

Viewline Rudder Gauges

Description

Gauge to indicate rudder angle (rudder position).

Features

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



Picture: Rudder Gauge 85mm

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), only with optional PC Software adjustable
Mounting	Spinlock Nut; locking height 0.5mm – 20mm, Optional Studs and Bracket; locking height 2 – 13mm
Connection	8 pin MQS connector system
Sensor	440-102-001-001 D

Technical Data		
Installation depth	50mm	
Installation diameter	85mm	
Deflection angle	90°	
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 +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 (Electromagnetic compatibility)	DIN_EN 61000-6-2 DIN_EN 61000-6-3 DIN_EN 61000-6-4	
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	25g; 6ms; 1Hz
	Single shock	100g; 11ms
	Free fall	1m; 3 times
Chemical resistance against	<ul style="list-style-type: none"> - 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	ISO Symbol	Voltage	Sensor
Dia. 85 mm Gauge					
A2C53194714	black	45°Port to 45° Starboard	Ship	12/24 Volt	VDO Rudder sensor
A2C53194715	white	45°Port to 45° Starboard	Ship	12/24 Volt	VDO Rudder sensor

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

Accessories:

A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
A2C59510864	VL Mounting bracket 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 ² tin plated
Tyco No. 963729-1	Single contacts 0.5 – 0.75 mm ² tin plated
Tyco No. 1355717-1	Strip 0.14 – 0.22 mm ² tin plated
Tyco No. 928999-1	Strip 0.25 – 0.5 mm ² tin plated
Tyco No. 963715-1	Strip 0.5 – 0.75 mm ² tin plated

Bezels 85mm

	Black	Chrome	White
Flat	A2C53192911	A2C53192910	A2C53192912
Round	A2C53192913	A2C53192914	A2C53192916
Triangle	A2C53192917	A2C53192918	A2C53192920