

## Viewline Tachometer

### Description

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

### Features

- \_ Integrated Warning LED.
- \_ Changeable Frontbezels.
- \_ Flush mount possibility
- \_ LED Illumination
- \_ High reliability



Picture: Tachometer with Display

### Concept

Housing	PC; flame retarding (UL94)
Bezel	PC or ABS; several colors and shapes (see table)
Lens	PMMA; double lens
Dial	backlit; different colors (see table)
Pointer	backlit, white on black dials; red on white dials
Illumination	Dial: LED amber (605nm) Pointer: LED red (632nm)
Warning LED	red (632nm), programmable
Mounting	spinlock Nut; locking height 0,5mm – 20mm, optional Studs and Bracket; locking height 2 – 13mm
Connection	8 pin MQS connector system

**Technical Data**

Measurement Range	see Table	
Sensors:	Hall sensor Inductive sensor Blocking oscillator	
LCD-Size	37 x 11 mm	
Alarm output	max 100mA	
Illumination	amber, dimmable	
Installation depth	50mm	
Installation diameter	85mm, 110mm (see table)	
Deflection angle	240°	
Operating Voltage	8,5 – 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 +85°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	80% to 100%
EMC in conformity with	ISO 7637-1/2 ISO 7637-3	
ESD in conformity with	DIN_EN 61000-4-2 ISO/CD 10605 SAE J 551/15)	
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 85 (DIN16257)	
Protection class	according to IEC 60529 Front: IP67 (in Nominal position) Rear: IP52 (in Nominal position)	
Reverse polarity protection	yes, 1 minute	
Short circuit protection	yes, 1 minute	

## available Gauges:

No. packed	No. unpacked	color	Diameter	Measurement range	Input signal *	Double lens
A2C59510044	A2C53194786	black	85	1800rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510045	A2C53194787	black	85	2500rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510046	A2C53194790	black	85	3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510047	A2C53194864	black	85	4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510048	A2C53194868	black	85	5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510049	A2C53194873	black	85	6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510050	A2C53194882	black	85	7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510051	A2C53194886	black	85	8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510052	A2C53194889	black	85	10000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510053	A2C53194792	white	85	3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510054	A2C53194866	white	85	4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510055	A2C53194870	white	85	5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510056	A2C53194880	white	85	6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510057	A2C53194884	white	85	7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510058	A2C53194888	white	85	8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510059	A2C53194910	white	85	10000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510086	A2C53194789	black	85	3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510087	A2C53194863	black	85	4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510088	A2C53194867	black	85	5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510089	A2C53194872	black	85	6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510090	A2C53194881	black	85	7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510091	A2C53194885	black	85	8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510092	A2C53194791	white	85	3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510093	A2C53194865	white	85	4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510094	A2C53194869	white	85	5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510095	A2C53194875	white	85	6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510096	A2C53194883	white	85	7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510097	A2C53194887	white	85	8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	yes
A2C59510108	A2C53194633	black	110	1800rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510109	A2C53194597	black	110	3000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510110	A2C53194596	black	110	4000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510111	A2C53194594	black	110	5000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510112	A2C53194593	black	110	6000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510113	A2C53194592	black	110	7000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no
A2C59510114	A2C53194590	black	110	8000rpm	W, 1, Ind, Generator, Hall, Lightning Coil	no

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1 – Ignition Terminal 1  
W – Alternator Terminal W  
Ind – Inductive Sensor  
Lightning Coil – Outboarder

**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**

	<b>black</b>	<b>black nickel*</b>	<b>brush aluminum*</b>	<b>chrome</b>	<b>gold*</b>	<b>white</b>
flat	A2C53192911	A2C53293487	A2C53293488	A2C53192910	A2C53293490	A2C53192912
round	A2C53192913	A2C53293541	A2C53293499	A2C53192914	A2C53293540	A2C53192916
triangle	A2C53192917	A2C53293549	A2C53293560	A2C53192918	A2C53293561	A2C53192920

**Bezels 110mm**

	<b>black</b>	<b>black nickel*</b>	<b>brush aluminum*</b>	<b>chrome</b>	<b>gold*</b>	<b>white</b>
flat	A2C53210745	-	-	A2C53210747	-	A2C53210746
round	A2C53210749	-	-	A2C53210761	-	A2C53210764
triangle	A2C53210763	-	-	A2C53210765	-	A2C53192920

\* Only on request, no part off standard portfolio