

M1-ABS

Bourdon tube pressure gauges

Technical Data Sheet



Description

Dry plastic case bottom entry. For general industry, gases and liquids not viscous, not aggressive and not crystallising.



M1-ABS 40

DN40 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
PA1101DELF	-1/0 bar/inHg	R1/8	D+LF+C	240/240	240
PA110117LF	0-1 bar/psi	R1/8	D+LF+C	240/240	240
PA1102DE01	0-1.6 bar/psi	R1/8	D+LF+C	240/240	240
PA120317LF	0-2.5 bar/psi	R1/8	D+LF+C	240/240	10
PA120417LF	0-4 bar/psi	R1/8	D+LF+C	240/240	240
PA120617LF	0-6 bar/psi	R1/8	D+LF+C	240/240	10
PA121017LF	0-10 bar/psi	R1/8	D+LF+C	240/240	10
PA121217LF	0-12 bar/psi	R1/8	D+LF+C	240/240	10
PA121617LF	0-16 bar/psi	R1/8	D+LF+C	240/240	10
PA122017LF	0-20 bar/psi	R1/8	D+LF+C	240/240	10
PA1225DE00	0-25 bar/psi	R1/8	D+C	240/240	240
PA1240DE00	0-40 bar/psi	R1/8	D+C	240/240	240
PA1344DE00	0-60 bar/psi	R1/8	D+C	240/240	240
PA1348DE00	0-100 bar/psi	R1/8	D+C	240/240	240
	0-160 bar/psi	R1/8	D+LF+C	240/240	240
PA1360DE00	0-250 bar/psi	R1/8	D+C	240/240	240
	0-315 bar/psi	R1/8	D+LF+C	240/240	240
	0-400 bar/psi	R1/8	D+LF+C	240/240	240



M1-ABS 50

DN50 pressure gauges.

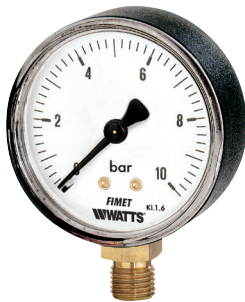
Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
PA219918LF	-1/0 bar/inHg	R1/4	D+LF+C	100/100	10
PA210118LF	0-1 bar/psi	R1/4	D+LF+C	100/100	10
	0-1.6 bar/psi	R1/4		100/100	100
PA220318LF	0-2.5 bar/psi	R1/4	D+LF+C	100/100	10
PA220418LF	0-4 bar/psi	R1/4	D+LF+C	100/100	100
PA220618LF	0-6 bar/psi	R1/4	D+LF+C	100/100	10
PA221018LF	0-10 bar/psi	R1/4	D+LF+C	100/100	10
PA221218LF	0-12 bar/psi	R1/4	D+LF+C	100/100	100
PA221618LF	0-16 bar/psi	R1/4	D+LF+C	100/100	10
PA222018LF	0-20 bar/psi	R1/4	D+LF+C	100/100	100
PA222518	0-25 bar/psi	R1/4	D+C	100/100	100
PA224018	0-40 bar/psi	R1/4	D+C	100/100	100
PA220617LF	0-6 bar/psi	R1/8	D+LF+C	100/100	100
PA221017LF	0-10 bar/psi	R1/8	D+LF+C	100/100	100
PA221217LF	0-12 bar/psi	R1/8	D+LF+C	100/100	10
PA2344DF00	0-60 bar/psi	R1/4	D+C	100/100	100
	0-100 bar/psi	R1/4		100/100	100
	0-160 bar/psi	R1/4		100/100	100
	0-250 bar/psi	R1/4		100/100	100
PA2362DF00	0-315 bar/psi	R1/4	D+C	100/100	100
	0-400 bar/psi	R1/4		100/100	100



M1-ABS 63

DN63 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
PA319918LF	-1/0 bar/inHg	R1/4	D+LF+C	100/100	10
PA310118LF	0-1 bar/inHg	R1/4	D+LF+C	100/100	10
PA310218	0-1.6 bar/psi	R1/4	D+C	100/100	100
PA320318LF	0-2.5 bar/psi	R1/4	D+LF+C	100/100	10
PA320418LF	0-4 bar/psi	R1/4	D+LF+C	100/100	10
PA320618LF	0-6 bar/psi	R1/4	D+LF+C	100/100	10
PA321018LF	0-10 bar/psi	R1/4	D+LF+C	100/100	10
PA321218LF	0-12 bar/psi	R1/4	D+LF+C	100/100	10
PA321618LF	0-16 bar/psi	R1/4	D+LF+C	100/100	10
PA322018LF	0-20 bar/psi	R1/4	D+LF+C	100/100	10
PA3225DF00	0-25 bar/psi	R1/4	D+LF+C	100/100	100
PA3240DF00	0-40 bar/psi	R1/4	D+LF+C	100/100	100
PA3344DF00	0-60 bar/psi	R1/4		100/100	100
	0-100 bar/psi	R1/4		100/100	100
	0-160 bar/psi	R1/4		100/100	100
	0-250 bar/psi	R1/4		100/100	100
PA336218	0-315 bar/psi	R1/4	D+C	100/100	100
PA336618	0-400 bar/psi	R1/4	D+C	100/100	100



M1-ABS 80

DN80 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
PA4101EC00	-1/0 bar/inHg	G3/8B	D+LF+C	1/50	50
	0-1 bar/psi	G3/8B		1/50	50
	0-1.6 bar/psi	G3/8B		1/50	50
	0-2.5 bar/psi	G3/8B		1/50	50
	0-4 bar/psi	G3/8B		1/50	50
	0-6 bar/psi	G3/8B		1/50	50
PA4210DC01	0-10 bar/psi	G3/8B	D+LF+C	1/50	50
PA4216DC00	0-16 bar/psi	G3/8B	D+LF+C	1/50	50
PA4225DC00	0-25 bar/psi	G3/8B	D+LF+C	1/50	50
	0-40 bar/psi	G3/8B		1/50	50
	0-60 bar/psi	G3/8B		1/50	50
	0-100 bar/psi	G3/8B		1/50	50
	0-160 bar/psi	G3/8B		1/50	50
	0-250 bar/psi	G3/8B		1/50	50
	0-315 bar/psi	G3/8B		1/50	50
	0-400 bar/psi	G3/8B		1/50	50



M1-ABS 100

DN100 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
	-1/0 bar/inHg	G1/2B		1/30	30
PA5101DL00	0-1 bar/psi	G1/2B	D+C	1/30	30
	0-1.6 bar/psi	G1/2B		1/30	30
PA5203DD00	0-2.5 bar/psi	G1/2B	D+C+LF	1/30	30
PA5204DD01	0-4 bar/psi	G1/2B	D+C	1/30	30
PA5206DD00	0-6 bar/psi	G1/2B	D+C+LF	1/30	30
PA5210DD01	0-10 bar/psi	G1/2B	D+C	1/30	30
PA5216DD00	0-16 bar/psi	G1/2B	D+C+LF	1/30	30
PA5225DD00	0-25 bar/psi	G1/2B	D+C+LF	1/30	30
PA5240DD00	0-40 bar/psi	G1/2B	D+C+LF	1/30	30
	0-60 bar/psi	G1/2B		1/30	30
	0-100 bar/psi	G1/2B		1/30	30
	0-160 bar/psi	G1/2B		1/30	30
	0-250 bar/psi	G1/2B		1/30	30
	0-315 bar/psi	G1/2B		1/30	30
	0-400 bar/psi	G1/2B		1/30	30

*Options included

D = Dual scale bar/psi (black/red)

LF = Fimet Watts logo on the dial

C = Accuracy class 1.6

Customizations per minimum order quantity

Customizations	Model
AT - PTFE sealing ring on parallel threads only	M1-ABS 40/50/63/80/100
T2 -40°C/+90°C - Aluminium dial + aluminium pointer, (QA+) Cl.2.5	M1-ABS 40/50/63/80/100
Z - Restrictor hole 0.5 mm	M1-ABS 40/50/63/80/100
Z3 - Restrictor hole 0.35 mm	M1-ABS 40/50/63/80/100
MS - Silicone movement for dampened pointer travel	M1-ABS 50/63/80/100
Customized dials, other scale ranges or connections on request	M1-ABS 40/50/63/80/100



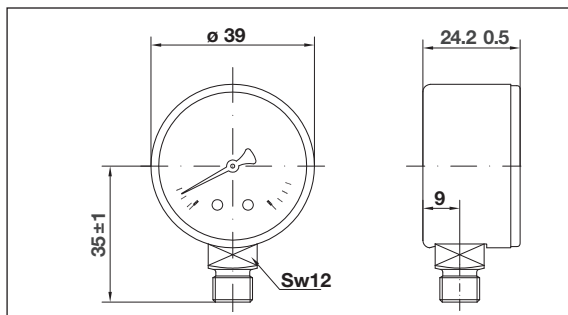
Features

Materials	
Case	Black plastic
Window	Clear plastic
Dial	White plastic
Pointer	Black plastic
Pressure connection	Cu-alloy, 12 mm flats (DN 40) - 14 mm (\geq DN 50) flats
Pressure element	Bourdon tube Cu-alloy, soft soldered \leq 60 bar C-type, $>$ 60 bar helical type Sn-Ag soldered
Movement	Cu-alloy

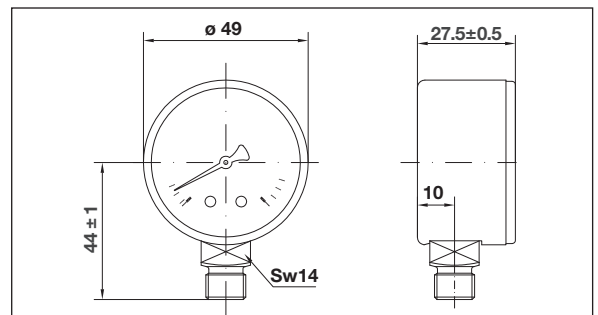
Technical features	
Design	EN 837-1
Working pressure	Steady: 75% of full scale value Fluctuating: 60% of full scale value Short time: full scale value
Temperature limits	Ambient: -40 ... +60 °C Medium: +60 °C maximum Storage: -40 ... +60 °C
Temperature effect	Deviation from reference temperature (+20°C): $\pm 0,04\%/1K$ of the span
Accuracy class	Cl 1.6
Degree of protection	IP 31 per EN 60 529 / IEC 529
Individual weight:	
M1-ABS 40	0.042 kg
M1-ABS 50	0.073 kg
M1-ABS 63	0.089 kg
M1-ABS 80	0.128 kg
M1-ABS 100	0.175 kg

Overall dimensions (mm)

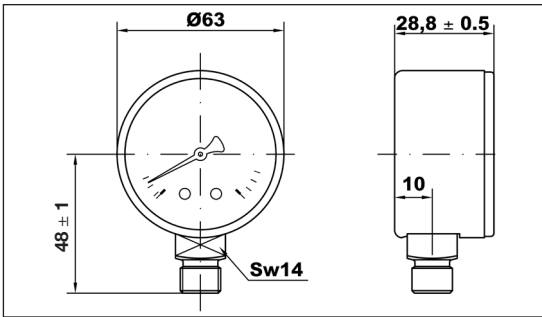
M1-ABS 40



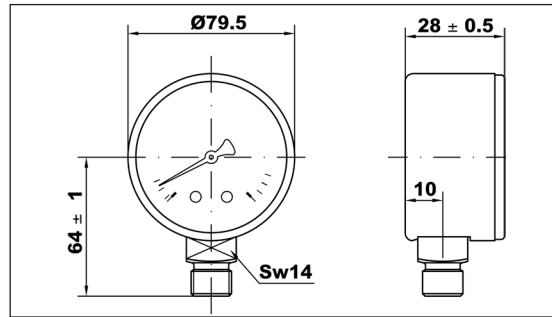
M1-ABS 50



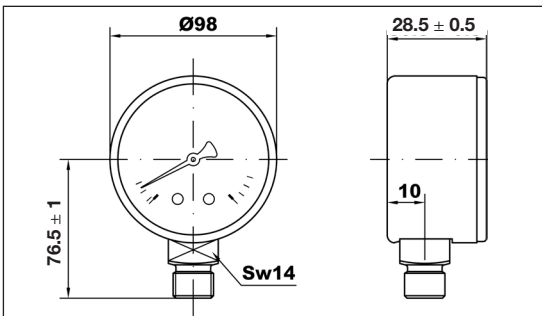
M1-ABS 63



M1-ABS 80



M1-ABS 100



Specification text

Bourdon tube pressure gauges **M1-ABS Series** - brand WATTS - for general industry, gases and liquids not viscous, not aggressive and not crystallising. Dry **plastic case** DN 40-50-63-80-100 mm **bottom entry**. Vacuum measures range -1/0, high pressure up to 400 bar. Temperature limits + 60°C, Accuracy class 1.6.

Compliant with EN 837-1.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

Watts Industries reserves the right to carry out any technical and design improvements to its products without prior notice. Warranty: All sales and contracts for sale are expressly conditioned on the buyer's assent to Watts terms and conditions found on its website at www.wattsindustries.com. Watts hereby objects to any term, different from or additional to

Watts terms, contained in any buyer communication in any form, unless agreed to in a writing signed by an officer of Watts.

WATTS®

Watts Industries Italia S.r.l.

Via Brenno, 21 • 20853 Biassono (MB) • Italy

Tel. +39 039 4986.1 • Fax +39 039 4986.222

infowattitalia@wattswater.com • www.wattsindustries.com