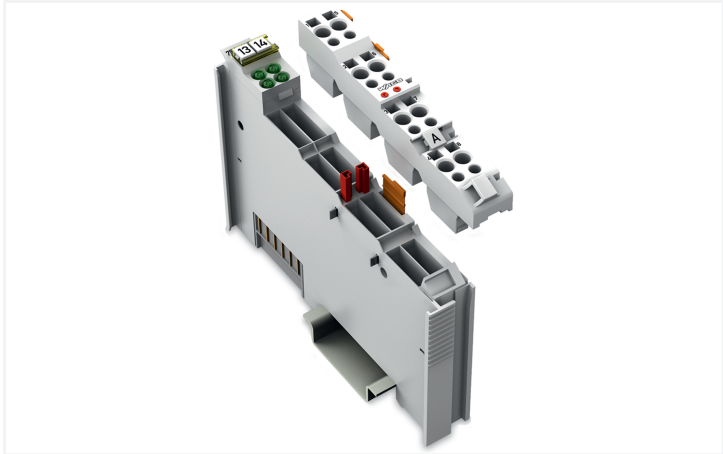
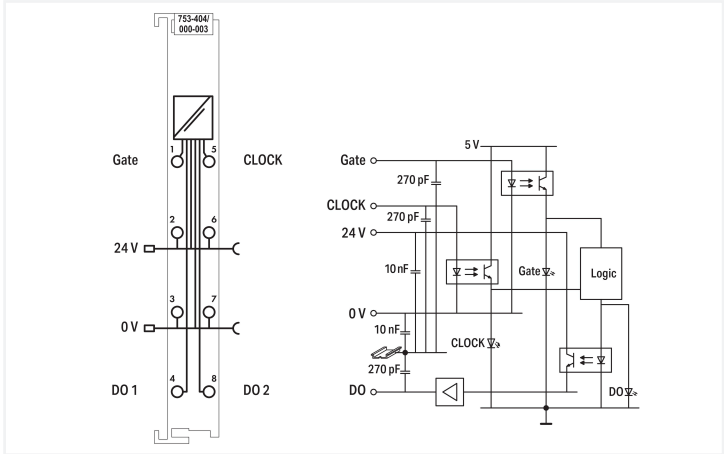
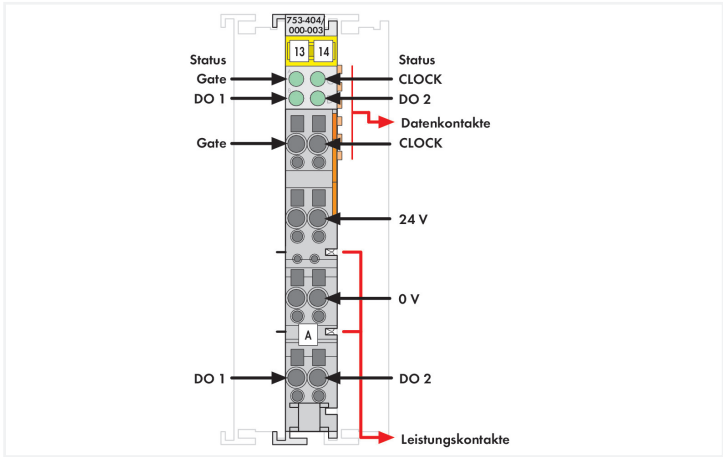
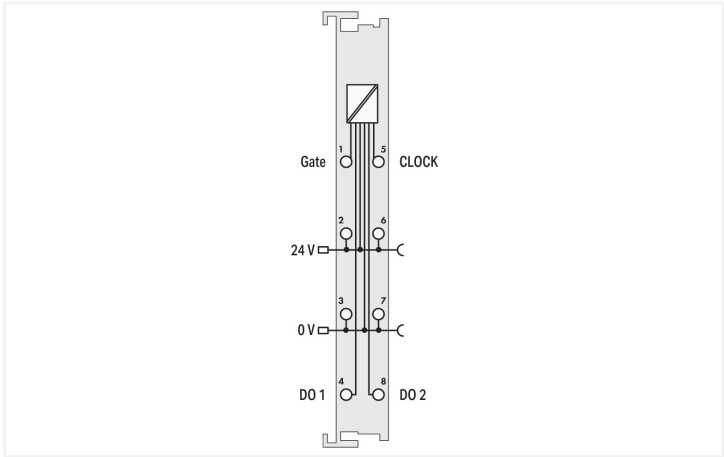




Color: ■ light gray



This counter is used for frequency measurement. The counter measures the 24 V signal pulse period at the CLOCK input and converts it to a frequency value. Measurement is enabled and inhibited via the GATE input. Digital outputs DO 1 and DO 2 can be set using the control byte.

Notes	
Note	Pluggable connectors and coding fingers (753 Series) are not included.

Technical data	
Number of digital outputs	2
Number of counters	1
Signal type	Voltage
Signal type (voltage)	24 VDC
Counter depth	32 bits
Input current (typ.)	5 mA
Output current per channel	0.5 A
Output current	short-circuit-protected
Switching frequency (max.)	100 kHz
Voltage range for signal (0)	-3 ... +5 VDC
Voltage range for signal (1)	15 ... 30 VDC
Data width	32-bit data; 8-bit control/status
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	70 mA

Technical data

Supply voltage (field)	24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Isolation	500 V system/field
Indicators	LED (A-D) green: Status Gate, DO 1, CLOCK, DO 2
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection Data

Connection technology: I/O	8 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	pluggable

Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.331 MJ
Weight	43 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data	
Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821008538
Customs tariff number	85389099990

Product Classification	
UNSPSC	41113637
eCl@ss 10.0	27-24-26-05
eCl@ss 9.0	27-24-26-05
ETIM 9.0	EC001601
ETIM 10.0	EC001601
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	1303-86-2 1317-36-8 25550-51-0 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4-Methyl-1,2-cyclohexanedicarboxylic anhydride Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	96b31545-d07b-4c0c-86b5-9ebcbe717e37
SCIP notification number (Belgium)	990823c1-64c3-4495-9ce5-1f5685ab1727
SCIP notification number (Bulgaria)	1b44fdff-03ce-418d-a7ff-67de3d65597b
SCIP notification number (Czech Republic)	588d01d6-3927-4e43-a277-bc522a9a700d
SCIP notification number (Denmark)	a6456565-c543-46cb-b7c9-aec9c3dbd860
SCIP notification number (Finland)	0af32b77-30d7-40c7-9fab-9c68977e9f4e
SCIP notification number (France)	7ea39a36-e93d-4762-8ad4-0f940aa30990
SCIP notification number (Germany)	3ce843c7-b470-411a-8141-bf2ccfd0611b
SCIP notification number (Hungary)	893bcb71-8532-4530-a6fc-ecff015d1195
SCIP notification number (Italy)	a823e425-0ee6-4fa0-9113-6f1d06d79e53
SCIP notification number (Netherlands)	9d70c3ef-ee3d-4f6f-904d-26a7ed3d1b0a
SCIP notification number (Poland)	40c047fd-0454-4970-9f3b-31c1294f2d24
SCIP notification number (Romania)	3d6cba49-ba16-4ade-ae6d-3d1029536c9b
SCIP notification number (Sweden)	58901254-6566-4f3a-bc2d-a15020ec58ce

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-CTM750	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199			

Approvals for marine applications			Approvals for hazardous areas		
     			      		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104	CCCEX CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194	IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
KR Korean Register of Shipping	-	KR HMB05880-AC001	INMETRO TUV Rheinland do Brasil Ltda.	IEC 60079-0	TUV 12.1297 X
LR Lloyds Register EMEA	-	LR22180952TA	UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
PRS Polski Rejestr Statków	-	TE/1101/880590/23	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 753-404/000-003	

Documentation			
Manual		System Description	
System Manual Series 750/753		750/753 Series I/O-System – General Product Information	pdf 953.35 KB 
		Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB 
Bid Text		Instruction Leaflet	
753-404/000-003	19.02.2019	xml 4.59 KB	
753-404/000-003	09.10.2017	doc 25.00 KB	
		CCC Ex (Additional information)	26.04.2023 pdf 159.76 KB 

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 753-404/000-003 	EPLAN Data Portal 753-404/000-003 
	WSCAD Universe 753-404/000-003 
	ZUKEN Portal 753-404/000-003 

1 Compatible Products

1.1 Required Accessories

1.1.1 Pluggable connector

1.1.1.1 Male connector/plug



Item No.: 753-110

Plug

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



Item No.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.2.2 Marking

1.2.2.1 Group marker carrier



Item No.: 750-106
Group marker carrier

1.2.2.2 Marker



Item No.: 750-100
Marker card; as a DIN A4 sheet; plain



Item No.: 2009-145/000-006
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 2009-145/000-007
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 2009-145/000-023
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 2009-145/000-012
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item No.: 2009-145/000-005
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item No.: 2009-145/000-024
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 2009-145/000-002
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



Item No.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



Item No.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



Item No.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.2.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.2.3 Pluggable connector

1.2.3.1 Coding



Item No.: 753-150
753 Series coding elements

1.2.4 Shield termination

1.2.4.1 Shield clamping saddles


Item No.: 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm


Item No.: 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm


Item No.: 790-116

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm


Item No.: 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm


Item No.: 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm


Item No.: 790-220

Shield clamping saddle; 30 mm wide; 20 mm


Item No.: 790-140

Shield clamping saddle; diameter of compatible conductor

1.2.5 Supply module

1.2.5.1 Supply module


Item No.: 750-612

Power Supply; 0 ... 230 V AC/DC


Item No.: 753-612

Power Supply; 0 ... 230 V AC/DC


Item No.: 750-602

Power Supply; 24 VDC


Item No.: 753-602

Power Supply; 24 VDC


Item No.: 750-601

Power Supply; 24 VDC; fuse holder


Item No.: 750-610

Power Supply; 24 VDC; fuse holder; Diagnostics

1.2.6 System enclosure

1.2.6.1 System enclosure


Item No.: 850-825

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (160x100x160 mm); 9 x M12, 4 x M20


Item No.: 850-826

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip


Item No.: 850-827

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip


Item No.: 850-828

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip


Item No.: 850-826/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip


Item No.: 850-827/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip


Item No.: 850-828/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip


Item No.: 850-834

IP65 enclosure; Polyester (RAL 7032); Wx-HxD (164x100x164 mm); 9 x M12, 4 x M20


Item No.: 850-835

IP65 enclosure; Polyester (RAL 7032); Wx-HxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip


Item No.: 850-836

IP65 enclosure; Polyester (RAL 7032); Wx-HxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip


Item No.: 850-814/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (200x120x200 mm); without flange plate


Item No.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (300x120x200 mm); without flange plate


Item No.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (400x120x200 mm); without flange plate


Item No.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (600x120x200 mm); without flange plate