


# Pressure gauge MA, DIN EN 837-1

Technical data

Function



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



Technical data			
Nominal size	40	50	63
Pneumatic connection	R $\frac{1}{8}$ , G $\frac{1}{4}$ , R $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$
Operating medium	Liquid media		
	Gaseous media		
	Not permitted: Oxygen		
	Not permitted: Acetylene		
Design	Bourdon tube pressure gauge		
Conforms to	DIN EN 837-1		
Type of mounting	Can be screwed in		
Connection position	Centre, rear side		
Ambient temperature [°C]	-20 ... +60		
Accuracy of measurement, class	2.5		
Factor, continuous load	0.75		
Factor, intermittent load	0.66		
Protection class	IP43		
For MS series service units	MS4/MS6	-	-
Materials	Housing: Acrylic butadiene styrene		
	Window shield: Polystyrene		
	Threaded plug: Brass		
Weight [g]	60	70	80

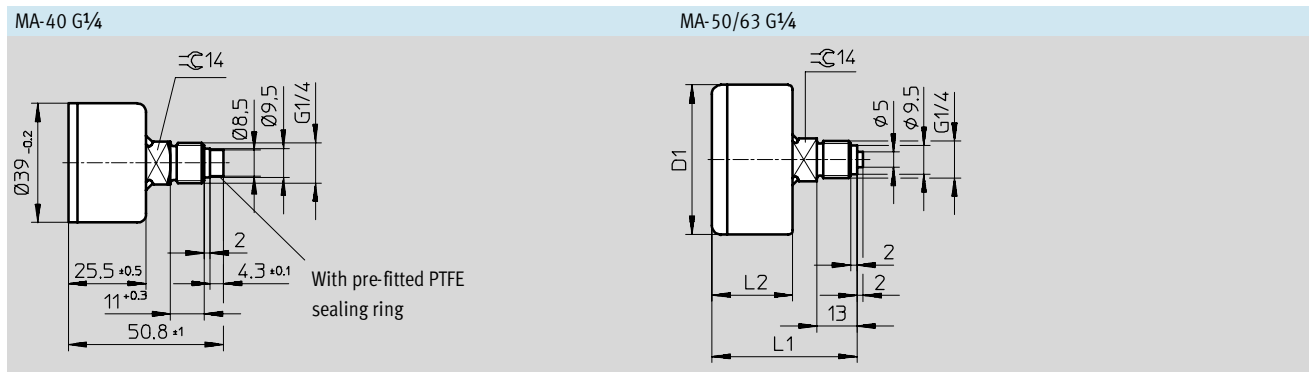
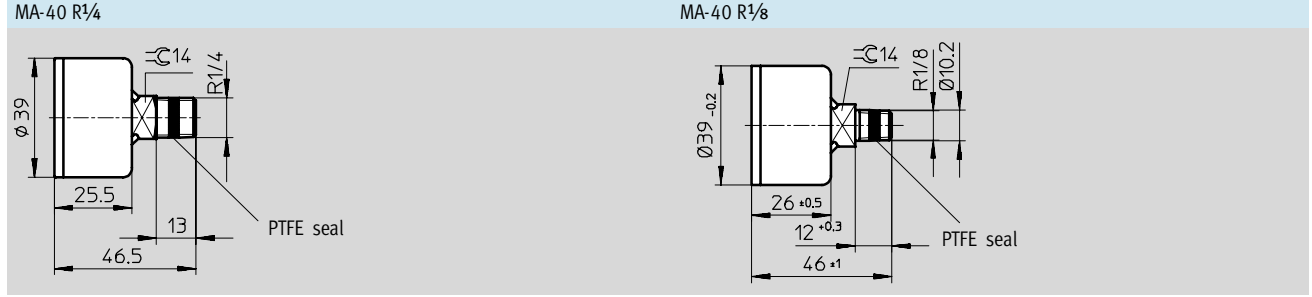
Indicating range				
[bar]	[psi]	40	50	63
0 ... 1	0 ... 14.5	-	-	■
0 ... 2.5	0 ... 36	-	■	■
0 ... 6	0 ... 87	■	-	-
0 ... 10	0 ... 145	■	■	■
0 ... 16	0 ... 232	■	■	■
0 ... 25	0 ... 360	■	-	-

# Pressure gauge MA, DIN EN 837-1

Technical data



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



Type	D1 Ø	L1	L2
MA-50	49	47.5	26.5
MA-63	61.5	48.5	27.5

Individual units  
Pressure gauges

4.8

# Pressure gauge MA, DIN EN 837-1

FESTO

Technical data

Ordering data					
Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
40	R $\frac{1}{8}$	0 ... 10	0 ... 145	162 835	MA-40-10- $\frac{1}{8}$ -EN
		0 ... 16	0 ... 232	162 836	MA-40-16- $\frac{1}{8}$ -EN
		0 ... 25	0 ... 360	526 167	MA-40-25- $\frac{1}{8}$ -EN
40	G $\frac{1}{4}$	0 ... 6	0 ... 87	183 899	MA-40-6-G $\frac{1}{4}$ -EN
		0 ... 10	0 ... 145	183 900	MA-40-10-G $\frac{1}{4}$ -EN
		0 ... 16	0 ... 232	183 901	MA-40-16-G $\frac{1}{4}$ -EN
		0 ... 25	0 ... 360	183 902	MA-40-25-G $\frac{1}{4}$ -EN
40	R $\frac{1}{4}$	0 ... 6	0 ... 87	187 078	MA-40-6-R $\frac{1}{4}$ -EN
		0 ... 10	0 ... 145	187 079	MA-40-10-R $\frac{1}{4}$ -EN
		0 ... 16	0 ... 232	187 080	MA-40-16-R $\frac{1}{4}$ -EN
		0 ... 25	0 ... 360	187 081	MA-40-25-R $\frac{1}{4}$ -EN
50	G $\frac{1}{4}$	0 ... 2.5	0 ... 36	162 837	MA-50-2,5- $\frac{1}{4}$ -EN
		0 ... 10	0 ... 145	162 838	MA-50-10- $\frac{1}{4}$ -EN
		0 ... 16	0 ... 232	162 839	MA-50-16- $\frac{1}{4}$ -EN
63	G $\frac{1}{4}$	0 ... 1	0 ... 14.5	162 844	MA-63-1- $\frac{1}{4}$ -EN
		0 ... 2.5	0 ... 36	162 845	MA-63-2,5- $\frac{1}{4}$ -EN
		0 ... 10	0 ... 145	162 840	MA-63-10- $\frac{1}{4}$ -EN
		0 ... 16	0 ... 232	162 841	MA-63-16- $\frac{1}{4}$ -EN

 Core Range


# Pressure gauge MA, DIN EN 837-1, with red-green range

Technical data

FESTO

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	Liquid media		
	Gaseous media		
	Not permitted: Oxygen		
	Not permitted: Acetylene		
Design	Bourdon tube pressure gauge		
Type of mounting	Can be screwed in		
Connection position	Centre, rear side		
Ambient temperature [°C]	-20 ... +60		
Accuracy of measurement, class	2.5		
Factor, continuous load	0.75		
Factor, intermittent load	0.66		
Protection class	IP43		
Materials	Housing: Acrylic butadiene styrene		
	Window shield: Polystyrene		
Weight [g]	62	76	88

Indicating range			
Nominal size	40	50	63
[bar]			
0 ... 2.5	-	■	■
0 ... 10	■	■	■
0 ... 16	■	■	■
[MPa]			
0 ... 0.25	-	-	■
0 ... 1	■	■	■
0 ... 1.6	■	■	■
[psi]			
0 ... 36	-	■	■
0 ... 145	■	■	■
0 ... 232	■	■	■

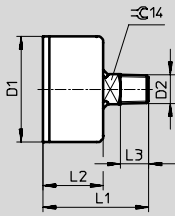
# Pressure gauge MA, DIN EN 837-1, with red-green range

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Technical data

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

MA-...-E-RG



Type	D1 ∅ ±0.5	D2	L1 ±1	L2 ±0.5	L3
MA-40-...-E-RG	39	R <sup>1</sup> / <sub>8</sub>	46	28	10
MA-50-...-E-RG	49	R <sup>1</sup> / <sub>4</sub>	49	28	13
MA-63-...-E-RG	61.5	R <sup>1</sup> / <sub>4</sub>	50.5	29.5	13

## Ordering data

Nominal size	Pneumatic connection	Indicating range	Part No.	Type
<b>Display unit [bar]</b>				
40	R <sup>1</sup> / <sub>8</sub>	0 ... 10	525 725	MA-40-10-R <sup>1</sup> / <sub>8</sub> -E-RG
		0 ... 16	525 726	MA-40-16-R <sup>1</sup> / <sub>8</sub> -E-RG
50	R <sup>1</sup> / <sub>4</sub>	0 ... 2.5	525 727	MA-50-2,5-R <sup>1</sup> / <sub>4</sub> -E-RG
		0 ... 10	525 728	MA-50-10-R <sup>1</sup> / <sub>4</sub> -E-RG
		0 ... 16	525 729	MA-50-16-R <sup>1</sup> / <sub>4</sub> -E-RG
63	R <sup>1</sup> / <sub>4</sub>	0 ... 2.5	525 730	MA-63-2,5-R <sup>1</sup> / <sub>4</sub> -E-RG
		0 ... 10	525 731	MA-63-10-R <sup>1</sup> / <sub>4</sub> -E-RG
		0 ... 16	525 732	MA-63-16-R <sup>1</sup> / <sub>4</sub> -E-RG
<b>Display unit [MPa]</b>				
40	R <sup>1</sup> / <sub>8</sub>	0 ... 1	526 778	MA-40-1,0-R <sup>1</sup> / <sub>8</sub> -MPA-E-RG
		0 ... 1.6	526 779	MA-40-1,6-R <sup>1</sup> / <sub>8</sub> -MPA-E-RG
50	R <sup>1</sup> / <sub>4</sub>	0 ... 0.25	526 780	MA-50-0,25-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
		0 ... 1	526 781	MA-50-1,0-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
		0 ... 1.6	526 782	MA-50-1,6-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
63	R <sup>1</sup> / <sub>4</sub>	0 ... 0.25	526 783	MA-63-0,25-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
		0 ... 1	526 784	MA-63-1,0-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
		0 ... 1.6	526 785	MA-63-1,6-R <sup>1</sup> / <sub>4</sub> -MPA-E-RG
<b>Display unit [psi]</b>				
40	R <sup>1</sup> / <sub>8</sub>	0 ... 145	526 786	MA-40-145-R <sup>1</sup> / <sub>8</sub> -PSI-E-RG
		0 ... 232	526 787	MA-40-232-R <sup>1</sup> / <sub>8</sub> -PSI-E-RG
50	R <sup>1</sup> / <sub>4</sub>	0 ... 36	526 788	MA-50-36-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG
		0 ... 145	526 789	MA-50-145-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG
		0 ... 232	526 790	MA-50-232-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG
63	R <sup>1</sup> / <sub>4</sub>	0 ... 36	526 791	MA-63-36-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG
		0 ... 145	526 792	MA-63-145-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG
		0 ... 232	526 793	MA-63-232-R <sup>1</sup> / <sub>4</sub> -PSI-E-RG

Individual units  
Pressure gauges

4.8


# Pressure gauge MA

Technical data

FESTO

Function



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



Technical data					
Nominal size	23	27	40	50	63
Pneumatic connection	R $\frac{1}{8}$	M5	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$
Operating medium	-				
	Liquid media				
	Gaseous media				
	Not permitted: Oxygen				
	Not permitted: Acetylene				
Design	Bourdon tube pressure gauge				
Type of mounting	Can be screwed in				
Connection position	Centre, rear side				
Ambient temperature [°C]	-40 ... +60	0 ... +60	-20 ... +60		
Accuracy of measurement, class	-	4	2.5		
Factor, continuous load	-	0.75			
Factor, intermittent load	-	0.66			
Protection class	-	IP43			
For D series service units	-	MICRO	MINI	MIDI/MAXI	-
Materials	Housing: Acrylic butadiene styrene	Housing: Plastic	Housing: Acrylic butadiene styrene		
	Sight glass: Polystyrene	Sight glass: Plastic	Sight glass: Polystyrene		
	Threaded plug: Brass	Threaded plug: Brass	Threaded plug: Brass		
Weight [g]	16	11	70	70	70

Indicating range						
Nominal size		23	27	40	50	63
[bar]	[psi]					
0 ... 6	0 ... 87	■	-	-	-	-
0 ... 10	0 ... 145	■	-	■	■	-
0 ... 16	0 ... 232	■	-	■	■	-
0 ... 20	0 ... 290	■	-	-	-	-
0 ... 25	0 ... 360	■	-	-	-	■
[bar]						
0 ... 10		-	■	-	-	-
[MPa]						
0 ... 0.6		-	-	-	-	-
0 ... 1		-	■	■	■	-
0 ... 1.6		-	-	■	■	-
0 ... 2.5		-	-	■	-	-
[psi]						
0 ... 160		-	■	-	-	-

# Pressure gauge MA

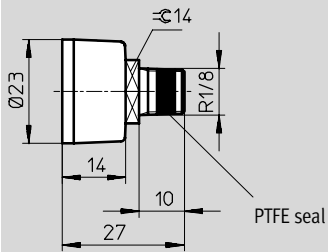
Technical data



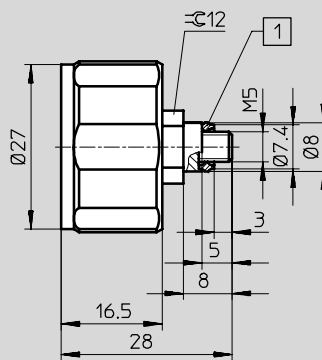
## Dimensions

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### Nominal size 23

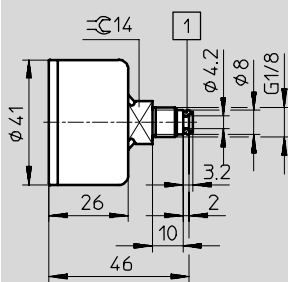


### Nominal size 27



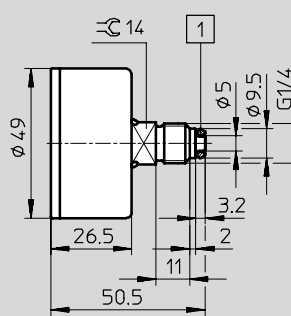
1 With pre-fitted aluminium sealing ring

### Nominal size 40



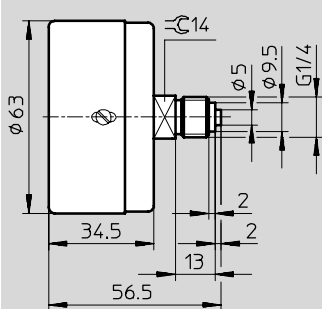
1 With pre-fitted aluminium sealing ring

### Nominal size 50



1 With pre-fitted aluminium sealing ring

### Nominal size 63



# Pressure gauge MA

Technical data

**FESTO**

Ordering data					
Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
23	R1/8	0 ... 6	0 ... 87	183 896	MA-23-6-R1/8
		0 ... 10	0 ... 145	183 897	MA-23-10-R1/8
		0 ... 16	0 ... 232	183 898	MA-23-16-R1/8
		0 ... 20	0 ... 290	537 916	MA-23-20-R1/8
40	G1/8	0 ... 10	0 ... 145	359 874	MA-40-10-1/8
		0 ... 16	0 ... 232	345 395	MA-40-16-1/8
50	G1/4	0 ... 10	0 ... 145	359 873	MA-50-10-1/4
		0 ... 16	0 ... 232	356 759	MA-50-16-1/4
63	G1/4	0 ... 25	0 ... 360	7 169	MA-63-0,25

Ordering data					
Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
Display unit [bar]					
27	M5	0 ... 10		526 323	MA-27-10-M5
Display unit [MPa]					
27	M5	0 ... 1		526 324	MA-27-1,0-M5-MPA
40	G1/4	0 ... 0.6		184 285	MA-40-0,6-G1/4-MPA
		0 ... 1		184 286	MA-40-1,0-G1/4-MPA
		0 ... 1.6		184 287	MA-40-1,6-G1/4-MPA
		0 ... 2.5		184 288	MA-40-2,5-G1/4-MPA
40	G1/8	0 ... 1		192 732	MA-40-1-G1/8-MPA
		0 ... 1.6		192 733	MA-40-1,6-G1/8-MPA
50	G1/4	0 ... 1		192 734	MA-50-1-G1/4-MPA
		0 ... 1.6		192 735	MA-50-1,6-G1/4-MPA
Display unit [psi]					
27	M5	0 ... 160		527 405	MA-27-160-M5-PSI

Individual units  
Pressure gauges

4.8




# Precision pressure gauge MAP, DIN EN 837-1

FESTO

Technical data

Function



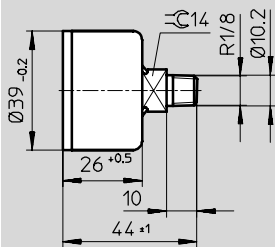
-  - Temperature range  
-20 ... +60 °C



Technical data					
Nominal size	40				
Pneumatic connection	R1/8				
Operating medium	Liquid media				
	Gaseous media				
	Not permitted: Oxygen				
	Not permitted: Acetylene				
Design	Bourdon tube pressure gauge				
Indicating range	[bar]	0 ... 1	0 ... 4	0 ... 6	0 ... 16
	[psi]	0 ... 14.5	0 ... 58	0 ... 87	0 ... 232
Conforms to	DIN EN 837-1				
Type of mounting	Can be screwed in				
Connection position	Centre, rear side				
Ambient temperature	[°C]	-20 ... +60			
Accuracy of measurement, class	1.6				
Factor, continuous load	0.75				
Factor, intermittent load	0.66				
Protection class	IP43				
Materials	Housing: Acrylic butadiene styrene				
	Sight glass: Polystyrene				
	Threaded plug: Brass				
Weight	[g]	60			

## Dimensions

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Ordering data					
Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
40	R1/8	0 ... 1	0 ... 14.5	<b>161 126</b>	<b>MAP-40-1-1/8-EN</b>
		0 ... 4	0 ... 58	<b>162 842</b>	<b>MAP-40-4-1/8-EN</b>
		0 ... 6	0 ... 87	<b>161 127</b>	<b>MAP-40-6-1/8-EN</b>
		0 ... 16	0 ... 232	<b>161 128</b>	<b>MAP-40-16-1/8-EN</b>

 Core Range


# Pressure gauge MA-QS

Technical data

FESTO

Function



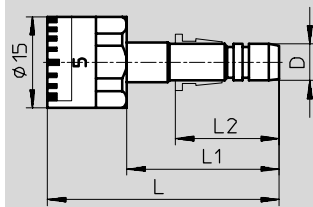
-  - Temperature range  
0 ... +60 °C



Technical data			
Nominal size	15		
Pneumatic connection	QS4	QS6	QS8
Operating medium	Filtered compressed air, lubricated or unlubricated		
Design	Bourdon tube pressure gauge without measuring mechanism		
Indicating range [bar]	0 ... 10		
Type of mounting	Can be screwed in		
Connection position	Centre, rear side		
Ambient temperature [°C]	0 ... +60		
Factor, continuous load	0.75		
Materials	Housing: Nickel plated steel		
Weight [g]	8	10	13

## Dimensions

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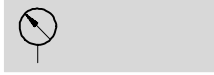
Dimensions and ordering data						
Nominal size	Indicating range	Pneumatic connection	L	L1	L2	Part No. Type
D	[bar]					
15	0 ... 10	QS4	36	23	15	153 383 MA-15-10-QS-4
		QS6	38	25	17	153 384 MA-15-10-QS-6
		QS8	34	21	18.5	153 385 MA-15-10-QS-8


# Flanged pressure gauge FMA, DIN EN 837-1

FESTO

Technical data

Function



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



Technical data			
Nominal size	40	50	63
Pneumatic connection	G $\frac{1}{4}$		
Operating medium	Liquid media		
	Gaseous media		
	Not permitted: Oxygen		
	Not permitted: Acetylene		
Design	Bourdon tube pressure gauge		
Conforms to	DIN EN 837-1		
Type of mounting	Panel mounting		
Connection position	Centre, rear side		
Ambient temperature [°C]	-20 ... +60		
Accuracy of measurement, class	2.5		
Factor, continuous load	0.75		
Factor, intermittent load	0.66		
Protection class	IP43		
Materials	Housing: Polystyrene		
	Sight glass: Styrene acrylonitrile copolymer		
	Threaded plug: Brass		
Weight [g]	80	100	120

Indicating range				
[bar]	[psi]	Nominal size		
		40	50	63
0 ... 2.5	0 ... 36	-	■	■
0 ... 10	0 ... 145	■	■	■
0 ... 16	0 ... 232	■	■	■

Individual units  
Pressure gauges

4.8

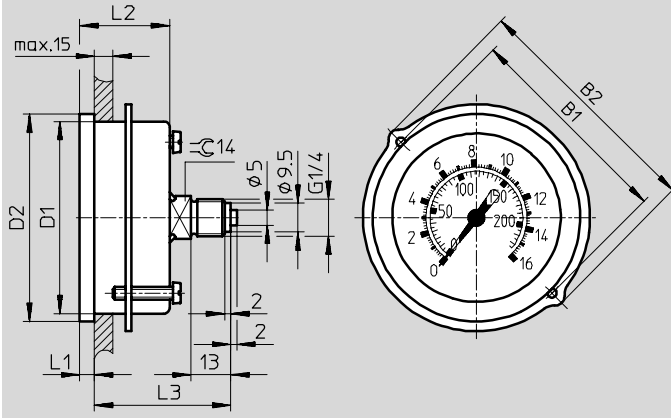
# Flanged pressure gauge FMA, DIN EN 837-1

Technical data

**FESTO**

## Dimensions

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Type	B1	B2	D1 ∅	D2 ∅	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	Indicating range		Part No.	Type
		[bar]	[psi]		
40	G <sup>1</sup> / <sub>4</sub>	0 ... 10	0 ... 145	159 596	FMA-40-10- <sup>1</sup> / <sub>4</sub> -EN
		0 ... 16	0 ... 232	159 597	FMA-40-16- <sup>1</sup> / <sub>4</sub> -EN
50	G <sup>1</sup> / <sub>4</sub>	0 ... 2.5	0 ... 36	159 598	FMA-50-2,5- <sup>1</sup> / <sub>4</sub> -EN
		0 ... 10	0 ... 145	159 599	FMA-50-10- <sup>1</sup> / <sub>4</sub> -EN
		0 ... 16	0 ... 232	159 600	FMA-50-16- <sup>1</sup> / <sub>4</sub> -EN
63	G <sup>1</sup> / <sub>4</sub>	0 ... 2.5	0 ... 36	159 601	FMA-63-2,5- <sup>1</sup> / <sub>4</sub> -EN
		0 ... 10	0 ... 145	159 602	FMA-63-10- <sup>1</sup> / <sub>4</sub> -EN
		0 ... 16	0 ... 232	159 603	FMA-63-16- <sup>1</sup> / <sub>4</sub> -EN


# Flanged pressure gauge FMA

Technical data

FESTO

Function



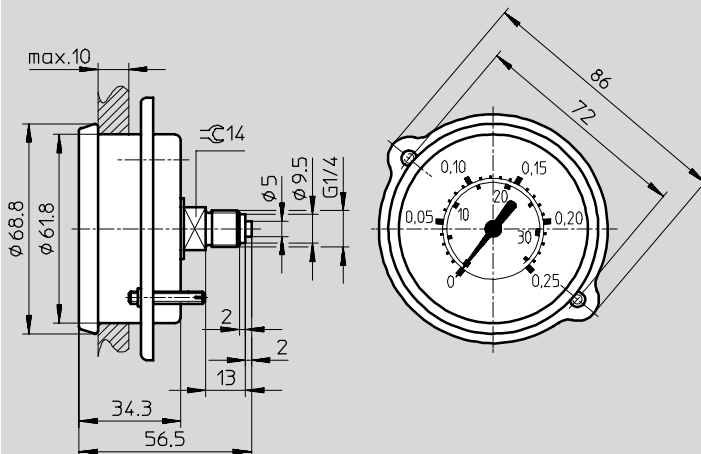
-  - Temperature range  
-10 ... +60 °C



Technical data	
Nominal size	63
Pneumatic connection	G1/4
Operating medium	Gaseous media
Design	Aneroid pressure gauge
Indicating range [bar]	0 ... 0.25
Indicating range [psi]	0 ... 3.6
Type of mounting	Panel mounting
Connection position	Centre, rear side
Ambient temperature [°C]	-10 ... +60
Accuracy of measurement, class	2.5
Factor, continuous load	0.75
Factor, intermittent load	0.66
Protection class	IP43
Materials	Housing: Steel
	Sight glass: Polymethylmethacrylate
	Threaded plug: Brass
Weight [g]	240

## Dimensions

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



Ordering data					
Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
63	G1/4	0 ... 0.25	0 ... 3.6	225 783	FMA-63-0,25-C

Individual units  
Pressure gauges

4.8


# Precision pressure gauge FMAP, DIN EN 837-1

Technical data

FESTO

Function



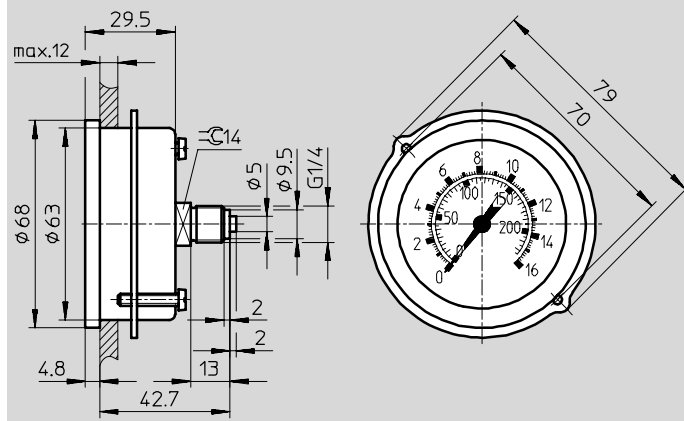
-  - Temperature range  
-20 ... +60 °C



Technical data					
Nominal size	63				
Pneumatic connection	G $\frac{1}{4}$				
Operating medium	Liquid media				
	Gaseous media				
	Not permitted: Oxygen				
	Not permitted: Acetylene				
Design	Bourdon tube pressure gauge				
Indicating range	[bar]	0 ... 1	0 ... 4	0 ... 6	0 ... 16
	[psi]	0 ... 14.5	0 ... 58	0 ... 87	0 ... 232
Conforms to	DIN EN 837-1				
Type of mounting	Panel mounting				
Connection position	Centre, rear side				
Ambient temperature	[°C]	-20 ... +60			
Accuracy of measurement, class	1.0				
Factor, continuous load	0.75				
Factor, intermittent load	0.66				
Protection class	IP43				
Materials	Housing: Polystyrene				
	Sight glass: Styrene acrylonitrile copolymer				
	Threaded plug: Brass				
Weight	[g]	120			

## Dimensions

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



## Ordering data

Nominal size	Pneumatic connection	Indicating range		Part No.	Type
		[bar]	[psi]		
63	G $\frac{1}{4}$	0 ... 1	0 ... 14.5	161 129	FMAP-63-1- $\frac{1}{4}$ -EN
		0 ... 4	0 ... 58	162 843	FMAP-63-4- $\frac{1}{4}$ -EN
		0 ... 6	0 ... 87	161 130	FMAP-63-6- $\frac{1}{4}$ -EN
		0 ... 16	0 ... 232	161 131	FMAP-63-16- $\frac{1}{4}$ -EN

Individual units  
Pressure gauges

4.8