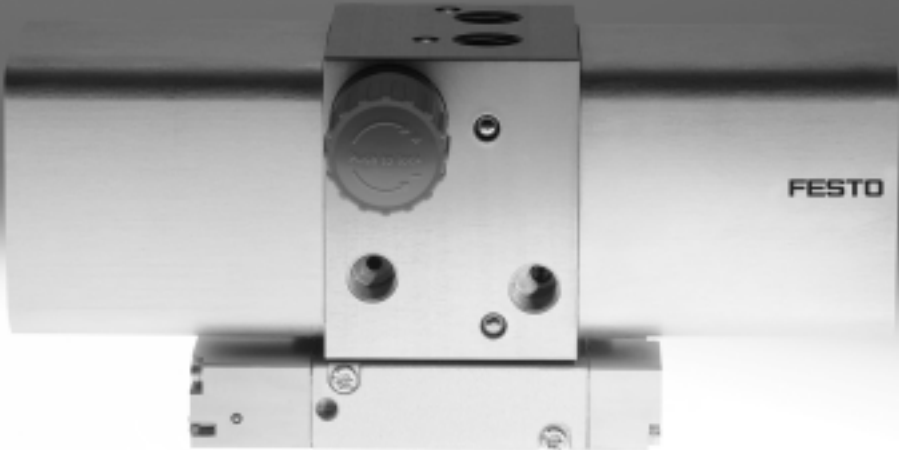


Pressure boosters DPA



# Pressure boosters DPA

Key features

## 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 to 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.

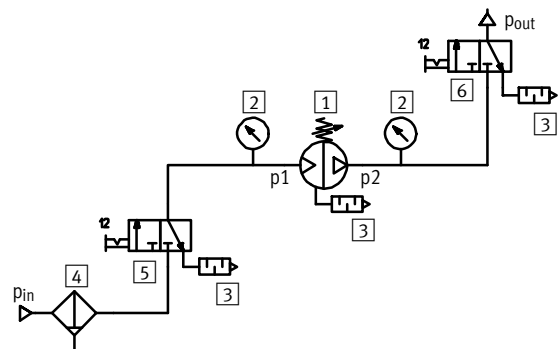
## Connection to the compressed air network

### 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

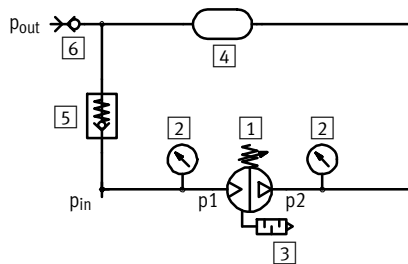
# Pressure boosters DPA

Key features

## Installation with air reservoir

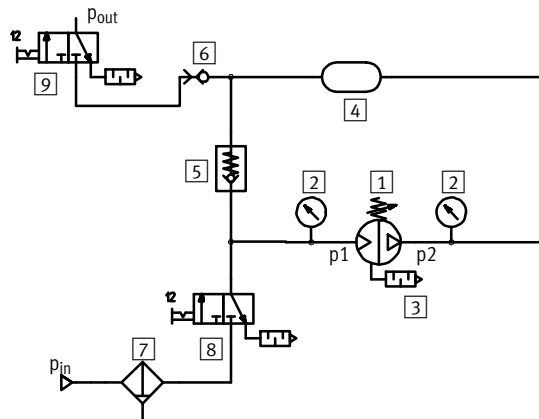
An air reservoir (e.g. CRVZS) should always be used on the output pressure side to compensate for pressure fluctuations. The air reservoir evens out the pulsation of the pressure booster. An effective way of filling the air reservoir with the supply pressure  $p_1$  is via a connecting cable. The pressure 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 (→ 17).



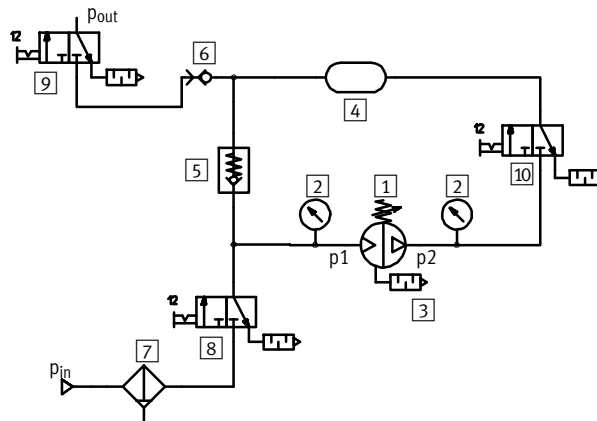
## Circuitry with 2 on-off valves

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.

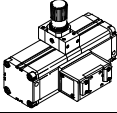
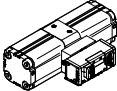
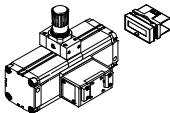
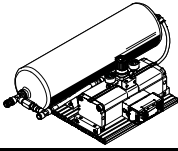


- 1 Pressure booster
- 2 Pressure gauge
- 3 Silencer
- 4 Air reservoir
- 5 Non-return valve
- 6 Quick coupling socket
- 7 Filter
- 8 3/2-way on-off valve on the supply pressure side
- 9 3/2-way on-off valve on the output pressure side
- 10 3/2-way on-off valve for venting the air reservoir

# Pressure boosters DPA

Product range overview

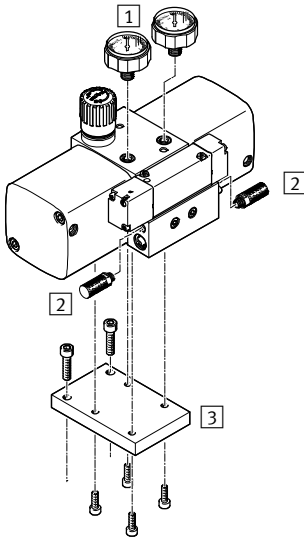


Function	Version	Type	Piston $\varnothing$ [mm]	→ Page/Internet
Pressure booster	Standard			
		DPA	40, 63, 100	5
	Without pressure regulator, double supply pressure			
		DPA-...-D	40, 63, 100	5
Pressure booster/ air reservoir combination	With sensing option			
		DPA-...-A	63, 100	5
		DPA-...-CRVZS	40, 63, 100	17

# Pressure boosters DPA

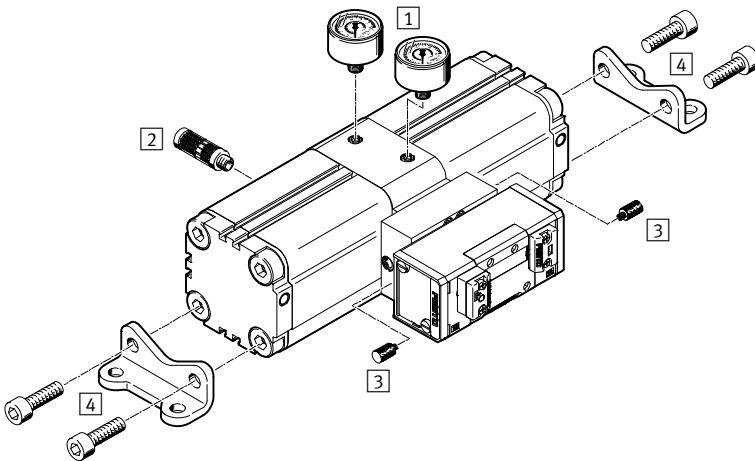
Peripherals overview

## 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	24
2	Silencer UC	For noise reduction at the exhaust port	27
3	Flange mounting FDPA	For mounting the pressure booster on other machine parts	23

## DPA-63/100-D



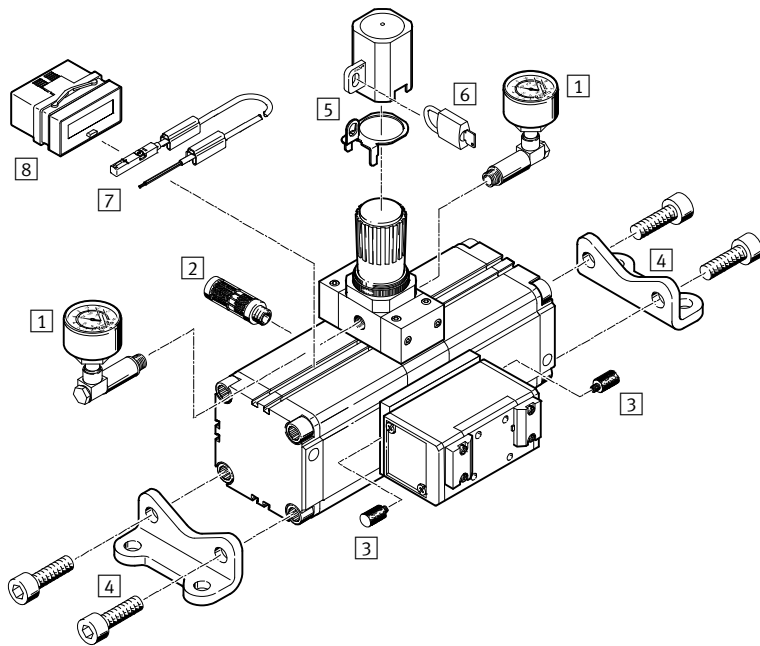
Mounting attachments and accessories		Brief description	→ Page/Internet
1	Pressure gauge MA	For monitoring the supply and output pressure	25
2	Silencer U...-B	For noise reduction at the exhaust port	27
3	Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	27
4	Foot mounting HUA	For mounting the pressure booster on other machine parts	23

# Pressure boosters DPA

Peripherals overview

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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	24
2	Silencer U-...-B	For noise reduction at the exhaust port	27
3	Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	27
4	Foot mounting HUA	For mounting the pressure booster on other machine parts	23
5	Regulator lock LRVS-D with lock plate	Prevents unintentional, and in conjunction with an LRVS padlock, unauthorised adjustment of the rotary knob	27
6	Padlock LRVS-D	Accessory for regulator lock LRVS-D	27
7	Proximity sensor SME-8M/SMT-8M	For registering individual strokes of the drive piston (only DPA-...-A)	26
8	Adding counter CCES	For counting the switching cycles (only DPA-...-A)	26

# Pressure boosters DPA

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)**

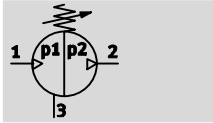
	No sensing possibility
A	With sensing possibility

# Pressure boosters DPA

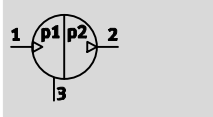
Technical data




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Function  
with pressure regulator

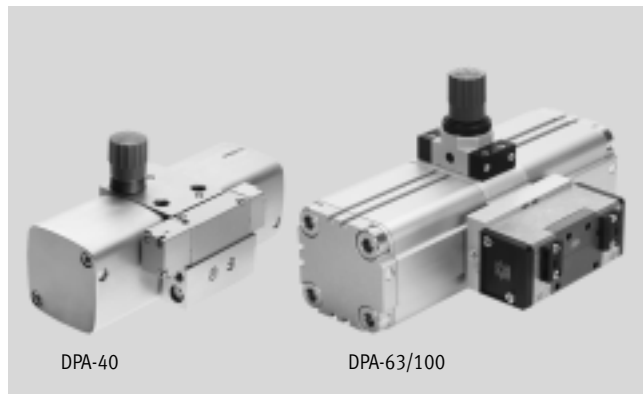


without pressure regulator




-  - Temperature range  
+5 ... +60 °C
-  - Pressure ratio  
1:2
-  - [www.festo.com](http://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	G $\frac{1}{4}$		G $\frac{3}{8}$		G $\frac{1}{2}$		G $\frac{3}{8}$		G $\frac{1}{2}$	
Pneumatic connection 3	M7		G $\frac{3}{8}$		G $\frac{1}{2}$		G $\frac{3}{8}$		G $\frac{1}{2}$	
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	G $\frac{1}{8}$ prepared		G $\frac{1}{8}$ prepared		G $\frac{1}{4}$ prepared		G $\frac{1}{8}$ prepared		G $\frac{1}{4}$ 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	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$
Pneumatic connection 3	M7	G $\frac{3}{8}$	G $\frac{1}{2}$
Constructional design	Twin-piston pressure booster		
Type of mounting	Via female thread		
Mounting position	Any		
Pressure indication	G $\frac{1}{8}$ prepared		

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



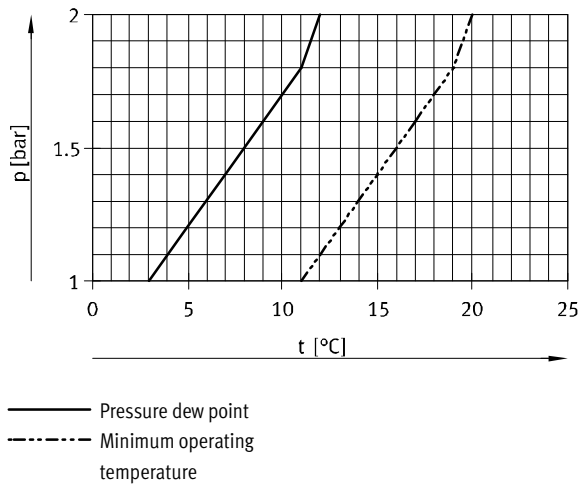
# Pressure boosters DPA

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 <sup>1)</sup>	4.5 ... 16 <sup>1)</sup>	4 ... 10 <sup>1)</sup>	4 ... 16 <sup>1)</sup>	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] <sup>3)</sup>					
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 <sup>2)</sup>	2					

- 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
- 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.
- 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 $p$

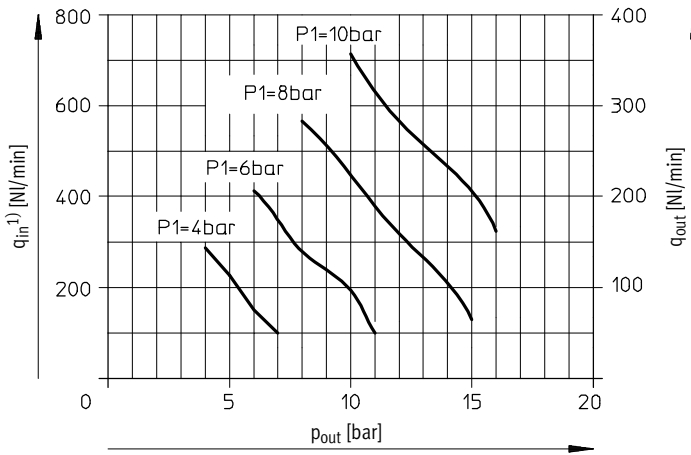




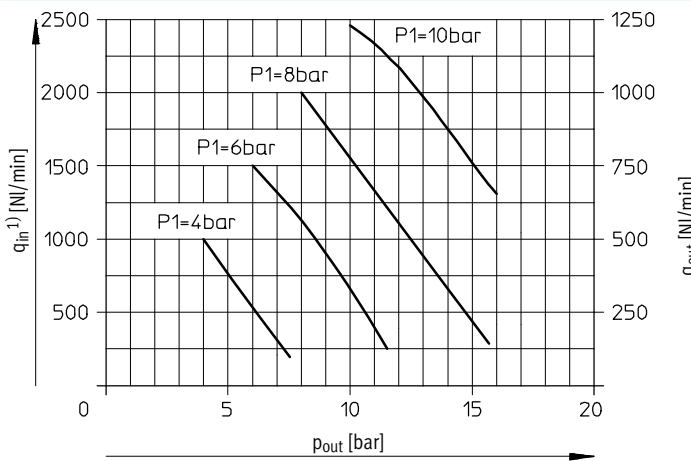
# Pressure boosters DPA

Technical data

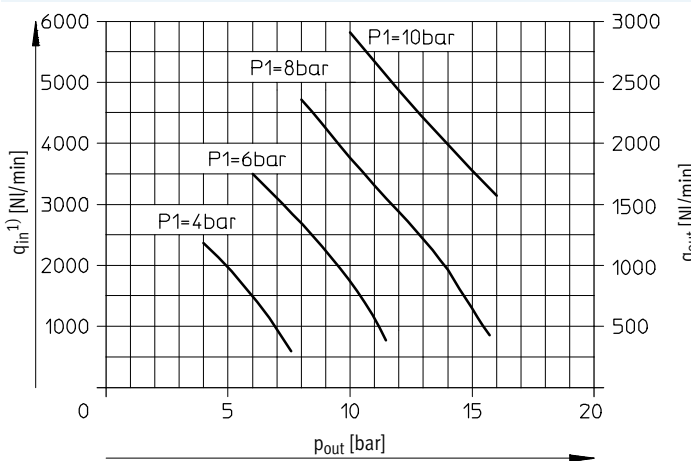
Flow rate at input  $q_{in}^{(1)}$  and flow rate at output  $q_{out}$  as a function of output pressure  $p_{out}$   
DPA-40



DPA-63



DPA-100



1) Theoretical values without switching losses and friction.

# Pressure boosters DPA

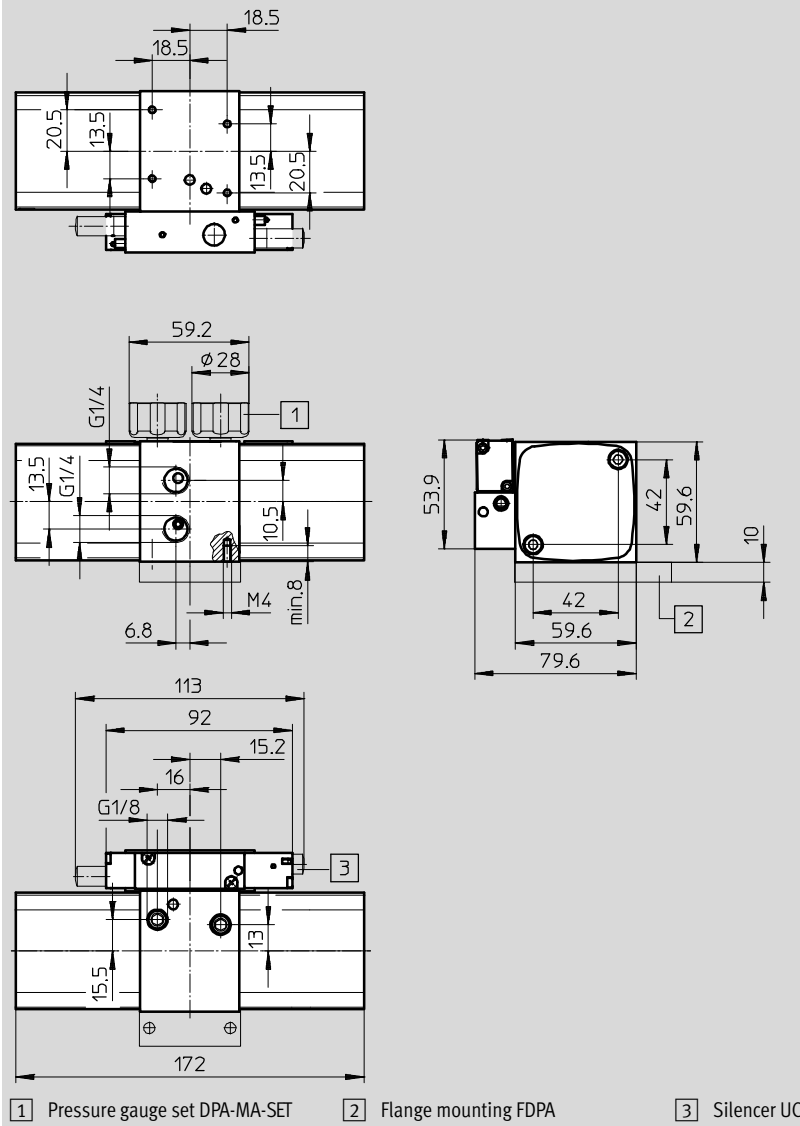
Technical data

FESTO

## Dimensions – DPA without pressure regulator

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

DPA-40-D



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

# Pressure boosters DPA

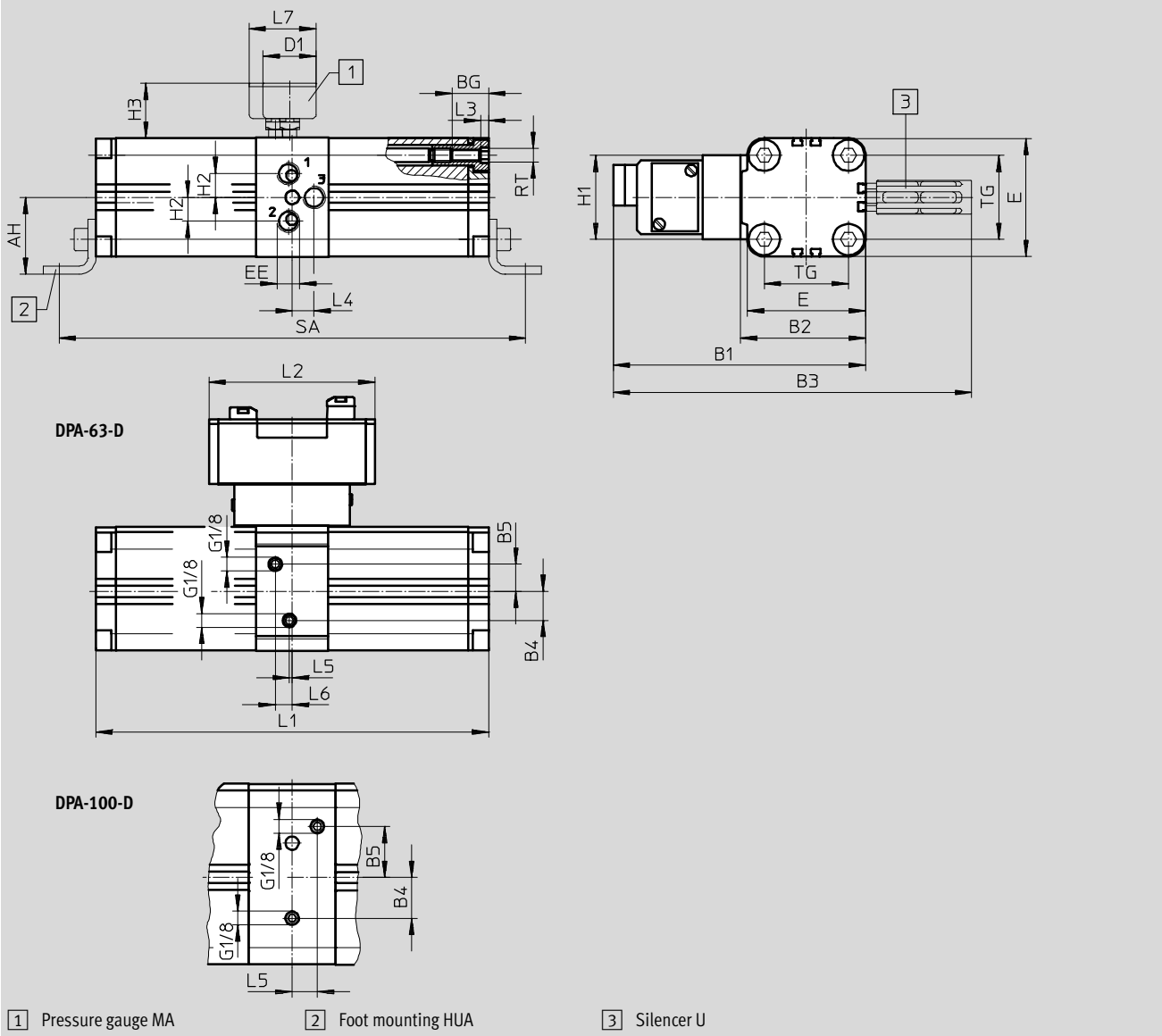
Technical data

FESTO

## Dimensions – DPA without pressure regulator

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

DPA-63/100-D



Type	AH	B1	B2	B3	B4	B5	BG	D1 ∅	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

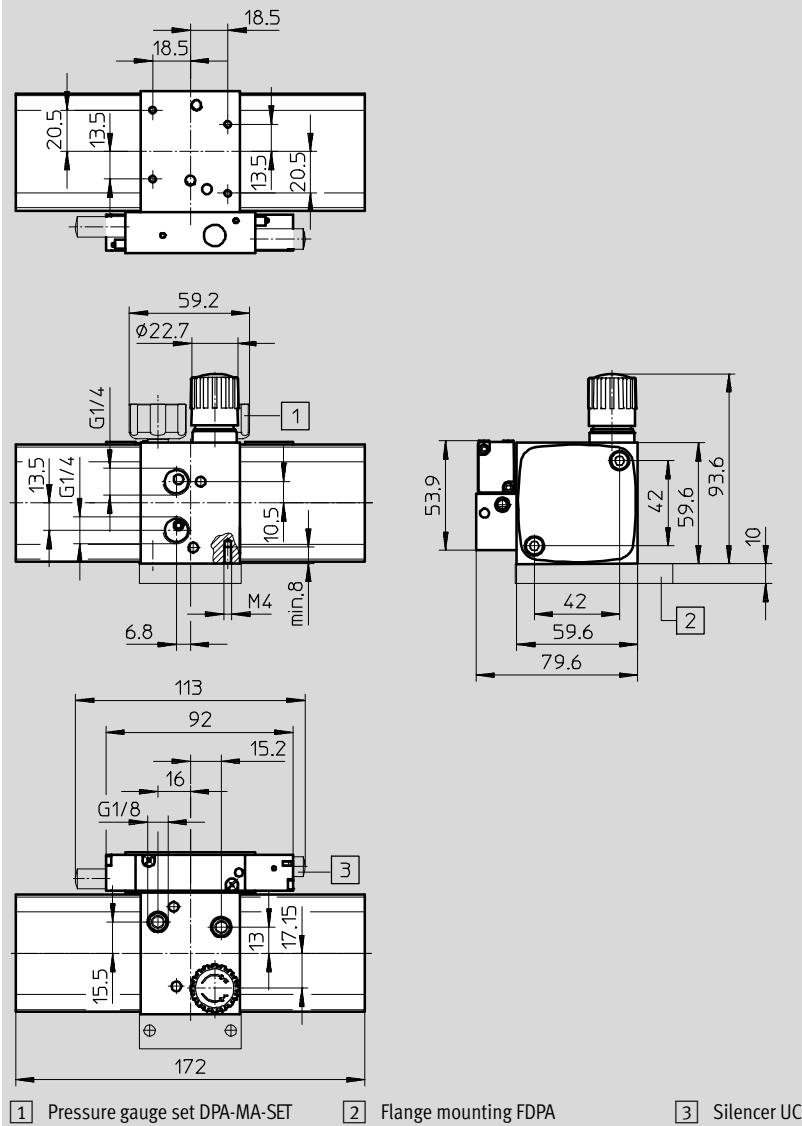
Technical data

FESTO

## Dimensions – DPA with pressure regulator

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

DPA-40-10/16



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

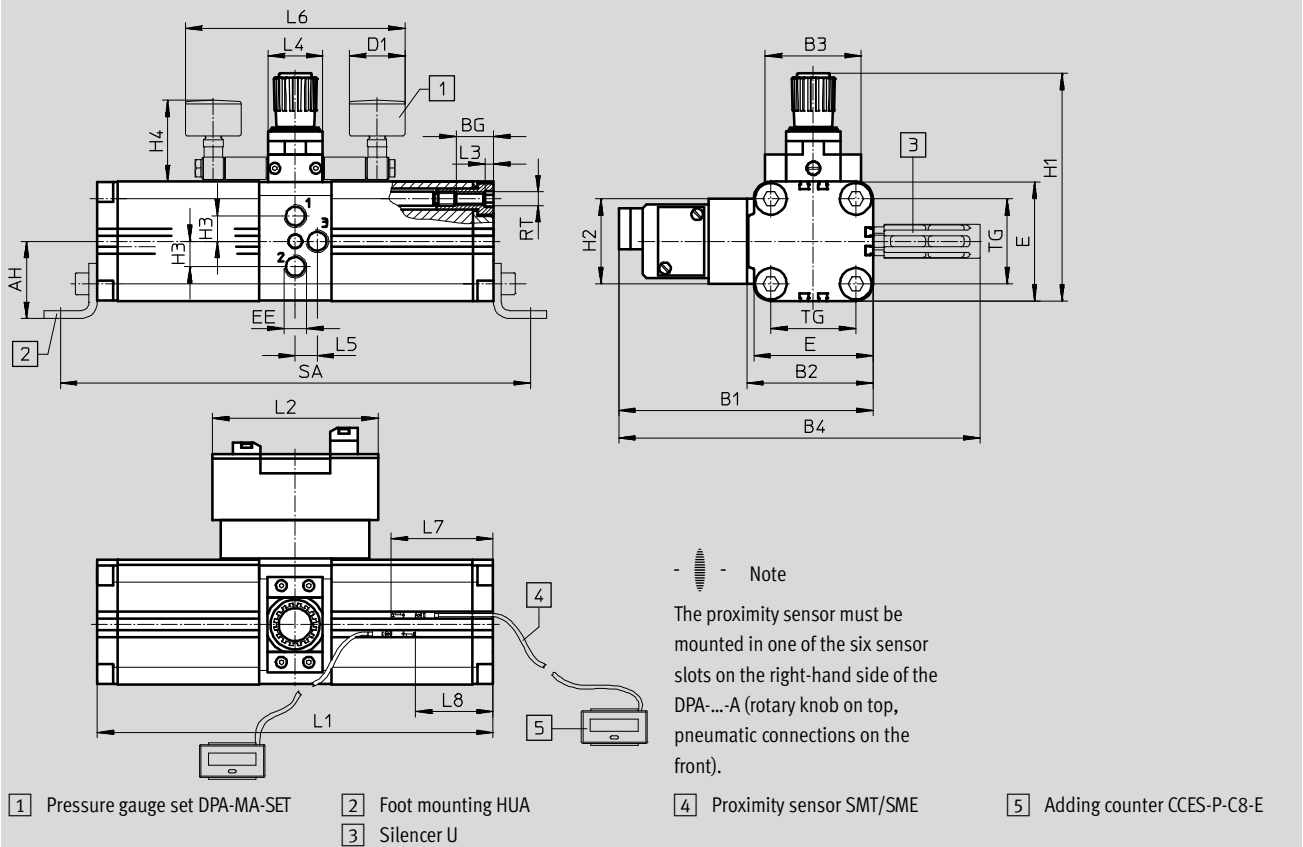
# Pressure boosters DPA

Technical data

## Dimensions – DPA with pressure regulator

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

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



Type	AH	B1	B2	B3	B4	BG	D1	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 $\varnothing$ [mm]	Output pressure 4 <sup>1)</sup> ... 10 bar		Output pressure 4 <sup>1)</sup> ... 16 bar		Double supply pressure	
	Part No.	Type	Part No.	Type	Part No.	Type
No sensing option						
40	<b>537273</b>	<b>DPA-40-10</b>	<b>537274</b>	<b>DPA-40-16</b>	<b>549396</b>	<b>DPA-40-D</b>
63	<b>184518</b>	<b>DPA-63-10</b>	<b>193392</b>	<b>DPA-63-16</b>	<b>549397</b>	<b>DPA-63-D</b>
100	<b>184519</b>	<b>DPA-100-10</b>	<b>188399</b>	<b>DPA-100-16</b>	<b>549398</b>	<b>DPA-100-D</b>
With sensing option						
63	<b>549399</b>	<b>DPA-63-10-A</b>	<b>549400</b>	<b>DPA-63-16-A</b>		–
100	<b>549401</b>	<b>DPA-100-10-A</b>	<b>549402</b>	<b>DPA-100-16-A</b>		–

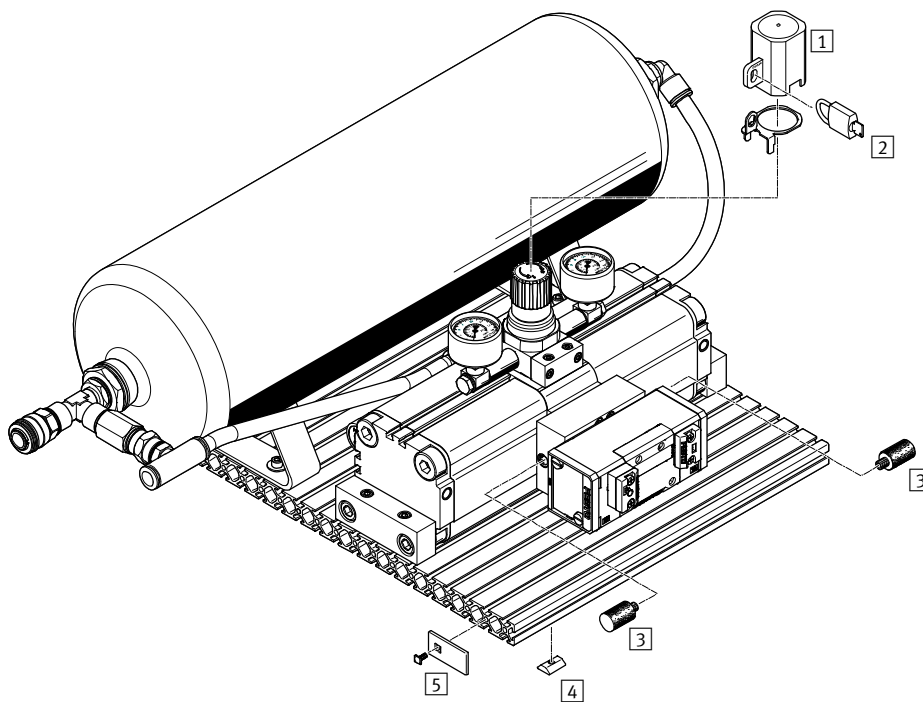
1) For DPA-40: 4,5 bar

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



# Pressure boosters DPA, with air reservoir

Peripherals overview



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	27
2	Padlock (DPA-63/100 only) LRVS-D	Accessory for regulator lock LRVS-D	27
3	Silencer (DPA-63/100 only) AMTE-M-LH-M3	For noise reduction at the valve exhaust port	27
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	On request
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	On request

# Pressure boosters DPA, with air reservoir

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
-------	-----------------

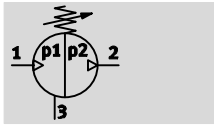
### Air reservoir volume [l]

DPA-40	
2	2
5	5
DPA-63/100	
10	10 (DPA-63 only)
20	20

# Pressure boosters DPA, with air reservoir

Technical data

Function  
Pressure booster  
with pressure regulator



- - Temperature range  
+5 ... +60 °C
- - Pressure ratio  
1:2
- - [www.festo.com](http://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] <sup>2)</sup>										
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 <sup>1)</sup>	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

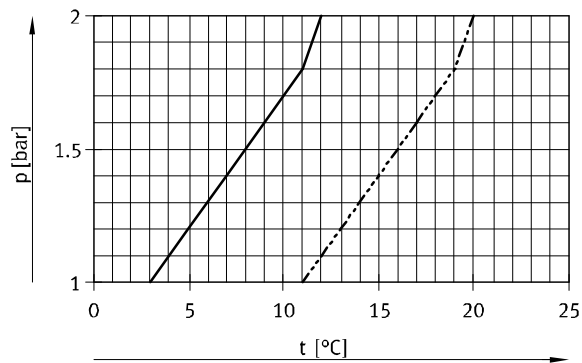
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

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


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



— Pressure dew point  
 - - - Minimum operating temperature

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

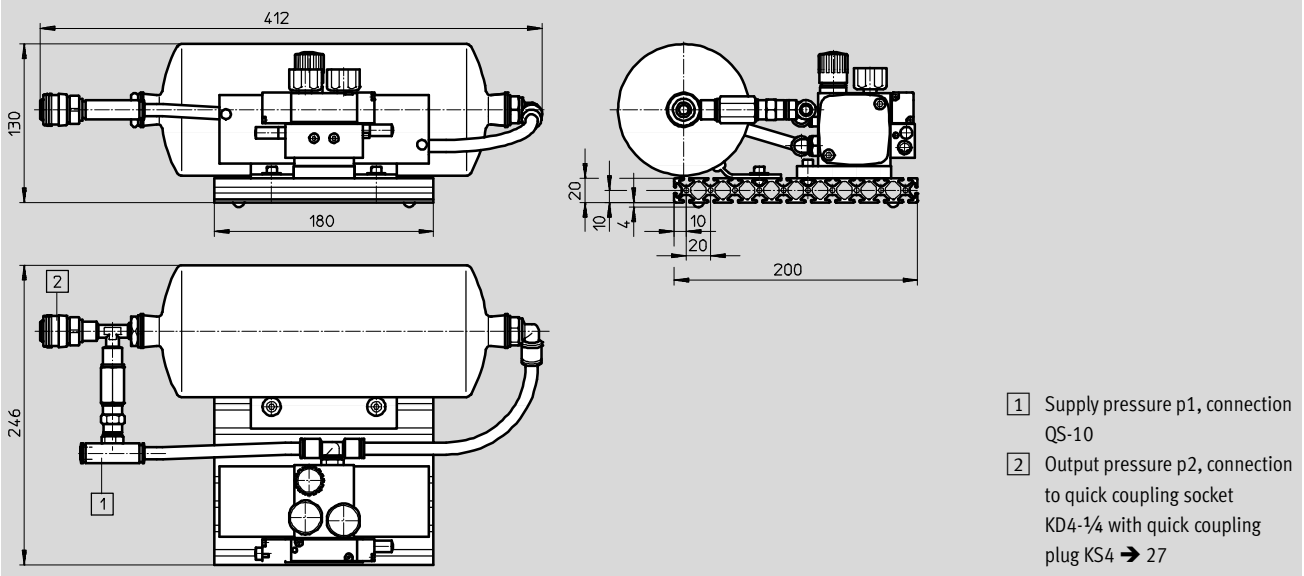
Technical data

FESTO

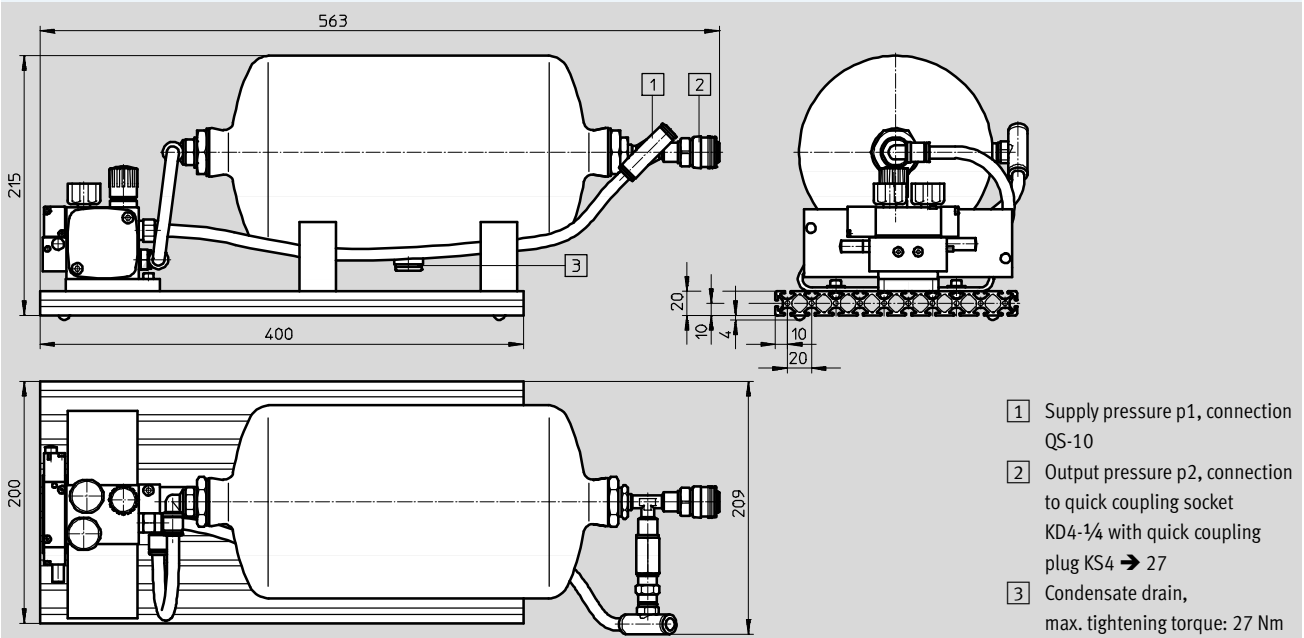
## Dimensions – DPA-40

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

With 2 l air reservoir



With 5 l air reservoir



# Pressure boosters DPA, with air reservoir

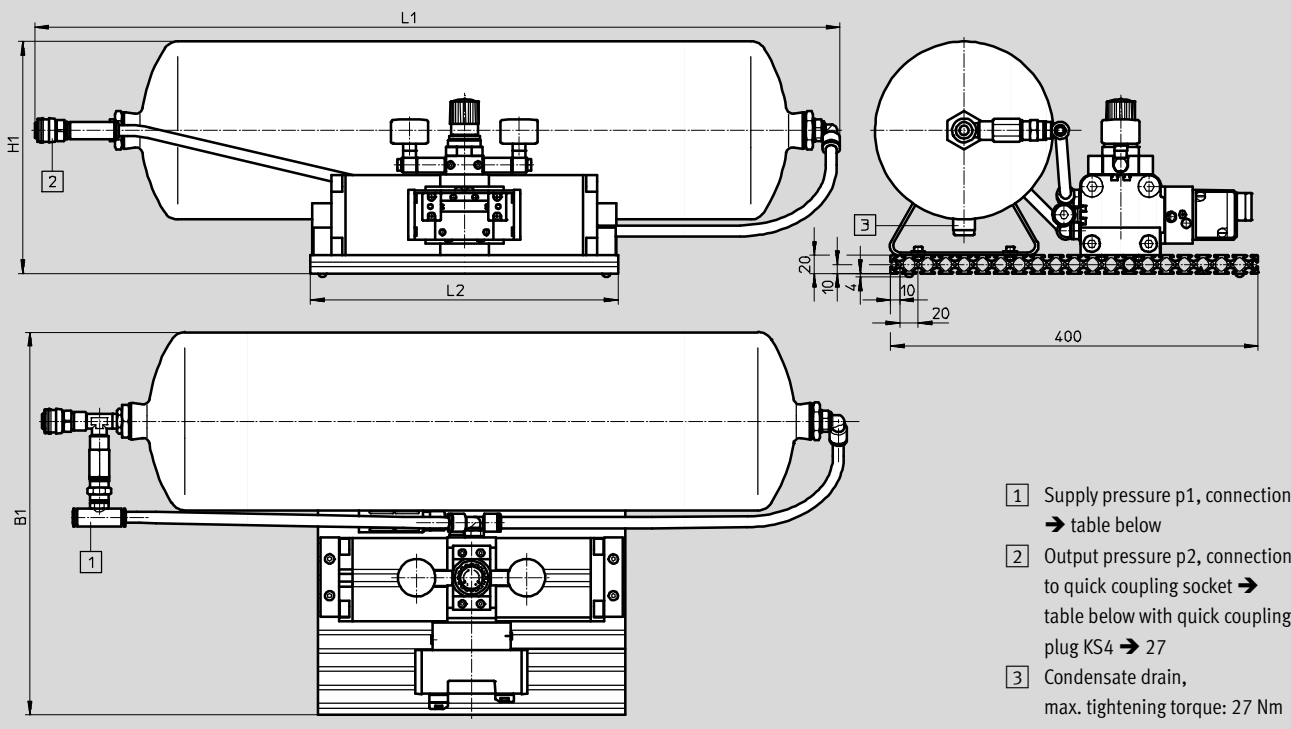
Technical data

FESTO

## Dimensions – DPA-63/100

With 10 l or 20 l air reservoir

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



- 1 Supply pressure p1, connection → table below
- 2 Output pressure p2, connection to quick coupling socket → table below with quick coupling plug KS4 → 27
- 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 <sup>1)</sup> ... 10 bar		Output pressure 4 <sup>1)</sup> ... 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

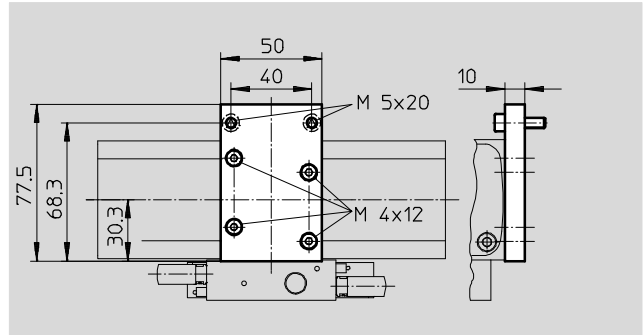
Type	Product series	Part No.	Type
DPA-40-10/16		707308	DPA-40-10/16
DPA-63-10/16	From SN to VN	397400	DPA-63-10/16
	From VD	738338	DPA-63-10/16
DPA-100-10/16	From SN to VN	397401	DPA-100-10/16
	From VD	738339	DPA-100-10/16

# Pressure boosters DPA

Accessories

## Flange mounting FDPA for DPA-40

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

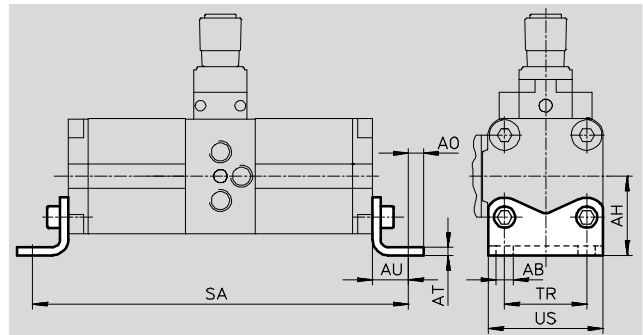


Ordering data											
For type	CRC <sup>1)</sup>	Weight [g]	Part No.	Type							
DPA-40	2	120	540783	FDPA-40							

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 <sup>1)</sup>	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).

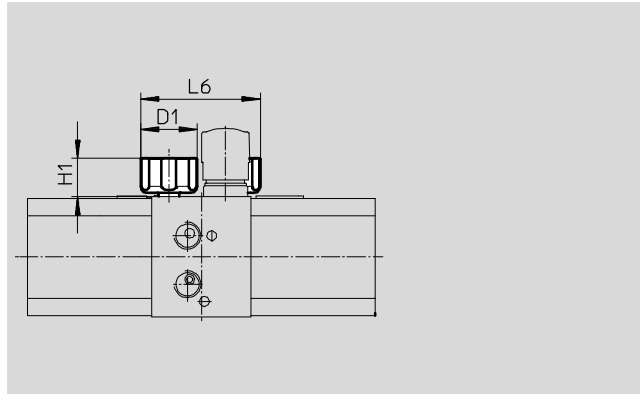
# Pressure boosters DPA

Accessories

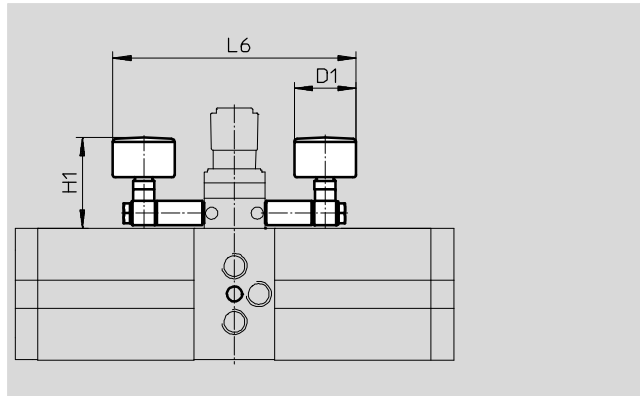
FESTO

## 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 ∅	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

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

Material:

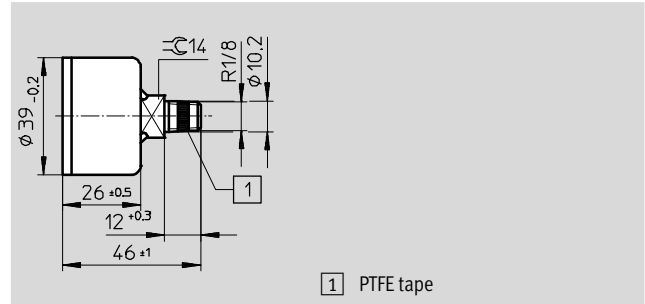
Housing: acrylic butadiene styrene

(colour: black)

Inspection window: polystyrene

Threaded plug/Materials in contact with the medium: brass

Conforms to RoHS



1 PTFE tape

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

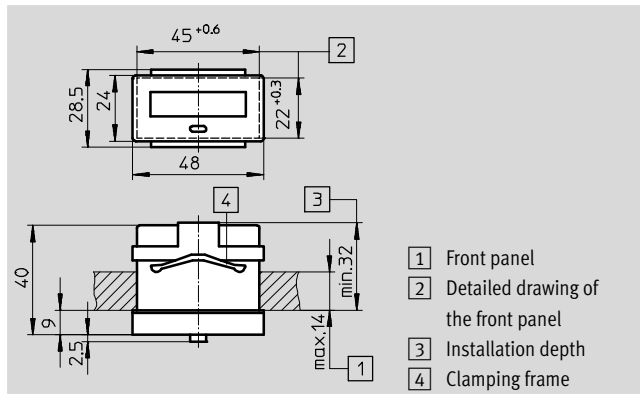
# Pressure boosters DPA

Accessories



## 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.

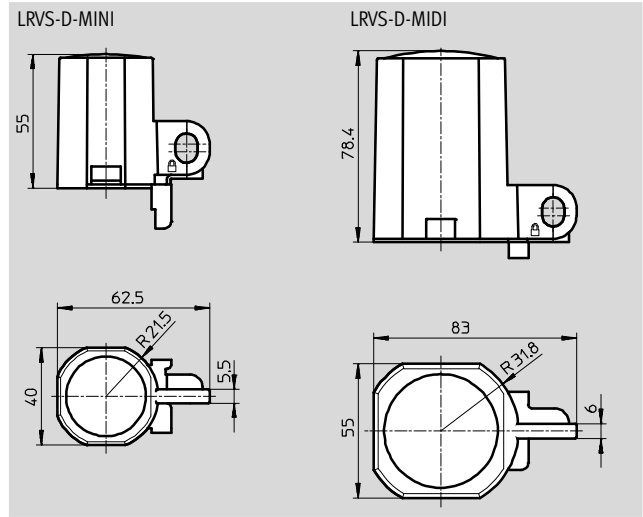
# Pressure boosters DPA

Accessories


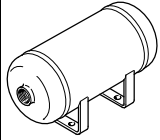






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## Regulator lock LRVS for DPA-63/100

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				Ordering data				
	Pneumatic connection	Part No.	Type		Volume [l]	Part No.	Type	PU <sup>1)</sup> [m]
<b>Silencer UC</b> <span style="float:right">Technical data → Internet: u</span> 				<b>Compressed air reservoir</b> <span style="float:right">Technical data → Internet: vzs</span> 				
	M7	161418	UC-M7	Stainless steel				
<b>Silencer U-...-B</b> <span style="float:right">Technical data → Internet: u</span> 				0.1	160233	CRVZS-0.1		
	G <sup>3</sup> / <sub>8</sub>	6843	U- <sup>3</sup> / <sub>8</sub> -B	0.4	160234	CRVZS-0.4		
	G <sup>1</sup> / <sub>2</sub>	6844	U- <sup>1</sup> / <sub>2</sub> -B	0.75	160235	CRVZS-0.75		
<b>Silencer AMTE-M-LH-M3</b> <span style="float:right">Technical data → Internet: amte</span> 				2	160236	CRVZS-2		
	M3	1231120	AMTE-M-LH-M3	5	192159	CRVZS-5		
<b>Quick coupling plug KS4</b> <span style="float:right">Technical data → Internet: ks4</span> 				10	160237	CRVZS-10		
	Male thread			20	534845	CRVZS-20		
	G <sup>1</sup> / <sub>4</sub>	2154	KS4- <sup>1</sup> / <sub>4</sub> -A	Standard				
	G <sup>3</sup> / <sub>8</sub>	2155	KS4- <sup>3</sup> / <sub>8</sub> -A	20	192161	VZS-20-B		
	G <sup>1</sup> / <sub>2</sub>	531676	KS4- <sup>1</sup> / <sub>2</sub> -A	<b>Plastic tubing PAN for supply pressure</b> <span style="float:right">Technical data → Internet: pan</span> 				
	Female thread					553909	PAN-10x1,5-BL	50
	G <sup>1</sup> / <sub>4</sub>	531678	KS4- <sup>1</sup> / <sub>4</sub> -I			553910	PAN-12x1,75-BL	50
	G <sup>3</sup> / <sub>8</sub>	531679	KS4- <sup>3</sup> / <sub>8</sub> -I			553911	PAN-16x2-BL	50
	G <sup>1</sup> / <sub>2</sub>	531680	KS4- <sup>1</sup> / <sub>2</sub> -I	<b>Plastic tubing PAN-R for output pressure</b> <span style="float:right">Technical data → Internet: pan-r</span> 				
<b>Padlock LRVS-D</b> 						541676	PAN-R-8x1,5-SI	50
	-	193786	LRVS-D			541677	PAN-R-10x1,9-SI	50
						541678	PAN-R-12x2,2-SI	50
						541679	PAN-R-16x3-SI	50

1) Packaging unit