

## Viewline Rudder gauges

### Description

Gauge to indicate rudder angle (rudder position).



Picture: rudder gauge 52mm

### Features

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

### 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 0,5mm – 20mm, optional Studs and Bracket; locking height 2 – 15mm
Connection	8 pin MQS connector system

**Technical Data**

Installation depth	50mm	
Installation diameter	52mm, 85mm (see table)	
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	- 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, 5 minute	
Over voltage protection	yes, 24V for1 minute	

## available Gauges:

No. packed	No. unpacked	colour	Diameter	Measurement range	ISO Symbol	Voltage	Sensor type	Double lens
A2C60100327	A2C53192577	Black	52mm	45°Port to 45° Starboard	Ship	12V	VDO Rudder sensor	yes
A2C60100328	A2C53192578	white	52mm	45°Port to 45° Starboard	Ship	12V	VDO Rudder sensor	yes
A2C59510106	A2C53194714	Black	85mm	45°Port to 45° Starboard	Ship	12 – 24V	VDO Rudder sensor	yes
A2C59510107	A2C53194715	white	85mm	45°Port to 45° Starboard	Ship	12 – 24V	VDO Rudder sensor	yes

**Accessories:**

A2C59510221	VL Dropping resistor 24V without connector (for 52mm Gauges)
A2C59510886	VL Makepoint 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**

	<b>black</b>	<b>black nickel</b>	<b>brush aluminium</b>	<b>chrome</b>	<b>gold</b>	<b>white</b>
flat	A2C53186040	A2C53293468	A2C53293480	A2C53186023	A2C53293482	A2C53186022
round	A2C53186027	A2C53293494	A2C53293495	A2C53186029	A2C53293496	A2C53186028
triangle	A2C53186024	A2C53293545	A2C53293546	A2C53186026	A2C53293548	A2C53186025

**Bezels 85mm**

	<b>black</b>	<b>black nickel</b>	<b>brush aluminium</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