

## Viewline Tachometer

### Description

Gauge to indicate Engine Revolution, Engine Hours, Voltage, Clock.

### Features

- \_ LED illumination
- \_ Integrated Warning LED
- \_ Changeable bezels
- \_ Backlit technology
- \_ Antifog and splash protection
- \_ Panel and flush mount possibility
- \_ External switch for LCD operation



Picture: Tachometer with Display

### 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), programmable via LC display
Mounting	Spinlock Nut; locking height 0.5mm – 20mm, Optional Studs and Bracket; locking height 2 – 13mm
Connection	8/14 pin MQS connector system

Technical Data							
Measurement Range	see Table						
Pulse count range	0.5-399 Imp/U (Default:6Imp/U) programmable via LC display or with optional PC Software adjustable						
Sensors	Hall sensor (none open Collector) Inductive sensor Blocking oscillator (none open Collector) Alternator Term. W Ignition Term. 1 Lightning Coil – Out boarder						
LCD-Size	37 x 11 mm						
Alarm output	max. 100mA						
Installation depth	50mm						
Installation diameter	85mm, 110mm (see table)						
Deflection angle	240°						
Operating Voltage	8 – 32 Volt						
Accuracy	± 2.5% of full scale reading						
Current consumption	< 175 mA, including Warning LED						
Operating temperature	-20°C to +85°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	<table border="1"> <tr> <td>Range</td> <td>-40°C to +85°C; plated bezels (chrome) -40°C to +70°C</td> </tr> <tr> <td>Transformation time</td> <td>10 seconds</td> </tr> <tr> <td>Retention time</td> <td>2h</td> </tr> </table>	Range	-40°C to +85°C; plated bezels (chrome) -40°C to +70°C	Transformation time	10 seconds	Retention time	2h
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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 ECE-R10						
Vibration	Sinus 2g; 8-500Hz; duration 16h Noise 4.2g; 10-1000Hz, duration 8h						
Mechanical shock	<table border="1"> <tr> <td>continuous</td> <td>25g; 6ms; 1Hz</td> </tr> <tr> <td>Single shock</td> <td>100g; 11ms</td> </tr> <tr> <td>Free fall</td> <td>1m; 3 times</td> </tr> </table>	continuous	25g; 6ms; 1Hz	Single shock	100g; 11ms	Free fall	1m; 3 times
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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 85 (DIN16257)						
Protection class	according to IEC 60529 Front: IP67 (in nominal position) Rear: IP52 (in nominal position)						
Reverse polarity protection	yes, 1 minute						
Over voltage protection	yes, 1 minute						

## Available Gauges:

No. unpacked *	Dial color	Measurement range	Input signal **	Double lens
<b>Dia. 85 mm Gauge</b>				
A2C53194786	black	0 to 1800rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194787	black	0 to 2500rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194790	black	0 to 3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194864	black	0 to 4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194868	black	0 to 5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194873	black	0 to 6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194882	black	0 to 7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194886	black	0 to 8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194889	black	0 to 10000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194792	white	0 to 3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194866	white	0 to 4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194870	white	0 to 5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194880	white	0 to 6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194884	white	0 to 7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194888	white	0 to 8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194910	white	0 to 10000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194789	black	0 to 3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194863	black	0 to 4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194867	black	0 to 5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194872	black	0 to 6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194881	black	0 to 7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194885	black	0 to 8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194791	white	0 to 3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194865	white	0 to 4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194869	white	0 to 5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194875	white	0 to 6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194883	white	0 to 7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C53194887	white	0 to 8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
<b>Dia. 110 mm Gauge</b>				
A2C53194633	black	0 to 1800rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194597	black	0 to 3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194596	black	0 to 4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194594	black	0 to 5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194593	black	0 to 6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194592	black	0 to 7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C53194590	black	0 to 8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no

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

\*\* W – Alternator Terminal W  
1 – Ignition Terminal 1  
Ind –Inductive Sensor  
Lightning Coil – Out boarder

**Accessories:**

A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
A2C59510864	VL Mounting bracket flush mount
A2C53215641	VL Sealing Ring 85mm 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 85mm**

	Black	Chrome	White
<b>Flat</b>	A2C53192911	A2C53192910	A2C53192912
<b>Round</b>	A2C53192913	A2C53192914	A2C53192916
<b>Triangle</b>	A2C53192917	A2C53192918	A2C53192920

**Bezels 110mm**

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