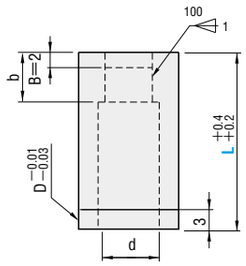
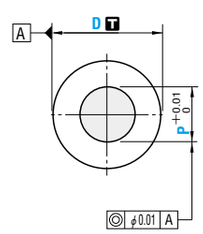
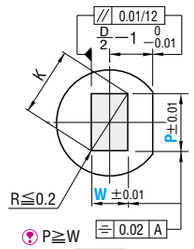
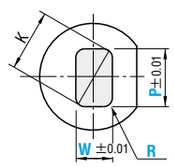
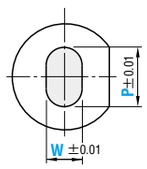
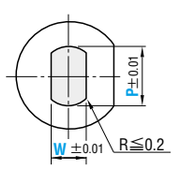
Straight type	Shank diameter D T tolerance	M H	D dimension	Catalog No.	The hole shape can be selected from Ⓐ D R E G below.
RoHS  For shank diameter tolerance D T, select either n5 or $^{+0.005}_{0}$.	D_{n5}	Equivalent to SKH51 61~64HRC	D3~5	MSD	Regular type 
		Equivalent to SKD 11 60~63 HRC	D6~56		
		Equivalent to SKD 11 60~63 HRC	D8~56	SD□	
		Powdered high-speed steel 64~67 HRC	D6~25	PMSD	
			D8~25	PSD□	
	$D^{+0.005}_{0}$	Equivalent to SKH51 61~64HRC	D3~5	A—MSD	
		Equivalent to SKD 11 60~63 HRC	D6~16		
		Equivalent to SKD 11 60~63 HRC	D8~16	A—SD□	
		Powdered high-speed steel 64~67 HRC	D6~16	A—PMSD	
			D8~16	A—PSD□	

Hole shape Ⓐ 

Hole shape D 

Hole shape R 

Hole shape E 

Hole shape G 

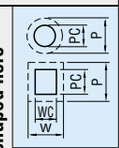
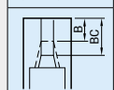
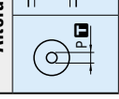
D tolerance			Catalog No.		L	0.01mm increments			b	d
						Ⓐ	D R E G	R		
D	n5	$^{+0.005}_{0}$	Type	D		min. P max.	P·Kmax.	P·Wmin.	R	
3	$^{+0.008}_{+0.004}$	+0.005 0	(Equivalent to SKH51) (D_{n5}) ($D^{+0.005}_{0}$)	(3)	16 20	0.30~ 1.00	—	—	—	2.0
4				(4)	16 20 22 25 28 30	0.50~ 2.00	—	—		2.4
5	$^{+0.013}_{+0.008}$		Ⓐ MSD A—MSD	(5)	16 20 22 25 28 30	0.50~ 2.50	—	—		2.9
6				(6)	16 20 22 25 28 30 32 35	1.00~ 3.00	—	—		3.4
8	$^{+0.016}_{+0.010}$		(Equivalent to SKD11) (D_{n5}) ($D^{+0.005}_{0}$)	8	16 20 22 25 28 30 32 35	1.00~ 4.00	4.00	1.00	0.15≦R<$\frac{W}{2}$ (Ⓡ only)	4.4
10				10	16 20 22 25 28 30 32 35 (40)	2.00~ 6.00	6.00	1.20		6.4
13	$^{+0.020}_{+0.012}$		Ⓐ MSD A—MSD	13	16 20 22 25 28 30 32 35 (40)	3.00~ 8.00	8.00	1.50		8.4
16				16	16 20 22 25 28 30 32 35 (40)	5.00~ 10.00	10.00	2.00		10.6
20	$^{+0.024}_{+0.015}$	—	Ⓓ SDD A—SDD	(20)	16 20 22 25 28 30 32 35 (40)	7.00~ 12.00	12.00	3.00		12.6
22				(22)	16 20 22 25 28 30 32 35 (40)	8.00~ 14.00	14.00	3.00		14.6
25			Ⓡ SDR A—SDR	(25)	16 20 22 25 28 30 32 35 (40)	10.00~ 16.00	16.00	3.00		16.6
32	$^{+0.028}_{+0.017}$			(32)	16 20 22 25 28 30 32 35	15.00~ 20.00	20.00	4.00		20.6
38			Ⓔ SDE A—SDE	(38)	16 20 22 25 30 35	19.00~ 26.00	26.00	5.00		26.6
45				(45)	20 22 25 30 35	25.00~ 35.00	35.00	6.00		36.0
50			Ⓖ SDG A—SDG	(50)	20 22 25 30 35	33.00~ 40.00	40.00	7.00		41.0
56	$^{+0.033}_{+0.020}$			(56)	20 22 25 30 35	38.00~ 45.00	45.00	8.00		46.0
6	$^{+0.013}_{+0.008}$	+0.005 0	(Powdered high-speed steel) (D_{n5}) ($D^{+0.005}_{0}$)	(6)	16 20 22 25 30 35	1.00~ 3.00	—	—		3.4
8	$^{+0.016}_{+0.010}$		Ⓐ PMSD A—PMSD	8	16 20 22 25 30 35	1.00~ 4.00	4.00	1.00		4.4
10				10	16 20 22 25 30 35	2.00~ 6.00	6.00	1.20		6.4
13	$^{+0.020}_{+0.012}$		Ⓓ PSDD A—PSDD	13	16 20 22 25 30 35	3.00~ 8.00	8.00	1.50		8.4
16			Ⓡ PSDR A—PSDR	16	16 20 22 25 30 35	5.00~ 10.00	10.00	2.00		10.6
20	$^{+0.024}_{+0.015}$	—	Ⓔ PSDE A—PSDE	(20)	16 20 22 25 30 35	7.00~ 12.00	12.00	3.00		12.6
25			Ⓖ PSDG A—PSDG	(25)	16 20 22 25 30 35	10.00~ 16.00	16.00	3.00		16.6

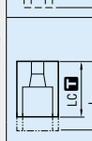
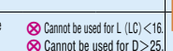
Ⓟ D=(3), (4), (5), and (6) are specifications available for Ⓐ shape (round) only. They are not available for shapes D R E G.
Ⓟ D=(20), (22), (25), (32), (38), (45), (50), (56) are specifications available for shank diameter tolerance of D_{n5} only.
Ⓟ L=(40) is a specification available for shank dia. tolerance of D_{n5} only.

Order — Catalog No. — L — P — W — R (Ⓡ only)
MSD 13 — 30 — P7.00

Days to Ship: Quotation

Order — Catalog No. — L (LC·SLC) — P (PC) — W (WC) — R — (BC·KC·WKC, etc.)
SDD 38 — 35 — P21.03 — W6.83 — BC4.0

Alteration		Code	Ⓐ	D R E G	1Code
Alterations to shaped hole		PC WC	Shaped hole diameter change min.: P>PC≧$\frac{Pmin.}{2}$≧0.50 0.01 mm increments Ⓟ If PC is 1.00~1.99, then b = 4.	Shaped hole diameter change min.: $\frac{P}{W}>\frac{PC}{WC}\geqq\frac{P\cdot Wmin.}{2}\geqq1.00$ 0.01mm increments	Quotation
				max.$\frac{P}{W}<\frac{PC}{WC}\leqq P\cdot Kmax.+0.2$ 0.01 mm increments	
		BC	Shaped hole depth change 1≦BC≦b 0.1 mm increments ⊗ Cannot be used for P<1.00.		
		PKC	Shaped hole diameter tolerance change $P^{+0.01}_{0}\Rightarrow{}^{+0.005}_{0}$ ⊗ Cannot be used for P<1.00.	Shaped hole diameter tolerance change $P\cdot W\pm0.01\Rightarrow{}^{+0.01}_{0}$	

Alteration		Code	Ⓐ	D R E G	1Code
Alterations to full length		LC	Full length change 10≦LC<L 0.1 mm increments (If combined with LKC·LKZ, 0.01 mm increments can be selected.) Ⓟ Press-in lead is shortened by (L—LC).		Quotation
		SLC	Changes to full length and full length tolerance are processed using a single code. The allowable range of change, increment, ordering process, and notes (Ⓟ) are the same as for LC. LC Full lengthchange + LKC Full length tolerancechange $L^{+0.4}_{+0.2}\Rightarrow{}^{+0.05}_{0}$ Ⓟ Can be selected in 0.01 mm increments.		
		LKC	Full length tolerance change $L^{+0.4}_{+0.2}\Rightarrow{}^{+0.05}_{0}$		
		LKZ	Full length tolerance change $L^{+0.4}_{+0.2}\Rightarrow{}^{+0.01}_{0}$ ⊗ Cannot be used for L (LC)<16. ⊗ Cannot be used for D>25.		
Others		KC	Addition of single key flat ⊗ Cannot be used for D3~6.  Key flat position change 1° increments		
		WKC	Addition of double key flats in parallel ⊗ Cannot be used for D3 ~ 6. Ⓟ Can be combined with KC for shapes D R E G.		

Ⓟ Price: Quotation