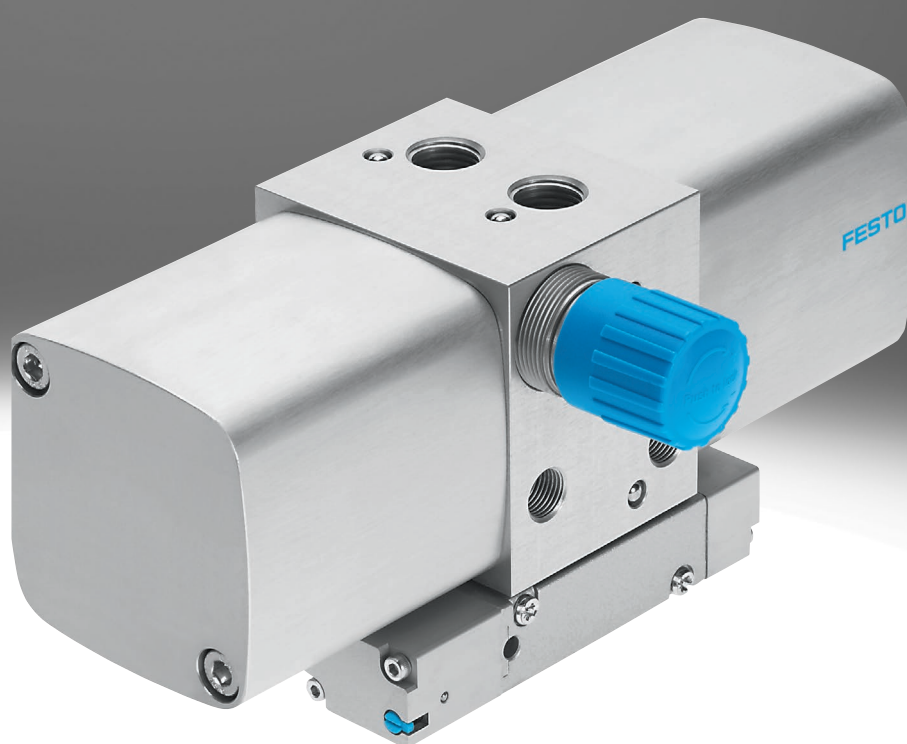


Pressure booster DPA

FESTO



Key features

Function

The pressure booster is a twin-piston pressure intensifier used only for compressing air. When the DPA is pressurised with compressed air, integrated check valves automatically ensure the pressure on the secondary side is built up. The output pressure p_2 can increase to up to twice the value of the input 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 double the input pressure. The air supply to both drive pistons is controlled by a pneumatic directional control valve that reverses automatically when the stroke end position has been reached.

The pressure booster starts up automatically when the input pressure is applied and the desired output pressure has not yet been reached. When the set output pressure is reached, the pressure booster stops operating to save energy, but restarts automatically when the output pressure drops again.

The version of the DPA with proximity sensing provides the option of sensing individual strokes of the drive piston with the help of an external sensor and adding counter.

Note

Pressure boosters are used for the occasional drawing-off of pressurised compressed air. Pressure boosters are not suitable as replacement compressors, as wear on the seals and drive piston increases significantly when used continuously without breaks.

Note

The pressure regulator is supplied with no tension on the regulator spring (DPA-...-10/16 only). After applying the input pressure, the regulator spring is pretensioned by turning the regulator knob until the required output pressure p_2 is reached. A pressure gauge is strongly recommended for monitoring the output pressure p_2 . The regulator setting of the DPA-63/100 can be secured against unauthorised adjustment using the regulator lock LRVS.

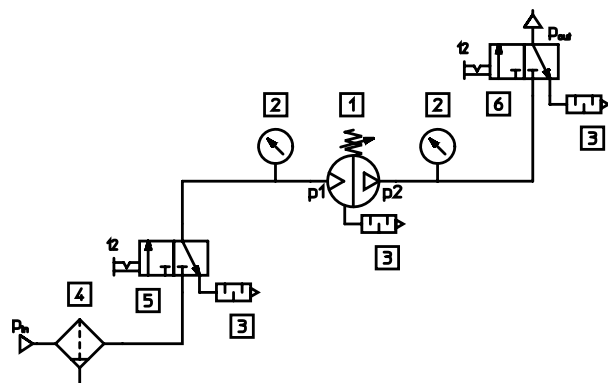
Connection to the compressed air network

Input pressure side

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

Output pressure side

It is recommended that a 3/2-way on/off valve is connected to the output pressure side of the pressure booster to ensure safe exhausting of the output pressure p_{out} . If a 3/2-way valve is not used, the output pressure can only be exhausted by completely relaxing the regulator spring (turning the regulator knob all the way to the left).



Note

If the system includes a soft-start valve, it is essential to position a 3/2-way on/off valve between the soft-start valve and the pressure booster.

Note

For pressure boosters without pressure regulator, the air must be exhausted externally 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 input pressure side
- [6] 3/2-way on/off valve on the output pressure side

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 smooths the pulsation of the pressure booster. It is sensible to fill the volume of the air reservoir with the input pressure p_1 via a connecting line.

The pressure booster only has to make up the difference between the input and the output pressure. Filling the air reservoir takes less time. A check valve prevents the air from flowing back out of the reservoir.

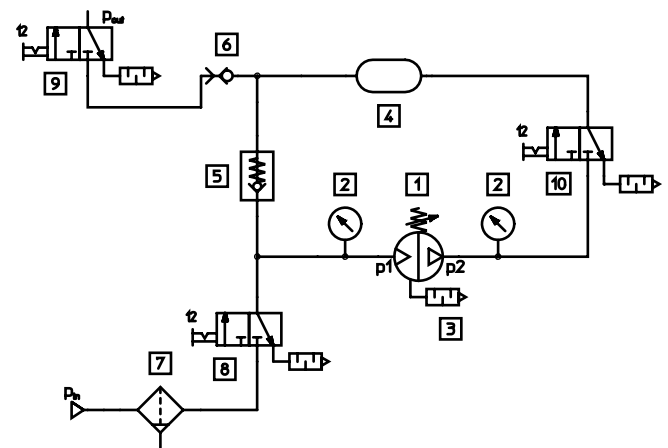
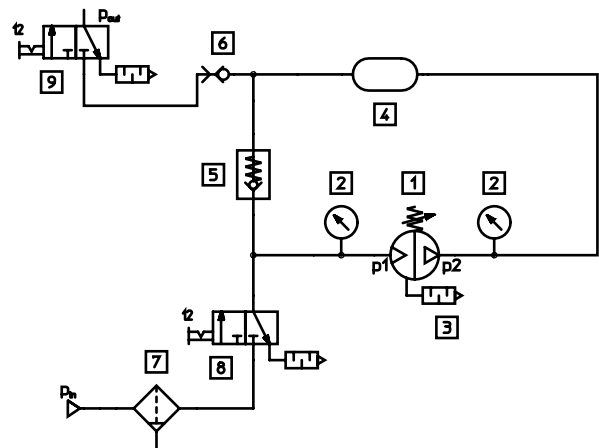
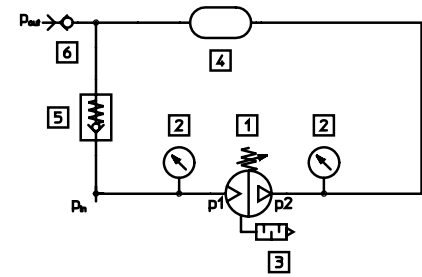
This arrangement corresponds to the scope of delivery of the pressure booster/air reservoir combination available to order (→ page 18).

Circuit with 2 on/off valves

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

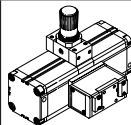
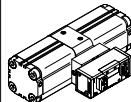
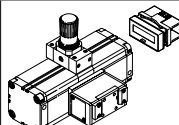
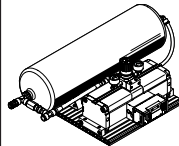
Circuit with 3 on/off valves

The air reservoir is exhausted via the additional on/off valve.



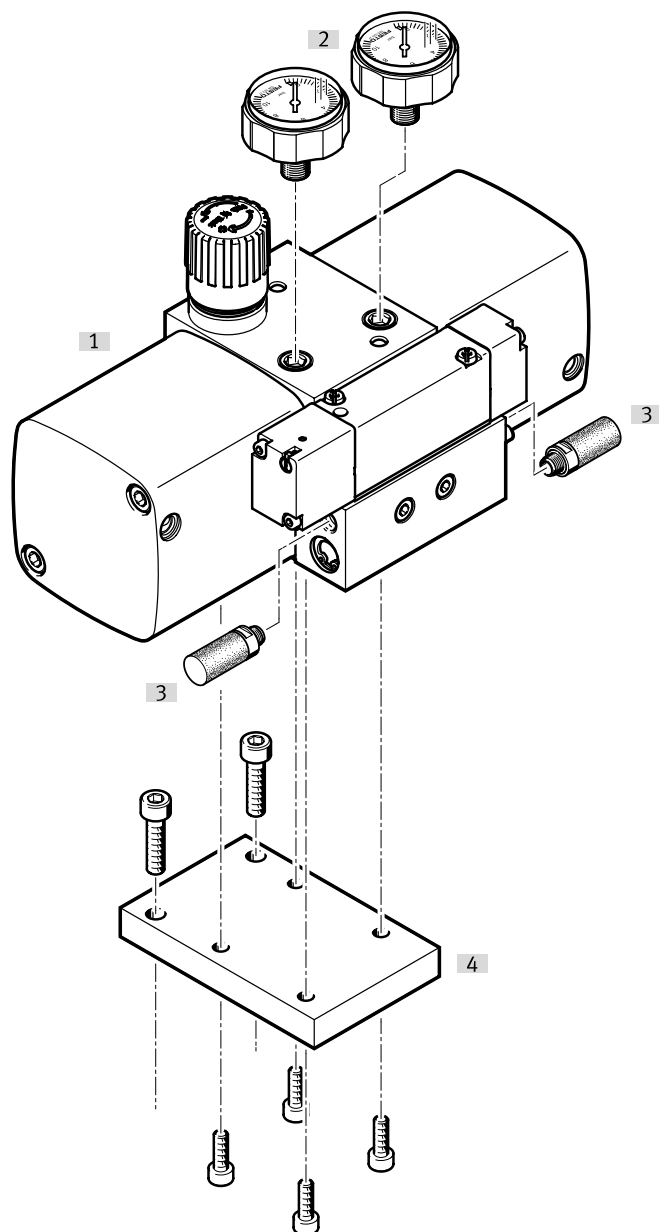
- | | |
|----------------------|--|
| [1] Pressure booster | [7] Filter |
| [2] Pressure gauge | [8] 3/2-way on/off valve on the input pressure side |
| [3] Silencer | [9] 3/2-way on/off valve on the output pressure side |
| [4] Air reservoir | [10] 3/2-way on/off valve for exhausting the air reservoir |
| [5] Check valve | |
| [6] Coupling socket | |

Product range overview

Function	Version	Type	Piston diameter [mm]	→ Page/Internet
Pressure booster	Standard			
		DPA	40, 63, 100	5
	Without pressure regulator, double the input pressure			
		DPA-...-D	40, 63, 100	5
	With proximity sensing			
		DPA-...-A	63, 100	5
Pressure booster/air reservoir combination		DPA-...-CRVZS	40, 63, 100	18

Peripherals overview

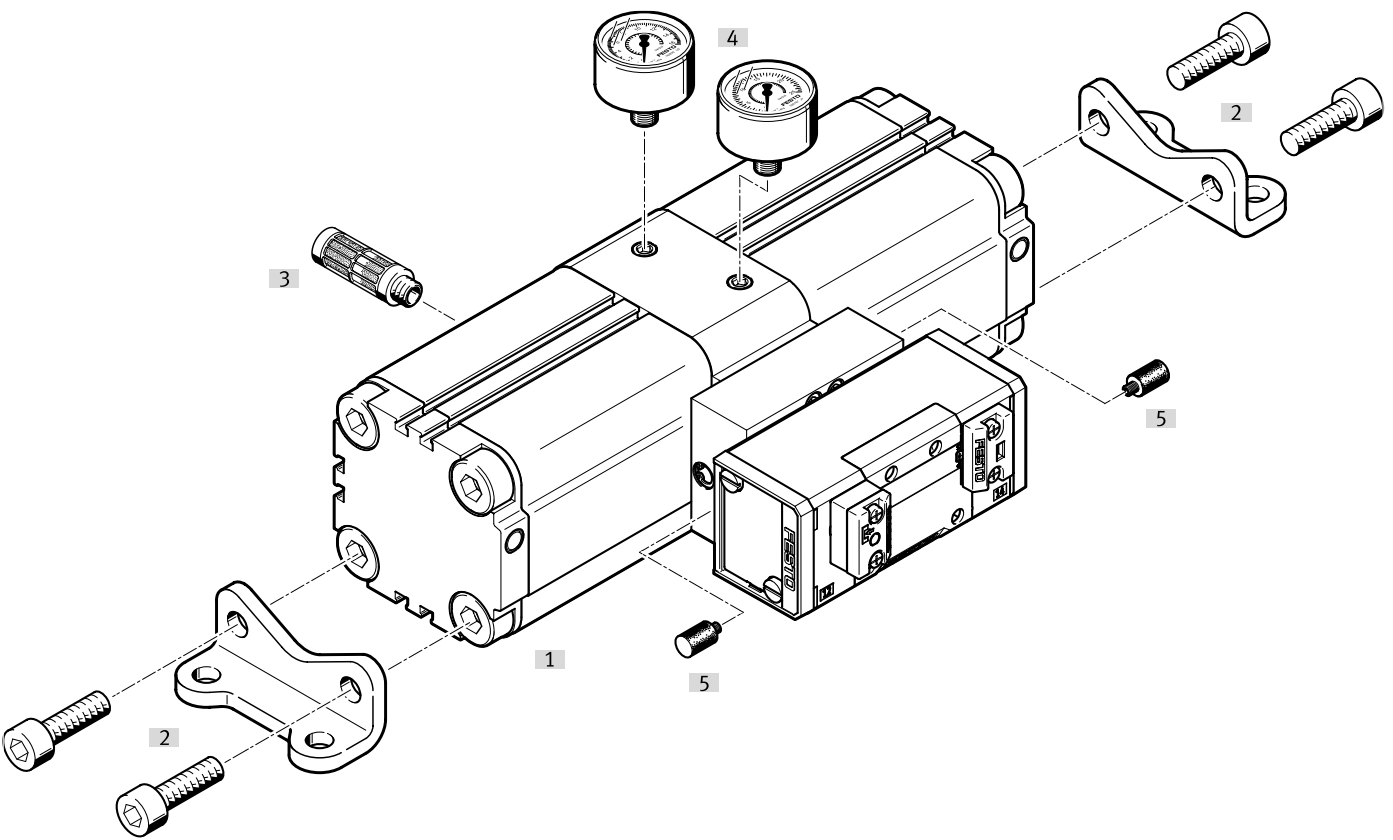
DPA-40-10/16/D



Mounting attachments and accessories		Description	→ Page/Internet
[1]	Pressure booster DPA		4
[2]	Pressure gauge kit DPA-MA-SET	For monitoring the input and output pressure	25
[3]	Silencer UC	For noise reduction at the exhaust port	28
[4]	Flange mounting FDPA	For mounting the pressure booster on other machine parts	24

Peripherals overview

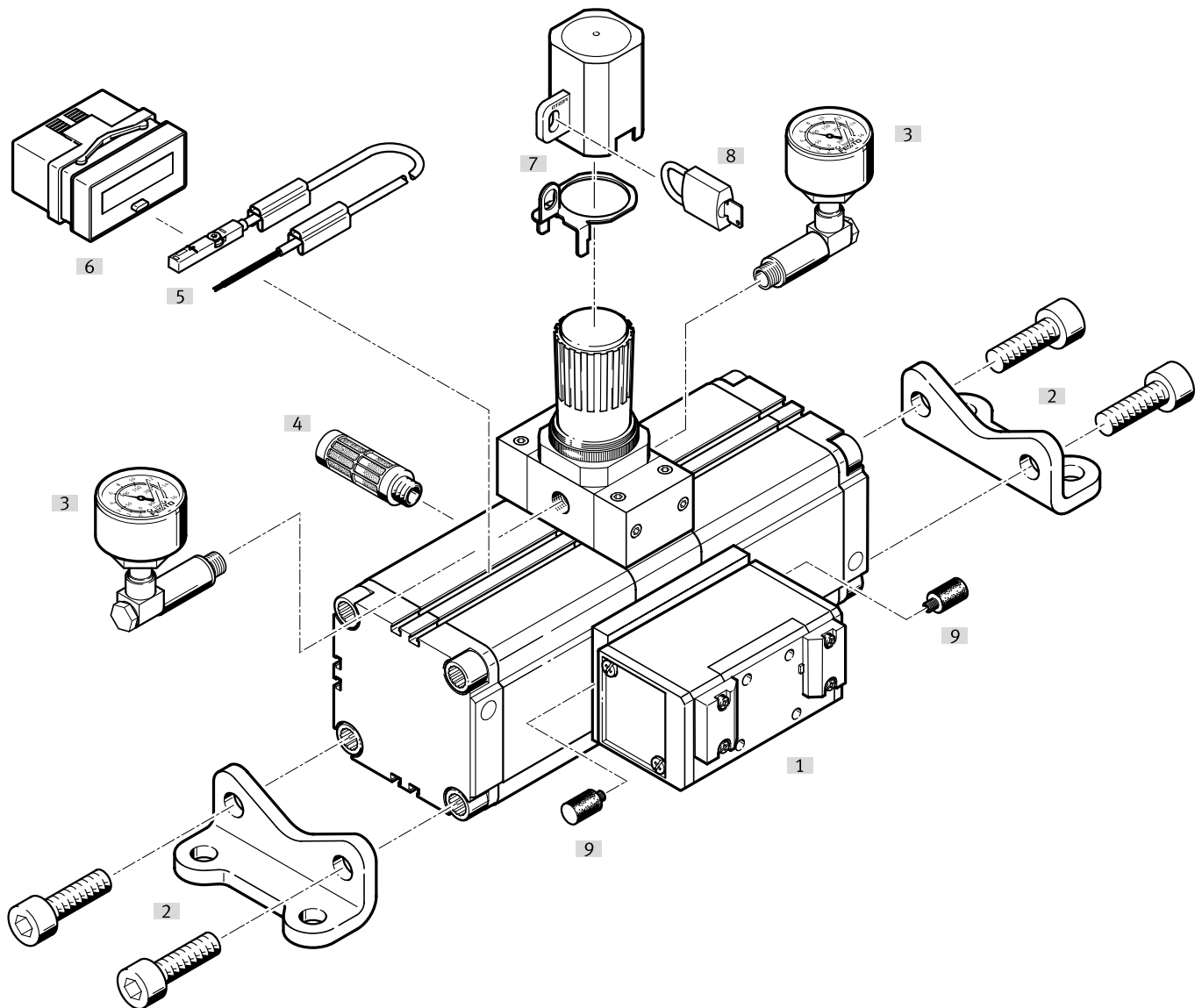
DPA-63/100-D



Mounting attachments and accessories		Description	→ Page/Internet
[1]	Pressure booster DPA		4
[2]	Foot mounting HUA	For mounting the pressure booster on other machine parts	24
[3]	Silencer U-...-B	For noise reduction at the exhaust port	28
[4]	Pressure gauge MA	For monitoring the input and output pressure	26
[5]	Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	28

Peripherals overview

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



Mounting attachments and accessories		Description	→ Page/Internet
[1]	Pressure booster DPA		4
[2]	Foot mounting HUA	For mounting the pressure booster on other machine parts	24
[3]	Pressure gauge kit DPA-MA-SET	For monitoring the input and output pressure	25
[4]	Silencer U-...-B	For noise reduction at the exhaust port	28
[5]	Proximity switch SME/SMT	For sensing individual strokes of the drive piston (DPA-...-A only)	27
[6]	Adding counter CCES	For counting the number of switching cycles (DPA-...-A only)	27
[7]	Regulator lock LRVS-D with locking plate	Prevents accidental – and, in combination with the padlock LRVS-D, unauthorised – adjustment of the rotary knob	28
[8]	Padlock LRVS-D	Accessory for regulator lock LRVS-D	28
[9]	Silencer AMTE-M-LH-M3	For noise reduction at the valve exhaust port	28

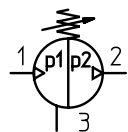
Type codes

001	Series	
DPA	Pressure booster	
002	Size	
40	40	
63	63	
100	100	

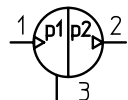
003	Outlet pressure	
10	Max. 10 bar	
16	Max. 16 bar	
D	Double input pressure, without pressure regulator	
004	Position sensing	
	None	
A	For proximity sensor	

Datasheet

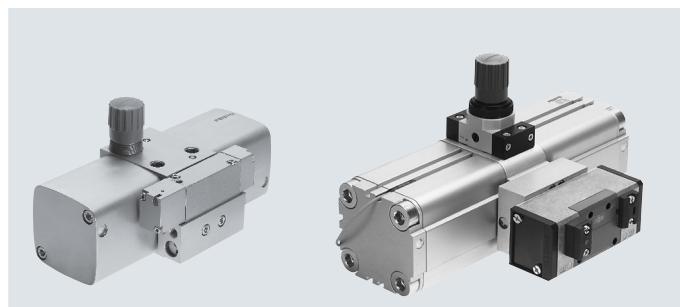
Function
with pressure regulator



Without pressure regulator



-  - Temperature range
+5 ... +60°C
-  - Pressure ratio
1:2
-  - www.festo.com
Sets of wearing parts
→ page 17



DPA-40

DPA-63/100

- 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 proximity sensing			
	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 diameter [mm]	40		63		100		63		100	
Pneumatic connection 1, 2	G1/4		G3/8		G1/2		G3/8		G1/2	
Pneumatic connection 3	M7		G3/8		G1/2		G3/8		G1/2	
Design	Twin-piston pressure booster						Twin-piston pressure booster			
	–						With piston magnet			
Type of mounting	With female thread									
Mounting position	Any									
Pressure display	Prepared for G1/8		Prepared for G1/8		Prepared for G1/4		Prepared for G1/8		Prepared for G1/4	

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

General technical data – DPA without pressure regulator

Type DPA-	40-D	63-D	100-D
Piston diameter [mm]	40	63	100
Pneumatic connection 1, 2	G1/4	G3/8	G1/2
Pneumatic connection 3	M7	G3/8	G1/2
Design	Twin-piston pressure booster		
Type of mounting	With female thread		
Mounting position	Any		
Pressure display	Prepared for G1/8		

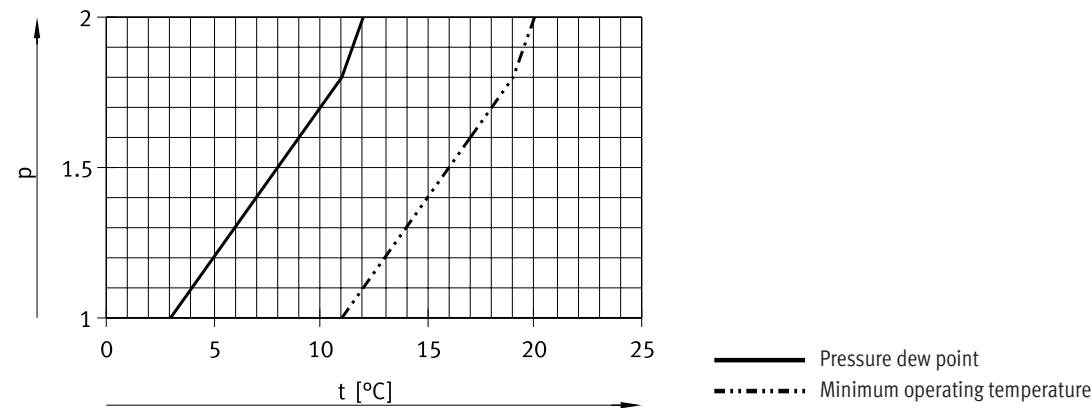
-  - Note: This product conforms to ISO 1179-1 and ISO 228-1.

Datasheet

Operating and environmental conditions								
Typ DPA-		DPA with pressure regulator				DPA without pressure regulator		
		40-10	40-16	63/100-10(-A)	63/100-16(-A)	40-D	63-D	100-D
Operating pressure	[MPa]	0.25 ... 0.8	0.25 ... 1	0.2 ... 0.8	0.2 ... 1	0.2 ... 0.8	0.2 ... 0.8	0.25 ... 0.8
	[bar]	2.5 ... 8	2.5 ... 10	2 ... 8	2 ... 10	2 ... 8	2 ... 8	2.5 ... 8
	[psi]	36.25 ... 116	36.25 ... 145	29 ... 116	29 ... 145	29 ... 116	29 ... 116	36.25 ... 116
Pressure regulation range	[MPa]	0.45 ... 1 ¹⁾	0.45 ... 1.6 ¹⁾	0.4 ... 1 ¹⁾	0.4 ... 1.6 ¹⁾	0.4 ... 1.6	0.4 ... 1.6	0.5 ... 1.6
	[bar]	4.5 ... 10 ¹⁾	4.5 ... 16 ¹⁾	4 ... 10 ¹⁾	4 ... 16 ¹⁾	4 ... 16	4 ... 16	5 ... 16
	[psi]	65.25 ... 145 ¹⁾	65.25 ... 232 ¹⁾	58 ... 145 ¹⁾	58 ... 232 ¹⁾	58 ... 232	58 ... 232	72.5 ... 232
Input pressure 1	[MPa]	0.25 ... 0.8	0.25 ... 1	0.2 ... 0.8	0.2 ... 1	0.25 ... 0.8	0.2 ... 0.8	0.2 ... 0.8
	[bar]	2.5 ... 8	2.5 ... 10	2 ... 8	2 ... 10	2.5 ... 8	2 ... 8	2 ... 8
	[psi]	36.25 ... 116	36.25 ... 145	29 ... 116	29 ... 145	36.25 ... 116	29 ... 116	29 ... 116
Output pressure 2	[MPa]	0.45 ... 1 ¹⁾	0.45 ... 1.6 ¹⁾	0.4 ... 1 ¹⁾	0.4 ... 1.6 ¹⁾	0.5 ... 1.6	0.4 ... 1.6	0.4 ... 1.6
	[bar]	4.5 ... 10 ¹⁾	4.5 ... 16 ¹⁾	4 ... 10 ¹⁾	4 ... 16 ¹⁾	5 ... 16	4 ... 16	4 ... 16
	[psi]	65.25 ... 145 ¹⁾	65.25 ... 232 ¹⁾	58 ... 145 ¹⁾	58 ... 232 ¹⁾	72.5 ... 232	58 ... 232	58 ... 232
Operating medium		Compressed air to ISO 8573-1:2010 [7:3:4]						
		Compressed air to ISO 8573-1:2010 [7:4:4] ³⁾						
Note on the operating/ pilot medium		Lubricated operation not possible						
Ambient temperature	[°C]	+5 ... +60						
Storage temperature	[°C]	+5 ... +60						
Corrosion resistance class CRC ²⁾		2 - Moderate corrosion stress						

- 1) The difference in pressure between the input 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 for DPA-...-10
– max. 22 bar for DPA-...-16
- 2) More information: www.festo.com/x/topic/crc
- 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, → diagram below

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



Datasheet

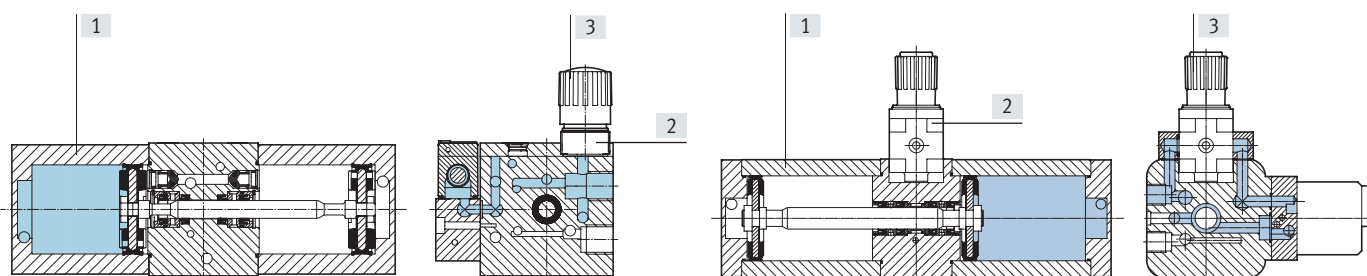
Weight [g]			
Type DPA-	40	63	100
Pressure booster	1500	6000	13000

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

Materials

Sectional view DPA-40

Sectional view DPA-63/100

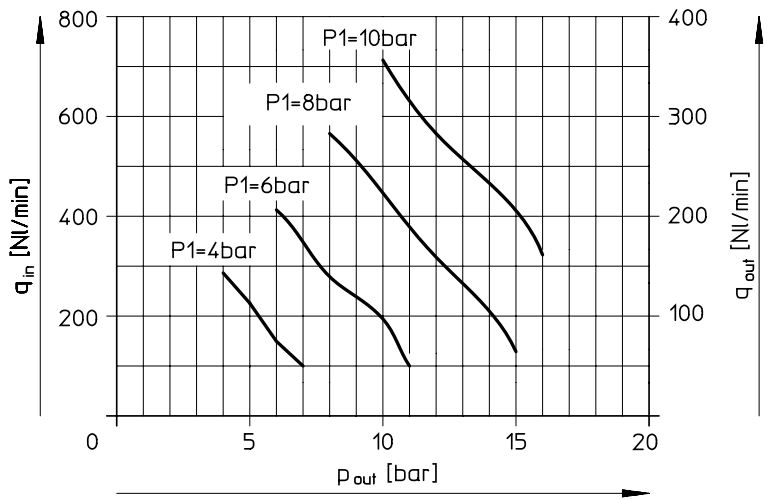


Pressure booster	DPA-40	DPA-63/100-10	DPA-63/100-16
[1] Housing	Aluminium		
[2] Support	Aluminium	PET	Aluminium
[3] Rotary knob	POM		
– Piston/piston rod seals	HNBR	PUR	
– Check valve seals	NBR	FKM	
– Regulator/valve seals	NBR		
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-B1/B2-L		

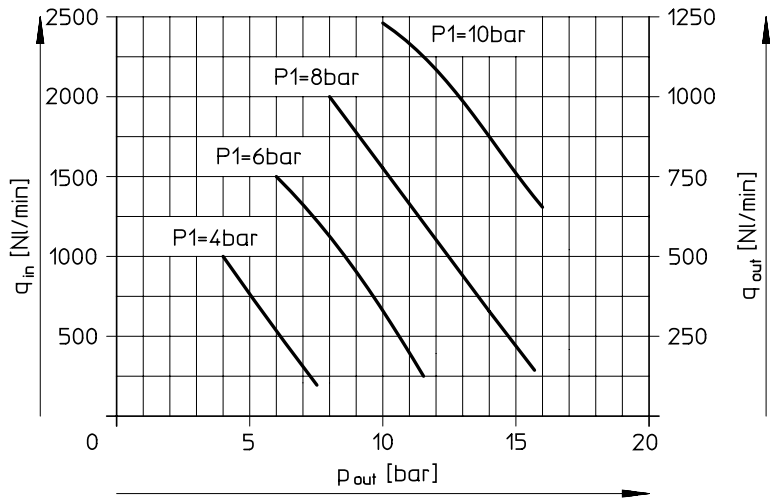
Datasheet

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

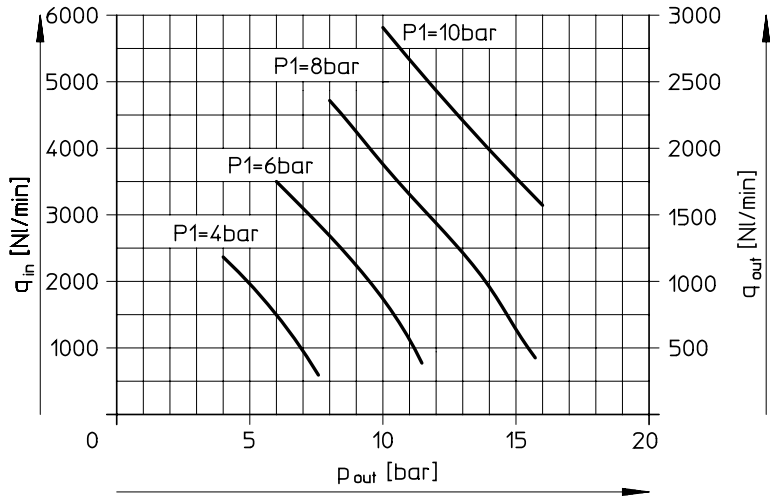
DPA-40



DPA-63



DPA-100



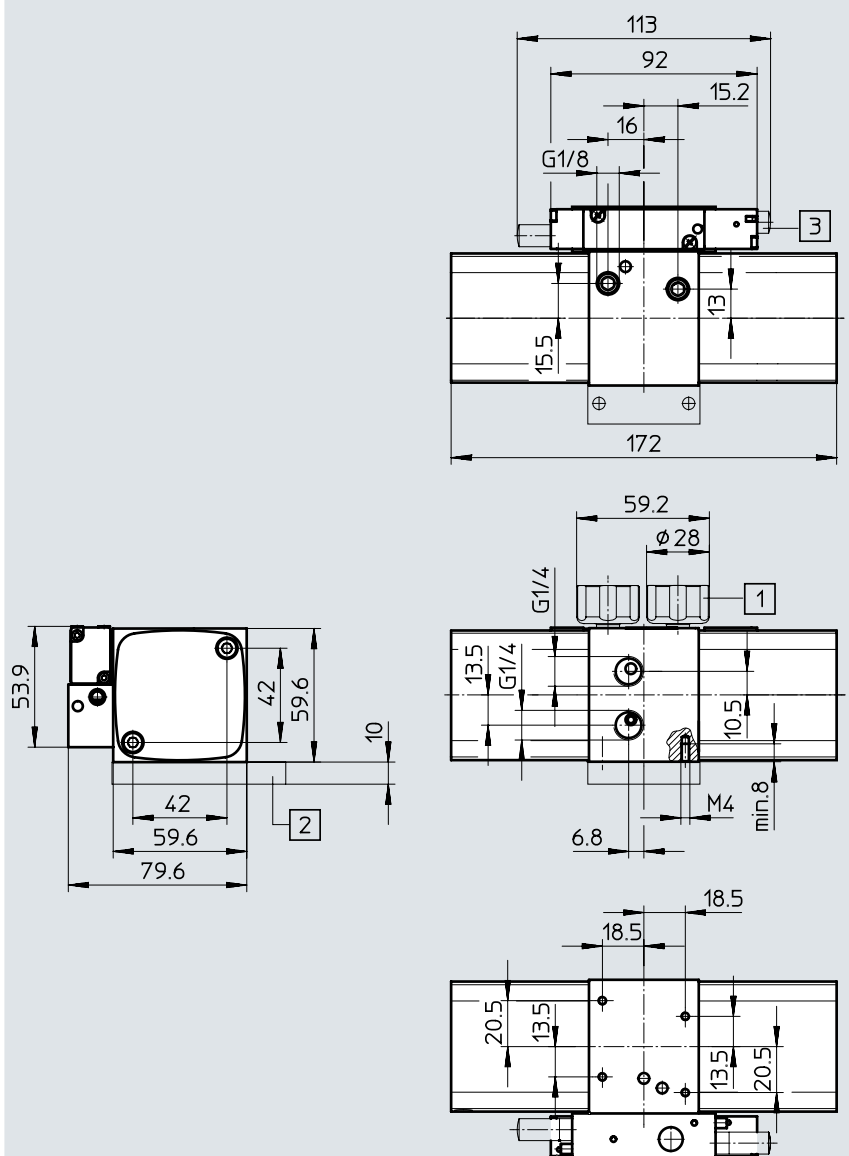
1) Theoretical values without switching losses and friction.

Datasheet

Dimensions – DPA without pressure regulator

Download CAD data → www.festo.com

DPA-40-D

[1] Pressure gauge kit
DPA-MA-SET

[2] Flange mounting FDPA

[3] Silencer UC

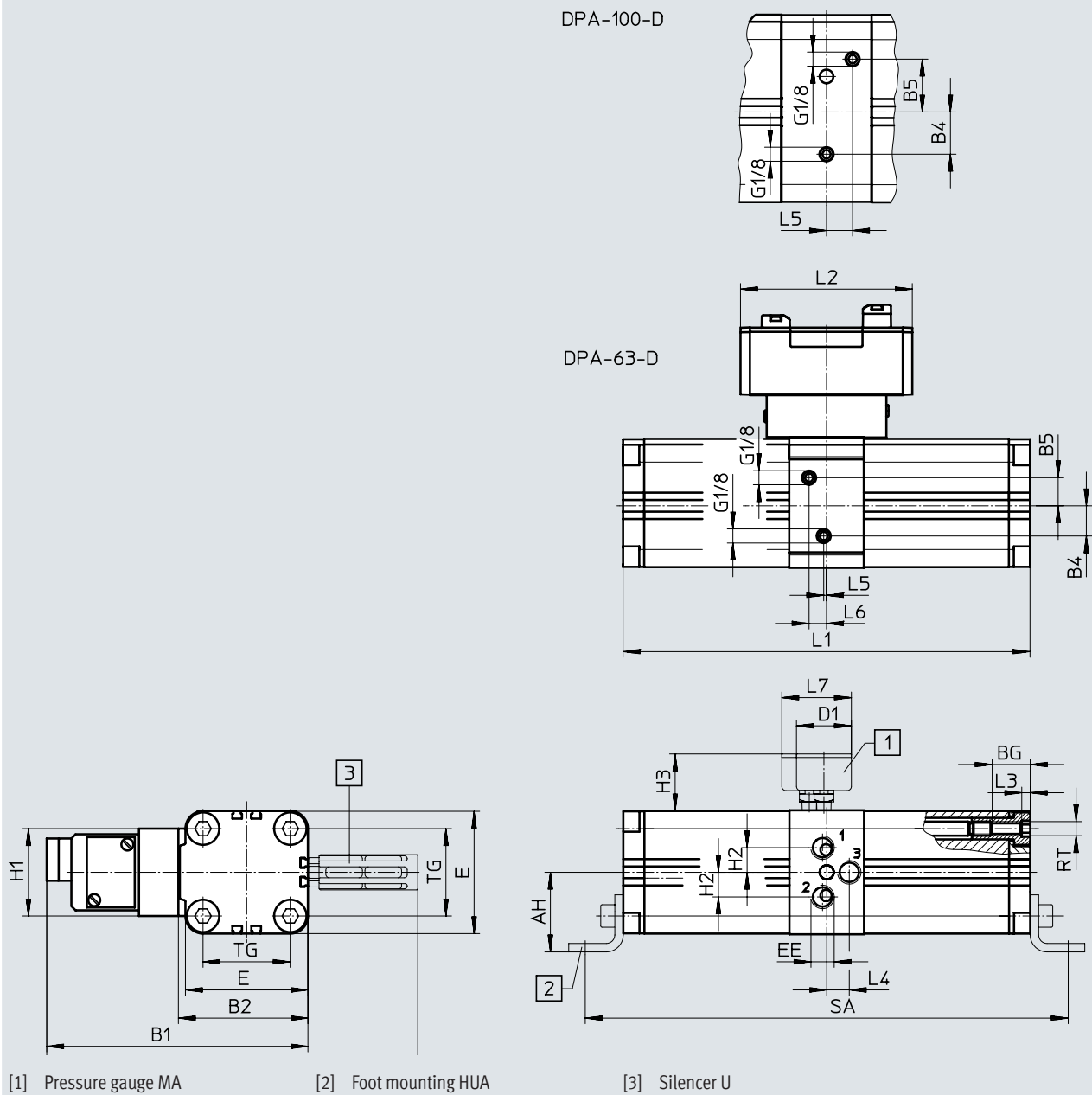
Note: This product conforms to ISO 1179-1 and ISO 228-1.

Datasheet

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	G3/8	62	17.5
DPA-100	81	244	133	352	30	37.5	30		128	G1/2	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

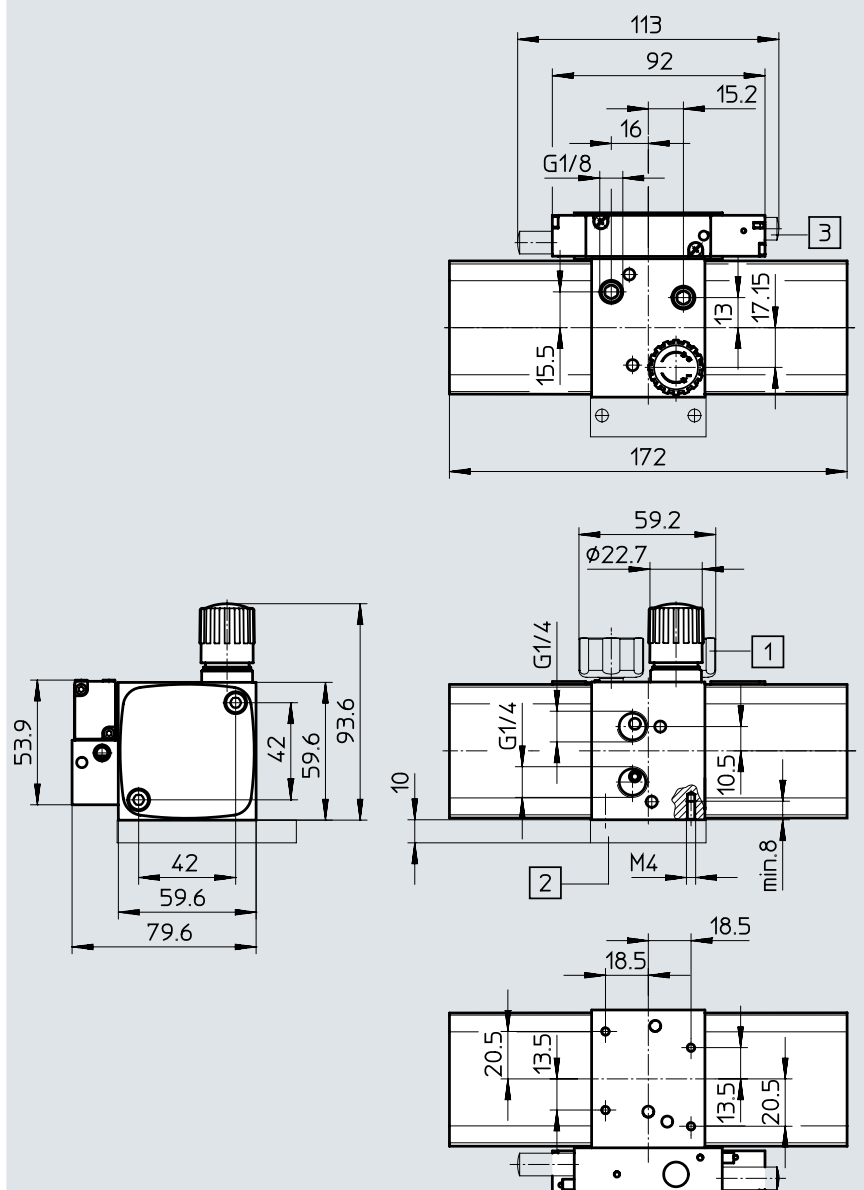
• Note: This product conforms to ISO 1179-1 and ISO 228-1.

Datasheet

Dimensions – DPA with pressure regulator

Download CAD data → www.festo.com

DPA-40-10/16



[1] Pressure gauge kit
DPA-MA-SET

[2] Flange mounting FDPA

[3] Silencer UC

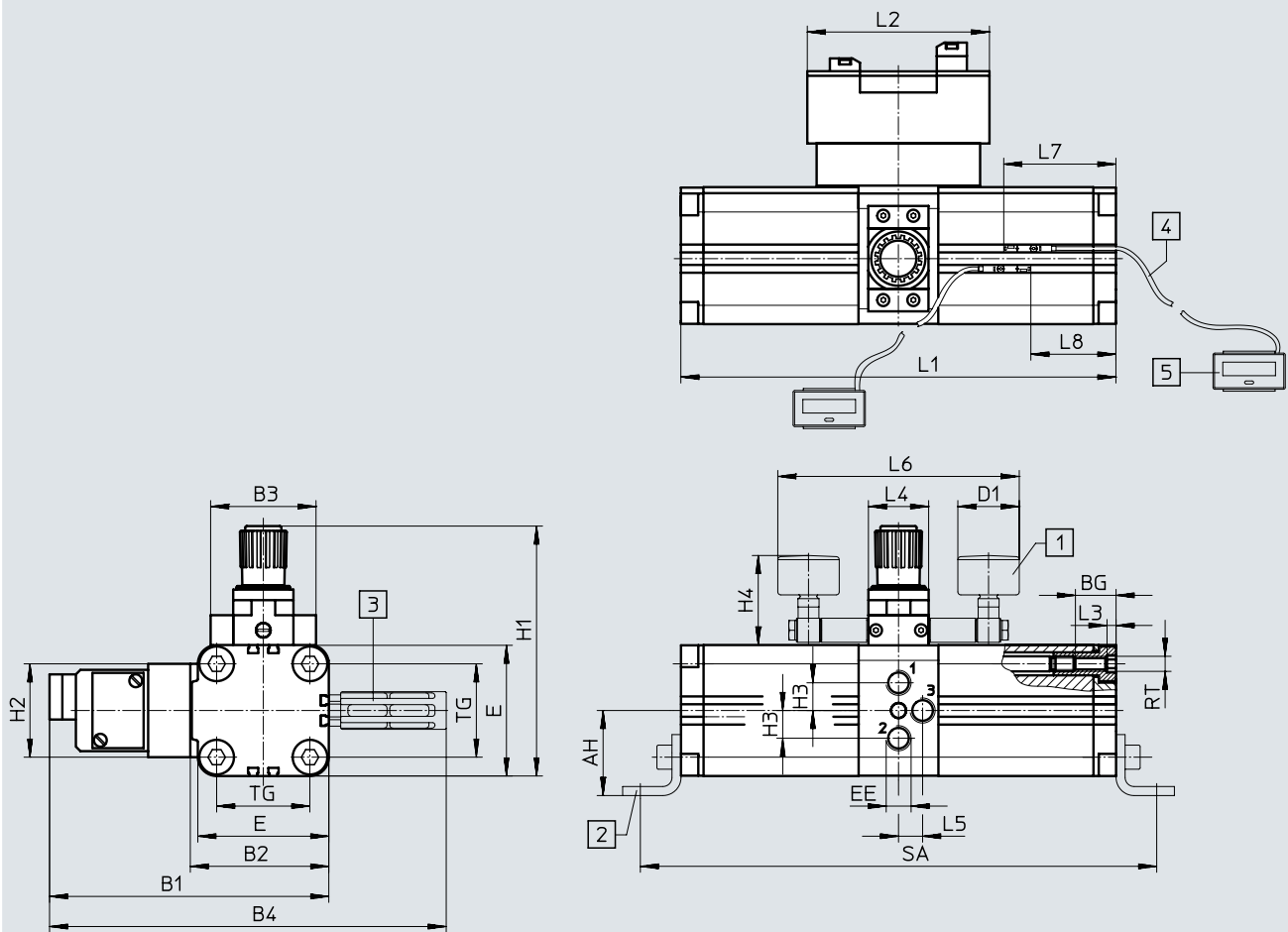
• Note: This product conforms to ISO 1179-1 and ISO 228-1.

Datasheet

Dimensions – DPA with pressure regulator

Download CAD data → www.festo.com

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



- [1] Pressure gauge kit
DPA-MA-SET
- [2] Foot mounting HUA
- [3] Silencer U
- [4] Proximity switch
SMT/SME
- [5] Adding counter CCES-P-C8-E

Note
The proximity switch must be mounted in one of the 6 sensor slots on the right-hand side of the DPA-...-A (rotary knob at the top, pneumatic connections at 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	G3/8	169	62	17.5
DPA-100-10	81	244	133	102	352	30	39	128	G1/2	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 ISO 228-1.

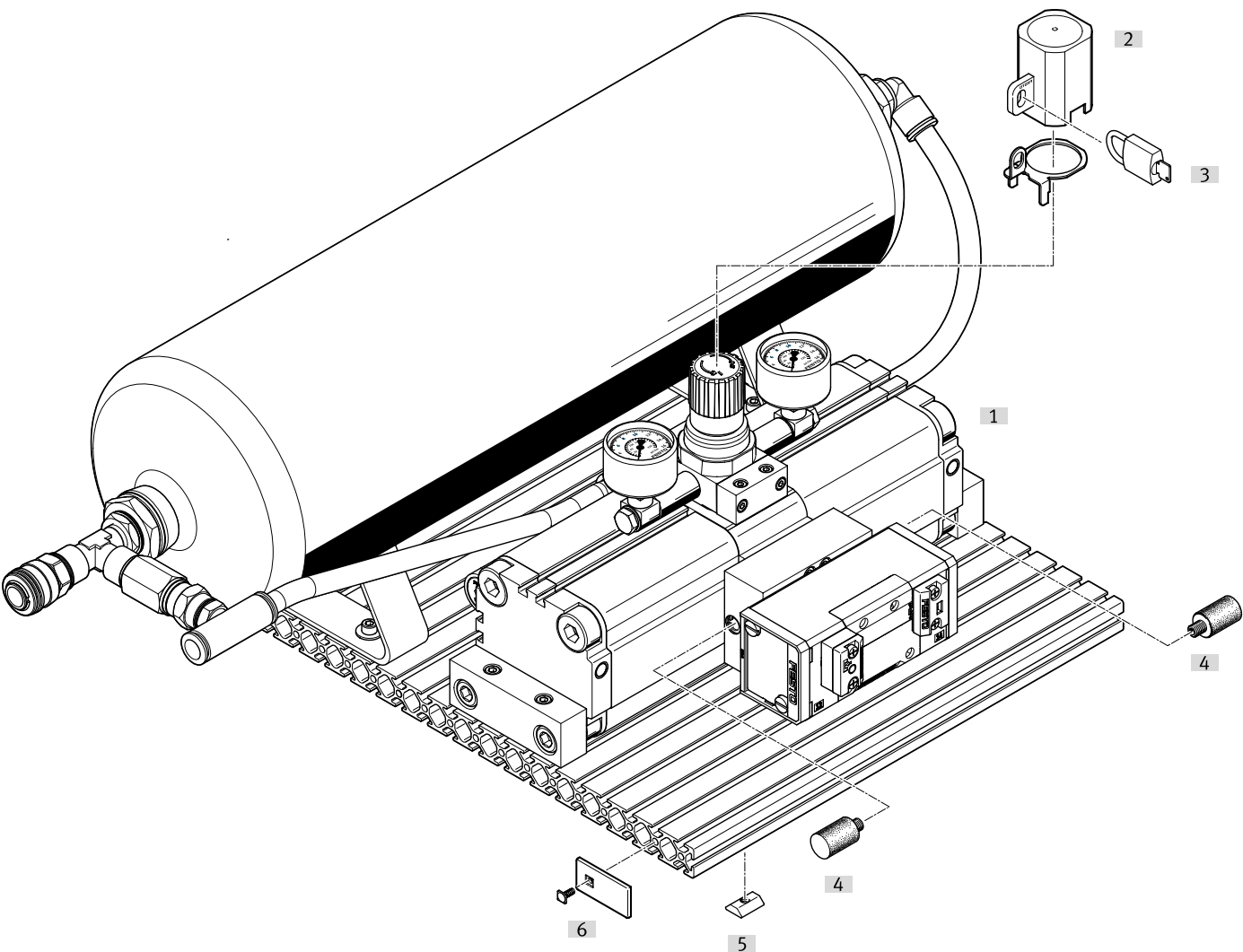
Datasheet

Ordering data							
Piston diameter [mm]	Output pressure 4 ¹⁾ ... 10 bar		Output pressure 4 ¹⁾ ... 16 bar		Double input 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 proximity sensing							
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 – Sets of wearing parts			
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

Peripherals overview



Accessories		Description	→ Page/Internet
[1]	Pressure booster DPA		18
[2]	Regulator lock (DPA-63/100 only) LRVS-D with locking plate	Prevents accidental – and, in combination with the padlock LRVS-D, unauthorised – adjustment of the rotary knob	28
[3]	Padlock (DPA-63/100 only) LRVS-D	Accessory for regulator lock LRVS-D	28
[4]	Silencer (DPA-63/100 only) AMTE-M-LH-M3	For noise reduction at the valve exhaust port	28
[5]	Slot nut IPM-VN-05-12/M5-ST	For attaching the profile plate DPA-40-...-CRVZS2: 4 included, DPA-40-...-CRVZS5: 6 included, DPA-63/100: 8 included	On request
[6]	Cover cap IPM-AN-05-20X40-PA	For covering the cut edge of the profile plate DPA-40: 5 for each cut edge, DPA-63/100: 10 for each cut edge	On request

Type codes

001	Series	
DPA	Pressure booster	

002	Size	
40	40	
63	63	
100	100	

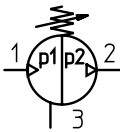
003	Outlet pressure	
10	Max. 10 bar	
16	Max. 16 bar	

004	Air reservoir	
CRVZS	Stainless steel	

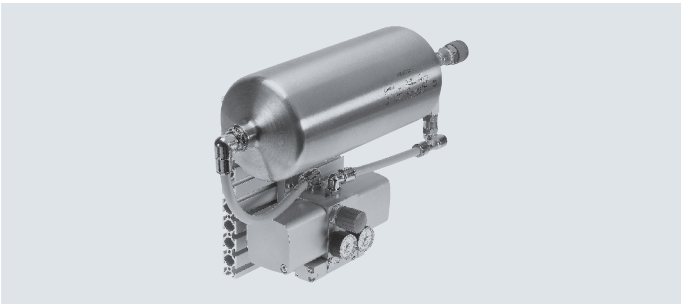
005	Air reservoir volume	
2	2 l	
5	5 l	
10	10 l	
20	20 l	

Datasheet

Function
Pressure booster with pressure
regulator



- - Temperature range
+5 ... +60°C
- - Pressure ratio
1:2
- - www.festo.com
Sets of wearing parts
→ page 23



Combination of pressure booster, air
reservoir in stainless steel, bypass
with check valve for constant filling of
the air reservoir with the system pres-

sure, pressure gauge set, silencer, fit-
ting and quick coupling.

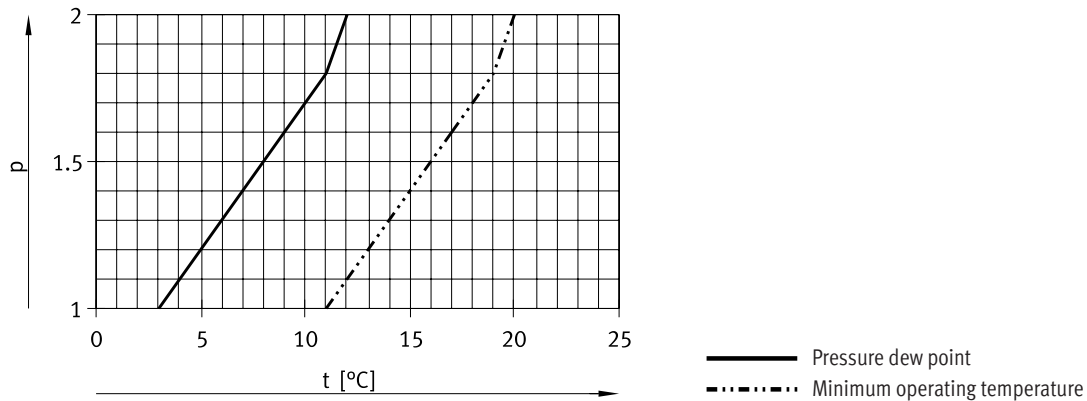
- Convenient all-in-one solution
- Perfectly matched components
- Combination fully mounted on a
profile plate

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 diameter [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									
Design	Twin-piston pressure intensifier, with air reservoir, with pressure gauge, with check valve									
Type of mounting	With slot nuts									
Mounting position	Any		Condensate drain downwards							
Pressure display	With pressure gauge									
Product weight [g]	4400		7300		16000		21500		30000	

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	[MPa]	0.25 ... 0.8				0.2 ... 0.8					
	[bar]	2.5 ... 8				2 ... 8					
	[psi]	36.25 ... 116				29 ... 116					
Input pressure 1	[MPa]	0.2 ... 0.8									
	[bar]	2 ... 8									
	[psi]	29 ... 116									
Pressure regulation range/ output pressure 2	[MPa]	0.45 ... 1	0.45 ... 1.6	0.45 ... 1	0.45 ... 1.6	0.4 ... 1	0.4 ... 1.6	0.4 ... 1	0.4 ... 1.6	0.4 ... 1	0.4 ... 1.6
	[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
	[psi]	65.25 ... 145	65.25 ... 232	65.25 ... 145	65.25 ... 232	58 ... 145	58 ... 232	58 ... 145	58 ... 232	58 ... 145	58 ... 232
Operating medium		Compressed air to ISO 8573-1:2010 [7:3:4]									
		Compressed air to ISO 8573-1:2010 [7:4:4] ²⁾									
Note on the operating/ pilot medium		Lubricated operation not possible									
Ambient temperature	[°C]	+5 ... +60									
Storage temperature	[°C]	+5 ... +60									
Corrosion resistance class CRC ¹⁾		2 - Moderate corrosion stress									
CE marking (see declaration of conformity)		–			To EU Pressure Equipment Directive						
UKCA marking (see declaration of conformity)		–			UK regulations for pressure equipment						

1) More information: www.festo.com/x/topic/crc
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, → diagram page 21

Datasheet

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

Materials

Pressure booster	→ Page 11
Air reservoir	High-alloy stainless steel
Profile plate	Aluminium
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Recommended tubing

Pressure booster DPA	40	63	100
For input 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

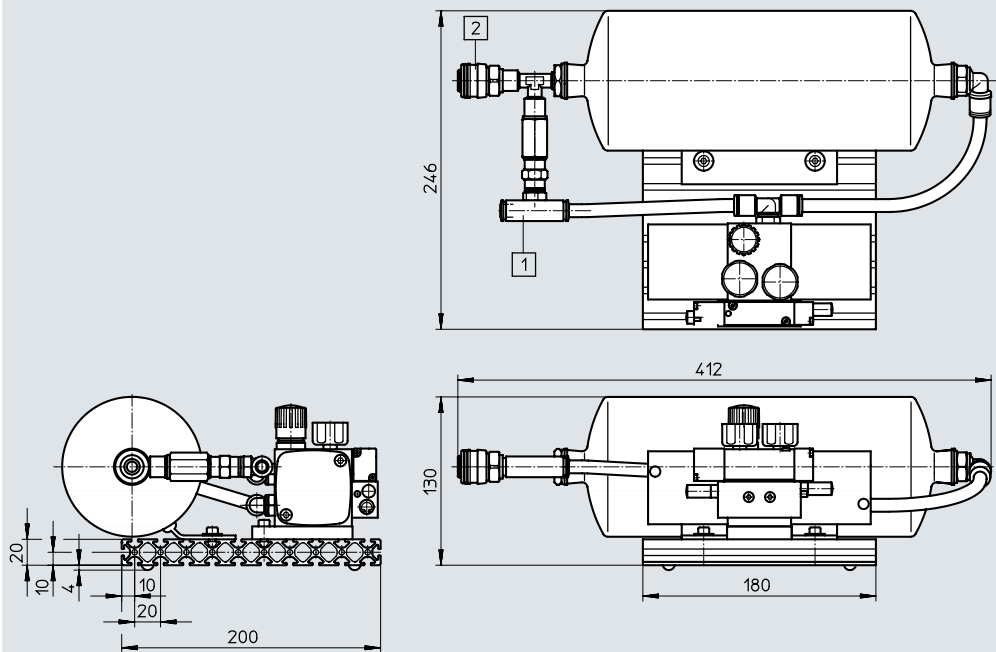
Flow rates → page 12

Datasheet

Dimensions – DPA-40

Download CAD data → www.festo.com

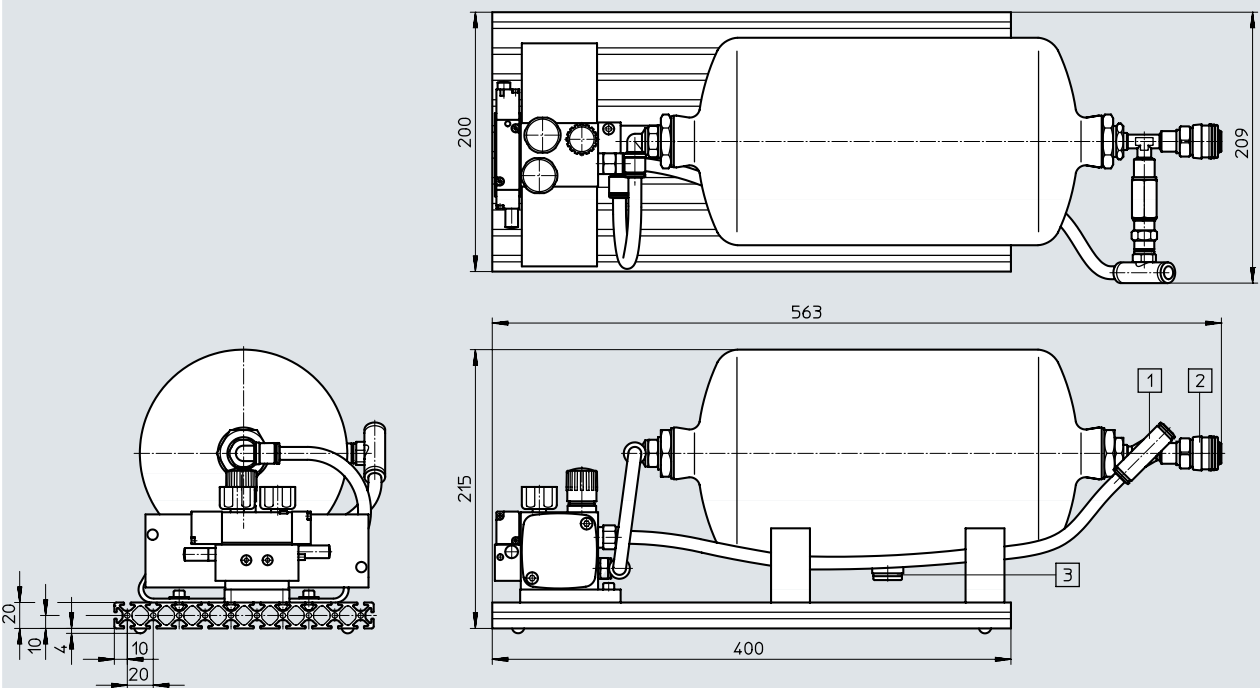
With 2 l air reservoir



[1] Input pressure p1, connection
QS-10

[2] Output pressure p2, connection
to coupling socket KD4-1/4 with
quick coupling plug KS4
→ page 28

With 5 l air reservoir



[1] Input pressure p1, connection
QS-10

[2] Output pressure p2, connection
to coupling socket KD4-1/4 with
quick coupling plug KS4
→ page 28

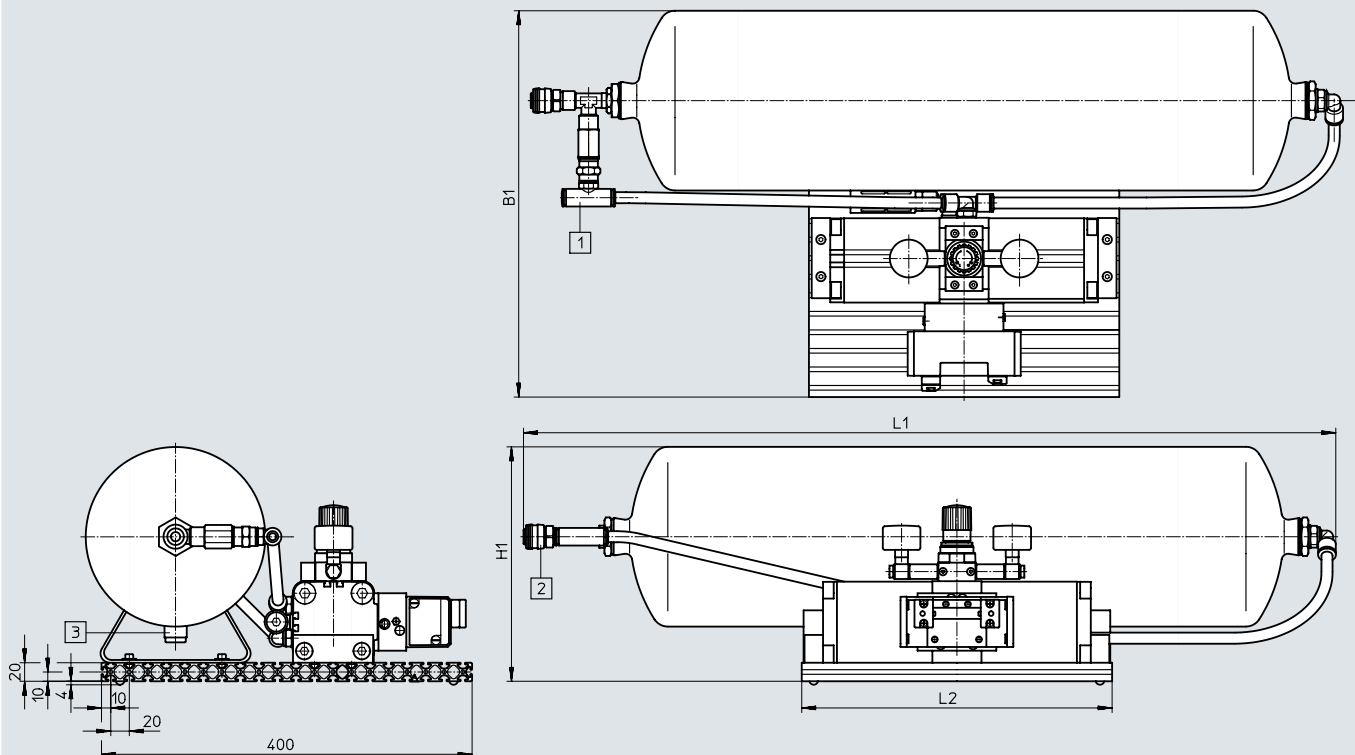
[3] Condensate drain, max. tighten-
ing torque 27 Nm

Datasheet

Dimensions – DPA-63/100

Download CAD data → www.festo.com

With 10 l or 20 l air reservoir



[1] Input pressure p1, → table below

[2] Output pressure p2, connection to coupling socket → table below with quick coupling plug KS4 → page 28

[3] Condensate drain, max. tightening torque 27 Nm

Type	B1	H1	L1	L2	[1]	[2] 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 diameter [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

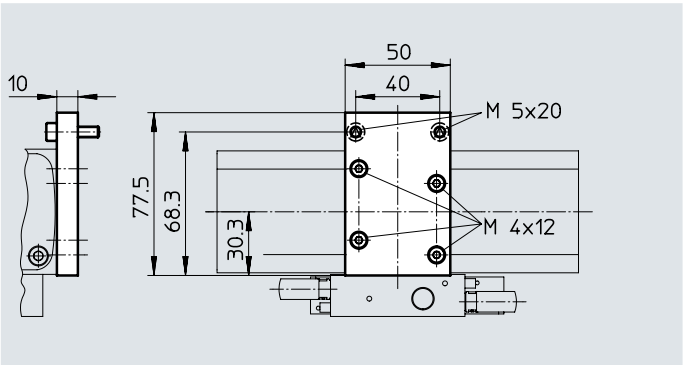
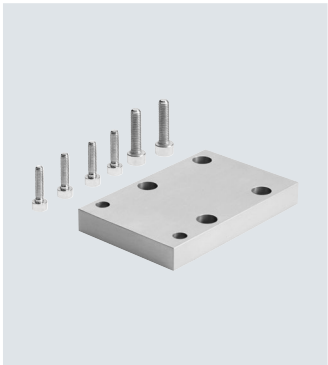
Ordering data – Sets of wearing parts

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

Accessories

Flange mounting FDPA
for DPA-40

Material:
Mounting: Anodised aluminium
Screws: Galvanised steel
Free of copper and PTFE

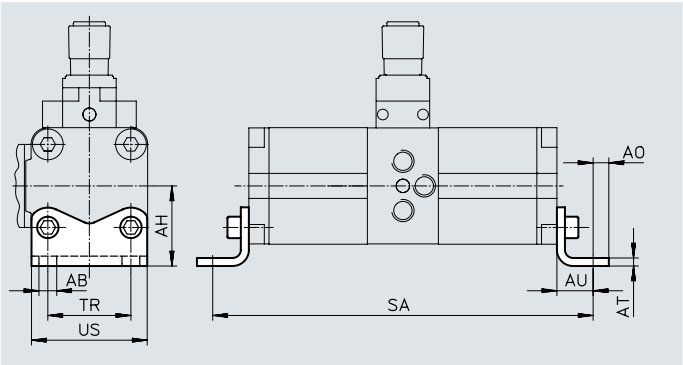


Ordering data				
For type	CRC ¹⁾	Weight [g]	Part no.	Type
DPA-40	2 - Moderate corrosion stress	120	540783	FDPA-40

1) More information: www.festo.com/x/topic/crc

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	1117	157317	HUA-100

1) More information: www.festo.com/x/topic/crc

Accessories

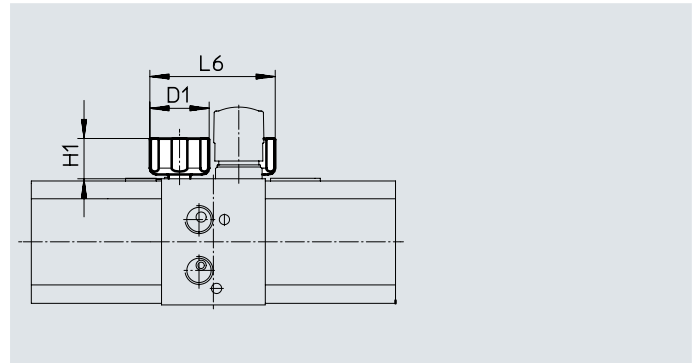
Pressure gauge kit DPA-MA-SET for DPA-40-10/16/D

The pressure gauge must in general be sealed with PTFE tape.

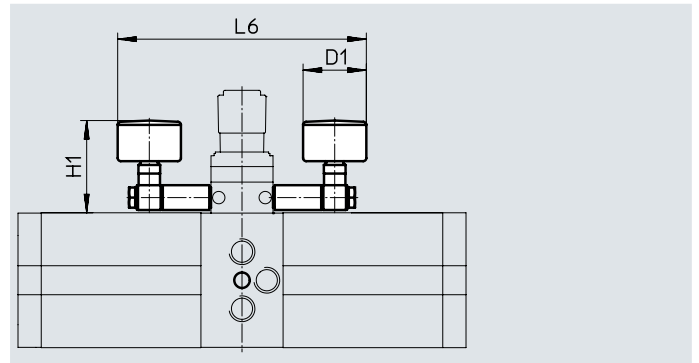
Individual pressure gauge

MA-27-...-R1/8:

Datasheets → Internet: ma-27



for DPA-63/100-10/16



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

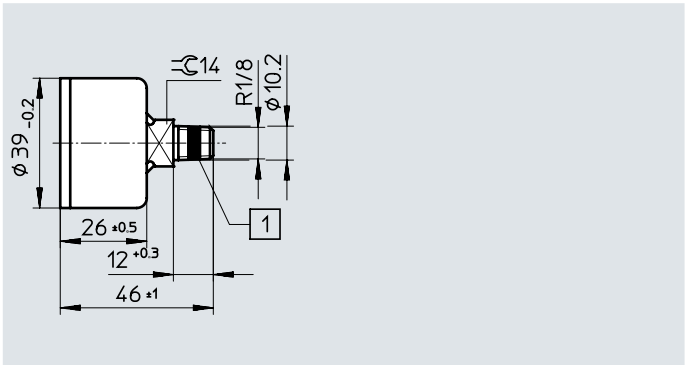
Materials	
Nominal size, pressure gauge	27
Housing	PA (colour: black)
Inspection window	PS
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L

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

Accessories

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

Material:
Housing: Acrylic butadiene styrene
(colour: black)
Inspection window: Polystyrene
Screwed trunnion/materials in contact
with the media: Brass
Note on materials: RoHS-compliant



Technical data	
Nominal size	40
Pneumatic connection	R1/8
Operating medium	Neutral fluids
	Neutral gases
	Not permitted: Oxygen
	Not permitted: Acetylene
Design	Bourdon tube pressure gauge
Scale	Double scale: bar (outer), psi (inner)
Conforms to standard	EN 837-1
Type of mounting	In-line installation
Connection position	Centred, rear
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
Degree of protection	IP43
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Weight [g]	60

Ordering data						
For type	Pressure control	Operating pressure	Display range		Part no.	Type
		[bar]	[bar]	[psi]		
DPA-63/100-D	For input pressure	0 ... 16	0 ... 16	0 ... 232	529046	MA-40-16-1/8-EN-DPA
	For output pressure	0 ... 25	0 ... 25	0 ... 362.5	526167	MA-40-25-1/8-EN

Accessories

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

Material:

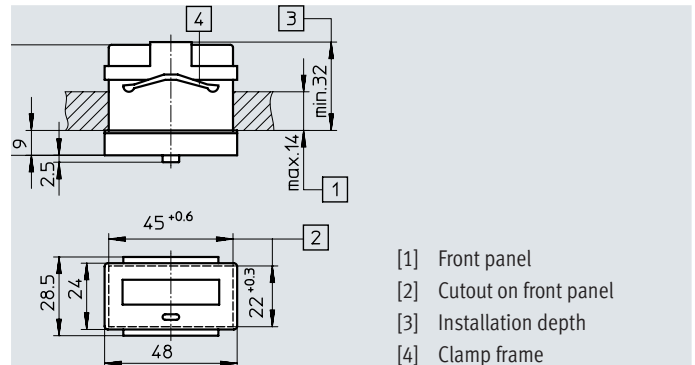
Housing: Polycarbonate

Note on materials:

RoHS-compliant

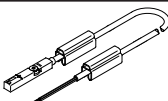
LABS (PWIS) conformity:

VDMA24364-B1/B2-L



Ordering data						Datasheets → Internet: cces
For type	Display	Power supply	CRC ¹⁾	Weight [g]	Part no.	Type
DPA-63/100-...-A	8-digit	Lithium battery (nominal value retention 7 years)	2	30	549403	CCES-P-C8-E

1) More information: www.festo.com/x/topic/crc

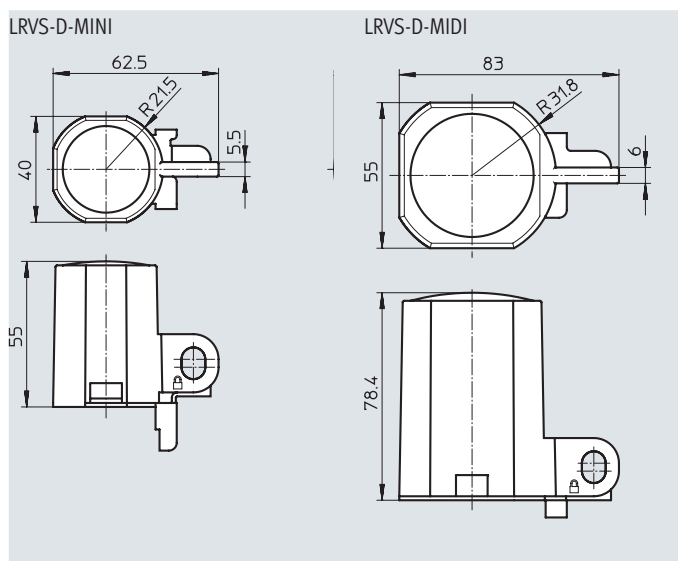
Ordering data – Proximity switch SME/SMT for adding counter CCES					Datasheets → Internet: sme-8m, smt-8m	
	Switching element function	Switching output	Electrical connection	Cable length [m]	Part no.	Type
	N/O	Contacting, bipolar	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2.5-OE
		PNP	Cable, 3-wire	2.5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

Note

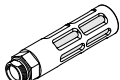
The following points shall be observed:

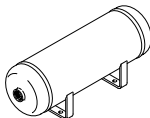
- The proximity switch SME mentioned above can be connected as a 2-wire switch to the adding counter without additional voltage supply.
- When using other proximity switches, an additional voltage supply is required and the counting input for the adding counter must be reprogrammed from NPN to PNP.
- Shielded cables must be used for cable lengths over 3 m.
- The maximum permissible cable length is 30 m.

Material:
Cap: Polyacetal
Locking plate: Steel
Knurled nut: Aluminium
LABS (PWIS) conformity:
VDMA24364-B1/B2-L



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		Datasheets → Internet: u	
	M7	161418	UC-M7
Silencer U-...-B		Datasheets → Internet: u	
	G3/8	6843	U-3/8-B
	G1/2	6844	U-1/2-B
Silencer AMTE-M-LH-M3		Datasheets → Internet: amte	
	M3	1231120	AMTE-M-LH-M3
Quick coupling plug KS4		Datasheets → Internet: ks4	
	With male thread		
	G1/4	2154	KS4-1/4-A
	G3/8	2155	KS4-3/8-A
	G1/2	531676	KS4-1/2-A
	With 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	PU ¹⁾ [m]
Air reservoir		Datasheets → 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		Datasheets → Internet: pan		
For input pressure				
	–	553909	PAN-10x1.5-BL	50
		553910	PAN-12x1.75-BL	50
		553911	PAN-16x2-BL	50
Plastic tubing PAN-R		Datasheets → Internet: pan-r		
For output pressure				
	–	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