# BALL-LOCK RETAINERS
## —LIGHT LOAD・SPACE SAVING・SINGLE FIXING-BOLT TYPE—

Refer to Notes on P.770.

**For round punch** RoHS

Ⓐ

| Application | Catalog No. | Components ① | ② | ③ | ④ | ⑦ |
|---|---|---|---|---|---|---|
| For round punch | CLN—PS | ○ | ○ | | ○ | ○ |
| Retainer body +plug | CLN—PN | ○ | ○ | | | |

⑤MSTM and ⑥MSW are not included with retainers for round punches.

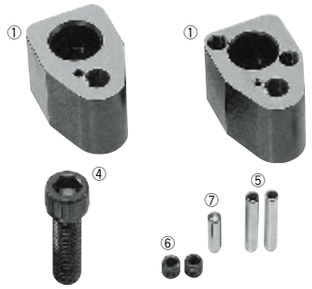
**For shaped punch and button die**

D R E G

| Application | Catalog No. | Components ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
|---|---|---|---|---|---|---|---|---|
| For shaped punch | CLN—FS | ○ | ○ | | ○ | ○ | ○ | ○ |
| For button die | CLN—DS | ○ | | ○ | ○ | ○ | ○ | ○ |
| Retainer body for shaped punch+plug | CLN—FSN | ○ | ○ | | | | | |
| Retainer body for button die+plug | CLN—DSN | ○ | | ○ | | | | |

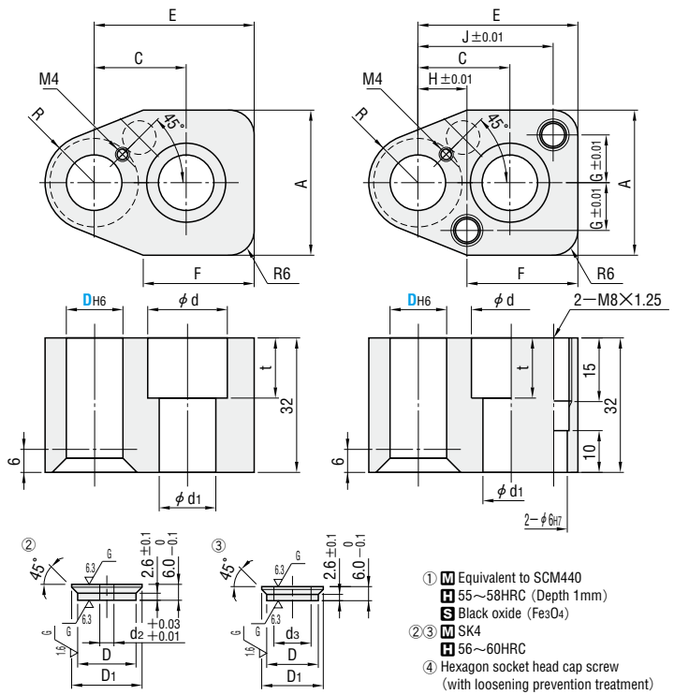
Only D13・D16 are available for button dies.

**For round punch** **For shaped punch and button die**




Use these retainers for light-load type punches. They cannot be used for heavy load type punches.

**—For round punch—** **—For shaped punch and button die—**




① M Equivalent to SCM440
H 55～58HRC (Depth 1mm)
S Black oxide (Fe3O4)
②③ M SK4
H 56～60HRC
④ Hexagon socket head cap screw (with loosening prevention treatment)

| Catalog No. Type | D | $D_{H6}$ | A | C | E | F | G | H | J | R | $D_1$ | d | $d_1$ | t | $d_2$ | $d_3$ | For round punch Ⓐ④ ⑦ | For shaped punch Ⓐ④⑤⑥⑦ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (For round punch) ①②④⑦ CLN—PS ①② CLN—PN | (10) | +0.009 0 | 34 | 22 | 38 | 26 | 11 | 12 | 32 | 11.5 | 16 | 19 | 13 | 14 | 6 | — | ④M12—40 ⑦MS6—20 | ④M12—40 ⑤MSTM6—30 ⑥MSW8 ⑦MS6—20 |
| (For shaped punch and button die) ①②④⑤⑥⑦ CLN—FS ①③④⑤⑥⑦ CLN—DS ①② CLN—FSN ①③ CLN—DSN | 13 | +0.011 0 | | | | | | | | | 19 | | | | | 6.2 | | |
| | 16 | | 36 | 26 | 45 | 33 | 12 | | 39 | 13 | 22 | 25 | 17 | 18 | | 9 | ④M16—40 ⑦MS6—20 | ④M16—40 ⑤MSTM6—30 ⑥MSW8 ⑦MS6—20 |

D10 is available only for punch retainers.

Order — Catalog No. CLN—PS 10

Days to Ship — Quotation

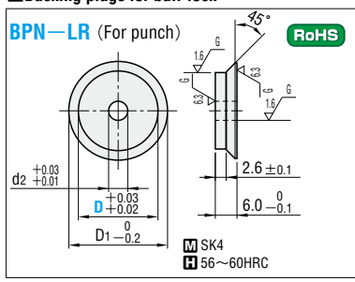
Price — Quotation



# BALL-LOCK RETAINERS
## —COMPONENTS—

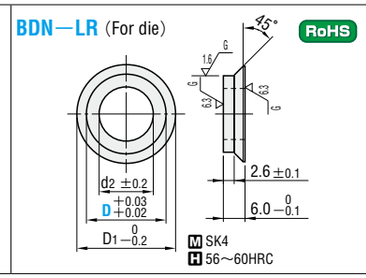
### ■Backing plugs for ball-lock

**BPN—LR** (For punch) RoHS



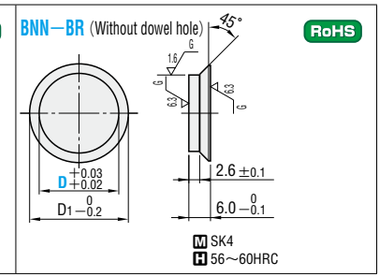

M SK4
H 56～60HRC

**BDN—LR** (For die) RoHS




M SK4
H 56～60HRC

**BNN—BR** (Without dowel hole) RoHS




M SK4
H 56～60HRC

| Retainer | $D_1$ | $d_2$ | Catalog No. Type | D | Base unit price 1～4 pieces | Volume discount unit price 5～9 pieces | 10～19 pieces | 20～50 pieces |
|---|---|---|---|---|---|---|---|---|
| CRN—P BRN—P CLN—P CBN—P CCRN CLN—PS CLN—FS LRGD—L/R BRGD—L/R | 16 | 6 | BPN—LR | 10 | | | | |
| | 19 | | | 13 | | | | |
| | 22 | | | 16 | | | | |
| | 26 | | | 20 | | | | |
| | 31 | | | 25 | | | | |
| | 38 | | | 32 | | | | |
| CRN—D CLN—D | 19 | 6.2 | BDN—LR | 13 | Quotation | | | |
| | 22 | 9 | | 16 | | | | |
| | 26 | 12 | | 20 | | | | |
| | 31 | 17 | | 25 | | | | |
| | 38 | 21 | | 32 | | | | |
| | 44 | 27 | | 38 | | | | |
| BRN—P CBN—PN | 16 | — | BNN—BR | 10 | | | | |
| | 19 | | | 13 | | | | |
| | 22 | | | 16 | | | | |
| | 26 | | | 20 | | | | |
| | 31 | | | 25 | | | | |
| | 38 | | | 32 | | | | |

### ■Balls for ball-lock retainers

| Retainer | | | | D | Catalog No. | Base unit price 1～4 pieces | Volume discount unit price 5～9 pieces | 10～19 pieces | 20～50 pieces |
|---|---|---|---|---|---|---|---|---|---|
| Light load | CLN—P CLN—PS CLN—D | CRN—P CLN—FS CRN—D | CCRN | 10～38 | BB 8 | Quotation | | | |
| Heavy load | CBN—P CBN—PN | CRN—P BRN—PN | | 10 | BB 10 | | | | |
| | | | | 13～32 | BB 13 | | | | |

### ■Springs for ball-lock retainers

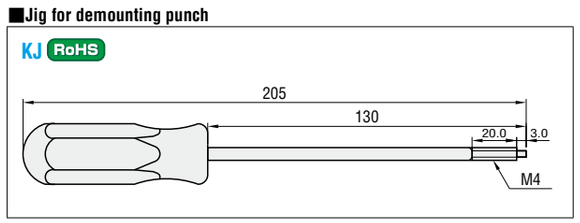
| Retainer | | | | D | Catalog No. | Base unit price 1～4 pieces | Volume discount unit price 5～9 pieces | 10～19 pieces | 20～50 pieces |
|---|---|---|---|---|---|---|---|---|---|
| Light load | CLN—P CLN—PS CLN—D | CRN—P CLN—FS CRN—D | CCRN | 10～38 | BF 8 | Quotation | | | |
| Heavy load | CBN—P CBN—PN | CRN—P BRN—PN | | 10 | BF 10 | | | | |
| | | | | 13～32 | BF 13 | | | | |

Order — Catalog No. BPN—LR25

Days to Ship — Quotation

### ■Jig for demounting punch

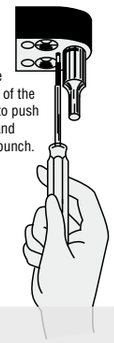
**KJ** RoHS




Order — Catalog No. KJ

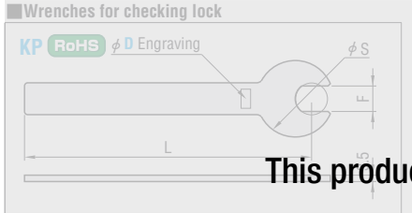
Days to Ship — Quotation

●Screw in the threaded tip of the jig in order to push up the ball and release the punch.



### ■Wrenches for checking lock

**KP** RoHS φD Engraving

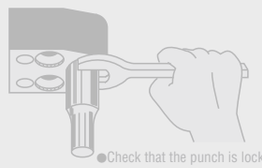



| D | F | S | L | Catalog No. Type | D | Base unit price 1～4 pieces | Volume discount unit price 5～9 pieces | 10～19 pieces | 20～50 pieces |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 8 | 20 | 83 | KP | 10 | Quotation | | | |
| 13 | 10 | 25 | 84 | | 13 | | | | |
| 16 | 13 | 30 | 85 | | 16 | | | | |
| 20 | 17 | 36 | 105 | | 20 | | | | |
| 25 | 22 | 45 | 106 | | 25 | | | | |
| 30 | 26 | 55 | 124 | | 32 | | | | |

This product was discontinued in 2017.

Catalog No. : KP

Example



●Check that the punch is locked by the ball-lock in the correct position by placing a wrench into the punch groove and turning it in both directions.

Order — Catalog No. KP 32

Days to Ship — Quotation