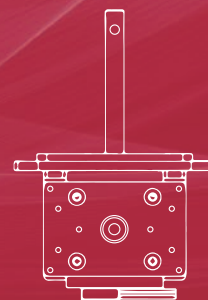


C11 series

Multi-axis joystick



PRODUCT FEATURES

- Z-type operation, Heavy duty friction operation
- Redundant security protection, mechanical lock and electronic lock available
- Large travel angle design
- Non-Contacting hall effect technology, high reliability, long life time
- IP67 (electronic part)

MARKET FOCUS

- Agricultural machinery
- Control panel
- Armrest box controller



TECHNICAL SPECIFICATIONS

① Mechanical data

- Travel angle: $-20^{\circ}\sim+35^{\circ}$ (Z-type operation), $\pm 35^{\circ}$ (Single axis operation)
- Operating force*: 30 ~ 40N
- Mechanical life: 3 million cycles
- Product weight: 1050g
- * The measuring point is 100 mm from the pivot center

② Electrical data

- Supply Voltage(Vs): $5.0\pm 0.5\text{Vdc}$ or 9~32Vdc
- Power current consumption: <10mA (per channel)
- Center voltage: $2.5\text{V}\pm 3\% \text{Vs}$
- Maximum linearity tolerance: $\pm 3\%$
- Maximum overload voltage: 24Vdc
- Maximum reverse voltage: -12Vdc
- Load resistance: 10K Ω
- Insulation resistance: >1000M Ω
- Microswitch rated current: 2A@30Vdc

③ Environmental data

- Operating temperature: $-30^{\circ}\text{C}\sim+70^{\circ}\text{C}$
- Storage temperature: $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$
- Protection class: IP67 (electronic part)

ORDERING CODES

C11 - ① - ② - ③ - ④ - ⑤

① Operating mode

F1	Single axis operation, friction positioning, the middle slot can feel the position of the handle, square shape stop plate, without dust cover
F2	Single axis operation, friction positioning, the middle slot can feel the position of the handle, circle shape stop plate, with dust cover
Z1	Z-type operation, Y axis friction positioning, X axis spring return, center detent, square shape stop plate, without dust cover
Z2	Z-type operation, Y axis friction positioning, X axis spring return, center detent, circle shape stop plate, with dust cover

② Output signal

H11	Supply voltage 5Vdc, 10%~50%~90%Vs ratiometer output
H13	Supply voltage 5Vdc, 20%~50%~80%Vs ratiometer output
H14	Supply voltage 5Vdc, 25%~50%~75%Vs ratiometer output
H21	Supply voltage 5Vdc, 10%~50%~90%Vs and 90%~50%~10%Vs redundant ratiometer output
H23	Supply voltage 5Vdc, 20%~50%~80%Vs and 80%~50%~20%Vs redundant ratiometer output
H24	Supply voltage 5Vdc, 25%~50%~75%Vs and 75%~50%~25%Vs redundant ratiometer output
W11	Supply voltage 9~32V, 0.5~2.5~4.5V output
W13	Supply voltage 9~32V, 1~2.5~4V output
W14	Supply voltage 9~32V, 1.25~2.5~3.75V output
W21	Supply voltage 9~32V, 0.5~2.5~4.5V and 4.5~2.5~0.5V redundant output
J33	CAN Bus output, protocol J1939, node address 33
J34	CAN Bus output, protocol J1939, node address 34
J35	CAN Bus output, protocol J1939, node address 35
J36	CAN Bus output, protocol J1939, node address 36
CA	CAN Bus output, protocol CANopen

③ Micro switch

N	No microswitch
S1	Normally closed push button switch in the middle position

ORDERING CODES

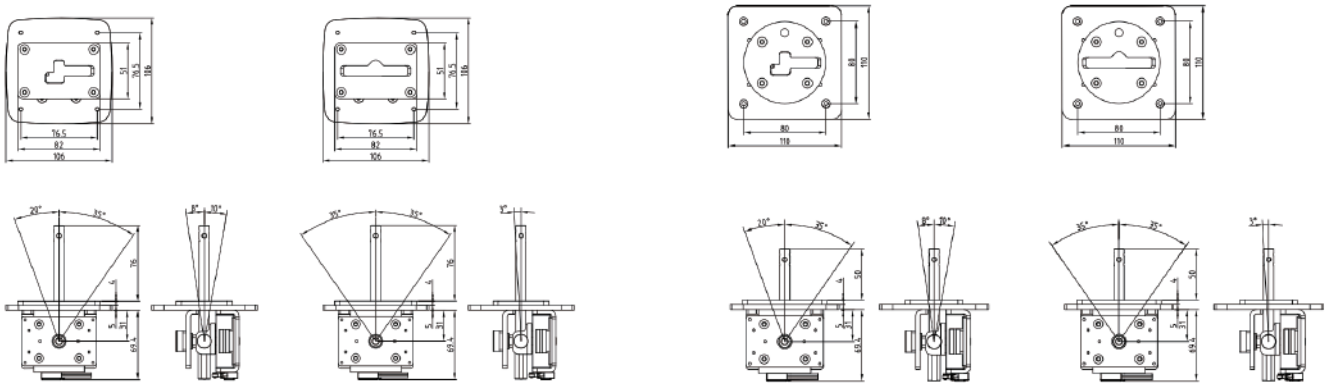
④ Handle options

N	No handle
HA	HA handle
HB	HB handle, without top switch
HBS	HBS handle, with top switch
HBR	HBR handle, with top rocker switch
HD	HD handle, without top switch
HDS	HDS handle, with top switch
HDR	HDR handle, with top rocker switch
K6DR	K6 handle, with deadman switch and top rocker switch
K2##	K2 handle, refer to K2 manual for detailed configurations
K4##	K4 handle, refer to K4 manual for detailed configurations

⑤ Wiring

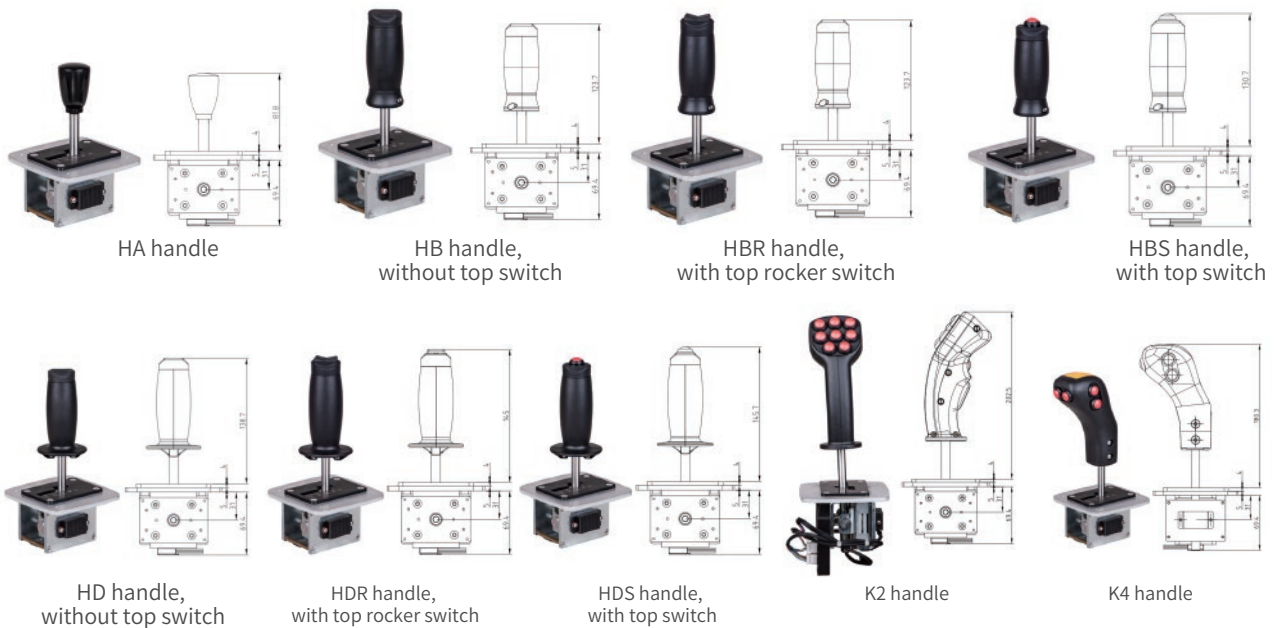
L	Cable wiring (default)
C	Connector (custom design)

SHAPE DIMENSIONS



Without dust-proof rubber

With dust-proof rubber



INSTALL

MECHANICAL INSTALLATIONS

