

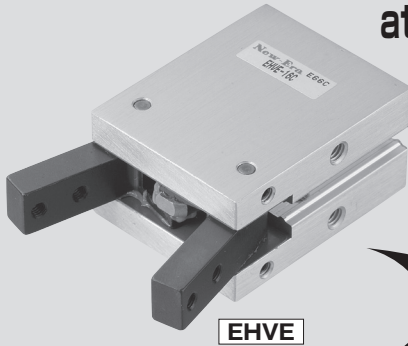
Angular Gripper (With Dust-proof Cover)

EHVJ Series

The Dust-proof Cover is attached to the Angular Gripper!!

EHVJ Series

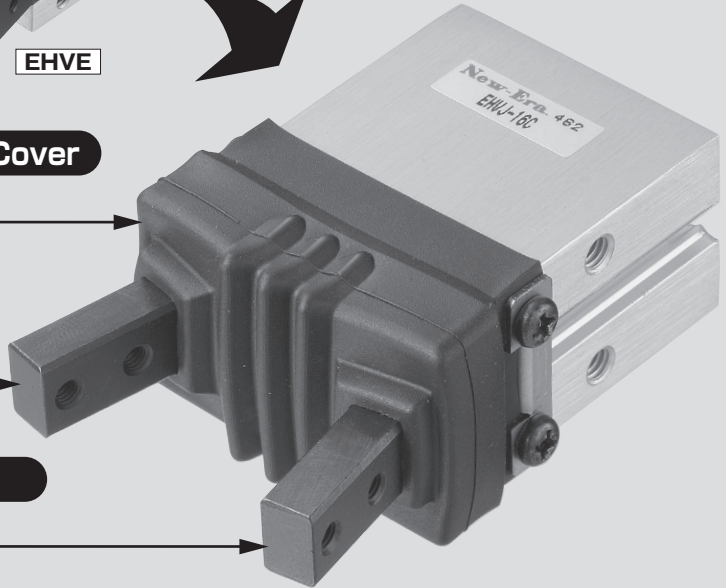
Angular Gripper (With Dust-proof Cover)



EHVE



Dust-proof Cover



Lever

Cover materials are the following 3.

NBR Rubber



Silicon Rubber



Fluorine Rubber



EHVJ Series

EHVJ Series

Angular Gripper (With Dust-proof Cover)

Model Code No.

EHVJ - 16 C ※ JN - HAE - ZE135 B 2

Series Name

Bore Size

16:16mm
20:20mm

Action Type

A : Single Acting Normally Open
C : Double Acting

Dust-proof Cover Type

JN: With NBR Rubber Cover
JS: With Silicon Rubber Cover
JF: With Fluorine Rubber Cover

Number of Switches

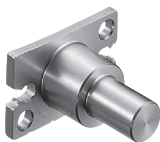
1:1 Switch
2:2 Switches

Switch Lead Wire Length

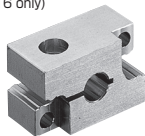
A:1m
B:3m

●Gripper Adaptor Type No Code: No Gripper Adaptor

HAE



HFE
HFE-L : Large Diameter Type (φ16 only)



●Detailed specifications→P.337

●Switch Type No Code: No Switch

ZE135	ES13
-------	------

2 Wire System Solid State Switch, Straight Type

ZE155	ES(P)15
-------	---------

3 Wire System Solid State Switch, Straight Type



ZE235	ES23
-------	------

2 Wire System Solid State Switch, L-shaped

ZE255	ES(P)25
-------	---------

3 Wire System Solid State Switch, L-shaped



●Switch details→P.521~528

●Dust-proof Cover Set

JS - VJ 16

Size

16:φ16用
20:φ20用

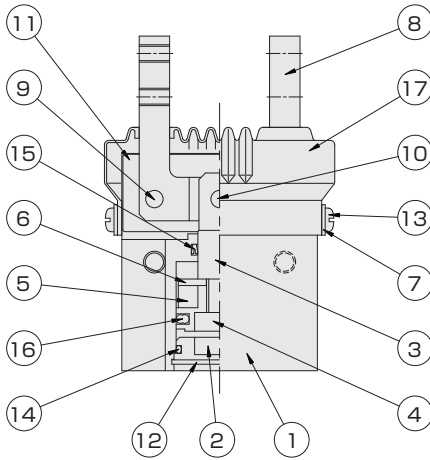
Series Name

VJ:EHVJ

Material

JN: With NBR Rubber Cover
JS: With Silicon Rubber Cover
JF: With Fluorine Rubber Cover

Internal Structure Diagram



Parts List

NO	Name	Material
1	Main Body	Aluminum Alloy
2	Head Cover	Aluminum Alloy
3	Piston Rod	Stainless Steel
4	Piston	Aluminum Alloy
5	Magnet	Resin Magnetic Body
6	Pressure Cover	Aluminum Alloy
7	Pressure Cover	Stainless Steel
8	Lever	Carbon Tool Steel
9	Fulcrum Pin	Carbon Tool Steel
10	Press Fit Pin	Carbon Steel
11	Slide Plate	Carbon Tool Steel
12	Locating Snap Ring	Hard Steel
13	Cross-recessed Head Screw	Carbon Steel
14	O Ring	NBR
15	Rod Packing	NBR
16	Piston Packing	NBR
17	Dust-proof Cover	NBR
		Silicon Fluorine

Specifications

Fluid	Air
Maximum Operating Pressure [MPa]	0.7
Proof Pressure [MPa]	1.05
Operating Temperature [°C]	0~60 (No Freezing)
Lubrication	Not Required (Required for sliding parts of the machine)
Pipe Bore	M5×0.8
Maximum Operating Cycle [Cycle/min]	180
Applicable Switch	ZE, ES Type (Solid State Switch)

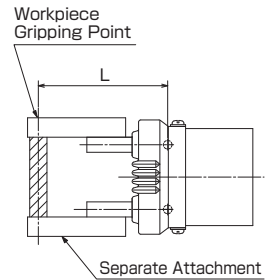
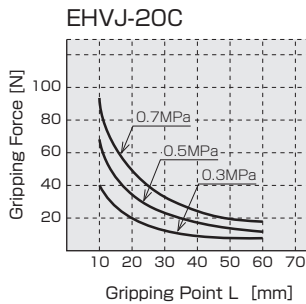
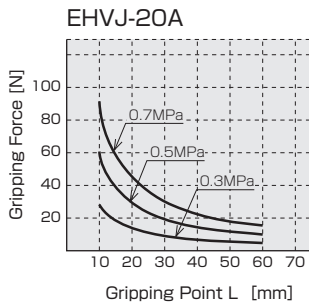
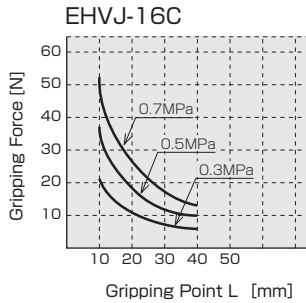
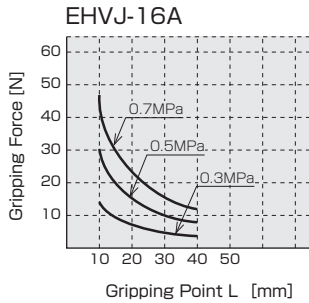
Action Type	Model	Bore Size [mm]	Minimum Operating Pressure [MPa]	Gripping Force [N] ^{Note)1}	Outside Dimensions (T x W x L) [mm] ^{Note)2}	Product Mass [g]
Double Acting	EHVJ-16C※J□	16	0.15	38/L	27.5×42×46.3	104
	EHVJ-20C※J□	20	0.15	72/L	38×53×56	196
Single Acting Normally Open	EHVJ-16A※J□	16	0.25	30/L	27.5×42×46.3	105
	EHVJ-20A※J□	20	0.25	54/L	38×53×56	198

Note 1): L indicates the distance (cm) from the fulcrum pin to the grip point. (The levers are retained in the horizontal condition.)

This is an effective value when the pressure is 0.5 MPa.

Note 2): The outside dimensions indicate the main body dimensions. (Excluding the levers)

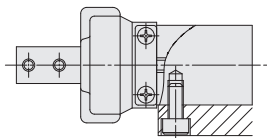
Effective Gripping Force (Closing Force)



※See the limitation range on the left.

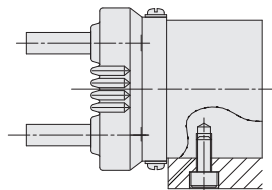
Main Body Mounting Example

1 When the mounting screw on the front of the main body is used



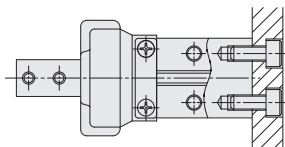
Model	Bolt to be Used	Maximum Tightening Torque[N·m]
EHVJ-16	M4×0.7	1.37
EHVJ-20	M5×0.8	2.84

2 When the mounting screw on the side of the main body is used



Model	Bolt to be Used	Maximum Tightening Torque[N·m]
EHVJ-16	M4×0.7	1.37
EHVJ-20	M5×0.8	2.84

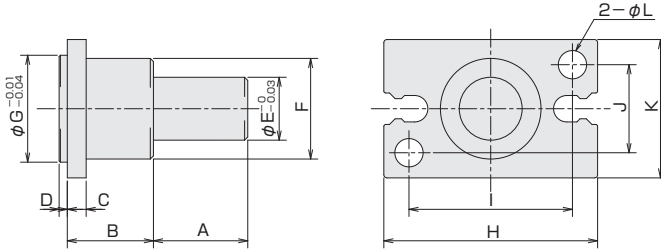
3 When the mounting screw on the bottom face of the main body is used



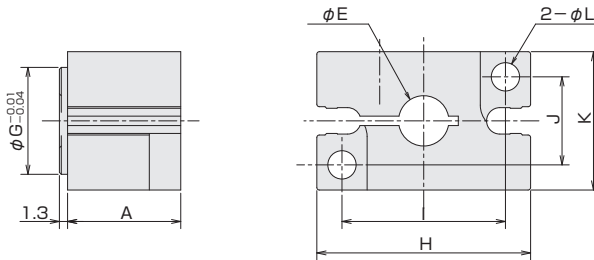
Model	Bolt to be Used	Maximum Tightening Torque [N·m]	Positioning Hole
EHVJ-16	M4×0.7	1.37	$\phi 17^{+0.05}_0$ depth 1.5
EHVJ-20	M5×0.8	2.84	$\phi 21^{+0.05}_0$ depth 1.5

Outline Dimensional Drawing of Gripper Adaptor

HAE Type

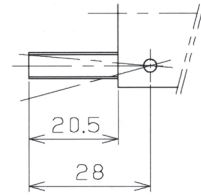
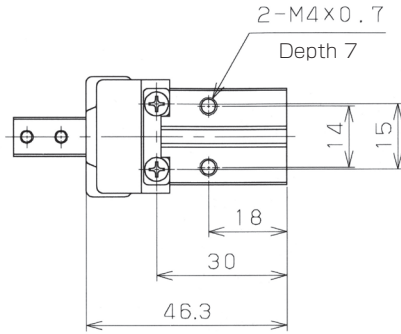


Type	Code	A	B	C	D	E	F	G	H	I	J	K	L	Ancillary Bolt (x2)	Product Mass [g] (Including Bolts)
HAE-16		15	15	3	1.3	10	16	17	34	26	14	22	4.5	M4×0.7×10 ^L	20
HAE-20		15	15	3	1.3	10	18	21	45	35	16	26	5.5	M5×0.8×10 ^L	28

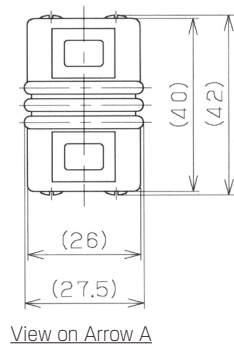
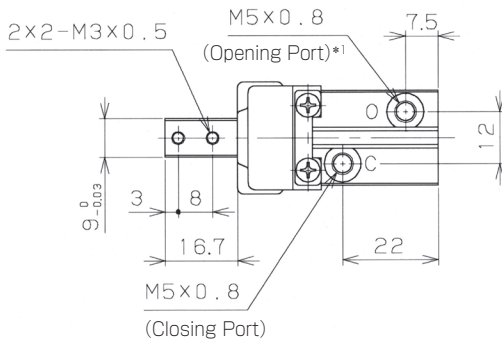
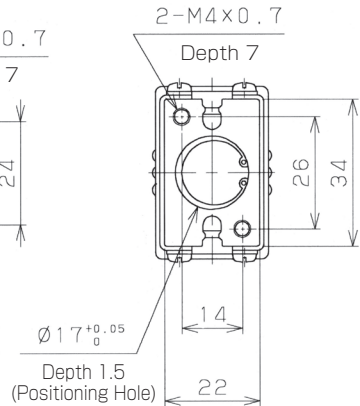
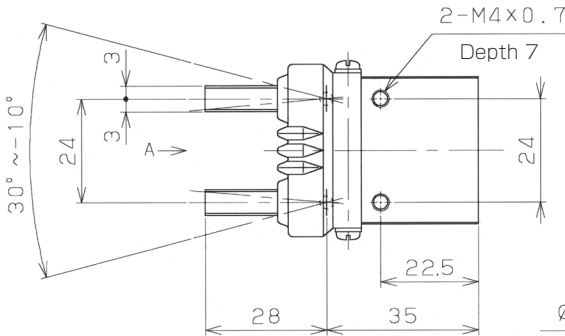


Type	Code	A	E	G	H	I	J	K	L	Ancillary Bolt (x3)		Product Mass [g] (Including Bolts)
										Gripper Mounting (x2)	Adapter Fixing (x1)	
HFE-16		18	8	17	34	26	14	22	4.5	M4×0.7×20 ^L	M4×0.7×16 ^L	35
HFE-16L		18	10	17	34	26	14	22	4.5	M4×0.7×20 ^L	M4×0.7×16 ^L	33
HFE-20		19	13	21	45	35	16	26	5.5	M5×0.8×20 ^L	M5×0.8×20 ^L	55

Dimensions EHVJ-16 □ ※ J □



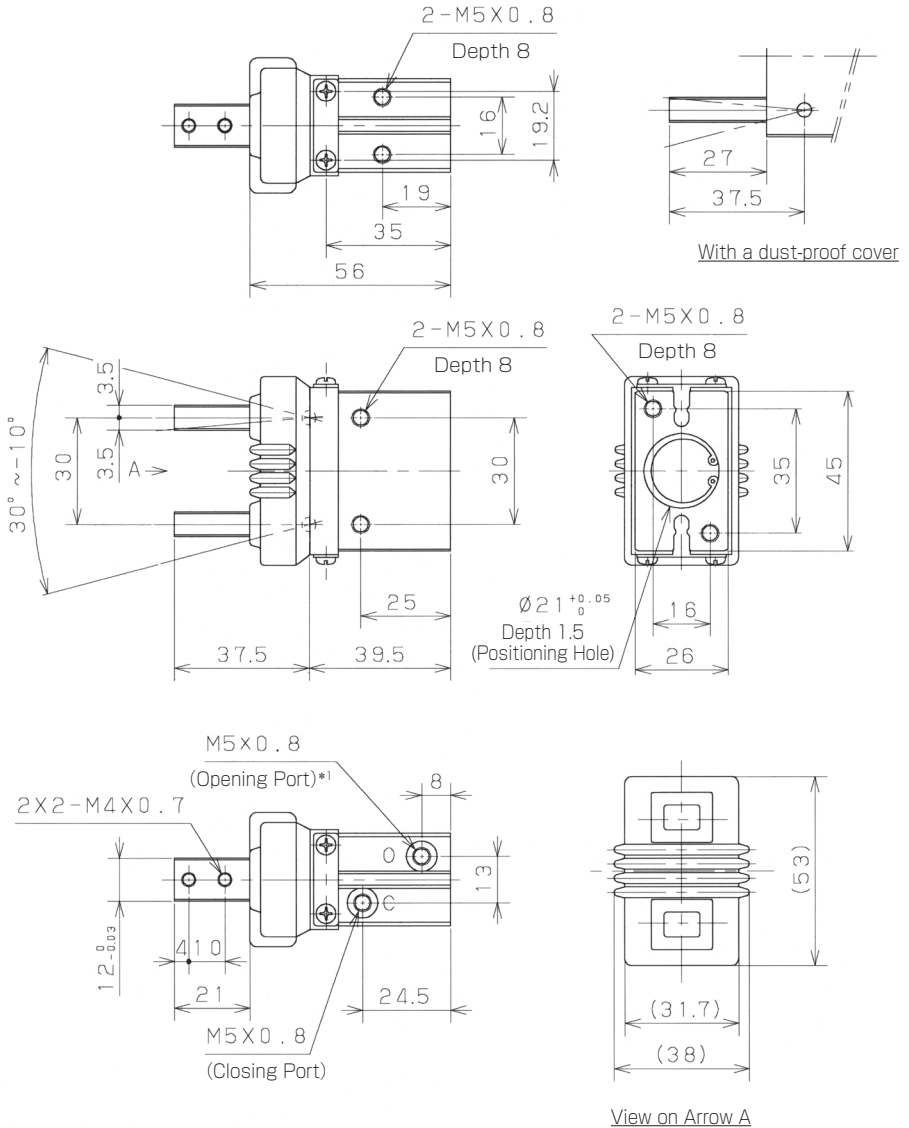
With a dust-proof cover



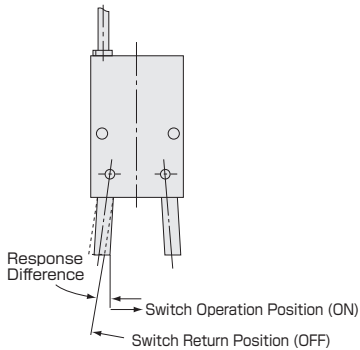
View on Arrow A

*1) For the single acting type, the opening port cannot be used because it is used for the exhaust plug.

Dimensions EHVJ-20 □ ※ J □



*1) For the single acting type, the opening port cannot be used because it is used for the exhaust plug.

Lever Operation and Switch Characteristics**1. Opening/Closing Stroke Difference (Opening/Closing Angle Difference)**

The distance from the position where the one side lever moves and the switch turns on from the position where the lever moves in the reverse direction and the switch turns off is called "response difference".

2. Switch repeat operating position accuracy

Variation of the switch ON/OFF position when the one side lever is moved in a certain direction.

Model	Opening/Closing Angle Difference[°]	Operation Position Accuracy[°]
EHVJ-16	2.0	0.6
EHVJ-20	2.0	0.5

Switch Protrusion Distance

No switch protrusion distance is set for the EHVJ series.

Switch Mounting

Insert the switch into the switch mounting groove. After setting the mounting position, tighten the switch fixing screw with a precision screwdriver. The tightening torque shall be 0.1 N·m or less.

