

Pressure Gauge

Per Euro-Norm EN 837-1

For direct mounting
Type MA-...-EN

Flanged Pressure Gauge

For panel mounting, with clamping bracket

Type FMA-...-EN



These precision pressure gauges measure and indicate the pressure in pneumatic control systems.

During continuous operation (static pressure conditions), these gauges may be pressurized only to three-fourths of full scale.

See next page for dimensions.



Type MA-...-EN



Type FMA-...1/4-EN

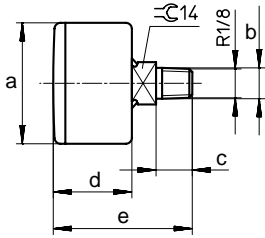
Order Number Part No./Type	Display Range	Outside Diameter		
		1.57 in / 40 mm	1.97 / 50 mm	2.48 in / 63 mm
	0 to 15 psi 0 to 1 bar	–	–	162 844 MA-63-1-1/4-EN
	0 to 36.3 psi 0 to 2.5 bar	–	162837 MA-50-2.5-1/4-EN	162845 MA-63-2.5-1/4-EN
	0 to 145 psi 0 to 10 bar	162835 MA-40-10-1/8-EN 159596 FMA-40-10-1/4-EN	162838 MA-50-10-1/4-EN 159599 FMA-50-10-1/4-EN	162840 MA-63-10-1/4-EN 159601 FMA-63-2.5-1/4-EN 159602 FMA-63-10-1/4-EN
	0 to 232 psi 0 to 16 bar	162836 MA-40-16-1/8-EN 159597 FMA-40-16-1/4-EN	162839 MA-50-16-1/4-EN 159600 FMA-50-16-1/4-EN	162841 MA-63-16-1/4-EN 159603 FMA-63-16-1/4-EN
Medium		Compressed air (filtered, lubricated or unlubricated)		
Design		Bourdon tube pressure gauge		
Connection		G 1/4 (Type MA-40-...-1/8 EN: R 1/8)		
Position of Connection		Centered on back		
Temperature Range		-4 to +140°F / -20 to +60°C		
Gauge Class (DIN 16005/EN 837-1)		2.5		
Shock Resistance (DIN IEC 68-2-6/EN 837-1)		5 m/s ² at 10 to 150 Hz		
Shock Resistance (DIN IEC 68-2-27/EN 837-1)		150 m/s ² at 11 Hz		
Type of Protection		IP 43		
Materials		Housing: Black PS; Sight glass: SAN; Dial: ABS white; Lettering: Black, blue		
Weight	Type MA-40-...	0.132 lb / 0.060 kg	0.154 lb / 0.070 kg	0.176 lb / 0.80 kg
	Type FMA-40-...	0.176 lb / 0.080 kg	0.220 lb / 0.101 kg	0.265 lb / 0.120 kg

Pneumatic Indicators and Gauges

Pressure Gauge

Type MA-40-...-1/8-EN

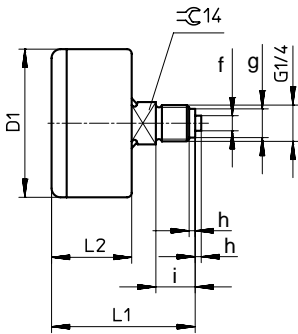
⌀ = wrench size (mm)



Dimensions

- a 1.61 in / 40.8 mm
- b 0.40 in / 10.2 mm
- c 0.47 in / 12 mm
- d 1.02 in / 26 mm
- e 1.81 in / 46 mm
- f 0.20 in / 5 mm
- g 0.37 in / 9.5 mm
- h 0.08 in / 2 mm
- i 0.51 in / 13 mm

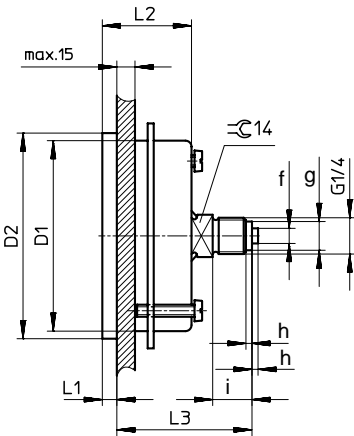
Type MA-50-...-1/4-EN MA-63-...-1/4-EN



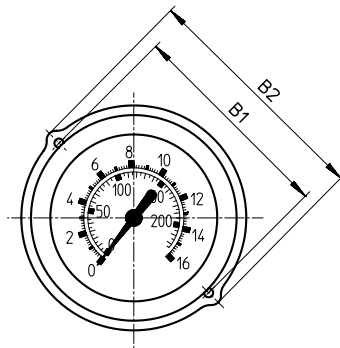
⌀ = wrench size (mm)

Type	D1 dia in / mm	L1 in / mm	L2 in / mm
MA-50-...-EN	1.93 / 49	1.87 / 47.5	1.04 / 26.5
MA-63-...-EN	2.42 / 61.5	1.91 / 48.5	1.08 / 27.5

Type FMA-...-1/4-EN



⌀ = wrench size (mm)



Type	B1 in / mm	B2 in / mm	D1 dia in / mm	L1 dia in / mm	L1 in / mm	L2 in / mm	L3 in / mm
FMA-40-...-1/4-EN	1.89 / 48	2.20 / 56	1.57 / 40	1.77 / 45	0.18 / 4.5	1.06 / 26.8	1.69 / 43
FMA-50-...-1/4-EN	2.24 / 57	2.60 / 66	1.95 / 49.5	2.13 / 54	0.18 / 4.5	1.06 / 26.8	1.70 / 43.3
FMA-63-...-1/4-EN	2.76 / 70	3.11 / 79	2.48 / 63	2.68 / 68	0.19 / 4.8	1.16 / 29.5	1.67 / 42.5

Low Pressure Gauge

Type MA-...

Flanged Low Pressure Gauge

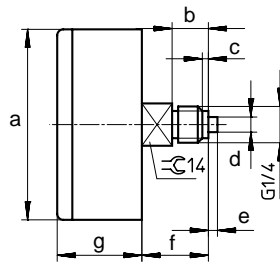
Type FMA-...



With beveled ring for front panel mounting
These precision pressure gauges indicate the pressure in pneumatic control systems.

During continuous operation (static pressure conditions), these gauges may be pressurized only to three-fourths of full scale.

Type MA-...



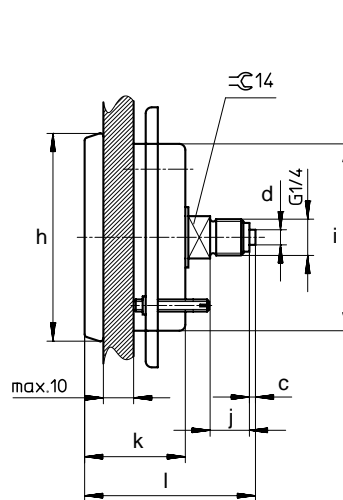
\varnothing = wrench size (mm)

Dimensions

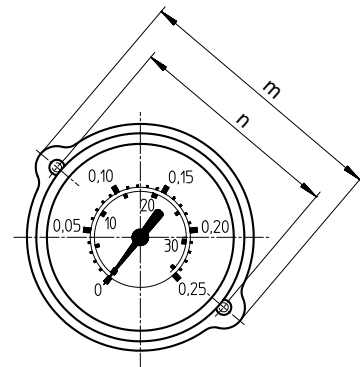
a	2.48 in / 63 mm	h	2.71 in / 68.8 mm
b	0.47 in / 12 mm	i	2.43 in / 61.8 mm
c	0.08 in / 2 mm	j	0.51 in / 13 mm
d	0.20 in / 5 mm	k	1.35 in / 34.3 mm
e	0.12 in / 3 mm	l	2.22 in / 56.5 mm
f	0.87 in / 22 mm	m	3.39 in / 86 mm
g	1.10 in / 28 mm	n	2.83 in / 72 mm



Type FMA-...



\varnothing = wrench size (mm)



Order Number	Part No./Type	7169 MA-63-0.25	225783 FMA-63-0.25-C
Outside Diameter		2.48 in / 63 mm	
Display Range		0 to 3.63 psi / 0 to 0.25 bar	
Medium		Compressed air, (filtered, lubricated or unlubricated)	
Design		Bourdon tube pressure gauge	
Mounting		Direct mount	Front mount with clamping bracket
Connection		G 1/4	
Position of Connection		Centered on back	
Temperature Range		+14 to +140°F / -10 to +60°C	
Gauge Class (DIN 16005 EN 837-1)		2.5	
Materials		Housing: Steel, black enamel; dial: black lettering: yellow; Sightglass: PMMA; Brass connecting thread	
Weight		0.287 lb / 0.13 kg	0.419 lb / 0.19 kg

Pneumatic Indicators and Gauges

Precision Pressure Gauges

Precision Pressure Gauge

Per Euro-Norm EN 837-1

For direct mounting

Type MAP-40-...-1/8-EN

Flanged Precision Pressure Gauge

For panel mounting, with clamping bracket

Type FMAP-63-...-1/4-EN



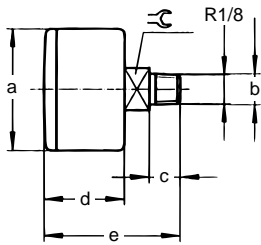
These precision pressure gauges measure and indicate the pressure in pneumatic control systems.

During continuous operation (static pressure conditions), these gauges may be pressurized only to three-fourths of full scale.

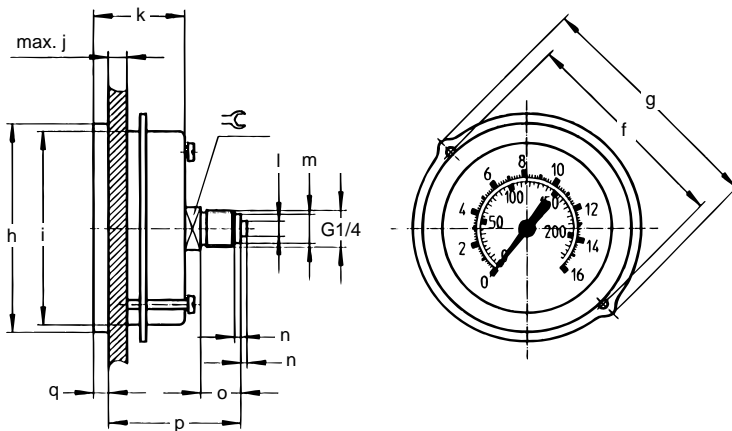



Order Number Part No./Type	Display Range	Outside Diameter	
		1.57 in / 40 mm	2.48 in / 63 mm
	0 to 15 psi / 0 to 1 bar	161126 MAP-40-1-1/8-EN	161129 FMAP-63-1-1/4-EN
	0 to 60 psi / 0 to 4 bar	162842 MAP-40-4-1/8-EN	162843 FMAP-63-4-1/4-EN
	0 to 90 psi / 1 to 6 bar	161127 MAP-40-6-1/8-EN	161130 FMAP-63-6-1/4-EN
	0 to 232 psi / 0 to 16 bar	161128 MAP-40-16-1/8-EN	161131 FMAP-63-16-1/4-EN
Medium	Compressed air (filtered, lubricated or unlubricated)		
Design	Bourdon tube pressure gauge		
Mounting	Direct mount	Front mount with collar	
Connection	R 1/8	G 1/4 ISO	
Position of Connection	Centered on back		
Temperature Range	-4 to +140°F / -20 to +60°C		
Gauge Class (DIN 16005/EN 837-1)	1.6	1.0	
Shock Resistance (DIN IEC 68-2-6/EN 837-1)	5 m/s ² at 10 to 150 Hz		
Shock Resistance (DIN IEC 68-2-27/EN 837-1)	150 m/s ² at 11 Hz		
Type of Protection	IP 43		
Materials	Housing: Black PS; Sight glass: SAN; Dial: ABS white; Lettering: Black, blue		
Weight	0.132 lb / 0.060 kg	0.265 lb / 0.120 kg	

Type MAP-40-...-1/8-EN



Type FMAP-63-...-1/4-EN



 = wrench size (mm)

Dimensions

a	1.61 in / 40.8 mm	j	0.47 in / 12 mm
b	0.40 in / 10.2 mm	k	1.16 in / 29.5 mm
c	0.39 in / 10 mm	l	0.20 in / 5 mm
d	1.02 in / 26 mm	m	0.37 in / 9.5 mm
e	1.73 in / 44 mm	n	0.08 in / 2 mm
f	2.76 in / 70 mm	o	0.51 in / 13 mm
g	3.11 in / 79 mm	p	1.68 in / 42.7 mm
h	2.68 in / 68 mm	q	0.19 in / 4.8 mm
i	2.48 in / 63 mm		

Pneumatic Indicators and Gauges

Pressure Gauges for Quick Star Fittings and Connectors

Pressure Gauge

For use with Quick Star Fittings and Connectors.

Metric Series

Type MA-...-QS-...

Inch Series

Type MA-...-QS-...-U



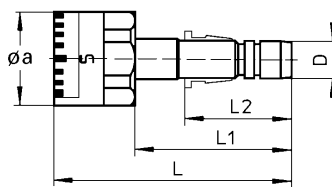
These pressure gauges can be used to measure and indicate the pressure in pneumatic control systems. An integral barbed fitting enables one to insert the gauge directly into Quick Star metric series fittings and connectors.

During continuous operation (static pressure conditions), these gauges may be pressurized only up to three-fourths of full scale.



Dimension

a 0.59 in / 15 mm



Type	Connection Size D (mm)	L in / mm	L1 in / mm	L2 in / mm
Metric Series				
	mm			
MA-15-10-QS-4	4	1.42 / 36.0	0.91 / 23.0	0.59 / 15.0
MA-15-10-QS-6	6	1.50 / 38.0	0.98 / 25.0	0.67 / 17.0
MA-15-10-QS-8	8	1.34 / 34.0	0.83 / 21.0	0.73 / 18.5
Inch Series				
	inch			
MA-15-10-QS-5/32-U	5/32	1.42 / 36.0	0.91 / 23.0	0.59 / 14.9
MA-15-10-QS-3/16-U	3/16	1.50 / 38.0	0.98 / 25.0	0.67 / 17.0
MA-15-10-QS-1/4-U	1/4	1.50 / 38.0	0.98 / 25.0	0.67 / 17.0
MA-15-10-QS-5/16-U	5/16	1.34 / 34.0	0.83 / 21.0	0.71 / 18.1
MA-15-10-QS-3/8-U	3/8	1.50 / 38.0	0.98 / 25.0	0.80 / 20.2

Order Number	Part No. / Type	153383 MA-15-10-QS-4	153384 MA-15-10-QS-6	153385 MA-15-10-QS-8	—	—
Order Number		190934 MA-15-10-QS-5/32-U	190935 MA-15-10-QS-3/16-U	190936 MA-15-10-QS-1/4-U	190937 MA-15-10-QS-5/16-U	190938 MA-15-10-QS-3/8-U
Medium	Compressed air (filtered, lubricated or unlubricated)					
Design	Bourdon tube pressure gauge					
Mounting	Barbed fitting					
Connection Position	Barbed fitting centered on back of gauge					
Temperature Range	32 to 140°F / 0 to 60°C					
Gauge Display Pressure Range	0 to 145 psi / 0 to 10 bar					
Material	Housing: Nickel-plated Steel, black plastic, white lettering					
Weight	0.018 lb / 0.008 kg	0.022 lb / 0.010 kg	0.029 lb / 0.013 kg	—	—	—

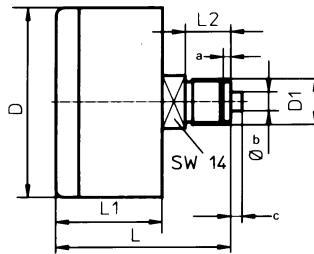
Vacuum Gauge

Type VAM-...



Vacuum gauges measure and indicate pressure in pneumatic control systems.

During continuous operation (static pressure conditions), these gauges may be pressurized only up to three-fourths of full scale; in alternating pressure situations, only up to one-fourth of full scale.



Dimensions

a 0.08 in / 2 mm
 b 0.20 in / 5 mm
 c 0.12 in / 3 mm
 SW = wrench size (mm)

Outside Diameter D in / mm	D1	L in / mm	L1 in / mm	L2 in / mm
1.57 / 40	G1/8 ISO	1.59 / 40.5	0.96 / 24.5	0.39 / 10
2.48 / 63	G1/4 ISO	1.81 / 46	1.10 / 28	0.47 / 12

Order Number Part No./Type	Display Range	Outside Diameter	
	-14.5 to 0 psi / -1 to 0 bar	1.57 in / 40 mm	2.48 in / 63 mm
	-14.5 to 0 psi / -1 to 0 bar	13777 VAM-40-V1/0-1/8	—
	-14.5 to 131 psi / -1 to +9 bar	—	13574 VAM-63-V1/0-1/4
	-14.5 to 131 psi / -1 to +9 bar	—	13575 VAM-63-V1/9-1/4
Medium	Compressed air (filtered, lubricated or unlubricated) and vacuum		
Mounting	Thread connection		
Connection	G1/8 ISO	G1/4 ISO	
Position of Connection	Centered on back		
Design	Bourdon tube pressure gauge		
Class (DIN 3160)	1.6		
Temperature Range*	14° to 140°F / -10° to +60°C		
Materials	Housing: Steel, painted black. Dial: Black with yellow characters.		
Weight	0.242 lb / 0.110 kg	2.49 lb / 1.130 kg	

* Standard temperature = 68°F / 20°C
 Pressure reading tolerance: +0.3% for each 18°F / 10°C change over 68°F / 20°C
 -0.3% for each 18°F / 10°C change under 68°F / 20°C

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