

Hydraulic Locking Core Pull Cylinders

Benefits

- Withstands high loads
- Large locking surfaces promote extended service life
- Pulls sliding cores in injection molds and die cast tools
- Withstands temperatures up to 356°F (180°C)*
- Proximity sensors recognize full forward and full reverse

System Cost Savings

Cost savings achieved when the Hydraulic Locking Core Pull Cylinder is used instead of traditional methods:

- Mold design and manufacturing time
- Mold fitting and assembly time
- Mold maintenance time
- Material cost (smaller mold base required)
- Cycle time reduction

The Hydraulic Locking Core Pull (HLCP) Cylinder replaces traditional slides and heel blocks, enabling independent movement of the sliding core while eliminating the need for a heel block. By using a segmented ring that presses into an internal groove inside the cylinder assembly while in closed position, the injection pressure from the part cavity acts against the cross section of the segmented ring, eliminating the need for heel blocks.

Eliminating separate heel blocks or additional cylinders can result in a smaller mold base size, simplifying mold designs and increasing cost savings!

The HLCP Cylinder is a robust, compact design. Available in seven sizes, each size has two available standard strokes. Due to the modular design of the HLCP Cylinder, special strokes are available upon request with quick delivery. The cylinder is constructed of hardened steel for extra long service life. Because of the cylinder's special design and breadth of assembly sizes available, a wide range of holding forces are possible with a hydraulic holding pressure of only 870 PSI minimum.

The HLCP Cylinder operates between fully opened and fully closed positions, both of which are sensed by high pressure proximity sensors without any mechanical contact. The HLCP Cylinder has a built-in cushion at the fully retracted end of the piston stroke, extending the service life of the cylinder.

The HLCP Cylinder's integral flange allows easy installation and mounts to the mold using socket head cap screws. Socket head cap screw sizes used for mounting the HLCP Cylinder to the mold are UNC-type. A spacer plate (shim) is supplied with the HLCP Cylinder for installation beneath the HLCP Cylinder flange, enabling fine adjustment in the mold. The spacer plate also provides important preload on the cylinder rod, particularly when the sliding core must shut off against the opposing wall of the core. Hydraulic fittings are NPTF-type fittings.

Due to the nature of the flange mounting design, the same size HLCP Cylinders are easily interchangeable. The cylinder's flange and screw mounting method ensures that the proximity sensors will always be positioned in the same orientation when the HLCP Cylinder is installed to the side of the mold.

Versa-Slide® Standard Slide Assemblies

- Designed for standard and custom mold bases
- Available as a complete assembly or individual components
- Sliding mechanics are finish ground, with .005 grind stock left on overall width, bottom of wear plate and slide angle
- Much more economical than a custom slide made from scratch
- Available in 10 different overall widths

Designed in series, profiles from the 25 Series to the 60 Series remain the same with only the widths changing. Since only widths change, guides can be used across all series of slides (except SL-10 & SL-20 Series). Each series from the 25 to the 60 Series comes in three thickness options — .640", 1.140", and 1.640". Within each thickness there are three maximum stroke limits, making up nine total standard assemblies in each series (except the 10 & 20 Series). Components can be mixed to form thousands of combinations.

Slide faces attach over the top on SL-10 & SL-20 Series slides. All other series attach to front of slide body.

Made in the U.S.A., there is a distinct advantage to using these off-the-shelf components. Downtime and cost are greatly reduced due to replacements being available for immediate shipment and spares are not required during the mold build process.

Slide workings are finished; grind stock on overall width, bottom of guide shoe and slide angle.

*Ball Detents included

Versa-Slide Assemblies are designed to fit various standard mold bases, as well as any custom design.

Mix & Match Slide Components

CamPin - H13

Wedge/Guide/Wearplate - Stamp S7,
hardened and ground , 54/56 HRC

Slide - Stamp H13, Hardened and ground,
48/50 HRC



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