Compact and short stroke length with position
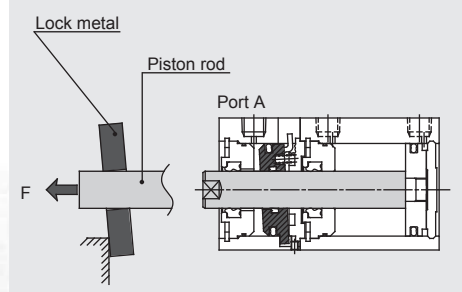
High abrasion-resistant round slit method

New long life position locking mechanism is used. Applying torque M to the lock metal generates axial force F. This force holds the rod.
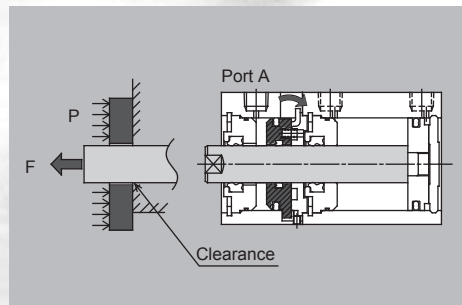

Lock metal B

A

Rod contact surface

View A   View B

When locked   When unlocked

Lockable at any point throughout full stroke length

The stop position can be locked at any point throughout the full stroke length, including the stroke end, as long as the piston rod remains still.
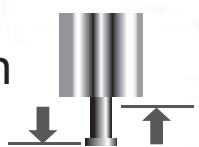
No more workpiece damage

Prevents the cylinder from falling due to its own weight during power blackouts, etc. This resolves the workpiece damage issue.
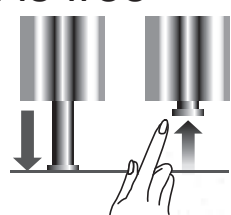
2 types of lock direction

Either forward lock or backward lock can be selected.

Lock reverse direction is free

Piston rod moves freely in reverse lock direction, and is therefore easy to remove even with workpiece clamped.

Easy lock release

It can be unlocked easily with a flathead screwdriver.


Lock in operation   Unlocked

Operational explanation

Lock metal
Piston rod
Port A

■ Lock operation

If air is discharged from port A, the lock metal tilts in response to spring force, and the piston rod is held.

Port A

Clearance

■ Unlocked

Air supply from port A brings the lock plate to vertical. This creates a clearance between the lock metal and the piston rod, allowing the rod to move freely.

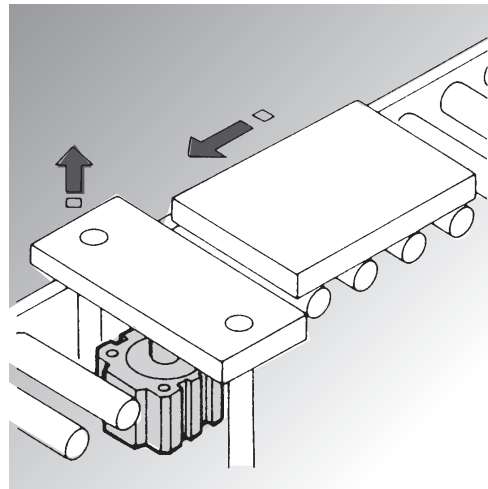# SUPER COMPACT CYLINDER
USSD SERIES

CKD

locking.

Space saving short stroke compact cylinder now with position locking mechanism.
Workpiece safety is maintained even during power failures or accidents.
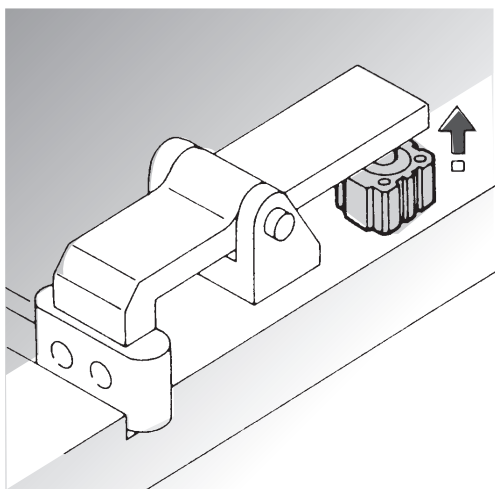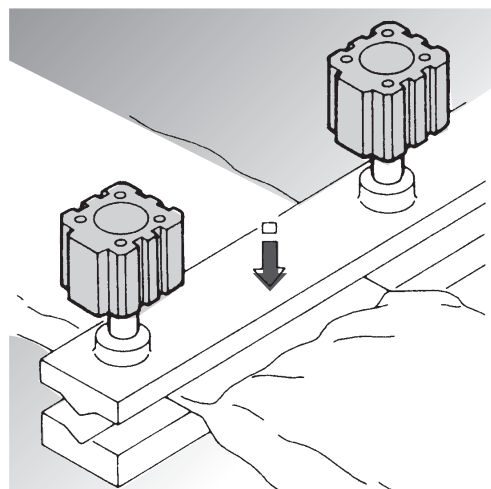
Applications
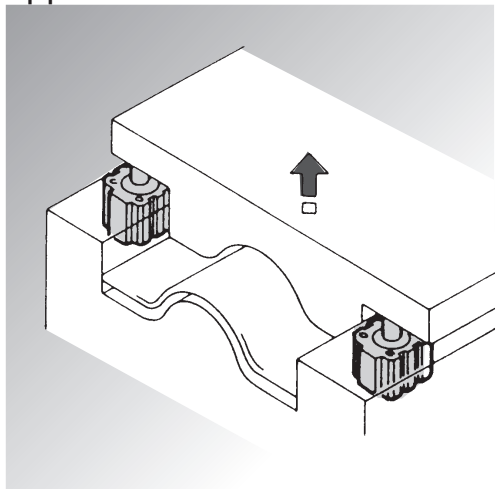
● Safety mechanism in mold casting
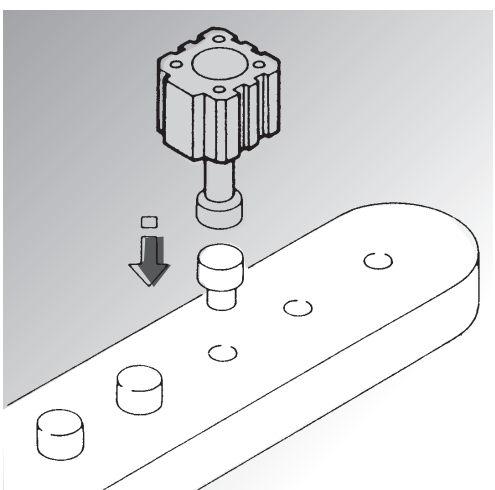
● Position locking of stopper

● Position locking of clamp jig

● Position locking of press jig

● Position locking of press-fit jig