敬业 PROFESSIONAL

守信 TRUSTWORTHY

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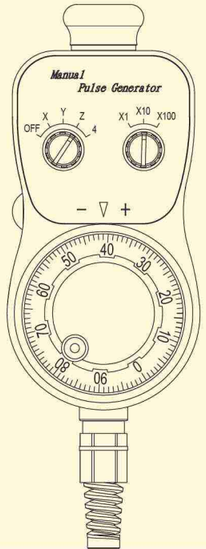

Jingrenart Design/0632-5669288

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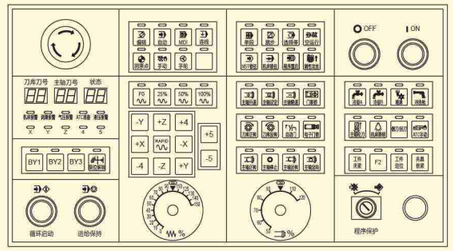
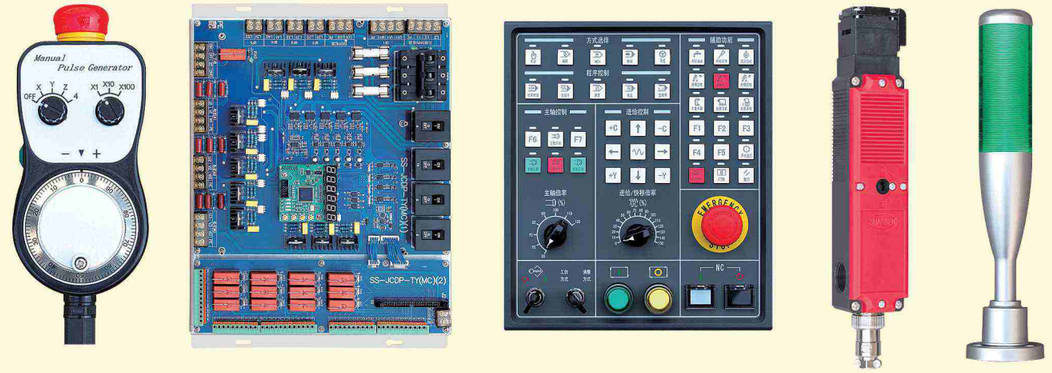
SHANSEN

SHANSEN CNC



Professional CNC Machine Solutions Provider



CATALOGUE

Machine Control Panel

Hand-held MPG

Safety Switch & Relay

Relay Module

Communication Interface

Signal Light & Work Light

Integrated Circuit Board

SHANDONG SHANSEN CNC TECHNOLOGY CO., LTD.

WWW.SSSK.COM.CN

COMPANY PROFILE

Tengzhou Factory

SHANSEN CNC is a leading Group of companies for industrial automation including,

> Tengzhou SHANSEN Chuangfa CNC Equipment Co., Ltd.
> Shandong Rizhao SHANSEN CNC Equipment Co., Ltd.
> SHANSEN CNC Technology Co., Ltd.
> Rizhao SHANSEN Machine Sales Co., Ltd.

SHANSEN CNC is a National High-Tech enterprise, a member of China CNC System Sub-association and the president company of Tengzhou Machinery Association. It is managed according to ISO 9001 quality management systems and 6S management systems. Occupying 45000 sqm, it has a building area of 31000 sqm in which it has first class offices, technical centers, laboratories, state-of-the-art manufacturing facilities and inspection equipments as well as a 40+ professional design & development team.

Main products of SHANSEN CNC include CNC systems, machine control panels, etc with 2000+ models in 16 categories for various CNC machines. Products are widely used in SMTCL, DOOSAN and other 1000+ companies. It has been granted Supplier Excellence Awards for continuous years from SMTCL and other companies.

With decade of development, SHANSEN CNC sticks to the principle of Customer First and Service Foremost and wins a superb reputation in the industries for high quality products and satisfying services.

Rizhao Factory

CUSTOMERS

SMTCL JFMT ROTTLER-YONGHUA XKC DOOSAN UGINT XYD

DMTG HEADMAN NBG SHANGHAI PULUTE MACHINE HARVEST STAR BOCHI KAIDA

CY GROUP YISHUI MACHINE JULIHUANG HANSLASER WUYI ANYANG YANGLI

JFY DZJC JINGYI SHENYANG HISION QINGHAI DINGSHENG QINGDAO SHENGJIAN COSIS

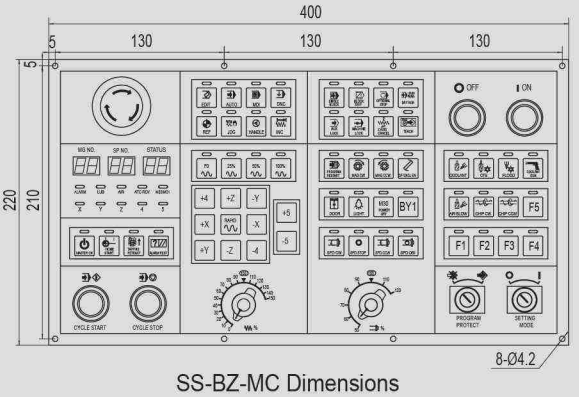
Consult for more machine manufacturers

Introduction:

The machine operation panel is designed for easy control of various CNC machines. Featuring modular design, standardized functions&dimensions, it is compatible perfectly with diverse CNC systems, ie FANUC, SIEMENS, MITSUBISHI,SYNTEC and others. Functions on the panel can be tailor-made according to specific needs of machine OEM makers.

SS-BZ-MC

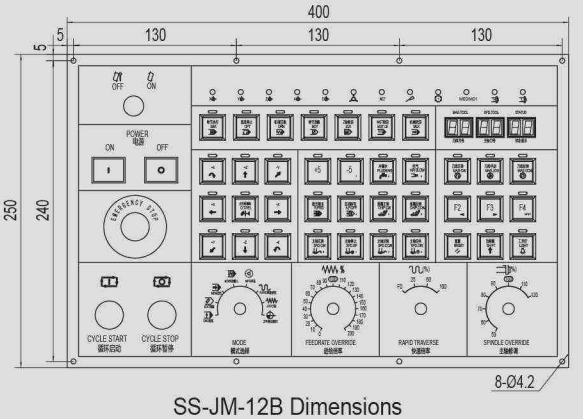
Notes: MCP for machining centers with FANUC and MITSUBISHI systems. With embedded matrix circuits, less I/O pins are needed for more I/O channels, ie 16 I/O pins for 64 I/O channels. Encryptable with random PIN numbers for high security. With interfaces for the hand-held MPG and Korean type keys.



SS-BZ-MC Dimensions

SS-JM-12B

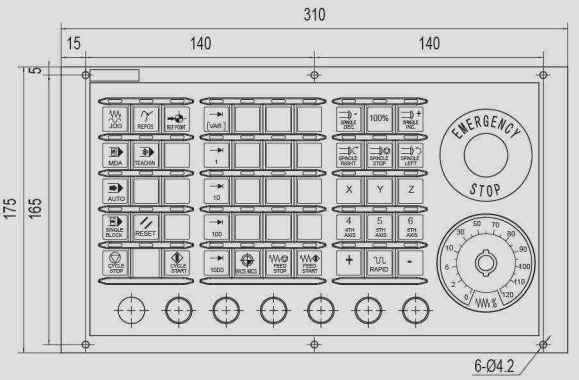
Notes: MCP for machining centers with FANUC and MITSUBISHI systems. With embedded matrix circuits, less I/O pins are needed for more I/O channels, ie 16 I/O pins for 64 I/O channels. Encryptable with random PIN numbers for high security. With interfaces for the hand-held MPG and laser inscribed keys.



SS-JM-12B Dimensions

SS-828D

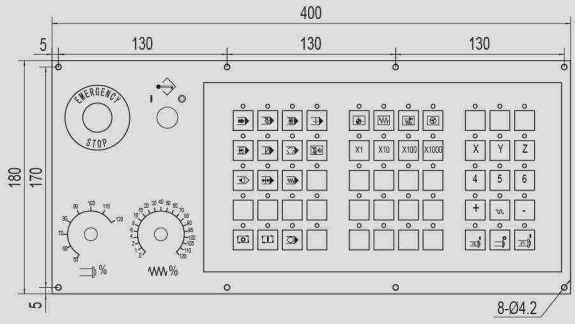
Notes: The MCP is the same as original SIEMENS vertical MCP in profile and dimensions. With embedded matrix circuits, less I/O pins are needed for more I/O channels, ie 16 I/O pins for 64 I/O channels. The MCP uses 1 standard I/O port for all the standard functions with easy connection and stable performance.



SS-828D Dimensions

SS-FM-B-2

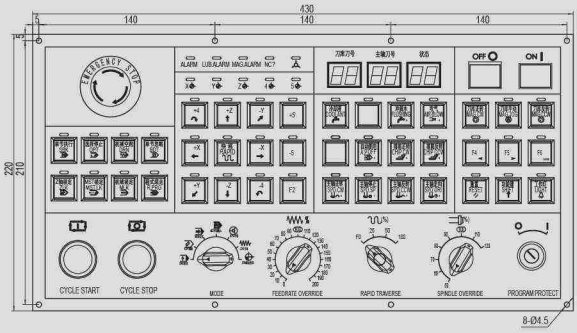
Notes: The MCP is consistent with original FANUC MCP in profile and can be used with the 8.4" FANUC CNC unit. With embedded matrix circuits, less I/O pins are needed for more I/O channels.



SS-FM-B-2 Dimensions

SS-JM-16B

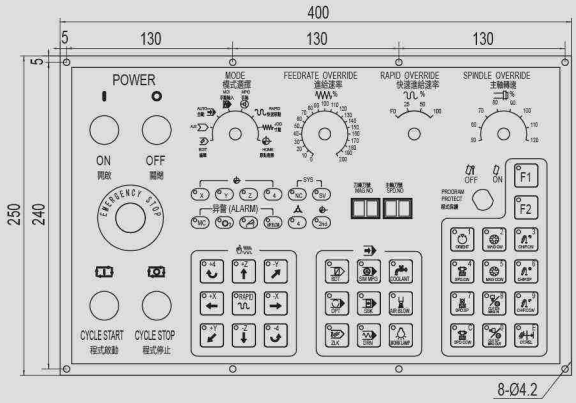
Notes: MCP for milling machines and machining centers with MITSUBISHI M80 series systems. With tool number and spindle speed gear display, replaceable key labels.



SS-JM-16B Dimensions

XDKB01

Notes: MCP for milling machines and machining centers with SYNTEC systems. With replaceable key labels.



XDKB01 Dimensions

Order:

MPG: ☐with integrated MPG ☐ without integrated MPG ☐ with MPG interface ☐ without MPG interface

Key: ☐replaceable keys ☐ membrane keys ☐ with LED indicator ☐ without LED indicator

☐others _____

Communication interface: ☐ without ☐ RS232 ☐ others _____

Display: ☐without ☐ tool number ☐ spindle speed step ☐ others _____

Others: _____

Integrated Circuit Board (ICB)

The integrated circuit board is a patented design and developed with the latest electronic and microcomputer technologies. It is to replace the traditional electric control panel but without some of the individual breakers, AC contactors, thermal overload relays, relay modules, resistance-capacitance arc suppressors and other components. It features easy wiring, anti-interference, compact, easy installation, cost competitiveness, less maintenance, high compatibility, reliable motor protection, high safety, etc. Patent number: ZL 2016 2 0001289 3.

◎Model Number SS-JCDP - □ □

Model code

Custom code

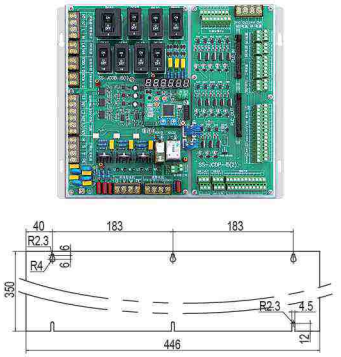
CNC systems

F: FANUC I5: SMTCL
M: MITSUBISHI G: GSK
S: SIEMENS H: HNC

◎ICB and Dimensions

SS-JCDP-i5

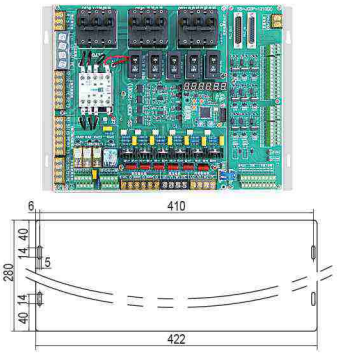
The SCR module embedded in the modular soldered PCB is to drive a 3Ph AC asynchronous motor, a single-phase AC motor and provide PLC I/O interfaces for easy control panel assembly. It is suitable for drilling and tapping centers and CNC lathes with SMTCL i5 series CNC systems.



SS-JCDP-i5 Dimensions

SS-JCDP-G/H

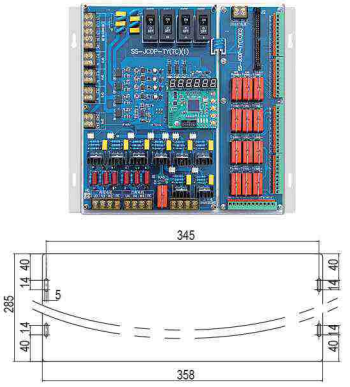
The SCR module embedded in the modular soldered PCB is to drive two 3Ph AC asynchronous motors and provide PLC I/O interfaces for easy control panel assembly. It is suitable for CNC lathes with GSK, HNC, KND and other CNC systems.



SS-JCDP-G/H Dimensions

SS-JCDP-TY(TC)

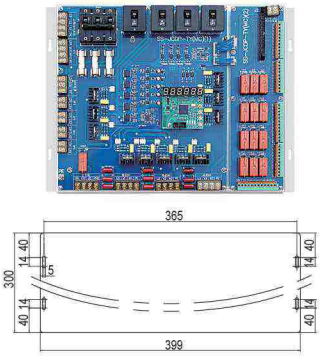
The SCR module embedded in the modular soldered PCB is to drive two 3Ph AC asynchronous motors and provide PLC I/O interfaces for easy control panel assembly. It is suitable for CNC lathes with FANUC, SIEMENS, MITSUBISHI, GSK, KND and other CNC systems.



SS-JCDP-TY(TC) Dimensions

SS-JCDP-TY(MC)

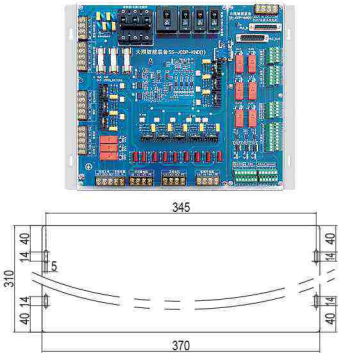
The SCR module embedded in the modular soldered PCB is to drive three 3Ph AC asynchronous motors and provide PLC I/O interfaces for easy control panel assembly. It is suitable for machining centers with FANUC, SIEMENS, MITSUBISHI, GSK, KND and other CNC systems.



SS-JCDP-TY(MC) Dimensions

SS-JCDP-KND

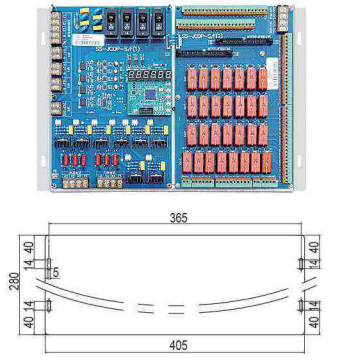
The SCR module embedded in the modular soldered PCB is to drive three 3Ph AC asynchronous motors and provide PLC I/O interfaces for easy control panel assembly. It is suitable for machining centers with KND and HNC CNC systems.



SS-JCDP-KND Dimensions

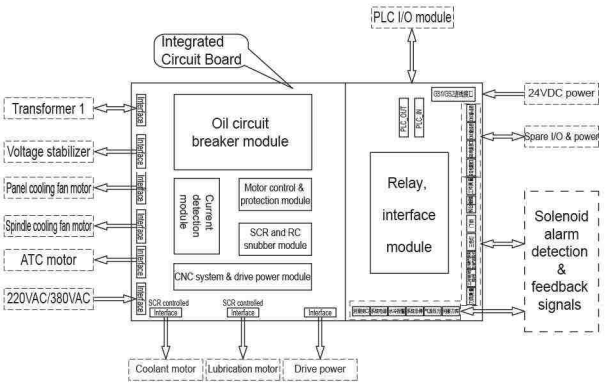
SS-JCDP-S/F

The SCR module embedded in the modular soldered PCB is to drive two 3Ph AC asynchronous motors and provide PLC I/O interfaces for easy control panel assembly. It is suitable for machining centers with FANUC and SIEMENS CNC systems.



SS-JCDP-S/F Dimensions

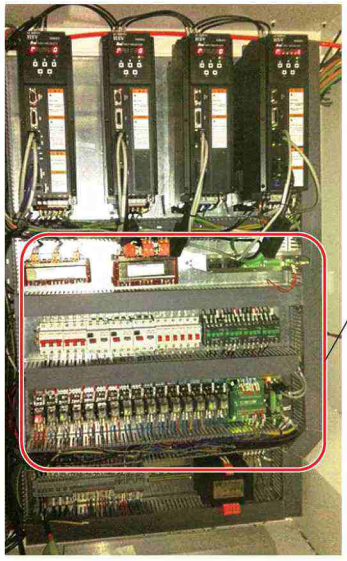
◎Introduction



The integrated circuit board is composed of heavy-current control circuits and light-current control circuits. The heavy-current control circuits include oil circuit breakers, motor control & protection modules, RC snubber protection modules, CNC system & drive power module and terminal blocks. The light-current control circuits include relay modules and interface modules. The circuits and component layout are designed according to the electric schematic drawings for easy wiring, reduced man-hours, aligned product portfolio and improved quality.

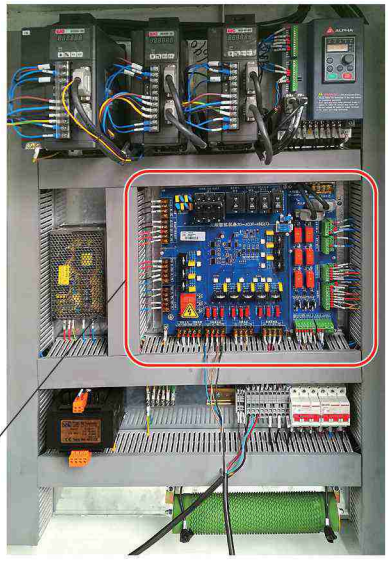
ICB installation: The ICB is connected to the PLC I/O module of the CNC system (FANUC, SIEMENS …) with cable and connectors. Terminal blocks (alarm, air pressure check unit …) are connected to the ICB input interfaces through PCB while ICB output interfaces are connected to relays through PCB. The relays control external components and are wired to their terminal blocks (solenoid, signal lights …). Heavy-current electric components on the ICB are controlled directly by the heavy-current circuits. Marks for components, terminals and interfaces are directly printed on the PCB. Earth terminals are clearly marked for easy wiring. The ICB is ideal for batch production and can be customized according to specific requirements. It gives you What Matters: Quality, Price and Delivery.

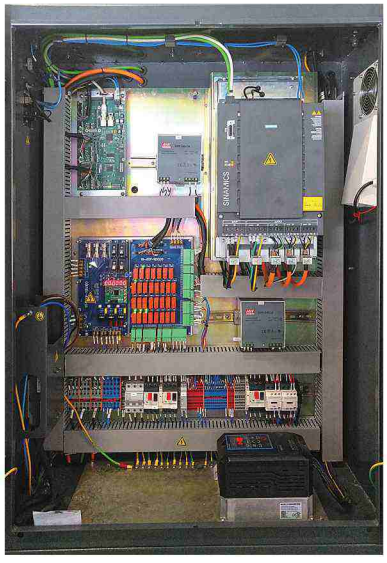
◎Photos

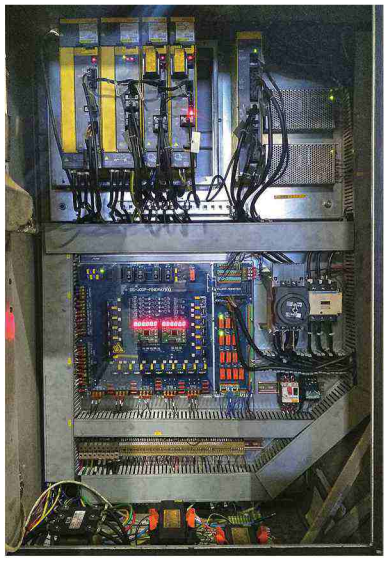


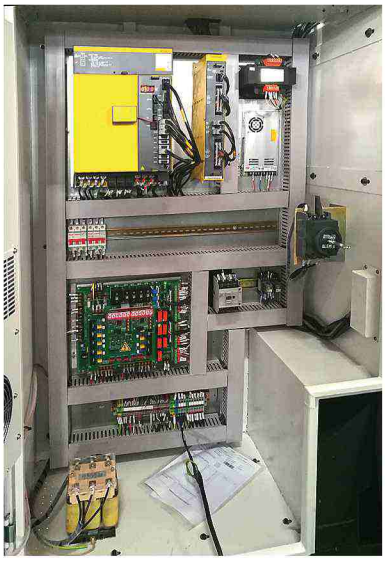
Individual breakers,
AC contactors,
Thermal overload relays,
Relay modules,
Resistance-capacitance arc suppressors
and other components.

Integrated Circuit Board









Safety Door Switch: SS/E-01 Series

◎Functions

It is a safety door switch with mechanical locking and solenoid unlocking. The door has to be closed to start the machine and the door cannot be opened when the machine is running.

◎Features

- Slim housing, suitable for constrained limited space
- Metal head with 4 key insertion directions
- 4 types of keys available
- 1000N locking force
- 3 conduit outlets

◎Model Number

SS/E — 01 — □ — □ — □ — □

- Model code
- Design number
- Z: horizontal straight key
- L: L-shape vertical key
- K: wide horizontal straight key
- H: adjustable horizontal key
- 1: water-proof plug connector
- 2: aviation plug connector
- 3: without plug connector
- Cable length (unit: m)
- B: rear conduit outlet
- R: right conduit outlet
- L: left conduit outlet

◎Ratings

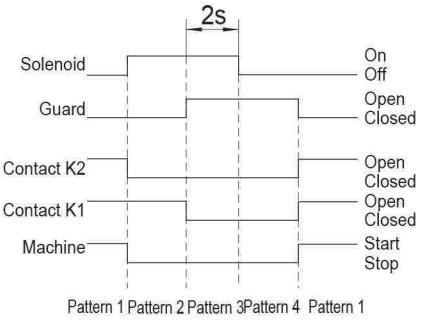
- Solenoid

Rated Voltage	DC24V $^{+10\%}_{-15\%}$
Rated Current	0.4A
Insulation	Class B

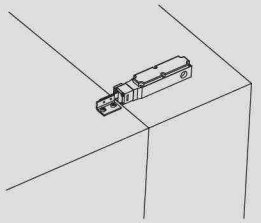
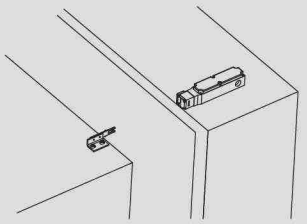
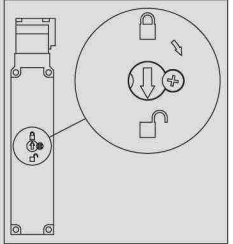
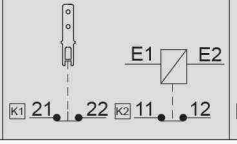
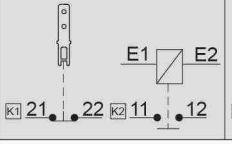
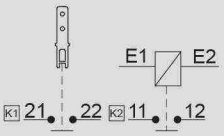
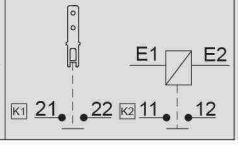
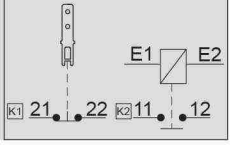
- Contacts

Rated Voltage			30V	250V
Rated Current	AC	Resistive load (AC-12)	—	4A
		Inductive load (AC-15)	—	2A
	DC	Resistive load (DC-12)	2A	0.8A
		Inductive load (DC-13)	1A	0.4A

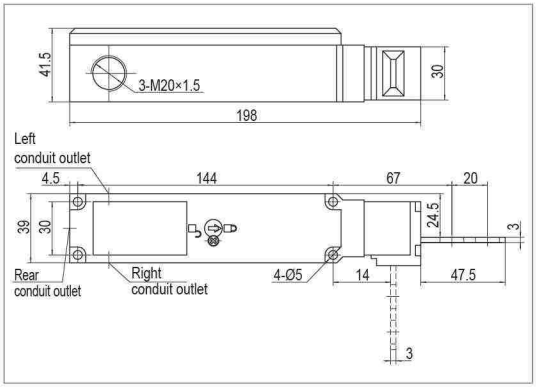
◎Timing Chart



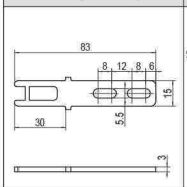
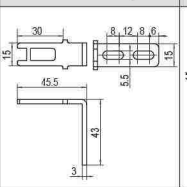
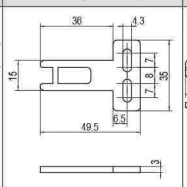
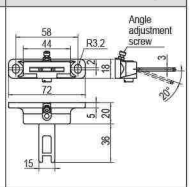
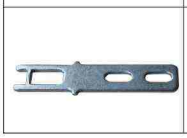
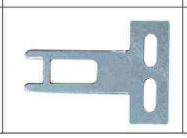
◎Operation Patterns

Operation	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Manual bypass unlock
	M/c starts with door closed and solenoid off	M/c stops with door closed but solenoid on	M/c stops with door closed and solenoid off	M/c starts with door open and solenoid off after 2 seconds time delay	M/c stops with solenoid off
Guard status					
Contact status					

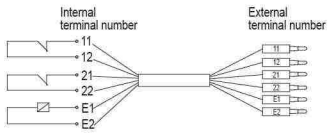
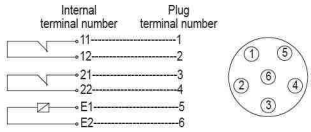
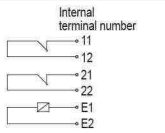
◎Dimensions



◎Keys

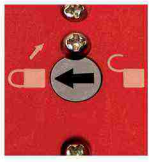
Z horizontal straight key	L-shape vertical key	W wide horizontal straight key	H adjustable horizontal key
			
			

◎Connectors

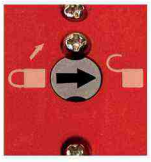
Connectors	Picture	Plug / Internal Terminals	Wiring
1 Water-proof plug connector			
2 Aviation plug connector			
3 Without plug connector			

◎Notes

1. Switch off power before installation, dismantlement or wiring to avoid electric shock or fire.
2. Use safety relay when a relay is required to avoid injury or damage.
3. Do NOT install PLC between safety switch and load to avoid risks due to mal-function.
4. Do NOT use M02 or M30 alone for automatic door open. Use a custom defined M code to power on/off the solenoid.
5. When the door is opened after the solenoid is powered on and the open signal is detected, the solenoid coil is to be powered off after 2 seconds time delay to avoid damage of the cam due to malfunction.
6. Write a protection program that the solenoid powers off automatically when the door is not opened after a certain time of power on. It is necessary to press the button on the control panel to power on the solenoid to open the door again.
7. If power off signal of the solenoid is not detected after 2 seconds of power on, there should be an alarm on the CNC system monitor to avoid damage of the cam. Mechanical release is needed to open the door again.
8. The safety switch should be installed with less access. In general, the safety switch is to be installed in the machine and the key on the sliding door with an alignment tolerance of ±1mm between the key and the insertion opening.
9. Do NOT use the safety switch as a stopper and avoid door collision shock. Do NOT use the safety switch as a lock.
10. Use protection covers to avoid collection of debris or dust in the insertion opening. However, the manual bypass unlock key should NOT be covered.
11. Do NOT use force more than the locking force of 1000N to avoid damage of the safety switch.
12. Do NOT touch the safety switch to avoid injury due to heat generated in the solenoid coil.
13. When the safety switch is installed properly, turn the arrow to LOCK position and tighten the locking screw (refer to Picture 1) and then it can be used.
14. When the machine is powered off or there is a fault with the safety switch, loosen the locking screw and turn the arrow to UNLOCK position (refer to Picture 2). The safety switch is manually unlocked and the door can be opened.



Picture 1



Picture 2

Safety Door Switch: SS/E-03 Series

◎Functions

It is a safety door switch with mechanical locking and solenoid unlocking. The door has to be closed to start the machine and the door cannot be opened when the machine is running.

◎Features

- Square housing with robustness
- Metal head with 4 key insertion directions
- High reliability with standardized contacts Solenoid unlock
- Manual bypass unlock integrated
- LED indicator for status display
- 6 pair contacts integrated for diverse wiring
- 1300N locking force

◎Model Number SS/E — 03 — □ — □ — □ — □

- SS/E: Model code
- 03: Design number
- □: Z: horizontal straight key; L: L-shape vertical key; H: adjustable horizontal key
- □: 1: water-proof plug connector; 2: aviation plug connector; 3: without plug connector
- □: B: rear conduit outlet; R: right conduit outlet
- □: Cable length (unit: m)

◎Ratings

- Contacts

Rated Voltage			30V	250V
Rated Current	AC	Resistive load (AC-12)	—	4A
		Inductive load (AC-15)	—	2A
	DC	Resistive load (DC-12)	2A	0.8A
		Inductive load (DC-13)	1A	0.4A

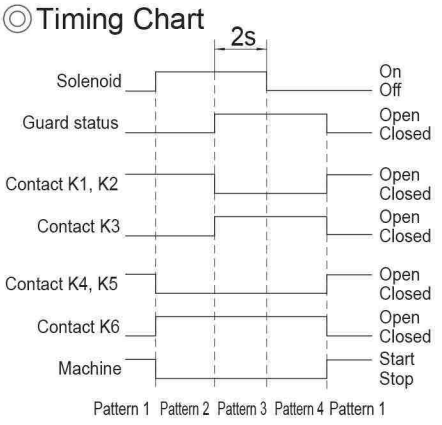
- Solenoid

Rated Voltage	DC24V +10% -15%
Rated Current	0.2A
Insulation	Class B

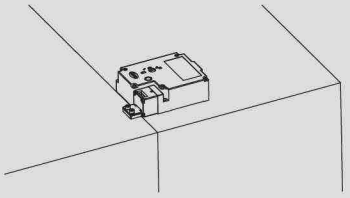
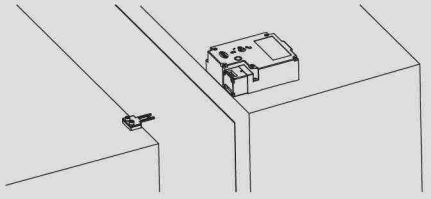
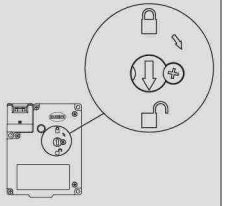
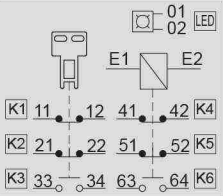
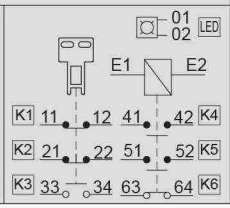
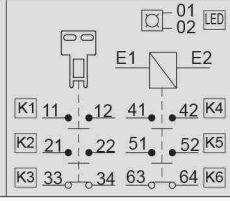
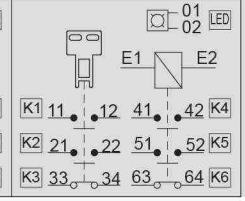
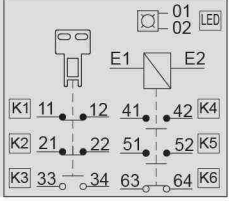
- LED Indicator

Rated Voltage	DC24V +10% -15%
Rated Current	7mA
Color	Green

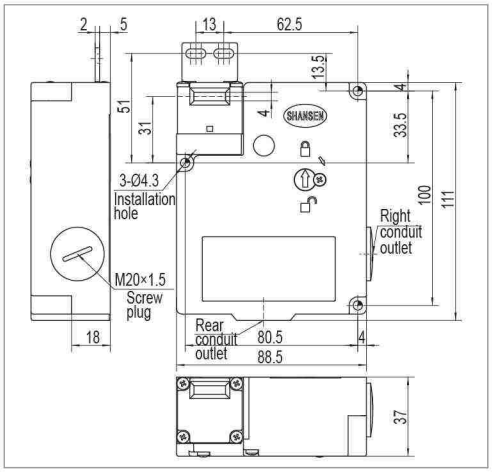
◎Timing Chart



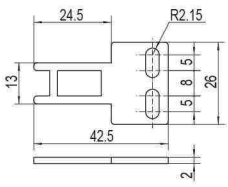
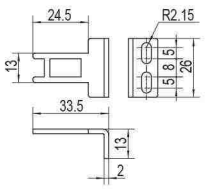
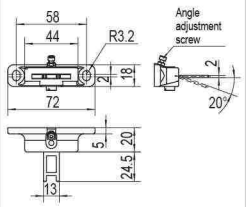
◎Operation Patterns

Operation	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Manual bypass unlock
	M/c starts with door closed and solenoid off	M/c stops with door closed but solenoid on	M/c stops with door open and solenoid off after 2 seconds time delay	M/c stops with door open but solenoid off	M/c stops with solenoid off
Guard status					
Contact status					

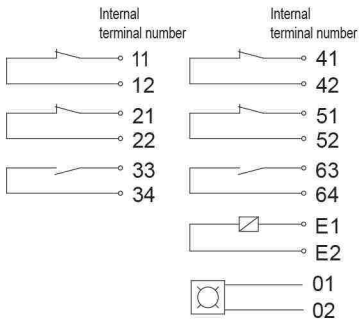
◎Dimensions



◎Keys

Z horizontal straight key	L-shape vertical key	H adjustable horizontal key
		
		

◎Connectors

Connector	Picture	Plug / Internal Terminals	Wiring
1 Water-proof plug connector			
2 Aviation plug connector			
3 Without plug connector			

◎Notes

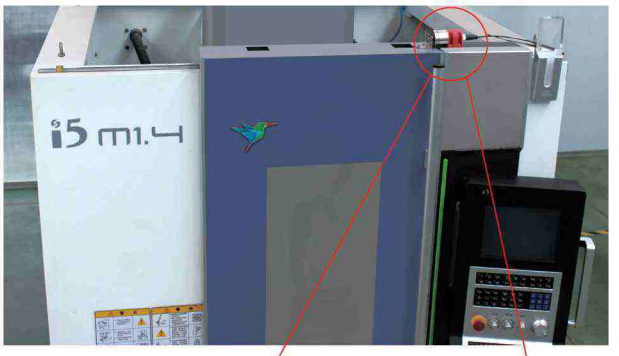
1. Switch off power before installation, dismantlement or wiring to avoid electric shock or fire.
2. Use safety relay when a relay is required to avoid injury or damage.
3. Do NOT install PLC between safety switch and load to avoid risks due to mal-function.
4. Do NOT use M02 or M30 alone for automatic door open. Use a custom defined M code to power on/off the solenoid.
5. When the door is opened after the solenoid is powered on and the open signal is detected, the solenoid coil is to be powered off after 2 seconds time delay to avoid damage of the cam due to malfunction.
6. Write a protection program that the solenoid powers off automatically when the door is not opened after a certain time of power on. It is
7. necessary to press the button on the control panel to power on the solenoid to open the door again.
   If power off signal of the solenoid is not detected after 2 seconds of power on, there should be an alarm on the CNC system monitor to avoid damage of the cam. Mechanical release is needed to open the door again.
8. The safety switch should be installed with less access. In general, the safety switch is to be installed in the machine and the key on the sliding door with an alignment tolerance of ±1mm between the key and the insertion opening.
9. Do NOT use the safety switch as a stopper and avoid door collision shock. Do NOT use the safety switch as a lock.
10. Use protection covers to avoid collection of debris or dust in the insertion opening. However, the manual bypass unlock key should NOT be covered.
11. Do NOT use force more than the locking force of 1300N to avoid damage of the safety switch.
12. Do NOT touch the safety switch to avoid injury due to heat generated in the solenoid coil.
13. When the safety switch is installed properly, turn the arrow to LOCK position and tighten the locking screw (refer to Picture 1) and then it can be used.
14. When the machine is powered off or there is a fault with the safety switch, loosen the locking screw and turn the arrow to UNLOCK position (refer to Picture 2). The safety switch is manually unlocked and the door can be opened.

Picture 1

Picture 2

Safety Door Switch: SS/E-06 Series

Patent number：ZL 2016 2 0601632.8



◎Functions

It is a safety door switch with electromagnetic locking. It detects the guard status with switch signals to decide whether to start the machine or not.

◎Features

- Electromagnetic locking. Guard status to be detected with switch signals.
- Position compensation on the head for secured lock.
- Plastic or metal housing
- 600N locking force.


P: plastic housing


M: metal housing

◎Model Number

SS/E — 06 — □ — □

- Model code: SS/E
- Design number: 06
- □: P: plastic housing; M: metal housing
- □: Cable length (unit: m)

◎Ratings

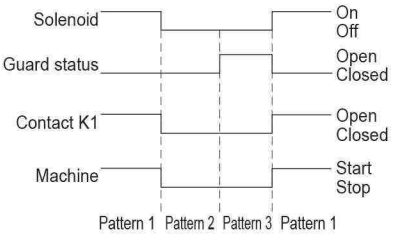
- Contact

Rated Voltage	DC24V +10% -15%
Rated Current	4A

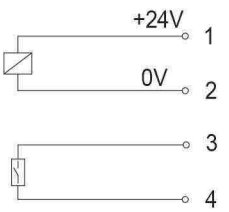
- Solenoid

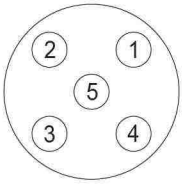
Rated Voltage	DC24V +10% -15%
Rated Current	0.25A
Insulation	Class B

◎Timing Chart



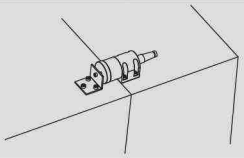
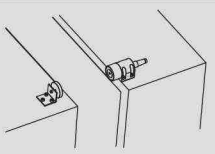
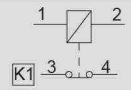
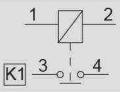
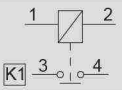
◎Internal Circuit Diagram



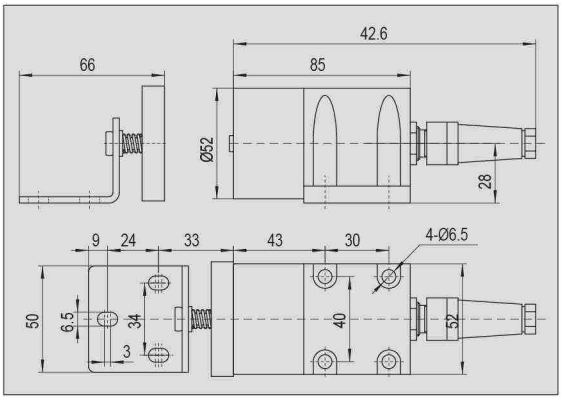


5-pin connector terminals

◎Operation Patterns

Operation	Pattern 1	Pattern 2	Pattern 3
	M/c starts with door closed and solenoid on	M/c stops with door closed but solenoid off	M/c stops with door open and solenoid off
Guard status			
Contact status			

◎Dimensions



◎Notes

1. Switch off power before installation, dismantlement or wiring to avoid electric shock or fire.
2. Use safety relay when a relay is required to avoid injury or damage.
3. Do NOT install PLC between safety switch and load to avoid risks due to mal-function.
4. Do NOT dismantle, modify or stop functioning of the safety switch to avoid fault or accident.
5. The safety switch should be installed with less access. In general, the safety switch is to be installed in the machine and the actuator on the sliding door.
6. Do NOT touch the safety switch to avoid injury due to heat generated in the solenoid coil.

Safety Door Switch: SS/E-07 Series

◎Functions

It is a safety door switch without guard locking. It detects the guard status with contact signals to decide whether to start the machine or not.

◎Features

- Compact, suitable for constrained limited spaces
- Metal head with 4 key insertion directions
- 3 pair contacts integrated for diverse wiring
- High reliability with standardized contacts

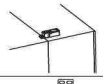
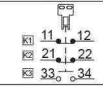
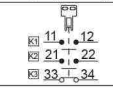
◎Model Number SS/E — 07 — □ — □ — □

Model code: SS/E
Design number: 07
Z: horizontal straight key
L: L-shape vertical key
H: adjustable horizontal key
1: water-proof plug connector
2: without plug connector
Cable length (unit: m)

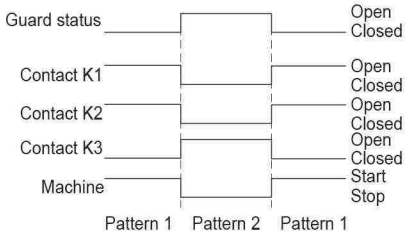
◎Contact Ratings: Current Carrying Capacity

Rated Voltage			30V	250V
Rated Current	AC	Resistive load (AC-12)	—	4A
		Inductive load (AC-15)	—	2A
	DC	Resistive load (DC-12)	2A	0.8A
		Inductive load (DC-13)	1A	0.4A

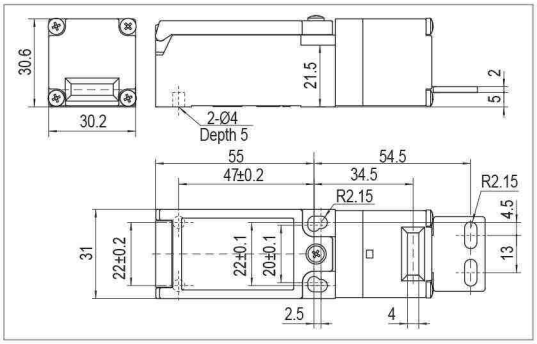
◎Operation Patterns

Operation	Pattern 1 M/c starts with door closed	Pattern 2 M/c stops with door open
Guard status		
Contact status		

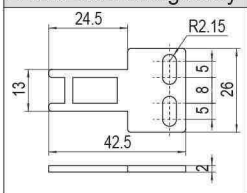
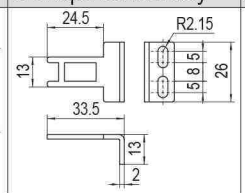
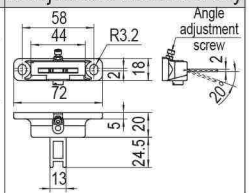
◎Timing Chart



◎Dimensions



◎Keys

Z horizontal straight key	L-shape vertical key	H adjustable horizontal key
		
		

◎Connectors

Connector	Picture	Plug / Internal Terminals
1 Water proof plug connector		
2 Without plug connector		

◎Notes

1. Switch off power before installation, dismantlement or wiring to avoid electric shock or fire.
2. Use safety relay when a relay is required to avoid injury or damage.
3. Do NOT install PLC between safety switch and load to avoid risks due to mal-function.
4. Do NOT dismantle, modify or stop functioning of the safety switch to avoid fault or accident.
5. The safety switch should be installed with less access. In general, the safety switch is to be installed in the machine and the key on the sliding door with an alignment tolerance of ±1mm between the key and the key opening.
6. Do NOT use the safety switch as a stopper and avoid door collision shock. Do NOT use the safety switch as a lock.

Relay Module

The relay module is mainly used for amplification and isolation of CNC system outputs so to control the spindles, ATC, coolant, etc. It features easy installation, compact design and low cost.

◎ Model Number ZJB- □/□□□

- Model code
- Connectors and No. of pins
  - H: HTC connector, female
  - B: flat connector
  - D: D type connector
  - C: universal
- No. of relay coils
- CNC systems
  - F: FANUC
  - M: MITSUBISHI
  - D: DASEN
  - S: SIEMENS
- No. of relay sockets

◎ Technical Data

Item	Model	No. of pins	Max. output current	Max. output voltage	Inst. Dimensions
Relay module	ZJB-50B/16F16	50	8A	220AC/100VDC	294×76
	ZJB-50B/10F10	50	8A	220AC/100VDC	262×76
	ZJB-40B/16M16	40	8A	220AC/100VDC	270×76
	ZJB-40B/10M10	40	8A	220AC/100VDC	179×76
	JCB-0I-16/22	50	5A	220AC/100VDC	275×76
	ZJB-16C/16		8A	220AC/100VDC	294×76
	Custom module				

TB16OUT-6.1
For SYNTEC system

TB16OUT-R8-1.0
For SYNTEC system

ZJB-40B/16M16
For MITSUBISHI system

ZJB-40B/10M10
For MITSUBISHI system

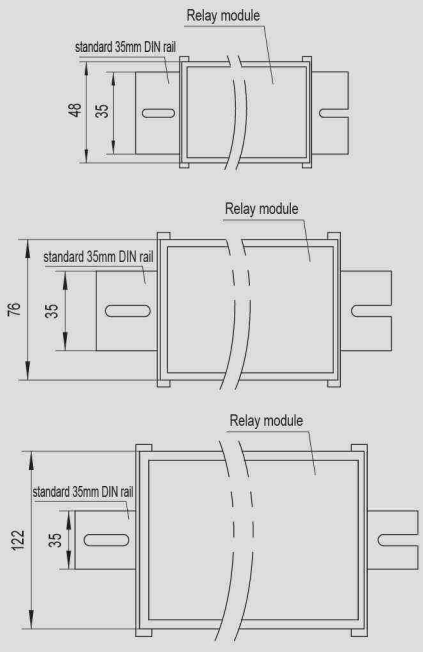
ZJB-50B/16F16
For FANUC/SIEMENS system

ZJB-50B/10F10
For FANUC/SIEMENS system

ZJB-16C/16
Universal Module

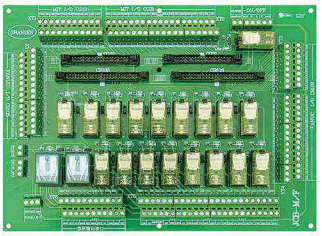
ZJB-FY-16
Universal Module

I. DIN rail mount

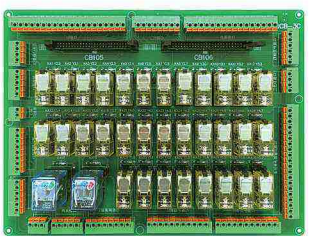


II. Custom modules

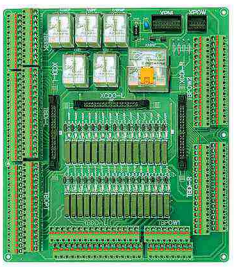
◎ Custom Integrated Modules



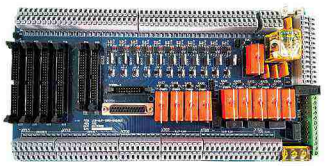
Custom versions 1



Custom versions 2



Custom versions 3



Custom versions 4

Interface Module / Data Distribution Module

FX series interface module is for data distribution from high density connectors to high quality screw-cage clamp terminal blocks for easy wiring and check. It has a wide application for I/O connection in automation and control industries.

◎Model Number FX－□ □ (L)

Model code

No. of pins

Connectors
B: flat connector
DZ: D type connector, male
D: D type connector, female
HZ: HTC connector, male
H: HTC connector, female

L: with indicator
-: without indicator

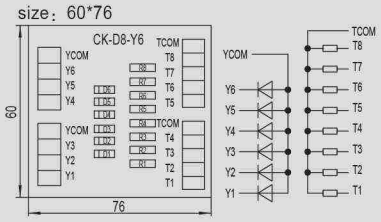
◎Technical Data and Dimensions

Item	Model	No. of pins	Max. current	Max. voltage	Inst. Dimensions
Interface module	FX-20B	20	100mA	50AC/30VDC	60×76
	FX-25D	25	100mA	50AC/30VDC	60×76 110×76
	FX-40B FX-40BL	40	100mA	50AC/30VDC	115×76
	FX-50B FX-50H	50	100mA	50AC/30VDC	162×76
	FX-50BZ (slim)	50	100mA	50AC/30VDC	140×48

Power, Pull-up Resistor and Reverse Voltage Module

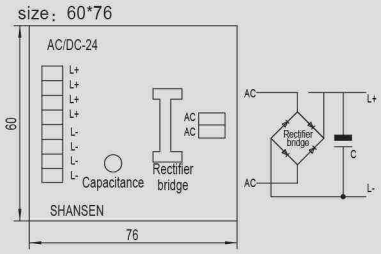
CK-D8-Y6 pull-up resistor and reverse voltage module can be used as the pull-up resistor for tool position signal on CNC machines. The diodes are used for release of reverse voltage in solenoid valves and other devices on machines. It is to be mounted on standard 35mm DIN rails.

size：60*76



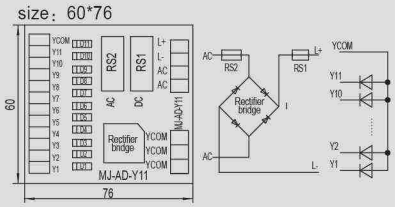
AC/DC-24V power module is to be mounted on standard 35mm DIN rails for easy routing. It is used as the power module on various machines.

size：60*76



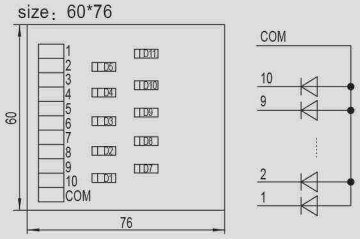
MJ-AD-Y11 power and reverse voltage module is to be mounted on standard 35mm DIN rails. The DC 24V power provides 5A power to CNC machines. The diodes are used for release of reverse voltage in solenoid valves and other devices on machines.

size：60*76



FX-KV10 reverse voltage module is used for release of reverse voltage in solenoid valves and other devices on machines. It is to be mounted on standard 35mm DIN rails.

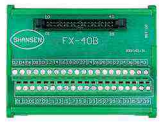
size：60*76



FX-50BZ

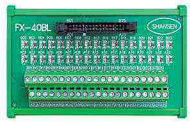
FX-25DZ

FX-DZP

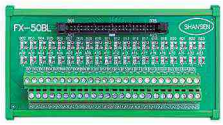


FX-40B

FX-40BZ

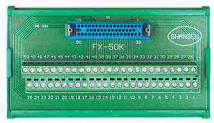


FX-40BL

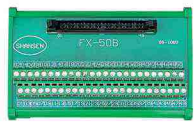


FX-50BL

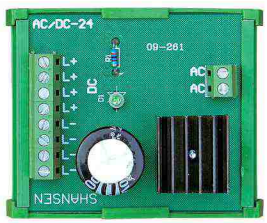
FX-25DZZ



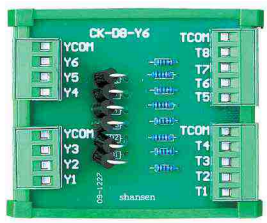
FX-50K



FX-50B

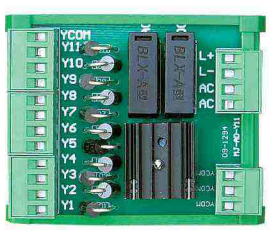


AC/DC-24



CK-D8-Y6

FX-KV10



MJ-AD-Y11

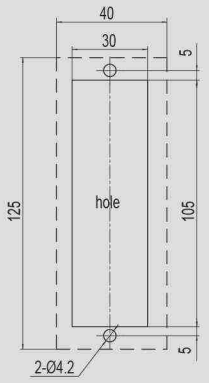
Communication Interface Module RS/40 Series

The interface is for communication between CNC machines and computers with 9-pin, 25-pin connectors, USB ports, network ports, etc. Data transfer cables and connectors are available at request.

◎ Model Number RS/ □–□□–□–□–□

- Model code
- Opening: 40 - 40mm width
- Connectors in the housing
  - N: C5 network port
  - U: USB port
  - 9K: 9-pin, female
  - 9Z: 9-pin, male
  - 25K: 25-pin, female
  - 25Z: 25-pin, male
- Cable length, if provided
- Connectors at the other end
  - N: C5 network port
  - U: USB plug
  - 9K: 9-pin, female
  - 9Z: 9-pin, male
  - 25K: 25-pin, female
  - 25Z: 25-pin, male

◎ Dimensions



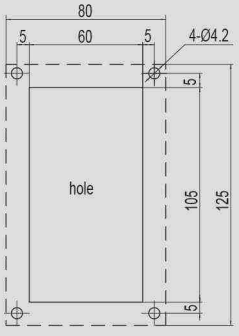
Communication Interface Module RS232 Series

◎ Model Number RS232 –□□–□–□–□

- Model code
- Connectors in the housing
  - N: C5 network port
  - U: USB port
  - 9K: 9-pin, female
  - 9Z: 9-pin, male
  - 25K: 25-pin, female
  - 25Z: 25-pin, male
- Cable length, if provided
- Connectors at the other end
  - N: C5 network port
  - 9K: 9-pin, female
  - 9Z: 9-pin, male
  - 25K: 25-pin, female
  - 25Z: 25-pin, male
  - F: FANUC 0i CNC connector

D: American standard power socket G: China standard universal power socket

◎ Dimensions



RS/40-N

RS/40-N-U

RS/40-9K

RS/40-25K

RS/40-9K-N

RS232-9K25K-G

RS232-25K-N-U

RS232-9K

RS232-N-U-G

RS232-9K-25K-N-D

RS232-9K-N-U-G

RS232-9K25K-1M-F
suitable for FANUC 0i CNC

RS232-9K25K-1M-S
suitable for SIEMENS 828D CNC

RS232-9KN-1M-9K

RS232-9K25K-N-D-1M-N

Hand-held MPG SE Series

◎Features

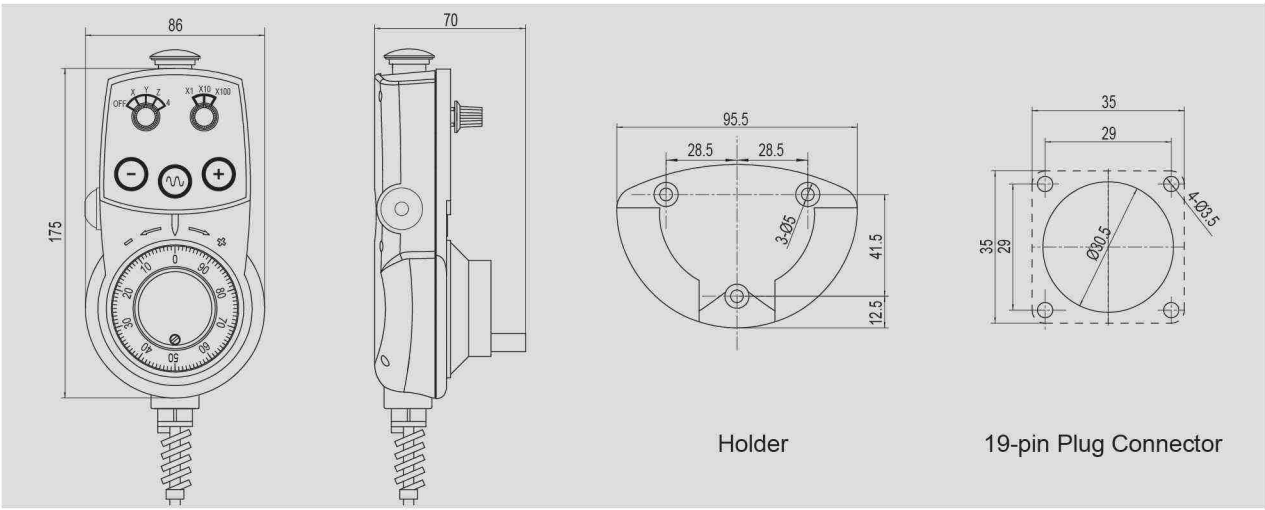
- Ergonomic and attractive design, easy to hold.
- High performance encoder, Zinc-alloy rotary switch.
- Strong magnet integrated for easy & firm mount together with a holder.
- Quality double shielded coiled cable, 200,000 stretching life cycles.
- Emergency stop button, enabling switches, manual/rapid pushbuttons available as options.
- Oil-proof housing, IP 65 protection.
- Patented design, patent No. ZL 2011 2 0290068 X.



◎Model Number

SE	-	Axes	-	Power	-	Pulses	-	Switches	-	Cable length	-	Connector	-	Emergency stop button	-	Enabling switches
Model code		2: OFF.X.Z 3: OFF.X.Y.Z 4: OFF.X.Y.Z.4 5: OFF.X.Y.Z.4.5 6: OFF.X.Y.Z.4.5.6 7: X.Y.Z.4.5.6.7		1: 5V 2: 5V differential 3. 12V 4. Others		25 100		D: rotary switch B: code switch		0: without 2: 2m 3: 3m 4: 4m 5: 5m 10: 10m		P: 19-pin plug connector -: loose flying lead		E: 1-channel E2: 2-channel -: without		S: 1 No. S2: 2 No. -: without

◎Dimensions



◎Wiring Table

No.	Wire Color	Rotary Switch	Code Switch	Functions
1	Red	+5V	+5V	Encoder
2	Black	0V	0V	
3	Yellow	HA	HA	
4	White	HB	HB	
5	Pink	HA-	HA-	Standby
6	Dark green	HB-	HB-	
7	Purple	COM	COM	Input common terminal
8	Yellow/black	X1	R1	Override
9	Light blue/black	X10	R2	
10	Transparent/black	X100	R4	
11	Brown	X	L1	Axis
12	Orange	Y	L2	
13	Light blue	Z	L4	
14	Dark blue	4	L8	
15	Transparent	-	-	Manual feed
16	Light purple	RAPID	RAPID	
17	Grey	+	+	Emergency stop
18	Red white	EMG	EMG	
19	Red black	EMGC	EMGC	

◎Code Table

Functions		Gray Code		
Axis		L4	L2	L1
	OFF	0	0	0
	X	0	0	1
	Y	0	1	1
	Z	0	1	0
	4	1	1	0
	5	1	1	1
	6	1	0	1
	7	1	0	0
Override		R4	R2	R1
	X1	0	0	1
	X10	0	1	1
	X100	0	1	0
	X1000	1	1	0

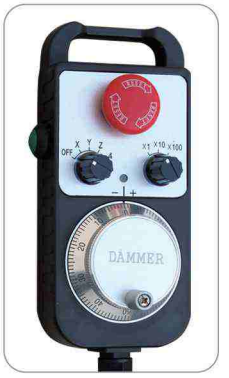
◎Notes

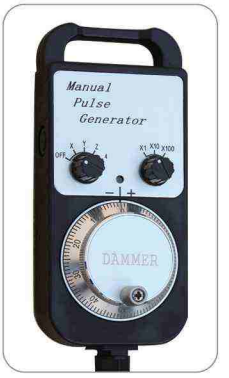
- Wire color in the table is for reference only. It may vary with the actual one.
- Coiled cable can be provided with labelled loose flying lead. Refer to the wiring table for a 19-pin plug connector (for number of axes less than 5). A socket will be provided for the plug connector. It is to be soldered on spot.
- Gray codes adopted for code switches (24V common terminal). Consult before ordering for 0V common terminal, fitting on MCPs with matrix circuits, or binary code switches.
- Tailor-made / customized hand-held MPG units are available at request.

Hand-held MPG SS Series

◎Features

- High performance encoder, Zinc-alloy rotary switch.
- DC 5V/12V power, with LED power indicator.
- Strong magnet integrated for easy & firm mount together with a mounting bracket.
- Quality double shielded coiled cable, 200,000 stretching life cycles.
- Modular design with diverse options, ie emergency stop button, enabling switches, etc.
- Oil-proof housing, IP 65 protection.

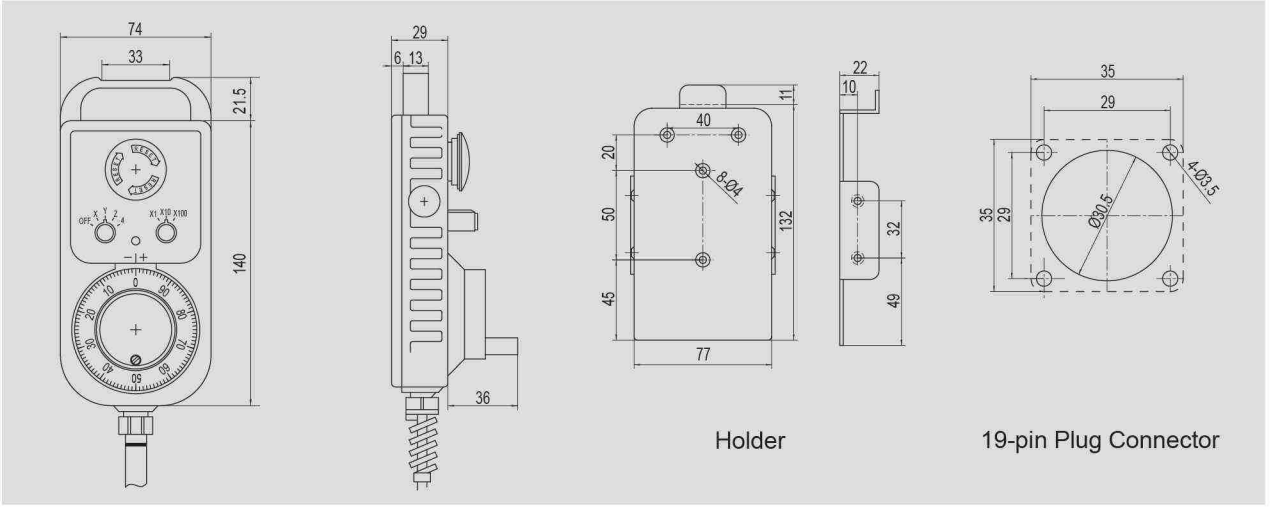




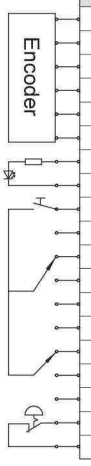
◎Model Number

SS -	Axes	-	Power	-	Pulses	-	Switches	-	Cable length	-	Connector	-	Emergency stop button	-	Enabling switches
Model code	2：OFF.X.Z 3：OFF.X.Y.Z 4：OFF.X.Y.Z.4 5：OFF.X.Y.Z.4.5 6：OFF.X.Y.Z.4.5.6		1: 5V 2: 5V differential 3. 12V 4. Others		25 100		D: rotary switch B: code switch		0: without 2: 2m 3: 3m 4: 4m 5: 5m 10: 10m		P: 19-pin plug connector -: loose flying lead		E: 1-channel E2: 2-channel -: without		S: 1 No. S2: 2 No. -: without

◎Dimensions



◎Wiring Table



No.	Wire Color	Rotary Switch	Code Switch	Functions
1	Red	+5V	+5V	Encoder
2	Black	0V	0V	
3	Yellow	HA	HA	
4	White	HB	HB	
5	Pink	HA-	HA-	Standby
6	Dark green	HB-	HB-	
7	Transparent	L+	L+	LED indicator
8	Light purple	L-	L-	
9	Purple	COM	COM	Input common terminal
10	Yellow/black	X1	R1	Override
11	Light blue/black	X10	R2	
12	Transparent/black	X100	R4	
13	Grey	OFF	OFF	Axis
14	Brown	X	L1	
15	Orange	Y	L2	
16	Light blue	Z	L4	
17	Dark blue	4	L8	
18	Red white	EMG	EMG	Emergency stop
19	Red black	EMGC	EMGC	

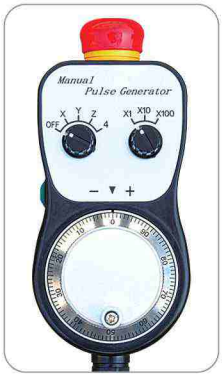
◎Code Table

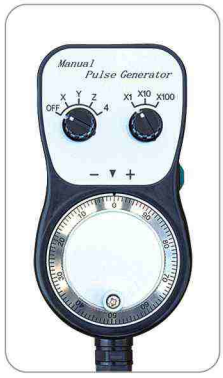
Functions		Gray Code		
Axis		L4	L2	L1
	OFF	0	0	0
	X	0	0	1
	Y	0	1	1
	Z	0	1	0
	4	1	1	0
	5	1	1	1
	6	1	0	1
Override		R4	R2	R1
	X1	0	0	1
	X10	0	1	1
	X100	0	1	0

◎Notes

- Wire color in the table is for reference only. It may vary with the actual one.
- Coiled cable can be provided with labelled loose flying lead. Refer to the wiring table for a 19-pin plug connector (for number of axes less than 5). A socket will be provided for the plug connector. It is to be soldered on spot.
- Gray codes adopted for code switches (24V common terminal). Consult before ordering for 0V common terminal, fitting on MCPs with matrix circuits, or binary code switches.
- Tailor-made / customized hand-held MPG units are available at request.

Hand-held MPG SM Series





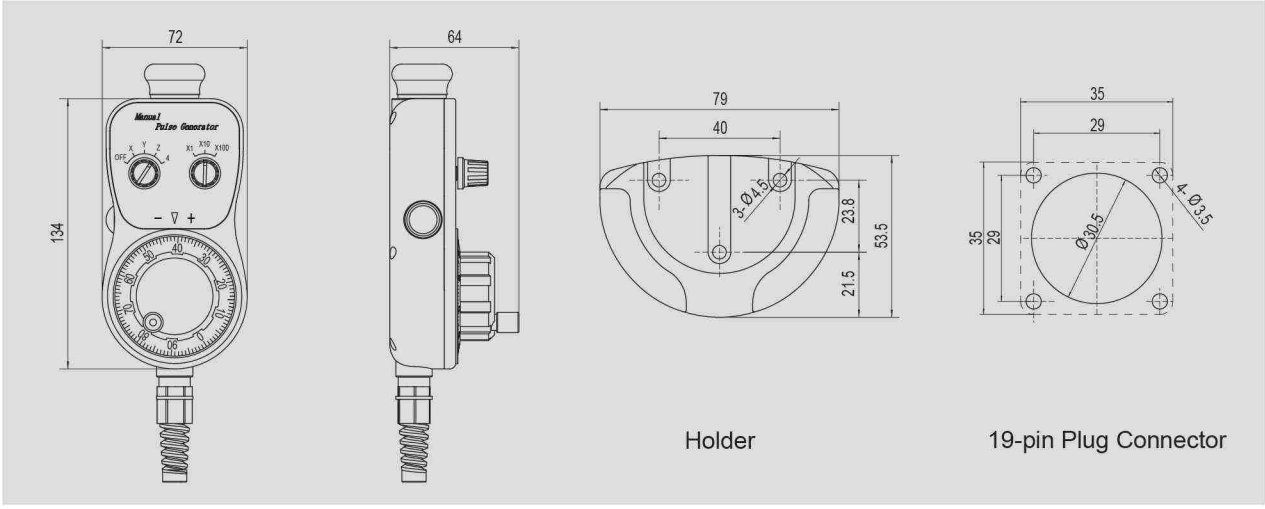
◎Features

- Unique and ergonomic design, easy to hold.
- Enabling switches can be installed on left or right side.
- High performance encoder, Zinc-alloy rotary switch.
- Strong magnet integrated for easy & firm mount together with a holder.
- Quality double shielded coiled cable, 200,000 stretching life cycles.
- Oil-proof housing, IP 65 protection.

◎Model Number

SM	-	Axes	-	Power	-	Pulses	-	Switches	-	Cable length	-	Connector	-	Emergency stop button	-	Enabling switches
Model code		2：OFF.X.Z 3：OFF.X.Y.Z 4：OFF.X.Y.Z.4 5：OFF.X.Y.Z.4.5 6：OFF.X.Y.Z.4.5.6 7：X.Y.Z.4.5.6.7		1: 5V 2: 5V differential 3. 12V 4. Others		25 100		D: rotary switch B: code switch		0: without 2: 2m 3: 3m 4: 4m 5: 5m 10: 10m		P: 19-pin plug connector -: loose flying lead		E: 1-channel E2: 2-channel -: without		LS: 1 No., left RS: 1 No., right S2: 2 No. -: without

◎Dimensions



◎Wiring Table

	No.	Wire Color	Rotary Switch	Code Switch	Functions
Encoder	1	Red	+5V	+5V	Encoder
	2	Black	0V	0V	
	3	Yellow	HA	HA	
	4	White	HB	HB	
	5	Pink	HA-	HA-	Standby
	6	Dark green	HB-	HB-	
	7	Transparent	L+	L+	LED indicator
	8	Light purple	L-	L-	
	9	Purple	COM	COM	Input common terminal
	10	Yellow/black	X1	R1	Override
	11	Light blue/black	X10	R2	
	12	Transparent/black	X100	R4	
	13	Grey	OFF	OFF	Axis
	14	Brown	X	L1	
	15	Orange	Y	L2	
	16	Light blue	Z	L4	
	17	Dark blue	4	L8	
	18	Red white	EMG	EMG	Emergency stop
	19	Red black	EMGC	EMGC	

◎Code Table

Functions	Gray Code			
Axis		L4	L2	L1
	OFF	0	0	0
	X	0	0	1
	Y	0	1	1
	Z	0	1	0
	4	1	1	0
	5	1	1	1
	6	1	0	1
	7	1	0	0
Override		R4	R2	R1
	X1	0	0	1
	X10	0	1	1
	X100	0	1	0
	X1000	1	1	0

◎Notes

- Wire color in the table is for reference only. It may vary with the actual one.
- Coiled cable can be provided with labelled loose flying lead. Refer to the wiring table for a 19-pin plug connector (for number of axes less than 5). A socket will be provided for the plug connector. It is to be soldered on spot.
- Gray codes adopted for code switches (24V common terminal). Consult before ordering for 0V common terminal, fitting on MCPs with matrix circuits, or binary code switches.
- Tailor-made / customized hand-held MPG units are available at request.

Signal Lights LA340B-3

◎Features

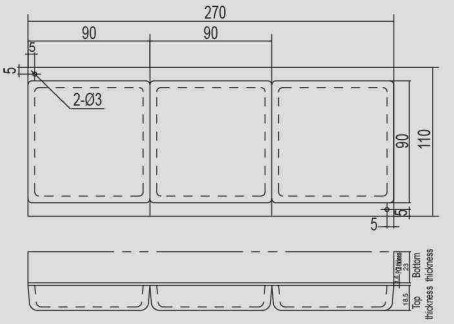
- Neat attractive design
- High luminosity, high purity with uniform light distribution
- Easy to install, long life, maintenance free

◎Technical Data

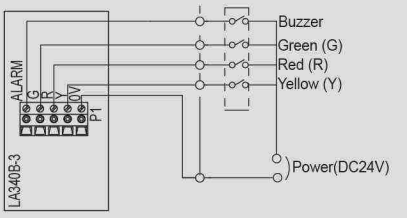
Rated Voltage	DC24V $^{+10\%}_{-15\%}$
Ambient Temperature	-20 ~ 60℃
Colors	Red Yellow Green
Power	≤3W

Signal Lights LA340B-3

◎Dimensions



◎Wiring Diagram



Continuous Light

Signal Lights JCB-8

◎Features

- Unique design with aesthetic shape, high quality lense, easy to install and maintain
- Superior high indensity LED, soft light with patented reflection system in the lens, high visibility
- AC/DC power, various sizes available
- 90°foldable, easy to pack and transport
- Patented design, patent No. ZL 2017 1 0185027 6

◎Model Number

JCB-8 □

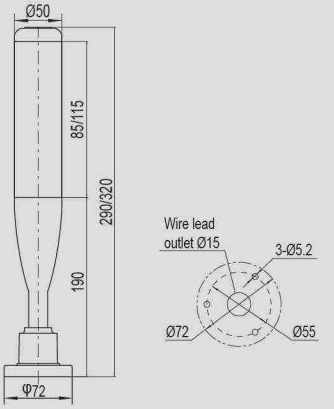
- Signal body length B:115 C:85
- Model code

◎Technical Data

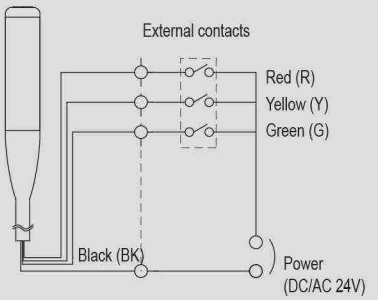
Rated Voltage	DC24V $^{+10\%}_{-15\%}$
Ambient Temperature	-20 ~ 60℃
Colors	Red Yellow Green
Power	≤3W

Foldable for Easy Pack and Transportation

◎Dimensions



◎Wiring Diagram: Continuous Light



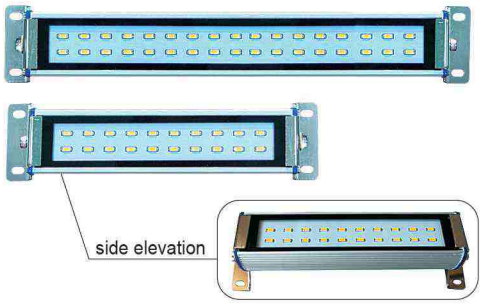
Signal Lights of Different Sizes

Work Light: JCLB Series

With big power LED diodes, the JCLB series work light features waterproof, anti-corrosion, energy-saving, environment friendly and long life.

◎Features

- Attractive & rugged housing, made of aircraft / aerospace grade aluminium profiles
- Superb structure design with excellent heat dissipation
- High flexibility with swivel bracket for ±45°adjustment
- Superior quality LED with evenly distributed light and high energy efficiency
- Flexible 304 grade stainless steel hose for efficient cable protection even in harsh conditions
- IP67 protection, water & dust-proof



◎Model Number

JCL - B - A - 1 - 6W - M - S1 - T - 1m

- Model code
- Design number
- A: 45mm width / B: 60mm width
- Mounting size number
- LED power
- Cable length -: 1m
- T: adjustable mounting bracket / -: fixed mounting bracket
- S: stainless steel cable hose with connector / -: cable without hose, to be clamped with clips
- M: opaque glass -: transparent glass

◎Application

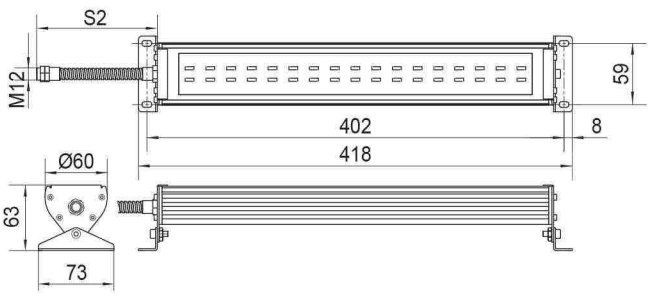
Lighting for various CNC machines, combined machines and other industrial equipments.

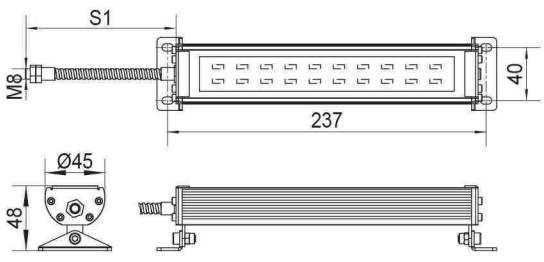
◎Technical Data

Luminous efficiency	Color temperature	Light angle	Working voltage	Life	Ambient temperature
60Lm/W	3800-4300	138°	DC24V±2V	50000h	-30℃ - 60℃

◎Dimensions

		Installation Dimensions				LED power	Cable hose
		Fixed Mounting Bracket		Adjustable Mounting Bracket (Max.)			
A	Light 45mm width	1	L210-40	2	L200-40	6W	S1=300mm Ø8.2mm hole
		3	L247-40	4	L237-40	6W	
		5	L402-40	6	L392-40	9W,12W	
B	Light 60mm width	1	L210-59	2	L200-59	7.5W	S2=300mm Ø12.2mm hole
		3	L247-59	4	L237-59	7.5W	
		5	L402-59	6	L392-59	12W,18W	





◎Cable Kit for CNC Machines

- Well knowledge of various CNC controller interfaces
- Professional production and testing equipment
- Tailor-made / custom cables available
- Cable cores are made of high grade copper with shielding layer protection
- Manufacturing according to international standards


Cable Kit for FANUC System


Cable Kit for Mitsubishi System


Cable Kit for Siemens System


Cables Kit for Other CNC Systems

◎Interface Cables

Diverse connectors can be equipped on the FK series cables. They can be used for easy and reliable connection between I/O interfaces of CNC controller PLC and industrial control PLCs and control panels, relay modules, interface modules and other transfer modules.

Notes: Provide details of specifications, length and special requirements before ordering. List of standard cables are available at request.

◎Model Number

FK □ □ / □ □ — □ M

- Model Code
- Number of Cable Cores
- Type of Cable
  - \- Normal round cable
  - P Round shielded twisted pair cable
  - B Flat cable
- Cable length
- Connectors
  - \- Loose flying lead
  - H HTC connector, male
  - HK HTC connector, female
  - B Flat connector
  - D D-type connector, male
  - DK D-type connector, female


FK50/BB-XM


FK50B/BB-XM


FK25/D-XM