

Part number: 43-08003
SAL-12-8FK5-12D-2FK4-12L-1FS4FE-1FK4FE

- ProfiNet protocol slave station
- 16-channel PNP input and output adaptive M12 5PIN A-code interface
- Integrated Ethernet switch function
- Port has short circuit, Overvoltage, under-voltage, reverse connection protection
- IP67 protection level



Basic parameters	
Shell material	Aluminum alloy
Shell color	Metallic silver color
Protection level	IP67, epoxy full potting
Dimensions	205mm×60mm×34.4mm
Weight	515g
Operating temperature	-25°C...70°C
Storage/tr: temperature	-40°C...85°C
Operating humidity	5%...95%
Storage/transport humidity	5%...95%
Operating atmospheric pressure	80KPa...106KPa
Storage/transport atmospheric pressure	80KPa...106KPa
I/O port tightening torque	M12: 0.5Nm
Application environment	Comply with EN-61131
Vibration test	Comply with IEC60068-2
Impact test	Comply with IEC60068-27
Free drop test	Comply with IEC60068-32
Electromagnetic compatibility (EMC)	Comply with IEC61000-4-2, -3, -4
Certification	CE, RoHS
Mounting hole size	Φ4.5mm×1, Φ5.5mm×1

Communication interface

M12 D-code female



Pin	Definition	Description
1	TX+	Data sent +
2	RX+	Data received +
3	TX-	Data sent -
4	RX-	Data received -

Port parameters

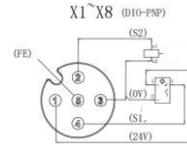
Connection mode	2×M12 D-code; 4-pin socket
Physical layer	Ethernet
Transmission speed	10/100 Mbps, full duplex
Characteristics	Complies with protocol characteristics
Alarm function	Diagnostic alarm, process alarm
Minimum cycle time	1ms
Communication port tightening torque	M12: 0.5Nm

I/O port wiring diagram Input/Output (X1-X8)

M12 A-code Female



1. 24VDC+
2. Input/Output
3. 0 V
4. Input/Output
5. FE



Module LED indicators

PWR	Green: Power supply is normal Red: Module power supply is connected in reverse/UA power is not connected/voltage is too high/voltage is too low
IO	Green: Channel signal is normal Red: Port power supply short circuit/current
LINK	Green: Link is normal, data communication is normal Yellow flashing: Link is normal, data communication is normal Off: Link is not established
SF	Red: Module failure
BF	Red: Configuration is inconsistent with connection Red flashing: Device name/IP address/module configuration error
SF/BF	Off: Module is normal

I/O signal distribution table

Input/Output	Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
	0	X1P4	X2P4	X3P4	X4P4	X5P4	X6P4	X7P4	X8P4
1	Byte	Bit0	Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7
	X1P2	X2P2	X3P2	X4P2	X5P2	X6P2	X7P2	X8P2	

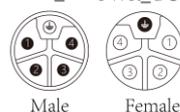
Port parameters

Number of input channels	16
Type	PNP
Input signal "0"	3-wire PNP sensor or 2-wire passive signal
Input signal "1"	Low level 0~5V High level 11~30V
Low level current	<1.5mA
High level current	>2mA
Switching threshold	EN 61131-2 Type 1/3
Switching frequency	250Hz
Input delay	20 μs
Maximum input supply current	200mA
Process data	2-byte input
I/O connection method	M12 5pin socket A-code
Number of output channels	16
Type	PNP
Output voltage	24V (follow UA)
Channel output current	0.5A/ch
Output diagnostic type	Point diagnosis
Synchronization factor	####
Switching frequency	250Hz
Load type	Resistance, inductance, lamp
Short circuit protection	Yes
Overload protection	Yes
Process data	2-byte output
I/O connection method	M12 5pin socket A-code

Power port

M12 L-code male/female

PWR_IN PWR_OUT



Pin	Definition	Description
1	+24V Us	System/Input Power +24V
2	GND Ua	Output Power GND
3	GND Ua	System/Input Power GND
4	+24V Ua	Output Power +24V
5	FE	Functional Ground

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

Port parameters

Power connection method	M12 5-pin L-code male/female
System power voltage US	18...30 VDC (type: 24VDC)
Auxiliary power voltage UA	18...30 VDC (type: 24VDC)
Total current IS/IA	12A
Quiet operating current IC	≤150mA
Overvoltage protection	Yes
Power reverse connection protection	Yes
Power port tightening torque	M12: 0.5Nm