Collet-Lok®
Product Family

Swing Cylinders

Push Cylinders

Work Supports

A Better Way for Workholding.

Safe.

Secure.

Robust.

Collet-Lok® Products with Depressurized Holding Technology™

Traditional hydraulic workholding utilizes pressurized cylinders with accumulator back-up to maintain clamping force. Collet-Lok® is unique to the hydraulic clamping industry. Once hydraulically actuated to clamp the work piece, the Collet-Lok® clamp uses an internal mechanical locking system to maintain the clamping force – without hydraulic pressure. Depressurized Holding Technology™!

Collet-Lok® is a great option, whether you are looking for the long term security of a manual mechanical clamp or the automation of hydraulic clamping. Collet-Lok® does both. Consider Collet-Lok® for your next clamping job. A better way for workholding!

The Proven Way: Depressurized Holding Technology

Collet-Lok® technology uses mechanical wedge locking, requiring no hydraulic pressure to maintain holding force.

Simple operation:

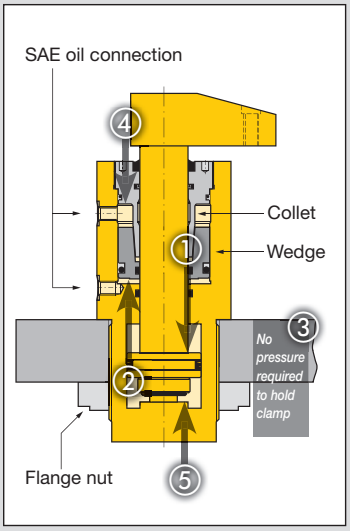
① Pressurize to SET AND LOCK
② Depressurized to HOLD
③ Pressurize to UNLOCK

NEW AND IMPROVED: Viton Seals Standard, Tube and Manifold Porting Standard on Flange Models, and new fulfillment capabilities for faster deliveries!

See our catalog for the complete line of Collet-Lok® products.

ENERPAC®

Collet-Lok® Product Family



How a Collet-Lok® works: It is the Wedge

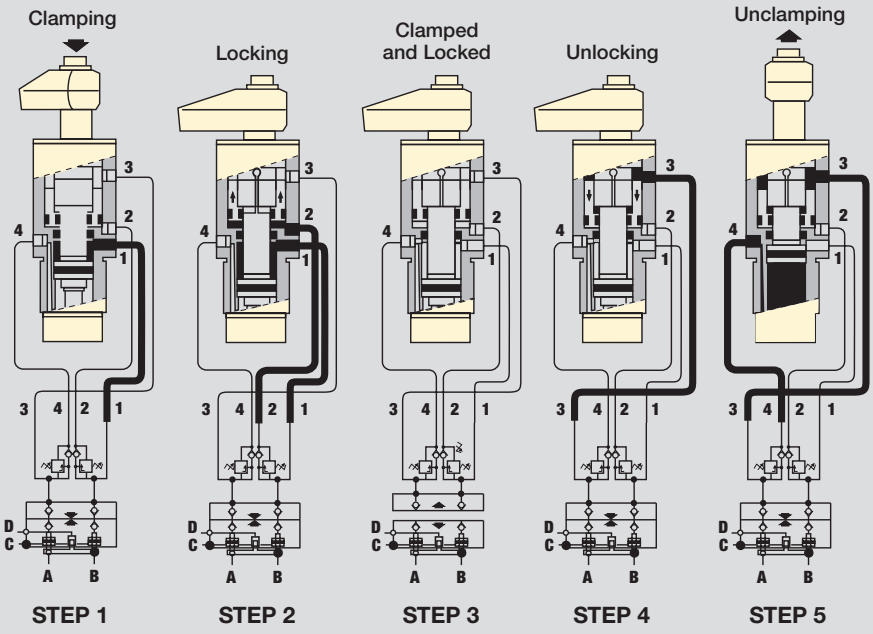
① Hydraulic pressure moves the clamp and generates a holding force.
② Hydraulic pressure pushes the wedge up to close and lock collet, locking the plunger in the clamping position.
③ Once in place, no hydraulic pressure is required to maintain holding force.
④ To release the collet, hydraulic pressure is applied to the other side of the collet.
⑤ Hydraulic force is used to return the clamp to its neutral position.

Advantages vs. Traditional Work Holding Systems

- Eliminates need for load holding valves
- Eliminates need for accumulators
- Better suited for palletized machining

Perfect for Palletized Systems with Long Dwell Times between Fixture Loading and Machining

Example Operation: Swing Clamp with Auto Coupler



WPTR-100 Collet-Lok® swing cylinder

1 = 90˚ Rotation + Clamp
2 = Lock
3 = Unlock
4 = Unclamp + 90˚ Rotation

WCA-62, WPA-62 auto coupler

A = Pressure line from pump to swing cylinder
B = Pressure line from pump to swing cylinder
C = Auto coupler advance
D = Auto coupler retract

STEP 1
2-way Auto coupler connects external power source with pallet receiver and the Collet-Lok® cylinder is activated for hydraulic clamping.

STEP 2
After reaching maximum clamping pressure the sequence valve is opened and actuates the internal wedge hydraulically.

STEP 3
The wedge system secures the plunger position mechanically and the hydraulic pressure is taken off, then the auto coupler retracts. The product on the pallet is now securely clamped, without being connected to a power source.

STEP 4
After being in the machine the pallet returns to the loading and unloading position and the auto coupler is connected again to release the wedge.

STEP 5
The hydraulic plunger is now retracted and the pallet is free for unloading and loading.

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POWERFUL SOLUTIONS. GLOBAL FORCE.