120-5
20x180	5	13 293	EV-20/180-5

### Ordering data – Clamping module, round

Clamping area ∅ [mm]	Stroke [mm]	Part No.	Type
12	3	150 681	EV-12-3
16	4	150 682	EV-16-4
20	4	150 683	EV-20-4
25	4	150 684	EV-25-4
32	5	150 685	EV-32-5
40	5	184 857	EV-40-5 <sup>1)</sup>
50	5	184 858	EV-50-5 <sup>1)</sup>
63	5	184 859	EV-63-5 <sup>1)</sup>

1) Free of copper, PTFE and silicone

# Clamping modules EV

Accessories

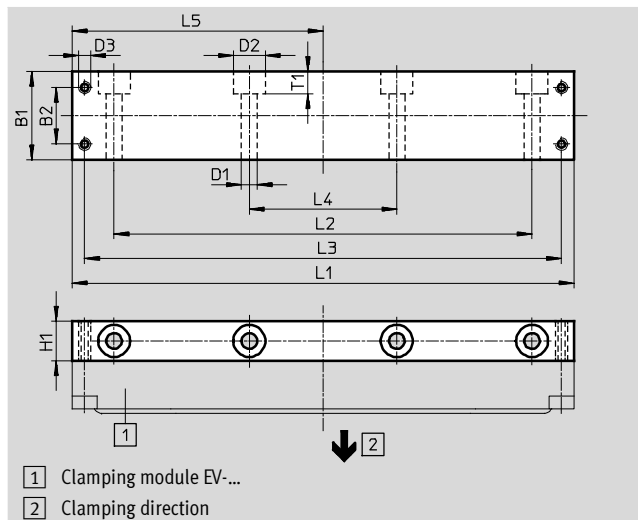


## Foot mounting HBEV

For clamping module, block shaped

Material:

Wrought aluminium alloy



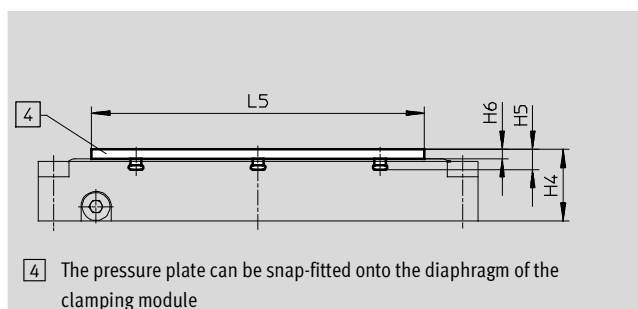
Dimensions and ordering data														
For clamping area	B1	B2	D1 ∅	D2 ∅	D3	H1	L1	L2	L3	L4	L5	T1	Part No.	Type
10x30	20	9	4.5	8	M3	10	45	23	37	-	22.5	4.6	152 512	HBEV-10/30
15x40	25	15.5	5.4	11	M4	15	55	29	47	-	27.5	7	34 562	HBEV-15/40
15x63							80	50	72	-	40	7	34 563	HBEV-15/63
20x75	36	23	6.4	13	M5	16	98	64	88	-	49	9	34 564	HBEV-20/75
20x120							144	110	134	-	72	9	34 565	HBEV-20/120
20x180							204	170	194	60	102	9	34 566	HBEV-20/180

## Pressure plate EV-...-DP

For clamping module, block shaped

Material:

Steel



Dimensions and ordering data						
For clamping area	H4	H5	H6	L5	CRC <sup>1)</sup>	Part No. Type
10x30	17	5	2.5	19	2	151 994 EV-10/30-DP
15x40	20.5	5.6	2.5	29	2	13 783 EV-15/40-DP
15x63				54	2	13 784 EV-15/63-DP
20x75	24.5	6.6	3	63	2	13 785 EV-20/75-DP
20x120				109	2	13 786 EV-20/120-DP
20x180				169	2	13 787 EV-20/180-DP

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

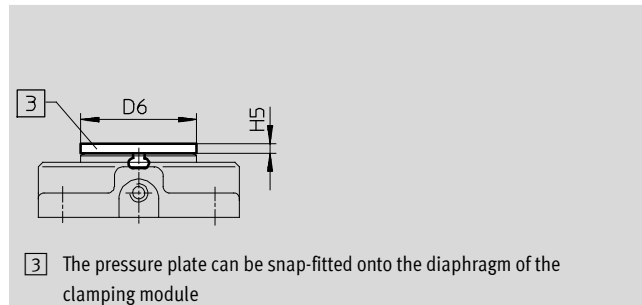


# Clamping modules EV

Accessories

**Pressure plate EV-...-DP**  
For clamping module, round

Material:  
Steel



Dimensions and ordering data					
For clamp- ing area ∅	D6 ∅	H5	CRC <sup>1)</sup>	Part No.	Type
12	11	1.5	2	150 690	EV-12-DP
16	15	1.5	2	150 691	EV-16-DP
20	19	1.5	2	150 692	EV-20-DP
25	24	1.5	2	150 693	EV-25-DP
32	31	1.5	2	150 694	EV-32-DP
40	39	1.6	2	184 860	EV-40-DP
50	49	1.6	2	184 861	EV-50-DP
63	62	1.6	2	184 862	EV-63-DP

1) Corrosion resistance class 2 according to Festo standard 940 070  
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.