

Pressure gauge MA

FESTO



Characteristics

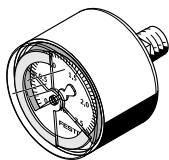
At a glance

Pressure gauge to DIN EN 837-1 for front panel or line installation.

- Pneumatic connection via R, G or metric thread, push-in connector
- Display units bar, psi, MPa

Additional display

[RG] Red/green scale



Two adjustable red segments above the pressure gauge scale along with the printed green segment enable the required pressure range to be limited. The different colours show whether or not the pressure is in the permitted tolerance range.

Type code

001	Series
MA	Pressure gauge MA

002	Size
15	Diameter 15 mm
23	Diameter 23 mm
27	Diameter 27 mm
40	Diameter 40 mm
50	Diameter 50 mm
63	Diameter 63 mm

003	Display range
0.25	0 ... 0.25
1	0 ... 1
1.6	0 ... 1.6
2.5	0 ... 2.5
6	0 ... 6
10	0 ... 10
16	0 ... 16
25	0 ... 25
36	0 ... 36
145	0 ... 145
160	0 ... 160
232	0 ... 232

004	Pneumatic connection
G18	G1/8
G14	G1/4
M5	M5
QS4	Push-in connector for tubing 4 mm
QS6	Push-in connector for tubing 6 mm
QS8	Push-in connector for tubing 8 mm
R18	R1/8
R14	R1/4

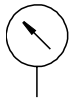
005	Display unit
	None
M	MPa
P	psi

006	Pressure gauge type
	MS pressure gauge
E	Round pressure gauge according to standard
EN	Round pressure gauge according to standard

007	Additional display
	None
RG	Red/green scale

Datasheet

General technical data



Nominal size of pressure gauge	15	23	27	40	50	63
Pneumatic connection	M5 QS-4 QS-6 QS-8	R1/8	M5 R1/8	G1/8 G1/4 R1/8 R1/4	G1/4 R1/4	G1/4
Design	Bourdon tube pressure gauge without measuring mechanism	Bourdon tube pressure gauge				
Type of mounting	In-line installation					
Position of connection	Centred, rear side					
Alternating load factor	0.66	0.6	0.66			0.66 ... 0.9
Scale	Single scale, Bar (outside scale), psi (outer scale)	Double scale, Bar (outside scale), psi (inner scale)	Bar (outside scale), Double scale, Single scale, MPa (outer scale), psi (outer scale), psi (inner scale)	Double scale, Single scale, MPa (outer scale), Bar (outside scale), psi (inner scale), psi (outer scale)	Double scale, Single scale, MPa (outer scale), Bar (outside scale), psi (outer scale), psi (inner scale)	Double scale, Bar (outside scale), psi (inner scale)
Measurement accuracy class	5	4	4, 5	2.5		1.6, 2.5
Degree of protection	IP53	IP44	IP43			
Conforms to standard	-			EN 837-1		DIN EN 837-3 EN 837-1
Product weight	10 g	27 g	8 g 11 g	60 g 70 g	70 g 75 g	80 g 180 g

Operating and environmental conditions

Nominal size of pressure gauge	15	23	27	40	50	63
Operating pressure	0 ... 1 MPa	0 ... 1.6 MPa	0 ... 2.5 MPa		0 ... 1.6 MPa	0 ... 0.1 MPa
Operating pressure	0 ... 10 bar	0 ... 16 bar	0 ... 25 bar		0 ... 16 bar	0 ... 1 bar
Operating pressure	0 ... 145 psi	0 ... 232 psi	0 ... 362.5 psi		0 ... 232 psi	0 ... 14.5 psi
Operating medium	Inert gases, Neutral fluids					Liquid media, Gaseous media, Inert gases, Neutral fluids
Note on operating and pilot medium	No acetylene, No oxygen					
Ambient temperature	-20 ... 60°C		0 ... 60°C	-20 ... 60°C		
Media temperature	-20 ... 60°C		0 ... 60°C	-20 ... 60°C		-20 ... 80°C

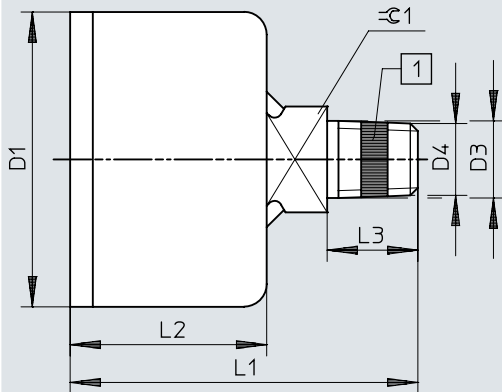
Materials

Nominal size of pressure gauge	15	23	27	40	50	63
Material housing	Steel	Brass	PA	ABS, PBT	ABS	ABS, Steel
Material screen	PC					
Material screwed plug	Brass		Brass, PA-reinforced		Brass	
Material in contact with the medium	Brass		Brass, PA-reinforced		Brass	
Housing colour	Black					
LABS (PWIS) conformity	VDMA24364-B2-L VDMA24364-B1/B2-L	VDMA24364-B1/B2-L		VDMA24364-B2-L VDMA24364-B1/B2-L		VDMA24364-B1/B2-L

Dimensions

Dimensions – MA-40-...-1/8-EN

Download CAD data → www.festo.com



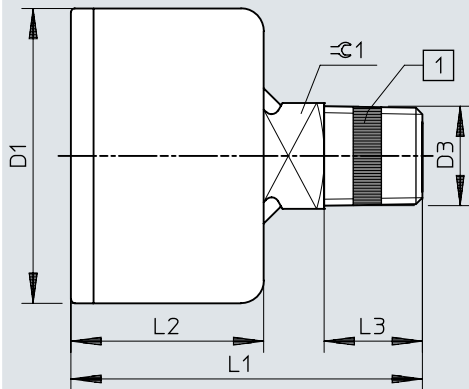
[1] PTFE sealing band for MA-40-16-1/8-EN-DPA and MA-40-25-1/8-EN

	D1 ∅ -0,2	D3	D4 ∅	L1 ±1	L2 ±0,5	L3 12 +0,3	$\approx C1$ 14
MA-40-...-1/8-EN	39	R1/8	10,2	46	26	12 +0,3	14

Dimensions

Dimensions – MA-40-...-R1/4-EN

Download CAD data → www.festo.com



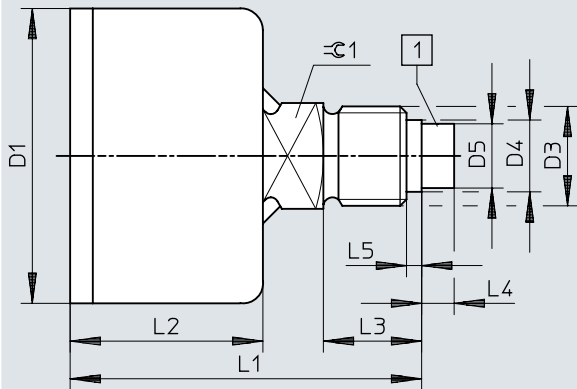
[1] PTFE sealing band

	D1 ∅ -0,2	D3	L1 ±1	L2 ±0,5	L3	R1/4
MA-40-...-1/4-EN	39	R1/4	46,5	25,5	13	14

Dimensions

Dimensions – MA-40-...-G1/4-EN

Download CAD data → www.festo.com



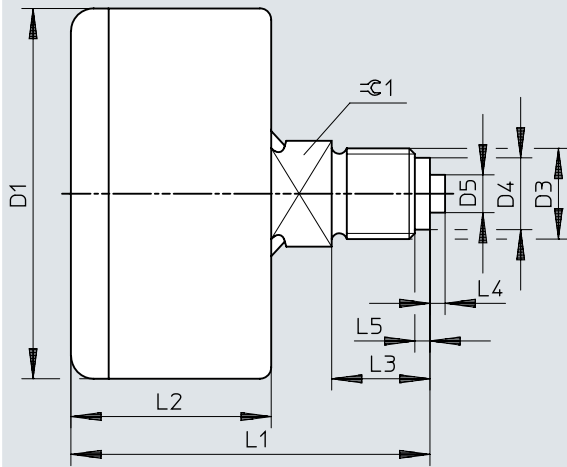
[1] With pre-fitted PTFE sealing ring

	D1 ∅	D3	D4 ∅	D5 ∅	L1	L2 ±0,5	L3 +0,3	L4	L5	⌀1
MA-40-...-G1/4-EN	39 -0,2	G1/4	9,5	8,5	46,5 ±1	25,5	13	4,3 ±0,1	2	14

Dimensions

Dimensions – MA-50/63, G1/4-EN

Download CAD data → www.festo.com

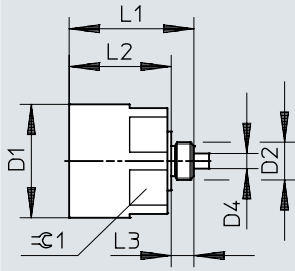


	D1 ∅	D3	D4 ∅	D5 ∅	L1	L2 ±0,5	L3 +0,3	L4	L5	± 0.1
MA-50-...-1/4-EN	49 ±0,5	G1/4	9,5 -0,2	5	47,5 ±1	26,5	13	2	2	14
MA-63-...-1/4-EN	61,5 ±0,5		9,5		47 ±0,5					

Dimensions

Dimensions – MA-15, M5

Download CAD data → www.festo.com

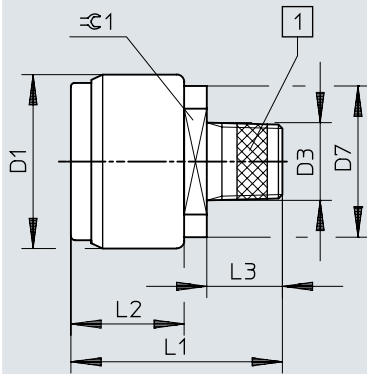


	D1 ∅	D2	D4 ∅	L1	L2	L3	⊖ 1
MA-15-...-M5	15	M5x0,8	2	16,5	13,5	3	14

Dimensions

Dimensions – MA-23, R1/8

Download CAD data → www.festo.com



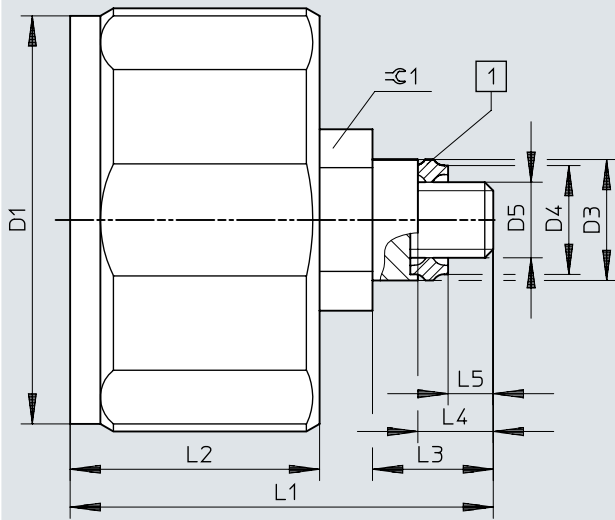
[1] PTFE sealing band

	D1 ∅ -0,4	D3	D7 ∅ -0,4	L1 ±0,35	L2 ±0,25	L3	≈ 1
MA-23-...-R1/8	23	R1/8	20	28	15	10	14

Dimensions

Dimensions – MA-27, M5

Download CAD data → www.festo.com



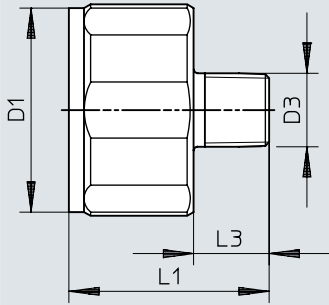
[1] With pre-fitted polyamide sealing ring

	D1 ∅	D3 ∅	D4 ∅	D5	L1	L2 ±0,5	L3	L4	L5	≈G 1
MA-27-...-M5	27	8	7,4	M5	28	16,5	8	5	3	10

Dimensions

Dimensions – MA-27, R1/8

Download CAD data → www.festo.com

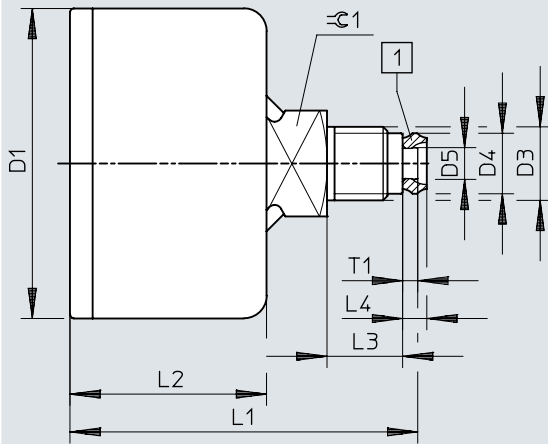


	D1 ∅	D3	L1	L3 ±0,15
MA-27-...-R1/8	27	R1/8	26,5	10

Dimensions

Dimensions – MA-40-...G1/8

Download CAD data → www.festo.com



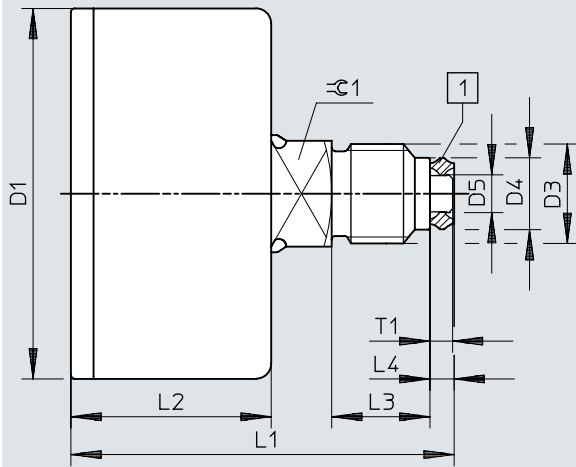
[1] With pre-fitted aluminium sealing ring

	D1 ∅	D3	D4 ∅	D5 ∅	L1	L2	L3	L4	T1	±0.1
MA-40-...1/8	39 ^{-0,2}	G1/8	8	4,2	46	26	10	3,2	2	14

Dimensions

Dimensions – MA-50, G1/4

Download CAD data → www.festo.com



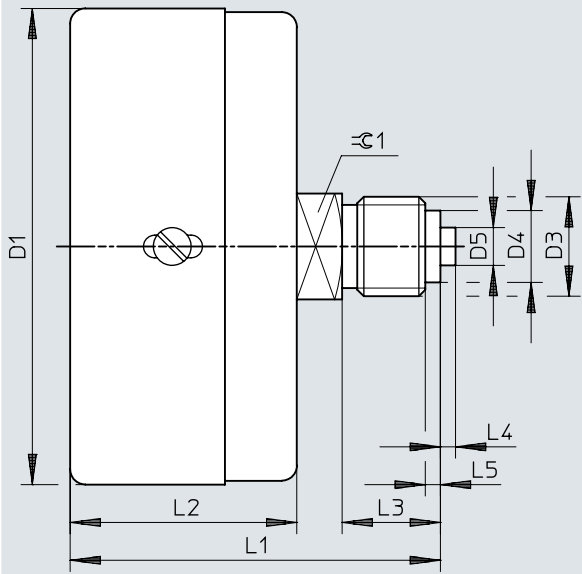
[1] With pre-fitted aluminium sealing ring

	D1 ∅	D3	D4 ∅	D5 ∅	L1 ±1	L2 ±0,5	L3 +0,3	L4	T1	1
MA-40-...1/4	49	G1/4	9,5	5	50,5	26,5	13	3,2	3	14

Dimensions

Dimensions – MA-63

Download CAD data → www.festo.com

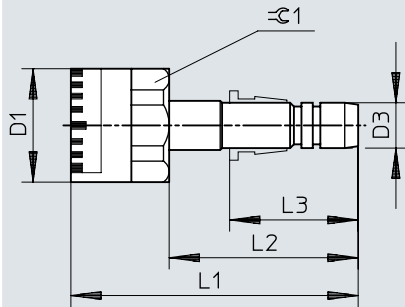


	D1 ∅ ±1	D3	D4 ∅	D5 ∅	L1 ±1	L2	L3 +0,3	L4	L5	=G 1
MA-63	63	G1/4	9,5	5	49	30	13	2	2	14

Dimensions

Dimensions – MA-15-10-QS

Download CAD data → www.festo.com

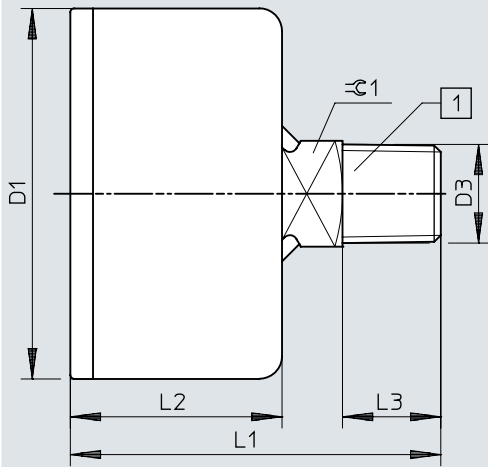


	D1 ∅	D3	L1	L2	L3	≡G 1
MA-15-10-QS-4	15	QS-4	36	23	15	14
MA-15-10-QS-6	15	QS-6	38	25	17	14
MA-15-10-QS-8	15	QS-8	34	21	18,5	14

Dimensions

Dimensions – MA-...-RG, with red/green area

Download CAD data → www.festo.com



[1] Coated with thread sealant

	D1 ∅ ±0,5	D3	L1 ±1	L2 ±0,5	L3	∠ 1
MA-40-...-RG	39	R1/8	46	28	10	14
MA-50-...-RG	49	R1/4	49	28	13	14

Ordering data

Ordering data – nominal size 15

Pneumatic connection	Indicating range	Indicating range	Scale	Product weight	Part no.	Type
M5		0 ... 145 psi	Single scale, psi (outer scale)	10 g	132341	MA-15-145-M5-PSI
	0 ... 10 bar		Single scale, Bar (outside scale)		132340	MA-15-10-M5
QS-4					153383	MA-15-10-QS-4
QS-6					153384	MA-15-10-QS-6
QS-8					153385	MA-15-10-QS-8

Ordering data – nominal size 23

Pneumatic connection	Indicating range	Indicating range	Scale	Product weight	Part no.	Type
R1/8	0 ... 6 bar	1 ... 87 psi	Double scale, Bar (outside scale), psi (inner scale)	27 g	183896	MA-23-6-R1/8
	0 ... 10 bar	0 ... 145 psi			183897	MA-23-10-R1/8
	0 ... 16 bar	0 ... 232 psi			183898	MA-23-16-R1/8

Ordering data – nominal size 27

Pneumatic connection	Indicating range	Indicating range	Indicating range	Scale	Product weight	Part no.	Type
M5		0 ... 160 psi		Single scale, psi (outer scale)	11 g	527405	MA-27-160-M5-PSI
	0 ... 1 MPa	0 ... 10 bar				526323	MA-27-10-M5
				Single scale, MPa (outer scale)		526324	MA-27-1,0-M5-MPA
R1/8		0 ... 16 bar	0 ... 232 psi	Bar (outside scale), Double scale, psi (inner scale)	8 g	541733	MA-27-16-R1/8
		0 ... 25 bar	0 ... 362.5 psi	Double scale, Bar (outside scale), psi (inner scale)		541734	MA-27-25-R1/8

Ordering data – nominal size 40

Pneumatic connection	Indicating range	Indicating range	Indicating range	Scale	Product weight	Part no.	Type
G1/8		0 ... 10 bar	0 ... 145 psi	Double scale, Bar (outside scale), psi (inner scale)	60 g	359874	MA-40-10-1/8
		0 ... 16 bar	0 ... 232 psi			345395	MA-40-16-1/8
		0 ... 25 bar	0 ... 362.5 psi			526167	MA-40-25-1/8-EN
	0 ... 1 MPa		Single scale, MPa (outer scale)	192732		MA-40-1-G1/8-MPA	
	0 ... 1.6 MPa			192733		MA-40-1,6-G1/8-MPA	
G1/4		0 ... 6 bar	1 ... 87 psi	Double scale, Bar (outside scale), psi (inner scale)	70 g	183899	MA-40-6-G1/4-EN
		0 ... 10 bar	0 ... 145 psi			183900	MA-40-10-G1/4-EN
		0 ... 16 bar	0 ... 232 psi			183901	MA-40-16-G1/4-EN
		0 ... 25 bar	0 ... 362.5 psi			183902	MA-40-25-G1/4-EN
R1/8			0 ... 145 psi	Single scale, psi (outer scale)	60 g	526786	MA-40-145-R1/8-PSI-E-RG
			0 ... 232 psi			526787	MA-40-232-R1/8-PSI-E-RG
	0 ... 2.5 bar			Single scale, Bar (outside scale)		546963	MA-40-2,5-R1/8-E-RG
						525725	MA-40-10-R1/8-E-RG
	0 ... 10 bar		0 ... 145 psi	Double scale, Bar (outside scale), psi (inner scale)		162835	MA-40-10-1/8-EN
						525726	MA-40-16-R1/8-E-RG
	0 ... 16 bar		0 ... 232 psi	Double scale, Bar (outside scale), psi (inner scale)		529046	MA-40-16-1/8-EN-DPA
						526778	MA-40-1,0-R1/8-MPA-E-RG
0 ... 1.6 MPa			Single scale, MPa (outer scale)	526779	MA-40-1,6-R1/8-MPA-E-RG		
R1/4		0 ... 6 bar	1 ... 87 psi	Double scale, Bar (outside scale), psi (inner scale)	70 g	187078	MA-40-6-R1/4-EN

Ordering data

Ordering data – nominal size 40							
Pneumatic connection	Indicating range	Indicating range	Indicating range	Scale	Product weight	Part no.	Type
R1/4		0 ... 10 bar	0 ... 145 psi	Double scale, Bar (outside scale), psi (inner scale)	70 g	187079	MA-40-10-R1/4-EN
		0 ... 16 bar	0 ... 232 psi			187080	MA-40-16-R1/4-EN

Ordering data – nominal size 50								
Pneumatic connection	Indicating range	Indicating range	Indicating range	Scale	Product weight	Part no.	Type	
G1/4		0 ... 2.5 bar	0 ... 36.25 psi	Double scale, Bar (outside scale), psi (inner scale)	70 g	162837	MA-50-2,5-1/4-EN	
		0 ... 10 bar	0 ... 145 psi	Bar (outside scale), Double scale, psi (inner scale)		162838	MA-50-10-1/4-EN	
		0 ... 16 bar	0 ... 232 psi	Double scale, Bar (outside scale), psi (inner scale)		359873	MA-50-10-1/4	
						356759	MA-50-16-1/4	
						162839	MA-50-16-1/4-EN	
		0 ... 1 MPa		Single scale, MPa (outer scale)		192734	MA-50-1-G1/4-MPA	
	0 ... 1.6 MPa		Single scale, MPa (outer scale)	192735	MA-50-1,6-G1/4-MPA			
	R1/4			0 ... 36 psi	Single scale, psi (outer scale)	75 g	526788	MA-50-36-R1/4-PSI-E-RG
				0 ... 145 psi			526789	MA-50-145-R1/4-PSI-E-RG
				0 ... 232 psi			526790	MA-50-232-R1/4-PSI-E-RG
0 ... 2.5 bar		Single scale, Bar (outside scale)	525727	MA-50-2,5-R1/4-E-RG				
0 ... 10 bar			525728	MA-50-10-R1/4-E-RG				
0 ... 16 bar			525729	MA-50-16-R1/4-E-RG				
0 ... 0.25 MPa		Single scale, MPa (outer scale)	526780	MA-50-0,25-R1/4-MPA-E-RG				
0 ... 1 MPa			526781	MA-50-1,0-R1/4-MPA-E-RG				
0 ... 1.6 MPa	526782		MA-50-1,6-R1/4-MPA-E-RG					

Ordering data – nominal size 63							
Pneumatic connection	Indicating range	Indicating range	Scale	Product weight	Part no.	Type	
G1/4	0 ... 0.25 bar	0 ... 3.6 psi		180 g	7169	MA-63-0,25	
	0 ... 1 bar	0 ... 14.5 psi	Double scale, Bar (outside scale), psi (inner scale)	80 g	162844	MA-63-1-1/4-EN	