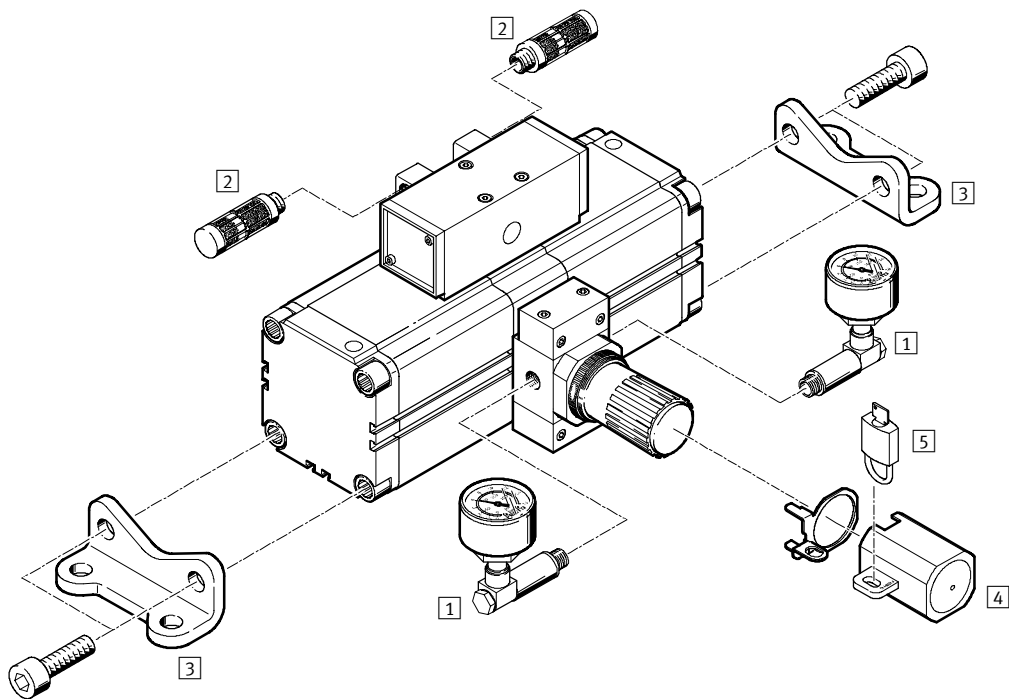


Pressure boosters DPA

Peripherals overview and type codes



Peripherals overview



Mounting attachments and accessories	Brief description	→ Page
1 Pressure gauge set MA-SET	The pressure gauge set is used to monitor the input and high pressure	3 / 4.7-5
2 Silencers U	The silencers are provided to reduce noise at the valve exhaust port	3 / 4.7-5
3 Foot mounting HUA	The pressure booster can be attached to other machine parts by means of the two foot mountings	3 / 4.7-5
4 Regulator lock LRVS with lock plate	Prevents unintentional, and in conjunction with an LRVS padlock, unauthorised adjustment of the rotary knob	3 / 4.7-6
5 Padlock LRVS-D	Accessory for LRVS	3 / 4.7-6

Type codes

DPA		63	16
Basic function			
DPA	Pressure boosters		
Piston Ø [mm]			
63			
Output pressure [bar]			
10	4 ... 10		
16	4 ... 16		



Pressure boosters DPA

Technical data

FESTO

Function



-  - Temperature range
+5 ... +60 °C
-  - Input pressure
2 ... 10 bar



Note

The regulator is supplied with a non-compressed regulator spring. After the input pressure is applied, the regulator spring is pretensioned by turning the regulating knob until the desired output pressure is achieved. A pressure gauge is strongly recommended to monitor the output pressure. The regulator setting can be secured against unauthorised adjustment by means of a regulator lock.

The pressure booster is a twin-piston pressure intensifier that can compress air.

When the DPA is pressurised with compressed air, integrated directional control and non-return valves automatically facilitate pressure build-up on the secondary side up to twice the normal operating pressure, depending on the flow rate.

The air supply to both drive pistons is controlled by a pneumatic directional control valve, which reverses automatically when the stroke end-position is reached.

The output pressure is freely selectable; it lies between the system pressure and the maximum double value.

The reference value is set using a manually operated regulator, which supplies compressed air to the working pistons on the secondary side and ensures stable operation of the booster.

The booster starts automatically when the system pressure is applied and the desired output pressure has not yet been reached.

When the output pressure is reached, it stops operating automatically but restarts if the pressure drops again.

All benefits at a glance

- Any mounting position
- Long service life
- Compact construction and good design
- Mounting option with components from the ADVU standard range
- Minimal loss of volume with valve activation
- Short filling times

General technical data				
Type	DPA-63-10	DPA-100-10	DPA-63-16	DPA-100-16
Pneumatic connection	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{3}{8}$	G $\frac{1}{2}$
Operating medium	Compressed air, filtered, unlubricated, grade of filtration 5µm			
Design	Twin-piston pressure intensifier			
Mounting position	Any			
Input pressure p1 [bar]	2 ... 8		2 ... 10	
Output pressure p2 [bar]	4 ... 10 ¹⁾		4 ... 16 ¹⁾	
Pressure indicator	G $\frac{1}{8}$ prepared	G $\frac{1}{4}$ prepared	G $\frac{1}{8}$ prepared	G $\frac{1}{4}$ prepared

1) The differential pressure between the input and output pressure must be at least 2 bar.

Ambient conditions		
Ambient temperature [°C]	+5 ... +60	
Corrosion resistance CRC ¹⁾	2	

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

Pressure boosters DPA

Technical data

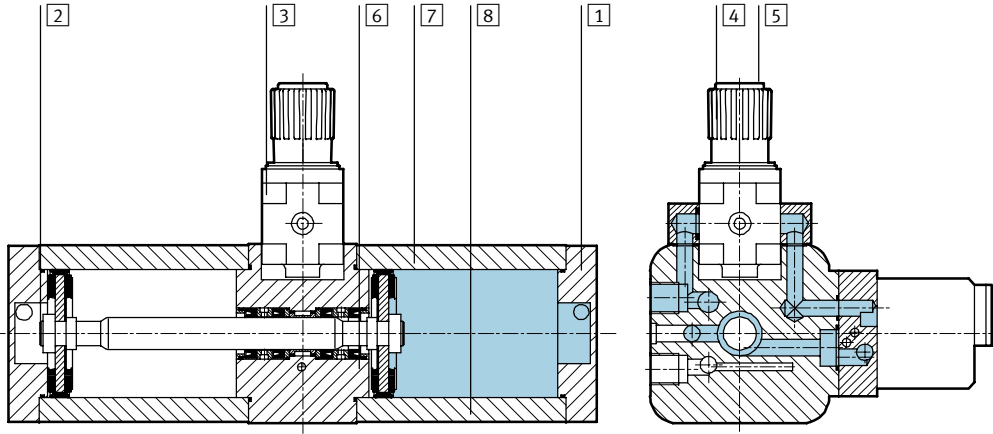


Weights [g]				
	DPA-63-10	DPA-100-10	DPA-63-16	DPA-100-16
Pressure boosters	6,000	13,000	6,000	8,000

Recommended tubing		
	Low pressure range	High pressure range
DPA-63-...	PAN-12x1,75	PAN-10x1,5
DPA100-...	PAN-16x2	PAN-12x1,75

Materials

Sectional view



Pressure boosters		
1	Plug cap	Aluminium
2	Round nut	Galvanised steel
3	Valves	Die-cast aluminium, polyacetate
4	Rotary knob	Acetal
5	Protective cover	Acrylic butadiene styrene
6	Centre bit	Aluminium
7	Housing	Die-cast zinc
8	Cylinder barrel	Aluminium
-	Seals, regulator	Nitrile rubber
-	Seals, valve	Nitrile rubber

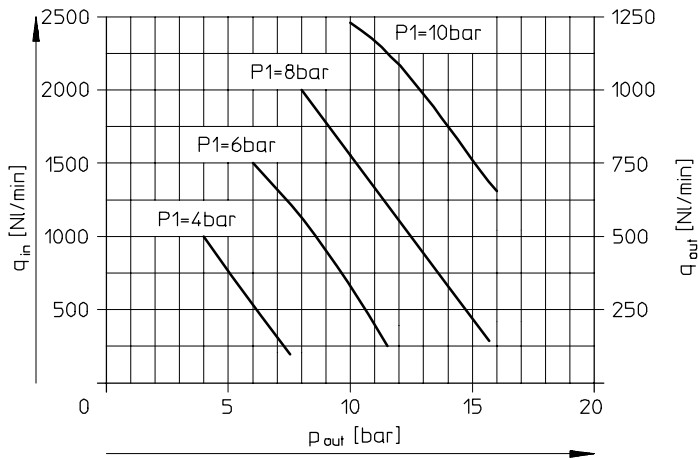
Pressure boosters DPA

Technical data

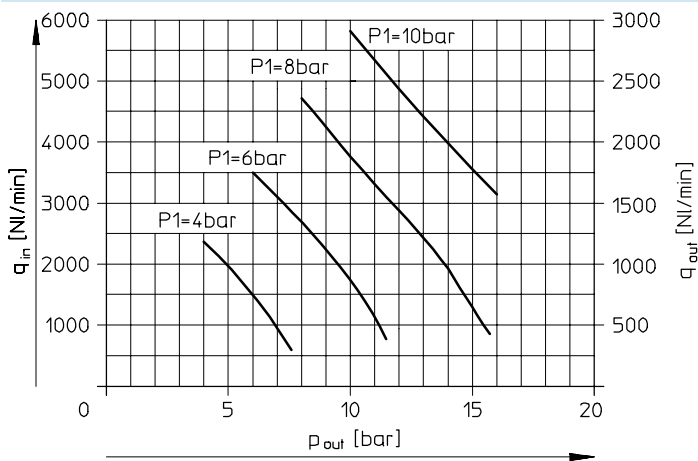
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Flow rate at input q_{in} and flow rate at output q_{out} as a function of output pressure p_{out}

DPA-63



DPA-100



Individual units
Pressure amplifier

4.7

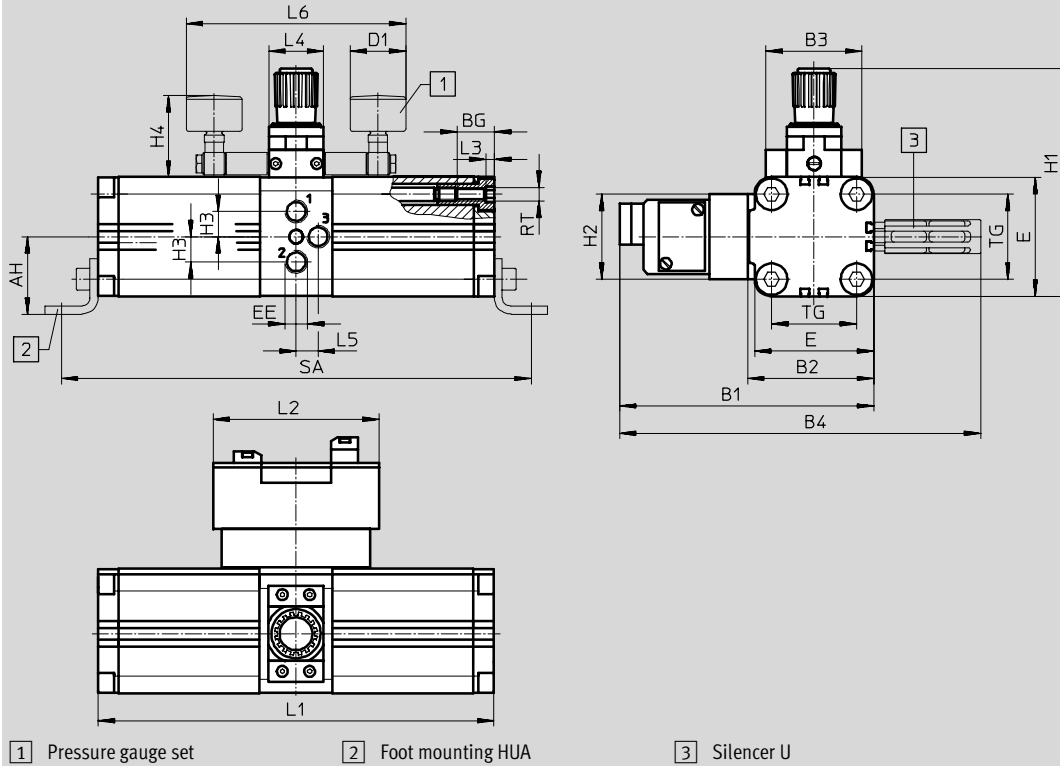
Pressure boosters DPA

Technical data

FESTO

Dimensions

Download CAD data → www.festo.com/en/engineering



Type	AH	B1	B2	B3	B4	BG	D1 Ø	E	EE	H1	H2
DPA-63-10	56.5	187	92.5	70	266	25	41	88	G $\frac{3}{8}$	169	62
DPA-63-16								128	G $\frac{1}{2}$	244	71
DPA-100-10	81	244	133	102	352	30	41	88	G $\frac{3}{8}$	169	62
DPA-100-16								128	G $\frac{1}{2}$	244	71

Type	H3	H4	L1	L2	L3	L4	L5	L6	RT	TG	SA
DPA-63-10	17.5	60	289	122	6	40	19	161	M10	62	343
DPA-63-16											
DPA-100-10	27	73	367	145.5	6	55	11	175	M10	103	433
DPA-100-16											

Ordering data

Size	Output pressure 4 ... 10 bar		Output pressure 4 ... 16 bar	
	Part No.	Type	Part No.	Type
63	184 518	DPA-63-10	193 392	DPA-63-16
100	184 519	DPA-100-10	188 399	DPA-100-16

Pressure boosters DPA

Accessories

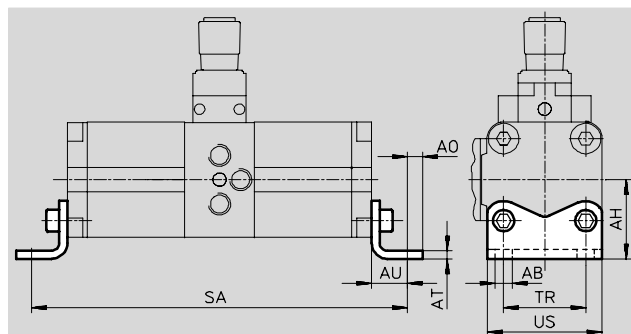
FESTO

Foot mounting HUA

Material:

Galvanised steel

Free of copper, PTFE and silicone



Ordering data										
Size	AB Ø	AH	AO	AT	AU	SA	TR	US	Part No.	Type
63	11	56.5	11.75	6	27	343	62	85.5	157 315	HUA-63
100	13.5	81	11.75	8	33	433	103	126.5	157 317	HUA-100

Pressure gauge set DPA-MA

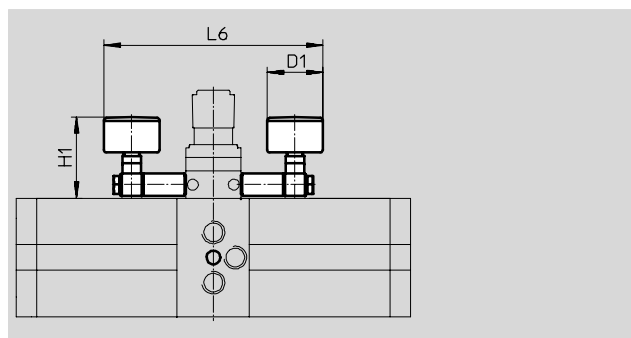
If the pressure gauge scale is to be specifically aligned, PTFE sealing tape must be used instead of the included sealing rings.

Material:

Housing: Acrylic butadiene styrene

Window shield: Polystyrene

Connection piece: Brass



Ordering data					
Size	D1 Ø	H1	L6	Part No.	Type
63-10	41	60	160.5	526 096	DPA-63-10-MA-SET
63-16				526 097	DPA-63-16-MA-SET
100-10	41	73	175	526 098	DPA-100-10-MA-SET
100-16				526 099	DPA-100-16-MA-SET

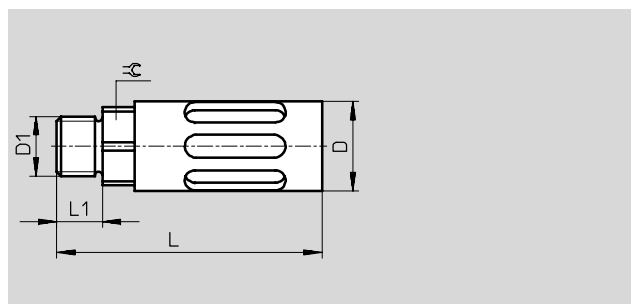
Silencer U

Material:

Housing: Die-cast aluminium

Insert: Polyethylene

Free of copper, PTFE and silicone



Ordering data						
Connection	D	D1	L	L1	Ø	Part No. Type
G3/8	25	G3/8	88.5	10.5	19	6843 U-3/8-B
G1/2	28	G1/2	120	14	24	6844 U-1/2-B

Core Range

Individual units
Pressure amplifier

4.7

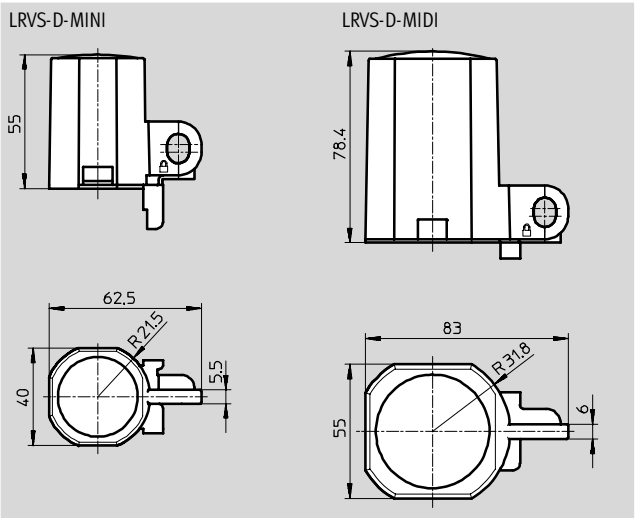
Pressure boosters DPA

Accessories



Regulator lock LRVS

Material:
Cap: Polyacetate
Lock plate: Steel
Knurled nut: Aluminium

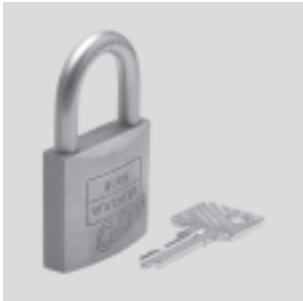


Ordering data			
Size	Weight [g]	Part No.	Type
63	40	193 781	LRVS-D-MINI ¹⁾
100	60	193 782	LRVS-D-MIDI ¹⁾

1) Free of copper, PTFE and silicone

Padlock LRVS-D

Material:
Housing: Brass



Ordering data			
	Weight [g]	Part No.	Type
Padlock	120	193 786	LRVS-D