Product Information

www.vdo.com

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



Installation depth Installation diameter B5mm Deflection angle Operating Voltage Accuracy < 2.5% of full scale reading at 13.0 Volt 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 Temperature shock Range Transformation time Retention time Retention time Transformation time Retention time Transformation time Transformation time Retention time Transformation time Transf					
Deflection angle 90° Operating Voltage 8 – 32 Volt Accuracy < 2.5% of full scale reading at 13.0 Volt 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 Temperature shock Range Transformation time Retention time Retention time Transformation time Retention time					
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Transformation time 10 seconds Retention time 2h	me) -40°C to +70°C				
0" "					
Climatic test Range +25°C to +55°C Rel. Humidity 80% to 100%					
EMC in conformity with (Electromagnetic DIN_EN 61000-6-3 compatibility) DIN_EN 61000-6-4	DIN_EN 61000-6-3				
Standards CE	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 - preservative agent - preservative agent remover - cold cleaner - methylated spirit - interior cleaner - drinks containing caffeine and tannin	 preservative agent remover cold cleaner methylated spirit interior cleaner 				
Nominal position NL 0 to NL 85 (DIN16257)	NL 0 to NL 85 (DIN16257)				
Protection class according to IEC 60529 Front: IP67 (in nominal position) Rear: IP52 (in nominal position)	Front: IP67 (in nominal position)				
Reverse polarity protection yes, 1 minute	yes, 1 minute				
Over voltage protection yes, 1 minute	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		

^{* &}quot;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 mm² tin plated
Tyco No. 963729-1	Single contacts 0.5 – 0.75 mm² tin plated
Tyco No. 1355717-1	Strip 0.14 – 0.22 mm² tin plated
Tyco No. 928999-1	Strip 0.25 – 0.5 mm² tin plated
Tyco No. 963715-1	Strip 0.5 – 0.75 mm² tin plated

Bezels 85mm

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