M1-ABS

Bourdon tube pressure gauges

Technical Data Sheet



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WATTS®

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



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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



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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+I) 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

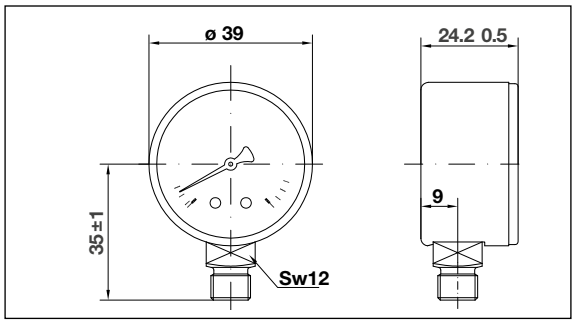
Features

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

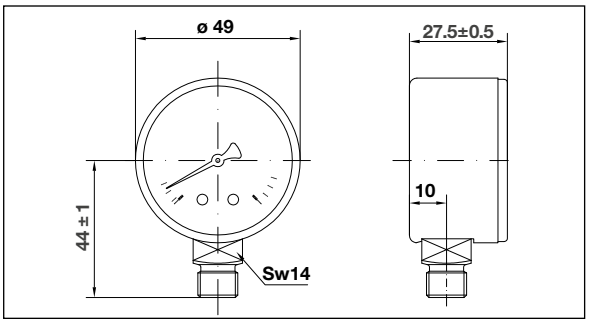
Technical features	
Design	*EN 837-1*
Working pressure	Steady: 75% of full scale value Fluctuating: 60% of full scale value Short time: full scale value
Temperature limits	Ambient: -40 ... +60°C Medium: +90°C maximum Storage: -40 ... +60°C
Temperature effect	Deviation from reference temperature (+20°C): ±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 M1-ABS 50 M1-ABS 63 M1-ABS 80 M1-ABS 100	 0.042 kg 0.073 kg 0.089 kg 0.128 kg 0.175 kg

Overall dimensions (mm)

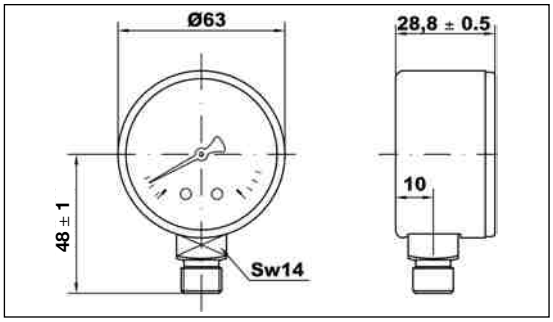
M1-ABS 40



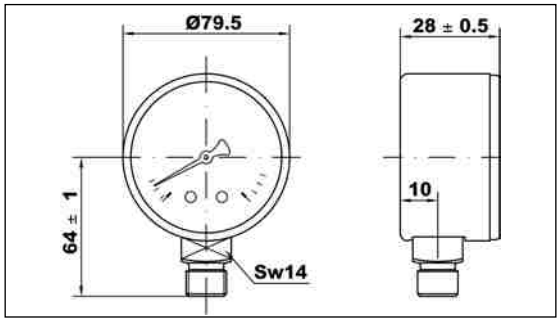
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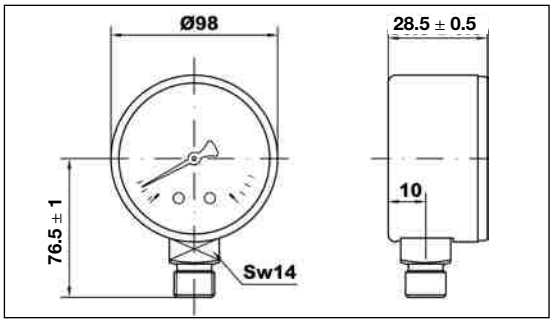
M1-ABS 63



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.

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