

Type: JS01 & JS02

Material: JS01 - SKD11 - D2 - Alloy Tool Steel

JS02 - SKH51 - HSS - High Speed Steel

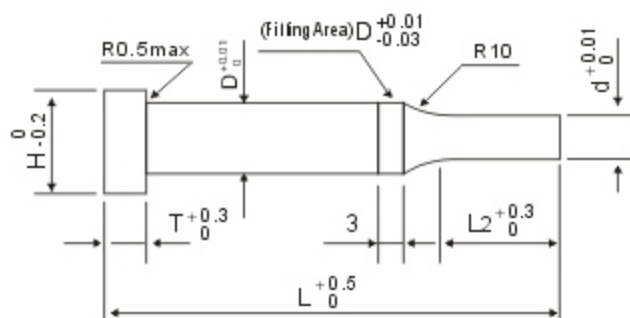
Hardness: JS01 - HRC60~62 Through Hardened

JS02 - HRC61~64 Through Hardened

D	H	T	L							
			40	50	60	70	80	90	100	
1.0	1.6	5	●	●	●	●				
1.1~1.5	2		●	●	●	●				
1.6~2.0	4		●	●	●	●	●			
2.1~2.5	4.5		●	●	●	●	●			
2.6~3.0	5		●	●	●	●	●			
3.1~3.5	5.5		●	●	●	●	●			
3.6~4.0	6		●	●	●	●	●			
4.1~4.5	6.5		●	●	●	●	●	●	●	●
4.6~5.0	7		●	●	●	●	●	●	●	●
5.1~5.5	7.5		●	●	●	●	●	●	●	●
5.6~6.0	8		●	●	●	●	●	●	●	●
6.1~6.5	8.5		●	●	●	●	●	●	●	●
6.6~6.9	9		●	●	●	●	●	●	●	●
7.0~7.9	10		●	●	●	●	●	●	●	●
8.0~8.9	11		●	●	●	●	●	●	●	●
9.0~9.9	12		●	●	●	●	●	●	●	●
10.0~10.9	13		●	●	●	●	●	●	●	●
11.0~11.9	14			●	●	●	●	●	●	●
12.0~12.9	15			●	●	●	●	●	●	●
13.0~13.9	16			●	●	●	●	●	●	●
14.0~14.9	17			●	●	●	●	●	●	●
15.0~15.9	18			●	●	●	●	●	●	●
16.0~16.9	19			●	●	●	●	●	●	●
17.0~17.9	20			●	●	●	●	●	●	●
18.0~18.9	21			●	●	●	●	●	●	●
19.0~19.9	22			●	●	●	●	●	●	●
20.0~20.9	23			●	●	●	●	●	●	●
21.0~21.9	24			●	●	●	●	●	●	●
22.0~22.9	25		●	●	●	●	●	●	●	
23.0~23.9	26		●	●	●	●	●	●	●	
24.0~24.9	27		●	●	●	●	●	●	●	
25.0~25.9	28		●	●	●	●	●	●	●	

Order Example: Type - D - L
JS01 - 6 - 50

■ Customize are also available
■ Tungsten carbide are also available



Type: JS03 & JS04

Material: JS03 - SKD11 - D2 - Alloy Tool Steel

JS04 - SKH51 - HSS - High Speed Steel

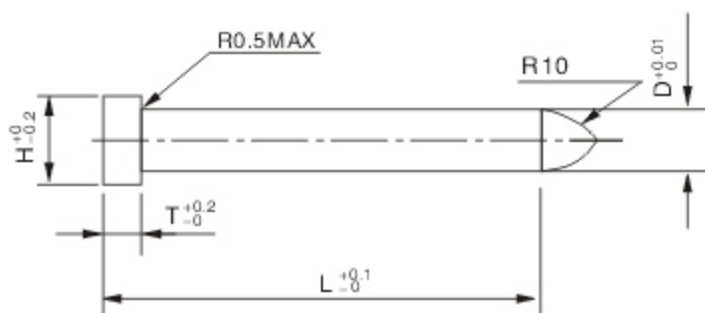
Hardness: JS03 - HRC60~62 Through Hardened

JS04 - HRC61~64 Through Hardened

D	H	0.1mm Increment	T	L2		L						
		d				40	50	60	70	80	90	100
3	5	1.0~2.9	5	8	13	●	●	●	●	●	●	●
4	6	1.0~3.9				●	●	●	●	●	●	●
5	7	2.0~4.9				●	●	●	●	●	●	●
6	8	2.0~5.9				●	●	●	●	●	●	●
8	11	3.0~7.9		13	19	●	●	●	●	●	●	●
10	13	4.0~9.9				●	●	●	●	●	●	●
13	16	8.0~12.9				●	●	●	●	●	●	●
16	19	10.0~15.9				●	●	●	●	●	●	●
20	23	14.0~19.9	19	25	●	●	●	●	●	●	●	
25	26	19.0~24.9			●	●	●	●	●	●	●	

Order Example: - - -
 - - -

■ Customize are also available
 ■ Tungsten carbide are also available



Type: JS05 & JS06

Material: JS05 - SKD11 - D2 - Alloy Tool Steel

JS06 - SKH51 - HSS - High Speed Steel

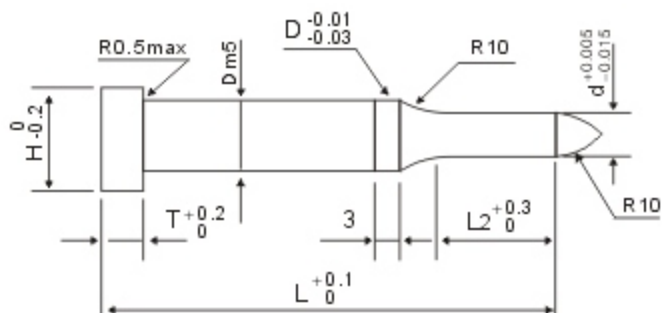
Hardness: JS05 - HRC60~62 Through Hardened

JS06 - HRC61~64 Through Hardened

D	H	D _{range}	T	L					
		0.1mm Increment		42	52	62	72	82	92
3	5	2.0~3.0	5	●	●	●	●		
4	6	3.0~4.0		●	●	●	●		
5	7	4.0~5.0		●	●	●	●		
6	8	5.0~6.0		●	●	●	●		
8	11	6.0~8.0		●	●	●	●		
10	13	8.0~10.0		●	●	●	●		
13	16	10.0~13.0		●	●	●	●	●	●
16	19	13.0~16.0		●	●	●	●	●	●

Order Example: - -
 - -

■ Customize are also available
 ■ Tungsten carbide are also available



Type: JS07 & JS08

Material: JS07 - SKD11 - D2 - Alloy Tool Steel

JS08 - SKH51 - HSS - High Speed Steel

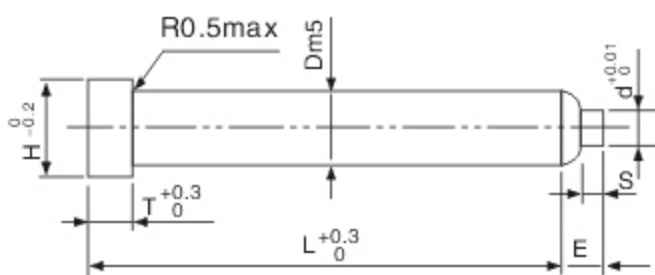
Hardness: JS07 - HRC60~62 Through Hardened

JS08 - HRC61~64 Through Hardened

D	H	d	T	L2	L						
		0.1mm Increment			42	52	62	72	82	92	102
3	5	1.0~2.9	5	10	●	●	●	●	●		
4	6	1.0~3.9			●	●	●	●	●		
5	7	2.0~4.9			●	●	●	●	●	●	●
6	8	2.0~5.9			●	●	●	●	●	●	●
8	11	3.0~7.9		10	●	●	●	●	●	●	●
10	13	5.0~9.9		15	●	●	●	●	●	●	●
13	16	8.0~12.9		21	●	●	●	●	●	●	●
16	19	10.0~15.9		21	●	●	●	●	●	●	●

Order Example: Type - D - d - L - L2
 JS07 - 3 - 1.0 - 52 - 10

- Customize are also available
- Tungsten carbide are also available



Type: JS09 & JS10

Material: JS09 - SKD11 - D2 - Alloy Tool Steel

JS10 - SKH51 - HSS - High Speed Steel

Hardness: JS09 - HRC60~62 Through Hardened

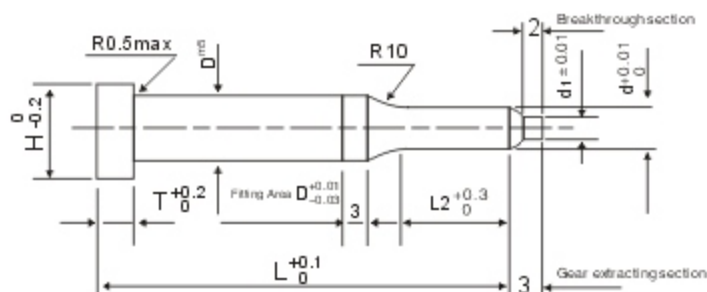
JS10 - HRC61~64 Through Hardened

D	H	d	T	E	S	L			
						41	51	61	71
4	6	2.00~3.20	5	2.7	2	●	●	●	●
5	7	2.00~3.80		3.7	3	●	●	●	●
6	8	2.00~4.30		4.1	●	●	●	●	
8	11	5.00~5.44		5.6	4	●	●	●	●

Order Example: - - -
 - - -

■ Customize are also available
 ■ Tungsten carbide are also available

Shoulder Burring Punch



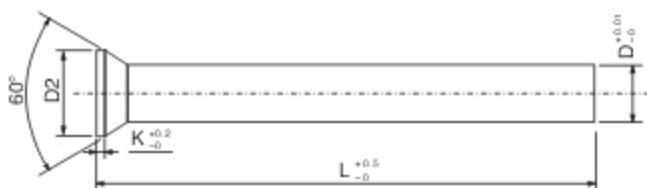
Type: JS11 & JS12

Material: JS11 - SKD11 - D2 - Alloy Tool Steel
 JS12 - SKH51 - HSS - High Speed Steel
 Hardness: JS11 - HRC60~62 Through Hardened
 JS12 - HRC61~64 Through Hardened

D	d	d1	H	L2	T	Bolt	L			
							41	51	61	71
4	1.65	1.0	6	6	5	M2.0	●	●	●	●
	2.2	1.3	6	8		M2.6	●	●	●	●
5	2.2	1.3	7	8		M2.6	●	●	●	●
	2.6	1.5	7	8		M3.0	●	●	●	●
6	2.2	1.3	8	8		M2.6	●	●	●	●
	2.5	1.5	8	8		M3.0	●	●	●	●
	2.6	1.5	8	8		M3.0	●	●	●	●
	2.7	1.6	8	8		M3.0	●	●	●	●
	3.2	1.9	8	10		M4.0	●	●	●	●
	3.4	1.9	8	10		M4.0	●	●	●	●
	3.6	2.1	8	10		M4.0	●	●	●	●
	4.2	2.4	8	12		M5.0	●	●	●	●
8	5.2	2.6	10	12		M6.0	●	●	●	●

Order Example: - - -
 - - -

■ Customize are also available
 ■ Tungsten carbide are also available



Type: JS13 & JS14

Material: JS13 - SKD11 - D2 - Alloy Tool Steel

JS14 - SKH51 - HSS - High Speed Steel

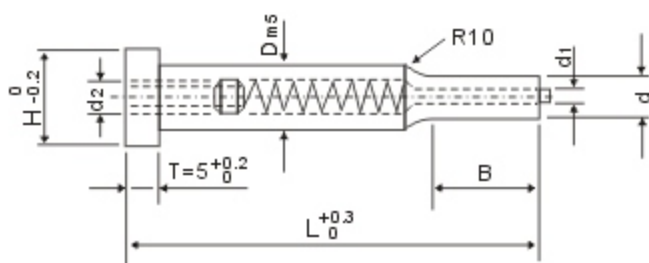
Hardness: JS13 - HRC60~62 Through Hardened

JS14 - HRC61~64 Through Hardened

D	D2	K	L						
			40	50	60	70	80	90	100
1.0,1.1	1.8	1.2~1.1	●	●	●	●			
1.2,1.3	2.0	1.2~1.1	●	●	●	●			
1.4,1.5	2.2	1.2~1.1	●	●	●	●			
1.6,1.7	2.5	1.3~1.2	●	●	●	●			
1.8,1.9,2.0	3.0	1.5~1.4	●	●	●	●	●		
2.1,2.2	3.2	1.5~1.4	●	●	●	●	●		
2.3,2.5	3.5	1.5~1.4	●	●	●	●	●		
2.6,2.9	4.0	1.7~1.5	●	●	●	●	●		
3.0,3.4	4.5	1.8~1.5	●	●	●	●	●	●	●
3.5,3.9	5.0	1.8~1.5	●	●	●	●	●	●	●
4.0,4.4	5.5	1.8~1.5	●	●	●	●	●	●	●
4.5,4.9	6.0	1.8~1.5	●	●	●	●	●	●	●
5.0,5.4	6.5	1.8~1.5	●	●	●	●	●	●	●
5.5,5.9	7.0	1.8~1.5	●	●	●	●	●	●	●
6.0,6.4	8.0	2.2~1.9	●	●	●	●	●	●	●
6.5,7.0	9.0	3.2~2.7	●	●	●	●	●	●	●
7.1~8.0	10.0	3.5~2.7	●	●	●	●	●	●	●
8.1~9.0	11.0	3.5~2.7	●	●	●	●	●	●	●
9.1~10.0	12.0	3.5~2.7	●	●	●	●	●	●	●
10.1~11.0	13.0	3.5~2.7	●	●	●	●	●	●	●
10.1~11.0	14.0	3.5~2.7	●	●	●	●	●	●	●

Order Example: - - -
 - - -

■ Customize are also available
 ■ Tungsten carbide are also available



Type: JS15 & JS16

Material: JS15 - SKD11 - D2 - Alloy Tool Steel

JS16 - SKH51 - HSS - High Speed Steel

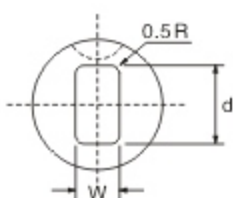
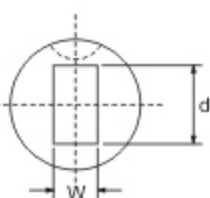
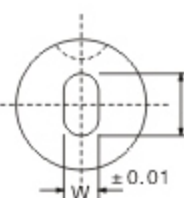
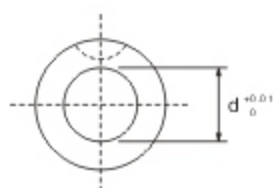
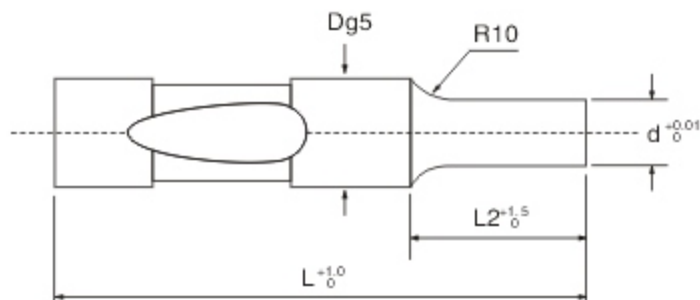
Hardness: JS15 - HRC60~62 Through Hardened

JS16 - HRC61~64 Through Hardened

D	H	d	B	d1	d2	L					
						50	60	70	80	90	100
5	7	2.00~4.99	8	0.7	2.5	●	●	●	●	●	●
6	8	2.00~5.99				●	●	●	●	●	●
8	11	3.00~7.99	13	1	3.3	●	●	●	●	●	●
10	13	3.00~9.99				●	●	●	●	●	●
13	16	6.00~12.99		1.5	4.2	●	●	●	●	●	●
16	19	10.00~15.99	19	2	5.2	●	●	●	●	●	●
20	23	13.00~19.99				●	●	●	●	●	●
25	28	18.00~24.99		2.5	●	●	●	●	●	●	

Order Example: - - -
 - - -

- Customize are also available
- Tungsten carbide are also available



SHAPE: A

B

C

D

Type: JS17 & JS18

Material: JS17 - SKD11 - D2 - Alloy Tool Steel
 JS18 - SKH51 - HSS - High Speed Steel

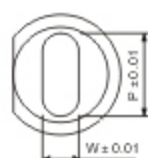
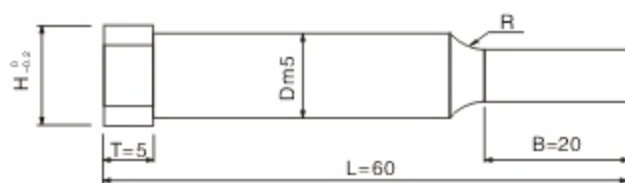
Hardness: JS17 - HRC 60~62 Through Hardened
 JS18 - HRC 61~64 Through Hardened

SHAPE	D	L2	L							A	B	C	D
			50	56	63	71	80	90	100	d	d	W	
A	6	8 13	●	●	●	●	●			1.60~5.97	5.97	1.60	
	10	13 19								1.60~9.97	9.97	1.60	
	13		●	●	●	●		●	●	5.00~12.97	12.97	4.50	
B	16	13 19 25								8.00~15.97	15.97	6.00	
C	20			●	●	●	●	●	●	12.00~19.97	19.97	8.00	
D	25	13 19 25								16.00~24.97	24.97	10.00	
	32					●	●	●	●	24.00~31.97	31.9	12.50	
	38						●	●	●	28.00~37.97	37.97	14.00	

Order Example: Type - SHAPE - D - L2 - L - d - W
 JS17 - B - 10 - 13 - 50 - 9.97 - 1.60

■ Customize are also available
 ■ Tungsten carbide are also available

Special Shape Shoulder Punch



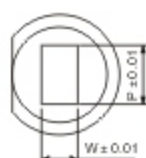
A



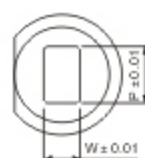
B



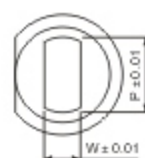
C



D



E



F

Type: JS19 & JS20

Material: JS19 - SKD11 - D2 - Alloy Tool Steel

JS20 - SKH51 - HSS - High Speed Steel

Hardness: JS19 - HRC 60~62 Through Hardened

JS20 - HRC 61~64 Through Hardened

SHAPE	D	H	L	T	B	Elliptical	Triangle	Hexagon	Square	Square R	Shape both side																																				
A	4	6	60	5	20	A	B	C	D	E	F																																				
	5	7																																													
	6	8																																													
	7	9																																													
	8	10																																													
	10	12																																													
	11	13																																													
	12	14																																													
	13	15																																													
	14	19																																													
B	15	17	60	5	20	A	B	C	D	E	F																																				
	16	18																																													
C	17	19										60	5	20	A	B	C	D	E	F																											
	18	20																																													
D	20	22																			60	5	20	A	B	C	D	E	F																		
	21	24																																													
E	22	24																												60	5	20	A	B	C	D	E	F									
	24	26																																													
F	25	27																																					60	5	20	A	B	C	D	E	F
	26	28																																													
	27	30																																													
	28	30																																													
	30	32																																													
	32	34																																													
	35	38																																													

Order Example: Type - SHAPE - D - H
 JS19 - A - 5 - 7

■ Customize are also available
 ■ Tungsten carbide are also available