# **HCM** Series

LCM

LCR LCG

LCW

LCX

STM

STG STS/STL STR2 UCA2 ULK\* JSK/M2 JSG JSC3/JSC4 USSD UFCD UFCD UB JSB3 LMB I MI HCM HCA LBC CAC4 UCAC2 CAC-N UCAC-N RCS2 RCC2 PCC SHC MCP GLC MFC BBS RRC GRC RV3\* NHS HRL LN Hand Chuk MecHnd/Chuk ShkAbs FJ FΚ SpdContr Ending

## Variation and option combination selection table

 $\bigcirc$  : Option

: Available (made-to-order product)

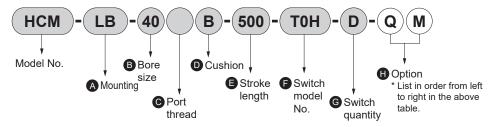
 $\triangle$ : Available depending on conditions (Contact CKD.)

× : Not available

		Category	Variation			Port thread			Option		
Category			Double acting basic	With cylinder switch		NPT	9		Switch rail attached at shipment	Piston rod material stainless steel	Specify piston rod end form
		Code	None	None		N	G		Q	М	N*
Variation	Double acting basic	Blank		0		0	0		×	0	0
	With cylinder switch	Blank				0	0		0	0	0
Port thread	NPT	N					×		0	0	0
	G	G							$\circ$	0	0
Option	Switch rail attached at shipment	О								0	
	Piston rod material stainless steel *1	М									
	Specify piston rod end form	N*									
Accessory	Cylinder switch	Listed separately	0	0		0	0		0	0	0
	Rod eye	I	0	0		0	0		0	0	Δ
	Rod clevis	Υ	0	0		0	0		0	0	Δ
Ă											

<sup>\*1 :</sup> ø20 and ø25 are piston rod material SUS as standard. Only ø32 to ø63 are available as an option.

### [Example of model No.]



Model No.: High energy absorption cylinder ● ariation : Double acting/basic

A Mounting : Axial foot
B Bore size : ø40 mm
Port thread : Rc thread

D Cushion : Both sides cushioned

Stroke : 500 mm

Switch model No.: Reed T0H switch, lead wire 1 m

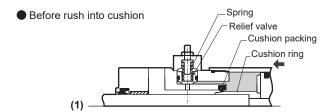
**G** Switch quantity : 2

① Option : Switch rail attached at shipment, piston rod material (stainless steel)

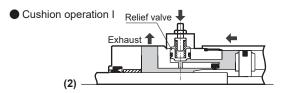
#### Cushion operational principle and example

## Cushion operational principle

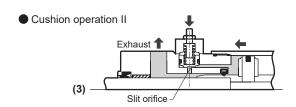
(1) When the piston operates and the cushion ring rushes into the cushion packing, an airtight space is formed in the state. As the piston moves further, the air in the sis compressed, absorbing the kinetic energy in the operating direction.



(2) The relief valve is opened by compressed air at the same time. Compressed air is instantaneously discharged and the relief valve closes

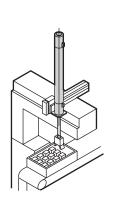


(3) After the relief valve closes, the remaining compressed air is exhausted from the slit orifice. The piston moves and contacts the cover. The energy absorption stroke is completed at this time.

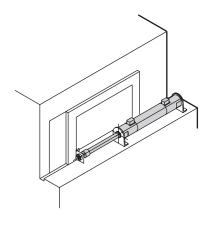


## **Applications**

Resin molding machine ejection robot



Machine door open/close



LCM LCR LCG LCW LCX STM STG STR2 UCA2 ULK\* JSK/M2 JSG JSC3/JSC4 USSD UFCD USC UB JSB3 LMB LML HCM HCA LBC CAC4 UCAC2 CAC-N UCAC-N RCS2 RCC2 PCC SHC MCP GLC MFC BBS RRC GRC RV3 NHS HRL

LN