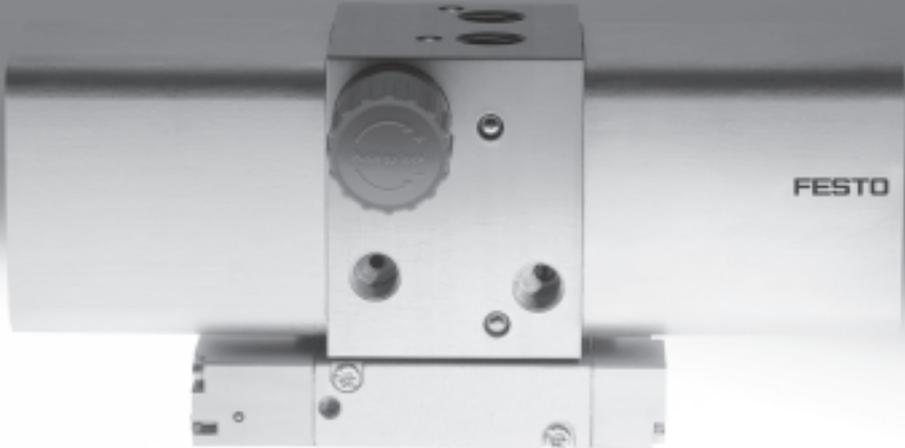


Pressure boosters DPA



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.

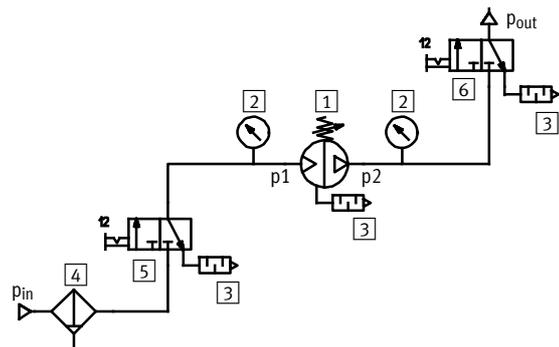
Connection to the compressed air network

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

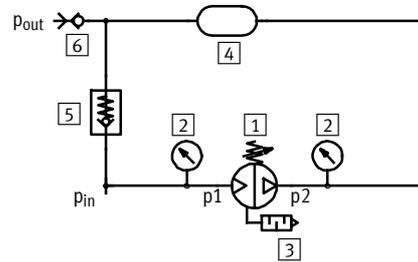
Key features

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

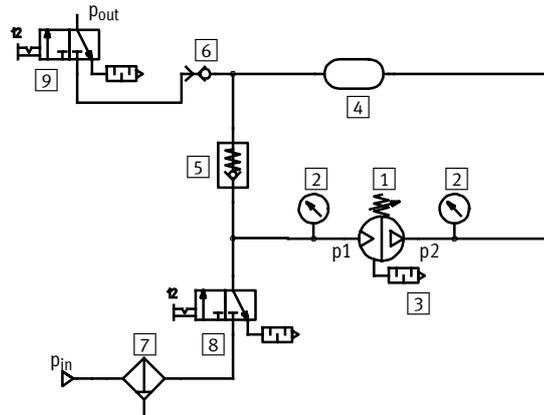
the difference between the supply and output pressures. The air reservoir is filled faster. A non-return valve prevents the air from flowing back out of the reservoir.

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



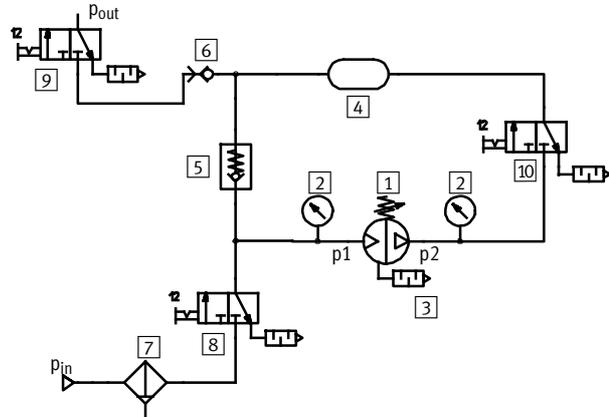
Circuitry with 2 on-off valves

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



Circuitry with 3 on-off valves

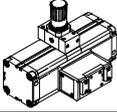
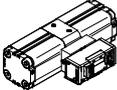
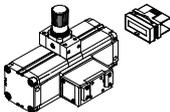
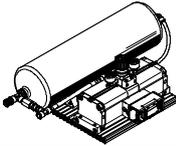
The air reservoir is vented via the additional on-off valve.



- | | |
|-------------------------|---|
| 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

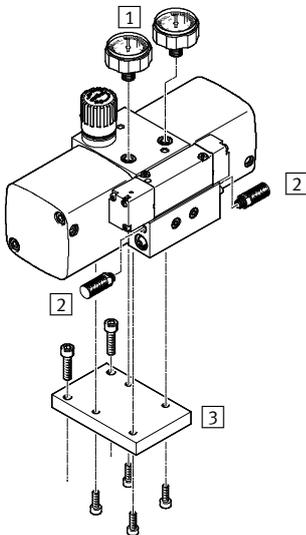
Product range overview

| 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 |
| Pressure booster/ air reservoir combination | With sensing option | | | |
| |  | DPA-...-A | 63, 100 | 5 |
| |  | DPA-...-CRVZS | 40, 63, 100 | 16 |

Pressure boosters DPA

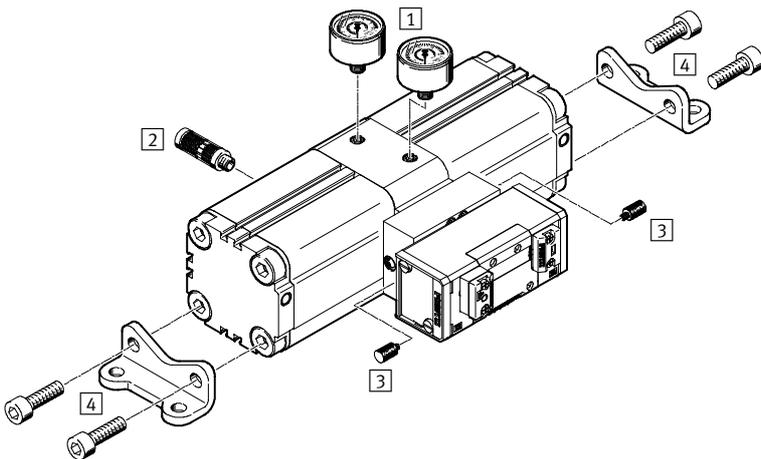
Peripherals overview

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 | 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



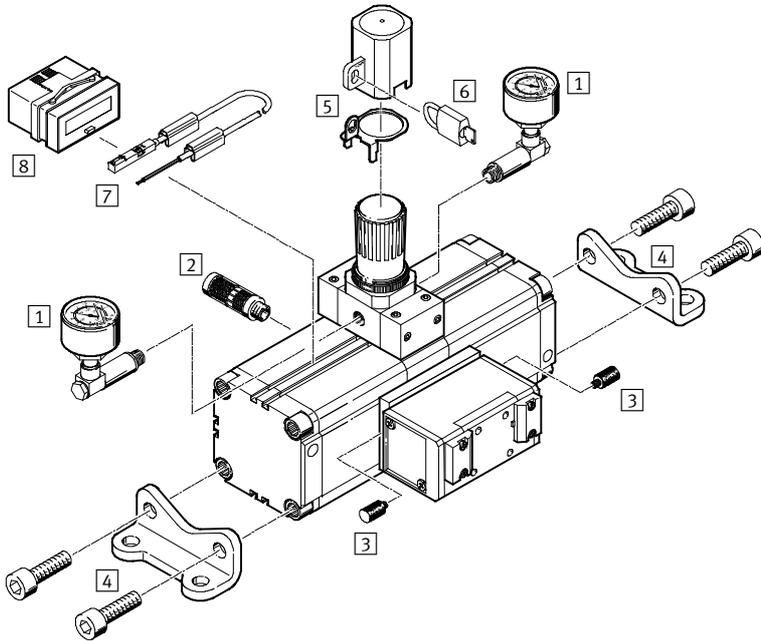
| Mounting attachments and accessories | | | |
|--------------------------------------|----------------------|--|----|
| | Brief description | → Page/Internet | |
| 1 | Pressure gauge MA | For monitoring the supply and output pressure | 23 |
| 2 | Silencer U...-B | For noise reduction at the exhaust port | 25 |
| 3 | Silencer U-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 U-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 | 25 |
| 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) | 24 |

Pressure boosters DPA

Type codes



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)

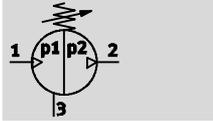
| | |
|---|--------------------------|
| | No sensing possibility |
| A | With sensing possibility |

Pressure boosters DPA

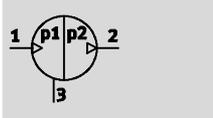
Technical data

FESTO

Function
with pressure regulator

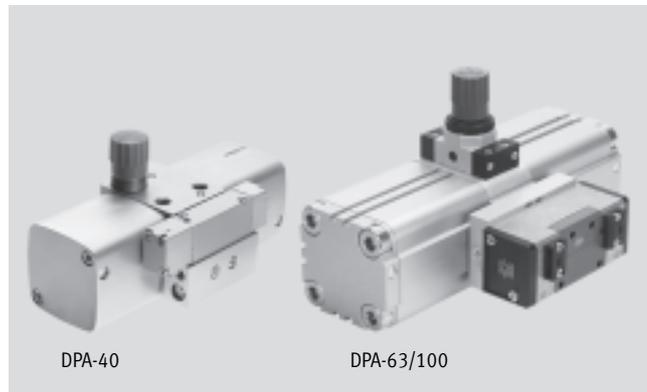


without pressure regulator



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

Wearing parts kits
→ 15



- 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 [bar] | 2.5 ... 8 | 2.5 ... 10 | 2 ... 8 | 2 ... 10 | 2.5 ... 8 | 2 ... 8 |
| Pressure regulation range [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 [7:4:4] | | | | | |
| 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.

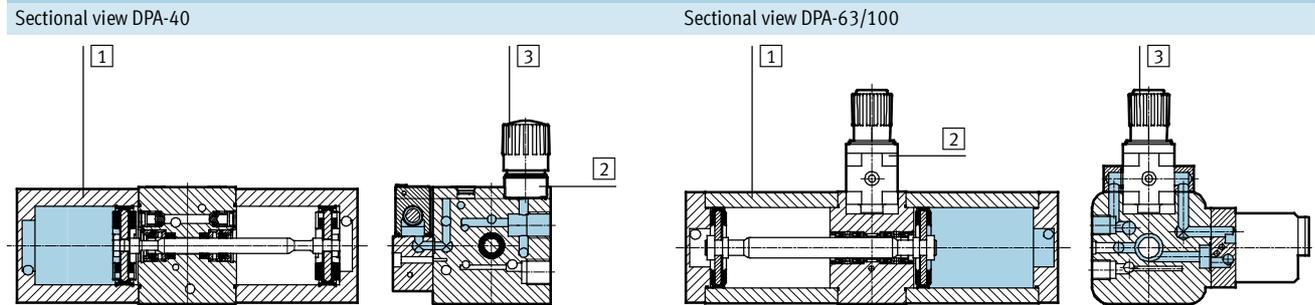
2) Corrosion resistance class 2 as per Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

| 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 | P-19-SW, PAN-16x2 |
| For output pressure | PAN-R-8x1,5 | PAN-R-16x3 | PAN-R-16x3 |

Materials



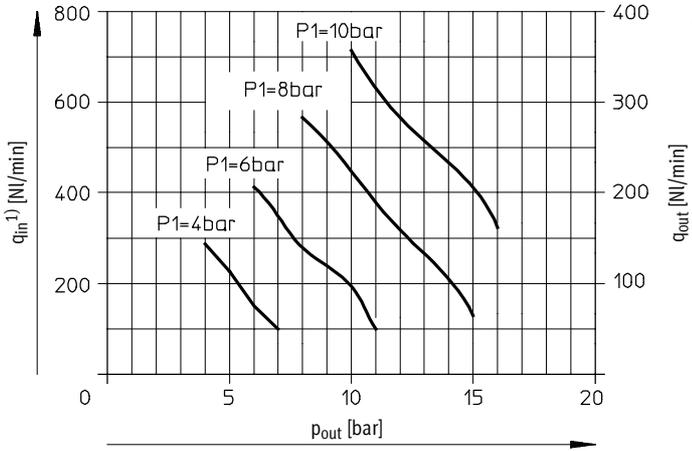
| Pressure booster | DPA-40 | DPA-63/100-10 | DPA-63/100-16 |
|---------------------------|-----------------------------|------------------|---------------|
| 1 Housing | Aluminium | | |
| 2 Support | Aluminium | Polyester | Aluminium |
| 3 Rotary knob | Polyacetate | | |
| - Piston/piston rod seals | Hydrogenated nitrile rubber | Polyurethane | |
| - Non-return valve seals | Nitrile rubber | Fluoro elastomer | |
| - Regulator/valve seals | Nitrile rubber | | |

Pressure boosters DPA

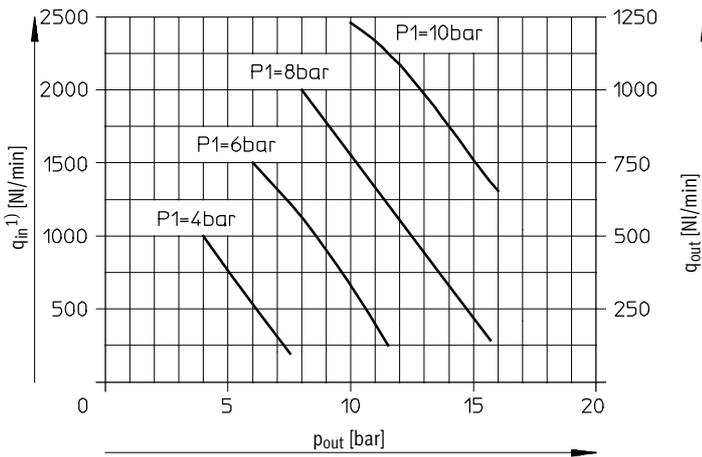
Technical data

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

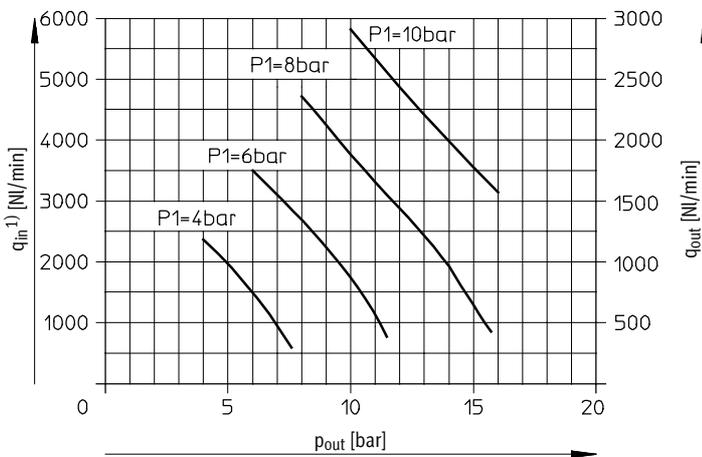
DPA-40



DPA-63



DPA-100



1) Theoretical values without switching losses and friction.

Pressure boosters DPA

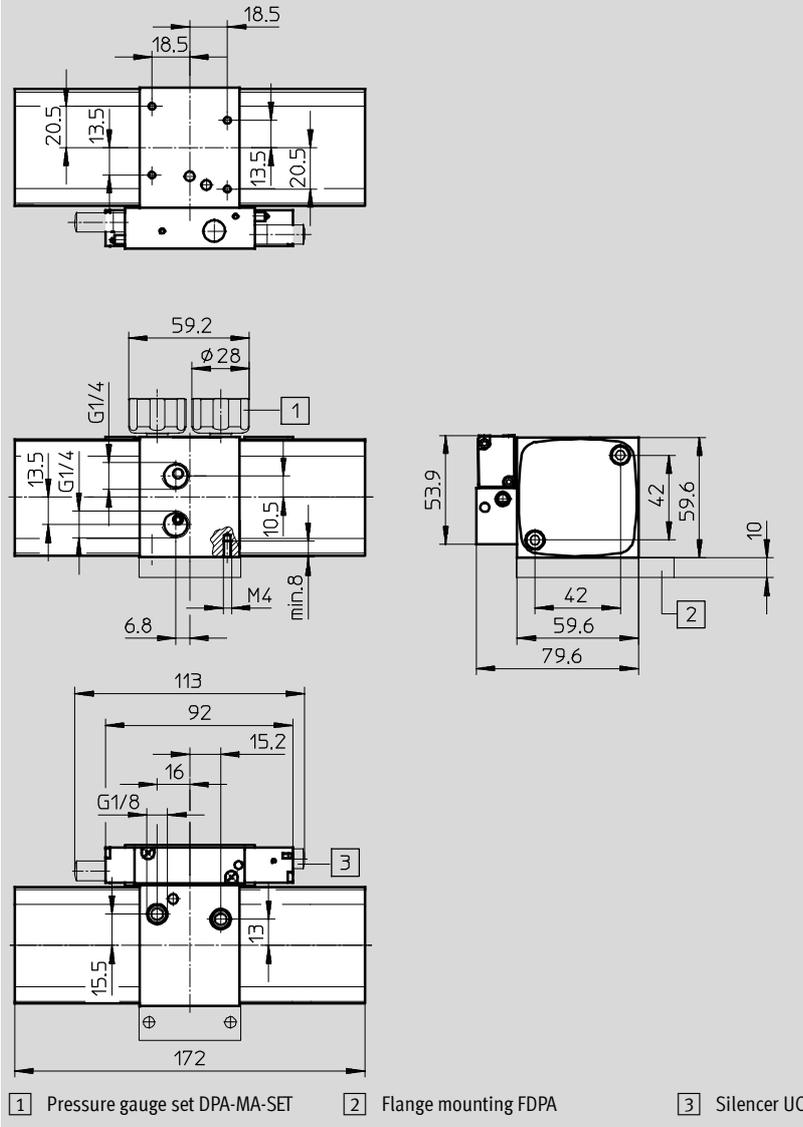
Technical data

FESTO

Dimensions – DPA without pressure regulator

Download CAD data → www.festo.com

DPA-40-D



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

Pressure boosters DPA

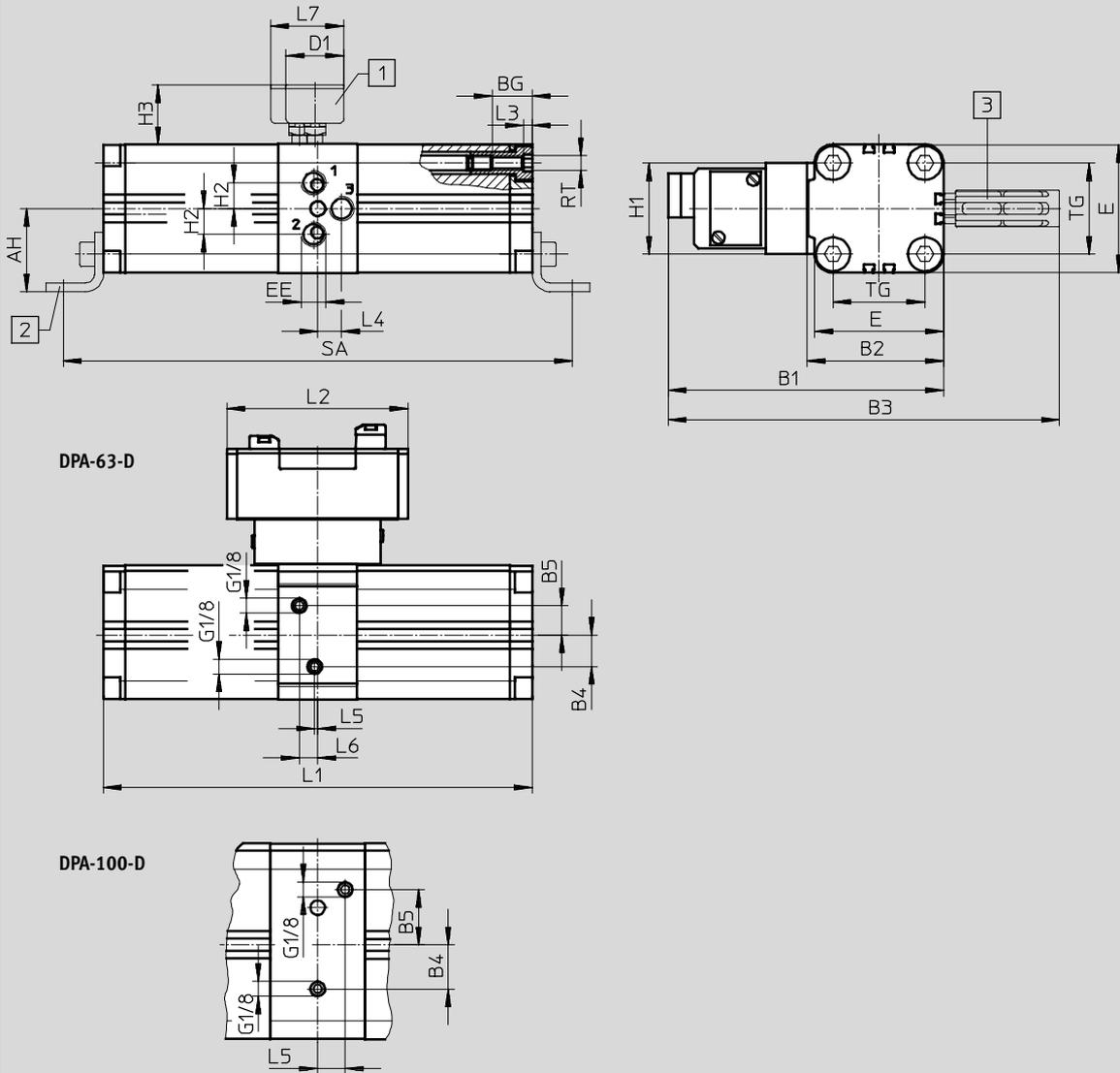
Technical data

FESTO

Dimensions – DPA without pressure regulator

Download CAD data → www.festo.com

DPA-63/100-D



1 Pressure gauge MA 2 Foot mounting HUA 3 Silencer U

| 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

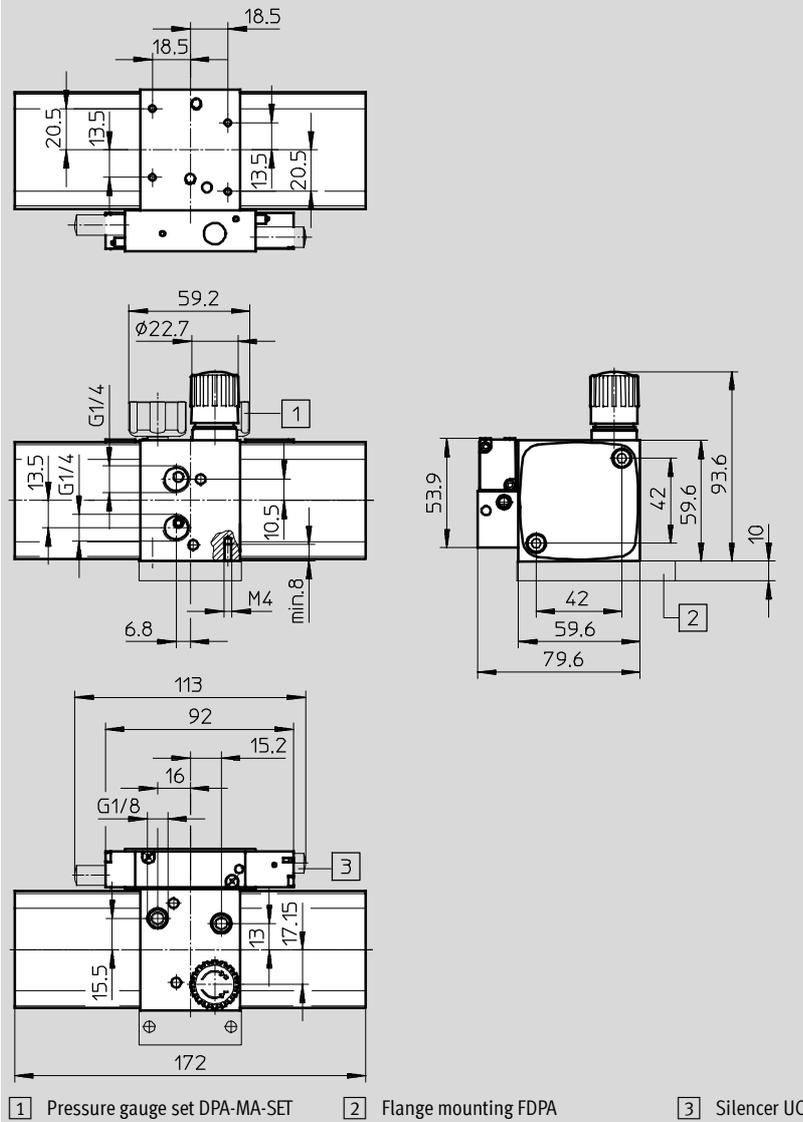
Pressure boosters DPA

Technical data

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

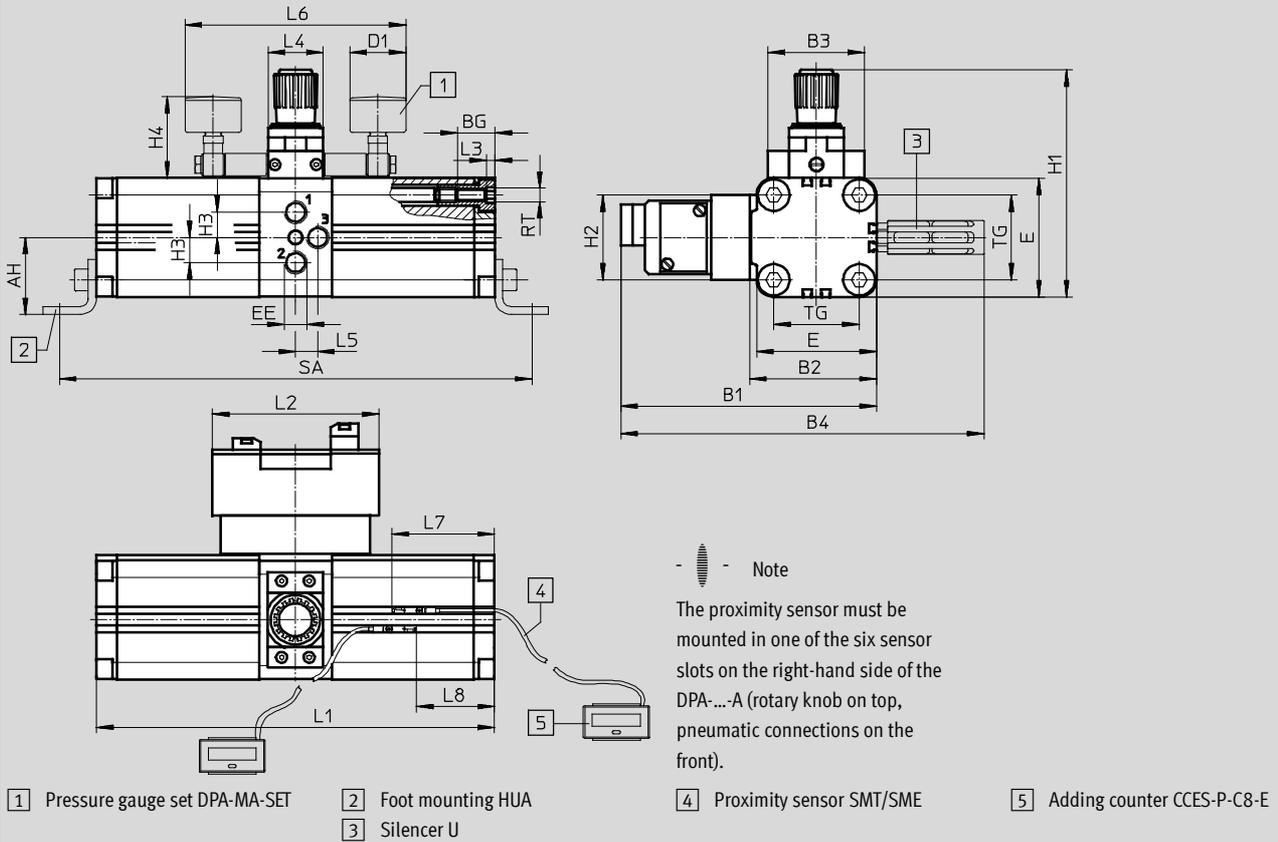
Technical data

FESTO

Dimensions – DPA with pressure regulator

Download CAD data → www.festo.com

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



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

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

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 | - | |

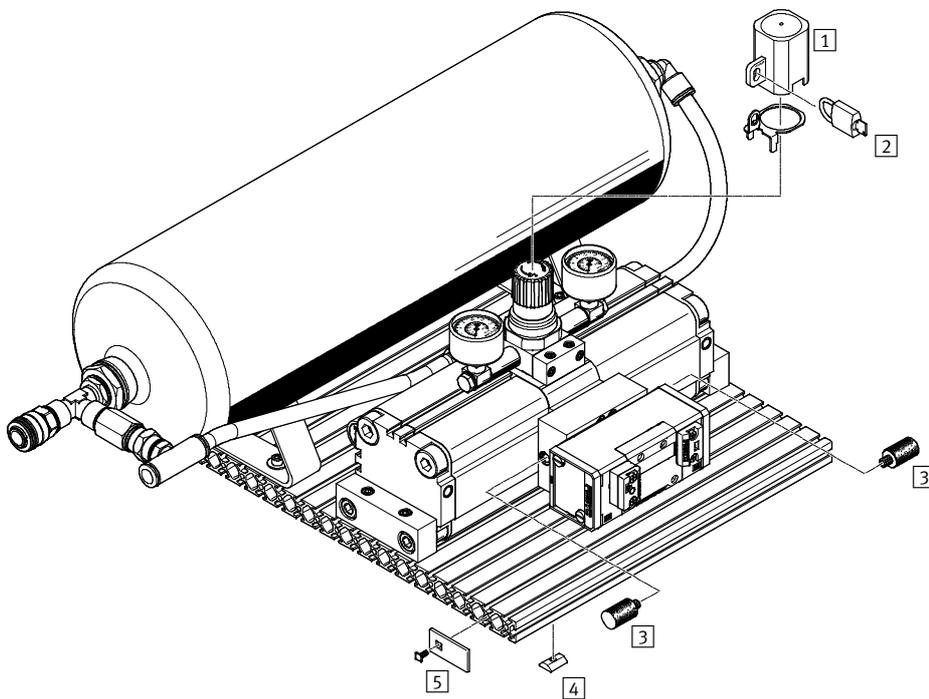
1) For DPA-40: 4.5 bar

| 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

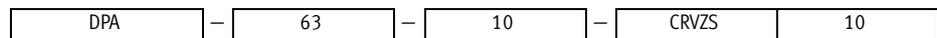
FESTO



| 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 | 25 |
| 2 | Padlock (DPA-63/100 only) LRVS-D | Accessory for regulator lock LRVS-D | 25 |
| 3 | Silencer (DPA-63/100 only) U-M3 | For noise reduction at the valve exhaust port | 25 |
| 4 | Slot nut IPM-VN-05-15/M5-ST | For attaching the slotted profile plate DPA-40: 4 pieces, DPA-63/100: 6 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



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 |
|-------|-----------------|

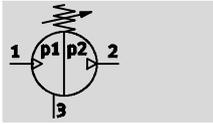
Air reservoir volume [l]

| | |
|-------------------|------------------|
| 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
- Wearing parts kits
→ 20



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 | |
| 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 | | | | | | | |
| Air reservoir volume [l] | 2 | | 5 | | 10 | | 20 | | | |
| 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 [bar] | 2.5 ... 8 | | | | 2 ... 8 | | | | | |
| Pressure regulation range [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 [7:4:4] | | | | | | | | | |
| 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 2 as per Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

| Materials | |
|-----------------------|----------------------------|
| Pressure booster | → 9 |
| Air reservoir | High-alloy stainless steel |
| Slotted profile plate | Aluminium |

Pressure boosters DPA, with air reservoir

Technical data

| 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 → 10

Dimensions – DPA-40 Download CAD data → www.festo.com

With 2 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

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

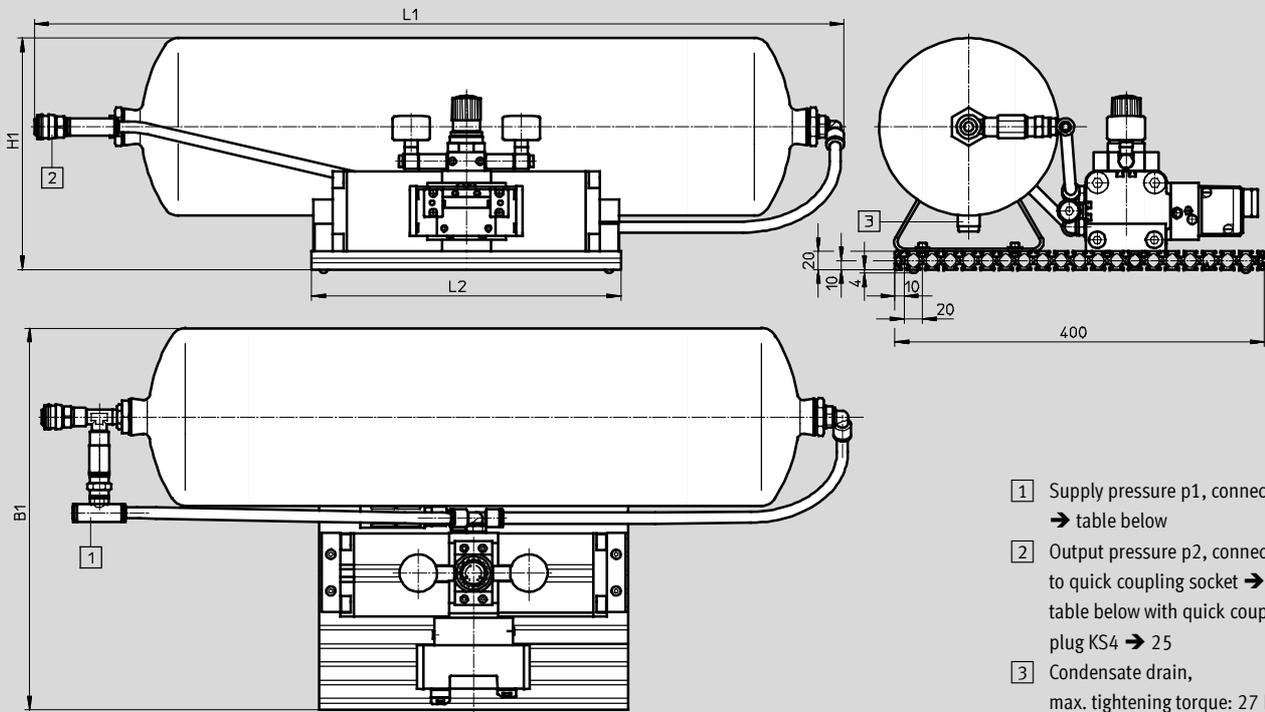
Technical data

FESTO

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

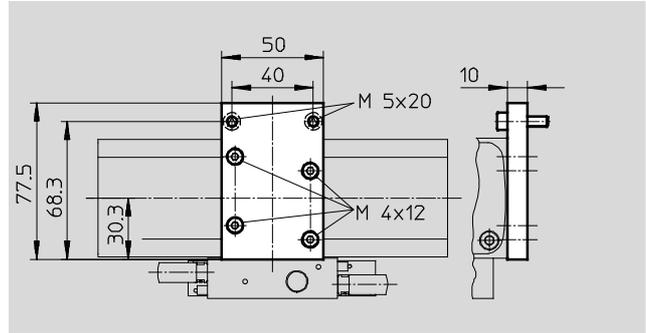
| Type | Product series | Part No. | Type |
|---------------|----------------|----------|---------------|
| DPA-40-10/16 | | 707308 | DPA-40-10/16 |
| DPA-63-10/16 | From SN to VN | 397400 | DPA-63-10/16 |
| | From VD | 738338 | DPA-63-10/16 |
| DPA-100-10/16 | From SN to VN | 397401 | DPA-100-10/16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

Pressure boosters DPA

Accessories

Flange mounting FDPA for DPA-40

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

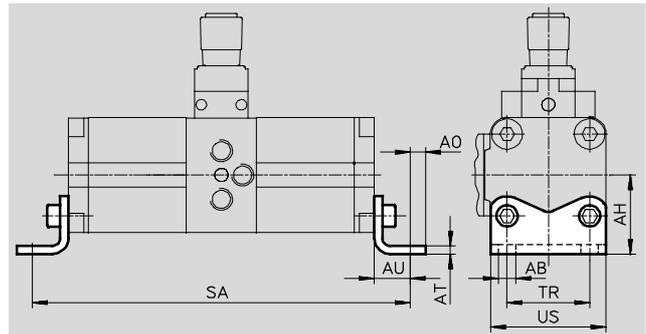


| Ordering data | | | | | | | | | | | |
|---------------|-------------------|------------|----------|---------|--|--|--|--|--|--|--|
| For type | CRC ¹⁾ | Weight [g] | Part No. | Type | | | | | | | |
| DPA-40 | 2 | 120 | 540783 | FDPA-40 | | | | | | | |

1) Corrosion resistance class 2 as per Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

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 1 according to Festo standard 940 070
 Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Pressure boosters DPA

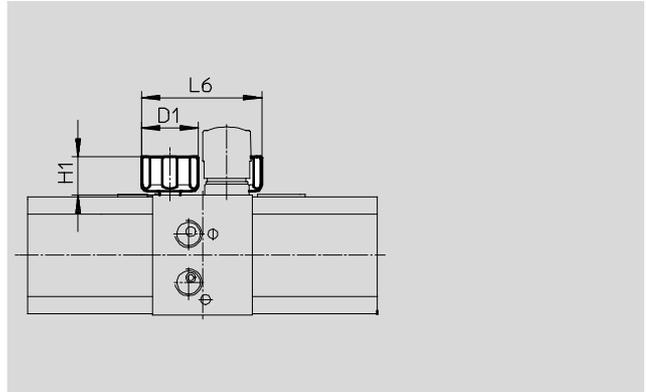
Accessories



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

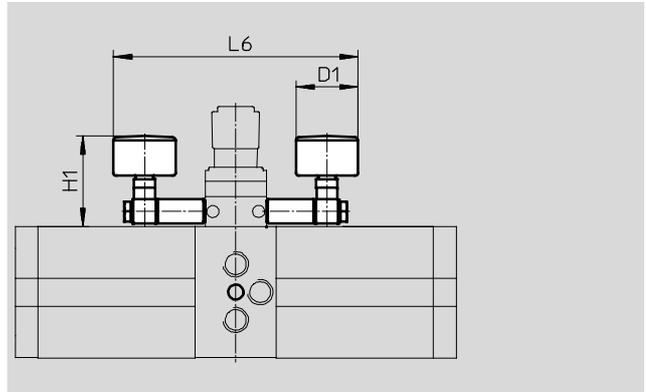
Material:
Housing: polyamide
Dial cover: polystyrene
Connection piece: polyamide

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

Material:
Housing: acrylic butadiene styrene
Dial cover: polystyrene
Connection piece: brass



| Dimensions | | | | |
|------------|----------------------|---------|----|------|
| For type | Pneumatic connection | D1 Ø | H1 | L6 |
| DPA-40 | R1/8 | 28 | 19 | 59.2 |
| DPA-63 | G1/8 | 39 | 65 | 159 |
| DPA-100 | G1/4 | 39 | 75 | 173 |

| Ordering data | | | | | | | |
|---------------|-------------------------------------|----------------------------|------------|---------------------------|-------------------|---------------------------|-------------------|
| For type | Nominal tubing size, pressure gauge | Measurement accuracy class | Weight [g] | Operating pressure 10 bar | | Operating pressure 16 bar | |
| | | | | Part No. | Type | Part No. | Type |
| DPA-40 | 27 | 4 | 16 | 540781 | DPA-40-10-MA-SET | 540782 | DPA-40-16-MA-SET |
| DPA-63 | 40 | 2.5 | 250 | 526096 | DPA-63-10-MA-SET | 526097 | DPA-63-16-MA-SET |
| DPA-100 | 40 | 2.5 | 305 | 526098 | DPA-100-10-MA-SET | 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

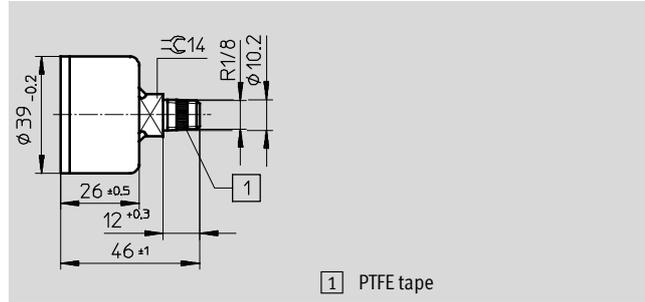
(colour: black)

Inspection window: polystyrene

Threaded plug/Materials in contact

with the medium: brass

Conforms to RoHS



| General technical data | |
|----------------------------|-----------------------------|
| Nominal tubing 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 |

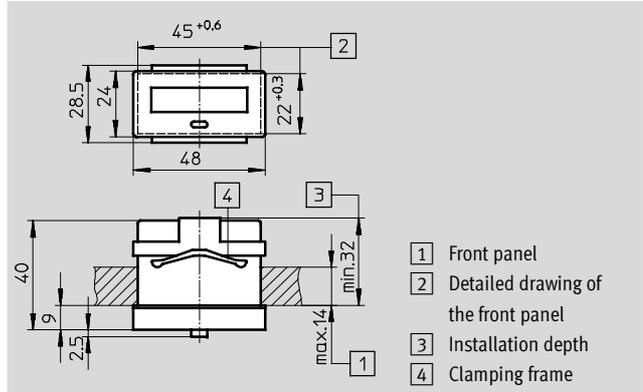
Pressure boosters DPA

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.

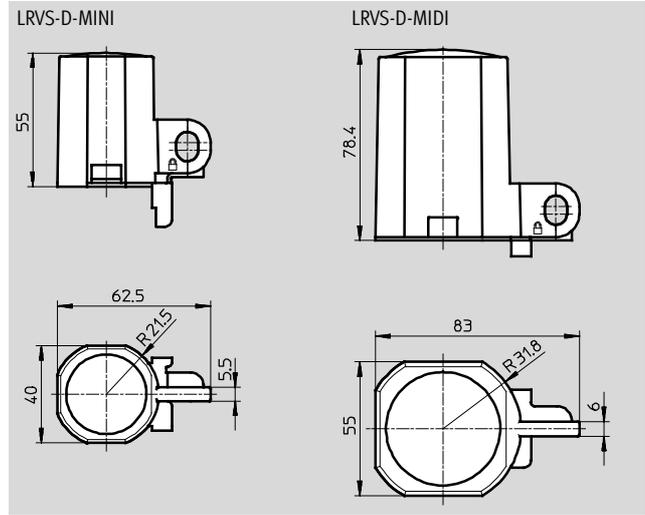
- Screened cables must be used for cables longer than 3 m.
- The maximum permissible cable length is 30 m.

Pressure boosters DPA

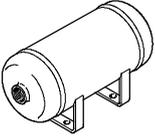
Accessories

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 ¹⁾ [m] |
| Silencer UC Technical data → Internet: u  | | | | Compressed air reservoir Technical data → Internet: vzs  | | | | |
| | M7 | 161418 | UC-M7 | Stainless steel | | | | |
| Silencer U-...-B Technical data → Internet: u  | | | | 0.1 | 160233 | CRVZS-0.1 | | |
| | G3/8 | 6843 | U-3/8-B | 0.4 | 160234 | CRVZS-0.4 | | |
| | G1/2 | 6844 | U-1/2-B | 0.75 | 160235 | CRVZS-0.75 | | |
| Silencer U-M3 Technical data → Internet: u  | | | | 2 | 160236 | CRVZS-2 | | |
| | M3 | 163978 | U-M3 | 5 | 192159 | CRVZS-5 | | |
| Quick coupling plug KS4 Technical data → Internet: ks4  | | | | 10 | 160237 | CRVZS-10 | | |
| | Male thread | | | 20 | 534845 | CRVZS-20 | | |
| | G1/4 | 2154 | KS4-1/4-A | Standard | | | | |
| | G3/8 | 2155 | KS4-3/8-A | 20 | 192161 | VZS-20-B | | |
| | G1/2 | 531676 | KS4-1/2-A | Plastic tubing P/PAN for supply pressure | | | | |
| | Female thread | | |  | | | | |
| | G1/4 | 531678 | KS4-1/4-I | - | 553909 | PAN-10x1,5-BL | 50 | |
| | G3/8 | 531679 | KS4-3/8-I | Plastic tubing PAN-R for output pressure Technical data → Internet: pan-r  | | | | |
| | G1/2 | 531680 | KS4-1/2-I | 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 | | | | |
| Padlock LRVS-D  | | | | - | 193786 | LRVS-D | | |

1) Packaging unit