



To Use This Product Safely

Be sure to read this before use.

For general information on cylinders, please see Intro P. 41, and for cylinder switches, please see P. 808.

Individual Precautions: Compact guided cylinder STM series

During Design / Selection

1. Common

Caution

■ When using a solid state 2-color indicator switch with STM-B-6, do not attach it to magnetic materials such as iron plates. This will cause switch detection failure.

2. With switch

Caution

■ Install the switch while adhering to the tightening torque.
If tightened beyond the tightening torque range, mounting screws, mounting brackets, switches, etc. may be damaged. Also, if tightened below the tightening torque range, the switch mounting position may shift. Tightening torque: 0.03 to 7.0 N·m

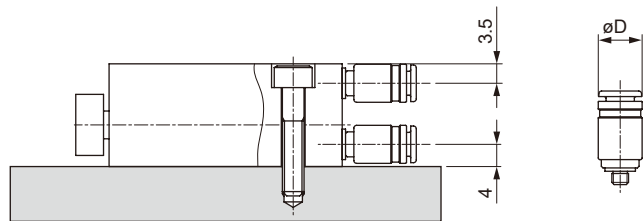
During Use

1. Common

Caution

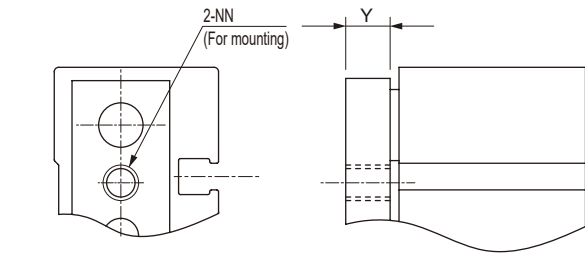
■ Be sure to use a speed controller when piping. Also, the usable fittings when mounting with through bolts for the rear piping type are as follows.

Bore Size	Port Size	Usable fittings / speed controllers	Fitting outer diameter D
ø6 ø10	M3	SC3W-M3-□ SC3U-M3-□	ø8
		FTS4-M3 FTL4-M3	
		GWS□-M3-S	
		PTN2-M3 PTNL-M3	



■ To prevent an increase in sliding resistance, do not make dents or scratches on the tube body mounting surface and end plate surface that may impair flatness. The flatness of the mating side to be included to the end plate should be 0.02 mm or less. If it is difficult to ensure the above flatness, insert shims (customer prepared), etc. between the end plate and the workpiece to adjust the gap. This may help prevent an increase in sliding resistance.

■ When attaching a jig, etc. to the end plate, ensure that the bolt screw-in length is equivalent to the Y dimension. This will cause damage to the end plate.



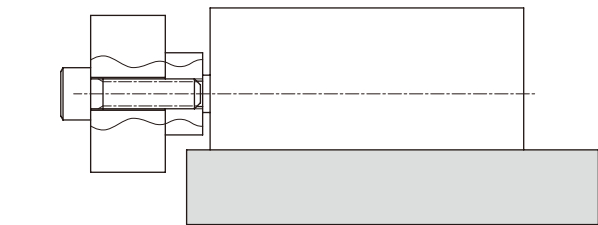
Bore Size (mm)	Y dimension
ø6	5
ø10	

■ A rubber cushion is incorporated as a cushion mechanism. The table below shows the kinetic energy that can be absorbed by the rubber cushion. If the energy exceeds this value, consider a separate shock absorber.

Bore Size (mm)	Allowable Absorption Energy (J)
ø6	0.008
ø10	0.054

■ When attaching a workpiece to the end plate, tighten with the tightening torque shown in the table below.

Bore Size (mm)	Thread Size	Tightening Torque (N·m)
ø6	M3	0.6
ø10	M4	1.6



■ This cylinder is a non-disassembly type. Do not forcibly disassemble.

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