
















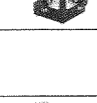





SELECTION GUIDE FOR OUR JOYSTICK CONTROLLERS

Models	Features
 H25JB	Very small-sized, joystick controller for industrial use, which accomplished long life-expectancy, high reliability, and robustness. This model can be assembled from both above and under the panel. Possible to be mounted on our cobra shaped knob.
 30JB	Most miniaturized series in our joystick controllers. 3-dimensional coordinate type is also available. Spring return device is incorporated inside housing case, and it automatically returns an operating lever to the center position.
 30JE	Modified version of type 30JB, and switches are incorporated inside housing case, instead of potentiometers. Spring return device is incorporated inside housing case.
 30JH	Low-cost version of 3-dimensional coordinate type joystick controllers and no other dimensional coordinate is available. Spring return device and dust-proof rubber cover are fitted as standard version.
 H30JH	Low-cost version of 3-dimensional coordinate type joystick controller incorporated a hall effect IC type resistive element. It offers long life expectancy and high reliability.
 30JL	Low-cost version of 1-dimensional coordinate type joystick controller and no other dimensional coordinate is available. Spring return device is fitted as standard version.
 H30JL	Low-cost version of 1-dimensional coordinate type joystick controller incorporated a hall effect IC type resistive element.
 40JB	Low-cost version with widest operating angle among our miniaturized joystick controllers.
 40JE	Almost same outer dimensions as low-cost type 40JB and incorporates code switches of digital output, instead of potentiometers. Spring return device is fitted as standard version.
 H40JH	Low-cost version of 3-dimensional coordinate type joystick controller incorporated a hall effect IC type resistive element. It offers high-protection and several special outputs.
 50JA	Most standardized joystick controllers. Various special specifications are easily available.
 H50JA	H50JA type joystick controller incorporating a hall effect IC type potentiometer, which suits especially for the application with strong vibration.
 50JC	Very robust structure featuring dust-proof rubber cover and spring return device, which automatically returns an operating lever to the center position as standard.
 60JB	Low-cost type. Spring return device is incorporated inside housing case, and it automatically returns an operating lever to the center position.
 H60JH	Low-cost version of 2-dimensional coordinate type joystick controller with hall effect IC incorporated, which features the robust structure, and high load strength to the knob.
 HMC60JH	Joystick controller with the mini-cobra shaped knob, which is the down sized version of our cobra shaped knob. The dead-man switch is available on the knob for safety design.
 90JA	Robust structure featuring sealed housing case, dust-proof rubber cover, and spring return device as standard. Various special knob shapes are available. Suitable for outdoor applications.
 90JB	Almost same specifications as 90JA type, but potentiometers are incorporated inside housing. Suitable for space-saving inside the cabinet.
 H90JA	H90JA types joystick controller incorporating a hall effect IC type potentiometer, which offers long life expectancy, high reliability and safety, and are best suitable for special vehicles with strong vibration.
 H90JB	H90JB types joystick controller incorporating a hall effect IC type potentiometer, which offers long life expectancy, high reliability and safety, and are best suitable for special vehicles with strong vibration.
 C90JAC90JB	90JA or 90JB types joystick controller mounted with cobra shaped knob, which suits for multi-directional operations such as robot operations. It is possible to operate complex functions with push button switches and seesaw motion potentiometer incorporated in the knob.
 100JB	This model has a seesaw type potentiometer as Z axis potentiometer and only 3-dimensional coordinate type is available. Suitable for various indoor applications.

Kind of element	Potentiometers' Mounting Method		Switch	Degree of Protection (IP code) (Note 1)		Life Expectancy (Note 2) (Unit: Ten Thousand)	Applications	Page
	Outside	Inside		Standard Version (No Rubber cover)	Special Version with Rubber Cover			
Hall effect IC Type	—	○	—	IP54		Abt. 200	Image processing devices, studio-related apparatuses, medical instruments, etc.	10, 11
Conductive Plastic Type	—	○	—	IP40	IP54 (2 axes type only)	Abt. 500	Various kinds of measuring devices, electromotive wheelchairs, robot operations, precision machine tools, etc.	12, 13
—	—	—	○	IP40	IP54 (2 axes type only)	Abt. 100	Medical instruments, studio-related apparatuses, industrial vehicles, etc.	14, 15
Conductive Plastic Type	—	○	—	IP65		Abt. 200	Medical instruments, robot operations, 3-dimensional coordinate measuring apparatuses, etc.	16, 17
Hall effect IC Type	—	○	—	IP40	IP54	Abt. 100	Medical instruments, security camera operations, etc.	18, 19
Conductive Plastic Type	—	○	—	IP65		Abt. 200	Medical instruments, industrial vehicles, robot operations, crane operations, etc.	20, 21
Hall effect IC Type	—	○	—	IP65		Abt. 500	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	22, 23
Conductive Plastic Type	—	○	—	IP40	IP54	Abt. 500	Image processing devices, electromotive wheelchairs, medical instruments, etc.	24, 25
—	—	—	○	IP40	IP54	Abt. 500	Medical instruments, industrial vehicles, robot operations, etc.	26, 27
Hall effect IC Type	—	○	—	IP65		X·Y: Abt. 500 Z: Abt. 300	Various kinds of tooling machine, robot operation, security camera operation, 3-dimensional coordinate measuring apparatus, etc.	28, 29
Conductive Plastic Type	○	—	—	IP40	IP54 (Consult 3 axes type)	Abt. 500	3-dimensional coordinate measuring apparatuses, CAD/CAM/CAE display devices, robot operations, etc.	30, 31
Hall effect IC Type	○	—	—	IP40	IP54 (Consult 3 axes type)	Abt. 1,000	Various kinds of tooling machine, robot operation, conveyer system, etc.	32, 33
Conductive Plastic Type	○	—	—	IP54		Abt. 500	Precision equipment for industrial use, construction machinery, crane operations, etc.	34, 35
Conductive Plastic Type	—	○	—	IP40	IP54 (2 axes type only)	Abt. 500	3-dimensional coordinate measuring apparatuses, image processing devices, robot operations, etc.	36, 37
Hall effect IC Type	—	○	—	IP65		Abt. 500	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	38, 39
Hall effect IC Type	—	○	—	IP40		X·Y: Abt. 500	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	40, 41
Conductive Plastic Type	○	—	—	IP65		Abt. 500	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	42, 43
Conductive Plastic Type	—	○	—	IP65		Abt. 500	Robot operations, crane operations, industrial vehicles, precision machine tools, etc.	42, 43
Hall effect IC Type	○	—	—	IP65		Abt. 500	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	44, 45
Hall effect IC Type	—	○	—	IP65		Abt. 1,000	Robot operations, crane operations, industrial vehicles, civil engineering and construction machinery, etc.	44, 45
Conductive Plastic Type	(C90JA)	(C90JB)	—	IP40		X·Y: Abt. 500	Medical instruments, industrial vehicles, robot operations, etc.	46, 47
Conductive Plastic Type	—	○	—	IP40		X·Y: Abt. 500 Z: Abt. 200	3-dimensional coordinate measuring apparatuses, image processing devices, industrial vehicles, robot operations, etc.	48, 49

Note 1) IP degree can apply to only the part including the lever above mounting panel and as for the details of IP degree, please see page 63. Other "IP degrees" are available on request.

Note 2) Life expectancy is approximate number of mechanical operations under the normal operational conditions, therefore please consider this value as rough indication when designing and selecting. In case of severe environmental conditions such as vibration, shock, high humidity, higher or lower temperature, extreme operations over partial part and etc., please consider these factors when reading these values. Note * please see page 9