

EG21/EGS21 series Electric Gauges and Swichgages®

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catalogue section 70



- **Rugged, environmentally sealed design**
- **Indication and alarm for pressure, temperature, fuel, volts and amps**
- **Suited to marine and mobile equipment applications**

Description

The EG21 and EGS21 series take the electric gauge to new heights, with leading-edge technology and proven reliability. With our proven HG Air Core Movement design, the EG(S)21 series offers superior operation, reading accuracy, back-lighting and installation. The EG(S)21 gives you the assurance of highest reliability and service.

These rugged, environmentally sealed gauges exceed the rigid SAE J1810 standard for reliable operation in rough off-road and power environments. Corrosion resistant materials are used throughout, making the gauges highly suited for marine and other environmentally sensitive applications. Soft, non-glare dial and pointer illumination is provided by "cold light" LED: when powered, the white scale lettering and clear pointer become soft red. All units feature a non-glare, low profile black bezel.

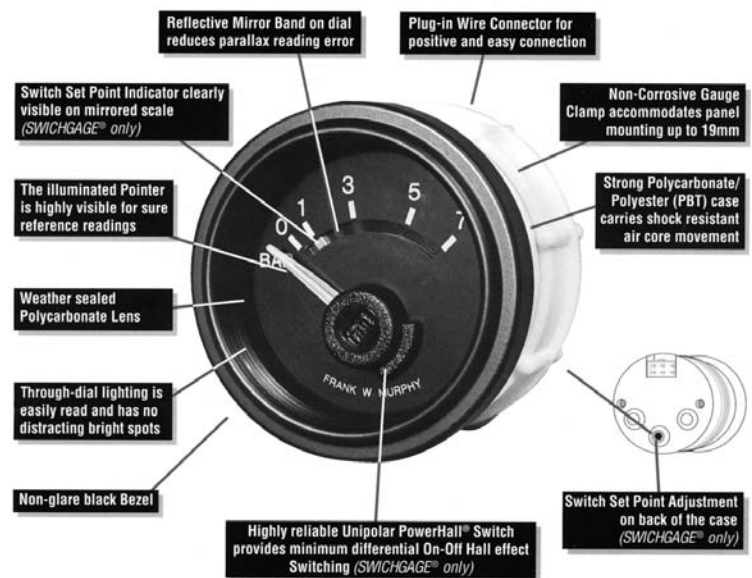
The EGS21 Swichgage® has all the features of the EG21 gauge, plus an adjustable set-point PowerHall® switch output for operating alarms or equipment shutdown. The trip point is adjustable over 90% of the scale and has a set point indicator visible on the gauge face.

Warranty

A one year limited warranty on materials and workmanship is given with this Murphy product. Full details are available at www.fwmurphy.co.uk/warranty.

PowerHall® is a registered trademark of Allegro MicroSystems Inc.

Key features



Scale options

pressure:	0 – 30 PSI / 0 – 2 Bar
	0 – 100 PSI / 0 – 7 Bar
	0 – 7 Bar
	0 – 400 PSI / 0 – 28 Bar
	0 – 28 Bar
temperature:	40 – 120°C
	60 – 150°C
fuel level:	E (empty) – ¼ - ½ - ¾ - F (full)
DC ammeter:	–60 / 0 / +60 Amps (internal shunt)
DC voltmeter, 12V:	8 – 18 Volts
	24V: 16 – 36 Volts



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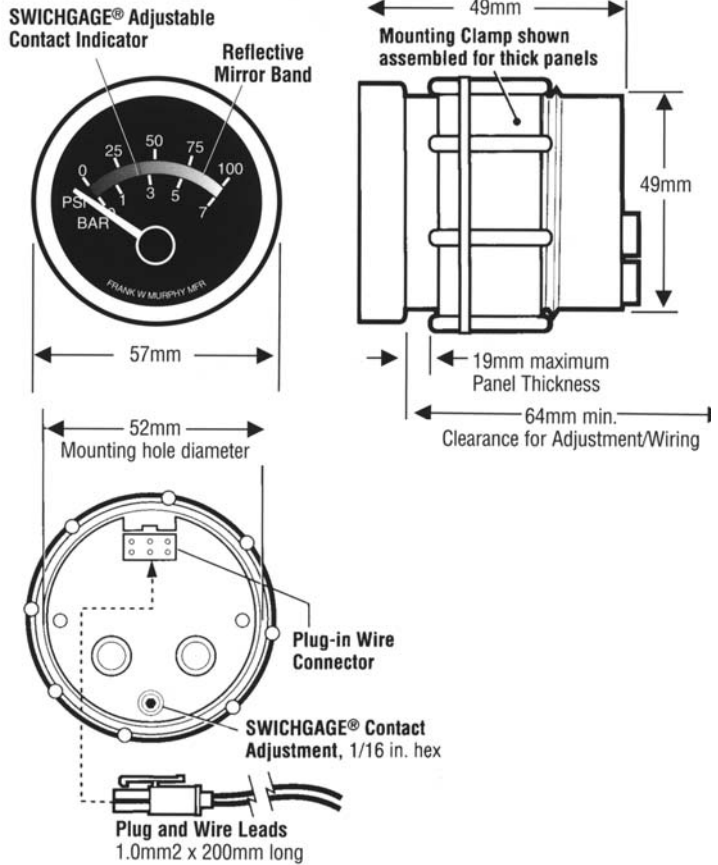


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Specifications

gauge:	
movement	air core, silicon dampened pointer
scale	black background; white markings and clear pointer (red when illuminated)
Swichgag® setting (EGS only)	red bar visible on mirror band, adjusted from gauge rear (1/16 in. hex type Allenkey).
electrical:	
supply voltage, VDC	10 – 16V (12V units), 20 – 32V (24V units)
overvolts protection	200% of nominal for 5 mins, to SAE J1810 (excludes EGS Powerhall® switch output)
reverse DC protection	100% reverse DC polarity, continuous
Swichgag® output (EGS only)	Powerhall® effect switch, normally open, closing to battery negative (pressure, fuel and volts set on on decreasing scale; temp. and amps set on increasing scale). Rated 300mA continuous.
connection	plug connector and wire leads (supplied), 18AWG (1.0mm ²) x 200mm
physical:	
case	polycarbonate/polyester (PBT), impact and weather resistant with screw-on mounting clamp
lens	clear polycarbonate, UV stabilised
bezel	matt black, non-glare
operating temperature	-40 to +85°C (-40 to 185°F)
storage temperature	-60 to +85°C (-77 to 185°F)
weight	approx. 100 – 150g (including harness)
environment and test	to SAE J1810. All models are CE marked.

Dimensions



How to order

Gauges/Swichgages (N.B. all part numbers include connector plug and 200mm wiring harness)

	EG21, 12V	EG21, 24V	EGS21,12V	EGS21,24V
Pressure				
0 - 30 PSI / 0 - 2 bar	05.70.2322	05.70.2323	05.70.2336	05.70.2337
0 - 100 PSI / 0 - 7 bar	05.70.2326	05.70.2327	05.70.2340	05.70.2341
0 - 7 bar	05.70.2328	05.70.2329	05.70.2342	05.70.2343
0 - 400 PSI / 0 - 28 bar	05.70.2332	05.70.2333	05.70.2346	05.70.2347
0 - 28 bar	05.70.2334	05.70.2335	05.70.2348	05.70.2349
Temperature				
40 - 120°C	10.70.1310	10.70.1311	10.70.1312	10.70.1313
60 - 150°C	10.70.1314	10.70.1315	10.70.1316	10.70.1317
Other				
Fuel level: E - ¼ - ½ - ¾ - F	15.70.0512	15.70.0513	15.70.0514	15.70.0515
DC volts: 8 - 18V, 16 - 36V	65.70.0130	65.70.0131	65.70.0132	65.70.0133
DC amps: -60 / 0 / +60 A	65.70.0134	65.70.0140	65.70.0135	65.70.0139

Resistive senders

Range	Thread §	2 wire (insulated return)	2 wire (insulated return, drives 2 gauges)	1 wire (earth return)
Pressure				
30 PSI / 2 bar §	1/8" NPT	00.00.3039	n/a	n/a
100 PSI / 7 bar §	1/8" NPT	00.00.3042	00.00.3055	00.00.3029
400 PSI / 28 bar §	1/8" NPT	B1078	n/a	n/a
Temperature §				
120/150°C (250/300F)	1/2" NPT	10.09.0050*	10.09.0066*	00.00.3034
120/150°C (250/300F)§	5/8" UNF	10.09.0051*	10.09.0065*	00.00.3088
120/150°C (250/300F)	1/8" NPT	10.09.0069*	10.09.0067*	00.00.3084
Fuel				
Tank depth 150 – 600mm		00.00.3037	00.00.3050	00.00.3024

§ See tables right for thread adaptors, available separately for use with standard senders

* These part numbers include a rubber dust boot

Sender thread adaptors

For use with 1/8" NPT pressure senders:-

M14 x 1.5	65.12.120
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For use with 5/8" UNF temperature senders:-

1/2" NPT	10.05.0131
3/4" NPT	10.05.0105
1/4" NPT	10.05.0167
3/8" NPT	10.05.0069
5/8" UNF	10.00.2452
3/8" BSPT	10.05.0284
1/2" BSPT	10.05.0330
M14 x 1.5	10.00.2442
M16 x 1.5	10.00.2444
M18 x 1.5	10.00.2443
M20 x 1.5	10.00.2446
M22 x 1.5	10.00.2445
M24 x 1.5	10.00.2449