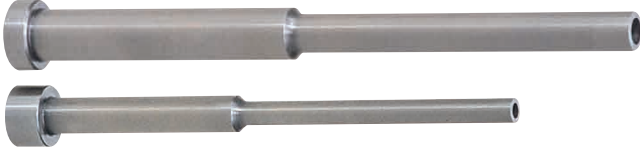


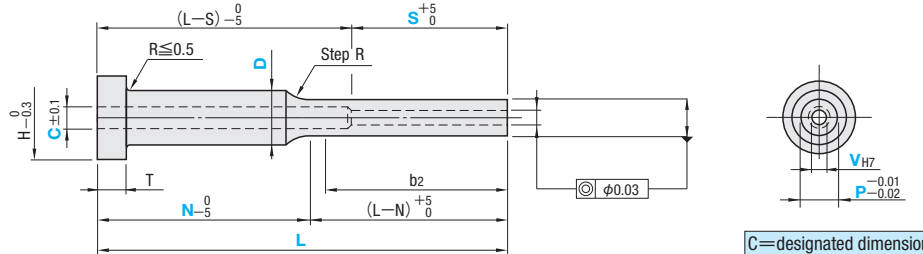
STEPPED EJECTOR SLEEVE

Ⓜ Non JIS material definition is listed on P.1351 - 1352

RoHS



| Part Number | Head Thickness (T) | P | D | T | V | L | | Applicable center pin shaft diameter tolerance | |
|-------------|--------------------|-------|----------------|------------|----|------------|------------|--|---|
| | | | | | | L ≤ 200 | L > 200 | V ≤ 3.0 | 3.1 ≤ V ≤ 6.0 |
| ESNVF | 4mm (T4) | -0.01 | -0.01 -0.02 | 0 -0.02 | H7 | +0.02 0 | +0.05 0 | -0.01 -0.02 | ※Note that for sleeves with V dimension tolerance of H7, combination with center pins that have shaft diameter tolerance -0.005 is not recommended. The reason for this is the fitting sections S are longer. (Details P.1309) |
| ESJVF | 6 • 8mm (JIS) | -0.02 | -0.02 -0.04 | 0 -0.05 | H7 | 0 | 0 | -0.02 | † V ≤ 3.0 † 3.1 ≤ V ≤ 6.0 † V ≥ 6.1 |



C = designated dimension

- Ⓜ SKD61 equivalent+Nitrided
- † Surface : 900HV
- Base material : 40±3HRC
- Ⓜ Range of guaranteed shaft diameter precision (D) (Details [P.1305](#))
- † Range of guaranteed base material hardness (Details [P.1307](#))
- † Range of guaranteed surface hardness for nitriding (Details [P.1308](#))
- † Step R (Details [P.1306](#))
- Ⓜ Range of guaranteed tip-diameter precision (b2) (Details [P.1306](#))

Ⓜ Nitriding may extend to the head as it is applied after dimension V and P machining.

† To insert a stepped center pin, the following condition must be met:
the sleeve's recess diameter (D) ≥ the center pin's shaft diameter (D) + 1.0 (Details [P.1310](#))

Alterations Part Number — L — V — P — C — N — S — (KC • WKC...etc.)

ESNVF6 — 150.00 — V2.5 — P5.50 — C3.1 — N80 — S30 — KC3.5

ESJVF6 — 150.00 — V3.0 — P5.50 — C4.0 — N80 — S30 — KC3.5

Alteration details [P.275](#)

| Alterations | Code | Spec. | 1Code |
|-------------|------------|--|--|
| | KC | Single flat cutting D/2 ≤ KC < H/2 | Quotation |
| | WKC | Two flats cutting D/2 ≤ WKC < H/2 | |
| | KAC KBC | Varied width parallel flats cutting D/2 ≤ KAC < H/2 KBC = 0.1mm increments only KAC < KBC < H/2 | |
| | RKC | Two flats (right angled) cutting D/2 ≤ RKC < H/2 | |
| | DKC | Three flats cutting D/2 ≤ DKC < H/2 | |
| | SKC | Four flats cutting D/2 ≤ SKC < H/2 | |
| | KGC | Two flats (angled) cutting D/2 ≤ KGC < H/2 AG = 1° increments 0 < AG < 360 | |
| | KTC | Three flats cutting at 120° D/2 ≤ KTC < H/2 | (1) To align the key flat with the shaft diameter (Unit of designation) 0.05mm increments possible (2) To designate arbitrary key flat dimensions (Unit of designation) 0.1mm |

4mm head

| H | T | Part Number | | L 0.01mm increments | V 0.1mm increments | P 0.01mm increments | C 0.1mm increments | Cmax. | 1mm increments | | | | | | | | | |
|-------------|-----------|--------------|-----------|---------------------------|--|---------------------------|-----------------------------------|-------|------------------------------|--|-------|-------------|----|-------------|-------------|--------|--------|----|
| | | Type | D | | | | | | N | S | | | | | | | | |
| 7 | 4 | ESNVF | 4 | 50.00~200.00 | 1.5~2.0 | 3.00~3.95 | C ≥ V + 0.5 and C ≤ P - 1.0 | 2.5 | N ≥ L/3 and (L-N) ≥ 10 | <table border="1" style="font-size: small;"> <tr><td colspan="2">20~50</td></tr> <tr><td>L</td><td>(L-S)min.</td></tr> <tr><td>50.00~60.00</td><td>20</td></tr> <tr><td>60.01~</td><td>30</td></tr> </table> | 20~50 | | L | (L-S)min. | 50.00~60.00 | 20 | 60.01~ | 30 |
| 20~50 | | | | | | | | | | | | | | | | | | |
| L | | | (L-S)min. | | | | | | | | | | | | | | | |
| 50.00~60.00 | | | 20 | | | | | | | | | | | | | | | |
| 60.01~ | | | 30 | | | | | | | | | | | | | | | |
| 8 | | | 4.5 | 2.0~2.5 | 3.50~4.45 | 3.0 | | | | | | | | | | | | |
| 9 | | | 5 | 50.00~250.00 | 2.0~3.0 | 3.50~4.95 | | | | | 3.5 | | | | | | | |
| | | | 5.5 | | 2.0~3.5 | 3.50~5.45 | | | | | 4.0 | | | | | | | |
| 10 | | | 6 | 50.00~300.00 | 2.0~4.0 | 4.00~5.95 | | | | | 4.5 | | | | | | | |
| | | | 6.5 | | 2.0~4.5 | 4.00~6.45 | | | | | 5.0 | | | | | | | |
| 11 | 7 | 50.00~300.00 | 2.0~5.0 | 4.00~6.95 | 5.5 | | | | | | | | | | | | | |
| | 7.5 | | 2.0~5.5 | 4.00~7.45 | 6.0 | | | | | | | | | | | | | |
| 14 | 8 | 50.00~300.00 | 2.5~6.0 | 4.00~7.95 | 6.5 | | | | | | | | | | | | | |
| | 9 | | 2.5~6.9 | 4.50~8.95 | 7.5 | | | | | | | | | | | | | |
| 15 | 10 | 2.5~7.9 | 4.50~9.95 | 8.5 | <table border="1" style="font-size: small;"> <tr><td colspan="2">20~50</td></tr> <tr><td>L</td><td>(L-S)min.</td></tr> <tr><td>50.00~60.00</td><td>20</td></tr> <tr><td>60.01~70.00</td><td>30</td></tr> <tr><td>70.01~80.00</td><td>40</td></tr> <tr><td>80.01~</td><td>50</td></tr> </table> | 20~50 | | L | (L-S)min. | 50.00~60.00 | 20 | 60.01~70.00 | 30 | 70.01~80.00 | 40 | 80.01~ | 50 | |
| 20~50 | | | | | | | | | | | | | | | | | | |
| L | (L-S)min. | | | | | | | | | | | | | | | | | |
| 50.00~60.00 | 20 | | | | | | | | | | | | | | | | | |
| 60.01~70.00 | 30 | | | | | | | | | | | | | | | | | |
| 70.01~80.00 | 40 | | | | | | | | | | | | | | | | | |
| 80.01~ | 50 | | | | | | | | | | | | | | | | | |

| D | Limit value for P |
|------|-------------------|
| 4~8 | P ≥ V + 1.5 |
| 9~10 | P ≥ V + 2.0 |

JIS head

| H | T | Part Number | | L 0.01mm increments | V 0.1mm increments | P 0.01mm increments | C 0.1mm increments | Cmax. | N 1mm increments | S 5mm increments | | | | | | | | | | |
|-------------|-----|--------------|-----------|---------------------------|---|---------------------------|-----------------------------------|------------|------------------------------|---|-------|--|---|-----------|-------------|----|-------------|----|--------|----|
| | | Type | D | | | | | | | | | | | | | | | | | |
| 9 | 6 | ESJVF | 5 | 50.00~300.00 | 2.0~3.0 | 3.50~4.95 | C ≥ V + 0.5 and C ≤ P - 1.0 | 3.5 | N ≥ L/3 and (L-N) ≥ 10 | <table border="1" style="font-size: small;"> <tr><td colspan="2">20~50</td></tr> <tr><td>L</td><td>(L-S)min.</td></tr> <tr><td>50.00~60.00</td><td>20</td></tr> <tr><td>60.01~70.00</td><td>30</td></tr> <tr><td>60.01~</td><td>30</td></tr> </table> | 20~50 | | L | (L-S)min. | 50.00~60.00 | 20 | 60.01~70.00 | 30 | 60.01~ | 30 |
| 20~50 | | | | | | | | | | | | | | | | | | | | |
| L | | | (L-S)min. | | | | | | | | | | | | | | | | | |
| 50.00~60.00 | | | 20 | | | | | | | | | | | | | | | | | |
| 60.01~70.00 | | | 30 | | | | | | | | | | | | | | | | | |
| 60.01~ | | | 30 | | | | | | | | | | | | | | | | | |
| 10 | | | 5.5 | 2.0~3.5 | 3.50~5.45 | 4.0 | | | | | | | | | | | | | | |
| 11 | | | 6 | 50.00~300.00 | 2.0~4.0 | 4.00~5.95 | | | | | 4.5 | | | | | | | | | |
| | | | 6.5 | | 2.0~4.5 | 4.00~6.95 | | | | | 5.0 | | | | | | | | | |
| 12 | | | 7 | 50.00~300.00 | 2.0~5.0 | 4.00~7.45 | | | | | 5.5 | | | | | | | | | |
| | 7.5 | 2.0~5.5 | 4.00~7.95 | | 6.0 | | | | | | | | | | | | | | | |
| 13 | 8 | 50.00~300.00 | 2.5~5.5 | 5.00~7.95 | 6.0 | | | | | | | | | | | | | | | |
| | 8 | | 2.5~5.5 | 5.00~7.95 | 6.0 | | | | | | | | | | | | | | | |
| 14 | 9 | 70.00~300.00 | 3.0~6.5 | 6.00~8.95 | 7.0 | | | | | | | | | | | | | | | |
| | 9 | | 3.0~6.5 | 6.00~8.95 | 7.0 | | | | | | | | | | | | | | | |
| 15 | 10 | 3.5~7.5 | 6.00~9.95 | 8.0 | <table border="1" style="font-size: small;"> <tr><td colspan="2">20~50</td></tr> <tr><td>(L-S) ≥ 50</td><td></td></tr> </table> | 20~50 | | (L-S) ≥ 50 | | | | | | | | | | | | |
| 20~50 | | | | | | | | | | | | | | | | | | | | |
| (L-S) ≥ 50 | | | | | | | | | | | | | | | | | | | | |

| D | Limit value for P |
|------|-------------------|
| 5~8 | P ≥ V + 1.5 |
| 9~10 | P ≥ V + 2.0 |

Order Part Number — L — V — P — C — N — S

ESNVF8 — 200.05 — V4.0 — P7.05 — C4.5 — N120 — S30

ESJVF10 — 200.05 — V4.5 — P7.55 — C6.0 — N120 — S30

Days to Ship **Quotation**

Price **Quotation**