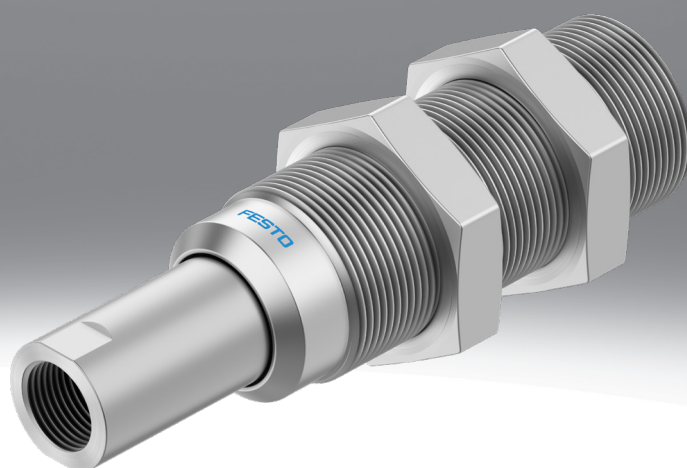


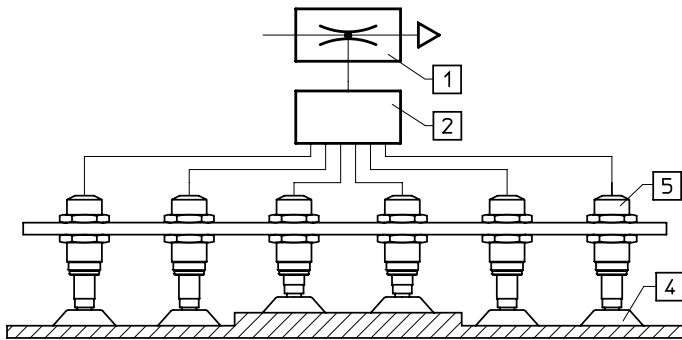
## Length compensator VAL

**FESTO**



### Characteristics

#### At a glance



- [1] Vacuum generator
- [2] Distributor
- [4] Suction cup with connection
- [5] Length compensator

The length compensator VAL is an accessory for the suction cups with connection VAS/VASB. It is used for treating the workpieces gently by compensating for a possible excess stroke of the handling device or by compensating for tolerance differences in the workpiece thickness.

#### Special material properties

[F1A]	Recommended for production plants for manufacturing lithium-ion batteries, F1A
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Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils

## Type code

001	Series	
VAL	Length compensator	
002	Suction cup connection	
G14	G1/4	
G18	G1/8	
G38	G3/8	
M5	M5	

003	Length compensator [mm]	
5	5	
10	10	
20	20	
80	80	
004	Special material properties	
	None	
F1A	Recommended for production plants for manufacturing lithium-ion batteries, F1A	

## Datasheet

## General technical data

Vacuum connection	M5	G1/8	G1/4	Female thread G1/8	Female thread G1/4	Female thread G3/8	Female thread M5
Suction cup mounting	M5	G1/8	G1/4	Female thread G1/8	Female thread G1/4	Female thread G3/8	Female thread M5
Design	Vacuum port on top						
Mounting position	optional						
Type of mounting	With male thread M16x1	With male thread M22x1.5	With male thread M26x1.5	With male thread M22x1.5	With male thread M26x1.5	With male thread M25x1.5	With male thread M16x1
Height compensator for suction-cup holder	5 mm	10 mm	20 mm	10 mm	20 mm	80 mm	5 mm

## Operating and environmental conditions

Operating pressure	-0.95 ... 8 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:::]
Ambient temperature	-10 ... 60°C
Corrosion resistance class CRC <sup>1)</sup>	2 - Moderate corrosion stress

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

## Materials

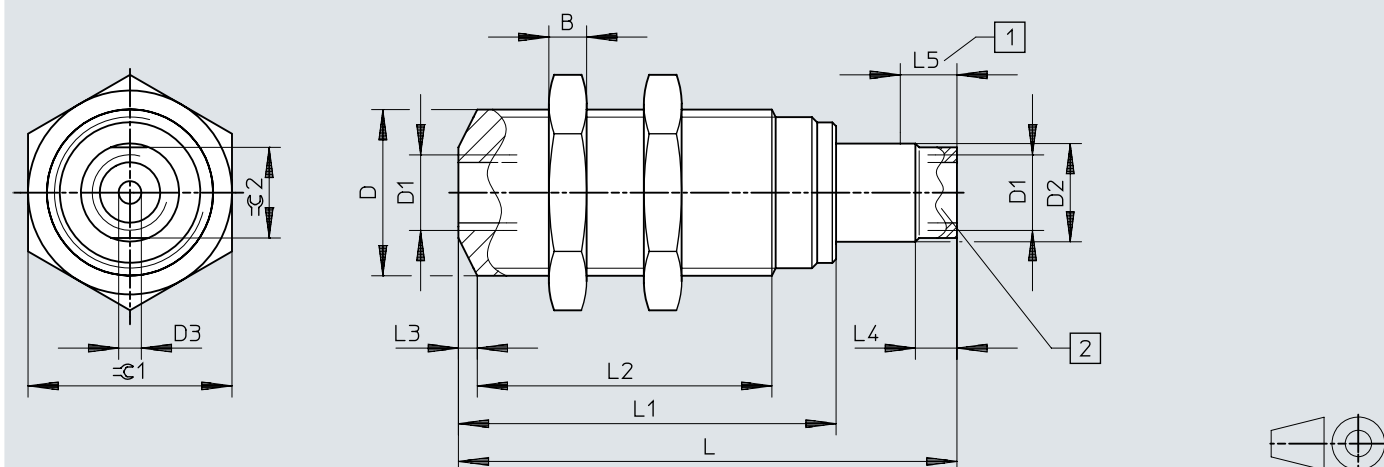
Material housing	Aluminium
Material retaining bracket	Aluminium, POM, Galvanised steel
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

## Materials – special material properties: F1A

Material retaining bracket	Aluminium, POM, High-alloy stainless steel
Suitability for the production of Li-ion batteries	Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni

## Dimensions

## Dimensions – Length compensator VAL

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

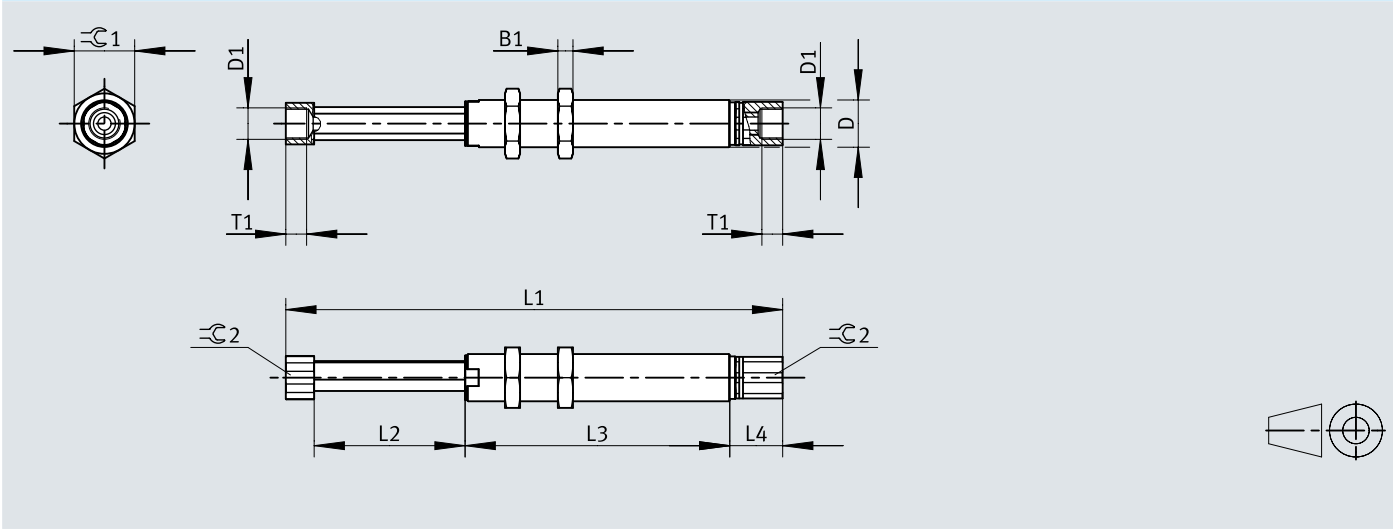
[1] Spring deflection for length compensation

[2] Connection for suction gripper

	B	D	D1	D2 $\varnothing$	D3 $\varnothing$	L	L1	L2	L3	L4	L5	$\varnothing 1$	$\varnothing 2$
VAL-M5-5	5	M16x1	M5	8	2	46	35	25,5	2	4,5	5	19	7
VAL-1/8-10	6	M22x1,5	G1/8	13	3	66	50	39	2,5	5,5	10	27	12
VAL-1/4-20	8	M26x1,5	G1/4	17	4	100	73	60	2,5	6,5	20	32	16


Dimensions


Dimensions – Length compensator VAL-3/8-80-F1A [Download CAD data](#) [www.festo.com](http://www.festo.com)



	B1	D	D1	L1	L2	L3	L4	T1	C 1	C 2
VAL-3/8-80-F1A	8	M25x1,5	G3/8	263	80	140	28	11	32	22

## Ordering data

Ordering data					
	Suction cup mounting	Height compensator for suction-cup holder	Product weight	Part no.	Type
	G1/4	20 mm	118 g	151211	VAL-1/4-20
	G1/8	10 mm	62 g	151210	VAL-1/8-10
	M5	5 mm	25 g	151209	VAL-M5-5

Ordering data – Products for battery production					
	Suction cup mounting	Height compensator for suction-cup holder	Product weight	Part no.	Type
	Female thread G1/8	10 mm	62 g	8214723	VAL-1/8-10-F1A
	Female thread G1/4	20 mm	118 g	8214724	VAL-1/4-20-F1A
	Female thread G3/8	80 mm	275 g	8210510	VAL-3/8-80-F1A
	Female thread M5	5 mm	25 g	8214722	VAL-M5-5-F1A