

## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

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16-channel analog input module with screw connection, redundant voltage supply, and additional jumpers for each channel. Suitable for Yokogawa SAI 143 card.

### Product Description

These modules have been specifically developed to connect analog I/O cards to the field level using pre-assembled system cables. The modules offer the following features:

- Transmission of up to 16 channels
- Two parallel system connections for redundant applications
- Fuse and LED per channel
- 2 or 3-wire connection for each channel depending on the jumper position
- Screw connection

The following input cards can be connected:  
SAI 143

### Key Commercial Data

Packing unit	1
GTIN	 4 046356 906937
GTIN	4046356906937
Custom tariff number	85369010

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
Type of note	Notes on operation
Note	No additional touch protection is required when using a SELV/PELV voltage ( $\leq 25$ V AC or 60 V DC).
Type of note	Notes on operation

# Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

## Technical data

### Note

Note	At least one functional insulation against adjacent modules is complied with (in the support rail direction). If the application has stricter requirements for the insulation (basic insulation or reinforced insulation), they must be realized by applying suitable measures (e. g. partition plates).
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### Dimensions

Width	181.5 mm
Height	127.5 mm
Depth	95 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
Maximum altitude	≤ 2000 m
Degree of protection	IP00
	≥ IP54 (Installation location)

### Output data

Designation	Alarm contact
Contact type	1 N/O contact
Type of switch contact	Double contact
Contact material	AgNi, 5 µm hard gold-plated
Maximum switching voltage	25 V AC
	48 V DC
Limiting continuous current	1 A
Min. switching current	1 mA
Interrupting rating (ohmic load) max.	24 W (24 V DC)
	48 W (48 V DC)
	25 VA (25 V AC)

### General

Nominal voltage $U_N$	24 V DC
	19.2 V DC ... 30 V DC
Max. permissible current	0.9 A (per path, protected by slow-blow fuse 1 A, 5x20 (short-circuit protection only))
Max. permissible total current	10 A (protected by slow-blow fuse 10 A, 5x20 (short-circuit protection only))
Status display	LED red
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data

Connection name	Field level
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## Technical data

### Connection data

Connection method	Screw connection
Number of connections	1
Number of positions	66
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12

### Connection data 2

Connection name	Controller level
Connection method	Yokogawa KS-compatible
Number of connections	2
Number of positions	40
Torque	0.5 Nm

### Connection data 3

Connection name	Supply
Connection method	Screw connection
Number of connections	1
Number of positions	6
Conductor cross section solid	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12

### Supported controller

Controller	Yokogawa ProSafe-RS
- suitable I/O card	SAI143

### Standards and Regulations

Designation	Air clearances and creepage distances
Standards/regulations	DIN EN 50178
Rated insulation voltage	50 V
Rated surge voltage	0.5 kV
Insulation	Functional insulation
Pollution degree	2
Overvoltage category	II

### Environmental Product Compliance

REACH SVHC	Cadmium oxide 1306-19-0
China RoHS	Environmentally Friendly Use Period = 50 years

# Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

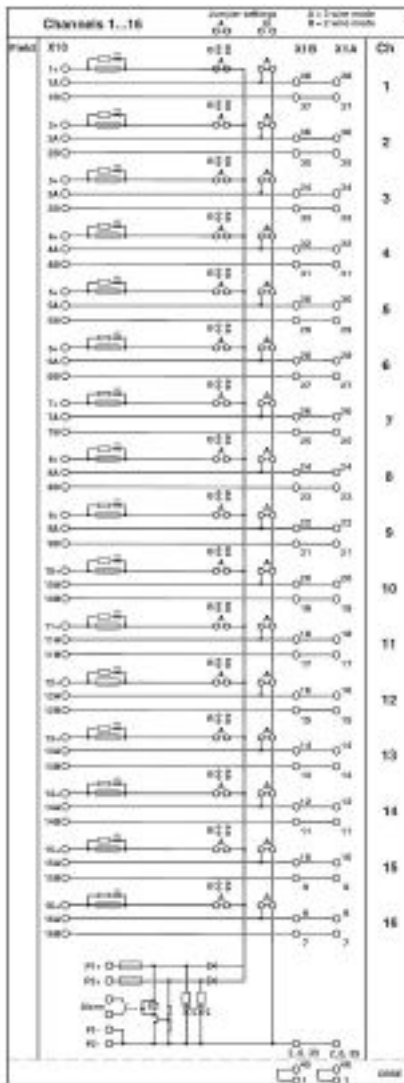
## Technical data

### Environmental Product Compliance

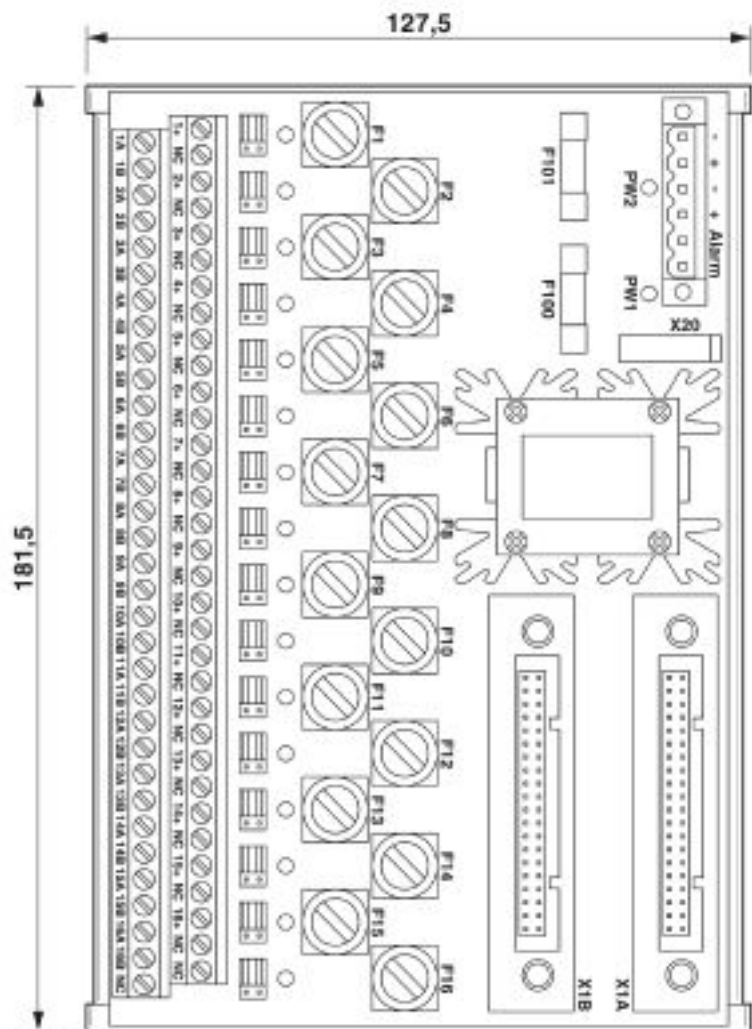
For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram



Dimensional drawing



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## Classifications

### eCl@ss

eCl@ss 10.0.1	27141152
eCl@ss 4.0	27250313
eCl@ss 4.1	27250300
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27141152
eCl@ss 8.0	27141152
eCl@ss 9.0	27141152

### ETIM

ETIM 5.0	EC002780
ETIM 6.0	EC002780
ETIM 7.0	EC002780

### UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals

### Approvals

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Approvals


EAC

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Ex Approvals

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### Approval details

EAC		RU C- DE.A*30.B.01742
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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Accessories

#### Front adapter

##### Front adapters - FLK 40-PA/EZ-DR/KS/ 100/YUC - 2322786



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 1.0 m

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##### Front adapters - FLK 40-PA/EZ-DR/KS/ 200/YUC - 2314341



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 2.0 m

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##### Front adapters - FLK 40-PA/EZ-DR/KS/ 300/YUC - 2314354



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 3.0 m

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##### Front adapters - FLK 40-PA/EZ-DR/KS/ 400/YUC - 2314367



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 4.0 m

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##### Front adapters - FLK 40-PA/EZ-DR/KS/ 500/YUC - 2321570



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 5.0 m

## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

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#### Front adapters - FLK 40-PA/EZ-DR/KS/ 600/YUC - 2314943



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 6.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/ 700/YUC - 2321583



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 7.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/ 800/YUC - 2314956



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 8.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/ 900/YUC - 2321415



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 9.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1000/YUC - 2314370



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 10.0 m

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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/KS/1100/YUC - 2321428



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 11.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1200/YUC - 2321431



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 12.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1300/YUC - 2321444



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 13.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1400/YUC - 2321457



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 14.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1500/YUC - 2314383



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 15.0 m

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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/KS/1600/YUC - 2321596



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 16.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1700/YUC - 2321606



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 17.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1800/YUC - 2321619



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 18.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/1900/YUC - 2321622



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 19.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/2000/YUC - 2314532



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 20.0 m

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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/KS/2500/YUC - 2314545



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 25.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/3000/YUC - 2314558



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 30.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/3500/YUC - 2901017



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 35.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/4000/YUC - 2901052



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 40.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/KS/4500/YUC - 2902912



Cast front adapter with attached round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 45.0 m

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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 100/YUC - 2904747



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 1.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 200/YUC - 2904748



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 2.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 300/YUC - 2904749



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 3.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 400/YUC - 2904750



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 4.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 500/YUC - 2904645



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 5.0 m

## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 600/YUC - 2904751



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 60.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 700/YUC - 2904752



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 7.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 800/YUC - 2904753



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 8.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/ 900/YUC - 2904754



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 9.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/1000/YUC - 2904646



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 10.0 m

## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/1500/YUC - 2904647



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 15.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/2000/YUC - 2904488



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 20.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/2500/YUC - 2904648



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 25.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/3000/YUC - 2904649



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 30.0 m

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#### Front adapters - FLK 40-PA/EZ-DR/HF/KS/3500/YUC - 2904650



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 35.0 m

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## Input module - UM-2KS40/16AI-J/SI/RS/SO225 - 2905003

### Accessories

Front adapters - FLK 40-PA/EZ-DR/HF/KS/4000/YUC - 2904651



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 40.0 m

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Front adapters - FLK 40-PA/EZ-DR/HF/KS/4500/YUC - 2904652



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 45.0 m

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Front adapters - FLK 40-PA/EZ-DR/HF/KS/5000/YUC - 2904653



Cast front adapter with attached, halogen-free round cable and a 40-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 50.0 m

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