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KOGANEI

GENERAL CATALOG OF AIR TREATMENT, AUXILIARY, VACUUM

HYDRO-CHECKERS INDEX

Hydro-checkers

Specifications, Inner Construction and Major Parts,

Order Code _____ 493

Dimensions, Handling Instructions and Precautions — 494



Caution

Before use, be sure to read the “Safety Precautions” on p. 31.

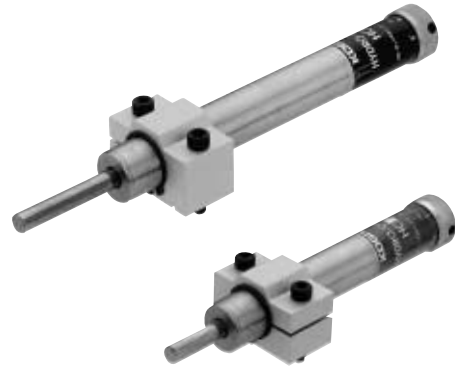
HYDRO-CHECKERS

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 {500kgf}.
- 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 {kgf} [lbf]	147.1~4903.3 {15~500} [33~1100]	
Allowable impact		Impact energy $E_k < 2.3N \cdot m$ {0.23kgf · m} [1.7ft · lbf] ^{Note 2}	
Controllable speed range	mm/s [in./sec]	0.5~30 [0.02~1.18] (Load at 980.7N {100kgf} [220lbf])	
Operating temperature range	°C [°F]	0~60 [32~140] ^{Note 3}	
Mass	kg [lb]	0.39 [0.86]	0.50 [1.10]

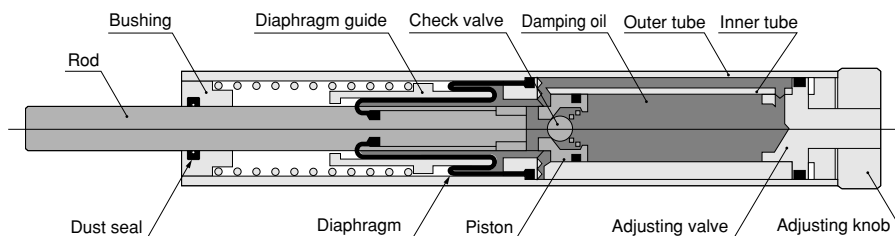
- Notes: 1. If the load is removed, the rod returns automatically.
 2. Impact energy of $2.3N \cdot m$ {0.23kgf · m} [1.7ft · lbf] is equivalent to collision with an object of 18kg [39.7lb] moving at a speed of 0.5m/s [1.64ft/sec].
 3. Temperature range does not refer only to the ambient temperature; it also includes the rise in temperature of oil caused by normal operations.

Order Code

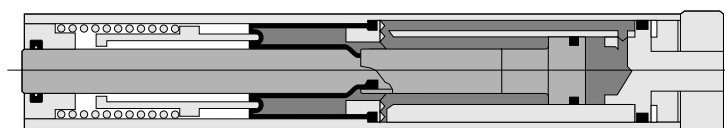
HC ☐
Maximum stroke
 3 : 30mm [1.18in.]
 5 : 50mm [1.97in.]

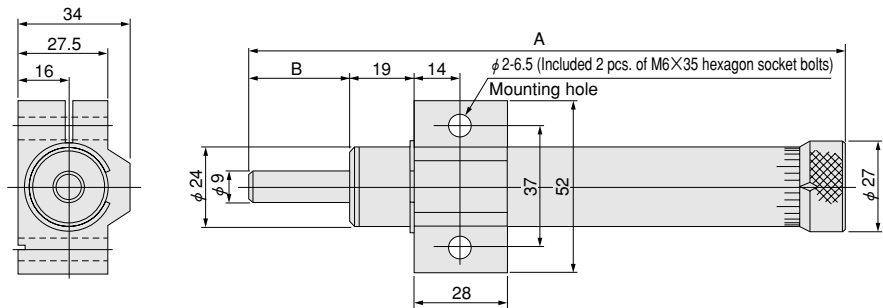
Inner Construction and Major Parts

Not in operation



In operation





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 {200kgf} [441lbf] or more), always insert 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.



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**SPEED CONTROLLERS, MUFFLERS,
EXHAUST FILTERS,
AIR-HYDRO CONVERTERS, AIR BLEEDERS,
HOLDERS AND COLUMN TUBES,
AIR INDICATORS**

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Caution

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