# **Product Information**

www.vdo.com

## Viewline Trim Gauges 12/24 Volt

#### Description

Gauge to indicate Trim angle (Outboard position).

### Features

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



Picture: Trim 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 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 Mercury Bravo



Technical Data				
Installation depth	50mm			
Installation diameter	52mm			
Deflection angle	90°			
Operating Voltage	10 – 32 Volt			
Accuracy	< 3.6 angular degrees at 13.0 Volt			
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	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> <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			



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#### **Available Gauges:**

No. unpacked *	Dial color	Measurement range outer		Measurement range inner		ISO	Sensor resistance	Sensor Type
		Min	Max	Min	Max	Symbol	range	31.
A2C53417260	black	Up	Down	non	non	Trim	167 - 10 Ohm	BRAVO
A2C53417261	white	Up	Down	non	non	Trim	167 - 10 Ohm	BRAVO

<sup>\* &</sup>quot;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 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 52mm

	Black	Chrome	White
Flat	A2C53186040	A2C53186023	A2C53186022
Round	A2C53186027	A2C53186029	A2C53186028
Triangle	A2C53186024	A2C53186026	A2C53186025



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