

Family datasheet

ECO 210-3 Fine Manometer

ECO 210-5 Manometer

- Modern and functional design – pocket-size
- Excellent price/performance ratio
- 3-line backlit display / overhead display at push of button
- Robust, long battery operation time
- Easy to use universal pressure port with exchangeable connections
- High resolution and precision
- Very fast!
- Calibration options



Characteristics

The primary focus in the development of the ECO line series was placed on the essential functions of the measurement technology. The heart of the instrument – the sensor – is a high-class component – which excels in this instrument class.

The high reliability, speed and precision, packed in a compact and water protected housing makes the instruments an ideal partner of industry and in the craft sector.

ECO line – The reference class in pocket size.

ECO 210-3

Fine pressure manometer for application in Heating / Ventilation / Air-conditioning (HVAC)

The measurement range up to 200 hPa (mbar) / 20 kPa and the high resolution 1 Pa (0.1 Pascal in the optimized fine pressure mode) covers the main applications for gas pressure 150 hPa (mbar) and burner adjustments with a single instrument. The high precision simplifies e.g. adjustments of dynamic pressure or draft measurements. The measurement is independent of instruments orientation – better than many, even much more expensive, competitors.

ECO 210-5

The sister device of the extremely high-resolution ECO 210-3 is the first choice when differential pressures $> \pm 200$ hPa (mbar) are to be measured. Up to ± 2000 hPa are covered precisely and with high resolution (up to 0.01 hPa, or 1 Pascal in optimized fine pressure mode).

UNIVERSAL-PORTS for use with a large range of pressure connections: Screw fitting, Quick-Connect, Push-Pull: All these types can be connected to the instrument! You have the choice, which connection is most practicable for you – instrument keeps the same.

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Connection variants

- ① UT connection for tubes 6 x 1 mm
(4 mm inner) and 8 x 1 mm (6 mm inner)
- ② QC6 Quick-Connect connection
for 6 x 1 mm (Ø 4 mm inner) tubes
- ③ ST6 screw connection for 6 x 1 mm
(Ø 4 mm inner) tubes
- ④ MCM mini male quick coupling nominal diameter 2.7
(Mini quick connect coupling socket optionally available)

*Universal port for the connection
of different pressure connections.
The pressure connection is exchangeable
due to 1/8-inch port!*



Please select variant when ordering. Can be changed later.



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TECHNICAL DATA

		ECO 210-3	ECO 210-5
Description		Fine Manometer	Manometer
Measuring		Difference pressure	
Pressure connection		2 tube connections, interchangeable with G1/8 universal ports	
Ranges / resolution	Hi	-200.0...+200.0 hPa (mbar) -2.900 ... +2.900 PSI -150.0 ... +150.0 mmHg (Torr)	-2000...+2000 hPa (mbar) -2.000...+2.000 bar -29.00 ... +29.00 PSI -1500 ... +1500 mmHg (Torr)
	Lo	-2000 ... +2000 Pa -20.00 ... +20.00 hPa (mbar) -20.00 ... +20.00 mmHg (Torr)	-200.0 ... +200.0 hPa (mbar) -200.0 ... +200.0 mmHg (Torr)
	In optimized fine mode $F_{i\ nE}$	-200.0 ... +200.0 Pa *)	-2000 ... +2000 Pa *)
Display units		Pa, hPa, mbar, PSI, mmHg (Torr)	hPa, mbar, bar, PSI, mmHg (Torr)
Measuring frequency		Slow: 2.5 measurements per second Fast: 25 measurements per second	
Precision typ. @ 25 °C		+/- 0.1 % FSS	+/- 0.1 % FSS
Precision max. (-20..50 °C)		+/- 1 % FSS	+/- 1 % FSS
Max. overload		+/- 1700 hPa	+/- 3100 hPa
Display		3-line segment LCD, additional symbols, illuminated (white, illumination time adjustable), overhead display on key press	
Standard functions		Min/Max/Hold, Auto-Power-Off-function / if activated, the product switches off automatically	
Optional special functions		NULL / Tare function	
		$F_{i\ nE}$: With 0.1 Pa resolution *)	$F_{i\ nE}$: With 1 Pa resolution *)
		R_{ur} : Averaging over 2 s / 5 s / 10 s	
Adjustment		Zero point and slope	
Housing		Break-proof ABS housing, protection rating IP67 except ports (pressure connections must be protected from soiling and moisture)	
Dimensions		108 x 54 x 28 mm, with connection ca. 122 x 54 x 28 mm	
Weight		150 g incl. battery	
Operating conditions		-20 to +50 °C; 0 to 95 % r.h. (temporarily 100 % r.h.)	
Storage temperature		-20 to +70 °C	
Power supply		2 x AA battery (included in the scope of delivery), current: ca. 1 mA (slow measurement SLO)/ with backlight ca 3mA, battery life ca. 3000 h/1000h battery indicator: 4-stage charge status indicator, note for low level: "bAt Lo"	

*) select " $F_{unc\ F_{i\ nE}}$ " and start optimized fine function with pressing "ok" 4 sec

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ORDERING CODE

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2.

3.

ECO 210

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1.	Measuring range	
3	-2000...2000 Pascal (-20.00...20.00 hPa) -200.0...200.0 hPa dif.	
5	-200.0...200.0 hPa -2000...2000 hPa dif.	
2.	Connection option	
UT	2x G1/8-inch port incl. connection for tube 6x1 mm (4 mm inner) or 8x1 mm (6 mm inner)	
QC6	2x G1/8-inch port incl. quick connector for tube with outer-Ø 6 mm	
ST6	2x G1/8-inch port incl. screw connector for tube with outer-Ø 6 mm	
MCM	2x G1/8-inch port incl. mini quick coupling plug, nominal width 2.7	
3.	Set option	
	Device in carton box, test-protocol, batteries, manual	
SET	Device in case GKK 1002, 1 m tube 6x1 PVC, test-protocol, batteries, manual	
SET	For -MCM: Device in case GKK 1002, 1 m tube 6x1 PVC, test-protocol, batteries, manual, 2 quick connect sockets GDZ-MCF	
SET 8	Device in case GKK 1002, incl. 1 m silicone tube 8 mm, test-protocol, batteries, manual	
WPD	Device in case GKK 1002, 1 m tube 6x1 PVC, factory calibration WPD5, not DAkkS accredited, batteries, manual	
8COVER	Device in carton box, 1 m silicone tube 8 mm, protective cover with magnet, test-protocol, batteries, manual	

STANDARD ARTICLES

ECO 210-3-UT	Fine manometer, 2x G1/8-inch port incl. connection for tube 6x1 mm (4 mm inner) or 8x1 mm (6 mm inner) Set-Option: Device in carton box, test-protocol, batteries, manual	Art no. 486718
ECO 210-3-UT-SET8	Fine manometer, 2x G1/8-inch port incl. connection for tube 6x1 mm (4 mm inner) or 8x1 mm (6 mm inner) Set-Option: Device in case GKK 1002, 1 m silicone tube 8 mm, , test-protocol, batteries, manual	Art no. 487010
ECO 210-3-QC6	Fine manometer, 2x G1/8-inch port incl. quick connector for tube with outer-Ø 6 mm Set-Option: Device in carton box, test-protocol, batteries, manual	Art no. 486960
ECO 210-3-UT-8COVER	Fine manometer, 2x G1/8-inch port incl. connection for tube 6x1 mm (4 mm inner) or 8x1 mm (6 mm inner) Set-Option: Device in carton box, 1 m silicone tube 8 mm, protective cover with magnet, test-protocol, batteries, manual	Art no. 490045
ECO 210-5-UT	Manometer, 2x G1/8-inch port incl. connection for tube 6x1 mm (4 mm inner) or 8x1 mm (6 mm inner) Set-Option: Device in carton box, test-protocol, batteries, manual	Art no. 486735
ECO 210-5-ST6-WPD	Manometer, 2x G1/8-inch port incl. screw connector for tube with outer-Ø 6 mm Set-Option: Device in case GKK 1002, incl. 1 m tube 6x1 PVC, factory calibration WPD5, not DAkkS accredited, batteries, manual	Art no. 487035

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ECO 210-5-QC6	Manometer, pressure connection: 2x G1/8-inch port incl. quick connector for tube with outer-Ø 6 mm Set-Option: Device in carton box, test-protocol, batteries, manual	Art no. 486983
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ACCESSORIES

ST-G1000	Protection bag with belt clip	Art no. 611373
G1000-Cover	Rubber protection cover for ECO-Line/G 1000 series, black, incl. 2 neodymium magnets	Art no. 483958
GCLIP1000	Metal belt clip self-adhesive	Art no. 475820
G1000-BASE	ECO-Line table base and wall suspension	Art no. 481885
GDZ-UT	Universal pressure port for tube 6/4 or 8/6 with male thread G 1/8, brass nickel-plated	Art no. 479260
GDZ-QC6	Quick connect for hose 6/4 with male thread G 1/8, brass nickel-plated	Art no. 479261
GDZ-MCM	Mini quick connect coupling plug (nominal diameter 2.7) with male thread G 1/8, brass nickel-plated	Art no. 479467
GDZ-MCF	Mini quick connect coupling socket (nominal diameter 2.7) with screw lock for tube 6/4, seals when plugged off, brass nickel-plated	Art no. 480221
GDZ-01	PVC hose 6/4 (6 mm outside-Ø, 4 mm inside-Ø, 5 bar at 23 °C)	Art no. 601541
GDZ-31	Rubber tube 8/5 (8 mm outside-Ø, 5 mm inside-Ø, 2 bar at 23 °C, max. 200 °C)	Art no. 606070
GKK1002	Case for ECO-Line / G1000 series small, 235 x 185 x 48 mm	Art no. 411907

For more available accessories, visit the Senseca-Website.

OPTIONAL: CALIBRATION

ISO-WPD5	ISO calibration certificate: 5 points rising, 5 points falling	Art no. 602514k
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Many other calibration options are available at Senseca, for more information please visit the Senseca-Website