

## Pressure gauges

**FESTO**



# Pressure gauges

Product range overview

**FESTO**

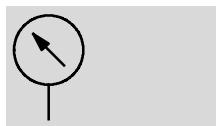
| Type                                                       |                                                                                     | Pneumatic connection                                    | Nominal size |    |    |    |    |    |    | Display unit |     |     | Red/<br>green<br>range | → Page/<br>Internet |
|------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------|--------------|----|----|----|----|----|----|--------------|-----|-----|------------------------|---------------------|
|                                                            |                                                                                     |                                                         | 15           | 23 | 26 | 27 | 40 | 50 | 63 | bar          | MPa | psi |                        |                     |
| Pressure gauge<br><b>MA-...-EN</b>                         |    | R $\frac{1}{8}$ , R $\frac{1}{4}$ , G $\frac{1}{4}$     | -            | -  | -  | -  | ■  | ■  | ■  | ■            | -   | ■   | -                      | 3                   |
| Pressure gauge<br>with red/green range<br><b>MA-...-RG</b> |    | R $\frac{1}{8}$ , R $\frac{1}{4}$                       | -            | -  | -  | -  | ■  | ■  | ■  | ■            | ■   | ■   | ■                      | 6                   |
| Pressure gauge<br><b>MA</b>                                |    | M5, R $\frac{1}{8}$ , G $\frac{1}{8}$ , G $\frac{1}{4}$ | ■            | ■  | -  | ■  | ■  | ■  | ■  | ■            | ■   | ■   | -                      | 9                   |
| Precision pressure gauge<br><b>MAP</b>                     |    | R $\frac{1}{8}$                                         | -            | -  | -  | -  | ■  | -  | -  | ■            | -   | ■   | -                      | 13                  |
| Pressure gauge<br><b>MA-...-QS</b>                         |    | QS-4, QS-6, QS-8                                        | ■            | -  | -  | -  | -  | -  | -  | ■            | -   | -   | -                      | 14                  |
| Flanged pressure gauge<br><b>FMA-...-EN</b>                |  | G $\frac{1}{4}$                                         | -            | -  | -  | -  | ■  | ■  | ■  | ■            | -   | ■   | -                      | 15                  |
| Flanged pressure gauge<br><b>FMA</b>                       |  | G $\frac{1}{4}$                                         | -            | -  | -  | -  | -  | -  | ■  | ■            | -   | ■   | -                      | 17                  |
| Precision flanged pressure<br>gauge<br><b>FMAP</b>         |  | G $\frac{1}{4}$                                         | -            | -  | -  | -  | -  | -  | ■  | ■            | -   | ■   | -                      | 18                  |
| Pressure gauge<br><b>PAGN</b>                              |  | For QSP10                                               | -            | -  | ■  | -  | ■  | -  | -  | ■            | ■   | ■   | -                      | 20                  |

# Pressure gauges MA-EN

Technical data

FESTO

Function



— — Temperature range  
–20 ... +60 °C



| Technical data                 |                             |                  |                 |                 |                 |
|--------------------------------|-----------------------------|------------------|-----------------|-----------------|-----------------|
| Nominal size                   | 40                          |                  |                 | 50              | 63              |
| Pneumatic connection           | R $\frac{1}{8}$             | R $\frac{1}{4}$  | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| Operating medium               | Inert gases                 |                  |                 |                 |                 |
|                                | Neutral liquids             |                  |                 |                 |                 |
| Note on operating/pilot medium | No oxygen                   |                  |                 |                 |                 |
|                                | No acetylene                |                  |                 |                 |                 |
| Design                         | Bourdon tube pressure gauge |                  |                 |                 |                 |
| Conforms to                    | EN 837-1                    |                  |                 |                 |                 |
| Type of mounting               | Inline installation         |                  |                 |                 |                 |
| Connection position            | Centred, rear side          |                  |                 |                 |                 |
| Ambient temperature [°C]       | –20 ... +60                 |                  |                 |                 |                 |
| Temperature of medium [°C]     | –20 ... +60 <sup>1)</sup>   |                  |                 |                 |                 |
| Measurement accuracy class     | 2.5                         |                  |                 |                 |                 |
| Continuous load factor         | 0.75                        |                  |                 |                 |                 |
| Intermittent load factor       | 0.66                        |                  |                 |                 |                 |
| Protection class               | IP43                        |                  |                 |                 |                 |
| For MS series service units    | MS4                         | MS4/MS6/MS9/MS12 |                 | –               | –               |
| Weight [g]                     | 60                          | 70               | 70              | 70              | 80              |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                            |                                           |                 |                 |                 |                 |
|--------------------------------------|-------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Nominal size                         | 40                                        |                 |                 | 50              | 63              |
| Pneumatic connection                 | R $\frac{1}{8}$                           | R $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| Housing                              | Acrylic butadiene styrene (colour: black) |                 |                 |                 |                 |
| Inspection window                    | Polystyrene                               |                 |                 |                 |                 |
| Threaded plug                        | Brass                                     |                 |                 |                 |                 |
| Materials in contact with the medium | Brass                                     |                 |                 |                 |                 |
| Note on materials                    | RoHS-compliant                            |                 |                 |                 |                 |

| Display range        |            |                 |                 |                 |                 |                 |
|----------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nominal size         |            | 40              |                 |                 | 50              | 63              |
| Pneumatic connection |            | R $\frac{1}{8}$ | R $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| [bar]                | [psi]      |                 |                 |                 |                 |                 |
| 0 ... 1              | 0 ... 14.5 | –               | –               | –               | –               | ■               |
| 0 ... 2.5            | 0 ... 36   | –               | –               | –               | ■               | ■               |
| 0 ... 6              | 0 ... 87   | –               | ■               | ■               | –               | –               |
| 0 ... 10             | 0 ... 145  | ■               | ■               | ■               | ■               | ■               |
| 0 ... 16             | 0 ... 232  | –               | ■               | ■               | ■               | ■               |
| 0 ... 25             | 0 ... 360  | ■               | ■               | –               | –               | –               |

# Pressure gauges MA-EN

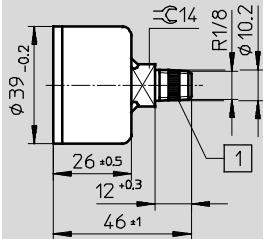
Technical data

**FESTO**

## Dimensions

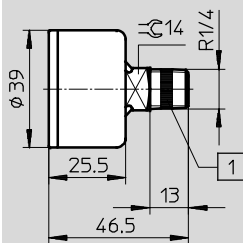
Download CAD data → [www.festo.com](http://www.festo.com)

MA-40, R $\frac{1}{8}$



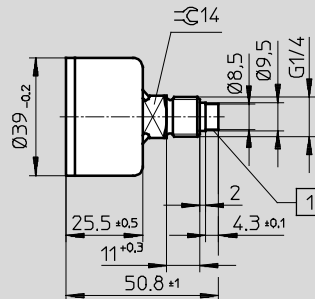
1 PTFE seal with  
MA-40-25- $\frac{1}{8}$ -EN

MA-40, R $\frac{1}{4}$



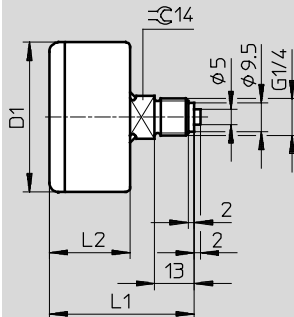
1 PTFE seal

MA-40, G $\frac{1}{4}$



1 With pre-assembled PTFE  
sealing ring

MA-50/63, G $\frac{1}{4}$



| Type  | D1<br>Ø | L1   | L2   |
|-------|---------|------|------|
| MA-50 | 49      | 47.5 | 26.5 |
| MA-63 | 61.5    | 48.5 | 27.5 |

# Pressure gauges MA-EN

Technical data



| Ordering data |                      |                    |               |            |          |                  |
|---------------|----------------------|--------------------|---------------|------------|----------|------------------|
| Nominal size  | Pneumatic connection | Operating pressure | Display range |            | Part No. | Type             |
|               |                      |                    | [bar]         | [psi]      |          |                  |
| 40            | R1/8                 | 0 ... 10 bar       | 0 ... 10      | 0 ... 145  | 162835   | MA-40-10-1/8-EN  |
|               |                      | 0 ... 25 bar       | 0 ... 25      | 0 ... 360  | 526167   | MA-40-25-1/8-EN  |
|               | R1/4                 | 0 ... 6 bar        | 0 ... 6       | 0 ... 87   | 187078   | MA-40-6-R1/4-EN  |
|               |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145  | 187079   | MA-40-10-R1/4-EN |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232  | 187080   | MA-40-16-R1/4-EN |
|               |                      | 0 ... 25 bar       | 0 ... 25      | 0 ... 360  | 187081   | MA-40-25-R1/4-EN |
|               | G1/4                 | 0 ... 6 bar        | 0 ... 6       | 0 ... 87   | 183899   | MA-40-6-G1/4-EN  |
|               |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145  | 183900   | MA-40-10-G1/4-EN |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232  | 183901   | MA-40-16-G1/4-EN |
|               |                      |                    |               |            |          |                  |
| 50            | G1/4                 | 0 ... 2.5 bar      | 0 ... 2.5     | 0 ... 36   | 162837   | MA-50-2,5-1/4-EN |
|               |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145  | 162838   | MA-50-10-1/4-EN  |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232  | 162839   | MA-50-16-1/4-EN  |
|               |                      |                    |               |            |          |                  |
| 63            | G1/4                 | 0 ... 1 bar        | 0 ... 1       | 0 ... 14.5 | 162844   | MA-63-1-1/4-EN   |
|               |                      | 0 ... 2.5 bar      | 0 ... 2.5     | 0 ... 36   | 162845   | MA-63-2,5-1/4-EN |
|               |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145  | 162840   | MA-63-10-1/4-EN  |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232  | 162841   | MA-63-16-1/4-EN  |

# Pressure gauges MA-RG, with red/green range

FESTO

## Technical data

### Function



-  - Temperature range  
-20 ... +60 °C



The adjustable red/green range provides additional safety when monitoring compressed air.

With the two red segments above the pressure gauge scale along with the printed green segment it is possible to

individually limit the desired pressure range. This coloured demarcation enables you to recognise immediately

whether or not the pressure is in the permitted tolerance range.

| Technical data                 |                             |                  |                 |
|--------------------------------|-----------------------------|------------------|-----------------|
| Nominal size                   | 40                          | 50               | 63              |
| Pneumatic connection           | R $\frac{1}{8}$             | R $\frac{1}{4}$  | R $\frac{1}{4}$ |
| Operating medium               | Inert gases                 |                  |                 |
|                                | Neutral liquids             |                  |                 |
| Note on operating/pilot medium | No oxygen                   |                  |                 |
|                                | No acetylene                |                  |                 |
| Design                         | Bourdon tube pressure gauge |                  |                 |
| Conforms to                    | EN 837-1                    |                  |                 |
| Type of mounting               | Inline installation         |                  |                 |
| Connection position            | Centred, rear side          |                  |                 |
| Ambient temperature [°C]       | -20 ... +60                 |                  |                 |
| Temperature of medium [°C]     | -20 ... +60 <sup>1)</sup>   |                  |                 |
| Measurement accuracy class     | 2.5                         |                  |                 |
| Continuous load factor         | 0.75                        |                  |                 |
| Intermittent load factor       | 0.66                        |                  |                 |
| Protection class               | IP43                        |                  |                 |
| For MS series service units    | MS4                         | MS4/MS6/MS9/MS12 | –               |
| Weight [g]                     | 60                          | 75               | 90              |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                              |                                           |
|--------------------------------------------------------|-------------------------------------------|
| Housing                                                | Acrylic butadiene styrene (colour: black) |
| Inspection window                                      | Polymethyl methacrylate                   |
| Threaded plug/<br>materials in contact with the medium | Brass                                     |
| Note on materials                                      | RoHS-compliant                            |

## Pressure gauges MA-RG, with red/green range

FESTO

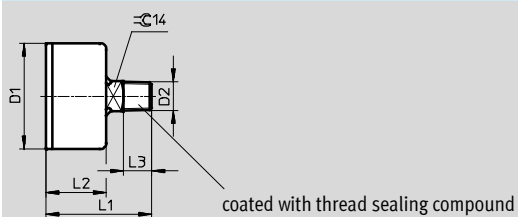
Technical data

| Display range        |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| Nominal size         | 40              | 50              | 63              |
| Pneumatic connection | R $\frac{1}{8}$ | R $\frac{1}{4}$ | R $\frac{1}{4}$ |
| [bar]                |                 |                 |                 |
| 0 ... 2.5            | ■               | ■               | ■               |
| 0 ... 10             | ■               | ■               | ■               |
| 0 ... 16             | ■               | ■               | ■               |
| [MPa]                |                 |                 |                 |
| 0 ... 0.25           | –               | ■               | ■               |
| 0 ... 1              | ■               | ■               | ■               |
| 0 ... 1.6            | ■               | ■               | ■               |
| [psi]                |                 |                 |                 |
| 0 ... 36             | –               | ■               | ■               |
| 0 ... 145            | ■               | ■               | ■               |
| 0 ... 232            | ■               | ■               | ■               |

### Dimensions

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

MA-...-E-RG



| Type           | D1<br>Ø<br>±0.5 | D2              | L1<br>±1 | L2<br>±0.5 | L3 |
|----------------|-----------------|-----------------|----------|------------|----|
| MA-40-...-E-RG | 39              | R $\frac{1}{8}$ | 46       | 28         | 10 |
| MA-50-...-E-RG | 49              | R $\frac{1}{4}$ | 49       | 28         | 13 |
| MA-63-...-E-RG | 61.5            | R $\frac{1}{4}$ | 50.5     | 29.5       | 13 |

## Pressure gauges MA-RG, with red/green range

FESTO

Technical data

| Ordering data      |                      |                    |               |          |                          |
|--------------------|----------------------|--------------------|---------------|----------|--------------------------|
| Nominal size       | Pneumatic connection | Operating pressure | Display range | Part No. | Type                     |
| Display unit [bar] |                      |                    |               |          |                          |
| 40                 | R1/8                 | 0 ... 2.5 bar      | 0 ... 2.5     | 546963   | MA-40-2,5-R1/8-E-RG      |
|                    |                      | 0 ... 10 bar       | 0 ... 10      | 525725   | MA-40-10-R1/8-E-RG       |
|                    |                      | 0 ... 16 bar       | 0 ... 16      | 525726   | MA-40-16-R1/8-E-RG       |
| 50                 | R1/4                 | 0 ... 2.5 bar      | 0 ... 2.5     | 525727   | MA-50-2,5-R1/4-E-RG      |
|                    |                      | 0 ... 10 bar       | 0 ... 10      | 525728   | MA-50-10-R1/4-E-RG       |
|                    |                      | 0 ... 16 bar       | 0 ... 16      | 525729   | MA-50-16-R1/4-E-RG       |
| 63                 | R1/4                 | 0 ... 2.5 bar      | 0 ... 2.5     | 525730   | MA-63-2,5-R1/4-E-RG      |
|                    |                      | 0 ... 10 bar       | 0 ... 10      | 525731   | MA-63-10-R1/4-E-RG       |
|                    |                      | 0 ... 16 bar       | 0 ... 16      | 525732   | MA-63-16-R1/4-E-RG       |
|                    |                      |                    |               |          |                          |
| Display unit [MPa] |                      |                    |               |          |                          |
| 40                 | R1/8                 | 0 ... 1 MPa        | 0 ... 1       | 526778   | MA-40-1,0-R1/8-MPA-E-RG  |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 526779   | MA-40-1,6-R1/8-MPA-E-RG  |
| 50                 | R1/4                 | 0 ... 0.25 MPa     | 0 ... 0.25    | 526780   | MA-50-0,25-R1/4-MPA-E-RG |
|                    |                      | 0 ... 1 MPa        | 0 ... 1       | 526781   | MA-50-1,0-R1/4-MPA-E-RG  |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 526782   | MA-50-1,6-R1/4-MPA-E-RG  |
| 63                 | R1/4                 | 0 ... 0.25 MPa     | 0 ... 0.25    | 526783   | MA-63-0,25-R1/4-MPA-E-RG |
|                    |                      | 0 ... 1 MPa        | 0 ... 1       | 526784   | MA-63-1,0-R1/4-MPA-E-RG  |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 526785   | MA-63-1,6-R1/4-MPA-E-RG  |
|                    |                      |                    |               |          |                          |
| Display unit [psi] |                      |                    |               |          |                          |
| 40                 | R1/8                 | 0 ... 145 psi      | 0 ... 145     | 526786   | MA-40-145-R1/8-PSI-E-RG  |
|                    |                      | 0 ... 232 psi      | 0 ... 232     | 526787   | MA-40-232-R1/8-PSI-E-RG  |
| 50                 | R1/4                 | 0 ... 36 psi       | 0 ... 36      | 526788   | MA-50-36-R1/4-PSI-E-RG   |
|                    |                      | 0 ... 145 psi      | 0 ... 145     | 526789   | MA-50-145-R1/4-PSI-E-RG  |
|                    |                      | 0 ... 232 psi      | 0 ... 232     | 526790   | MA-50-232-R1/4-PSI-E-RG  |
| 63                 | R1/4                 | 0 ... 36 psi       | 0 ... 36      | 526791   | MA-63-36-R1/4-PSI-E-RG   |
|                    |                      | 0 ... 145 psi      | 0 ... 145     | 526792   | MA-63-145-R1/4-PSI-E-RG  |
|                    |                      | 0 ... 232 psi      | 0 ... 232     | 526793   | MA-63-232-R1/4-PSI-E-RG  |



# Pressure gauges MA

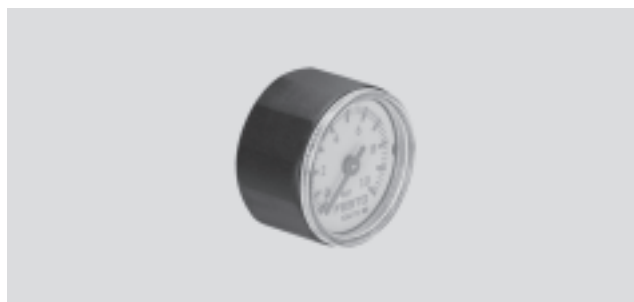
Technical data

FESTO

Function



Temperature range  
-20 ... +60 °C



| Technical data                 |                                                         |                             |           |      |      |                           |           |                           |                        |
|--------------------------------|---------------------------------------------------------|-----------------------------|-----------|------|------|---------------------------|-----------|---------------------------|------------------------|
| Nominal size                   | 15                                                      | 23                          | 27        |      |      | 40                        |           | 50                        | 63                     |
| Pneumatic connection           | M5                                                      | R1/8                        | M5        | R1/8 | G1/8 | G1/4                      | G1/4      | G1/4                      |                        |
| Operating medium               | Inert gases                                             |                             |           |      |      |                           |           |                           | Gaseous media          |
|                                | Neutral liquids                                         |                             |           |      |      |                           |           |                           | Fluid media            |
| Note on operating/pilot medium | No oxygen                                               |                             |           |      |      |                           |           |                           |                        |
|                                | No acetylene                                            |                             |           |      |      |                           |           |                           |                        |
| Design                         | Bourdon tube pressure gauge without measuring mechanism | Bourdon tube pressure gauge |           |      |      |                           |           |                           | Capsule pressure gauge |
| Conforms to                    | EN 837-1                                                |                             |           |      |      |                           |           |                           | EN 837-3               |
| Type of mounting               | Inline installation                                     |                             |           |      |      |                           |           |                           |                        |
| Connection position            | Centred, rear side                                      |                             |           |      |      |                           |           |                           |                        |
| Ambient temperature [°C]       | -20 ... +60                                             |                             | 0 ... +60 |      |      | -20 ... +60               |           | -20 ... +60               |                        |
| Temperature of medium [°C]     | -20 ... +60 <sup>1)</sup>                               |                             | 0 ... +60 |      |      | -20 ... +60 <sup>1)</sup> |           | -20 ... +80 <sup>1)</sup> |                        |
| Measurement accuracy class     | 5                                                       |                             | 4         |      |      | 2.5                       |           | 1.6                       |                        |
| Continuous load factor         | 0.75                                                    |                             | 0.75      |      |      |                           |           | 0.75                      |                        |
| Intermittent load factor       | 0.66                                                    | 0.6                         | 0.66      |      |      |                           |           | 0.9                       |                        |
| Protection class               | IP53                                                    | IP44                        | IP43      |      |      |                           |           | IP43                      |                        |
| For D series service units     | –                                                       | –                           | MICRO     | –    | MINI | –                         | MIDI/MAXI | –                         |                        |
| Weight [g]                     | 10                                                      | 27                          | 11        | 8    | 60   | 70                        | 70        | 180                       |                        |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                           |                       |                       |                           |                      |                                           |      |      |                         |
|-----------------------------------------------------|-----------------------|-----------------------|---------------------------|----------------------|-------------------------------------------|------|------|-------------------------|
| Nominal size                                        | 15                    | 23                    | 27                        |                      | 40                                        |      | 50   | 63                      |
| Pneumatic connection                                | M5                    | R1/8                  | M5                        | R1/8                 | G1/8                                      | G1/4 | G1/4 | G1/4                    |
| Housing                                             | Steel (colour: black) | Brass (colour: black) | Polyamide (colour: black) |                      | Acrylic butadiene styrene (colour: black) |      |      | Steel                   |
| Inspection window                                   | Polycarbonate         |                       | Polystyrene               |                      | Polystyrene                               |      |      | Polymethyl methacrylate |
| Threaded plug/ materials in contact with the medium | Brass                 |                       | Brass                     | Reinforced polyamide | Brass                                     |      |      | Brass                   |
| Note on materials                                   | RoHS-compliant        |                       |                           |                      |                                           |      |      |                         |

# Pressure gauges MA

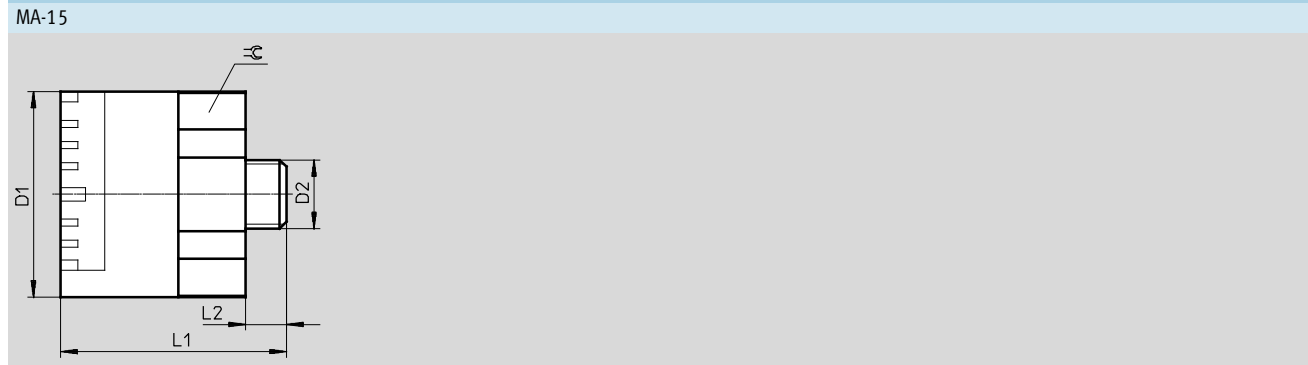
Technical data

FESTO

| Display range        |           |    |                 |    |                 |                 |                 |                 |                 |
|----------------------|-----------|----|-----------------|----|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nominal size         |           | 15 | 23              | 27 |                 | 40              |                 | 50              | 63              |
| Pneumatic connection |           | M5 | R $\frac{1}{8}$ | M5 | R $\frac{1}{8}$ | G $\frac{1}{8}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| [bar]                | [psi]     |    |                 |    |                 |                 |                 |                 |                 |
| 0 ... 0.25           | 0 ... 3.6 | –  | –               | –  | –               | –               | –               | –               | ■               |
| 0 ... 6              | 0 ... 87  | –  | ■               | –  | –               | –               | –               | –               | –               |
| 0 ... 10             | 0 ... 145 | –  | ■               | –  | –               | ■               | –               | ■               | –               |
| 0 ... 16             | 0 ... 232 | –  | ■               | –  | ■               | ■               | –               | ■               | –               |
| 0 ... 25             | 0 ... 360 | –  | –               | –  | ■               | –               | –               | –               | –               |
| [bar]                |           |    |                 |    |                 |                 |                 |                 |                 |
| 0 ... 10             |           | ■  | –               | ■  | –               | –               | –               | –               | –               |
| [MPa]                |           |    |                 |    |                 |                 |                 |                 |                 |
| 0 ... 0.6            |           | –  | –               | –  | –               | –               | ■               | –               | –               |
| 0 ... 1              |           | –  | –               | ■  | –               | ■               | ■               | ■               | –               |
| 0 ... 1.6            |           | –  | –               | –  | –               | ■               | ■               | ■               | –               |
| 0 ... 2.5            |           | –  | –               | –  | –               | –               | ■               | –               | –               |
| [psi]                |           |    |                 |    |                 |                 |                 |                 |                 |
| 0 ... 145            |           | ■  | –               | –  | –               | –               | –               | –               | –               |
| 0 ... 160            |           | –  | –               | ■  | –               | –               | –               | –               | –               |

## Dimensions

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



| Type  | D1<br>Ø | D2 | L1   | L2 | ≡  |
|-------|---------|----|------|----|----|
| MA-15 | 15      | M5 | 16.5 | 3  | 14 |

# Pressure gauges MA

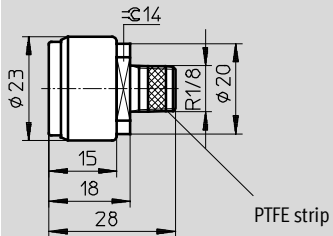
Technical data

FESTO

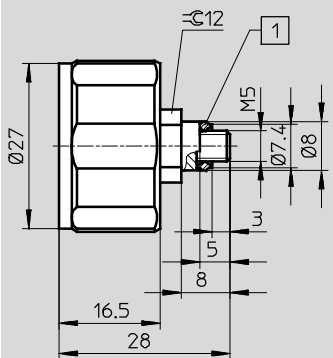
## Dimensions

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

### MA-23

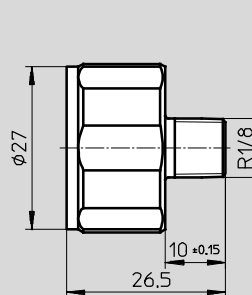


### MA-27, M5

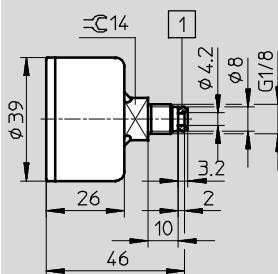


1 With pre-assembled polyamide sealing ring

### MA-27, R1/8

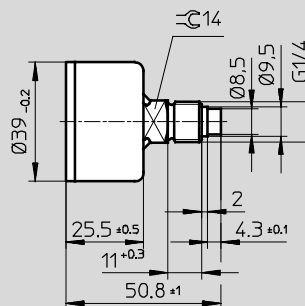


### MA-40, G1/8

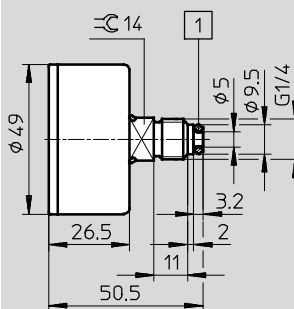


1 With pre-assembled aluminium sealing ring with MA-40-...-G1/8

### MA-40, G1/4

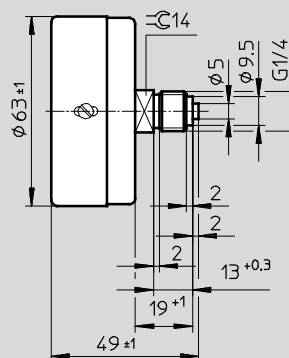


### MA-50



1 With pre-assembled aluminium sealing ring with MA-50-...-G1/4

### MA-63



# Pressure gauges MA

Technical data

**FESTO**

| Ordering data |                      |                    |               |           |          |               |
|---------------|----------------------|--------------------|---------------|-----------|----------|---------------|
| Nominal size  | Pneumatic connection | Operating pressure | Display range |           | Part No. | Type          |
|               |                      |                    | [bar]         | [psi]     |          |               |
| 23            | R1/8                 | 0 ... 6 bar        | 0 ... 6       | 0 ... 87  | 183896   | MA-23-6-R1/8  |
|               |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 183897   | MA-23-10-R1/8 |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 183898   | MA-23-16-R1/8 |
|               |                      |                    |               |           |          |               |
| 27            | R1/8                 | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 541733   | MA-27-16-R1/8 |
|               |                      | 0 ... 25 bar       | 0 ... 25      | 0 ... 360 | 541734   | MA-27-25-R1/8 |
|               |                      |                    |               |           |          |               |
| 40            | G1/8                 | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 359874   | MA-40-10-1/8  |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 345395   | MA-40-16-1/8  |
|               |                      |                    |               |           |          |               |
| 50            | G1/4                 | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 359873   | MA-50-10-1/4  |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 356759   | MA-50-16-1/4  |
|               |                      |                    |               |           |          |               |
| 63            | G1/4                 | 0 ... 0.25 bar     | 0 ... 0.25    | 0 ... 3.6 | 7169     | MA-63-0,25    |

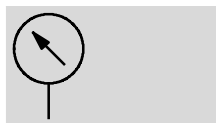
| Ordering data      |                      |                    |               |          |                    |
|--------------------|----------------------|--------------------|---------------|----------|--------------------|
| Nominal size       | Pneumatic connection | Operating pressure | Display range | Part No. | Type               |
| Display unit [bar] |                      |                    |               |          |                    |
| 15                 | M5                   | 0 ... 10 bar       | 0 ... 10      | 132340   | MA-15-10-M5        |
|                    |                      |                    |               |          |                    |
| 27                 | M5                   | 0 ... 10 bar       | 0 ... 10      | 526323   | MA-27-10-M5        |
|                    |                      |                    |               |          |                    |
| Display unit [MPa] |                      |                    |               |          |                    |
| 27                 | M5                   | 0 ... 1 MPa        | 0 ... 1       | 526324   | MA-27-1,0-M5-MPA   |
|                    |                      |                    |               |          |                    |
| 40                 | G1/8                 | 0 ... 1 MPa        | 0 ... 1       | 192732   | MA-40-1-G1/8-MPA   |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 192733   | MA-40-1,6-G1/8-MPA |
|                    | G1/4                 | 0 ... 0.6 MPa      | 0 ... 0.6     | 184285   | MA-40-0,6-G1/4-MPA |
|                    |                      | 0 ... 1 MPa        | 0 ... 1       | 184286   | MA-40-1,0-G1/4-MPA |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 184287   | MA-40-1,6-G1/4-MPA |
|                    |                      | 0 ... 2.5 MPa      | 0 ... 2.5     | 184288   | MA-40-2,5-G1/4-MPA |
|                    |                      |                    |               |          |                    |
| 50                 | G1/4                 | 0 ... 1 MPa        | 0 ... 1       | 192734   | MA-50-1-G1/4-MPA   |
|                    |                      | 0 ... 1.6 MPa      | 0 ... 1.6     | 192735   | MA-50-1,6-G1/4-MPA |
|                    |                      |                    |               |          |                    |
| Display unit [psi] |                      |                    |               |          |                    |
| 15                 | M5                   | 0 ... 145 psi      | 0 ... 145     | 132341   | MA-15-145-M5-PSI   |
|                    |                      |                    |               |          |                    |
| 27                 | M5                   | 0 ... 160 psi      | 0 ... 160     | 527405   | MA-27-160-M5-PSI   |

# Precision pressure gauges MAP

FESTO

Technical data

Function



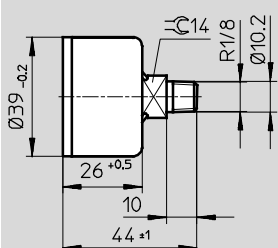
-  - Temperature range  
-20 ... +60 °C



| Technical data                 |                                |
|--------------------------------|--------------------------------|
| Nominal size                   | 40                             |
| Pneumatic connection           | R1/8                           |
| Operating medium               | Inert gases<br>Neutral liquids |
| Note on operating/pilot medium | No oxygen<br>No acetylene      |
| Design                         | Bourdon tube pressure gauge    |
| Conforms to                    | EN 837-1                       |
| Type of mounting               | Inline installation            |
| Connection position            | Centred, rear side             |
| Ambient temperature [°C]       | -20 ... +60                    |
| Temperature of medium [°C]     | -20 ... +60 <sup>1)</sup>      |
| Measurement accuracy class     | 1.6                            |
| Continuous load factor         | 0.75                           |
| Intermittent load factor       | 0.66                           |
| Protection class               | IP43                           |
| Weight [g]                     | 60                             |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                              |                                           |
|--------------------------------------------------------|-------------------------------------------|
| Housing                                                | Acrylic butadiene styrene (colour: black) |
| Inspection window                                      | Polystyrene                               |
| Threaded plug/<br>materials in contact with the medium | Brass                                     |
| Note on materials                                      | RoHS-compliant                            |

| Dimensions                                                                          |  | Download CAD data → <a href="http://www.festo.com">www.festo.com</a> |
|-------------------------------------------------------------------------------------|--|----------------------------------------------------------------------|
|  |  |                                                                      |

| Ordering data |                      |                    |               |           |                            |
|---------------|----------------------|--------------------|---------------|-----------|----------------------------|
| Nominal size  | Pneumatic connection | Operating pressure | Display range |           | Part No.    Type           |
|               |                      |                    | [bar]         | [psi]     |                            |
| 40            | R1/8                 | 0 ... 1 bar        | 0 ... 1       | 0 ... 15  | 161126    MAP-40-1-1/8-EN  |
|               |                      | 0 ... 4 bar        | 0 ... 4       | 0 ... 58  | 162842    MAP-40-4-1/8-EN  |
|               |                      | 0 ... 6 bar        | 0 ... 6       | 0 ... 87  | 161127    MAP-40-6-1/8-EN  |
|               |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 161128    MAP-40-16-1/8-EN |

# Pressure gauges MA-QS

Technical data

FESTO

Function



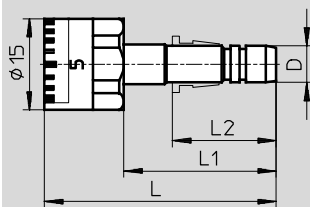
—  — Temperature range  
–20 ... +60 °C



| Technical data                 |                                                         |      |      |
|--------------------------------|---------------------------------------------------------|------|------|
| Nominal size                   | 15                                                      |      |      |
| Pneumatic connection           | QS-4                                                    | QS-6 | QS-8 |
| Operating medium               | Inert gases                                             |      |      |
|                                | Neutral liquids                                         |      |      |
| Note on operating/pilot medium | No oxygen                                               |      |      |
|                                | No acetylene                                            |      |      |
| Design                         | Bourdon tube pressure gauge without measuring mechanism |      |      |
| Conforms to                    | 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     | 5                                                       |      |      |
| Continuous load factor         | 0.75                                                    |      |      |
| Intermittent load factor       | 0.66                                                    |      |      |
| Protection class               | IP53                                                    |      |      |
| Weight [g]                     | 10                                                      |      |      |

| Materials                                              |                       |
|--------------------------------------------------------|-----------------------|
| Housing                                                | Steel (colour: black) |
| Inspection window                                      | Polycarbonate         |
| Threaded plug/<br>materials in contact with the medium | Brass                 |
| Note on materials                                      | RoHS-compliant        |

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



| Dimensions and ordering data |                        |    |    |      |                    |                     |                      |
|------------------------------|------------------------|----|----|------|--------------------|---------------------|----------------------|
| Nominal size                 | Pneumatic connection D | L  | L1 | L2   | Operating pressure | Display range [bar] | Part No. Type        |
| 15                           | QS-4                   | 36 | 23 | 15   | 0 ... 10 bar       | 0 ... 10            | 153383 MA-15-10-QS-4 |
|                              | QS-6                   | 38 | 25 | 17   | 0 ... 10 bar       | 0 ... 10            | 153384 MA-15-10-QS-6 |
|                              | QS-8                   | 34 | 21 | 18.5 | 0 ... 10 bar       | 0 ... 10            | 153385 MA-15-10-QS-8 |

# Flanged pressure gauges FMA-EN

Technical data

FESTO

Function




 - Temperature range  
 -20 ... +60 °C



| Technical data                 |                               |                 |                 |
|--------------------------------|-------------------------------|-----------------|-----------------|
| Nominal size                   | 40                            | 50              | 63              |
| Pneumatic connection           | G $\frac{1}{4}$               | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| Operating medium               | Inert gases<br>Neutral fluids |                 |                 |
| Note on operating/pilot medium | No oxygen<br>No acetylene     |                 |                 |
| Design                         | Bourdon tube pressure gauge   |                 |                 |
| Conforms to                    | EN 837-1                      |                 |                 |
| Type of mounting               | Front panel mounting          |                 |                 |
| Connection position            | Centred, rear side            |                 |                 |
| Ambient temperature [°C]       | -20 ... +60                   |                 |                 |
| Temperature of medium [°C]     | -20 ... +60 <sup>1)</sup>     |                 |                 |
| Measurement accuracy class     | 2.5                           |                 |                 |
| Continuous load factor         | 0.75                          |                 |                 |
| Intermittent load factor       | 0.66                          |                 |                 |
| Protection class               | IP43                          |                 |                 |
| Weight [g]                     | 80                            | 100             | 120             |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                              |                                           |
|--------------------------------------------------------|-------------------------------------------|
| Housing                                                | Acrylic butadiene styrene (colour: black) |
| Inspection window                                      | Styrene acrylonitrile copolymer           |
| Mounting ring                                          | Steel                                     |
| Threaded plug/<br>materials in contact with the medium | Brass                                     |
| Note on materials                                      | RoHS-compliant                            |

| Display range        |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| Nominal size         | 40              | 50              | 63              |
| Pneumatic connection | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{1}{4}$ |
| [bar]                | [psi]           |                 |                 |
| 0 ... 2.5            | 0 ... 36        | —               | ■               |
| 0 ... 10             | 0 ... 145       | ■               | ■               |
| 0 ... 16             | 0 ... 232       | ■               | ■               |

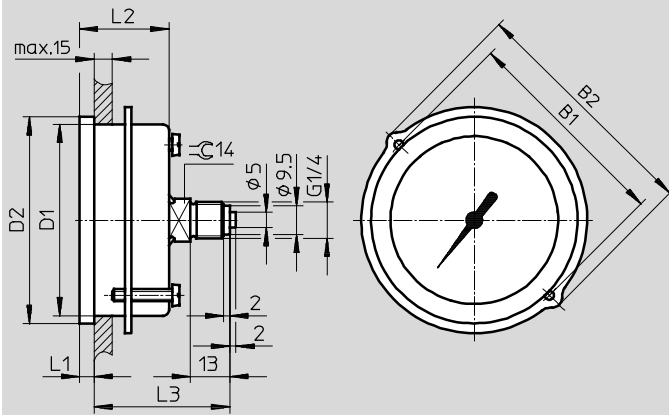
# Flanged pressure gauges FMA-EN

Technical data

**FESTO**

## Dimensions

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



| Type   | B1 | B2 | D1<br>Ø | D2<br>Ø | L1  | L2   | L3   |
|--------|----|----|---------|---------|-----|------|------|
| FMA-40 | 48 | 56 | 40      | 45      | 4.5 | 26.5 | 43   |
| FMA-50 | 57 | 66 | 49.5    | 54      | 4.5 | 26.8 | 43.3 |
| FMA-63 | 70 | 79 | 63      | 68      | 4.8 | 29.5 | 42.5 |

## Ordering data

| Nominal size | Pneumatic connection | Operating pressure | Display range |           | Part No. | Type              |
|--------------|----------------------|--------------------|---------------|-----------|----------|-------------------|
|              |                      |                    | [bar]         | [psi]     |          |                   |
| 40           | G1/4                 | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 159596   | FMA-40-10-1/4-EN  |
|              |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 159597   | FMA-40-16-1/4-EN  |
| 50           | G1/4                 | 0 ... 2.5 bar      | 0 ... 2.5     | 0 ... 36  | 159598   | FMA-50-2,5-1/4-EN |
|              |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 159599   | FMA-50-10-1/4-EN  |
|              |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 159600   | FMA-50-16-1/4-EN  |
| 63           | G1/4                 | 0 ... 2.5 bar      | 0 ... 2.5     | 0 ... 36  | 159601   | FMA-63-2,5-1/4-EN |
|              |                      | 0 ... 10 bar       | 0 ... 10      | 0 ... 145 | 159602   | FMA-63-10-1/4-EN  |
|              |                      | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | 159603   | FMA-63-16-1/4-EN  |

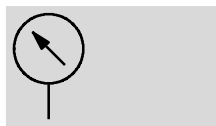


# Flanged pressure gauges FMA

Technical data

**FESTO**

Function



Temperature range  
-20 ... +60 °C

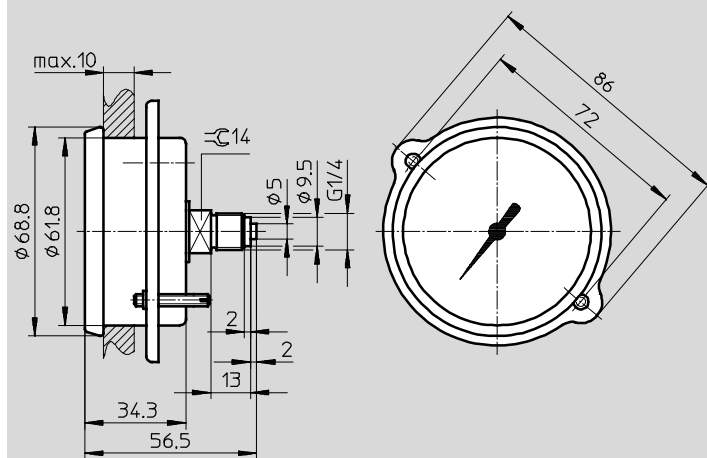


| Technical data                 |                              |
|--------------------------------|------------------------------|
| Nominal size                   | 63                           |
| Pneumatic connection           | G1/4                         |
| Operating medium               | Gaseous media<br>Fluid media |
| Note on operating/pilot medium | No oxygen<br>No acetylene    |
| Design                         | Capsule pressure gauge       |
| Conforms to                    | EN 837-3                     |
| Type of mounting               | Front panel mounting         |
| Connection position            | Centred, rear side           |
| Ambient temperature [°C]       | -20 ... +60                  |
| Temperature of medium [°C]     | -20 ... +80                  |
| Measurement accuracy class     | 1.6                          |
| Continuous load factor         | 0.75                         |
| Intermittent load factor       | 0.9                          |
| Protection class               | IP43                         |
| Weight [g]                     | 120                          |

| Materials            |                         |
|----------------------|-------------------------|
| Housing              | Steel                   |
| Inspection window    | Polymethyl methacrylate |
| Mounting ring/screws | Steel                   |
| Threaded plug        | Brass                   |

## Dimensions

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



| Ordering data |                      |                    |               |           |                         |
|---------------|----------------------|--------------------|---------------|-----------|-------------------------|
| Nominal size  | Pneumatic connection | Operating pressure | Display range |           | Part No.    Type        |
|               |                      |                    | [bar]         | [psi]     |                         |
| 63            | G1/4                 | 0 ... 0.25 bar     | 0 ... 0.25    | 0 ... 3.6 | 225783    FMA-63-0,25-C |

# Precision flanged pressure gauges FMAP

FESTO

Technical data

Function



— — Temperature range  
–20 ... +60 °C



| Technical data                 |                             |  |
|--------------------------------|-----------------------------|--|
| Nominal size                   | 63                          |  |
| Pneumatic connection           | G1/4                        |  |
| Operating medium               | Inert gases                 |  |
|                                | Neutral liquids             |  |
| Note on operating/pilot medium | No oxygen                   |  |
|                                | No acetylene                |  |
| Design                         | Bourdon tube pressure gauge |  |
| Conforms to                    | EN 837-1                    |  |
| Type of mounting               | Front panel mounting        |  |
| Connection position            | Centred, rear side          |  |
| Ambient temperature [°C]       | –20 ... +60                 |  |
| Temperature of medium [°C]     | –20 ... +60 <sup>1)</sup>   |  |
| Measurement accuracy class     | 1.0                         |  |
| Continuous load factor         | 0.75                        |  |
| Intermittent load factor       | 0.66                        |  |
| Protection class               | IP43                        |  |
| Weight [g]                     | 120                         |  |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                              |                                           |
|--------------------------------------------------------|-------------------------------------------|
| Housing                                                | Acrylic butadiene styrene (colour: black) |
| Inspection window                                      | Styrene acrylonitrile copolymer           |
| Mounting ring                                          | Steel                                     |
| Threaded plug/<br>materials in contact with the medium | Brass                                     |
| Note on materials                                      | RoHS-compliant                            |

| Dimensions | Download CAD data → <a href="http://www.festo.com">www.festo.com</a> |
|------------|----------------------------------------------------------------------|
|            |                                                                      |

## Precision flanged pressure gauges FMAP

**FESTO**

Technical data

| Ordering data |                               |                    |               |           |                                                              |
|---------------|-------------------------------|--------------------|---------------|-----------|--------------------------------------------------------------|
| Nominal size  | Pneumatic connection          | Operating pressure | Display range |           | Part No.    Type                                             |
|               |                               |                    | [bar]         | [psi]     |                                                              |
| 63            | G <sup>1</sup> / <sub>4</sub> | 0 ... 1 bar        | 0 ... 1       | 0 ... 15  | <b>161129</b> <b>FMAP-63-1-<sup>1</sup>/<sub>4</sub>-EN</b>  |
|               |                               | 0 ... 4 bar        | 0 ... 4       | 0 ... 58  | <b>162843</b> <b>FMAP-63-4-<sup>1</sup>/<sub>4</sub>-EN</b>  |
|               |                               | 0 ... 6 bar        | 0 ... 6       | 0 ... 87  | <b>161130</b> <b>FMAP-63-6-<sup>1</sup>/<sub>4</sub>-EN</b>  |
|               |                               | 0 ... 16 bar       | 0 ... 16      | 0 ... 232 | <b>161131</b> <b>FMAP-63-16-<sup>1</sup>/<sub>4</sub>-EN</b> |

# Pressure gauges PAGN

Technical data

FESTO

Function



— — Temperature range  
–20 ... +60 °C



| Technical data                 |                             |           |
|--------------------------------|-----------------------------|-----------|
| Nominal size                   | 26                          | 40        |
| Pneumatic connection           | For QSP10                   | For QSP10 |
| Operating medium               | Inert gases                 |           |
|                                | Neutral liquids             |           |
| Note on operating/pilot medium | No oxygen                   |           |
|                                | No acetylene                |           |
| Design                         | Bourdon tube pressure gauge |           |
| Conforms to                    | EN 837-1                    |           |
| Type of mounting               | Inline installation         |           |
| Connection position            | Centred, rear side          |           |
| Ambient temperature [°C]       | –20 ... +60                 |           |
| Temperature of medium [°C]     | –20 ... +60 <sup>1)</sup>   |           |
| Measurement accuracy class     | 4.0                         | 2.5       |
| Continuous load factor         | 0.75                        |           |
| Intermittent load factor       | 0.66                        |           |
| Protection class               | IP43                        |           |
|                                | NEMA 4                      |           |
| Weight [g]                     | 15                          | 50        |

1) With a media temperature below 0 °C, the operating medium should be dry.

| Materials                                              |                           |                                           |
|--------------------------------------------------------|---------------------------|-------------------------------------------|
| Housing                                                | Polyamide (colour: black) | Acrylic butadiene styrene (colour: black) |
| Inspection window                                      | Polystyrene               |                                           |
| Threaded plug/<br>materials in contact with the medium | Brass                     |                                           |
| Note on materials                                      | RoHS-compliant            |                                           |

| Dimensions     |         | Download CAD data → <a href="http://www.festo.com">www.festo.com</a> |
|----------------|---------|----------------------------------------------------------------------|
| PAGN-26        | PAGN-40 |                                                                      |
|                |         |                                                                      |
| 1 Sealing ring |         |                                                                      |

# Pressure gauges PAGN

FESTO

Technical data

| Ordering data                          |                      |                    |               |               |          |                  |
|----------------------------------------|----------------------|--------------------|---------------|---------------|----------|------------------|
| Nominal size                           | Pneumatic connection | Operating pressure | Display range |               | Part No. | Type             |
|                                        |                      |                    | Outer scale   | Inner scale   |          |                  |
| Outer scale in bar, inner scale in psi |                      |                    |               |               |          |                  |
| 26                                     | For QSP10            | 0 ... 10 bar       | 0 ... 10 bar  | 0 ... 145 psi | 543488   | PAGN-26-10-P10   |
|                                        |                      | 0 ... 16 bar       | 0 ... 16 bar  | 0 ... 232 psi | 543487   | PAGN-26-16-P10   |
| 40                                     | For QSP10            | 0 ... 10 bar       | 0 ... 10 bar  | 0 ... 145 psi | 548009   | PAGN-40-10-P10   |
|                                        |                      | 0 ... 16 bar       | 0 ... 16 bar  | 0 ... 232 psi | 548010   | PAGN-40-16-P10   |
|                                        |                      |                    |               |               |          |                  |
| Outer scale in psi, inner scale in bar |                      |                    |               |               |          |                  |
| 26                                     | For QSP10            | 0 ... 145 psi      | 0 ... 145 psi | 0 ... 10 bar  | 563732   | PAGN-26-145P-P10 |
|                                        |                      | 0 ... 232 psi      | 0 ... 232 psi | 0 ... 16 bar  | 563731   | PAGN-26-232P-P10 |
| 40                                     | For QSP10            | 0 ... 145 psi      | 0 ... 145 psi | 0 ... 10 bar  | 563734   | PAGN-40-145P-P10 |
|                                        |                      | 0 ... 232 psi      | 0 ... 232 psi | 0 ... 16 bar  | 563733   | PAGN-40-232P-P10 |
|                                        |                      |                    |               |               |          |                  |
| Outer scale in MPa                     |                      |                    |               |               |          |                  |
| 26                                     | For QSP10            | 0 ... 1 MPa        | 0 ... 1 MPa   | –             | 563736   | PAGN-26-1M-P10   |
|                                        |                      | 0 ... 1.6 MPa      | 0 ... 1.6 MPa | –             | 563735   | PAGN-26-1.6M-P10 |
| 40                                     | For QSP10            | 0 ... 1 MPa        | 0 ... 1 MPa   | –             | 563738   | PAGN-40-1M-P10   |
|                                        |                      | 0 ... 1.6 MPa      | 0 ... 1.6 MPa | –             | 563737   | PAGN-40-1.6M-P10 |