

# M1-ABS/R

Bourdon tube pressure gauges

## Technical Data Sheet



## Description

Dry plastic case bottom entry red adjustable pointer on window. For heating industry, gases and liquids not viscous, not aggressive and not crystallising.



### M1-ABS 40/R

DN40 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
	0-2.5 bar	G1/8B		240/240	240
	0-4 bar	G1/8B		240/240	240
	0-6 bar	G1/8B		240/240	240
PA1210BA00	0-10 bar	G1/8B	R	240/240	240
	0-16 bar	G1/8B		240/240	240
	0-25 bar	G1/8B		240/240	240
	0-40 bar	G1/8B		240/240	240
	0-60 bar	G1/4B		100/100	100
	0-100 bar	G1/4B		100/100	100
	0-160 bar	G1/4B		100/100	100
	0-250 bar	G1/4B		100/100	100
	0-315 bar	G1/4B		100/100	100
	0-400 bar	G1/4B		100/100	100



### M1-ABS 50/R

DN50 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
	-1/0 bar	G1/4B		100/100	100
	0-1 bar	G1/4B		100/100	100
	0-1.6 bar	G1/4B		100/100	100
	0-2.5 bar	G1/4B		100/100	100
PA2204BB10	0-4 bar	G1/4B	R+LF	100/100	10
PA2206BB13	0-6 bar	G1/4B	R+LF	100/100	10
PA2210BB12	0-10 bar	G1/4B	R+LF	100/100	10
PA2216BB09	0-16 bar	G1/4B	R+LF	100/100	10
PA2225BB04	0-25 bar	G1/4B	R+LF	100/100	100
PA2240BB00	0-40 bar	G1/4B	R	100/100	100
	0-60 bar	G1/4B		100/100	100
	0-100 bar	G1/4B		100/100	100
	0-160 bar	G1/4B		100/100	100
	0-250 bar	G1/4B		100/100	100
	0-315 bar	G1/4B		100/100	100
	0-400 bar	G1/4B		100/100	100



## M1-ABS 63/R

DN63 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
PA3101BB00	-1/0 bar	G1/4B	R	100/100	100
PA3101BB02	0-1 bar	G1/4B	LF+R+QISP	100/100	100
PA3102BB01	0-1.6 bar	G1/4B	LF+R+QISP	100/100	100
PA3203BB02	0-2.5 bar	G1/4B	LF+R+QISP	100/100	100
PA3204BB12	0-4 bar	G1/4B	LF+R+QISP	100/100	10
PA3206BB13	0-6 bar	G1/4B	LF+R+QISP	100/100	10
PA3210BB15	0-10 bar	G1/4B	LF+R+QISP	100/100	10
PA3216BB12	0-16 bar	G1/4B	LF+R+QISP	100/100	10
PA3225BB01	0-25 bar	G1/4B	LF+R	100/100	10
PA3240BB00	0-40 bar	G1/4B	LF+R	100/100	100
	0-60 bar	G1/4B		100/100	100
	0-100 bar	G1/4B		100/100	100
	0-160 bar	G1/4B		100/100	100
	0-250 bar	G1/4B		100/100	100
	0-315 bar	G1/4B		100/100	100
	0-400 bar	G1/4B		100/100	100



## M1-ABS 80/R

DN80 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min. order
	-1/0 bar	G3/8B		1/50	50
PA4101BC01	0-1 bar	G3/8B	R+QISP+LF	1/50	50
PA4102BC01	0-1.6 bar	G3/8B	R+QISP+LF	1/50	50
PA4203BC01	0-2.5 bar	G3/8B	R+QISP+LF	1/50	1
PA4204BC05	0-4 bar	G3/8B	R+QISP+LF	1/50	1
PA4206BC07	0-6 bar	G3/8B	R+QISP+LF	1/50	1
PA4210BC05	0-10 bar	G3/8B	R+QISP+LF	1/50	1
PA4216BC02	0-16 bar	G3/8B	R+QISP+LF	1/50	1
PA4225BC01	0-25 bar	G3/8B	R+LF	1/50	1
PA4240BC01	0-40 bar	G3/8B	R+LF	1/50	50
PA4101WC02	0-10 mH <sub>2</sub> O	G3/8B	R+QISP+LF	1/50	1
PA4102WC02	0-16 mH <sub>2</sub> O	G3/8B	R+QISP+LF	1/50	1
PA4203WC02	0-25 mH <sub>2</sub> O	G3/8B	R+QISP+LF	1/50	50
PA4204WC01	0-40 mH <sub>2</sub> O	G3/8B	R+QISP+LF	1/50	1
PA4206WC01	0-60 mH <sub>2</sub> O	G3/8B	R+QISP+LF	1/50	1
	0-60 bar	G3/8B		1/50	50
	0-100 bar	G3/8B		1/50	50
	0-160 bar	G3/8B		1/50	50
	0-250 bar	G3/8B		1/50	50
	0-315 bar	G3/8B		1/50	50
	0-400 bar	G3/8B		1/50	50
PA4204BD03	0-4 bar	G1/2B	R+LF	1/50	50
PA4206BD04	0-6 bar	G1/2B	R+LF	1/50	1
PA4210BD03	0-10 bar	G1/2B	R+L	1/50	1
PA4216BD04	0-16 bar	G1/2B	R+LF	1/50	50
PA4225BD02	0-25 bar	G1/2B	R	1/50	50



## M1-ABS 100/R

DN100 pressure gauges.

Part No	Pressure Range	Connection	Options*	Box/Master	Min.order
	-1/0 bar	G1/2B		1/30	30
PA5101BD02	0-1 bar	G1/2B	R+LF	1/30	30
PA5102BD01	0-1.6 bar	G1/2B	R+LF	1/30	30
PA5203BD01	0-2.5 bar	G1/2B	R+LF	1/30	30
PA5204BD01	0-4 bar	G1/2B	R+LF	1/30	1
PA5206BD03	0-6 bar	G1/2B	R+LF	1/30	1
PA5210BD02	0-10 bar	G1/2B	R+LF	1/30	1
PA5216BD03	0-16 bar	G1/2B	R+LF	1/30	1
PA5225BD02	0-25 bar	G1/2B	R+LF	1/30	30
PA5240BD01	0-40 bar	G1/2B	R+LF	1/30	30
	0-60 bar	G1/2B		1/30	30
	0-100 bar	G1/2B		1/30	30
	0-160 bar	G1/2B		1/30	30
	0-250 bar	G1/2B		1/30	30
	0-315 bar	G1/2B		1/30	30
	0-400 bar	G1/2B		1/30	30

### \*Options included

R = Red pointer on window  
 LF = Fimet Watts logo on the dial  
 QISP = Dial according to INAIL standards

## Customization per minimum order quantity

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



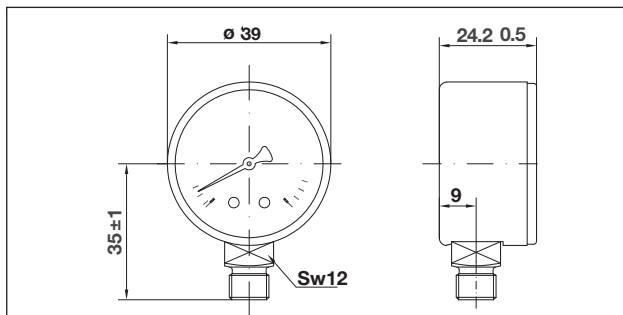
## Features

Materials	
Case	Black plastic
Window	Clear plastic
Dial	White plastic
Pointer	Black plastic - red 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

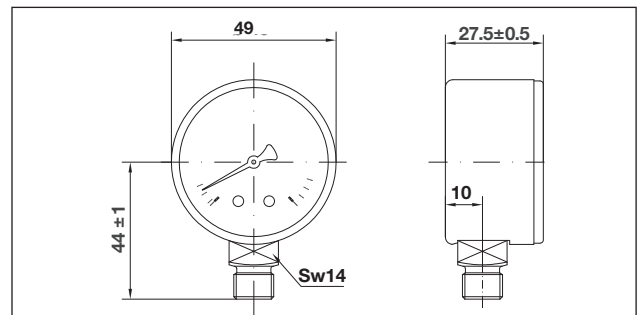
Technical features	
Design	EN 837-1
Working pressure	Steady: 75 % of full scale value Fluctuating: 60 % of full scale value Short time: full scale value
Temperature limits	Ambient: -40 ... +60 °C Medium: +60 °C maximum Storage: -40 ... +60 °C
Temperature effect	Deviation from reference temperature (+20°C): $\pm 0,04\%/1K$ of the span
Accuracy class	cl 1.6
Degree of protection	IP 31 per EN 60 529 / IEC 529
Individual weight:	
M1-ABS 40/R	0.042 kg
M1-ABS 50/R	0.073 kg
M1-ABS 63/R	0.069 kg
M1-ABS 80/R	0.128 kg
M1-ABS 100/R	0.175 kg

## Overall dimensions (mm)

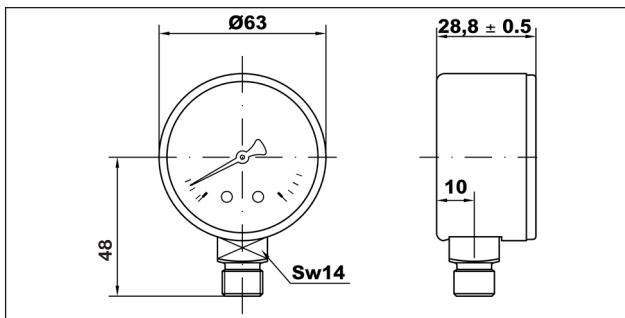
### M1-ABS 40/R



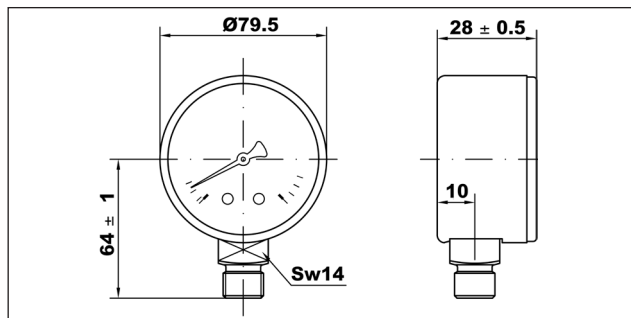
### M1-ABS 50/R



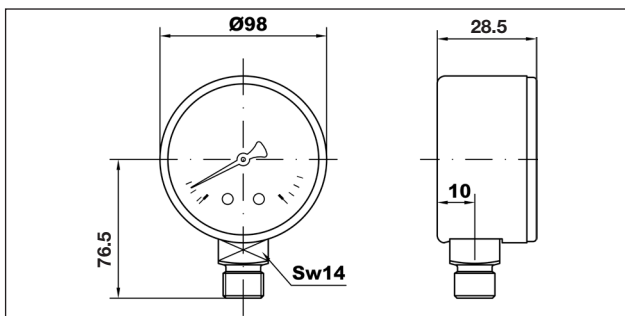
## M1-ABS 63/R



## M1-ABS 80/R



## M1-ABS 100/R



## Specification text

Bourdon tube pressure gauges, **M1-ABS/R Series**, WATTS brand, for heating industry, gases and liquids not viscous, not aggressive and not crystallising. **Dry plastic case** DN 40-50-63-80-100 mm **bottom entry red adjustable pointer on window**. Vacuum measures range -1/0 at 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.

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