To Use This Product Safely

Be sure to read this before use.

For general cylinder information, see Intro 41, and for cylinder switches, see P. 924.

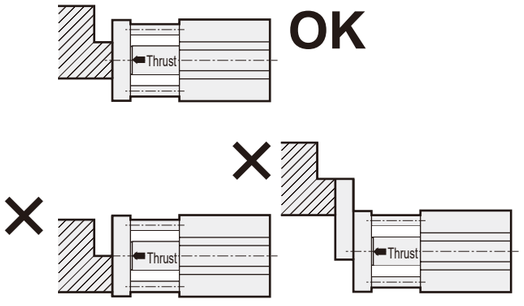
During Design / Selection

Caution

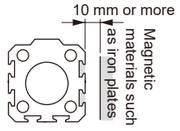
■ Use within the allowable load. Exceeding the allowable lateral load or allowable rotational torque may cause damage. Refer to the technical data on P. 345.

■ Do not use as a stopper. Use this product for applications such as pushers and lifters where impact lateral loads are not applied.

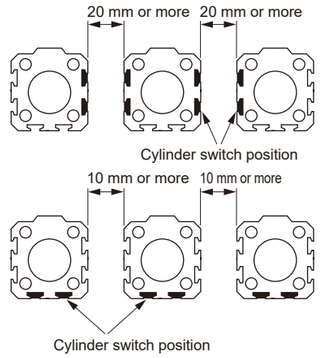
■ When used by pressing in the middle of the stroke, use it so that the thrust acting on the end plate is applied in the axial direction of the piston rod. When pressing in the middle of the stroke, such as with a clamp, thrust acts on the end plate, and pressing at an eccentric position may cause component damage. Use with the axis of the piston rod as shown in the diagram below.



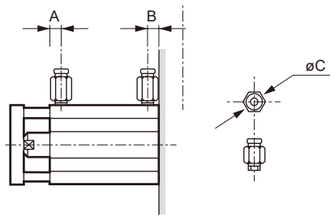
■ If there is a magnetic material such as an iron plate near the cylinder switch, it may cause malfunction. Maintain a distance of 10 mm or more from the cylinder surface. (Same for all bore sizes)



■ If cylinders are adjacent, it may cause cylinder switch malfunction. Maintain the following distance from the cylinder surface. (Same for all bore sizes)



■ Always use a speed controller when piping. There are restrictions on usable piping fittings. Refer to the following and use accordingly.



Item / Bore size (mm)	Port Size	Port position dimension A	Port position dimension B	Usable Fittings	Fitting outer diameter øC	Unusable Fittings
ø12	M5	5.5	5.5	SC3W-M5-4 SC3W-M5-6 GWS4-M5-S GWS4-M5 GWL4-M5 GWL6-M5	ø11 or less	GWS6-M5
ø16						
ø20		8	5.5			
ø25		11	6			
ø32	Rc1/8 *1	8	8	SC3W-6-4,6,8 GWS4-6 GWS6-6 GWS8-6 GWL4-6 GWL6-6	ø15 or less	GWS10-6 GWL8-6 GWL10-6
ø40		12	8.5			
ø50	Rc1/4	10.5	10.5	SC3W-8-6,8,10 GWS4-8 GWS6-8 GWS10-8 GWL4 to 12-8	ø21 or less	GWS12-8
ø63		13	11			
ø80	Rc3/8	16	13	SC3W-10-6,8,10 GWS6-10 GWS8-10 GWS10-10 GWL6 to 12-10	ø21 or less	-
ø100		23	15			

*1: For ø32 without switch, 5 strokes, the port diameter will be M5. For port position dimensions, refer to the outline dimension drawing.

■ Avoid making dents, scratches, etc., on the end plate surface that would impair its flatness. The flatness of the mating side included to the end plate should be 0.05 mm or less.

■ Allowable absorbed energy value
Use within the range of allowable absorbed energy. If used exceeding the allowable absorbed energy, provide a separate external shock absorber. For the allowable absorbed energy value, refer to the specifications section.

During Use

Caution

■ Do not disassemble this product. If disassembled, performance may no longer be maintained.

For precautions regarding mounting, installation, adjustment, use, and maintenance, please see "Precautions for Use" in this catalog and the CKD Components Product website (https://www.ckd.co.jp/kiki/en/) -> "Model No." -> Instruction Manual .