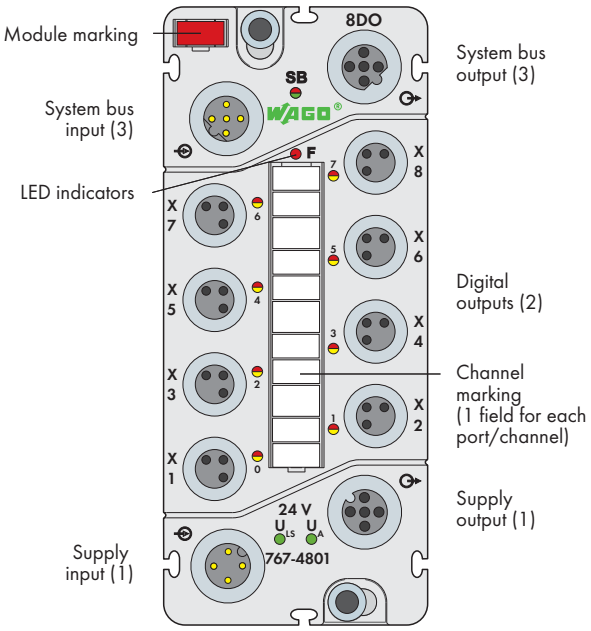
Digital Output Module 24 V DC / 0.5 A

8 outputs (8 x M8)



Short description:
Digital output module for actuator control (e.g., magnetic valves, DC contactors, indicators).

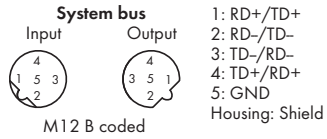
Included:
- 1 x WMB marker, red
- 1 x marking strip
- 2 x M8 protective cap

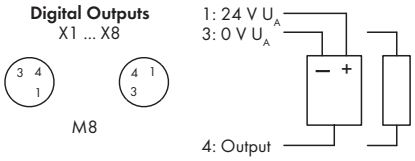
Features:
- 8 digital outputs, 24 VDC / 0.5 A
- Diagnostic capable (per channel)
- Parametrizable (inversion, substitute value strategy, manual mode, online simulation and diagnostics)

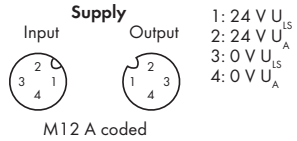
Description	Item No.	Pack. Unit
8DO 24V DC 0.5A (8xM8)	**767-4801**	1
Product discontinuation	**Last Call: 30.09.2018**	
8DO 24V DC 0.5A IF (8xM8)*	**767-4801/000-800**	1
Product discontinuation	**Last Call: 30.09.2018**	
* Interference-free for safety function applications (see manual)		

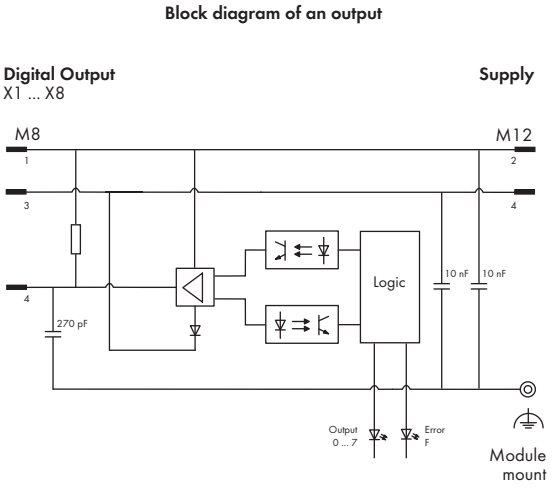
Accessories	Item No.
Marking strips, marking pen, spacer module and protective caps	see pages 520 ... 521
IP67 cables and connectors	see pages 502 ... 517 + Section 11

Technical Data	
Module supply:	
Connection type (1)	M12 connectors, A coded, 4 poles;
	Derating must be observed
Current carrying capacity of supply	
connections	Max. 8 A (U_{LS}: 4 A, U_A: 4 A)
Supply voltage	
Logic and sensor voltage U_{LS}	24 V DC (-25 % ... +30 %)
Actuator voltage U_A	24 V DC (-25 % ... +30 %)
Supply current	
Logic and sensor current I_{LS}	typ. 45 mA (only logic part)
Actuator current I_A	typ. 25 mA + actuators
Protection	Reverse voltage protection for U_{LS} + U_A
Digital outputs:	
No. of outputs	8
Connection type (2)	M8 connectors, 3 poles
Wire connection	2- or 3-wire
Output voltage	≤ U_A
Output current (per channel)	0.5 A (max. 0.6 A),
	short-circuit/overload proof
	(thermal disconnection)
Voltage drop against U_A at 500 mA	Max. 0.2 V DC
Output current (module)	max. 4 A
Leakage current in OFF state	typ. 150 µA
Output circuit	High-side switching









Technical Data

Information on actuator selection:	
Delay time hardware from "0" to "1"	
(0 – 90%)	Typ. 75 µs (resistive load)
Delay time hardware from "1" to "0"	
(0 – 90%)	Typ. 270 µs (resistive load)
Rise time from "0" to "1"	typ. 40 µs (resistive load)
Fall time from "1" to "0"	Typ. 50 µs (resistive load)
Cable length, unshielded	≤ 30 m
Protection against reverse voltages	≤ 0.5 A
Type of load	Inductive, resistive loads and lamps
Switching frequency	Inductive load approx. 20 Hz
	Resistive load approx. 500 Hz
	Lamp load approx. 500 Hz
Parallel connection of 2 outputs	for power boost
	for redundant actuation of a load
Type of protective circuit	External protection (e.g., recovery diodes)
Output resistance	< 0.4 Ω
Operating state influence on output:	
PLC CPU stop	Acc. to substitute value strategy
Fieldbus disruption	Acc. to substitute value strategy
S-bus (system bus) disruption	0 V status
Supply voltage under rated voltage	
tolerance	0 V status
Interruption of supply voltage	0 V status
Output operation	Non-latching
Overload behavior	Automatic restart
System bus:	
Connection type (3)	M12 connectors, B coded, 5 poles,
	shielded
Standards and approvals:	
Conformity marking	CE
Korea Certification	
UL 508	
BVS 15 ATEX E 098 X	II 3G Ex nA IIC T5 Gc,
	II 3D Ex tc IIIB T90°C Dc
IECEx BVS 15.0083X	Ex nA IIC T5 Gc,
	Ex tc IIIB T90°C Dc

Technical Data

Isolation:	
Channel – Channel	No
U_{LS}, U_A, system bus	500 V DC each
Configurable functions:	
Inversion (per channel)	On/off
Substitute value strategy (per channel)	Switch substitute value/hold last value
Substitute value (per channel)	0/1
Manual mode (per channel)	On/off
Manual mode value (per channel)	0/1
Online simulation (per channel)	Lock/unlock; simulation value: 0/1
Online simulation (per channel/	
module)	Diagnostics
I/O diagnostics:	
I/O diagnostics (per channel)	Actuator short-circuit/overload
	Actuator wire break
	Overtemperature
I/O diagnostics (per module)	Undervoltage (U_{LS} + U_A)
Process image:	
Process data width	1-byte data + status
LED indicators:	
SB: System bus status	LED (green/red/orange)
F: Error status	LED (red)
0 ... 7: Output signal status	LED (yellow/red)
U_{LS} + U_A: Supply status	LED (green)
Indicators	Non-latching

General Specifications

Dimensions (mm) W x H x L	50 x 35.7 x 117
Weight	270 g