

## Viewline Trim gauges

### Description

Gauge to indicate Trim angle (Outboard position).

### Features

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



Picture: trim gauge 52mm

### 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)
Mounting	spinlock Nut; locking height 0,5 - 20mm, optional Studs and Bracket; locking height 2 - 15mm
Connection	8 pin MQS connector system

**Technical Data**

Installation depth	50mm	
Housing Diameter	52mm	
Installation diameter	52mm	
Deflection angle	90°	
Operating Voltage	10 - 16 Volt	
Accuracy	< 3,6 angular degrees	
Current consumption	< 140 mA, including Warning LED	
Operating temperature	-30°C to +80°C; plated bezels (chrome) -30°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	DIN_EN 61000-6-3	
	DIN_EN 61000-6-1	
	DIN_EN 61000-6-4	
	DIN_EN 61000-6-2	
Standards	EN 60945	
	GL, Category C, F (under preparation)	
Vibration	Sinus 2g; 10 - 500Hz; duration 16h	
	Noise 3g; 10 - 1000Hz, duration 8h	
Mechanical shock	continuous	25g; 6ms; 1Hz
	Single shock	100g; 11ms
	Free fall	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, 24V for 1 minute	

## available Gauges:

No. packed	No. unpacked	color	Measurement range	ISO Symbol	Voltage	Sensor type	Double Lens
A2C60100329	A2C53192579	Black	Up - Down	Ship	12V	Mercury Bravo trim sensor	yes
A2C60002889	A2C53380300	White	Up - Down	Ship	12V	Mercury Bravo trim sensor	yes

## Accessories:

A2C59510221	VL Dropping resistor 24V without connector (for 52mm Gauges)
A2C59510886	VL Make point switch 12V (for 52mm Gauges)
A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
A2C59510864	VL Mounting bracket flush mount
A2C53215640	VL Sealing Ring 52mm flush mount
A2C53215641	VL Sealing Ring 85mm flush mount
A2C59510847	Bush housing, 8-pin
A2C53324664	Protective connector cap, 8-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 52mm

	black	black nickel*	brush aluminum*	chrome	gold*	white
flat	A2C53186040	A2C53293468	A2C53293480	A2C53186023	A2C53293482	A2C53186022
round	A2C53186027	A2C53293494	A2C53293495	A2C53186029	A2C53293496	A2C53186028
triangle	A2C53186024	A2C53293545	A2C53293546	A2C53186026	A2C53293548	A2C53186025

\* Only on request, no part off standard portfolio