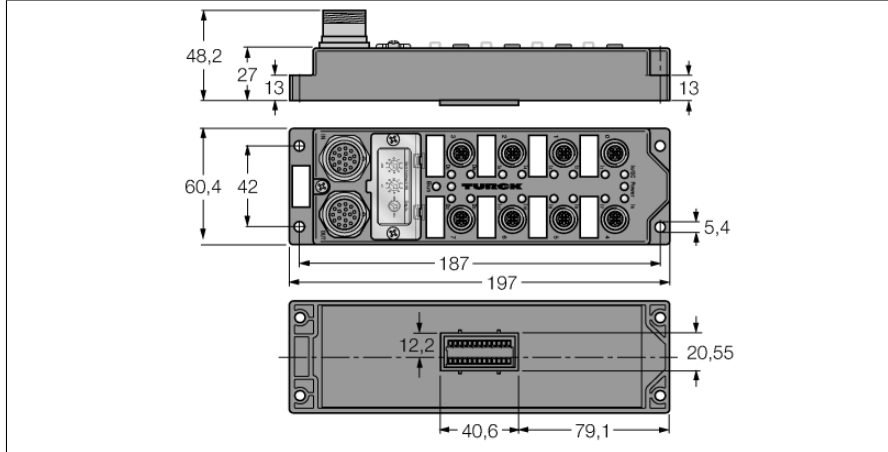


Fieldbus I/O module PROFIBUS-DP

12 digital pnp inputs

4 digital outputs 2 A

FLDP-IOM124-0002 (A2)



- Two inputs or outputs per connector
- For robot applications
- Robust electromechanics
- High magnetic field immunity
- Intelligent terminating resistor
- Module-related diagnostics
- IP20 terminal connection
- Fiber-glass reinforced housing
- Shock and vibration tested
- Encapsulated module electronics
- Metal connector
- Degree of protection IP67

Tip	FLDP-IOM124-0002(A2)
Tanıt. no.	6825348
Kanal sayısı	16
Operating / load voltage	18...30 VDC
Operating current	< 200 mA
Configuration file	TRCKFF1D.gsd
Girişler	
Number of channels	(12) 2/3-wire pnp sensors
Input voltage	18...30 VDC via operating voltage
Supply current	120 mA per port, short-circuit proof
Switching threshold	2 mA / 4 mA
Giriş gecikmesi	2,5 ms
Anahtarlama frekansı	≤ 250 Hz
Maks. giriş akımı	7 mA
Elektrik yalıtımı	galvanic isolation against the bus
Çıkışlar	
Number of channels	(4) DC actuators
Çıkış voltajı	Yük geriliminden 18...30 VDC
Kanal başına çıkış akımı	2.0 A, short-circuit proof
Yük tipi	resistive, inductive, lamp load
Anahtarlama frekansı	≤ 250 Hz
Eşzamanlılık faktörü	1
Elektrik yalıtımı	galvanic isolation against the bus
Fieldbus iletim hızı	9.6 kbps ...12 Mbps
Fieldbus adresleme	0 ... 99 (decimal) via two coded rotary switches
Electrical isolation	to operating and load voltage
Teşhis	Load voltage diagnostics, switched on/off via rotary switch

İşlevsel prensip

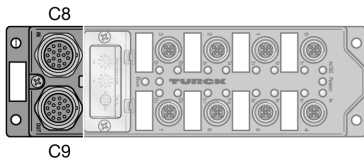
The FLDP-IOM124-0002 is a compact fieldbus I/O module for PROFIBUS-DP and was especially designed for robotic systems resp. automatic tool changers. The module is available in degree of protection IP67 and features 12 digital pnp inputs and 4 digital 2A outputs.

PROFIBUS and power supply are jointly connected via a multibus cable with M23 connection technology which was especially developed for robotic applications. The module also features a 13-pole IP20 terminal on the bottom side. Via this electromechanical link, additional analog signals like those of the current stabilizer are supplied to the multibus cable (quasi-parallel wiring).

Due to the target application, the module also features an intelligent terminating resistor. The terminating resistor is automatically connected if the roboter module is the last slave at the PROFIBUS branch. Once a further PROFIBUS slave is added, the terminating resistor is automatically disconnected. Automatic connection of the internal terminating resistor is always carried out, if pin 15 and 16 of the M23 coupling (OUT) are not short-circuited.

The diagnostic message of the load voltage can be activated or deactivated via GSD parameterization or the integrated coded rotary switch.

Boyutlar (W x L x H)	60 x 197 x 40 mm
Housing material	fibre-glass reinforced Polyamide (PA6-GF30)
Halojensiz	evet
Montaj	4 mounting holes Ø 5,4 mm
Ortam sıcaklığı	0...+55 °C
Saklama sıcaklığı	-25...+70 °C
Altitude	Maks. 5000 m
Titreşim testi	EN 60068-2-6 uyarınca
Darbe testi	EN 60068-2-27 uyarınca
Elektromanyetik uyumluluk	EN 61000-6-2/EN 61000-6-4 uyarınca
IP Derecesi	IP67
Onaylar	CE, cULus
UL Sertifikası	pol. der. 2, maks. ort. sic. 40 °C, 2 par. ger.



Note

Çoklu veri yolu robotu kablosu (örnek):
Robot kablolar yalnızca Ernst & Engbring GmbH & Co. KG tarafından satılmaktadır.

Kablo montaj M23 konektörü:

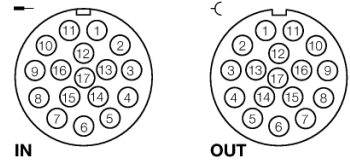
Dişi konektör

6604066 FW-M23KU17O-W-CP-ME-SH-14.5

Erkek konektör:

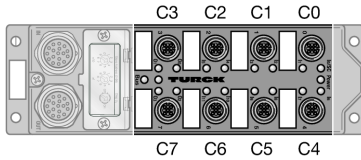
6604067 FW-M23ST17Q-G-CP-ME-SH-14.5

M23 x 1 Fieldbus



M23 round connector, 17-pole

IN	OUT
1	1 0 V, UB
2	2 0 V, UL
3	3 +24 V, UL
4	4 +24 V, UB
5	5 PE
6	6 B-line
7	7
8	8
9	9
10	10
11	11 A-line
12	12
13	13
14	14
15	15 reserved
16	16 reserved
17	17



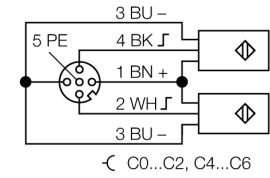
Note

Sensor /Actuator cable (example):

WAK4.5-5-WAS4.5/S57

Ident no. 8016989

Giriş M12 x 1



↪ C0...C2, C4...C6

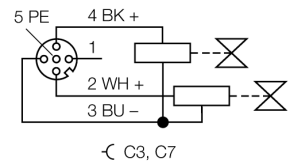
Note

Sensor/actuator cable (example):

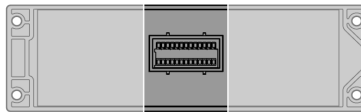
WAK4.5-5-WAS4.5/S57

Ident-No. 8016989

Çıkış M12 x 1



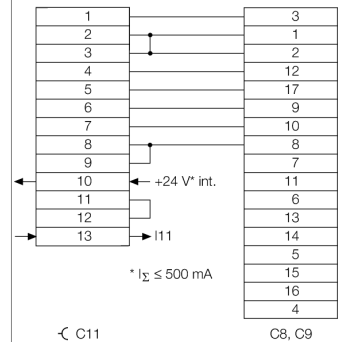
↪ C3, C7



Note

Electrical connection between the 13-pole IP20 terminal on the module bottom side and the 17-pole M23 round connectors.

Terminal bağlantısı



* I_Σ ≤ 500 mA

↪ C11

C8, C9

LED status module

LED	Color	Status	Description
PROFIBUS	red	off	Communication
	green	on	
	red	on	no communication
	green	off	
SC	red	on	Short-circuit group signal, inputs
Power	green	on	Operating and load voltage within the defined tolerances
	red	on	Load voltage below the defined tolerances
		off	Operating voltage below the defined tolerances

LED status IOs

LED	Color	Status	Description
Inputs	green	off	Input undamped (low)
		on	Input damped (high)
Outputs	green	off	Output undamped (low)
		on	Output damped (high)

I/O and diagnostic display

	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Input	0	C4P2	C4P4	C2P2	C2P4	C1P2	C1P4	C0P2	C0P4
	1	-	-	-	-	C6P2	C6P4	C5P2	C5P4
Output	1	-	-	-	-	C7P2	C7P4	C3P2	C3P4
Diagnose	0	-	-	-	-	-	UB	UL	SC

C2P4 - connector 2 / pin 4

SC - short circuit group signal

UB - operating voltage < 18 VDC

UL - load voltage < 18 VDC