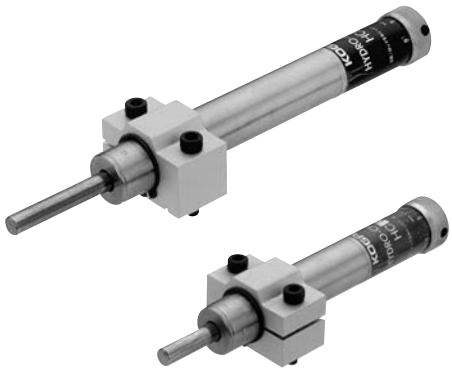
HYDRO-CHECKERS

HC3, HC5



Stepless and Smooth

Compact, lightweight, and high-performance hydraulic type cylinder speed controller.

- The spring return type ensures a control load with plenty of margin, up to a maximum of 4903.3N [1100lbf.].
- Use of damping oil keeps changes in viscosity due to temperature to a minimum, and limits changes in the setting speed.
- Two types are available, including HC3 (maximum stroke 30mm) and HC5 (maximum stroke 50mm).
- No piping or wiring is required, for easy mounting.

Specifications

Item \ Model	HC3	HC5
Return type	Spring return[Note 1]	
Maximum stroke mm [in.]	30 [1.18]	50 [1.97]
Controllable load range N [lbf.]	147.1～4903.3 [33～1100]	
Allowable impact	Impact energy Ek＜2.3N·m [1.7ft・lbf][Note 2]	
Controllable speed range mm/s [in./sec.]	0.5～30 [0.02～1.18] (Load at 980.7N [220lbf.])	
Operating temperature range °C [°F]	0～60 [32～140] [Note 3]	
Mass kg [lb.]	0.39 [0.86]	0.50 [1.10]

Notes: 1. If the load is removed, the rod returns automatically.
2. Impact energy of 2.3N・m [1.7ft・lbf] is equivalent to collision with an object of 18kg [39.7lb.] moving at a speed of 0.5m/s [1.64ft./sec.].
3. Temperature range does not refer only to the ambient temperature; it also includes the rise in temperature of oil caused by normal operations.

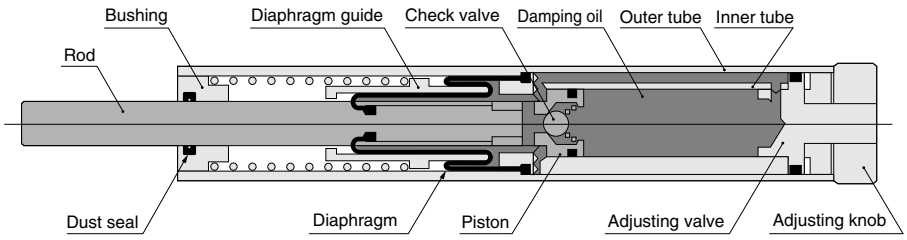
Order Codes

HC □

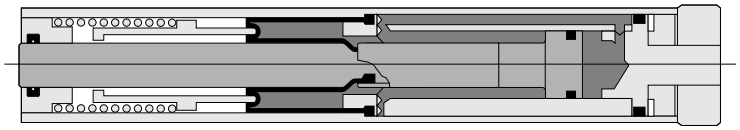
Maximum stroke
3 : 30mm [1.18in.]
5 : 50mm [1.97in.]

Inner Construction and Major Parts

Not in operation

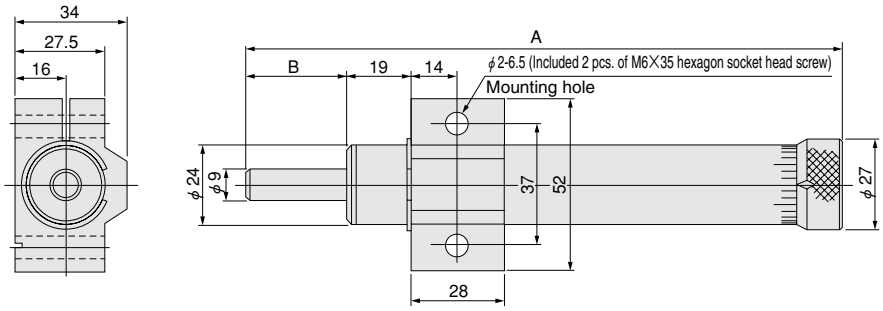


In operation



Dimensions (mm)

HC3
HC5



Type / Code	A	B
HC3	180	31
HC5	240	51

Handling Instructions and Precautions

General precautions

1. The Hydro-checker cannot be used as a shock absorber.
2. Always use with the stroke and load within the specification range, and avoid subjecting it to impact loads, particularly to the impacts of heavy loads.
3. Use within the temperature range shown in the specifications.
4. For heavy loads (1961.3N [441lbf.] or more), always fit an external snap ring onto the body.
5. Mount the unit so that loads are perpendicular to the axial center, and avoid lateral loads.
6. Do not forcibly rotate or twist the rod.