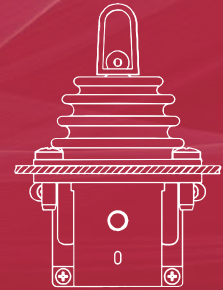


C12 series

Single axis joystick



PRODUCT FEATURES

- Small size, single axis fingertip-operated, spring return or friction positioning
- Non-contacting hall effect technology, high reliability, long life time
- Supply voltage 9-32Vdc
- Forward and backward operation or Unidirectional operation
- Optional front and rear directional switch

MARKET FOCUS

- Industrial remote controller
- Control panel
- Electrohydraulic control system
- Industrial automation



TECHNICAL SPECIFICATIONS

① Mechanical data

- Travel angle: $\pm 25^\circ$
- Operating force*: 5-20N
- Mechanical life: >2 million cycles
- Product weight: Appr. 95g
- * The measuring point is 60mm from the pivot center

② Electrical data

- Supply voltage(Vs): $5.0 \pm 0.5\text{Vdc}$ or 9~32Vdc
- Power current consumption: <11mA (per channel)
- Center voltage: $2.5\text{V} \pm 3\%V_s$
- Output linearity tolerance: $\pm 3\%$
- Maximum overload voltage: 24Vdc
- Maximum Reverse voltage: -12Vdc
- Load resistance: 10K Ω

③ Environmental data

- Operating temperature: -40°C~+85°C
- Storage temperature: -40°C~+85°C
- Protection class: IP67 (electronic part)
- EMC: EN6100-6-4-2007, 30MHz-1GHz
EN6100-6-2-2019, 80MHz-6GHz

ORDERING CODES

C12 - ① - ② - ③ - ④

① Operation mode

A1	Forward and backward operation, spring return
A2	One-way operation, from Y- to Y+ direction, spring return
A3	One-way operation, from Y+ to Y- direction, spring return (reverse installation)
A4	Forward and backward operation, friction positioning

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
L11	Supply voltage 3.3V, 10%~50%~90%Vs output
W11	Supply voltage 9~32Vdc, 0.5~2.5~4.5V output
W13	Supply voltage 9~32Vdc, 1~2.5~4V output
W14	Supply voltage 9~32Vdc, 1.25~2.5~3.75V output
W21	Supply voltage 9~32Vdc, 0.5~2.5~4.5 V and 4.5~2.5~0.5V redundant output
W23	Supply voltage 9~32Vdc, 1~2.5~4V and 4~2.5~1V redundant output
W24	Supply voltage 9~32Vdc, 1.25~2.5~3.75V and 3.75~2.5~1.25V redundant output

③ Micro switch

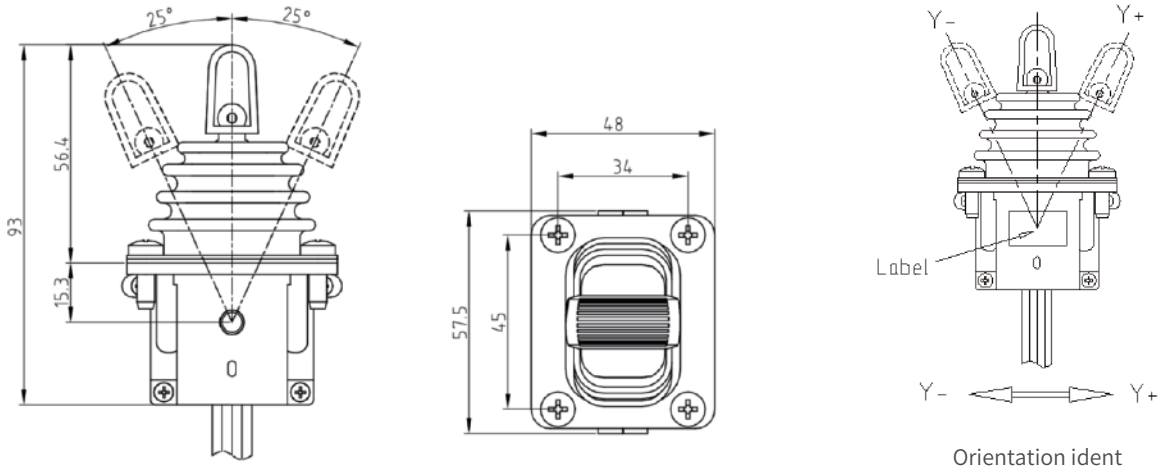
N	Without micro switch
S1	With center position switch
S2	With forward and backward switch
S3	With one switch in the middle position, two switches in front and rear position

*No micro switch fitted with the friction hold function

④ Wiring

L	Cable wiring (length 330mm)
---	-----------------------------

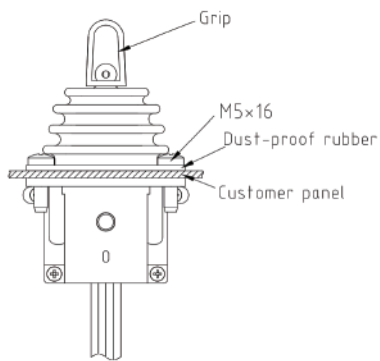
SHAPE DIMENSIONS



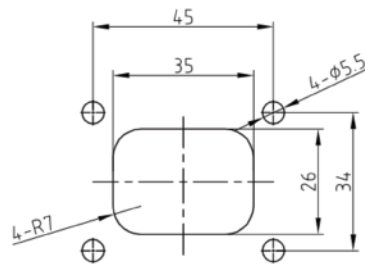
INSTALL

① MECHANICAL INSTALLATIONS

Note: The thickness of the panel $\leq 4\text{mm}$



Mounting diagram



Panel cut-out dimensions

② ELECTRICAL CONNECTIONS

No.	Color	Hall Effect	Redundant hall effect
1	Red	VCC(5V)	VCC(9~32V)
2	Black	GND(0V)	GND(0V)
3	Purple	-----	VCC(5V)
4	Yellow	A-out	A-out
5	Green	-----	B-out