

Viewline Tachometer / Trim gauge

Description

Gauge to indicate Engine Revolution
Gauge to indicate Trim angle (Outboard/Stern drive position)

Features

- _ LED Illumination
- _ 5 Integrated Warning LED's
- _ Backlit Technology
- _ Changeable Frontbezels
- _ Antifog and splash protection
- _ Panel and Flush mount possibility



Picture: Tachometer / Trim gauge

Concept

Housing	Polycarbonat (PC)
Bezel	PC (black, white) or ABS (chrome); several colors and shapes (see table)
Lens	PMMA; double lens
Dial	backlit; different colors (black, white)
Pointer	backlit, white on black dials; red on white dials
Illumination	Dial: LED amber (605nm) Pointer: LED red (632nm)
Warning LED	red (632nm), for tachometer only with optional PC software adjustable
Mounting	Spinlock Nut; locking height 0,5mm – 20mm, Optional Studs and Bracket; locking height 2 – 15mm
Connection	8/14 pin MQS connector system

Technical Data

Installation depth	50mm
Installation diameter	110mm
Deflection angle Engine Revolution	240°
Deflection angle Trim	90°
Operating Voltage	10 – 16 Volt
Accuracy Engine Revolution	< 2,5 % of the full scale reading
Accuracy Trim	< 3,6 angular degree
Current consumption	< 175 mA, including Warning LED
Measurement Range	see Table
Sensors Engine Revolution:	Hall sensor (none open Collector) Inductive sensor
Sensors Trim:	Blocking oscillator (none open Collector) Mercury Bravo
Operating temperature	-20°C to +80°C; plated bezels (chrome) -20°C to +70°C
Storage temperature	-40°C to +80°C for 48h; plated bezels (chrome) -40°C to +70°C +90°C for 1h
Temperature shock	Range -40°C to +85°C; plated bezels (chrome) -40°C to +70°C Transformation time 10 seconds Retention time 2h
Climatic test	Range +25°C to +55°C Rel. Humidity 95%
EMC in conformity with (Electromagnetic compatibility)	DIN_EN 61000-6-2 DIN_EN 61000-6-3 DIN_EN 61000-6-4
Standards	EN 60945 GL, Category C, F (under preparation) CE
Vibration	Sinus 2g; 8-500Hz; duration 16h Noise 4,2g; 10-1000Hz, duration 8h
Mechanical shock	continuous 25g; 6ms; 1Hz Single shock 100g; 11ms Free fall 1m; 3 times
Chemical resistance against	- preservative agent - preservative agent remover - cold cleaner - methylated spirit - interior cleaner - drinks containing caffeine and tannin
Nominal position	NL 0 to NL 90 (DIN16257)
Protection class	according to IEC 60529 Front: IP67 (in Nominal position) Rear: IP52 (in Nominal position)
Reverse polarity protection	yes, 5 minutes
Short circuit protection	yes, 1 minute

available Gauges

No. unpacked *	Dial color	Measurement range Engine Revolution	Input signal Engine Revolution *	Measurement range Trim	Input signal Trim	Double lens
A2C53371936	black	0 to 6000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes
A2C53371937	white	0 to 6000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes
A2C53371939	black	0 to 7000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes
A2C53371940	white	0 to 7000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes
A2C53371942	black	0 to 8000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes
A2C53371936	white	0 to 8000 RPM	W, 1, Lightning Coil	Up - Down	Mercury Bravo trim sensor 167 – 10 Ohm	yes

* **"No. unpacked"** is not a order number.

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1 – Ignition Terminal 1
W – Alternator Terminal W
Lightning Coil – Out boarder

Accessories:

A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
A2C59510864	VL Mounting bracket flush mount
A2C53215642	VL Sealing Ring 110mm flush mount
A2C59510847	Bush housing, 8-pin
A2C59510848	Bush housing, 14-pin
A2C53324664	Protective connector cap, 8-pin
A2C53324671	Protective connector cap, 14-pin
Tyco No. 539635-1	Hand pliers
Tyco No. 539682-2	Tool for hand pliers.
Tyco No. 1355718-1	Single contacts 0.14 – 0.22 mm ² tin plated
Tyco No. 963729-1	Single contacts 0.5 – 0.75 mm ² tin plated
Tyco No. 1355717-1	Strip 0.14 – 0.22 mm ² tin plated
Tyco No. 928999-1	Strip 0.25 – 0.5 mm ² tin plated
Tyco No. 963715-1	Strip 0.5 – 0.75 mm ² tin plated

Bezels 110mm

	Black	Chrome	White
Flat	A2C53210745	A2C53210747	A2C53210746
Round	A2C53210749	A2C53210761	A2C53210764
Triangle	A2C53210763	A2C53210765	A2C53192920