Safety Precautions

Be sure to read this section before use.

Refer to Intro Page 73 for general information of the cylinder, and to Intro Page 80 for general information of the cylinder switch.

Product-specific cautions: Stopper cylinder STK Series

Design/selection

1. Common

⚠CAUTION

■ When using a stopper cylinder to brake loads directly connected to cylinder, etc

● The specified range is only for stopping pallets on the conveyor. When using a stopper cylinder to stop loads directly connected to cylinder, etc., because the cylinder thrust is applied as a lateral load, select the cylinder within the range of allowable absorbed energy and allowable lateral load.

2. Single acting STK-Y

⚠CAUTION

■ Do not apply pressure from the head side for the single acting.

● If air is introduced for the head side for single acting, air leakage will occur.

Mounting, installation and adjustment

1. Common

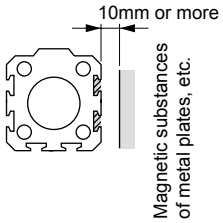
⚠CAUTION

■ Do not apply rotation torque to the piston rod. Attach the piston rod so that the rod contact surface is parallel to the pallet contact surface in order that torque is not applied.

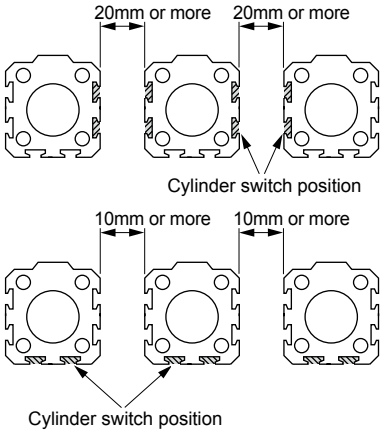
■ Avoid using oil, etc., for the piston rod sliding section.

● Otherwise, cylinder malfunctions, etc., may result.

■ The cylinder switch could malfunction if there is a magnetic substance such as a metal plate installed adjacently. Confirm that a distance of at least 10 mm is allocated from the surface of the cylinders.
(Same clearance for all bore sizes)



■ The cylinder switch could malfunction if cylinders are installed adjacently. Check that the following distances are allocated between cylinders.
(Same clearance for all bore sizes)



2. Single acting STK-Y

⚠CAUTION

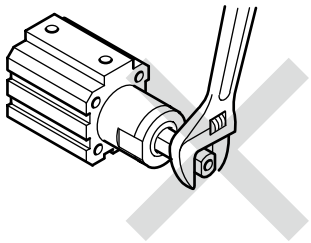
■ Do not leave the single acting cylinder pressurized. If it is left pressurized, the piston rod may not be returned by the spring force when the pressure is released.

3. Rod end form chamfered type with female thread STK-M-N11

⚠CAUTION

■ Avoid using the product so as to apply rotation torque to the piston rod.
The spacer for rotation-stop comes off and the direction of the chamfered piston rod is changed.

■ When fixing a workpiece onto the end of the piston rod, push the piston rod to the stroke end and apply a wrench to the section projecting from the rod's parallel section. Be careful when tightening so that torque is not applied to the cylinder body.

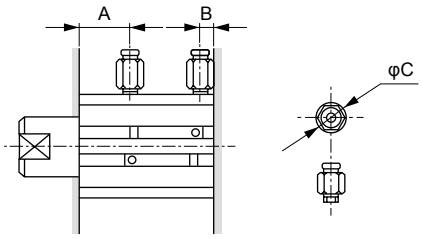


Use/maintenance

1. Common

⚠CAUTION

■ As compatible piping fittings are limited, refer to the table below to select the fitting.



Descriptions / Bore size (mm)	Port size	Port position dimensions A	Port position dimensions B	Applicable fittings	Fitting O.D. φC	Inapplicable fittings
φ20	M5	8	5.5	SC3W-M5-4 SC3W-M5-6 GWS4-M5-S GWS4-M5 GWL4-M5 GWL6-M5	φ11 or less	GWS6-M5
φ32	Rc1/8	8	8	SC3W-6-4/6/8 GWS4-6 GWS6-6 GWS8-6 GWL4-6 GWL6-6	φ15 or less	GWS10-6 GWL-8-6 GWL10-6
φ40		12	8.5			
φ50	Rc1/4	10.5	10.5	SC3W-8-6/8/10 GWS4-8 GWS6-8 GWS10-8 GWL4 to 12-8	φ21 or less	GWS-12-8

■ When changing the direction of the rotation-stop, loosen the rod cover set screws (3 positions) to change position arbitrarily and then tighten them again.

2. Spring integrated double acting STK-Y1

⚠CAUTION

■ Spring integrated double acting is usually used as a double acting, and when the air is shut off for any reason, the rod is pushed and the stopper function is maintained.