

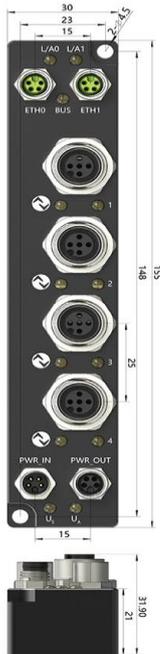
Part number: 43-08004
SAL-12-4FK5-8-2FK4-1FS4-1FK4

- Profinet 10-Link hub, 10-LINK master
- 4 ports 10-LINK M12 SPIN A-coded
- Integrated Ethernet switch functionality
- The port has short circuit, over-voltage, under-voltage and reverse connection protection
- IP67 protection level



Basic parameters

Housing material	Aluminum Alloy
Housing color	Anodized black
Protection level	IP67, epoxy full potting
Dimension	155mm×30mm×31.9mm
Weight	208g
Operating temperature	-25°C...70°C
Storage/Transportation temperature	-40°C...85°C
Operating humidity	5%...95%
Storage/Transportation humidity	5%...95%
Operating atmospheric pressure	80KPa...106KPa
Storage/Transportation	80KPa...106KPa
I/O port tightening torque	M12:0.5Nm
Application Environment	According to EN-61131
Vibration test	According to IEC60068-2
Shock test	According to IEC60068-27
Free drop test	According to IEC60068-32
Electromagnetic compatibility (EMC)	According to IEC61000-4-2, -3, -4
Certificate	CE, RoHS
Mounting hole size	Φ4.5mm×2



Communication Interface

M8 A-code female



Pin	Definition	Description
1	TX+	Data Send+
2	RX+	Data Reception+
3	RX-	Data Reception-
4	TX-	Data transmission-

Port parameters

Connection	2×M8 A-code; 4 pins, female
Physical Layer	Ethernet
Transfer speed	10/100 Mbps, full duplex
Characteristic	According to the protocol characteristics
Alarm function	Diagnostic alarm, process alarm
Minimum cycle time	1ms
Communication port tightening torque	M8:0.5Nm

10-LINK port wiring diagram input (X1~X4)

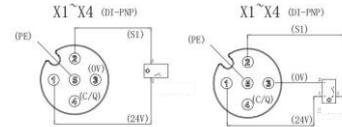
M12 A-code Female



Class A

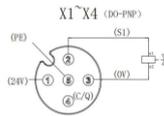
1. 24VDC+
2. Input/Output
3. 0 V
4. C/Q
5. N/C

1. PNP input signal, that is, the jack is connected to the input sensor, divided into two-wire and three-wire



2. PNP type output signal, that is, the jack is connected to the actuator

3. 10LINK port connects to IOLD series slave station



X1~X4



10-LINK parameters

Port number	4×10-LINK
10-LINK connection	M12, 5 pins, A-code, female
10-LINK version	1.1
Communication rate	COM1 (4.8Kbps)/COM2 (38.4Kbps)/COM3 (230.4Kbps)
Port voltage	type, 24VDC (follow US)
Port current	2A (follow US)
Port Level	4 × CLASS A (X1...X4)
Maximum data length of the po	32byte
Maximum network communication	≤100 meters
10-LINK maximum distance	≤20 meters
Digital Input/Output	4-point PNP (input and output adaptive)

Input Parameters

Input number	Max 4
Input port location	X1...X4
Input polarity	PNP
Input signal "0"	Low level -0.3~5VDC
Input signal "1"	High level 12~30VDC

Output Parameters

Output quantity	Max 4
Output port location	X1...X4
Output polarity	PNP
Output Current	Single channel maximum 2A
Port protection	Port power short circuit protection (PIN1, PIN3), port overload protection

Module LED indicators

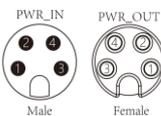
Indicator	Color	Meaning
PWR	Green	Module power is normal
	Red	Module power supply is reversed/UA power is not connected/voltage is too high/voltage is too low
I/O	Green	Channel signal is normal
	Red	Port power supply short circuit (pins 2, 3)/current is too large
LINK	Green	The link is normal. Data communication is abnormal
	Yellow flashing	The link is normal and the data communication is normal
	Off	Link not established
BUS	Green	OP status
	Green slow flashing	SAFEOP state
	Green flashing	Pre-OP state
	Off	Init state
10-LINK	Green	Port operational (running) status
	Green flashing	The port is connecting.
	Green slow flashing	The port is in pre-operation state
	Green Off	Port is closed
	Red	Power supply short circuit (pins 1, 3)

I/O signal distribution table

Byte	Bit0	Bit1	Bit2	Bit3
0	X1P2	X2P2	X3P2	X4P2

Power port

M8 A-code male/female



Pin	Definition	Description
1	+24V Us	System/input power +24V
2	+24V Ua	Output power +24V
3	GND Us	System/input power GND
4	GND Ua	Output power GND

※Us is the system and input power supply, Ua is the output power supply

Port parameters

Power connection method	M8 4 pins A-code male/female
System power supply voltage U	18...30 VDC (type, 24VDC)
Auxiliary power supply voltage	18...30 VDC (type, 24VDC)
Total current IS/IA	4A
Static operating current IC	≤150mA
Overvoltage protection	enabled
Power reverse polarity protec	enabled
Power port tightening torque	M8:0.5Nm