

## Viewline 2 in One Tachometer / Trim Gauge

### Description

Gauge to indicate Engine Revolution and Trim Angle (Outboard/Stern drive position).

### Features

- \_ LED illumination
- \_ 5 Integrated Warning LEDs
- \_ Backlit technology
- \_ Changeable bezels
- \_ 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 Deflection angle Trim Gauge	240° 90°	
Operating Voltage	10 – 16 Volt	
Accuracy Engine Revolution Accuracy Trim Gauge	< 2.5 % of the full scale reading < 3.6 angular degrees	
Current consumption	< 175 mA, including Warning LED	
Measurement Range	see Table	
Sensors Engine Revolution	Hall sensor (none open Collector) Inductive sensor Blocking oscillator (none open Collector)	
Sensors Trim	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 Transformation time Retention time	-40°C to +85°C; plated bezels (chrome) -40°C to +70°C 10 seconds 2h
Climatic test	Range Rel. Humidity	+25°C to +55°C 95%
EMC in conformity with (Electromagnetic compatibility)	DIN_EN 61000-6-2 DIN_EN 61000-6-3	
Standards	EN 60945 (under preparation) GL, Category C, F (under preparation) CE	
Vibration	Sinus 2g; 8-500Hz; duration 16h Noise 4.2g; 10-1000Hz, duration 8h	
Mechanical shock	continuous Single shock Free fall	25g; 6ms; 1Hz 100g; 11ms 1m; 3 times
Chemical resistance against	<ul style="list-style-type: none"> <li>- preservative agent</li> <li>- preservative agent remover</li> <li>- cold cleaner</li> <li>- methylated spirit</li> <li>- interior cleaner</li> <li>- drinks containing caffeine and tannin</li> </ul>	
Nominal position	NL 0 to NL 85 (DIN16257)	
Protection class	according to IEC 60529 Front: IP67 (in nominal position) Rear: IP52 (in nominal position)	
Reverse polarity protection	yes, 5 minute	
Over voltage 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 <sup>2</sup> tin plated
Tyco No. 963729-1	Single contacts 0.5 – 0.75 mm <sup>2</sup> tin plated
Tyco No. 1355717-1	Strip 0.14 – 0.22 mm <sup>2</sup> tin plated
Tyco No. 928999-1	Strip 0.25 – 0.5 mm <sup>2</sup> tin plated
Tyco No. 963715-1	Strip 0.5 – 0.75 mm <sup>2</sup> tin plated

## Bezels 110mm

	Black	Chrome	White
<b>Flat</b>	A2C53210745	A2C53210747	A2C53210746
<b>Round</b>	A2C53210749	A2C53210761	A2C53210764
<b>Triangle</b>	A2C53210763	A2C53210765	A2C53192920