







- Use this for the recipient that requires abrasion resistance and accurate locating.
- Especially effective for plungers for heavy load.
- It can be used for pin type plungers, as well as ball type plungers.
- For applicable ball button, please refer to each product page of the plungers.
- Heat treatment and polishing applied. It is easy to press fit or press.
- Machine the holes for ball button BB mounting so that they are transition fit or stationary fit.

Material/Finish

	ВВ
Main body	SK4 (hardness: 60 - 62 HRC) - Polishing

					Unit:mm
Part Number	A 11	L	L1	В	Mass (g)
BB-4	4	5	2	1.5	0.5
BB-5	5	6	2	2	1
BB-6	6	8	2	2	2
BB-8	8	10	2	3	4
BB-10	10	12	3	4	6.5
BB-12	12	14	3	6	12
BB-16	16	18	3	8	26

• Effective stroke s1 formula

• If $D \le \sqrt{2} B$

$$s_1 = s - (\frac{D+B}{2} - \frac{\sqrt{2}}{2}D)$$

• If D> $\sqrt{2}$ B

$$s_1=s-\frac{D-\sqrt{D^2-B^2}}{2}$$

s₁:Effective stroke

s: Total stroke of the plunger

D: Diameter of plunger ball or pin

B:Diameter of recipient hole of the ball button **BB**



• Part number specification







