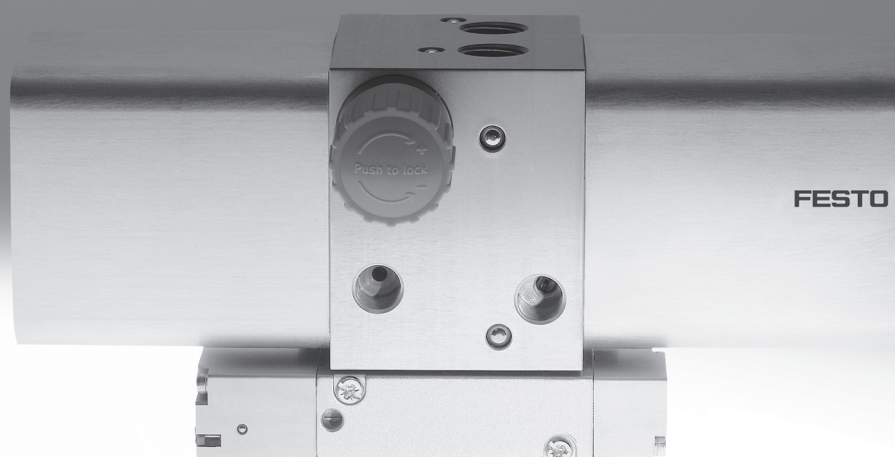


Pressure boosters DPA

FESTO



Pressure boosters DPA

Key features

FESTO

Function

The pressure booster is a twin-piston pressure intensifier intended solely for compressing air.

When the DPA is pressurised with compressed air, integrated non-return valves automatically facilitate pressure build-up on the secondary side. The output pressure p_2 can increase up to twice the value of the supply

pressure p_1 . The required output pressure is set using a manually operated pressure regulator. In the case of pressure boosters without a pressure regulator, the output pressure is always twice the supply pressure. The air supply to both drive pistons is controlled by a pneumatic directional control valve that reverses

automatically when the stroke end position is reached.

The pressure booster starts automatically when the supply pressure is applied and the desired output pressure has not yet been reached. When the set output pressure is reached, the pressure booster

switches to energy-saving mode but restarts automatically if the pressure drops during system operation. With the DPA with sensing option, it is also possible to record individual strokes of the drive piston with the aid of an external sensor and adding counter.

Note

Pressure boosters are intended for the occasional relieving of compressed air. They are not suitable as a replacement for compressors, as wear on seals and drive pistons increases significantly during continuous operation without breaks.

Note

The pressure regulator is supplied with a non-tensioned regulator spring (DPA-...-10/16 only). After the supply pressure is applied, the regulator spring is pretensioned by turning the regulator knob until the desired output pressure p_2 is achieved.

A pressure gauge is strongly recommended to monitor the output pressure p_2 . In the case of the DPA-63/100, the regulator setting can be secured against unauthorised adjustment by means of the regulator lock LRVS.

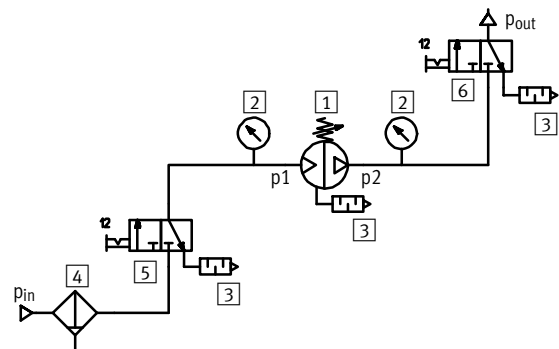
Connection to the compressed air network

Supply pressure side

The use of a 3/2-way on-off valve (e.g. HE-...-D, HEE-...-D or a similar type) in the air supply line to the pressure booster is recommended. The 3/2-way on-off valve must not be opened until the supply pressure p_{in} has already built up.

Output pressure side

The connection of a 3/2-way on-off valve on the output pressure side of the pressure booster is recommended for safe venting of the output pressure p_{out} . If a 3/2-way valve is not used, the output pressure can only be vented by fully releasing the regulator spring (regulator knob turned all the way to the left).



Note

If there is a soft-start valve in the system, it is essential that a 3/2-way on-off valve is inserted between the soft-start valve and pressure booster.

Note

In the case of pressure boosters without pressure regulator, external venting must be ensured via a 3/2-way on-off valve.

- 1 Pressure booster
- 2 Pressure gauge
- 3 Silencer
- 4 Filter

- 5 3/2-way on-off valve on the supply pressure side
- 6 3/2-way on-off valve on the output pressure side

Pressure boosters DPA

Key features

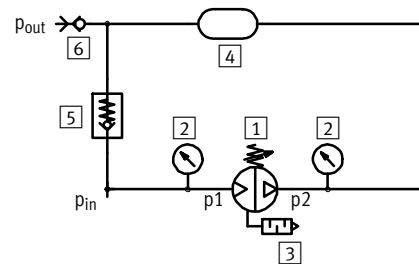
FESTO

Installation with air reservoir

An air reservoir (e.g. CRVZS) should always be used on the output pressure side to compensate for pressure fluctuations. The air reservoir evens out the pulsation of the pressure booster. An effective way of filling the air reservoir with the supply pressure p_1 is via a connecting cable. The pressure booster only has to make up

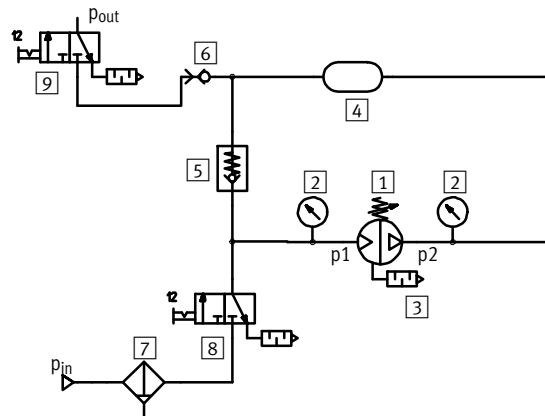
the difference between the supply and output pressures. The air reservoir is filled faster. A non-return valve prevents the air from flowing back out of the reservoir.

This configuration corresponds to the scope of delivery of the pressure booster/air reservoir combination that can be ordered (→ 16).



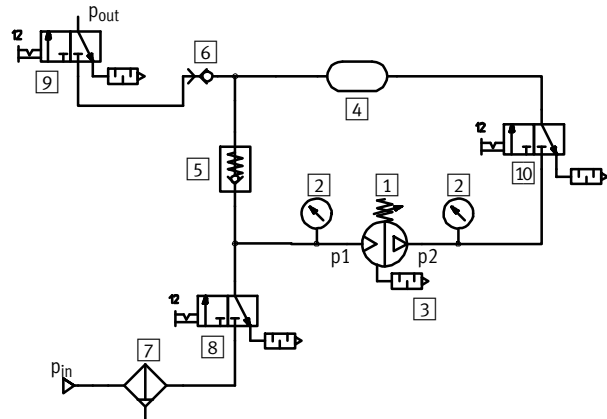
Circuitry with 2 on-off valves

The air reservoir is vented via the regulator knob of the pressure booster.



Circuitry with 3 on-off valves

The air reservoir is vented via the additional on-off valve.

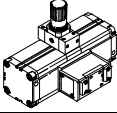
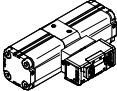
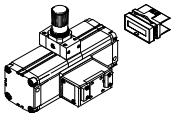
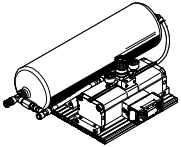


- | | |
|-------------------------|---|
| 1 Pressure booster | 7 Filter |
| 2 Pressure gauge | 8 3/2-way on-off valve on the supply pressure side |
| 3 Silencer | 9 3/2-way on-off valve on the output pressure side |
| 4 Air reservoir | 10 3/2-way on-off valve for venting the air reservoir |
| 5 Non-return valve | |
| 6 Quick coupling socket | |

Pressure boosters DPA

Product range overview

FESTO

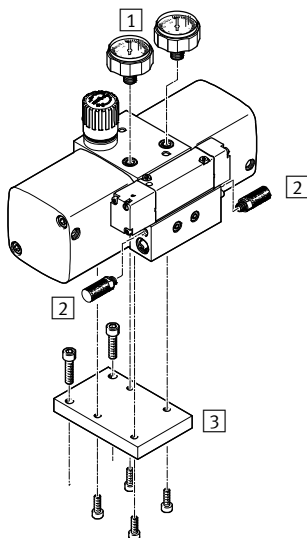
Function	Version	Type	Piston Ø [mm]	→ Page/Internet
Pressure booster	Standard			
		DPA	40, 63, 100	5
	Without pressure regulator, double supply pressure			
		DPA-...-D	40, 63, 100	5
	With sensing option			
		DPA-...-A	63, 100	5
Pressure booster/ air reservoir combination		DPA-...-CRVZS	40, 63, 100	16

Pressure boosters DPA

Peripherals overview

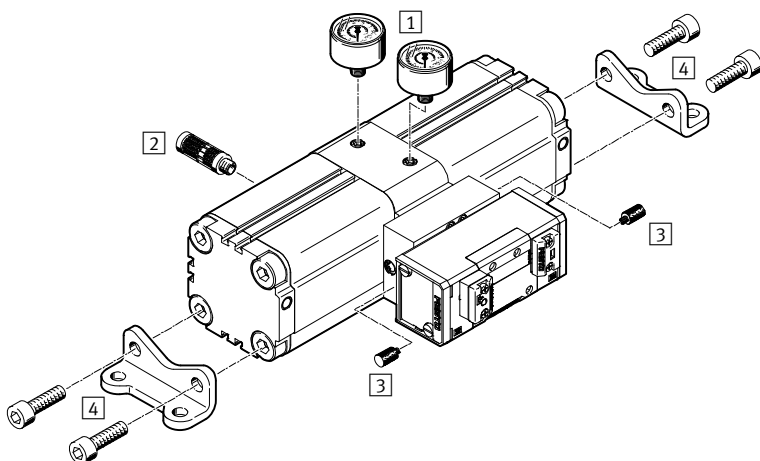
FESTO

DPA-40-10/16/D



Mounting attachments and accessories		Brief description	→ Page/Internet
1	Pressure gauge set DPA-MA-SET	For monitoring the supply and output pressure	22
2	Silencer UC	For noise reduction at the exhaust port	25
3	Flange mounting FDPA	For mounting the pressure booster on other machine parts	21

DPA-63/100-D



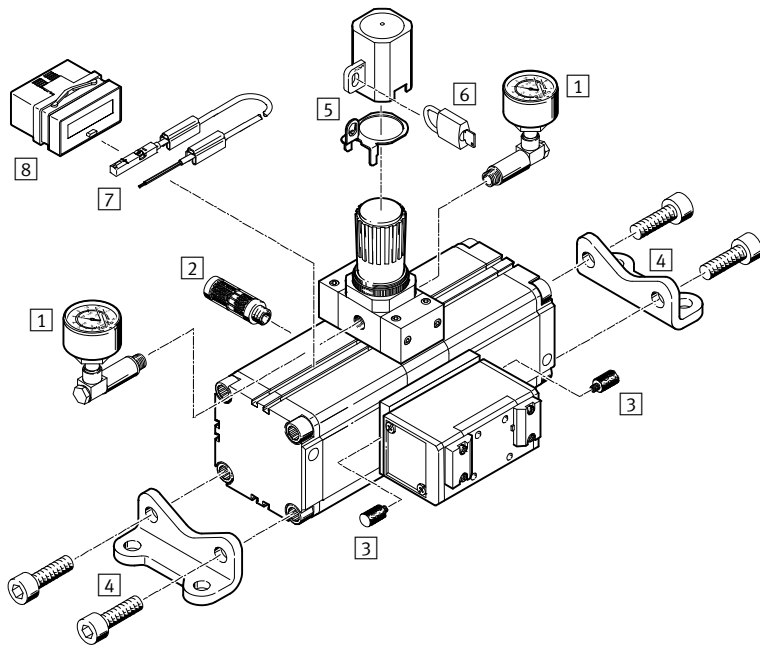
Mounting attachments and accessories		Brief description	→ Page/Internet
1	Pressure gauge MA	For monitoring the supply and output pressure	23
2	Silencer U-...-B	For noise reduction at the exhaust port	25
3	Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	25
4	Foot mounting HUA	For mounting the pressure booster on other machine parts	21

Pressure boosters DPA

Peripherals overview

FESTO

DPA-63/100-10/16(-A)



Mounting attachments and accessories		
	Brief description	→ Page/Internet
1 Pressure gauge set DPA-MA-SET	For monitoring the supply and output pressure	22
2 Silencer U-...-B	For noise reduction at the exhaust port	25
3 Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	25
4 Foot mounting HUA	For mounting the pressure booster on other machine parts	21
5 Regulator lock LRVS-D with lock plate	Prevents unintentional, and in conjunction with an LRVS padlock, unauthorised adjustment of the rotary knob	LEERER MERKER
6 Padlock LRVS-D	Accessory for regulator lock LRVS-D	25
7 Proximity sensor SME-8M/SMT-8M	For registering individual strokes of the drive piston (only DPA-...-A)	24
8 Adding counter CCES	For counting the switching cycles (only DPA-...-A)	LEERER MERKER

Pressure boosters DPA

FESTO

Type codes

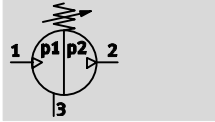
		DPA	–	63	–	16	–	A
Basic function								
DPA	Pressure booster							
Piston Ø								
40	40 mm							
63	63 mm							
100	100 mm							
Output pressure [bar]								
DPA-40								
10	4,5 ... 10, adjustable with pressure regulator							
16	4,5 ... 16, adjustable with pressure regulator							
D	Double supply pressure, without pressure regulator							
DPA-63/100								
10	4 ... 10, adjustable with pressure regulator							
16	4 ... 16, adjustable with pressure regulator							
D	Double supply pressure, without pressure regulator							
Sensing (DPA-63/100-10/16 only)								
	No sensing possibility							
A	With sensing possibility							

Pressure boosters DPA

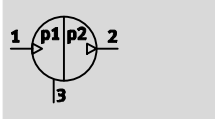
Technical data

FESTO

Function
with pressure regulator

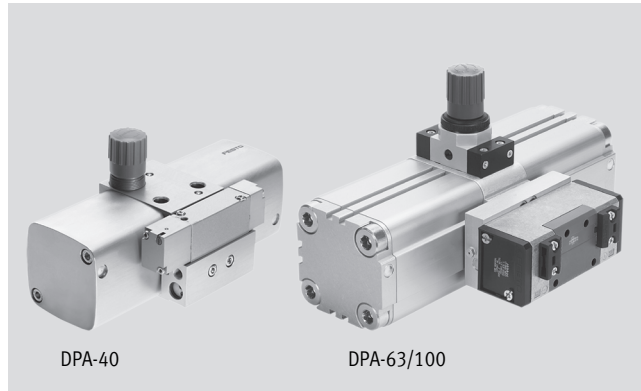


without pressure regulator



-  - Temperature range
+5 ... +60 °C
-  - Pressure ratio
1:2
-  - www.festo.com

Wearing parts kits
→ 16



- Any mounting position
- Long service life
- Compact construction and attractive design
- Minimal loss of volume due to valve actuation
- Short filling times

General technical data – DPA with pressure regulator

Type DPA-	No sensing option						With sensing option			
	40-10	40-16	63-10	63-16	100-10	100-16	63-10-A	63-16-A	100-10-A	100-16-A
Piston Ø [mm]	40		63		100		63		100	
Pneumatic connection 1, 2	G1¼		G3⁄8		G1⁄2		G3⁄8		G1⁄2	
Pneumatic connection 3	M7		G3⁄8		G1⁄2		G3⁄8		G1⁄2	
Constructional design	Twin-piston pressure booster						Twin-piston pressure booster			
	–						With magnet on piston			
Type of mounting	Via female thread									
Mounting position	Any									
Pressure indication	G1⁄8 prepared		G1⁄8 prepared		G1¼ prepared		G1⁄8 prepared		G1¼ prepared	

-  - Note: This product conforms to ISO 1179-1 and to ISO 228-1

General technical data – DPA without pressure regulator

Type DPA-	40-D	63-D	100-D
Piston Ø [mm]	40	63	100
Pneumatic connection 1, 2	G1/4	G3/8	G1/2
Pneumatic connection 3	M7	G3/8	G1/2
Constructional design	Twin-piston pressure booster		
Type of mounting	Via female thread		
Mounting position	Any		
Pressure indication	G1/8 prepared		

-  - Note: This product conforms to ISO 1179-1 and to ISO 228-1

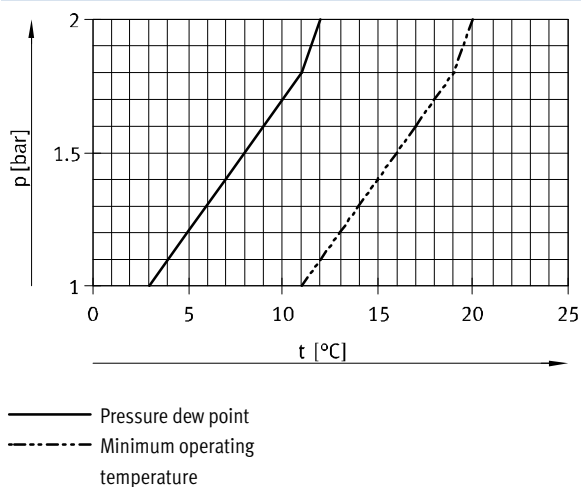
Pressure boosters DPA

Technical data

Operating and environmental conditions						
Type DPA-	DPA with pressure regulator				DPA without pressure regulator	
	40-10	40-16	63/100-10(-A)	63/100-16(-A)	40-D	63/100-D
Operating pressure/ input pressure [bar]	2.5 ... 8	2.5 ... 10	2 ... 8	2 ... 10	2.5 ... 8	2 ... 8
Pressure regulation range/ output pressure [bar]	4.5 ... 10 ¹⁾	4.5 ... 16 ¹⁾	4 ... 10 ¹⁾	4 ... 16 ¹⁾	5 ... 16	4 ... 16
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:3:4] Compressed air in accordance with ISO 8573-1:2010 [7:4:4] ³⁾					
Note on operating/pilot medium	Operation with lubricated medium not possible					
Ambient temperature [°C]	+5 ... +60					
Storage temperature [°C]	+5 ... +60					
Corrosion resistance class CRC ²⁾	2					

- 1) The differential pressure between the supply and output pressure must be at least 2 bar.
If the regulator spring is at maximum tension (rotary knob turned all the way clockwise), the maximum output pressure can be exceeded by 40 %:
– Max. 14 bar on DPA-...-10
– Max. 22 bar on DPA-...-16
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 3) A higher pressure dew point of max. +3°C is possible if the following condition is met to prevent condensation forming in the pressure booster. The minimum operating temperature must always be at least 8 K higher than the pressure dew point, see diagram → page 9

Minimum permissible operating temperature t as a function of the pressure dew point and pressure amplification p



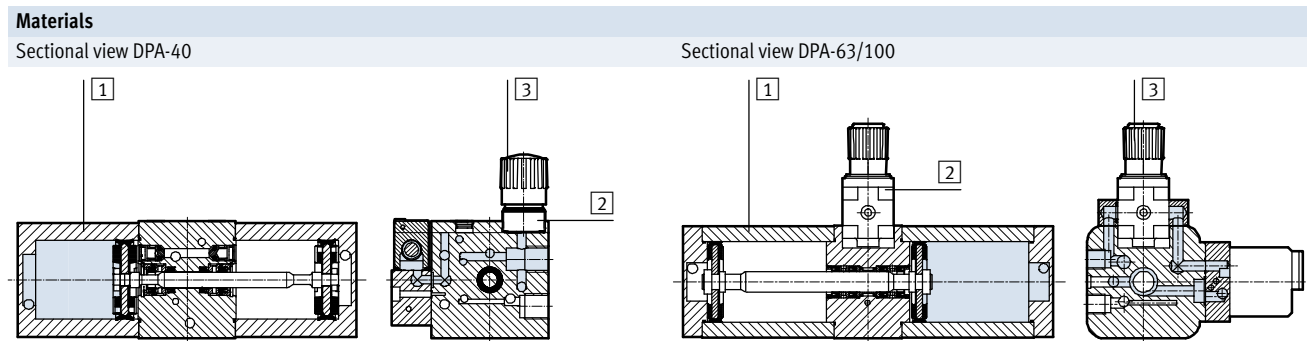
Pressure boosters DPA

FESTO

Technical data

Weight [g]			
Type DPA-	40	63	100
Pressure booster	1,500	6,000	13,000

Recommended tubing			
Type DPA-	40	63	100
For supply pressure	PAN-10x1,5	PAN-16x2	PAN-16x2
For output pressure	PAN-R-8x1,5	PAN-R-16x3	PAN-R-16x3



Pressure booster	DPA-40	DPA-63/100-10	DPA-63/100-16
[1] Housing	Aluminium		
[2] Support	Aluminium	PET	Aluminium
[3] Rotary knob	POM		
– Piston/piston rod seals	HNBR	PUR	
– Non-return valve seals	NBR	FKM	
– Regulator/valve seals	NBR		
Note on materials	RoHS-compliant		

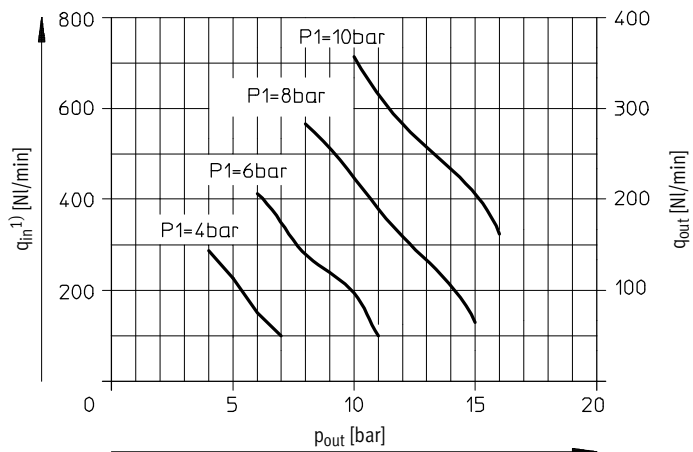
Pressure boosters DPA

Technical data

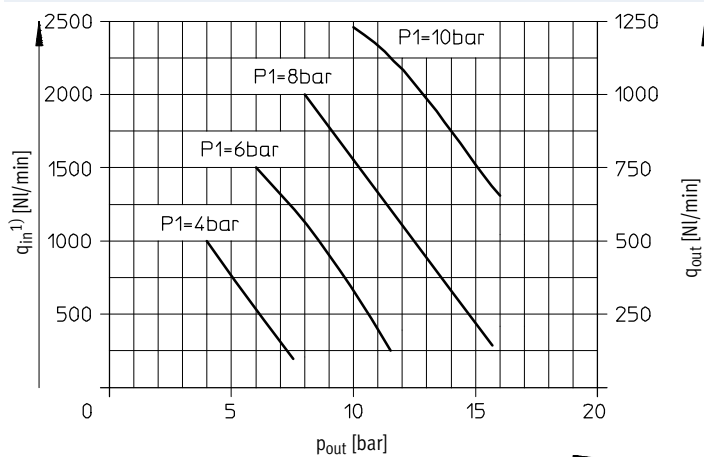
FESTO

Flow rate at input $q_{in}^{(1)}$ and flow rate at output q_{out} as a function of output pressure p_{out}

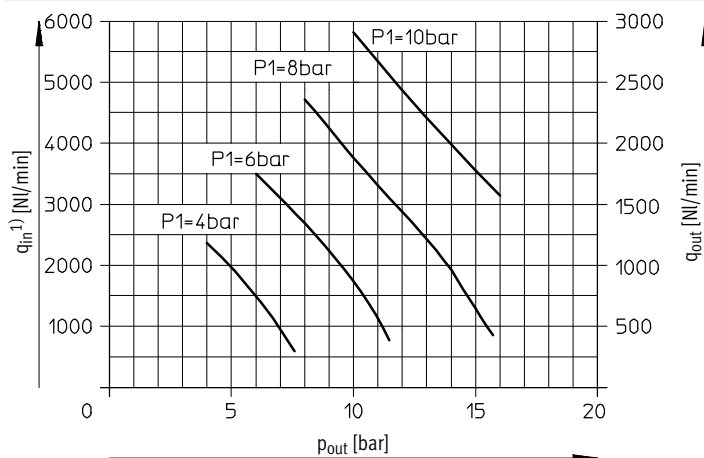
DPA-40



DPA-63



DPA-100



1) Theoretical values without switching losses and friction.

Pressure boosters DPA

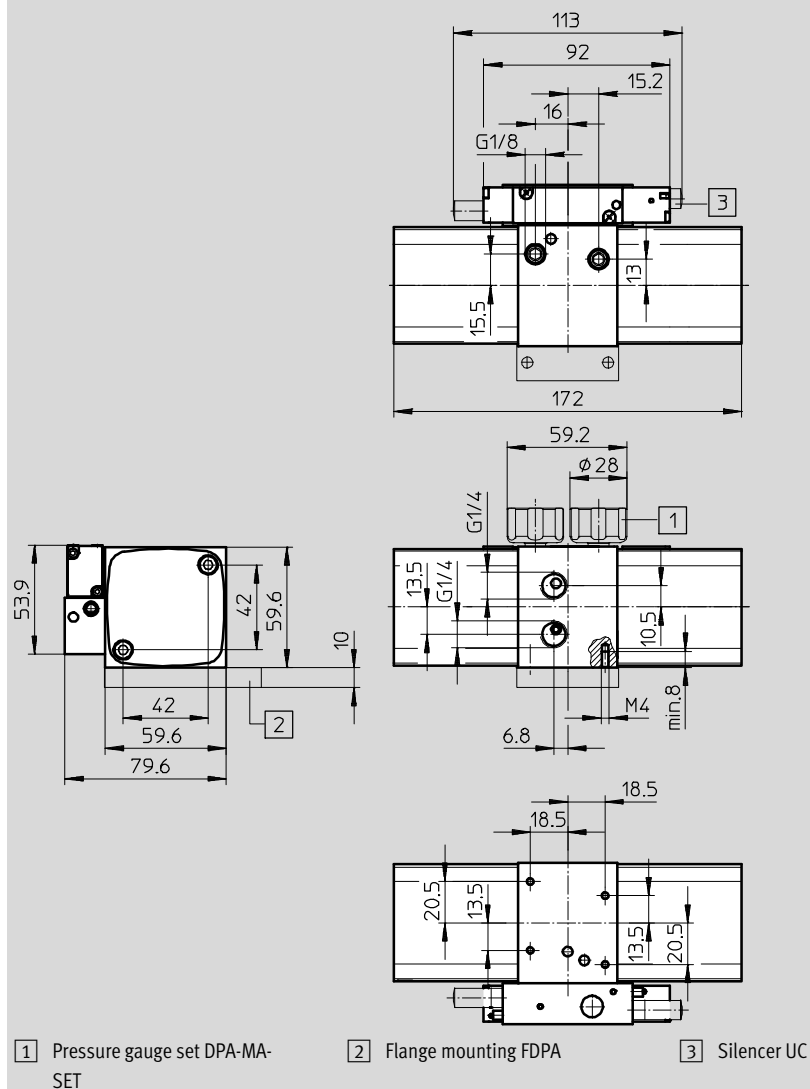
Technical data

FESTO

Dimensions – DPA without pressure regulator

Download CAD data → www.festo.com

DPA-40-D



Note: This product conforms to ISO 1179-1 and to ISO 228-1

Pressure boosters DPA

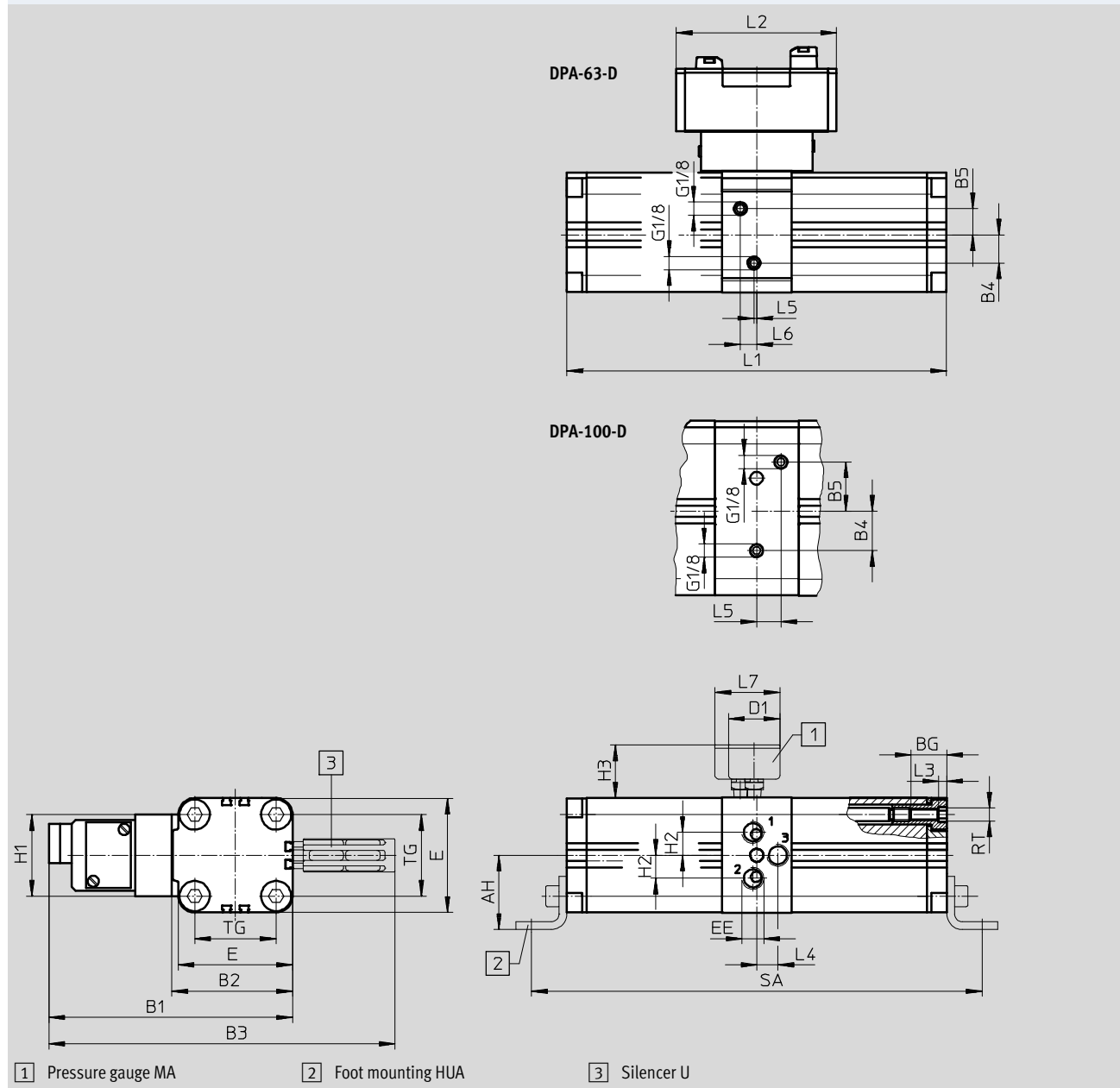
Technical data

FESTO

Dimensions – DPA without pressure regulator

Download CAD data → www.festo.com

DPA-63/100-D



Type	AH	B1	B2	B3	B4	B5	BG	D1 Ø	E	EE	H1	H2
DPA-63	56.5	187	92.5	266	21.4	19.9	25	39	88	G $\frac{3}{8}$	62	17.5
DPA-100	81	244	133	352	30	37.5	30		128	G $\frac{1}{2}$	71	27

Type	H3	L1	L2	L3	L4	L5	L6	L7	RT	TG	SA
DPA-63	40.5	289	122	6	19	2	12.4	49.4	M10	62	343
DPA-100	40	367	145.5		11	18.5	–	57.5		103	433

– Note: This product conforms to ISO 1179-1 and to ISO 228-1

Pressure boosters DPA

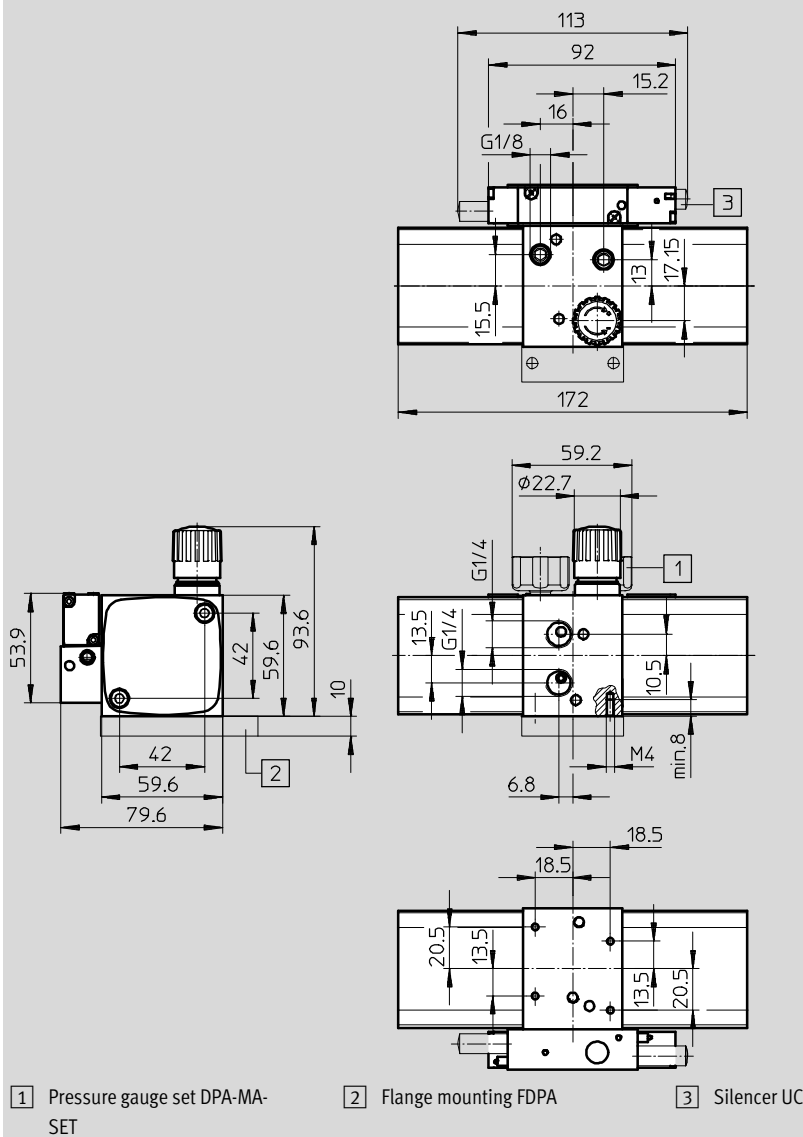
Technical data

FESTO

Dimensions – DPA with pressure regulator

Download CAD data → www.festo.com

DPA-40-10/16



Note: This product conforms to ISO 1179-1 and to ISO 228-1

Pressure boosters DPA

Technical data

FESTO

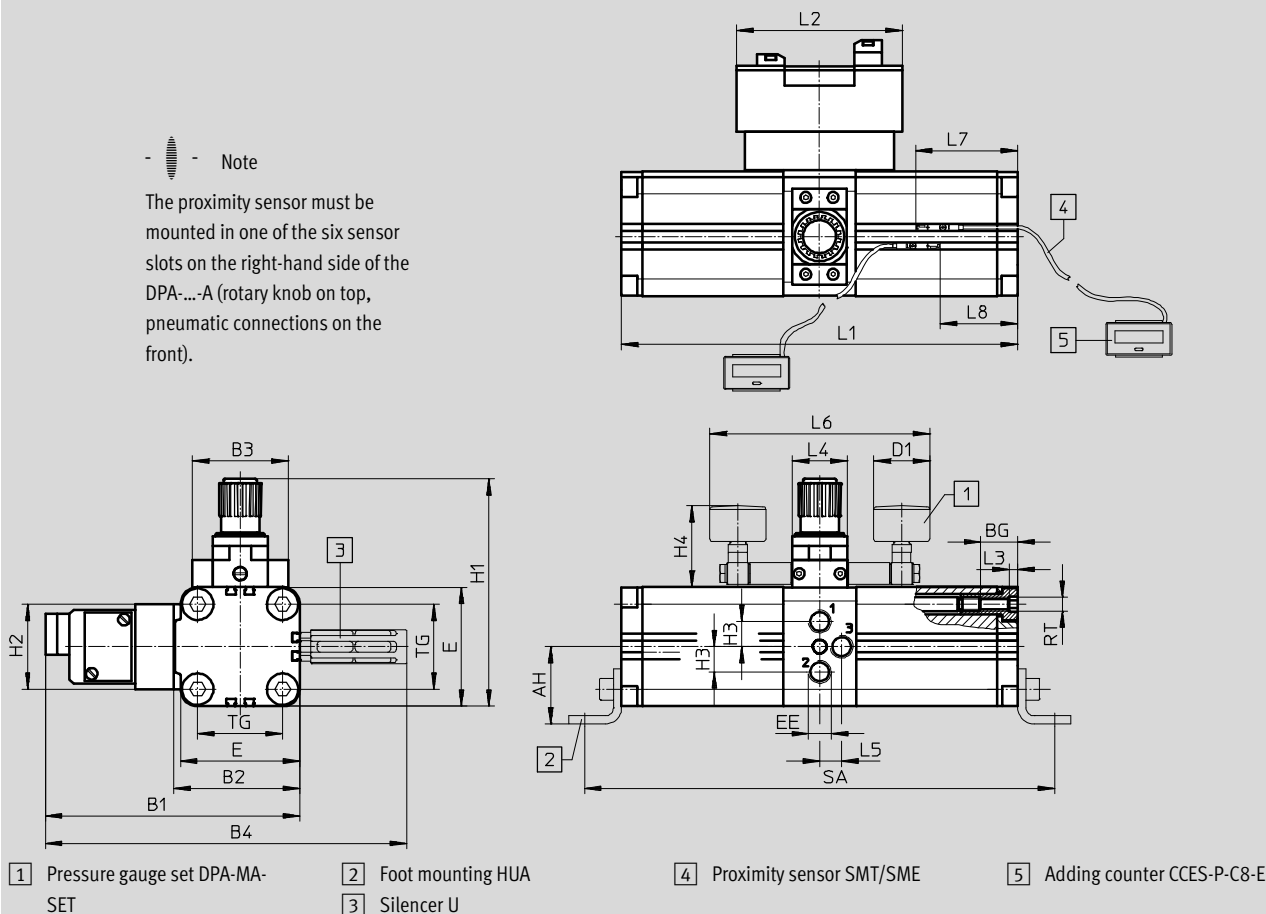
Dimensions – DPA with pressure regulator

Download CAD data → www.festo.com

DPA-63/100-10/16(-A)

-  - Note

The proximity sensor must be mounted in one of the six sensor slots on the right-hand side of the DPA-...-A (rotary knob on top, pneumatic connections on the front).



Type	AH	B1	B2	B3	B4	BG	D1 Ø	E	EE	H1	H2	H3
DPA-63-10/16	56.5	187	92.5	70	266	25	39	88	G $\frac{3}{8}$	169	62	17.5
DPA-100-10	81	244	133	102	352	30	39	128	G $\frac{1}{2}$	244	71	27
DPA-100-16												

Type	H4	L1	L2	L3	L4	L5	L6	L7	L8	RT	TG	SA
DPA-63-10/16	65	289	122	6	40	19	159	74.5	56.5	M10	62	343
DPA-100-10	75	367	145.5	6	55	11	173	93	75	M10	103	433
DPA-100-16	82.5											

-  - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Pressure boosters DPA



Technical data

Ordering data					
Piston Ø [mm]	Output pressure 4 ¹⁾ ... 10 bar		Output pressure 4 ¹⁾ ... 16 bar		Double supply pressure
	Part No.	Type	Part No.	Type	Part No. Type
No sensing option					
40	537273	DPA-40-10	537274	DPA-40-16	549396 DPA-40-D
63	184518	DPA-63-10	193392	DPA-63-16	549397 DPA-63-D
100	184519	DPA-100-10	188399	DPA-100-16	549398 DPA-100-D
With sensing option					
63	549399	DPA-63-10-A	549400	DPA-63-16-A	–
100	549401	DPA-100-10-A	549402	DPA-100-16-A	–

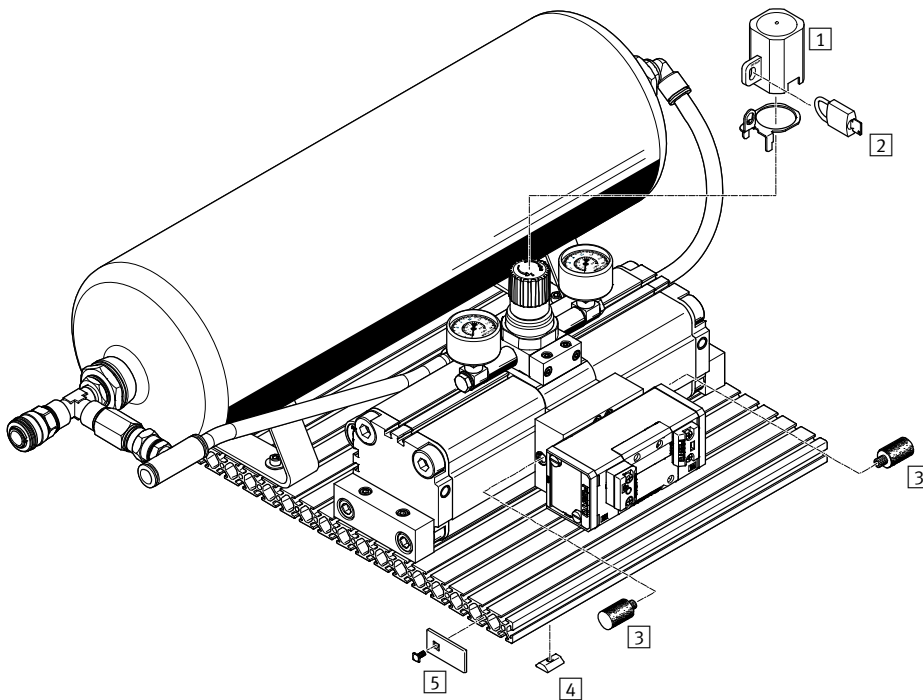
1) For DPA-40: 4,5 bar

Ordering data – Wearing parts kits			
Type	Product series	Part No.	Type
DPA-40-10/16		707308	DPA-40-10/16
DPA-63-10/16	From SN to VN	397400	DPA-63-10/16
	From VD	738338	DPA-63-10/16
DPA-100-10/16	From SN to VN	397401	DPA-100-10/16
	From VD	738339	DPA-100-10/16

Pressure boosters DPA, with air reservoir

Peripherals overview

FESTO



Accessories		
	Brief description	→ Page/Internet
1	Regulator lock (DPA-63/100 only) LRVS-D with lock plate	Prevents unintentional, and in conjunction with a padlock LRVS-D, unauthorised adjustment of the rotary knob
2	Padlock (DPA-63/100 only) LRVS-D	Accessory for regulator lock LRVS-D
3	Silencer (DPA-63/100 only) AMTE-M-LH-M3	For noise reduction at the valve exhaust port
4	Slot nut IPM-VN-05-12/M5-ST	For attaching the slotted profile plate DPA-40-...-CRVZS2: 4 pieces, DPA-40-...-CRVZS5: 6 pieces, DPA-63/100: 8 pieces
5	Cover IPM-AN-05-20X40-PA	For covering the cut edge of the slotted profile plate DPA-40: 5 pieces per cut edge, DPA-63/100: 10 pieces per cut edge

Pressure boosters DPA, with air reservoir

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Type codes

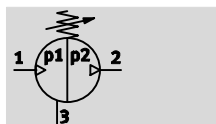
		DPA	–	63	–	10	–	CRVZS	10
Basic function									
DPA	Pressure booster								
Piston Ø									
40	40 mm								
63	63 mm								
100	100 mm								
Output pressure [bar]									
DPA-40									
10	4.5 ... 10, adjustable with pressure regulator								
16	4.5 ... 16, adjustable with pressure regulator								
DPA-63/100									
10	4 ... 10, adjustable with pressure regulator								
16	4 ... 16, adjustable with pressure regulator								
Air reservoir									
CRVZS	Stainless steel								
Air reservoir volume [l]									
DPA-40									
2	2								
5	5								
DPA-63/100									
10	10 (DPA-63 only)								
20	20								

Pressure boosters DPA, with air reservoir

FESTO

Technical data

Function
Pressure booster
with pressure regulator



- - Temperature range
+5 ... +60 °C
- - Pressure ratio
1:2
- - www.festo.com

Wearing parts kits
→ 22



Combination of pressure booster, air reservoir in stainless steel design, bypass with non-return valve for constant filling of the air reservoir

with the system pressure, pressure gauge set, silencer, fitting and quick coupling.

- Convenient all-in-one solution
- Ideally matched components

- Combination fully mounted on a slotted profile plate

General technical data										
Pressure booster DPA	40-10	40-16	40-10	40-16	63-10	63-16	63-10	63-16	100-10	100-16
Air reservoir	CRVZS2	CRVZS2	CRVZS5	CRVZS5	CRVZS10	CRVZS10	CRVZS20	CRVZS20	CRVZS20	CRVZS20
Piston Ø	[mm]	40			63			100		
Air reservoir volume	[l]	2		5		10		20		20
Pneumatic connection 1	QS-10				QS-12				QS-16	
Pneumatic connection 2	KD4									
Pneumatic connection 3	Silencer									
Constructional design	Twin-piston pressure booster, with air reservoir, with pressure gauge, with non-return valve									
Type of mounting	Via slot nuts									
Mounting position	Any		Condensate drain underneath							
Pressure display	Via pressure gauge									
Product weight	[g]	4,400		7,300		16,000		21,500		30,000

Operating and environmental conditions										
Pressure booster DPA	40-10	40-16	40-10	40-16	63-10	63-16	63-10	63-16	100-10	100-16
Air reservoir	CRVZS2	CRVZS2	CRVZS5	CRVZS5	CRVZS10	CRVZS10	CRVZS20	CRVZS20	CRVZS20	CRVZS20
Operating pressure/ input pressure [bar]	2.5 ... 8				2 ... 8					
Pressure regulation range/ output pressure [bar]	4.5 ... 10	4.5 ... 16	4.5 ... 10	4.5 ... 16	4 ... 10	4 ... 16	4 ... 10	4 ... 16	4 ... 10	4 ... 16
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:3:4]									
	Compressed air in accordance with ISO 8573-1:2010 [7:4:4] ²⁾									
Note on operating/pilot medium	Operation with lubricated medium not possible									
Ambient temperature [°C]	+5 ... +60									
Storage temperature [°C]	+5 ... +60									
Corrosion resistance class CRC ¹⁾	2									
CE mark (see declaration of conformity)	–		In accordance with EU Pressure Equipment Directive							

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

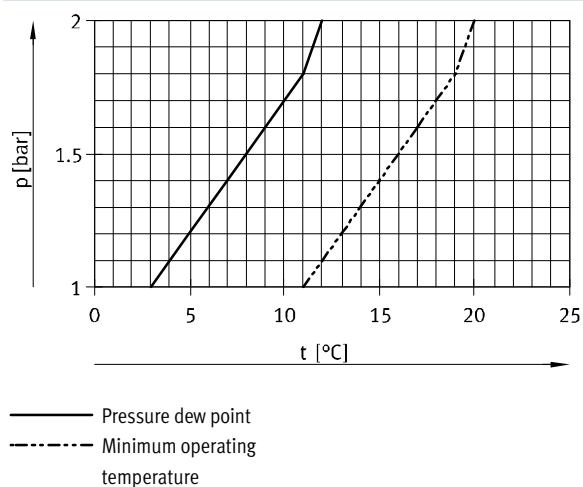
2) A higher pressure dew point of max. +3°C is possible if the following condition is met to prevent condensation forming in the pressure booster. The minimum operating temperature must always be at least 8 K higher than the pressure dew point, see diagram → page 20

Pressure boosters DPA, with air reservoir

Technical data

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Minimum permissible operating temperature t as a function of the pressure dew point and pressure amplification p



Materials

Pressure booster	→ 10
Air reservoir	High-alloy stainless steel
Slotted profile plate	Aluminium
Note on materials	RoHS-compliant

Recommended tubing

Type DPA-	40	63	100
For supply pressure	PAN-10x1,5	PAN-12x1,75	PAN-16x2
For output pressure	PAN-R-8x1,5, PAN-R-10x1,9, PAN-R-12x2,2	PAN-R-16x3	PAN-R-16x3

-  - Note

Flow rates → 11

Pressure boosters DPA, with air reservoir

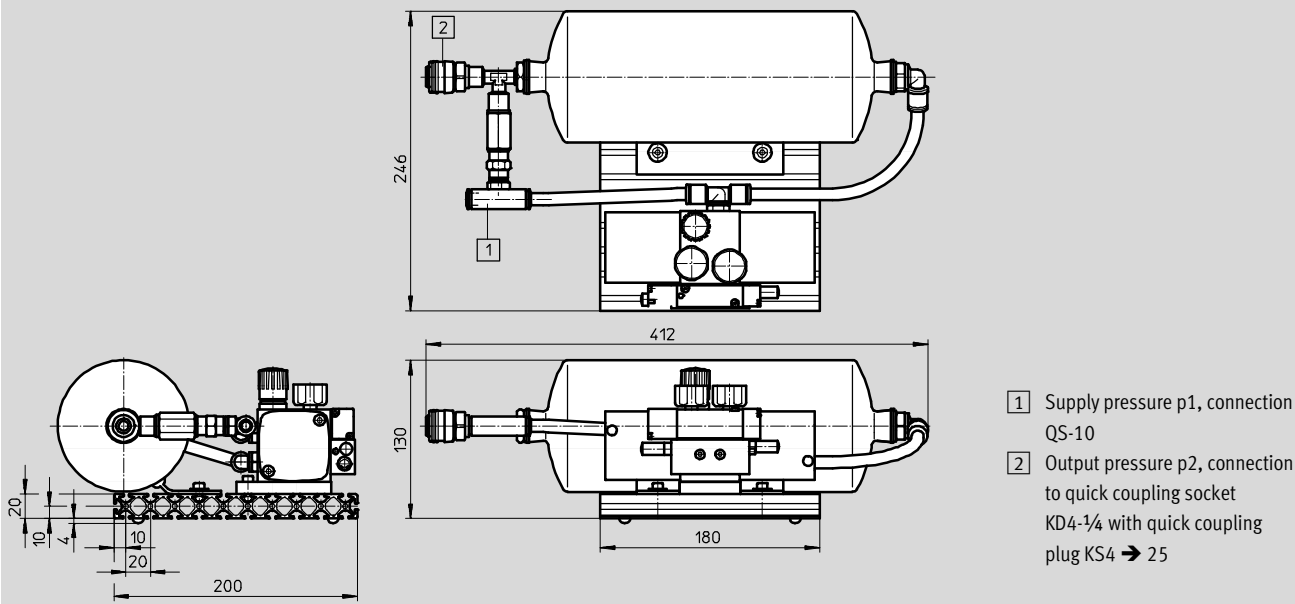
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Technical data

Dimensions – DPA-40

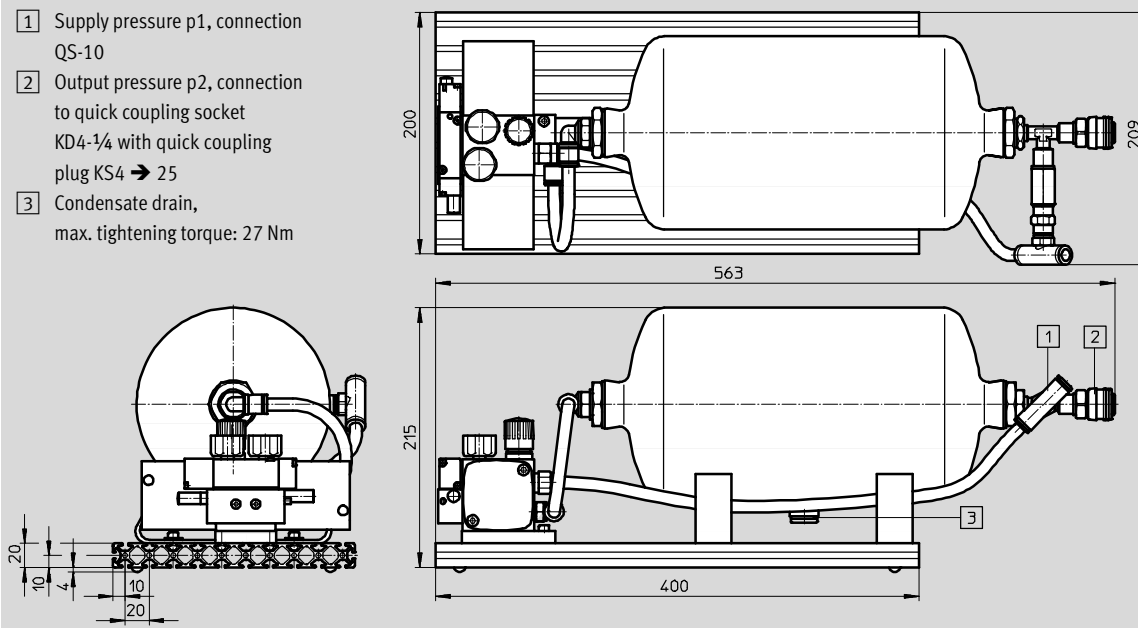
Download CAD data → www.festo.com

With 2 l air reservoir



With 5 l air reservoir

- 1 Supply pressure p1, connection QS-10
- 2 Output pressure p2, connection to quick coupling socket KD4-1/4 with quick coupling plug KS4 → 25
- 3 Condensate drain, max. tightening torque: 27 Nm



Pressure boosters DPA, with air reservoir

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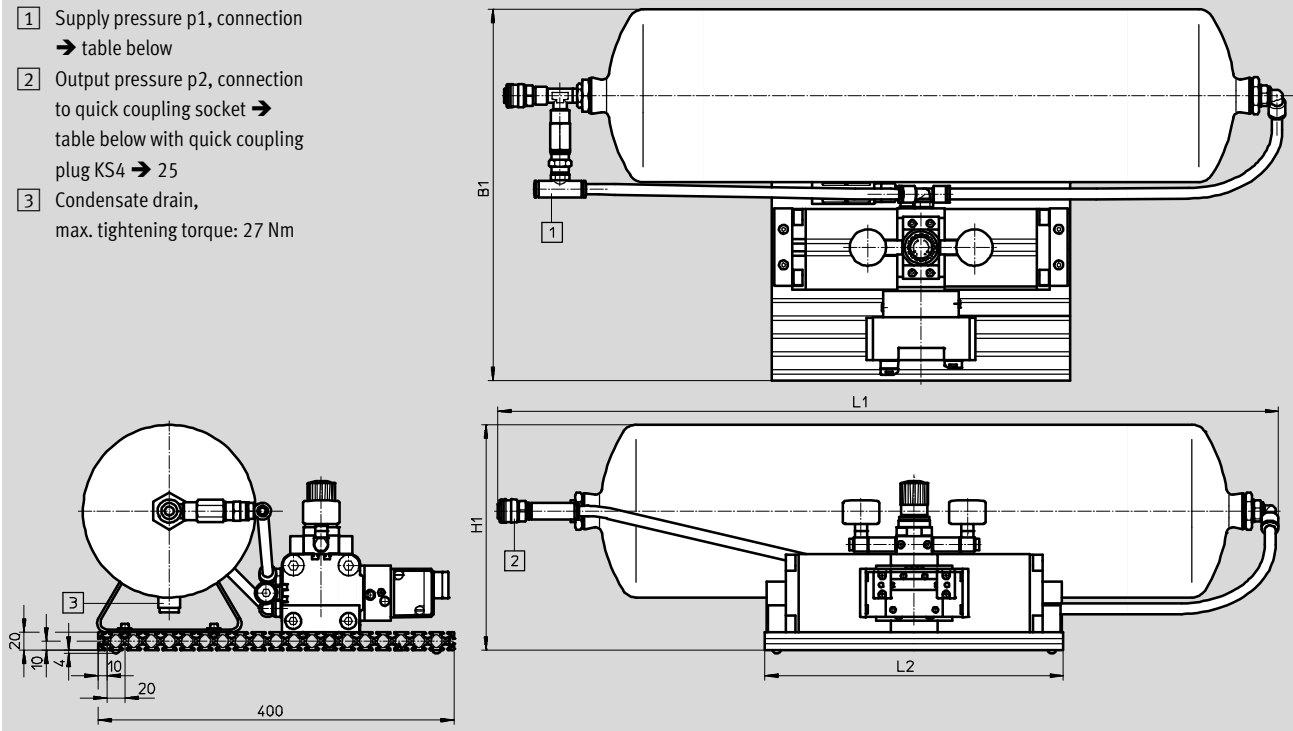
Technical data

Dimensions – DPA-63/100

Download CAD data → www.festo.com

With 10 l or 20 l air reservoir

- 1 Supply pressure p1, connection
→ table below
- 2 Output pressure p2, connection
to quick coupling socket →
table below with quick coupling
plug KS4 → 25
- 3 Condensate drain,
max. tightening torque: 27 Nm



Type	B1	H1	L1	L2	1	2 Quick coupling socket
DPA-63-10-CRVZS10	400	215	695	335	QS-12	KD4-3/8
DPA-63-16-CRVZS10						
DPA-63-10-CRVZS20	417	253	877	335	QS-12	KD4-3/8
DPA-63-16-CRVZS20						
DPA-100-10-CRVZS20	487	253	880	410	QS-16	KD4-1/2
DPA-100-16-CRVZS20						

Ordering data

Piston Ø [mm]	Volume [l]	Output pressure 4 ¹⁾ ... 10 bar		Output pressure 4 ¹⁾ ... 16 bar	
		Part No.	Type	Part No.	Type
40	2	552928	DPA-40-10-CRVZS2	552929	DPA-40-16-CRVZS2
	5	552930	DPA-40-10-CRVZS5	552931	DPA-40-16-CRVZS5
63	10	552932	DPA-63-10-CRVZS10	552933	DPA-63-16-CRVZS10
	20	552934	DPA-63-10-CRVZS20	552935	DPA-63-16-CRVZS20
100	20	552936	DPA-100-10-CRVZS20	552937	DPA-100-16-CRVZS20

1) For DPA-40: 4,5 bar

Ordering data – Wearing parts kits

Type	Product series	Part No.	Type
DPA-40-10/16		707308	DPA-40-10/16
DPA-63-10/16	From SN to VN	397400	DPA-63-10/16
	From VD	738338	DPA-63-10/16
DPA-100-10/16	From SN to VN	397401	DPA-100-10/16
	From VD	738339	DPA-100-10/16

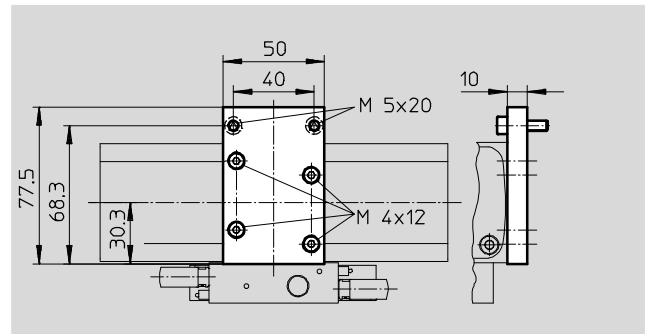
Pressure boosters DPA

FESTO

Accessories

Flange mounting FDPA for DPA-40

Material:
Mounting: anodised aluminium
Screws: galvanised steel
Free of copper and PTFE

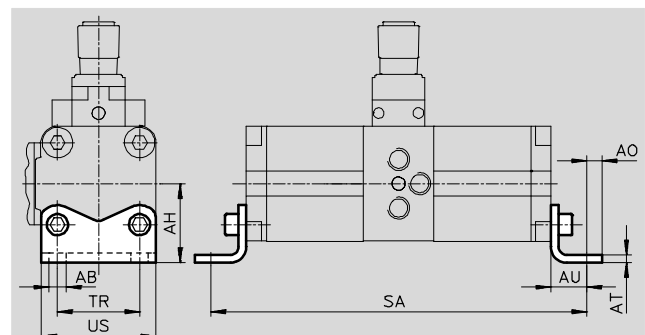


Ordering data				
For type	CRC ¹⁾	Weight [g]	Part No.	Type
DPA-40	2	120	540783	FDPA-40

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Foot mounting HUA for DPA-63/100

Material:
Mounting, screws: galvanised steel
Free of copper and PTFE



Ordering data											
For type	AB Ø	AH	AO	AT	AU	SA	TR	US	CRC ¹⁾	Weight [g]	Part No. Type
DPA-63	11	56.5	11.75	6	27	343	62	85.5	1	581	157315 HUA-63
DPA-100	13.5	81	11.75	8	33	433	103	126.5	1	1,117	157317 HUA-100

- 1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

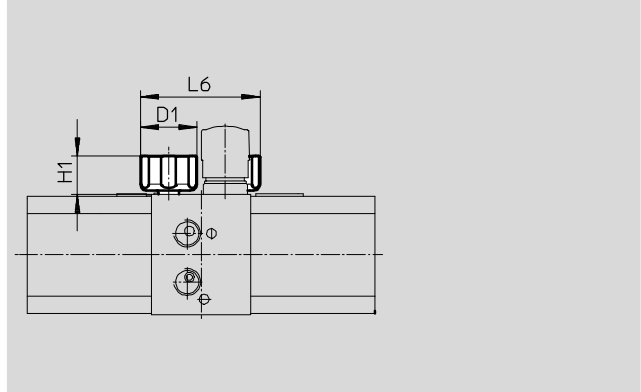
Pressure boosters DPA

Accessories

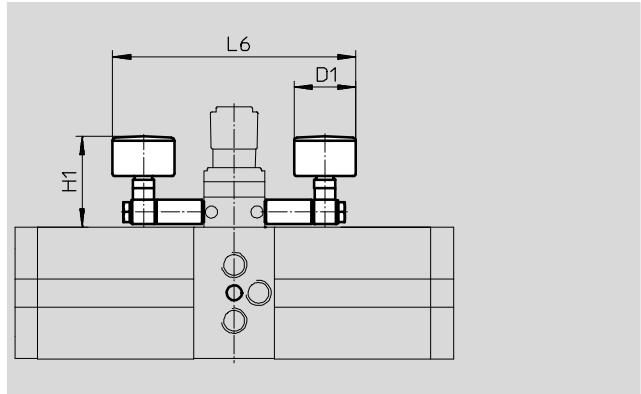
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Pressure gauge set DPA-MA-SET for DPA-40-10/16/D

The pressure gauges generally have to be sealed with PTFE sealing tape.
Single pressure gauge MA-27-...-R1/8:
Technical data → Internet: ma-27



for DPA-63/100-10/16



General technical data			
For type	DPA-40	DPA-63	DPA-100
Pneumatic connection	R1/8	G1/8	G1/4
Nominal size of pressure gauge	27	40	40
Design	Bourdon-tube pressure gauge		
Based on standard	EN 837-1		
Type of mounting	With external thread		
Mounting position	Any		
Ambient temperature [°C]	+5 ... +60		
Measurement accuracy class	4	2.5	2.5
Protection class	IP43		
Weight [g]	16	250	305

Materials		
Nominal size of pressure gauge	27	40
Housing	PA (colour: black)	ABS (colour: black)
Inspection window	PS	PS
Note on materials	RoHS-compliant	

Dimensions and ordering data						
For type	D1 Ø	H1	L6	Operating pressure [bar]	Part No.	Type
DPA-40	28	19	59.2	10	540781	DPA-40-10-MA-SET
				16	540782	DPA-40-16-MA-SET
DPA-63	39	65	159	10	526096	DPA-63-10-MA-SET
				16	526097	DPA-63-16-MA-SET
DPA-100	39	75	173	10	526098	DPA-100-10-MA-SET
		82.5		16	526099	DPA-100-16-MA-SET

Pressure boosters DPA

Accessories

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Pressure gauge MA, to EN 837-1 for DPA-63/100-D

Material:

Housing: acrylic butadiene styrene

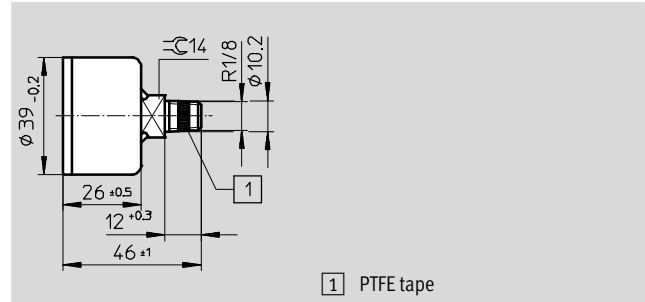
(colour: black)

Inspection window: polystyrene

Threaded plug/Materials in contact

with the medium: brass

Conforms to RoHS



General technical data	
Nominal size	40
Pneumatic connection	R1/8
Operating medium	Neutral liquids
	Neutral gases
	Not permitted: Oxygen
	Not permitted: Acetylene
Design	Bourdon-tube pressure gauge
Based on standard	EN 837-1
Type of mounting	Inline installation
Connection position	Centred, rear side
Ambient temperature [°C]	-20 ... +60
Temperature of medium [°C]	-20 ... +60
Measurement accuracy class	2.5
Continuous load factor	0.75
Intermittent load factor	0.66
Protection class	IP43
Weight [g]	60

Ordering data					
For type	Pressure control	Operating pressure	Indicating range		Part No. Type
		[bar]	[bar]	[psi]	
DPA-63/100-D	For supply pressure	0 ... 16	0 ... 16	0 ... 232	529046 MA-40-16-1/8-EN-DPA
	For output pressure	0 ... 25	0 ... 25	0 ... 360	526167 MA-40-25-1/8-EN

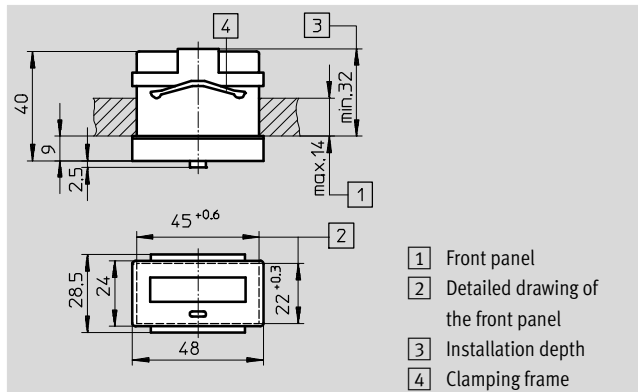
Pressure boosters DPA

Accessories

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Adding counter CCES for DPA-63/100-...-A

Material:
Housing: Polycarbonate
Conforms to RoHS



Ordering data				Technical data → Internet: cces	
For type	Display	Power supply	Weight [g]	Part No.	Type
DPA-63/100-...-A	8-digit	Lithium battery (nominal value retention 7 years)	30	549403	CCES-P-C8-E

Ordering data – Proximity sensor SME/SMT for adding counter CCES					Technical data → Internet: sme-8m, smt-8m	
	Switching element function	Switch output	Electrical connection	Cable length [m]	Part No.	Type
	N/O contact	Contacting, bipolar	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2,5-OE
		PNP	Cable, 3-wire	2.5	543867	SMT-8M-PS-24V-K-2,5-OE

Note

Please note the following points:

- The abovementioned proximity sensor SME can be connected to the adding counter as a 2-wire switch without additional power supply.
- If using other proximity sensors, an additional power supply is needed

and the clock pulse input of the adding counter must be reprogrammed from NPN to PNP.

- Screened cables must be used for cables longer than 3 m.
- The maximum permissible cable length is 30 m.

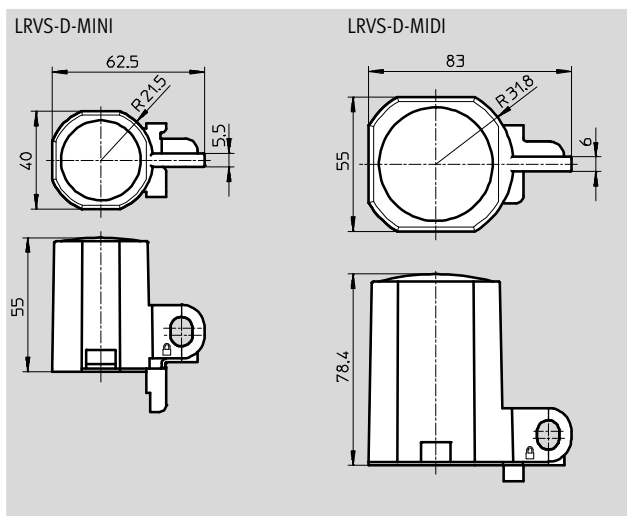
Pressure boosters DPA

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Accessories

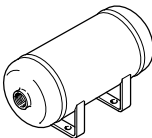
Regulator lock LRVS for DPA-63/100

Material:
Cap: polyacetal
Lock plate: steel
Knurled nut: aluminium
Free of copper and PTFE



Ordering data			
For type	Weight [g]	Part No.	Type
DPA-63	40	193781	LRVS-D-MINI
DPA-100	60	193782	LRVS-D-MIDI

Ordering data			
	Pneumatic connection	Part No.	Type
Silencer UC			
	M7	161418	UC-M7
Silencer U-...-B			
	G3/8	6843	U-3/8-B
	G1/2	6844	U-1/2-B
Silencer AMTE-M-LH-M3			
	M3	1231120	AMTE-M-LH-M3
Quick coupling plug KS4			
	Male thread		
	G1/4	2154	KS4-1/4-A
	G3/8	2155	KS4-3/8-A
	G1/2	531676	KS4-1/2-A
	Female thread		
	G1/4	531678	KS4-1/4-I
G3/8	531679	KS4-3/8-I	
G1/2	531680	KS4-1/2-I	
Padlock LRVS-D			
	-	193786	LRVS-D

	Volume [l]	Part No.	Type	PU1) [m]
Compressed air reservoir		Technical data → Internet: vzs		
	Stainless steel			
	0.1	160233	CRVZS-0.1	
	0.4	160234	CRVZS-0.4	
	0.75	160235	CRVZS-0.75	
	2	160236	CRVZS-2	
	5	192159	CRVZS-5	
	10	160237	CRVZS-10	
	20	534845	CRVZS-20	
	Standard			
	20	192161	VZS-20-B	
Plastic tubing PAN for supply pressure				
	-	553909	PAN-10x1,5-BL	50
		553910	PAN-12x1,75-BL	50
		553911	PAN-16x2-BL	50
Plastic tubing PAN-R for output pressure		Technical data → Internet: pan-r		
	-	541676	PAN-R-8x1,5-SI	50
		541677	PAN-R-10x1,9-SI	50
		541678	PAN-R-12x2,2-SI	50
		541679	PAN-R-16x3-SI	50

1) Packaging unit

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