Viewline Voltmeter

Description
Indication of Battery power

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

**Picture: Voltmeter**

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
Deflection angle	90°
Operating Voltage	8 – 16 Volt, (18-32V)
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 (12V Gauges)

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available Gauges:

No. packed	No. unpacked	colour	Double Scale	Measurement range	ISO Symbol	Voltage	Double lens
A2C60100076	A2C53191475	black	no	18 - 32V	⊟⊞	24V	no
A2C60100077	A2C53191478	white	no	18 - 32V	⊟⊞	24V	no
A2C60100078	A2C53191767	black	no	18 - 32V	⊟⊞	24V	yes
A2C60100079	A2C53191769	white	no	18 - 32V	⊟⊞	24V	yes
A2C60100176	A2C53191474	black	no	8 - 16V	⊟⊞	12V	no
A2C60100177	A2C53191476	white	no	8 - 16V	⊟⊞	12V	no
A2C60100178	A2C53191766	black	no	8 - 16V	⊟⊞	12V	yes
A2C60100179	A2C53191768	white	no	8 - 16V	⊟⊞	12V	yes

Accessories:

A2C59510854	VL Mounting Kit (studs and brackets) 52, 85, 110mm
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	black nickel*	brush aluminum*	chrome	gold*	white
flat	A2C53186040	A2C53293468	A2C53293480	A2C53186023	A2C53293482	A2C53186022
round	A2C53186027	A2C53293494	A2C53293495	A2C53186029	A2C53293496	A2C53186028
triangle	A2C53186024	A2C53293545	A2C53293546	A2C53186026	A2C53293548	A2C53186025

* Only on request, no part off standard portfolio

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