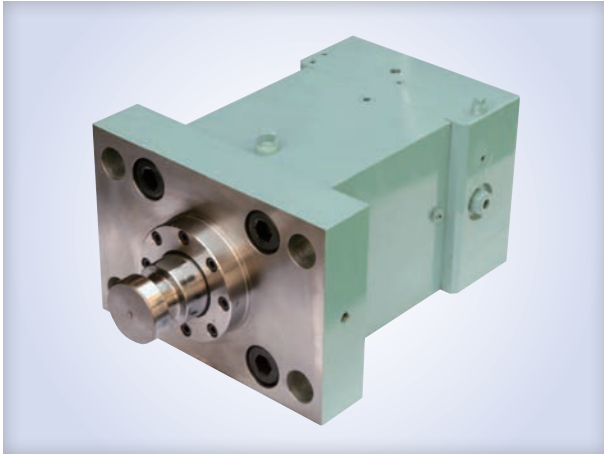


High Spec Cylinders 1/3



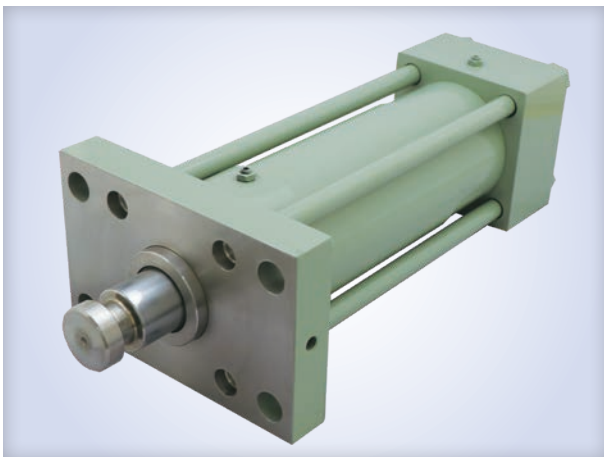
SL-Model FA-Type (See P061)

SL Model

Hydraulic oil is sealed inside the cylinder is then compressed by intensifying its pressure.

Since a load is applied in such conditions, it's possible to maintain the position by cylinder alone and to hold the return distance close to zero without any limits.

By using the SL Model for molds which had been mechanically locked up to now, mold structure can be significantly simplified. Furthermore, when keeping position by cylinder alone, by using the SL Model the cylinder's shape can be made more compact than standard cylinders'.



QS Model (See P021)

QS Model [For reducing energy consumption]

Cylinder consisting of 2 stages, automatically changing from large diameters to small diameters. In die-casting, when pulling out the cores, a strong power is initially required for the release, but once release has been performed power is no longer required. If the QS Model is used, cycle time can be shortened, significantly reducing electric power consumption, because this model can pull out large diameters at time of release and automatically switches to small diameters after release.

16MPa ($\phi 140 \sim 220$) available Since 2019.



TS Model (See P123)

TS Model [For reducing post-processing]

In die-casting, a draft angle is always necessary for cores. On the contrary, since TS Model rotates the rods and extracts the core after release, it makes it possible to reduce the core angle to zero degrees.

In addition to reducing energy consumption by making secondary processing unnecessary, exposure of porous holes can be avoided.

High Spec Cylinders 2/3



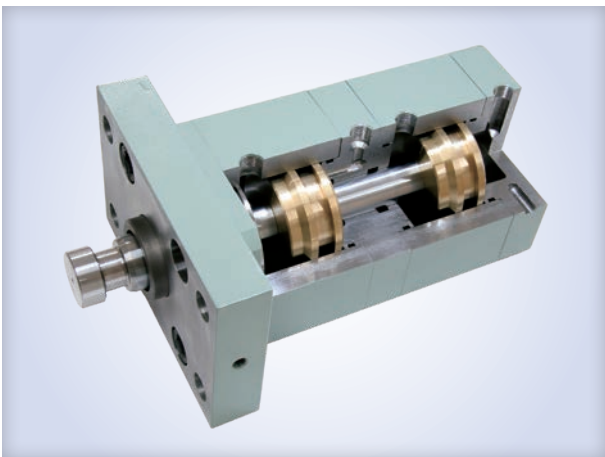
Triple Squeeze Cylinders

Triple Squeeze Cylinders

In die-casting, if there are multiple places for squeezing and pitches are very close, standard cylinders cannot be arranged.

Since triple squeeze cylinders contain three sets of built-in cylinders in one block, it is possible to make the pitches between cylinders closer than when lining up standard cylinders. Furthermore, since the oil pressure ports of each of the 3 sets are different, it's possible to modify the timing of the squeeze.

Please contact us for more details as this models is designed and manufactured on a case-by-case basis.



Twin Pistons Cylinder

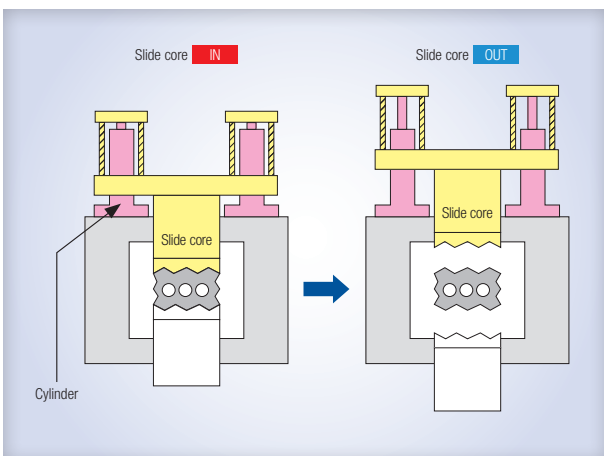
Twin Pistons Cylinder

A small diameter cylinder with high pushing and pulling forces.

It can be 1.8 times the cylinder capacity because of two pistons.

Although two lines of piping are required, a method of branching the port in the cylinder is also possible, so one line can be used.

This cylinder is effective when there are restrictions in the cylinder width direction.



External sliding(moving) cylinder

External sliding(moving) cylinder

In Europe, dies are made more compact using external sliding cylinders.

In Japan, mold slides generally use one cylinder for each slide.

The external sliding cylinder has two cylinders arranged in the opposite direction to one slide.

Reverse use has the advantage of maximizing cylinder capacity.

Since the slide core is pulled by two units, the cylinder size can be small, and the mold can be made compact.

The center of the core becomes free, so it is possible to add squeezing and cooling.