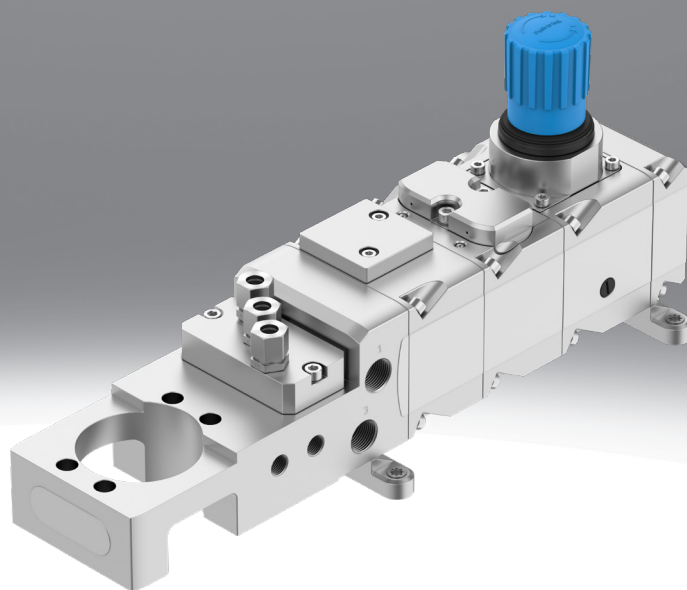


Valve terminal VTOP

FESTO



Characteristics

At a glance

Innovative, modular, compact complete solution for control applications

- Modules such as fail-safe, volume booster and filter regulator can be combined with one another as required, are easy to install, and can be extended and retrofitted without any problems
- Patented integrated air duct to supply all modules as well as actuator and positioner, without leak-prone, external piping
- Standardised mounting interface for direct attachment of a positioner according to VDI/VDE 3847-2
- Individual interface for the indirect attachment of a positioner without a standardised interface in accordance with VDI/VDE3847-2
- Optimised for positioner CSMH for controlling single- and double-acting quarter turn and linear actuators
- Suitable for quarter turn actuators DFPD-C with mechanical interface to VDI/VDE 3847-2 and for linear actuators DFPI-NB3 based on ISO 15552
- The remote version is also suitable for single-acting and double-acting pneumatic actuators that cannot be flange-mounted directly
- Sustainable operation thanks to leakage reduction at sealing points

Position function

All VTOP modules can be ordered as separate part numbers. The individual configuration features are listed in the type code.

The modules are categorised as follows:

- TB1, TB3, TB4 - VABP
- VB1, VB2 - VOGM
- PC1, PC2 - PCRI
- FS1 - VOGI
- EP1 - VABE

Type code

001	Series	
VTOP	Valve terminal	
002	Size	
100	100 mm	
003	Compressed air supply connection	
F90	Flange, nominal width 9 mm	
004	Compressed air supply connection position	
L	Left	

005	Position function	
TB1	Manifold block for safety functions, HFT0 prepared for exhaust, VDI/VDE 3845	
TB3	Manifold block for safety functions, HFT0 prepared for exhaust, VDI/VDE 3847	
TB4	Manifold block for safety functions, HFT1 prepared for exhaust, VDI/VDE 3847	
VB1	Volume booster, single-acting	
VB2	Volume booster, double-acting	
PC1	Filter regulator, pressure range 0.5 ... 12 bar, grade of filtration 5 µm	
PC2	Filter regulator, pressure range 0.5 ... 12 bar, grade of filtration 40 µm	
FS1	Module for reaching a specific end position in case of a pressure failure	
EP1	End plate, double-acting, active direction can be switched	

Datasheet

General technical data valve terminal VTOP

Size	100 mm
Variants	Manifold block for safety functions, HFT0 prepared for exhaust, VDI/VDE 3845 Manifold block for safety functions, HFT0 prepared for exhausting, VDI/VDE 3847 Manifold block for safety functions, HFT1 prepared for exhausting, VDI/VDE 3847 End plate, double-acting, active direction can be switched Filter regulator, pressure range 0.5 ... 12 bar, grade of filtration 40 µm Filter regulator, pressure range 0.5 ... 12 bar, grade of filtration 5 µm Module for reaching a specific end position in case of a pressure failure Volume booster, double-acting Volume booster, single-acting
Type of mounting	With accessories
Mounting position	optional
Pneumatic connection	Sub-base design, airing
Operating medium	Compressed air to ISO 8573-1:2010 [-:7:-] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Operating pressure	0 ... 0.9 MPa
Operating pressure	0 ... 9 bar
Operating pressure	0 ... 130.5 psi
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material rotary knob	POM
Material spring	Spring steel
Material screws	High-alloy stainless steel
Material seals	EPDM NBR
Material filter	PE
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Datasheet

General technical data adapter plate VABA		
Size 2	Size 1	Size 2
Size	240 300 480 700 900	1,200 2,300
Design	Adapter for rotary drive	
Valve connection conforms to standard	VDI/VDE 3847-2	
Mounting position	optional	
Pneumatic connection	Sub-base design, airing	
Pneumatic connection, port 1	G1/2	
Pneumatic connection, port 2	Internal	
Pneumatic connection, port 3	G1/2	
Pneumatic connection, port 4	Internal	
Operating medium	Compressed air to ISO 8573-1:2010 [7:7-], Inert gases	
Note on operating and pilot medium	Lubricated operation not possible	
Media temperature	-40 ... 80°C	
Ambient temperature	-40 ... 80°C	
Operating pressure	0 ... 0.9 MPa	
Operating pressure	0 ... 9 bar	
Corrosion resistance class CRC	3 - high corrosion stress	
LABS (PWIS) conformity	VDMA24364 zone III	
Note on materials	RoHS-compliant	
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)	
Material seals	EPDM, NBR	NBR, EPDM
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)	
Material screws	High-alloy stainless steel	

Datasheet

General technical data adapter plate VABA

Size 2	Size 1	Size 2
Size	180 240 300 360 480 700 720 900	960 1,200 1,440 1,920 2,300
Design	Adapter for rotary drive	
Valve connection conforms to standard	VDI/VDE 3845-1	
Mounting position	optional	
Pneumatic connection	Sub-base design, airing	
Pneumatic connection, port 1	G1/2	
Pneumatic connection, port 2	G1/4	
Pneumatic connection, port 3	G1/2	
Pneumatic connection, port 4	G1/4	
Operating medium	Compressed air to ISO 8573-1:2010 [7:7-], Inert gases	
Note on operating and pilot medium	Lubricated operation not possible	
Media temperature	-40 ... 80°C	
Ambient temperature	-40 ... 80°C	
Operating pressure	0 ... 0.9 MPa	
Operating pressure	0 ... 9 bar	
Corrosion resistance class CRC	3 - high corrosion stress	
LABS (PWIS) conformity	VDMA24364 zone III	
Note on materials	RoHS-compliant	
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)	
Material seals	EPDM, NBR	
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)	
Material screws	High-alloy stainless steel	

General technical data adapter plate VABA

Design	Adapter for remote application	
Mounting position	optional	
Pneumatic connection	Sub-base design, airing	
Pneumatic connection, port 1	G1/4	
Pneumatic connection, port 2	G1/4	
Pneumatic connection, port 4	G1/4	
Operating medium	Compressed air to ISO 8573-1:2010 [7:7-], Inert gases	
Note on operating and pilot medium	Lubricated operation not possible	
Media temperature	-40 ... 80°C	
Ambient temperature	-40 ... 80°C	
Operating pressure	0 ... 0.8 MPa	
Operating pressure	0 ... 8 bar	
Corrosion resistance class CRC	3 - high corrosion stress	
LABS (PWIS) conformity	VDMA24364 zone III	
Note on materials	RoHS-compliant	
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)	
Material seals	EPDM, NBR	
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)	
Material screws	High-alloy stainless steel	

Datasheet

General technical data volume booster VOGM

Design	Sub-base valve Diaphragm valve Piloted piston poppet valve
Type of actuation	Pneumatic
Sealing principle	Soft
Mounting position	optional
Valve function	Proportional 3/3-way valve
Mode of operation	Double-acting, Single-acting
Type of reset	Mechanical spring
Pneumatic connection	Sub-base design, airing
Operating medium	Compressed air to ISO 8573-1:2010 [7:7:-], Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Media temperature	-40 ... 80°C
Ambient temperature	-40 ... 80°C
Operating pressure	0.14 ... 0.8 MPa
Operating pressure	1.4 ... 8 bar
Operating pressure	20.3 ... 116 psi
Standard nominal flow rate (standardised to DIN 1343)	1,240 l/min
C value	5.58 l/sbar
b value	0.214
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material seals	EPDM, NBR
Material screws	High-alloy stainless steel
Material spring	Spring steel

Datasheet

General technical data Fail-safe module VOGI

Design	Sub-base valve Piloted piston poppet valve
Type of actuation	Pneumatic
Sealing principle	Soft
Mounting position	optional
Valve function	4/2-way, single solenoid Fail safe
Mode of operation	Double-acting
Type of reset	Mechanical spring
Pneumatic connection	Sub-base design, airing
Pneumatic connection, port 1	G1/2
Operating medium	Compressed air to ISO 8573-1:2010 [7:7:-] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Media temperature	-20 ... 80°C
Ambient temperature	-20 ... 80°C
Operating pressure	0.33 ... 0.8 MPa
Operating pressure	3.3 ... 8 bar
Operating pressure	47.85 ... 116 psi
Standard nominal flow rate (standardised to DIN 1343)	1,093 l/min
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material seals	EPDM, NBR
Material screws	High-alloy stainless steel
Material spring	Spring steel

General technical data flange module for safety functions VABP

Design	1001 channel structure, 1002 channel structure
Valve connection conforms to standard	VDI/VDE 3845-1, VDI/VDE 3847-1
Mounting position	optional
Pneumatic connection	Sub-base design, airing
Operating medium	Compressed air to ISO 8573-1:2010 [7:7:-] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Media temperature	-40 ... 80°C
Ambient temperature	-40 ... 80°C
Operating pressure	0 ... 0.8 MPa
Operating pressure	0 ... 8 bar
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material seals	EPDM, NBR
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material screws	High-alloy stainless steel

Datasheet

General technical data Filter regulator PCRI

Design	Sub-base valve, Directly actuated diaphragm regulator
Actuator lock	Rotary knob with detent
Material rotary knob	POM
Mounting position	optional
Controller function	Output pressure constant Via primary pressure compensation With secondary venting
Grade of filtration	5, 40
Material filter	PE
Condensate drain	None
Pneumatic connection	Sub-base design, airing
Pressure gauge (ANALOG) or Pressure display (DIGITAL)	Prepared for G1/4
Operating medium	Compressed air to ISO 8573-1:2010 [-:7:-] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Media temperature	-40 ... 80°C
Ambient temperature	-40 ... 80°C
Operating pressure	0.1 ... 0.9 MPa
Operating pressure	14.5 ... 130.5 psi
Pressure regulation range	0.5 ... 8 bar
Air purity class at output	Compressed air to ISO 8573-1:2010 [6:7:-] Compressed air to ISO 8573-1:2010 [7:7:-] Inert gases
Max. pressure hysteresis	0.025 MPa
Max. pressure hysteresis	3.625 psi
Max. pressure hysteresis	0.25 bar
Standard nominal flow rate (standardised to DIN 1343)	1,400 l/min
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material seals	EPDM, NBR
Material spring	Spring steel
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material screws	High-alloy stainless steel

General technical data end plate VABE

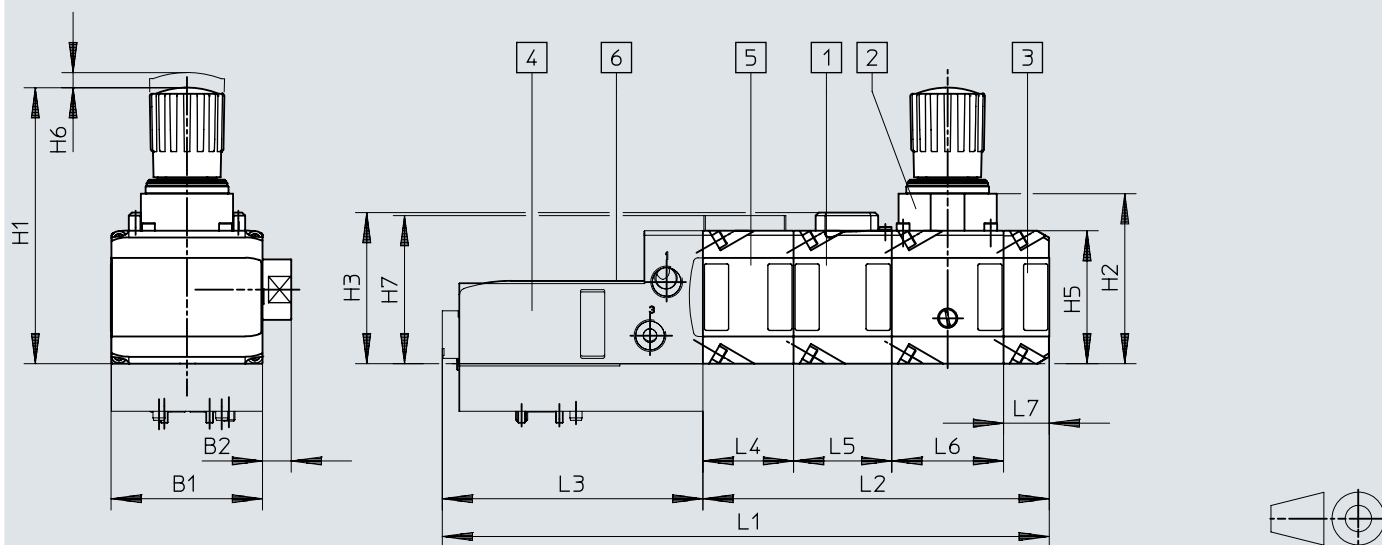
Design	Without flow control Switchable flow direction
Mounting position	optional
Pneumatic connection	Sub-base design, airing
Operating medium	Compressed air to ISO 8573-1:2010 [7:7:-] Inert gases
Note on operating and pilot medium	Lubricated operation not possible
Media temperature	-40 ... 80°C
Ambient temperature	-40 ... 80°C
Operating pressure	0 ... 0.8 MPa
Operating pressure	0 ... 8 bar
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant
Material cover	Smooth-anodised wrought aluminium alloy (20 µm)
Material seals	EPDM, NBR
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material screws	High-alloy stainless steel

Datasheet

General technical data mounting kit VAME	
Mounting position	optional
Note on operating and pilot medium	Lubricated operation not possible
Corrosion resistance class CRC	3 - high corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Type of mounting	With accessories
Note on materials	RoHS-compliant
Material seals	EPDM, NBR
Material housing	Smooth-anodised wrought aluminium alloy (20 µm)
Material screws	High-alloy stainless steel

Dimensions

Dimensions – VTOP for quarter turn actuators

[Download CAD data](#) www.festo.com


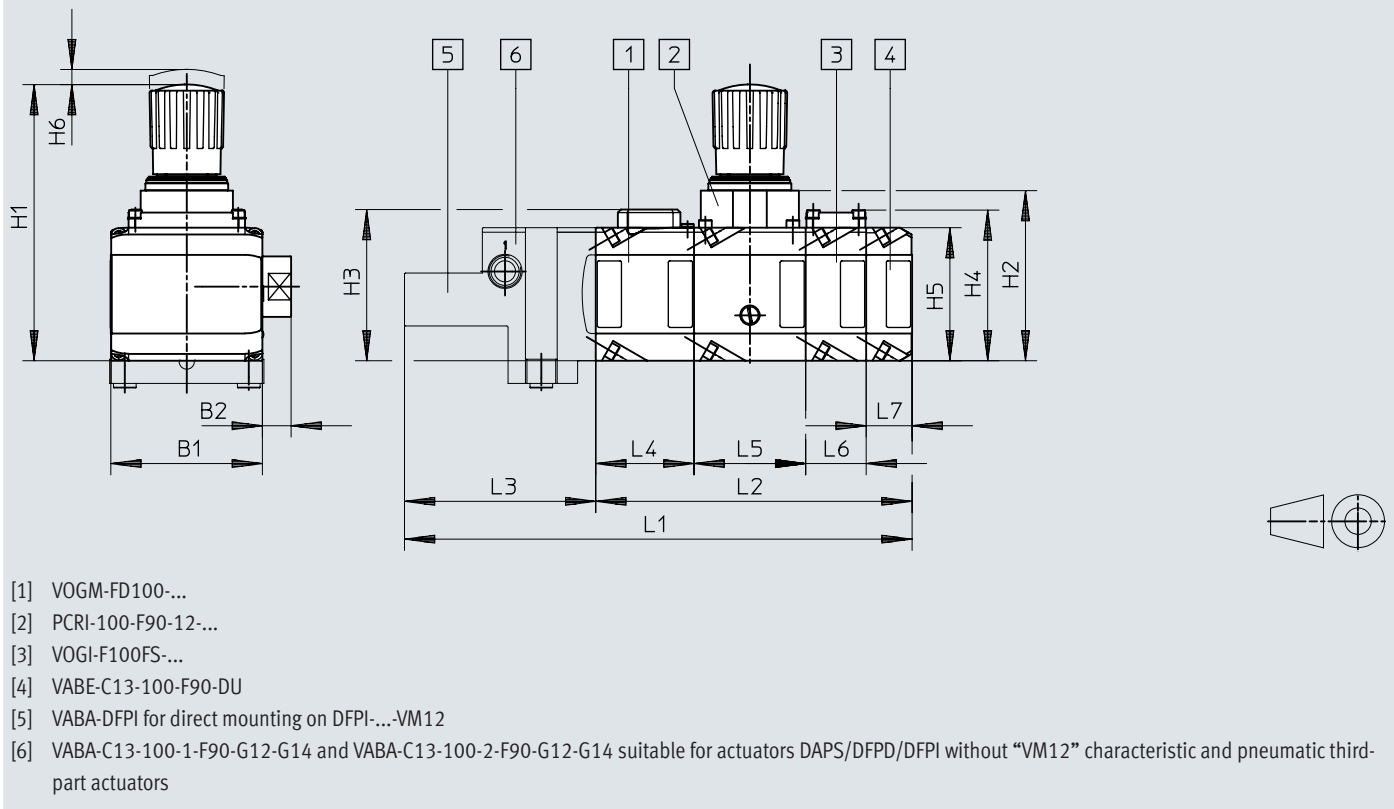
- [1] VOGM-FD100-...
 [2] PCRI-100-F90-12-...
 [3] VABE-C13-100-F90-DU
 [4] VABP-C13-100HFT...
 [5] VABA-C13-100-1-F90-G12 & VABA-C13-100-2-F90-G12 only suitable for internal air flow on the DFPD-C
 [6] VABA-C13-100-1-F90-G12-G14 and VABA-C13-100-2-F90-G12-G14 suitable for DAPS/DFPD actuators and pneumatic third-party actuators

	B1	B2	H1	H2	H3	H5	H6	H7
VTOP-100-F90-L-TB...-VB...-PC...-EP1	100,3	19	182,9	112,5	100	88	10	98

	L1	L2	L3	L4	L5	L6	L7
VTOP-100-F90-L-TB...-VB...-PC...-EP1	401,8	229,3	172,5	60	65	74	30,3

Dimensions

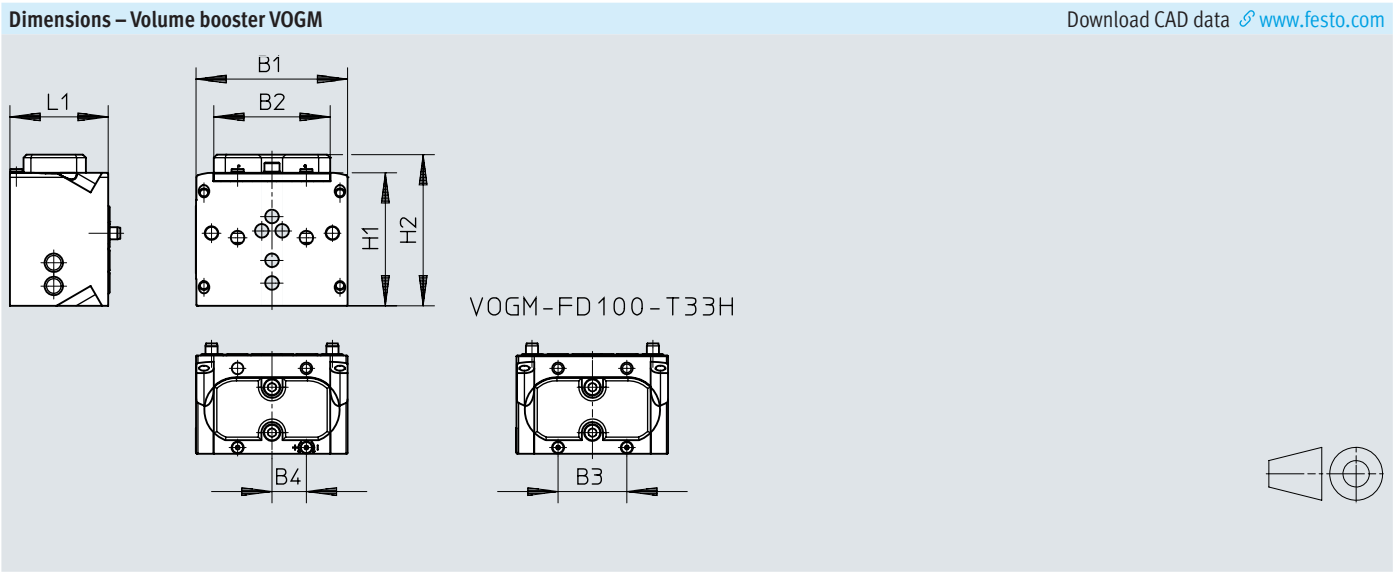
Dimensions – VTOP for linear actuators Download CAD data www.festo.com



	B1	B2	H1	H2	H3	H4	H5	H6
VTOP-100-F90-L-VB...-PC...-FS1...-EP1	100,3	19	182,9	112,5	100	99,6	88	10

	L1	L2	L3	L4	L5	L6	L7
VTOP-100-F90-L-VB...-PC...-FS1...-EP1	335,8	209,3	126,5	65	74	40	30,3

Dimensions



	B1	B2	B3	B4	H1	H2	L1
VOGM-FD100-M33E-M-F90	100,3	77	45,5	22,8	88	100	65
VOGM-FD100-T33H-M-F90							

Dimensions

Dimensions – Fail safe module VOGI

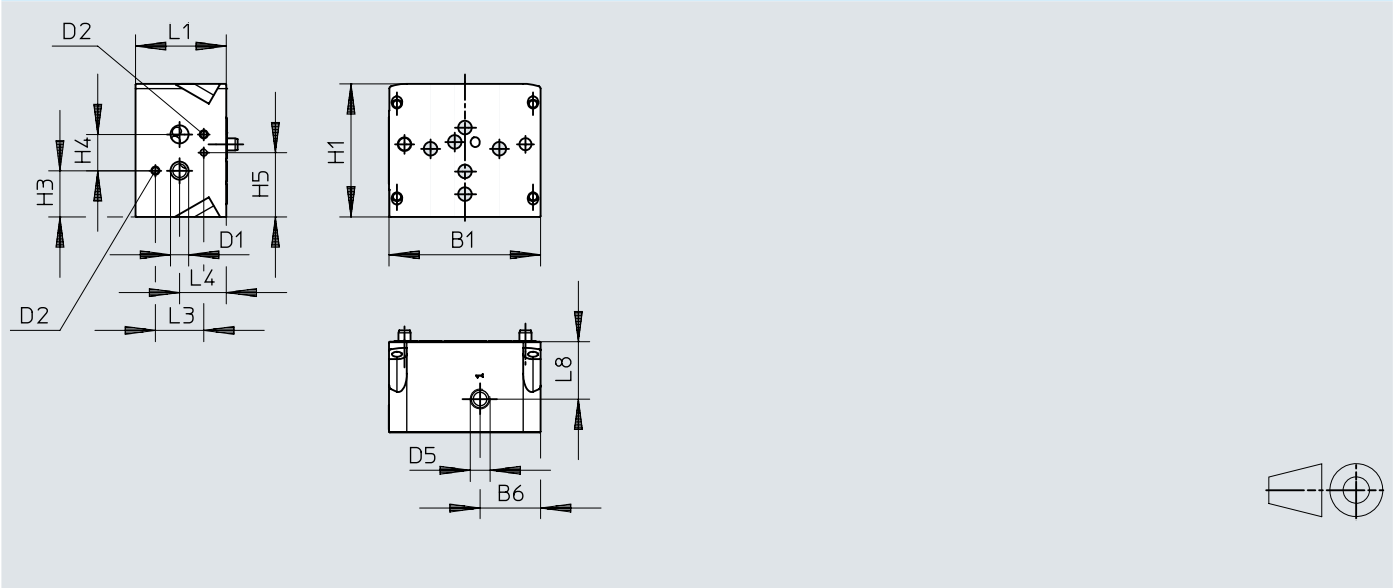
[Download CAD data](#) www.festo.com

Technical drawing of the VOGI fail safe module. The drawing includes a side view on the left and a front view on the right. The side view shows dimensions L1 (total length), L2 (length of the lower section), D1 (diameter of the lower section), and H3 (height of the lower section). The front view shows dimensions B1 (width), B2 (width of the upper section), H1 (height of the upper section), and H2 (height of the lower section). A small cone symbol is located on the right side of the drawing.

	B1	B2	D1	H1	H2	H3	L1	L2
VOGI-F100FS-T32H-M-F90	100,3	77	G1/2	88	99,6	33,5	40	13,2

Dimensions

Dimensions – Sub-base VABP position function HFT0/TB1, VDI/VDE 3845 Download CAD data www.festo.com

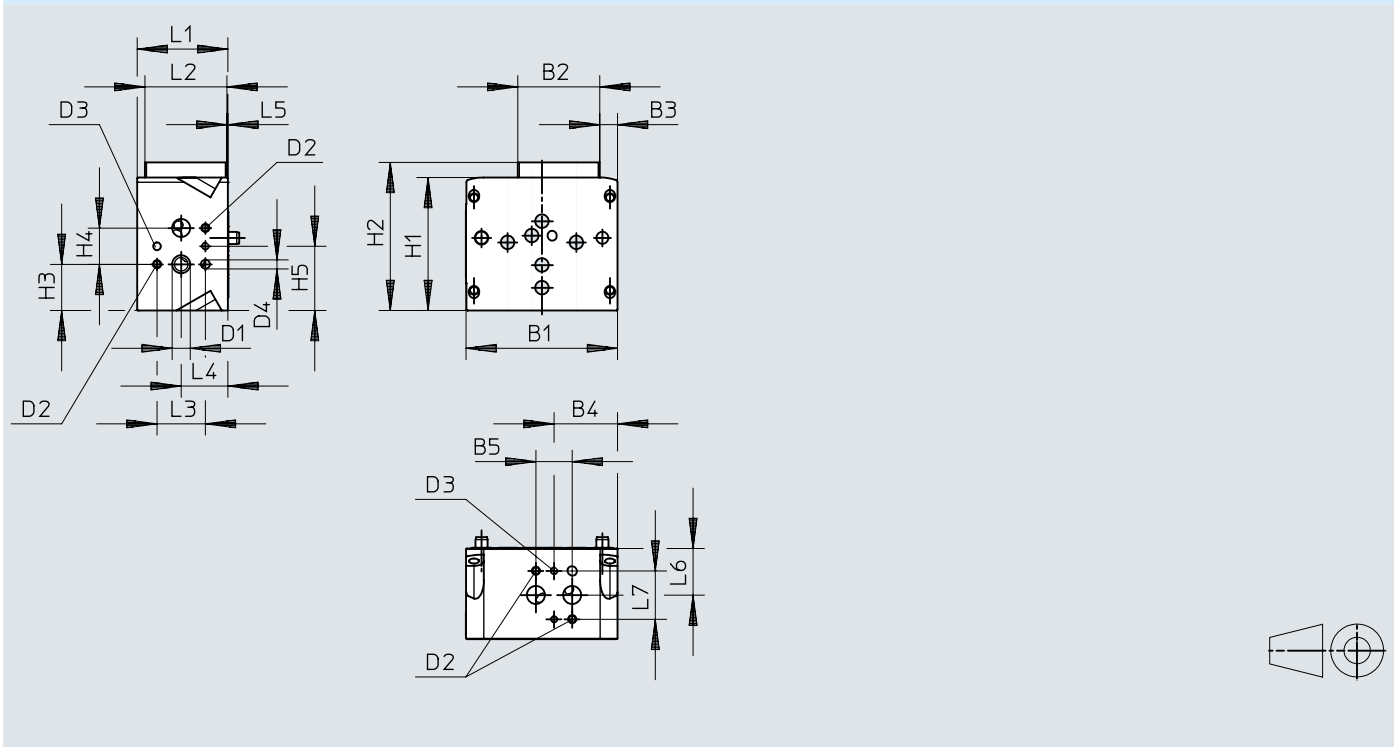


		B1	B6	D1 Ø	D2	D5	H1	H3	H4	H5	L1	L3	L4	L8
VABP-C13-100HFT0-F90	VTOP-...-TB1	100,3	40	12	M5	G1/4	88	30,5	24	42,	60	32	30,9	30,9

Dimensions

Dimensions – Sub-base VABP position function HFT0/TB3, HFT1/TB4, VDI/
VDE 3847

Download CAD data www.festo.com



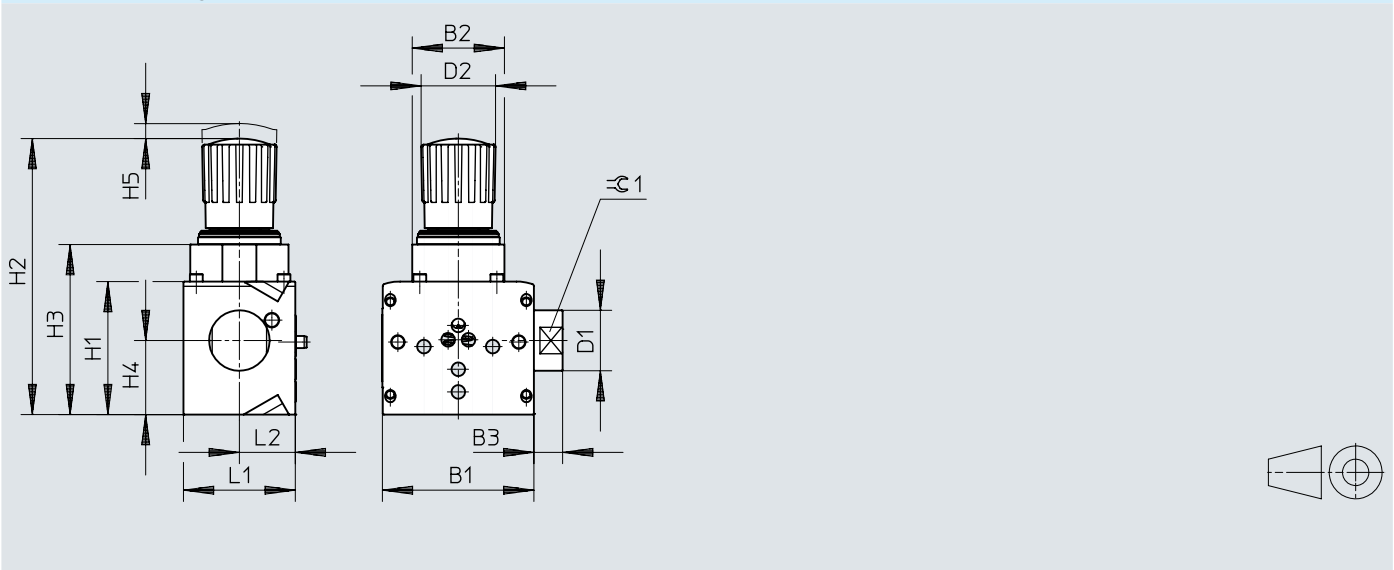
		B1	B2	B3	B4	B5	D1 Ø	D2	D3	D4
VABP-C13-100HFT0-F90-...	VTOP-...-TB3	100,3	54,2	11,8	42	24	12	M5	M5	6
VABP-C13-100HFT1-F90-...	VTOP-...-TB4									

		H1	H2	H3	H4	H5	L1	L2	L3	L4	L5	L6	L7
VABP-C13-100HFT0-F90-...	VTOP-...-TB3	88	98	30,5	24	42,5	60	54,2	32	30,9	0,7	32	30,9
VABP-C13-100HFT1-F90-...	VTOP-...-TB4												

Dimensions

Dimensions – Filter regulator PCRI

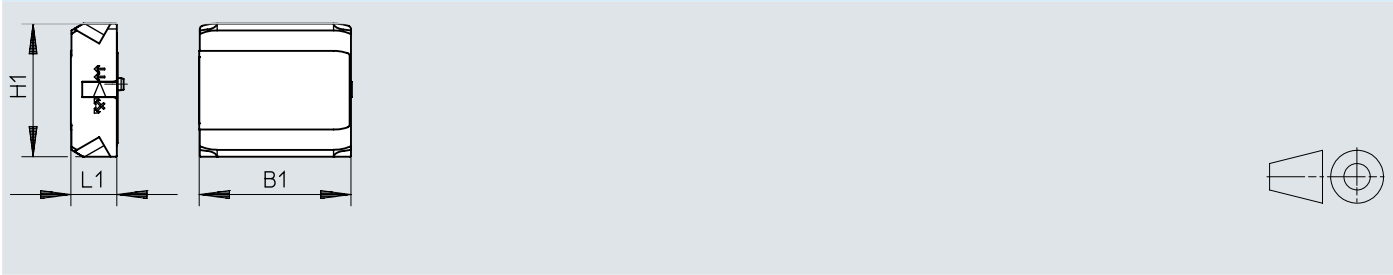
Download CAD data www.festo.com



	B1	B2	B3	D1 Ø	D2 Ø	H1	H2	H3	H4	H5	L1	L2	1/4
PCRI-100-F90-12-E	100,3	61	19	40	~50	88	182,9	112,5	49	~10	74	37	36
PCRI-100-F90-12-C													

Dimensions

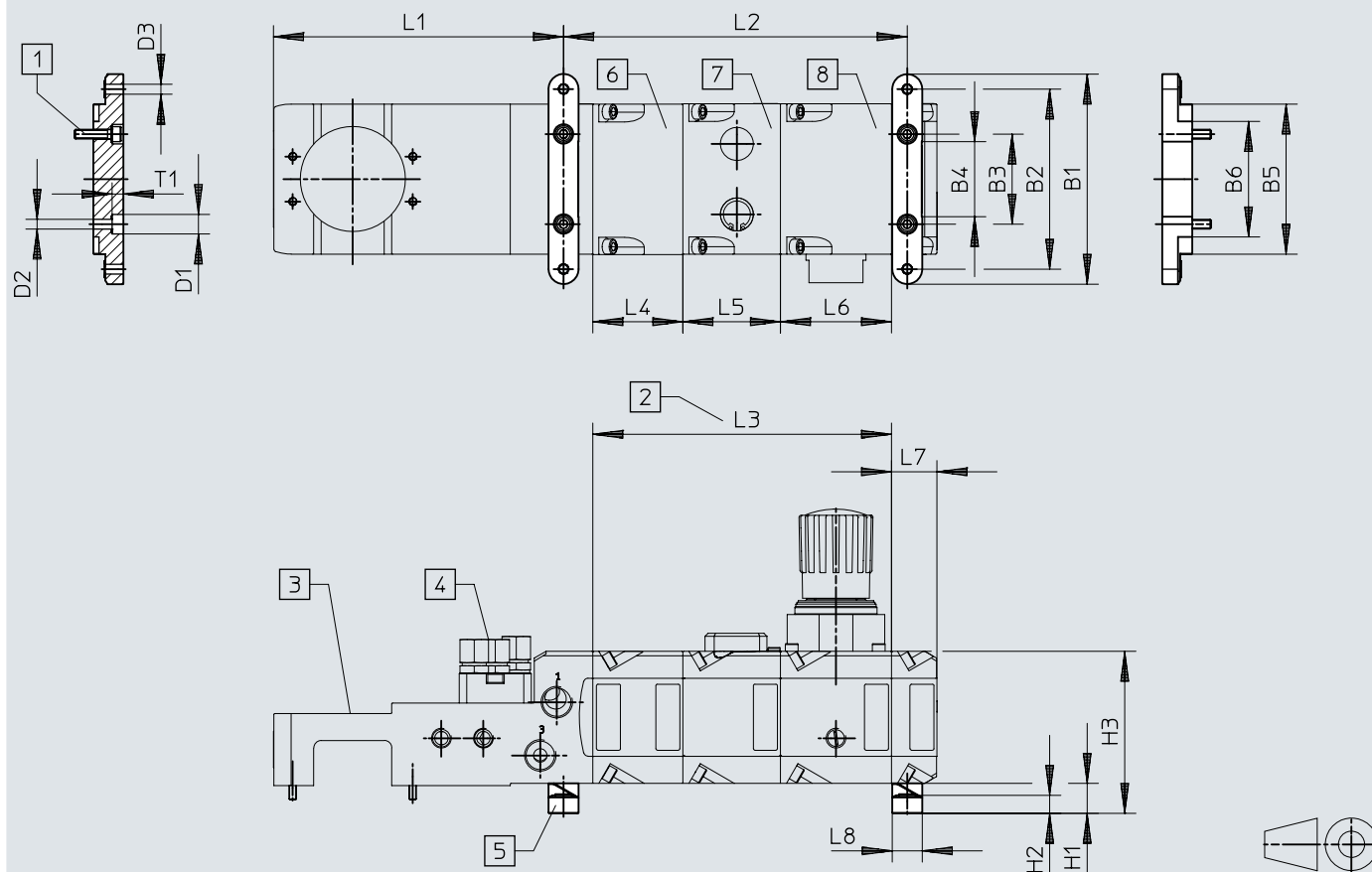
Dimensions – End plate VABE Download CAD data www.festo.com



	B1	H1	L1
VABE-C13-100-F90-DU	100,3	88	30,3

Dimensions

Dimensions – Mounting kit VAME

Download CAD data www.festo.com

- [1] M6x25 screws
- [2] Module length
- [3] VABA-C13-100-1-F90-G12-G14 (adapter plate)
- [4] VAME-C13-K (assembly kit)
- [5] VABE-C13-100-F90-DU (end plate)
- [6] VABP-C13-100...
- [7] VOGM-C13-100...
- [8] PCRI-C13-100...

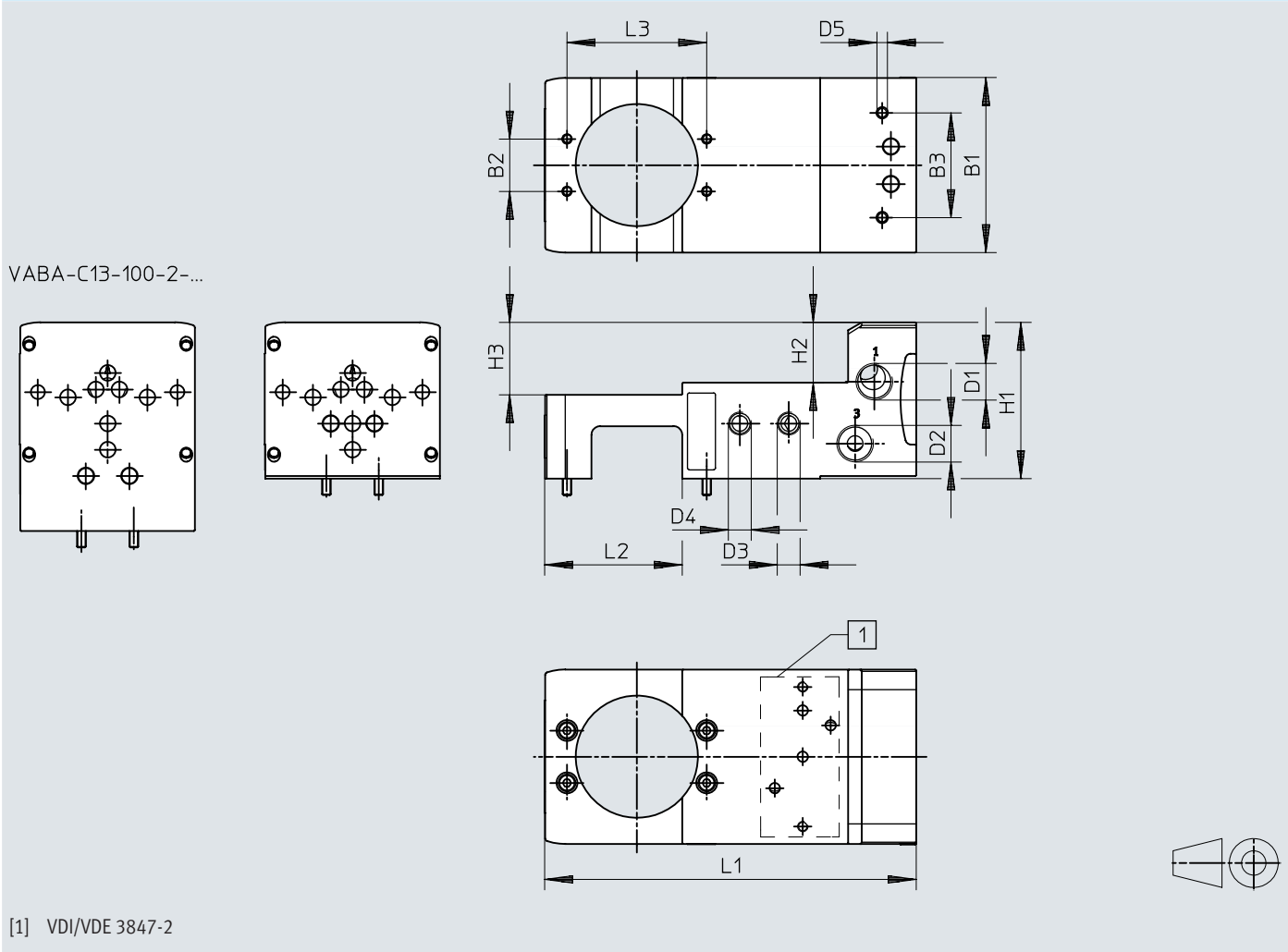
	B1	B2	B3	B4	B5	B6	D1 ∅	D2 ∅	D3 ∅	H1	H2
	±0,3				±0,1	±0,1	H13	H13	H13	±0,1	±0,2
VAME-C13-K	140	120	60	50	100	77	13	6,6	6,6	20	12

	H3	L1	L2	L3	L4	L5	L6	L7	L8	T1
			30+L3						±0,1	
VAME-C13-K	108	212,8	229	199	60	65	74	30,3	20	7,5

Dimensions

Dimensions – Adapter plate VABA-...-G14 Download CAD data www.festo.com

VABA-C13-100-2-...



[1] VDI/VDE 3847-2

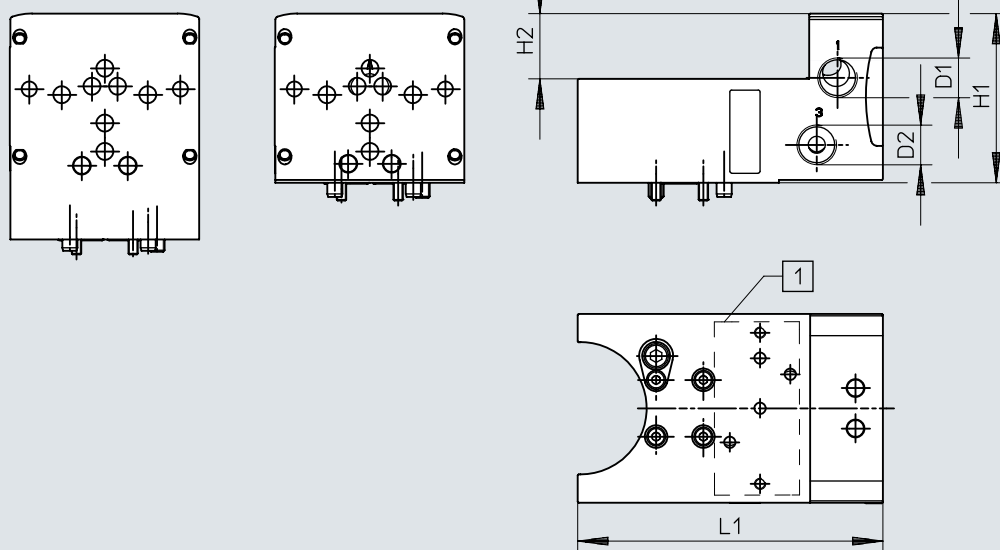
	B1	B2	B3	D1	D2	D3	D4	D5	H1	H2	H3	L1	L2	L3
VABA-C13-100-1-F90-G14	100,3	30	60	G1/2	G1/2	G1/4	G1/4	M6	89,5	34,5	41,5	212,8	78,8	80
VABA-C13-100-2-F90-G14			–						119,5	33	40	262,3	102,3	130

Dimensions

Dimensions – Adapter plate VABA-...-G12

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VABA-C13-100-2-...



[1] VDI/VDE 3847-2

	B1	B2	B3	B4	B5	D1	D2	H1	H2	L1	L2	L3	L4
VABA-C13-100-1-F90-G12	100,3	30	20	12,7	41,5	G1/2	G1/2	89,5	34,5	161,5	25	54	23,5
VABA-C13-100-2-F90-G12								119,5	33	161,1			

Ordering data

Adapter plate VABA					
	Size ¹⁾	Working port	Product weight	Part no.	Type
	180, 240, 300, 360, 480, 700, 720, 900	G1/4	2,530 g	8189576	VABA-C13-100-1-F90-G12-G14
	240, 300, 480, 700, 900	Standard	2,225 g	8141664	VABA-C13-100-1-F90-G12
	960, 1200, 1440, 1920, 2300	G1/4	4,331 g	8189575	VABA-C13-100-2-F90-G12-G14
	1,200, 2300	Standard	3,140 g	8141665	VABA-C13-100-2-F90-G12

1) For quarter turn actuators DFPD-....-C-VDE2

Adapter plate VABA			
	Working port	Part no.	Type
	G1/4	8194539	VABA-C13-G14

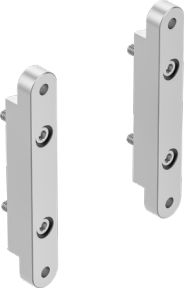
Volume amplifier VOGM				
	Mode of operation	Product weight	Part no.	Type
	Double-acting	1,560 g	8141659	VOGM-FD100-T33H-M-F90
	Single-acting		8141658	VOGM-FD100-M33E-M-F90

Fail-safe module VOGI				
	Mode of operation	Product weight	Part no.	Type
	Double-acting	880 g	8141660	VOGI-F100FS-T32H-M-F90

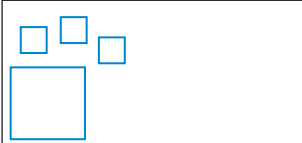
Flange module for safety functions VABP				
	Design	Product weight	Part no.	Type
	1001 channel structure	1,300 g	8141661	VABP-C13-100HFT0-F90-VDE1E
		1,314 g	8188509	VABP-C13-100HFT0-F90-VDE1
	1002 channel structure	1,365 g	8141662	VABP-C13-100HFT1-F90-VDE1E

Filter regulator PCRI				
	Grade of filtration	Product weight	Part no.	Type
	5 µm	1,950 g	8141656	PCRI-100-F90-12-C-T3
	40 µm		8141657	PCRI-100-F90-12-E-T3

End plate VABE			
	Product weight	Part no.	Type
	645 g	8141663	VABE-C13-100-F90-DU

Mounting kit VAME			
	Product weight	Part no.	Type
	252 g	8188567	VAME-C13-K

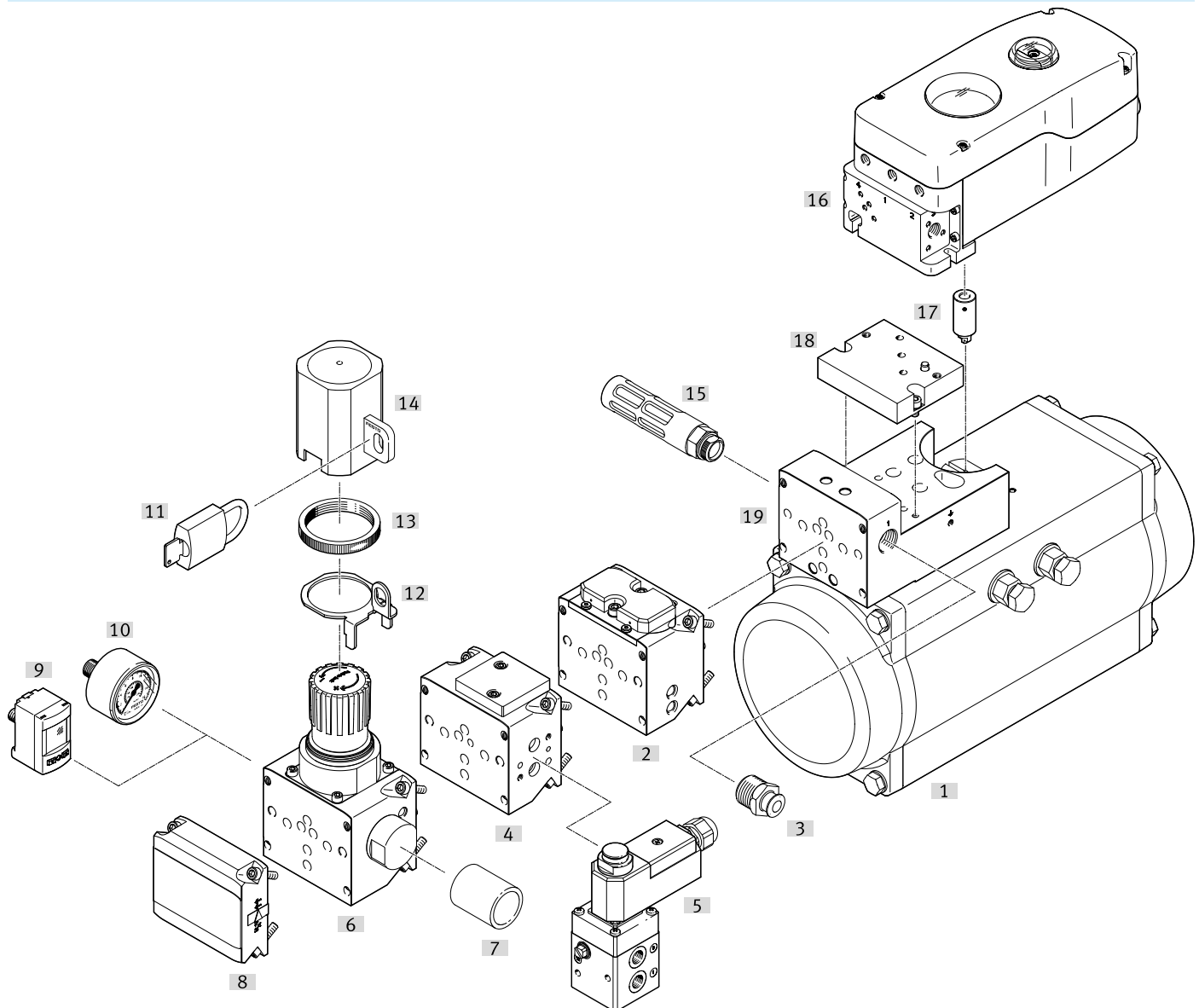
Ordering data

Ordering information – Modular product system ¹⁾		
	Part no.	Type
	8141655	VTOP-

1) VABA-C13-100-1-F90-G12-G14 and VABA-C13-100-2-F90-G12-G14 suitable for DAPS/DFPD actuators and pneumatic third-party actuators

Peripherals

Valve terminal VTOP with semi-rotary drive



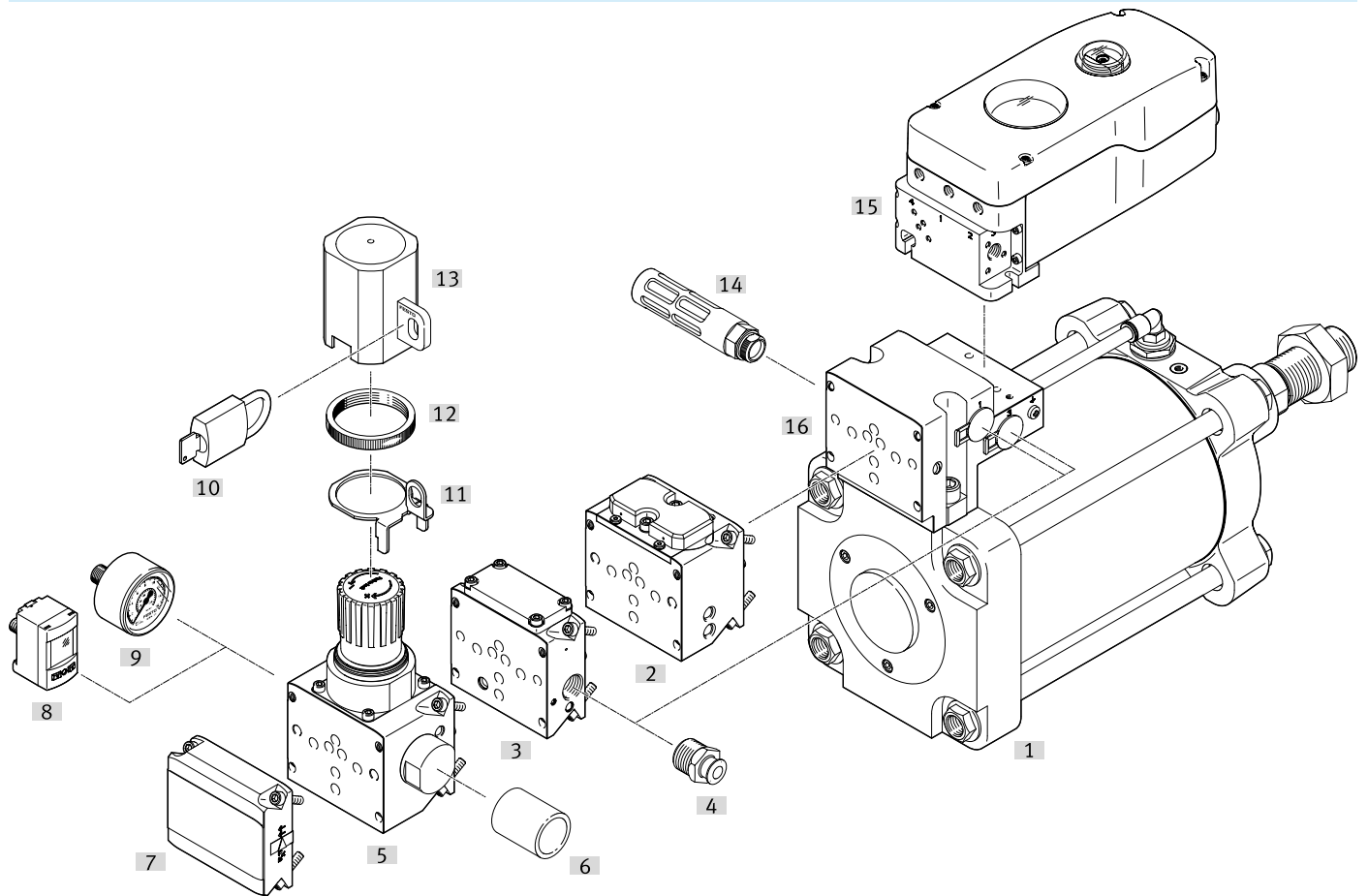
Accessories		→ Link
Type/order code	Description	
[1] Quarter turn actuator DFPD	In sizes 240 ... 2300	dfpd
[2] Pneumatic valve VOGM	Modules for boosting the compressed air flow rate specified by the positioner	vogm
[3] Push-in fitting QS	For connecting tubing with standard O.D.	29
[4] Sub-base VABP	- Flange module for safety functions - Modules with interface for safe exhausting	vabp
[5] Valve VOFC	Solenoid valve with internal pilot air and flanged connection G1/4	29
[6] Filter regulator PCRI	Module for filtering and regulating the compressed air	pcri
[7] Filter cartridge LFP	Metal design	28
[8] End plate VABE	For sealing off the valve terminal VTOP	
[9] Pressure sensor SPAU	For direct mounting	29
[10] Pressure gauge MA	Pressure gauge with pneumatic connection G1/4	28
[11] Padlock LRVS-D	Padlock for regulator lock	
[12] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[13] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[14] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[15] Silencer	To reduce noise and prevent contamination at exhaust ports	29
[16] Valve positioners CMSH	Intelligent, digital positioner with HART communication	cmsh

Peripherals

Accessories		→ Link
Type/order code	Description	
[17] Coupling CAFM	For connecting the shaft of positioners with the interface according to VDI/VDE 3847-2 and quarter turn actuator	28
[18] Adapter kit DADG	For mounting VTOP on quarter turn actuator DFPD-2300-...-VDE2	28
[19] Adapter plate VABA	Adapter plate between valve terminal VTOP, pneumatic drive and positioner. The following sizes can be combined: • VABA-C13-100-1-F90-G12: DFPD-240 ... 900 • VABA-C13-100-2-F90-G12: DFPD-1200 ... 2300 • VABA-C13-100-1-F90-G12-G14: DFPD-240 ... 900, DAPS-0180 ... 0720 • VABA-C13-100-2-F90-G12-G14: DFPD-1200 ... 2300, DAPS-0960 ... 1920	vaba

Peripherals

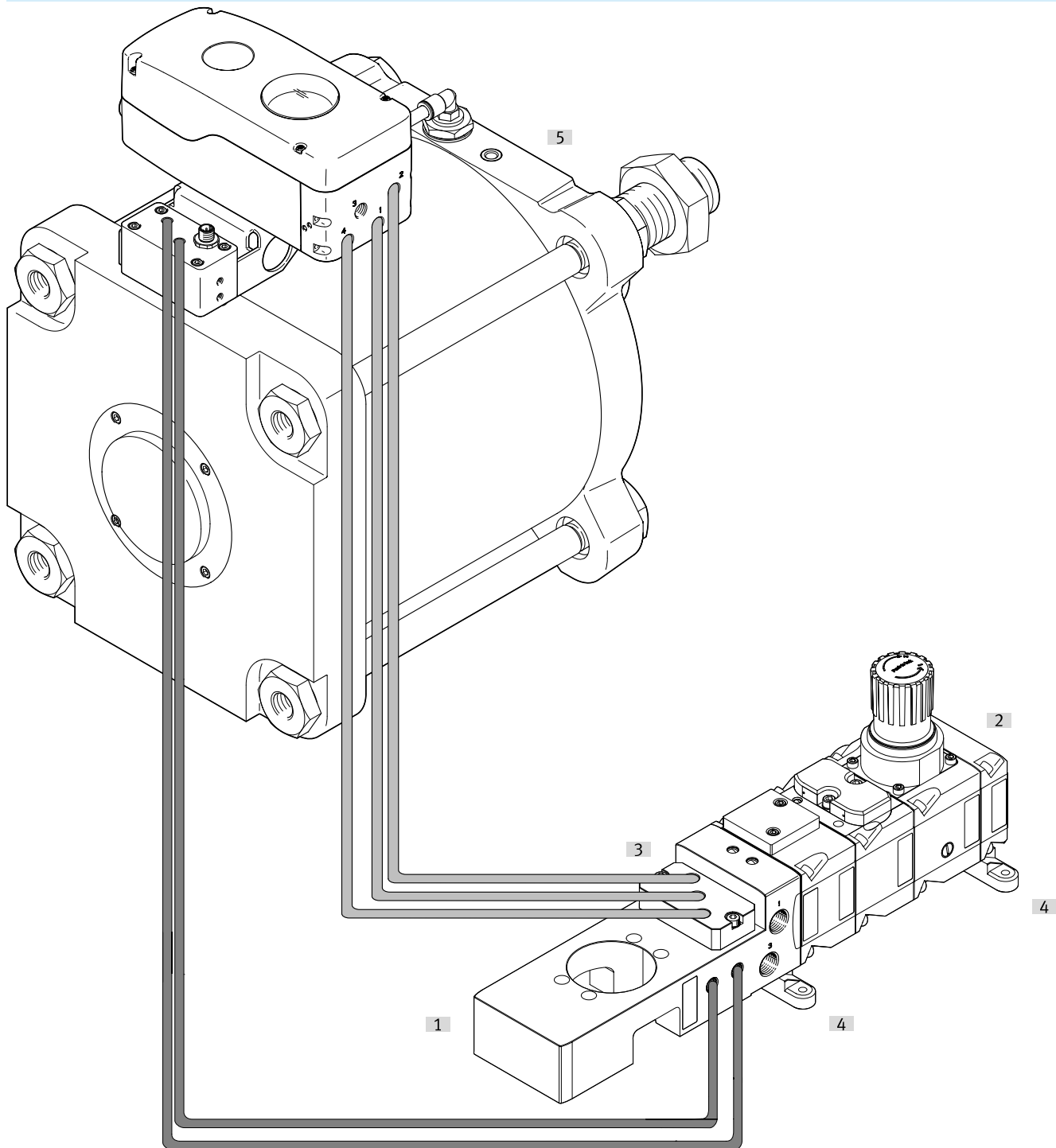
Valve terminal VTOP with linear drive



Accessories		→ Link
Type/order code	Description	
[1] Linear actuator DFPI	In piston diameters 160 ... 320 mm	dfpi
[2] Pneumatic valve VOGM	Modules for boosting the compressed air flow rate specified by the positioner	vogm
[3] Pneumatic valve VOGI	- Flange module for safety functions - Modules with interface for safe exhausting	vogi
[4] Push-in fitting QS	For connecting tubing with standard O.D.	29
[5] Filter regulator PCRI	Module for filtering and regulating the compressed air	pcri
[6] Filter cartridge LFP	Metal design	28
[7] End plate VABE	End plate for reversing the effective direction	vabe
[8] Pressure sensor SPAU	For direct mounting	29
[9] Pressure gauge MA	Pressure gauge with pneumatic connection G1/4	28
[10] Padlock LRVS-D	Padlock for regulator lock	28
[11] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[12] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[13] Regulator lock LRVS	Lock to prevent unauthorised adjustment of the set pressure of pressure and filter regulators	28
[14] Silencer	To reduce noise and prevent contamination at exhaust ports	29
[15] Valve positioners CMSh	Intelligent, digital positioner with HART communication	cmsh
[16] Adapter plate VABA	Adapter plate between valve terminal VTOP, pneumatic actuator and positioner.	vaba

Peripherals

Valve terminal VTOP with mounting kit (actual application)



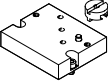
Accessories		→ Link
Type/order code	Description	
[500] Adapter plate VABA-C13-100-2-F90-G12-G14	Adapter plate between valve terminal VTOP, pneumatic actuator and positioner	vaba
End plate VABE	For sealing off the valve terminal VTOP	vabe
Adapter plate VABA-C13-G14	Adapter for remote use of a positioner	vaba
Mounting kit VAME	for mounting the valve terminal VTOP	vame
Valve positioners CMSH	with quarter-turn actuator DFPD-... (other pneumatic actuators possible)	cmssh
Valve positioners CMSH	With linear actuator DFPI-... (other pneumatic actuators possible)	cmssh

Accessories

Coupling CAFM

	Description	Part no.	Type
	Coupling for connecting the shaft of positioners with the interface according to VDI/VDE 3847-2 and quarter turn actuator	8154714	CAFM-M1-CK-N3

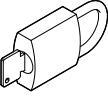
Adapter plate DADG

	Description	Part no.	Type
	Adapter kit for DFPD-C-2300-VDE2 together with positioner CSMH-...-VDE2	8104804	DADG-AK-F9-2

Regulator lock LRV5

	Product weight	Part no.	Type
	60 g	193782	LRVS-D-MIDI

Padlock LRV5-D

	Product weight	Part no.	Type
	120 g	193786	LRVS-D

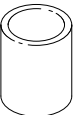
Pressure gauge PAGN

	Nominal size of pressure gauge	Pneumatic connection	Part no.	Type
	63	G1/4	8081401	PAGN-63-16-G14-R1-1.6-0.5-V2

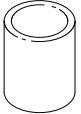
Pressure gauge MA

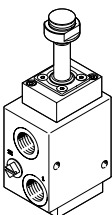
	Nominal size of pressure gauge	Pneumatic connection	Part no.	Type
	40	G1/4	183901	MA-40-16-G1/4-EN

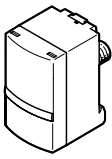
Filter cartridges LFP

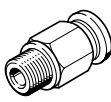
	Size	Grade of filtration	Part no.	Type
	Midi	5 µm	159594	LFP-D-MIDI-5M

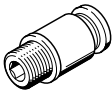
Accessories

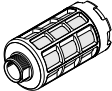
Filter cartridges LFP					
	Size	Grade of filtration	Part no.	Type	
	Midi	40 µm	363667	LFP-D-MIDI-40M	

Valve VOFC					
	Valve function	Nominal size	Description	Part no.	Type
	3/2-way, closed, monostable	6 ... 12 mm	Valve VOFC-LT-...-FG14-...-F19 for position function variant TB1, valve VOFC-LT-...-FGP14-...-F19 for position function variant TB3/TB4	2868687	VOFC-LT-M32C-

Pressure sensors SPAU					
	Switching output	Display type	Electrical connection 1, connector system	Part no.	Type
	2 x PNP or 2 x NPN, switchable	Illuminated LCD	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

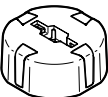
Push-in fitting QS					
	Pneumatic connection, port 1	Nominal size	Packaging unit [units]	Part no.	Type
	Male thread G1/2	11 mm	1	★ 186104	QS-G1/2-12
	Male thread R1/2		20	132046	QS-G1/2-12-20
			1	★ 153010	QS-1/2-12
			20	★ 130684	QS-1/2-12-20

Push-in fitting QS					
	Pneumatic connection, port 1	Nominal size	Packaging unit [units]	Part no.	Type
	Male thread G1/2	8.4 mm	1	★ 186115	QS-G1/2-12-I
	Male thread R1/2			★ 153021	QS-1/2-12-I

Silencer U							
	Pneumatic connection	Flow rate to atmosphere	Ambient temperature	Product weight	Size of pack	Part no.	Type
	G1/2	7,500 l/min	-10 ... 70 °C	75 g		6844	U-1/2-B
		10,300 l/min		58.2 g		★ 2310	U-1/2
					20	534225	U-1/2-20

Accessories

Silencer AMTE					
	Design type	Ambient temperature	Product weight	Part no.	Type
	Short	-40 ... 80 °C	30 g	★ 1206625	AMTE-M-H-G12
	Long		43 g	★ 1205863	AMTE-M-LH-G12

Position indicator SASF					
	Size	Dimensions (W x L x H)	Ambient temperature	Part no.	Type
	64	Ø 101 mm x 30 mm	-20 ... 80 °C	8147102	SASF-F9-DE-64-A30
	41	Ø 70 mm x 25 mm		8147099	SASF-F9-DE-41-A30
	31			8147096	SASF-F9-DE-31-A30
	38			8147098	SASF-F9-DE-38-A30
	44			8147100	SASF-F9-DE-44-A30
	50			8147101	SASF-F9-DE-50-A30