



# Attachment

● Material : Iron, engineering plastic



## Features

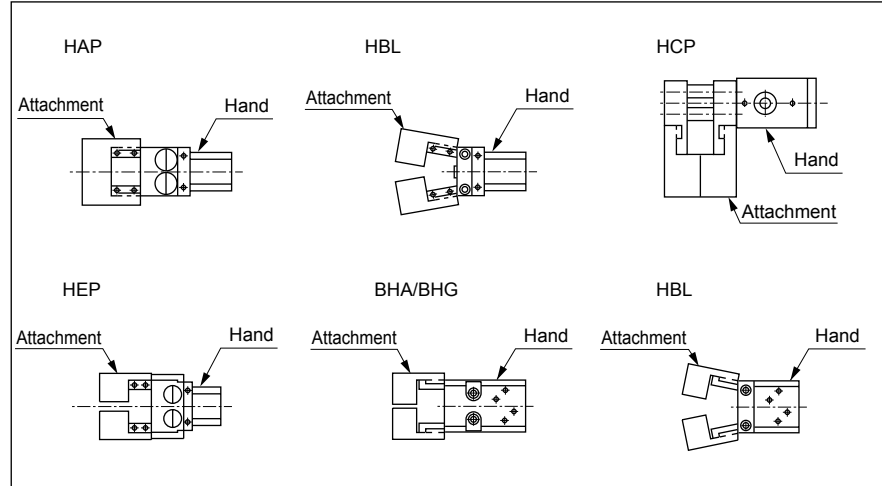
Attachments machined for use with a variety of models are available to match user workpieces.

● Socket and spigot section machined  
 Troublesome reference section (spigot section) machined.

Wide series variation to select according to workpiece shape and dimension.

● 2 types of material for attachment  
 Iron (S50C) and engineering plastic (MC nylon) are available for optimum selection according to material and working condition of workpiece.

## Compatible model for standard attachment



## Attachment applications

| Hand applications              |   |                 |
|--------------------------------|---|-----------------|
| Soft jaw                       | Compact workpiece                         | Large workpiece |
| Miscellaneous shape workpieces | Vertical grasp (inside tensile workpiece) | Vertical grasp  |

How to order (Note : When ordering repair parts, 1 pc. is provided.)

**BHA** - **Y1** - **110**

● A Model ● B Material ● C Attachment No.

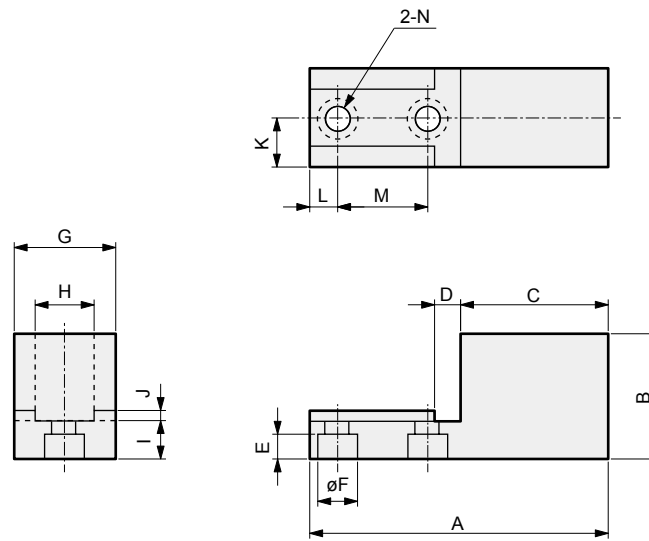
| A Model    |  | B Material |                   | C Attachment No. |                  |            |                     |
|------------|--|------------|-------------------|------------------|------------------|------------|---------------------|
| Code       | Description  | Code       | Description       | Code             | Compatibility    | Code       | Compatibility       |
| <b>FH</b>  | Feather hand (FH100/FH500)                           | <b>Y1</b>  | Material S50C     | <b>110</b>       | HAP-1C           | <b>210</b> | HEP-5CS             |
| <b>HAP</b> | Parallel hand  | <b>Y2</b>  | Material MC nylon | <b>120</b>       | HAP-2CS, HBL-2CS | <b>310</b> | FH110, FH510        |
| <b>BHA</b> | Compact cross roller parallel hand                   |            |                   | <b>130</b>       | HAP-3CS, HBL-3CS | <b>320</b> | FH112, FH512        |
| <b>BHG</b> | Compact cross roller parallel hand with rubber cover |            |                   | <b>140</b>       | HAP-4CS, HBL-4CS | <b>330</b> | FH116, FH516        |
| <b>HEP</b> | Bearing parallel hand                                |            |                   | <b>150</b>       | HBL-1CS          | <b>340</b> | FH120, FH520        |
| <b>HCP</b> | Lateral parallel hand                                |            |                   | <b>160</b>       | HCP-2CS          | <b>350</b> | FH125               |
| <b>HBL</b> | Fulcrum hand   |            |                   | <b>170</b>       | HCP-3CS          | <b>260</b> | BHA-01CS1, BHG-01CS |
|            |  |            |                   | <b>180</b>       | HCP-4CS          | <b>270</b> | BHA-03CS1, BHG-03CS |
|            |  |            |                   | <b>190</b>       | HEP-3.5CS        | <b>280</b> | BHA-04CS1, BHG-04CS |
|            |  |            |                   | <b>200</b>       | HEP-4CS          | <b>290</b> | BHA-05CS1, BHG-05CS |

LCM  
 LCR  
 LCG  
 LCW  
 LCX  
 STM  
 STG  
 STS/STL  
 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  
**Hand**  
 Chuk  
 MecHnd/Chuk  
 ShkAbs  
 FJ  
 FK  
 SpdContr  
 Ending  
 LSH-HP  
 LSH  
 FH100  
 BSA2  
 BHA/BHG  
 LHA  
 LHAG  
 HAP  
 HKP  
 HCP  
 HGP  
 HLF2  
 HLA/HLB  
 HLAG/HLBG  
 HLC  
 HLD  
 HMF  
 HMF-G  
 HMF-B  
 HFP  
 FH500  
 HBL  
 HJL  
 HMD  
 HDL  
 HJD  
 BHE

## Dimensions



● 110 to 350



\* Material  
Y1: S50C  
Y2: MC nylon

| Attachment No. | Compatibility         | * Material | Dimensions (mm) |      |      |      |   |     |    |                                    |    |     |      |     |    |     | Weight (g) |
|----------------|-----------------------|------------|-----------------|------|------|------|---|-----|----|------------------------------------|----|-----|------|-----|----|-----|------------|
|                |                       |            | A               | B    | C    | D    | E | øF  | G  | H <sup>+0.02</sup>                 | I  | J   | K    | L   | M  | øN  |            |
| 110            | HAP-1C                | Y1         | 40              | 17   | 24.5 | 4.5  | 3 | 6   | 10 | 8                                  | 5  | 1.5 | 5    | 3.5 | 8  | 3.5 | 39         |
|                |                       | Y2         |                 | 21   |      |      |   |     |    |                                    | 9  |     |      |     |    |     | 8          |
| 120            | HAP-2CS<br>HBL-2CS    | Y1         | 50              | 26   | 28   | 5.5  | 4 | 8   | 20 | 10                                 | 6  | 2   | 10   | 5   | 12 | 4.5 | 135        |
|                |                       | Y2         |                 | 30   |      |      |   |     |    |                                    | 10 |     |      |     |    |     | 25         |
| 130            | HAP-3CS<br>HBL-3CS    | Y1         | 60              | 33   | 30.5 | 6.5  | 5 | 9.5 | 20 | 12                                 | 8  | 2   | 10   | 5.5 | 18 | 5.5 | 194        |
|                |                       | Y2         |                 | 33   |      |      |   |     |    |                                    | 8  |     |      |     |    |     | 29         |
| 140            | HAP-4CS<br>HBL-4CS    | Y1         | 80              | 43   | 44   | 7.5  | 6 | 11  | 20 | 14                                 | 10 | 2   | 10   | 8   | 20 | 6.5 | 352        |
|                |                       | Y2         |                 | 50   |      |      |   |     |    |                                    | 17 |     |      |     |    |     | 53         |
| 150            | HBL-1C                | Y1         | 40              | 19   | 4.5  | 3    | 6 | 12  | 8  | 5                                  | 5  | 1.5 | 6    | 4   | 10 | 3.5 | 44         |
|                |                       | Y2         |                 | 21   |      |      |   |     |    |                                    | 7  |     |      |     |    |     |            |
| 160            | HCP-2CS               | Y1         | 60              | 29   | 33   | 9.5  | 5 | 9.5 | 22 | 18 <sup>+0.2</sup> <sub>-0.1</sub> | 9  | 2   | 11   | 11  | 10 | 5.5 | 206        |
|                |                       | Y2         |                 | 31   |      |      |   |     |    |                                    |    |     |      |     |    |     |            |
| 170            | HCP-3CS               | Y1         | 70              | 35   | 34   | 11.5 | 6 | 11  | 25 | 20 <sup>+0.2</sup> <sub>-0.1</sub> | 10 | 2   | 12.5 | 8   | 20 | 6.5 | 303        |
|                |                       | Y2         |                 | 45   |      |      |   |     |    |                                    |    |     |      |     |    |     |            |
| 180            | HCP-4CS               | Y1         | 80              | 40   | 42   | 13   | 6 | 11  | 35 | 25 <sup>+0.2</sup> <sub>-0.1</sub> | 10 | 2   | 17.5 | 10  | 20 | 6.5 | 563        |
|                |                       | Y2         | 78              | 44   |      |      |   |     |    |                                    | 8  |     |      | 97  |    |     |            |
| 190            | HEP-3.5CS             | Y1         | 80              | 41   | 50   | 7.5  | 5 | 9.5 | 20 | 14                                 | 10 | 2   | 10   | 6   | 18 | 5.5 | 360        |
|                |                       | Y2         |                 | 49   |      |      |   |     |    |                                    | 18 |     |      |     |    |     | 70         |
| 200            | HEP-4CS               | Y1         | 120             | 60   | 81   | 11.5 | 6 | 11  | 30 | 22                                 | 13 | 2   | 15   | 8   | 20 | 6.5 | 1245       |
|                |                       | Y2         |                 | 77   |      |      |   |     |    |                                    | 30 |     | 16   |     |    |     | 270        |
| 210            | HEP-5CS               | Y1         | 135             | 60   | 91   | 14.5 | 8 | 14  | 30 | 28                                 | 16 | 2   | 15   | 10  | 25 | 8.5 | 1443       |
|                |                       | Y2         |                 | 79   |      |      |   |     |    |                                    | 35 |     | 19   |     |    |     | 382        |
| 310            | FH110<br>FH510        | Y1         | 29.5            | 15   | 14   | 4.5  | 3 | 6   | 12 | 7                                  | 4  | 1.5 | 6    | 3.5 | 8  | 3.5 | 22         |
|                |                       | Y2         |                 | 4    |      |      |   |     |    |                                    |    |     |      |     |    |     |            |
| 320            | FH112<br>FH512        | Y1         | 29.5            | 16.5 | 14   | 4.5  | 3 | 6   | 12 | 7                                  | 4  | 1.5 | 6    | 3.5 | 8  | 3.5 | 23         |
|                |                       | Y2         |                 | 4    |      |      |   |     |    |                                    |    |     |      |     |    |     |            |
| 330            | FH116<br>FH516        | Y1         | 39              | 20   | 20.5 | 5.5  | 4 | 8   | 12 | 10                                 | 5  | 1.5 | 6    | 3.5 | 10 | 4.5 | 48         |
|                |                       | Y2         |                 | 8    |      |      |   |     |    |                                    |    |     |      |     |    |     |            |
| 340            | FH120<br>FH520        | Y1         | 39              | 22.5 | 20.5 | 5.5  | 4 | 8   | 12 | 10                                 | 5  | 1.5 | 6    | 3.5 | 10 | 4.5 | 53         |
|                |                       | Y2         |                 | 25.5 |      |      |   |     |    |                                    | 8  |     |      |     |    |     | 10         |
| 350            | FH125                 | Y1         | 48.5            | 22.5 | 28.5 | 6.5  | 5 | 9.5 | 14 | 12                                 | 8  | 2   | 7    | 4.5 | 10 | 5.5 | 105        |
|                |                       | Y2         |                 | 25.5 |      |      |   |     |    |                                    | 14 |     |      |     |    |     | 17         |
| 260            | BHA-01CS1<br>BHG-01CS | Y1         | 30              | 17.5 | 14.5 | 4.5  | 3 | 6   | 14 | 10                                 | 5  | 1.5 | 7    | 4   | 8  | 3.5 | 38         |
|                |                       | Y2         |                 | 6    |      |      |   |     |    |                                    | 6  |     |      |     |    |     |            |
| 270            | BHA-03CS1<br>BHG-03CS | Y1         | 40              | 21   | 21   | 5.5  | 4 | 8   | 14 | 10                                 | 6  | 1.5 | 7    | 4.5 | 10 | 4.5 | 61         |
|                |                       | Y2         |                 | 23   |      |      |   |     |    |                                    | 8  |     |      |     |    |     | 11         |
| 280            | BHA-04CS1<br>BHG-04CS | Y1         | 40              | 26.5 | 21   | 5.5  | 4 | 8   | 14 | 10                                 | 6  | 1.5 | 7    | 4.5 | 10 | 4.5 | 76         |
|                |                       | Y2         |                 | 29.5 |      |      |   |     |    |                                    | 9  |     |      |     |    |     | 12         |
| 290            | BHA-05CS1<br>BHG-05CS | Y1         | 50              | 33   | 28.5 | 6.5  | 5 | 9.5 | 14 | 10                                 | 8  | 2   | 7    | 6   | 10 | 5.5 | 123        |
|                |                       | Y2         |                 | 39   |      |      |   |     |    |                                    | 14 |     |      |     |    |     | 23         |

|              |
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| UB           |
| JSB3         |
| LMB          |
| LML          |
| HCM          |
| HCA          |
| LBC          |
| CAC4         |
| UCAC2        |
| CAC-N        |
| UCAC-N       |
| RCS2         |
| RCC2         |
| PCC          |
| SHC          |
| MCP          |
| GLC          |
| MFC          |
| BBS          |
| RRC          |
| GRC          |
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| LHA          |
| LHAG         |
| HAP          |
| HKP          |
| HCP          |
| HGP          |
| HLF2         |
| HLA/HLB      |
| HLAG/HLBG    |
| HLC          |
| HLD          |
| HMF          |
| HMF-G        |
| HMFB         |
| HFP          |
| FH500        |
| HBL          |
| HJL          |
| HMD          |
| HDL          |
| HJD          |
| BHE          |