

Wedge Cam Operation Slide Guide Air Gripper/2-Finger Type Series **MHK2** ø12, ø16, ø20, ø25

How to Order

Standard type

MHK 2 - 20 D 1 F - M9B

Long stroke type

MHKL 2 - 20 D 1 F - M9B

Number of fingers

2	2 fingers
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Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Action

D	Double acting
S	Single acting (Normally open)
C	Single acting (Normally closed)

Finger material

Nil	Carbon steel
1	Stainless steel

Made to Order
Refer to page 523
for details.

Number of auto switches

Nil	2 pcs.
S	1 pc.

Auto switch

Nil	Without auto switch (Built-in magnet)
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Dust cover material

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicon rubber (Si)

Applicable Auto Switch/Refer to pages 761 to 809 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto Switch model		Lead wire length (m)*				Pre-wired connector	Applicable load			
					DC	AC	Electrical entry direction		0.5 (Nil)	1 (M)	3 (L)	5 (Z)		IC circuit	Relay, PLC		
							Perpendicular	In-line									
Solid state switch	Water resistant (2-color indication)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	—	IC circuit	Relay, PLC	
				3-wire (PNP)				M9PV	M9P	●	●	●	○				
				2-wire				M9BV	M9B	●	●	●	○				
				3-wire (NPN)				M9NAV	M9NA	○	○	●	○				○
				3-wire (PNP)				M9PAV	M9PA	○	○	●	○				○
				2-wire				M9BAV	M9BA	○	○	●	○				○

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWZ

* Auto switches marked with a "○" symbol are produced upon receipt of order.

Note 1) Take note of hysteresis with 2-color indication type switches.
Refer to "Auto Switch Hysteresis" on page 536.

Note 2) Refer to pages 761 to 809 for further information on auto switches.

Wedge Cam Operation Slide Guide Air Gripper/2-Finger Type **Series MHK2**

Specifications

Fluid		Air	
Operating pressure	Double acting		0.1 to 0.6 MPa
	Single acting	Normally open	0.25 to 0.6 MPa
Normally closed			
Ambient and fluid temperature		-10 to 60°C	
Repeatability		±0.01 mm	
Lubrication		Not required	
Action		Double acting/Single acting	
Auto switch (Option) (Note)		Solid state auto switch (3-wire, 2-wire)	

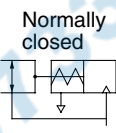
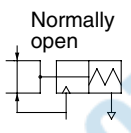
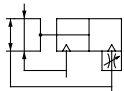


Note) Refer to pages 761 to 809 for further information on auto switches.

JIS Symbol

Double acting

Single acting



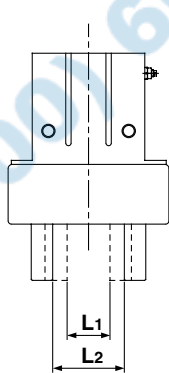
Option

Finger material	Carbon steel (Standard), Stainless steel
Dust cover material	Chloroprene rubber (CR) (Standard), Fluoro rubber (FKM), Silicon rubber (Si)

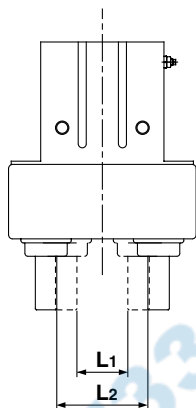
Model

Series MHK2/Standard Type

Action	Model	Bore size (mm)	Max. operating frequency (c.p.m)	Effective gripping force per finger (N) <small>(Note)</small>	Opening/Closing stroke (mm) L2-L1	Width at closing (mm) L1	Width at opening (mm) L2	Mass (g)	
Double acting	MHK2-12D	12	120	External grip: 15 Internal grip : 16	4	9	13	75	
	MHK2-16D	16		External grip: 31 Internal grip : 36	6	14.6	20.6	113	
	MHK2-20D	20		External grip: 46 Internal grip : 56	10	16	26	235	
	MHK2-25D	25		External grip: 80 Internal grip : 86	14	19	33	440	
Single acting	Normally open	MHK2-12S		12	9	4	9	13	76
		MHK2-16S		16	23	6	14.6	20.6	114
		MHK2-20S		20	34	10	16	26	237
		MHK2-25S		25	58	14	19	33	443
	Normally closed	MHK2-12C		12	12	4	9	13	76
		MHK2-16C		16	25	6	14.6	20.6	115
		MHK2-20C		20	44	10	16	26	237
		MHK2-25C		25	73	14	19	33	443



Series MHK2



Series MHKL2



Made to Order

Refer to pages 683 to 713 for details.

Symbol	Specifications/Description
-X4	Heat resistance (100°C)
-X5	Fluororubber seal
-X7	Closing direction spring assist
-X12	Opening direction spring assist
-X39	With grease needle
-X41	Switch groove (Both-side type)
-X50	Without magnet
-X53	EPDM seal/Fluorine grease
-X63	Fluorine grease
-X64	Finger: Side tapped mounting
-X65	Finger: Through-hole mounting
-X77A	Dust cover adhesion
-X77B	Dust cover adhesion (Finger part only)
-X78A	Dust cover caulking
-X78B	Dust cover caulking (Finger part only)
-X79	Grease for food

Series MHKL2/Long Stroke Type

Action	Model	Bore size (mm)	Max. operating frequency (c.p.m)	Effective gripping force per finger (N) <small>(Note)</small>	Opening/Closing stroke (mm) L2-L1	Width at closing (mm) L1	Width at opening (mm) L2	Mass (g)	
Double acting	MHKL2-12D	12	90	External grip: 14 Internal grip : 17	11	9	20	104	
	MHKL2-16D	16		External grip: 27 Internal grip : 30	14	14.6	28.6	164	
	MHKL2-20D	20		External grip: 45 Internal grip : 53	18	16	34	312	
	MHKL2-25D	25		External grip: 79 Internal grip : 90	22	19	41	562	
Single acting	Normally open	MHKL2-12S		12	9	11	9	20	105
		MHKL2-16S		16	17	14	14.6	28.6	165
		MHKL2-20S		20	32	18	16	34	314
		MHKL2-25S		25	53	22	19	41	565
	Normally closed	MHKL2-12C		12	11	11	9	20	105
		MHKL2-16C		16	22	14	14.6	28.6	166
		MHKL2-20C		20	40	18	16	34	314
		MHKL2-25C		25	63	22	19	41	565



Note) At the pressure of 0.5 MPa, when gripping point L is 20 mm.
Single acting normally open: External holding force, Single acting normally closed: Internal gripping force.
Refer to "Effective Gripping Force" for the gripping force at each gripping position on pages 525 to 529.