

SCS-F Clamping Screw



Characteristic

The ball rotates 9°.
It securely clamps even if the subject is tilting.

Note

No stroke caused by a spring.

Application

Machine tools / Jigs / Tools /
Any Type of Metal Mold /
Testing devices

Specification

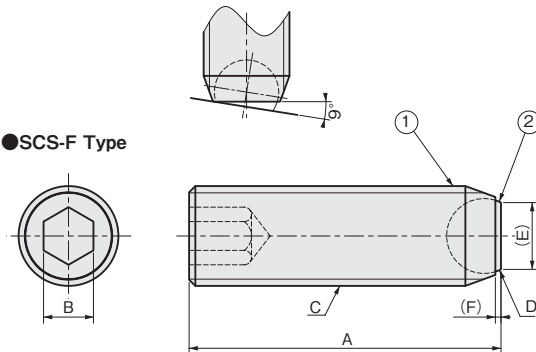
Hardness of the Ball:
HRC56~60

Parts List

No.	Parts Name	Material	Finish	Quantity
1	Body	SCM435	Fe3O4 Oxidation Film Treating (Black)	1
2	Ball	SUJ2		1

Model No.	A	B	C	D	(E)	(F)	Net Weight(g)	Code No.
SCS-M6×10-F	10	3	M6	φ4	(φ3.2)	(0.45)	1.5	4429
SCS-M6×16-F	16						2.5	4430
SCS-M6×25-F	25						4	4431
SCS-M8×10-F	10	4	M8	φ5.5	(φ4.5)	(0.5)	2.5	4432
SCS-M8×12-F	12						3.2	4433
SCS-M8×20-F	20						5.7	4434
SCS-M8×30-F	30	5	M10	φ7	(φ6)	(0.6)	9	4435
SCS-M10×12-F	12						5	4436
SCS-M10×16-F	16						7	4437
SCS-M10×25-F	25	6	M12	φ8.5	(φ7.2)	(0.75)	11	4438
SCS-M10×35-F	35						16	4439
SCS-M12×16-F	16						10	4440
SCS-M12×20-F	20	8	M16	φ12	(φ10.7)	(0.9)	12.5	4441
SCS-M12×30-F	30						20	4442
SCS-M12×40-F	40						28	4443
SCS-M16×20-F	20	8	M16	φ12	(φ10.7)	(0.9)	22	4444
SCS-M16×25-F	25						28	4445
SCS-M16×35-F	35						41	4446
SCS-M16×50-F	50						48	4447

SCS-F Type



BB Ball Button



Characteristic

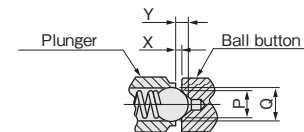
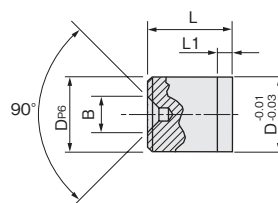
A receiver applicable to where strong abrasion resistance or precise positioning is required.
It is effective as a receiver for a heavy weight plunger.
It can be used for a pin type plunger other than a ball type plunger.
Heat treatment and polish finishing are applied.
Easy to press in or drive in.

Application

Machine tools / Jigs and tools /
Various types of metal molds, etc.

Note

Hole shapes are slightly different from each BB-4, BB-5, and BB-6.



■ An effective stroke for plunger using with the ball button is given as following.
[Effective stroke calculation]

$$\sqrt{2} P \text{ For } Q > \frac{Q - \sqrt{Q^2 - B^2}}{2}$$

$$X = Y - \frac{Q - \sqrt{Q^2 - B^2}}{2}$$

$$\sqrt{2} P \text{ For } Q < \frac{Q - \sqrt{Q^2 - B^2}}{2}$$

$$X = Y - \frac{P - (\sqrt{2} - 1)Q}{2}$$

$$\approx Y - \frac{P - 0.414Q}{2}$$

X=effective stroke,
Y=total stroke of the plunger,
P=receiver hole diameter of Ball Button BB,
Q=diameter of the plunger ball.
Fixing hole for the Ball Button BB should be processed that Ball Button is fixed as an intermediate fit or a tightened fit.

Model No.	D	L±0.05	L1	B	Net Weight (g)	Code No.
BB-4	4	5	(2)	1.5	0.5	4448
BB-5	5	6		2	1.0	4449
BB-6	6	8		3	2.0	4450
BB-8	8	10	(3)	4	4.0	4451
BB-10	10	12		6	6.5	4452
BB-12	12	14		8	12.0	4453
BB-16	16	18		8	26.0	4454

Specification

Model No.	Material	Finish
BB	SK4	Hardening (Hardness HRC60~62) · Polish