

Amperemeter mit Shunt
(Gehäuse Ø 52 mm)

Ammeter With Shunt
(Housing Dia. 52 mm)

Durchlichtausführung
VDO Ocean Line Black

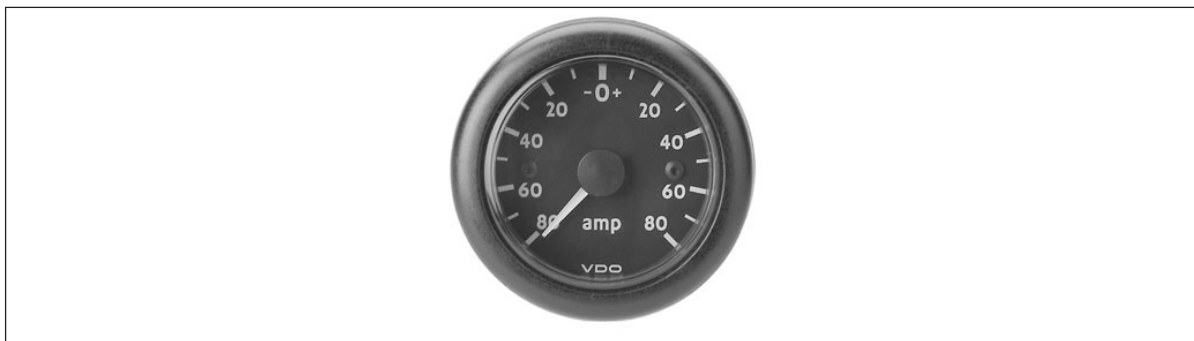
Backlight Type
VDO Ocean Line Black

Beschreibung:

Messung und Anzeige der Gleichstromstärke

Description:

Measurement and display of DC current



Ausführung:

Gehäuse: Kunststoff, flammhemmend
 Frontring: Kunststoff, schwarz
 Deckglas: Doppeldeckglas, Kunststoff
 Zifferblatt: Durchlicht
 Aufdruck: Grund schwarz
 Skala, Ziffern und Symbol weiß
 Zeiger: Durchlicht, weiss
 Befestigung: Spinlock Gehäusemutter,
 Klemmhöhe 0 bis 15 mm
 Option: Bügel-Teilesatz,
 Klemmhöhe 0 bis 12 mm
 Beleuchtung: Glühlampe: rot
 12 VDC, 1,2 W oder
 24 VDC, 1,2 W (optional)
 Sockel W2x4,6d DIN 49 632
 Anschlüsse: Flachstecker 6,3 x 0,8 mm
 Zertifizierung: Germanischer Lloyd
 Zertifikat Nr.: 12-276-98 H

Design:

Housing: plastic, flame-retarding
 Bezel: plastic, black
 Lens: double lens system
 Dial: backlighting
 Dialgraphics: black background
 with white characters
 Pointer: translucent backlighting, white
 Mounting: spin lock nut,
 locking height 0 to 15 mm
 option: bracket attachment kit
 locking height 0 to 12 mm
 Illumination: Light bulb: red
 12 VDC, 1,2 W or
 24 VDC, 1,2 W (optional)
 socket W2x4,6d DIN 49 632
 Connections: blade terminals 6.3 x 0.8 mm
 Certification: Germanischer Lloyd
 Certificate No.: 12-276-98 H

Amperemeter mit Shunt / Ammeter with Shunt

VDO Ocean Line Black

Technische Daten (Anzeiger):

Betriebsspannung:	10,8 ... 16 VDC*
Stromaufnahme (ohne Beleuchtung):	< 100 mA
Betriebstemperatur:	- 20°C bis + 70°C
Lagertemperatur:	- 30°C bis + 85°C
Anzeigetoleranz:	+/- 2,5% des Skalenendwertes bei 14 VDC, 23°C und NL 45
Nennlage:	NL 0 bis NL 90, DIN 16 257
Schutzart:	IP65 DIN 40 050 frontseitig, im eingebauten Zustand nach IEC 529
Schwingungsfestigkeit:	max. 1g eff., 25Hz bis 500Hz (Dauer 8 Std.)
Schock:	15 g, 1,5 ms Halbsinus
EMV:	angewandte Normen: EN 50082-1, EN 50081-1 entspricht EMV Richtlinie 89/336/EWG

* Bei Anschluss an 24 VDC wird ein externer Vorwiderstand (Option) benötigt.

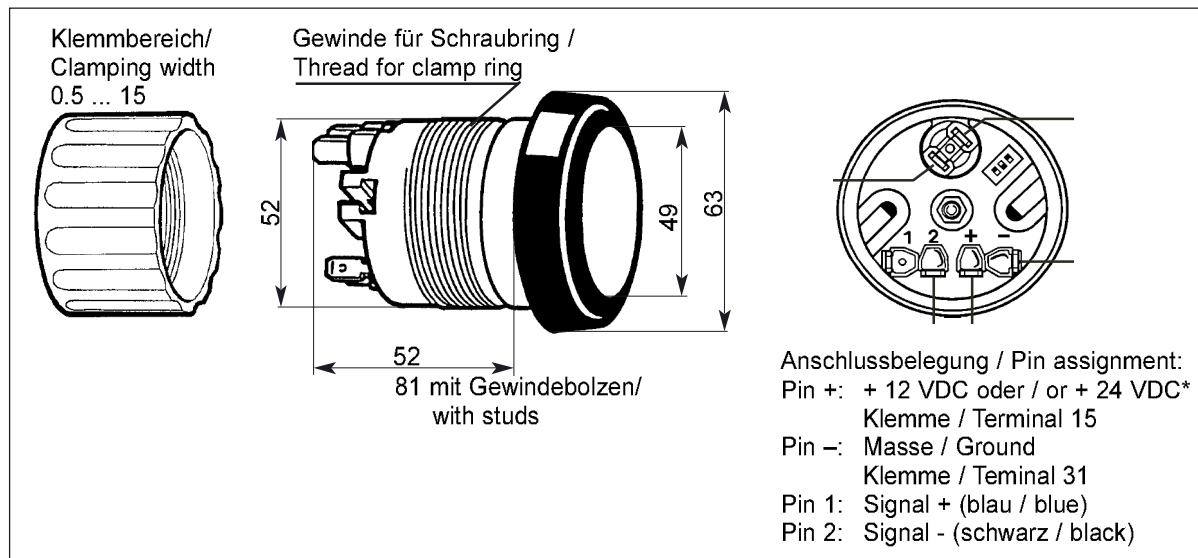
Technical Data (Indicator):

Operating voltage:	10.8 ... 16 VDC*
Current consumption (without illumination):	< 100 mA
Operating temperature:	- 20°C to + 70°C
Storage temperature:	- 30°C to + 85°C
Indication tolerance:	+/- 2.5% of final scale value at 14 VDC, 23°C and NL 45
Nominal position:	NL 0 to NL 90, DIN 16 257
Protection:	IP65 DIN 40 050 from the front, after installation in acc. with IEC 529
Vibration resistance:	1g eff. max., 25Hz to 500Hz (duration 8 h)
Shock:	15g, 1.5 ms semi-sinusoidal
EMC:	used standards EN 50082-1, EN 50081-1 acc. to EMC direction 89/336/EWG

* An external compensating resistor (option) is needed when connected to 24 VDC.

Abmaße des Anzeiger (mm):

Dimensions of indicator (mm):



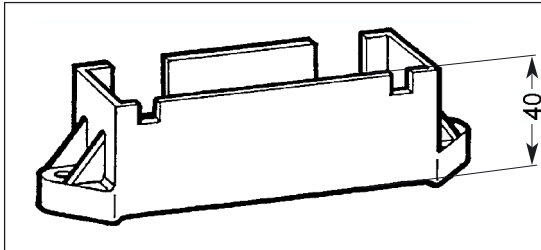
Technische Daten (Nebenwiderstand):

Messbereich (zul. Belastung): 80 A
 Messspannung bei 80 A: 108,6 mV
 Betriebstemperatur: - 25°C bis + 80°C
 Lagertemperatur: - 30°C bis + 100°C
 Toleranz: +/- 1%

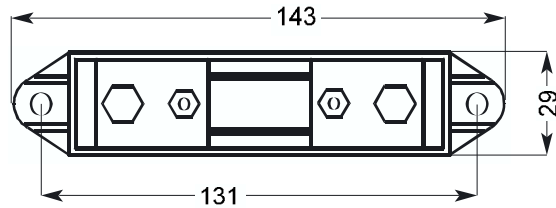
Technical Data (Shunt):

Measuring range (max. load): 80 A
 Measuring voltage at 80 A: 108.6 mV
 Operating temperature: - 25°C to + 80°C
 Storage temperature: - 30°C to + 100°C
 Tolerance: +/- 1%

Abmaße des Nebenwiderstands (mm):



Dimensions of shunt (mm):



**Anlagenübersicht
Systems Survey**

Messbereich Measuring Range	Zifferblattaufdruck Dialgraphics	Betriebsspannung Operating Voltage [Volt / Volts]	Anlage Bestell-Nr. System Order-No.
-80 ... 0 ... +80	80 ... - 0 + ... 80 amp	12	N02-400-310

Teil: / Part:

Anzeiger / Indicator
 Nebenwiderstand / Shunt 80 Amp

Befestigungs- Teilesatz für Anzeiger (Bügel und Gewindebolzen) /
 Mounting kit for indicator (bracket and threaded studs)

Kabel- Teilesatz / cable kit

Vorwiderstand und Glühbirne (rot) / Series resistor and bulb (red) 24 VDC

Bestell-Nr.: / Order-No.:

N02-420-712
 N03-330-116

N05-800-782

N05-006-100

N05-800-786

Material -	Description (Material)	Commercial number (Material)	dial color	bezel	Symbol	scale	Voltage	Country of origin	Material group 4
N02-420-718	OLB AMMETER 140AMP 10X 12/24V NOT INCL.S	02 420 718	black	none	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
N02-420-716	OLB AMMETER 80AMP 10X 12/24V NOT INCL.SH	02 420 716	black	none	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
N02-420-712	OLIB Ammeter 80-0-80 52mm 12V	02 420 712	black	black	"amp"	80A	12	CH (Switzerland)	1AP (Instrument Ammeter)
N02-420-706	OLW AMMETER 140AMP 10X 12/24V NOT INCL.S	02 420 706	white	none	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
N02-420-704	OLW AMMETER 80AMP 10X 12/24V NOT INCL.SH	02 420 704	white	none	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
N02-400-310	OLIB Ammeter + Shunt 80-0-80 52mm 12V	02 400 310	black	black	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)

Material -	Description (Material)	Commercial number	component gauge	dial color	bezel	Symbol	scale	Voltage	Country of origin	Material group 4
V1904102B	GAUGE AMMETER 140 AMP 12/24V OLB	1904102B		black	chrome	"amp"			CH (Switzerland)	1AP (Instrument Ammeter)
V1904101B	GAUGE AMMETER 80 AMP 12/24V OLB	1904101B		black	chrome	"amp"			CH (Switzerland)	1AP (Instrument Ammeter)
V1901102B	GAUGE AMMETER 140 AMP 12/24V OLB	1901102B		black	black	"amp"			CH (Switzerland)	1AP (Instrument Ammeter)
N02-420-712D	OLIB AMMETER 80-0-80 12V	02 420 712D	N02-420-712	black	black	"amp"	80A	12	CH (Switzerland)	1AP (Instrument Ammeter)
V1907152	GAUGE AMMETER 140 AMP 12/24V OLW	1907152	N02-420-706	white	brass	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1907151	GAUGE AMMETER 80 AMP 12/24V OLW	1907151	N02-420-704	white	brass	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1907102	GAUGE AMMETER 140 AMP 12/24V OLB	1907102	N02-420-718	black	brass	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1907101	GAUGE AMMETER 80 AMP 12/24V OLB	1907101	N02-420-716	black	brass	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1906152	GAUGE AMMETER 140 AMP 12/24V OLW	1906152	N02-420-706	white	aluminum	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1906151	GAUGE AMMETER 80 AMP 12/24V OLW	1906151	N02-420-704	white	aluminum	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1906102	GAUGE AMMETER 140 AMP 12/24V OLB	1906102	N02-420-718	black	aluminum	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1906101	GAUGE AMMETER 80 AMP 12/24V OLB	1906101	N02-420-716	black	aluminum	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1905152	GAUGE AMMETER 140 AMP 12/24V OLW	1905152	N02-420-706	white	gold	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1905151	GAUGE AMMETER 80 AMP 12/24V OLW	1905151	N02-420-704	white	gold	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1905102	GAUGE AMMETER 140 AMP 12/24V OLB	1905102	N02-420-718	black	gold	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1905101	GAUGE AMMETER 80 AMP 12/24V OLB	1905101	N02-420-716	black	gold	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1904152	GAUGE AMMETER 140 AMP 12/24V OLW	1904152	N02-420-706	white	chrome	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1904151	GAUGE AMMETER 80 AMP 12/24V OLW	1904151	N02-420-704	white	chrome	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1904102	GAUGE AMMETER 140 AMP 12/24V OLB	1904102	N02-420-718	black	chrome	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1904101	GAUGE AMMETER 80 AMP 12/24V OLB	1904101	N02-420-716	black	chrome	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1903152	GAUGE AMMETER 140 AMP 12/24V OLW	1903152	N02-420-706	white	black chrome	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1903151	GAUGE AMMETER 80 AMP 12/24V OLW	1903151	N02-420-704	white	black chrome	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1903102	GAUGE AMMETER 140 AMP 12/24V OLB	1903102	N02-420-718	black	black chrome	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1903101	GAUGE AMMETER 80 AMP 12/24V OLB	1903101	N02-420-716	black	black chrome	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1902152	GAUGE AMMETER 140 AMP 12/24V OLW	1902152	N02-420-706	white	white	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1902151	GAUGE AMMETER 80 AMP 12/24V OLW	1902151	N02-420-704	white	white	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1902102	GAUGE AMMETER 140 AMP 12/24V OLB	1902102	N02-420-718	black	white	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1902101	GAUGE AMMETER 80 AMP 12/24V OLB	1902101	N02-420-716	black	white	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1901152	GAUGE AMMETER 140 AMP 12/24V OLW	1901152	N02-420-706	white	black	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1901151	GAUGE AMMETER 80 AMP 12/24V OLW	1901151	N02-420-704	white	black	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1901102	GAUGE AMMETER 140 AMP 12/24V OLB	1901102	N02-420-718	black	black	"amp"	140A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)
V1901101	GAUGE AMMETER 80 AMP 12/24V OLB	1901101	N02-420-716	black	black	"amp"	80A	12/24	CH (Switzerland)	1AP (Instrument Ammeter)