

## Viewline Rudder Gauges 12/24 Volt

### Description

Gauge to indicate rudder angle (rudder position).

### Features

- \_ LED illumination
- \_ Integrated Warning LED
- \_ Backlit technology
- \_ Changeable bezels
- \_ Antifog and splash protection
- \_ Panel and flush mount possibility



Picture: Rudder Gauge 52mm

### Concept

Housing	Polycarbonat (PC)
Bezel	PC (black, white) or ABS (chrome); several colors and shapes (see accessories table)
Lens	PMMA; double lens
Dial	backlit, different colors (black, white)
Pointer	backlit, white on black dials; red on white dials
Illumination	backlit 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
Sensor	440-102-001-001 D

Technical Data		
Installation depth	50mm	
Installation diameter	52mm	
Deflection angle	90°	
Operating Voltage	10 – 32 Volt	
Accuracy	< 3.6 angular degrees	
Current consumption	< 140 mA, incl. Warn LED	
Operating temperature	-30°C to +80°C; plated bezels (chrome) -30°C to +70°C	
Storage temperature	-30°C to +80°C for 48h; plated bezels (chrome) -30°C to +70°C	
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; 10-500Hz; duration 16h Noise 3g; 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 outer		Measurement range inner		ISO Symbol	Sensor resistance range
		Min	Max	Min	Max		
A2C53417228	black	40° Port	40° Stb	non	non	Ship	3 - 180 Ohm
A2C53417229	white	40° Port	40° Stb	non	non	Ship	3 - 180 Ohm

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

**Accessories:**

A2C59510886	VL Make point switch 12V
A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
A2C53007398	Fastening nut
A2C59510864	VL Mounting bracket flush mount
A2C53215640	VL Sealing Ring 52mm 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	Chrome	White
<b>Flat</b>	A2C53186040	A2C53186023	A2C53186022
<b>Round</b>	A2C53186027	A2C53186029	A2C53186028
<b>Triangle</b>	A2C53186024	A2C53186026	A2C53186025