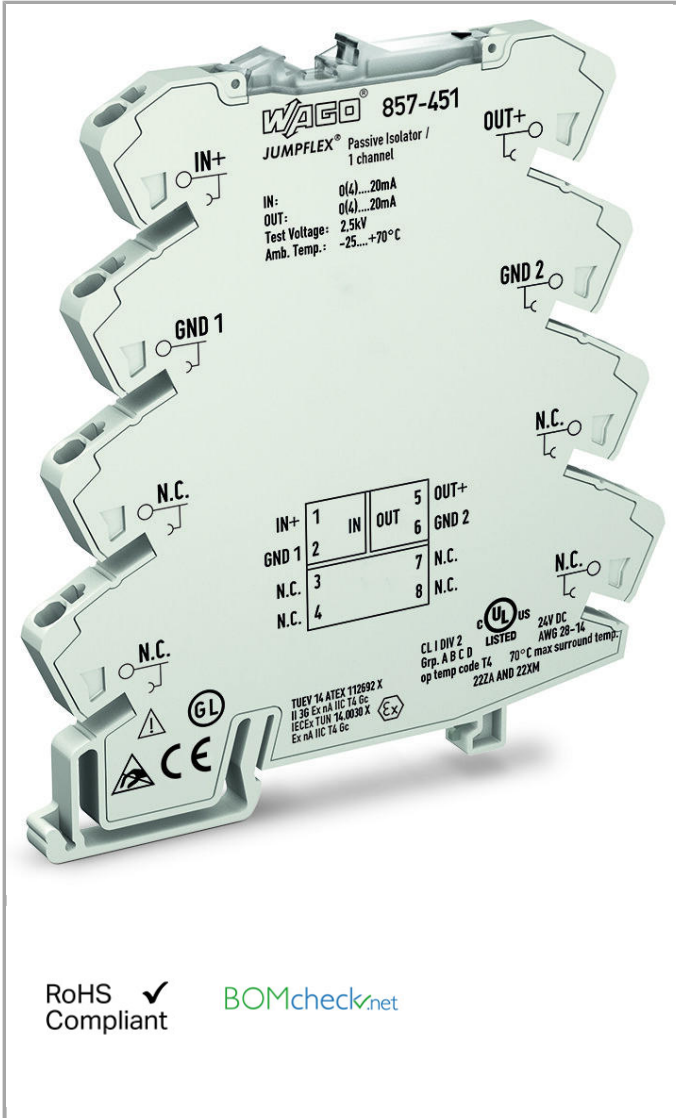


Data sheet | Item number: 857-451

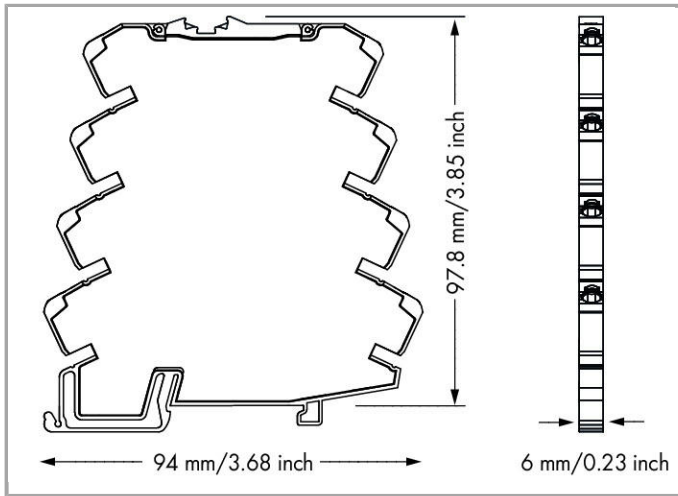
Passive isolator, 1-channel; Current input signal; Current output signal;
Power via input; 6 mm module width



www.wago.com/857-451



IN+	1	IN	OUT	5	OUT+
GND 1	2			6	GND 2
N.C.	3			7	N.C.
N.C.	4			8	N.C.



Item description

Short description:

WAGO's passive isolator (1-channel) electrically isolates and filters 0(4)–20 mA standard analog signals, while drawing power for signal transmission from the input circuit. The connected sensor supplies the passive isolator with the required power to energize the connected load.

Characteristics:

- No additional supply voltage required
- Safe 2-way isolation with 2.5kV test voltage per EN 61140

Data

Technical Data

Configuration

Configuration options	permanently configured
-----------------------	------------------------

Input

Input signal type	Current
Input signal, current	0 ... 20 mA; 4 ... 20 mA
Voltage drop at input	≤ 2.5 V (at 20 mA at the output)
Max. input current	40mA
Max. input voltage	20 V
Response threshold	200 µA

Output

Output signal type	Current
Output signal current	0 ... 20 mA; 4 ... 20 mA
Load impedance (output/current)	≤ 600 Ω (temperature range restrictions may occur)

Signal processing

Max. operating frequency	100 Hz
Step response typ.	3.5 ms

Measurement error

Transmission error typ.	≤ 0.1 % of upper range value
Load error	≤ 0.05% (of the full scale value; per 100 Ω load)
Temperature coefficient	≤ 0.01 %/K

Power supply

Type of power supply	passive (via input)
----------------------	---------------------

Safety and protection:

Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min
Protection class	IP20

Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	97.8 mm / 3.85 inch
Depth	94 mm / 3.701 inch

Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

Material Data

Color	light gray
Fire load	0.747 MJ
Weight	34.2 g

Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C

Standards and specifications


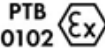
Conformity marking	1
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

Commercial data





Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454471323
Customs Tariff No.	85437090300

Approvals / Certificates


Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0030_X
	IECEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	BV Bureau Veritas S.A.	-	40179_A0
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1
	NK Nippon Kaiji Kyokai	-	TA17255M
	PRS Polski Rejestr Statków	-	TE/2186 /880590/18

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Compatible products

tools



Item no.: 210-720
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

www.wago.com/210-720

General accessories

Item no.: 857-979
Supply and through module

www.wago.com/857-979

Jumper

Item no.: 281-482
Comb-style jumper bar; insulated; 2-way; IN = IN terminal block

www.wago.com/281-482

Item no.: 859-402
Push-in type jumper bar; 2-way; Nominal current 18 A; insulated

www.wago.com/859-402



Item no.: 859-402/000-005
Push-in type jumper bar; 2-way; Nominal current 18 A; insulated

www.wago.com/859-402/000-005



Item no.: 859-402/000-006
Push-in type jumper bar; 2-way; Nominal current 18 A; insulated

www.wago.com/859-402/000-006



Item no.: 859-402/000-029
Push-in type jumper bar; 2-way; Nominal current 18 A; insulated

www.wago.com/859-402/000-029



Item no.: 859-403
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated

www.wago.com/859-403



















Item no.: 859-403/000-005
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated

www.wago.com/859-403/000-005



Item no.: 859-403/000-006
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated

www.wago.com/859-403/000-006

	Item no.: 859-403/000-029 Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	www.wago.com/859-403/000-029
	Item no.: 859-404 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	www.wago.com/859-404
	Item no.: 859-404/000-005 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	www.wago.com/859-404/000-005
	Item no.: 859-404/000-006 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	www.wago.com/859-404/000-006
	Item no.: 859-404/000-029 Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	www.wago.com/859-404/000-029
	Item no.: 859-405 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	www.wago.com/859-405
	Item no.: 859-405/000-005 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	www.wago.com/859-405/000-005
	Item no.: 859-405/000-006 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	www.wago.com/859-405/000-006
	Item no.: 859-405/000-029 Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	www.wago.com/859-405/000-029
	Item no.: 859-406 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	www.wago.com/859-406
	Item no.: 859-406/000-005 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	www.wago.com/859-406/000-005
	Item no.: 859-406/000-006 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	www.wago.com/859-406/000-006
	Item no.: 859-406/000-029 Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	www.wago.com/859-406/000-029
	Item no.: 859-407 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	www.wago.com/859-407
	Item no.: 859-407/000-005 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	www.wago.com/859-407/000-005
	Item no.: 859-407/000-006 Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	www.wago.com/859-407/000-006



Item no.: 859-407/000-029
Push-in type jumper bar; 7-way; Nominal current 18 A; insulated

www.wago.com/859-407/000-029



Item no.: 859-408
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

www.wago.com/859-408



Item no.: 859-408/000-005
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

www.wago.com/859-408/000-005



Item no.: 859-408/000-006
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

www.wago.com/859-408/000-006



Item no.: 859-408/000-029
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

www.wago.com/859-408/000-029



Item no.: 859-409
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

www.wago.com/859-409



Item no.: 859-409/000-005
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

www.wago.com/859-409/000-005



Item no.: 859-409/000-006
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

www.wago.com/859-409/000-006



Item no.: 859-409/000-029
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

www.wago.com/859-409/000-029



Item no.: 859-410
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

www.wago.com/859-410



Item no.: 859-410/000-005
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

www.wago.com/859-410/000-005



Item no.: 859-410/000-006
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

www.wago.com/859-410/000-006



Item no.: 859-410/000-029
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

www.wago.com/859-410/000-029

transfer module

Item no.: 857-980
JUMPFLEX® adapter; with 16-pole flat cable connector per DIN 41651; analog











www.wago.com/857-980

power supply

Item no.: 787-2852
Switched-mode power supply; for JUMPFLEX® Signal Conditioners; 1-phase; 24 VDC output voltage; 1 A output current

www.wago.com/787-2852

Marking accessories

	<p>Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type</p>	www.wago.com/2009-110
	<p>Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115
	<p>Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-002
	<p>Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-006
	<p>Item no.: 2009-115/000-007 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-007
	<p>Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-012
	<p>Item no.: 2009-115/000-017 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-017
	<p>Item no.: 2009-115/000-023 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-023
	<p>Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-024
	<p>Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501
	<p>Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-002
	<p>Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-005
	<p>Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-006
	<p>Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-007
	<p>Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-012



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-017



Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-023



Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-024



Item no.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502



Item no.: 793-502/000-002
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-002



Item no.: 793-502/000-005
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-005



Item no.: 793-502/000-006
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-006



Item no.: 793-502/000-007
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-007



Item no.: 793-502/000-012
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-012



Item no.: 793-502/000-017
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-017



Item no.: 793-502/000-023
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-023



Item no.: 793-502/000-024
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-502/000-024



Item no.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503



Item no.: 793-503/000-002
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503/000-002



Item no.: 793-503/000-005
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503/000-005



Item no.: 793-503/000-006

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-006



Item no.: 793-503/000-007

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-007



Item no.: 793-503/000-012

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-012



Item no.: 793-503/000-017

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-017



Item no.: 793-503/000-023

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-023



Item no.: 793-503/000-024

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-503

/000-024



Item no.: 793-504

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504



Item no.: 793-504/000-002

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-002



Item no.: 793-504/000-005

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-005



Item no.: 793-504/000-006

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-006



Item no.: 793-504/000-012

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-012



Item no.: 793-504/000-017

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-017



Item no.: 793-504/000-023

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-504

/000-023



Item no.: 793-505

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-505



Item no.: 793-505/000-005

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-505

/000-005



Item no.: 793-505/000-006

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-505/000-006



Item no.: 793-505/000-007

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-505/000-007



Item no.: 793-505/000-012

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-505/000-012



Item no.: 793-506

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-506



Item no.: 793-506/000-005

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-506/000-005



Item no.: 793-506/000-006

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-506/000-006



Item no.: 793-506/000-012

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-506/000-012



Item no.: 793-506/000-017

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type www.wago.com/793-506/000-017



Item no.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501



Item no.: 793-5501/000-002

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-002



Item no.: 793-5501/000-005

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-005



Item no.: 793-5501/000-006

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-006



Item no.: 793-5501/000-007

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-007



Item no.: 793-5501/000-012

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-012



Item no.: 793-5501/000-014

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501/000-014



Item no.: 793-5501/000-017
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-017



Item no.: 793-5501/000-023
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-023



Item no.: 793-5501/000-024
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501/000-024



Item no.: 793-566
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566



Item no.: 793-566/000-002
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-002



Item no.: 793-566/000-005
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-005



Item no.: 793-566/000-006
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-006



Item no.: 793-566/000-007
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-007



Item no.: 793-566/000-012
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-012



Item no.: 793-566/000-017
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-017



Item no.: 793-566/000-023
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-023



Item no.: 793-566/000-024
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type

www.wago.com/793-566/000-024

assembling

Item no.: 249-116
Screwless end stop; 6 mm wide

www.wago.com/249-116

Item no.: 249-117
Screwless end stop; 10 mm wide

www.wago.com/249-117

Item no.: 249-197
Screwless end stop; 14 mm wide

www.wago.com/249-197



Downloads

Documentation

Instruction Leaflet

Measurement Transducer and Isolation Amplifier Passive isolator 1-channel	18-jun-2015	pdf 1.7 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0 10-oct-2018	pdf 265.8 kB	Download
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CAD/CAE - Smart Data

CAD data

3D Download 857-451		URL	Download
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Subject to changes.