



SEZIONE 3

PUNZONI E MATRICI

pag. 3.02/3.42

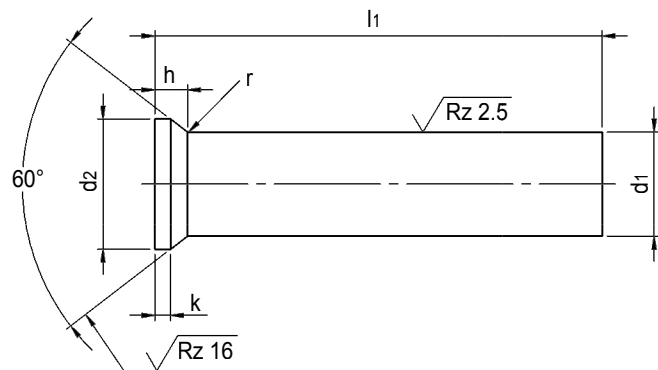
PUNCHES AND DIE BUTTONS

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- Materiale: HWS - A2
- Durezza corpo: 62 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

- Material: HWS - A2
- Hardness shank: 62 ± 2 HRC
- Hardness head: 50 ± 5 HRC

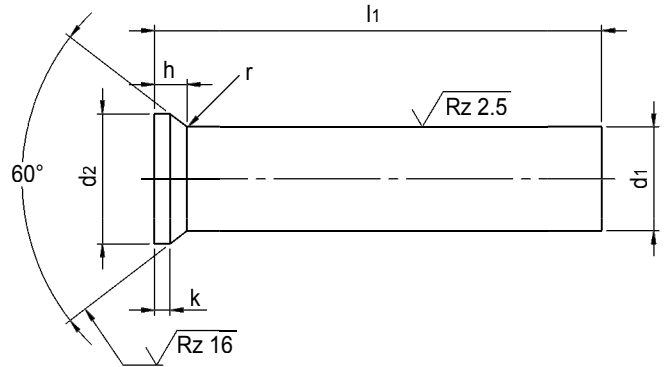


d1 h6	d2 $\pm 0,05$	h $+0,2$	k $+0,2$	r	l1		
					71	80	100
0,50	0,9	0,55	0,2	$0,2^{+0,2}$	●	●	●
0,55	1,0	0,59	0,2	$0,2^{+0,2}$	●	●	●
0,60	1,1	0,63	0,2	$0,2^{+0,2}$	●	●	●
0,65	1,2	0,68	0,2	$0,2^{+0,2}$	●	●	●
0,70	1,3	0,72	0,2	$0,2^{+0,2}$	●	●	●
0,75	1,3	0,68	0,2	$0,2^{+0,2}$	●	●	●
0,80	1,4	0,92	0,4	$0,2^{+0,2}$	●	●	●
0,85	1,4	0,88	0,4	$0,2^{+0,2}$	●	●	●
0,90	1,6	1,01	0,4	$0,2^{+0,2}$	●	●	●
0,95	1,6	0,96	0,4	$0,2^{+0,2}$	●	●	●
1,00	1,8	1,19	0,5	$0,4^{+0,3}$	●	●	●
1,10	1,8	1,11	0,5	$0,4^{+0,3}$	●	●	●
1,20	2,0	1,19	0,5	$0,4^{+0,3}$	●	●	●
1,30	2,0	1,11	0,5	$0,4^{+0,3}$	●	●	●
1,40	2,2	1,19	0,5	$0,4^{+0,3}$	●	●	●
1,50	2,2	1,11	0,5	$0,4^{+0,3}$	●	●	●
1,60	2,5	1,28	0,5	$0,4^{+0,3}$	●	●	●
1,70	2,5	1,19	0,5	$0,4^{+0,3}$	●	●	●
1,80	2,8	1,37	0,5	$0,4^{+0,3}$	●	●	●
1,90	2,8	1,28	0,5	$0,4^{+0,3}$	●	●	●
2,00	3,0	1,37	0,5	$0,4^{+0,3}$	●	●	●
2,10	3,2	1,45	0,5	$0,4^{+0,3}$	●	●	●
2,20	3,2	1,37	0,5	$0,4^{+0,3}$	●	●	●
2,30	3,5	1,54	0,5	$0,4^{+0,3}$	●	●	●
2,40	3,5	1,45	0,5	$0,4^{+0,3}$	●	●	●
2,50	3,5	1,37	0,5	$0,4^{+0,3}$	●	●	●
2,60	4,0	1,71	0,5	$0,4^{+0,3}$	●	●	●
2,70	4,0	1,63	0,5	$0,4^{+0,3}$	●	●	●
2,80	4,0	1,54	0,5	$0,4^{+0,3}$	●	●	●
2,90	4,0	1,45	0,5	$0,4^{+0,3}$	●	●	●
3,00	4,5	1,80	0,5	$0,6^{+0,4}$	●	●	●
3,10	4,5	1,71	0,5	$0,6^{+0,4}$	●	●	●
3,20	4,5	1,63	0,5	$0,6^{+0,4}$	●	●	●
3,30	4,5	1,54	0,5	$0,6^{+0,4}$	●	●	●
3,40	4,5	1,45	0,5	$0,6^{+0,4}$	●	●	●
3,50	5,0	1,80	0,5	$0,6^{+0,4}$	●	●	●
3,60	5,0	1,71	0,5	$0,6^{+0,4}$	●	●	●
3,70	5,0	1,63	0,5	$0,6^{+0,4}$	●	●	●
3,80	5,0	1,54	0,5	$0,6^{+0,4}$	●	●	●
3,90	5,0	1,45	0,5	$0,6^{+0,4}$	●	●	●
4,00	5,5	1,80	0,5	$0,6^{+0,4}$	●	●	●
4,10	5,5	1,71	0,5	$0,6^{+0,4}$	●	●	●
4,20	5,5	1,63	0,5	$0,6^{+0,4}$	●	●	●
4,30	5,5	1,54	0,5	$0,6^{+0,4}$	●	●	●
4,40	5,5	1,45	0,5	$0,6^{+0,4}$	●	●	●
4,50	6,0	1,80	0,5	$0,6^{+0,4}$	●	●	●
4,60	6,0	1,71	0,5	$0,6^{+0,4}$	●	●	●
4,70	6,0	1,63	0,5	$0,6^{+0,4}$	●	●	●

d1 h6	d2 $\pm 0,05$	h $+0,2$	k $+0,2$	r	l1		
					71	80	100
4,80	6,0	1,54	0,5	$0,6^{+0,4}$	●	●	●
4,90	6,0	1,45	0,5	$0,6^{+0,4}$	●	●	●
5,00	6,5	1,80	0,5	$0,6^{+0,4}$	●	●	●
5,10	6,5	1,71	0,5	$0,6^{+0,4}$	●	●	●
5,20	6,5	1,63	0,5	$0,6^{+0,4}$	●	●	●
5,30	6,5	1,54	0,5	$0,6^{+0,4}$	●	●	●
5,40	6,5	1,45	0,5	$0,6^{+0,4}$	●	●	●
5,50	7,0	1,80	0,5	$0,6^{+0,4}$	●	●	●
5,60	7,0	1,71	0,5	$0,6^{+0,4}$	●	●	●
5,70	7,0	1,63	0,5	$0,6^{+0,4}$	●	●	●
5,80	7,0	1,54	0,5	$0,6^{+0,4}$	●	●	●
5,90	7,0	1,45	0,5	$0,6^{+0,4}$	●	●	●
6,00	8,0	2,23	0,5	$1,0^{+0,5}$	●	●	●
6,10	8,0	2,15	0,5	$1,0^{+0,5}$	●	●	●
6,20	8,0	2,06	0,5	$1,0^{+0,5}$	●	●	●
6,30	8,0	1,97	0,5	$1,0^{+0,5}$	●	●	●
6,40	8,0	1,89	0,5	$1,0^{+0,5}$	●	●	●
6,50	9,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
7,00	9,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
7,50	10,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
8,00	10,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
8,50	11,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
9,00	11,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
9,50	12,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
10,00	12,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
10,50	13,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
11,00	13,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
11,50	14,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
12,00	14,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
12,50	15,0	3,17	1,0	$1,0^{+0,5}$	●	●	●
13,00	15,0	2,73	1,0	$1,0^{+0,5}$	●	●	●
13,50	16,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
14,00	16,0	3,23	1,5	$1,5^{+0,5}$	●	●	●
14,50	17,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
15,00	17,0	3,23	1,5	$1,5^{+0,5}$	●	●	●
15,50	18,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
16,00	18,0	3,23	1,5	$1,5^{+0,5}$	●	●	●
16,50	19,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
17,00	19,5	3,23	1,5	$1,5^{+0,5}$	●	●	●
17,50	20,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
18,00	20,5	3,23	1,5	$1,5^{+0,5}$	●	●	●
18,50	21,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
19,00	21,5	3,23	1,5	$1,5^{+0,5}$	●	●	●
19,50	22,0	3,67	1,5	$1,5^{+0,5}$	●	●	●
20,00	22,5	3,23	1,5	$1,5^{+0,5}$	●	●	●

- Materiale: HWS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

- Material: HWS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC

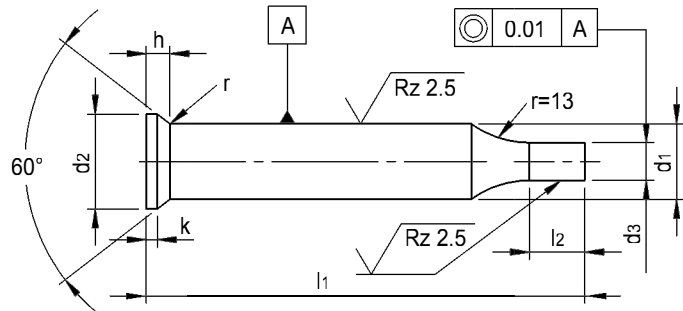


d1 h6	d2 $\pm 0,05$	h $+0,2$	k $+0,2$	r	l1 $+0,5$			
					71	80	100	130
0,50	0,9	0,55	0,2	$0,2^{+0,2}$	●	●	●	
0,55	1,0	0,59	0,2	$0,2^{+0,2}$	●	●	●	
0,60	1,1	0,63	0,2	$0,2^{+0,2}$	●	●	●	
0,65	1,2	0,68	0,2	$0,2^{+0,2}$	●	●	●	
0,70	1,3	0,72	0,2	$0,2^{+0,2}$	●	●	●	
0,75	1,3	0,68	0,2	$0,2^{+0,2}$	●	●	●	
0,80	1,4	0,92	0,4	$0,2^{+0,2}$	●	●	●	
0,85	1,4	0,88	0,4	$0,2^{+0,2}$	●	●	●	
0,90	1,6	1,01	0,4	$0,2^{+0,2}$	●	●	●	
0,95	1,6	0,96	0,4	$0,2^{+0,2}$	●	●	●	
1,00	1,8	1,19	0,5	$0,4^{+0,3}$	●	●	●	
1,10	1,8	1,11	0,5	$0,4^{+0,3}$	●	●	●	
1,20	2,0	1,19	0,5	$0,4^{+0,3}$	●	●	●	
1,30	2,0	1,11	0,5	$0,4^{+0,3}$	●	●	●	
1,40	2,2	1,19	0,5	$0,4^{+0,3}$	●	●	●	
1,50	2,2	1,11	0,5	$0,4^{+0,3}$	●	●	●	
1,60	2,5	1,28	0,5	$0,4^{+0,3}$	●	●	●	
1,70	2,5	1,19	0,5	$0,4^{+0,3}$	●	●	●	
1,80	2,8	1,37	0,5	$0,4^{+0,3}$	●	●	●	
1,90	2,8	1,28	0,5	$0,4^{+0,3}$	●	●	●	
2,00	3,0	1,37	0,5	$0,4^{+0,3}$	●	●	●	
2,10	3,2	1,45	0,5	$0,4^{+0,3}$	●	●	●	
2,20	3,2	1,37	0,5	$0,4^{+0,3}$	●	●	●	
2,30	3,5	1,54	0,5	$0,4^{+0,3}$	●	●	●	
2,40	3,5	1,45	0,5	$0,4^{+0,3}$	●	●	●	
2,50	3,5	1,37	0,5	$0,4^{+0,3}$	●	●	●	
2,60	4,0	1,71	0,5	$0,4^{+0,3}$	●	●	●	
2,70	4,0	1,63	0,5	$0,4^{+0,3}$	●	●	●	
2,80	4,0	1,54	0,5	$0,4^{+0,3}$	●	●	●	
2,90	4,0	1,45	0,5	$0,4^{+0,3}$	●	●	●	
3,00	4,5	1,80	0,5	$0,6^{+0,4}$	●	●	●	
3,10	4,5	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
3,20	4,5	1,63	0,5	$0,6^{+0,4}$	●	●	●	●
3,30	4,5	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
3,40	4,5	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
3,50	5,0	1,80	0,5	$0,6^{+0,4}$	●	●	●	●
3,60	5,0	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
3,70	5,0	1,63	0,5	$0,6^{+0,4}$	●	●	●	●
3,80	5,0	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
3,90	5,0	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
4,00	5,5	1,80	0,5	$0,6^{+0,4}$	●	●	●	●
4,10	5,5	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
4,20	5,5	1,63	0,5	$0,6^{+0,4}$	●	●	●	●
4,30	5,5	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
4,40	5,5	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
4,50	6,0	1,80	0,5	$0,6^{+0,4}$	●	●	●	●
4,60	6,0	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
4,70	6,0	1,63	0,5	$0,6^{+0,4}$	●	●	●	●

d1 h6	d2 $\pm 0,05$	h $+0,2$	k $+0,2$	r	l1 $+0,5$			
					71	80	100	130
4,80	6,0	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
4,90	6,0	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
5,00	6,5	1,80	0,5	$0,6^{+0,4}$	●	●	●	●
5,10	6,5	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
5,20	6,5	1,63	0,5	$0,6^{+0,4}$	●	●	●	●
5,30	6,5	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
5,40	6,5	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
5,50	7,0	1,80	0,5	$0,6^{+0,4}$	●	●	●	●
5,60	7,0	1,71	0,5	$0,6^{+0,4}$	●	●	●	●
5,70	7,0	1,63	0,5	$0,6^{+0,4}$	●	●	●	●
5,80	7,0	1,54	0,5	$0,6^{+0,4}$	●	●	●	●
5,90	7,0	1,45	0,5	$0,6^{+0,4}$	●	●	●	●
6,00	8,0	2,23	0,5	$1,0^{+0,5}$	●	●	●	●
6,10	8,0	2,15	0,5	$1,0^{+0,5}$	●	●	●	●
6,20	8,0	2,06	0,5	$1,0^{+0,5}$	●	●	●	●
6,30	8,0	1,97	0,5	$1,0^{+0,5}$	●	●	●	●
6,40	8,0	1,89	0,5	$1,0^{+0,5}$	●	●	●	●
6,50	9,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
7,00	9,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
7,50	10,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
8,00	10,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
8,50	11,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
9,00	11,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
9,50	12,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
10,00	12,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
10,50	13,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
11,00	13,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
11,50	14,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
12,00	14,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
12,50	15,0	3,17	1,0	$1,0^{+0,5}$	●	●	●	●
13,00	15,0	2,73	1,0	$1,0^{+0,5}$	●	●	●	●
13,50	16,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
14,00	16,0	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
14,50	17,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
15,00	17,0	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
15,50	18,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
16,00	18,0	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
16,50	19,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
17,00	19,5	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
17,50	20,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
18,00	20,5	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
18,50	21,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
19,00	21,5	3,23	1,5	$1,5^{+0,5}$	●	●	●	●
19,50	22,0	3,67	1,5	$1,5^{+0,5}$	●	●	●	●
20,00	22,5	3,23	1,5	$1,5^{+0,5}$	●	●	●	●

- Materiale: HWS - A2
- Durezza corpo: 62 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta

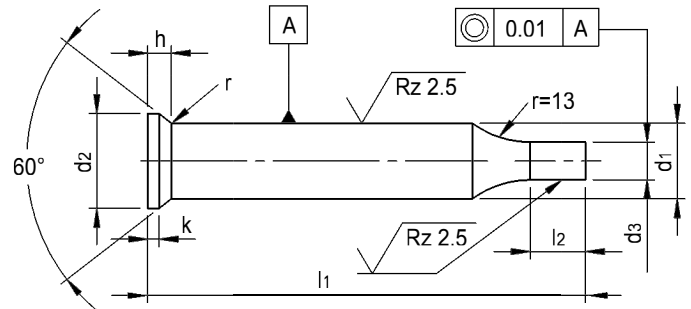
- Material: HWS - A2
- Hardness shank: 62 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable



d1 h6	d3 h6	Progressione Step	l2 Standard +0,5	l1 +0,5		
				71	80	100
1,5	0,5 - 1,4	0,1	7	●	●	●
2,0	0,5 - 1,9	0,1	7	●	●	●
3,0	1,6 - 2,9	0,1	7	●	●	●
4,0	1,6 - 3,9	0,1	10	●	●	●
5,0	2,5 - 4,9	0,1	10	●	●	●
6,0	3,0 - 5,9	0,1	10	●	●	●
8,0	4,0 - 7,9	0,1	13	●	●	●
10,0	5,0 - 9,9	0,1	17	●	●	●
13,0	9,0 - 12,9	0,1	17	●	●	●
16,0	12,0 - 15,9	0,5	17	●	●	●
20,0	16,0 - 19,9	0,5	17	●	●	●

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
- Per dimensioni mancanti vd. SE 775

- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Length l2 freely selectable
- For missing dimensions see SE 775



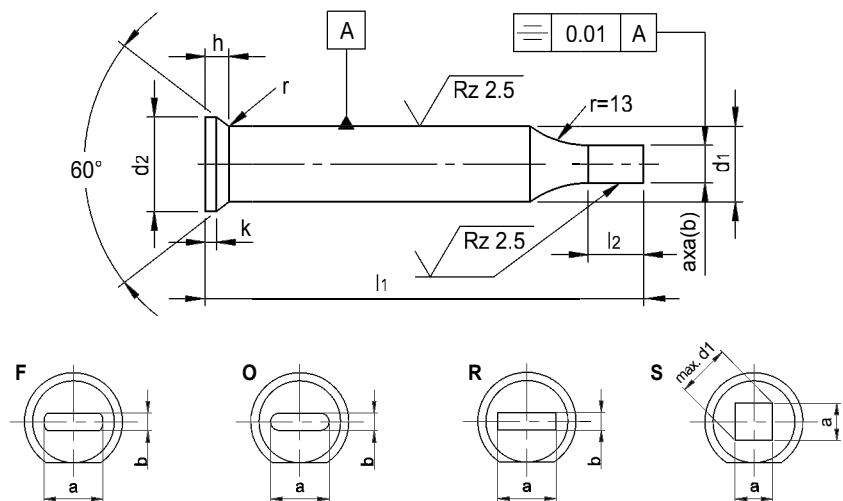
d1 h6	d3 h6 Progressione/step 0,01	l2 +0,5	l1 +0,5			
			71	80	100	130
1,5	0,5 - 1,4	7	●	●	●	
2,0	0,5 - 1,9	7	●	●	●	
3,0	1,6 - 2,9	7	●	●	●	
4,0	1,6 - 3,9	10	●	●	●	●
5,0	2,5 - 4,9	10	●	●	●	●
6,0	3,0 - 5,9	10	●	●	●	●
8,0	4,0 - 7,9	13	●	●	●	●
10,0	5,0 - 9,9	17	●	●	●	●
13,0	9,0 - 12,9	17	●	●	●	●
16,0	12,0 - 15,9	17	●	●	●	●
20,0	16,0 - 19,9	17	●	●	●	●
25,0	20,0 - 24,9	17	●	●	●	●
32,0	25,0 - 31,9	17	●	●	●	●
38,0	30,0 - 37,9	17	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta.
- Punzoni senza chiavetta antirotazione a richiesta.

Per dimensioni mancanti vd. SE 775

- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable.
- Punches without key flat available upon request.

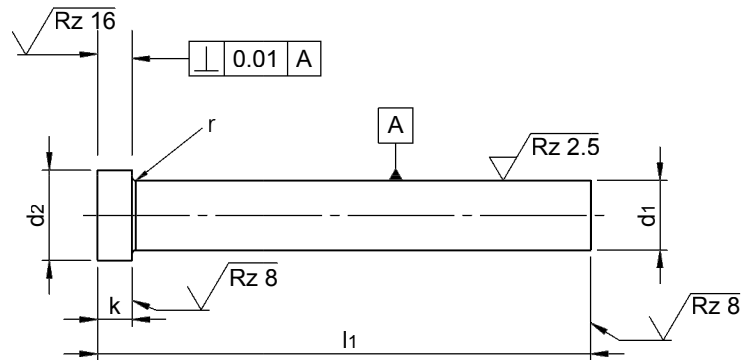
For missing dimensions see SE 775



d1 h6	a x b $\pm 0,01$ Progressione/step 0,01 \geq \leq	l2 +0,5	l1 +0,5			
			71	80	100	130
5	2,5 - 4,9	10	●	●	●	●
6	3,0 - 5,9	10	●	●	●	●
8	4,0 - 7,9	13	●	●	●	●
10	5,0 - 9,9	17	●	●	●	●
13	9,0 - 12,9	17	●	●	●	●
16	12,0 - 15,9	17	●	●	●	●
20	16,0 - 19,9	17	●	●	●	●
25	20,0 - 24,9	17	●	●	●	●
32	27,0 - 31,9	17	●	●	●	●
38	33,0 - 37,9	17	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

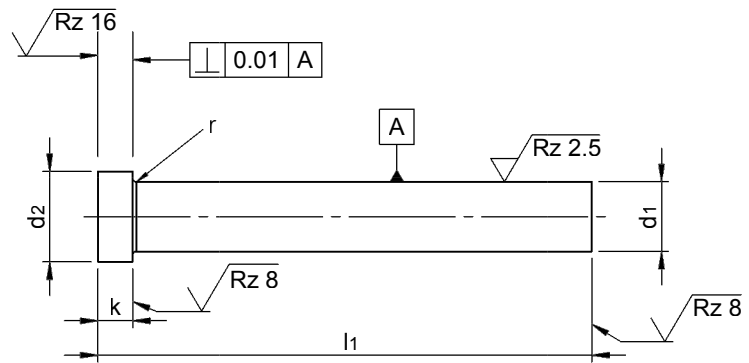
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC



d1 m5	d2 -0,15	k +0,2 +0,1	r +0,1	l1 +0,5 +0,2					
				63	71	80	90	100	120
3	5	3	0,2	●	●	●	●		
4	6	3	0,2	●	●	●	●	●	
5	8	5	0,3	●	●	●	●	●	●
6	9	5	0,3	●	●	●	●	●	●
8	11	5	0,3	●	●	●	●	●	●
10	13	5	0,3	●	●	●	●	●	●
13	16	5	0,5	●	●	●	●	●	●
16	19	6	0,5	●	●	●	●	●	●
20	24	6	0,5	●	●	●	●	●	●
25	29	10	0,5	●	●	●	●	●	●
32	36	12	0,5	●	●	●	●	●	●
38	45	15	0,5	●	●	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

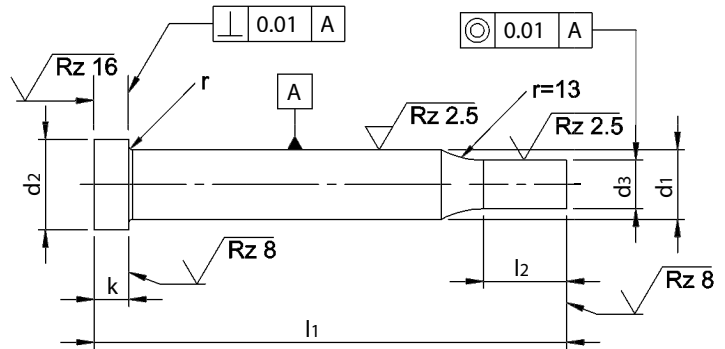
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC



d1 m5	d2 -0,15	k +0,2 +0,1	r +0,1	l1 +0,5 +0,2					
				63	71	80	90	100	120
3	5	3	0,2	●	●	●	●		
4	6	3	0,2	●	●	●	●	●	
5	8	5	0,3	●	●	●	●	●	●
6	9	5	0,3	●	●	●	●	●	●
8	11	5	0,3	●	●	●	●	●	●
10	13	5	0,3	●	●	●	●	●	●
13	16	5	0,5	●	●	●	●	●	●
16	19	5	0,5	●	●	●	●	●	●
20	23	5	0,5	●	●	●	●	●	●
25	28	5	0,5	●	●	●	●	●	●
32	35	5	0,5	●	●	●	●	●	●
38	41	5	0,5	●	●	●	●	●	●

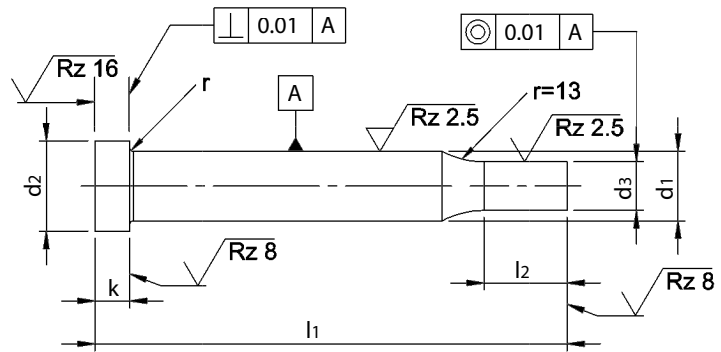
- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta.

- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable.



d1 m5	d2 -0,15	d3 +0,01 Progressione/step 0,01	k +0,2 +0,1	r +0,1	l2 $\pm 0,5$	l1 +0,5 +0,2					
						63	71	80	90	100	120
3	5	1,6 - 2,9	3	0,2	7	●	●	●	●		
4	6	1,6 - 3,9	3	0,2	10	●	●	●	●	●	
5	8	2,5 - 4,9	5	0,3	10	●	●	●	●	●	●
6	9	3,0 - 5,9	5	0,3	10	●	●	●	●	●	●
8	11	4,0 - 7,9	5	0,3	13	●	●	●	●	●	●
10	13	5,0 - 9,9	5	0,3	17	●	●	●	●	●	●
13	16	9,0 - 12,9	5	0,5	17	●	●	●	●	●	●
16	19	12,0 - 15,9	6	0,5	17	●	●	●	●	●	●
20	24	16,0 - 19,9	6	0,5	17	●	●	●	●	●	●
25	29	20,0 - 24,9	10	0,5	17	●	●	●	●	●	●
32	36	27,0 - 31,9	12	0,5	17	●	●	●	●	●	●
38	45	33,0 - 37,9	15	0,5	17	●	●	●	●	●	●

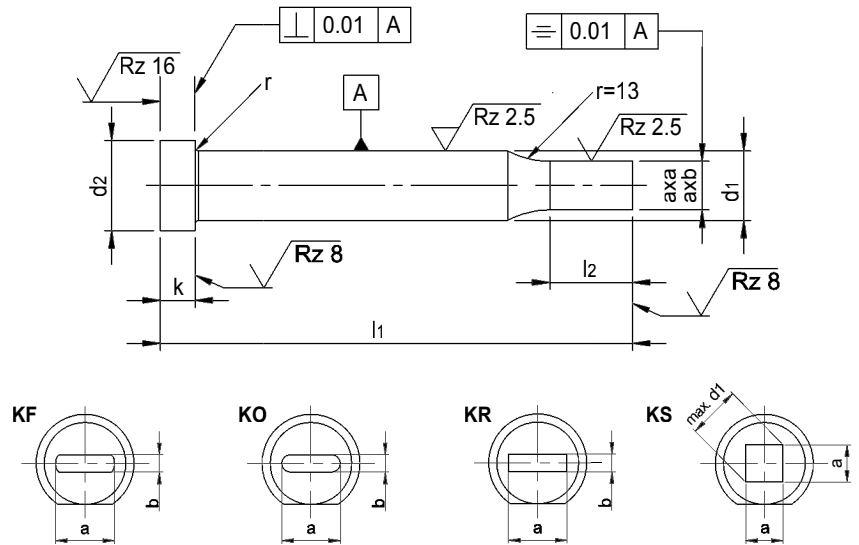
- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
-
- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Lenght l2 freely selectable.



d1 m5	d2 -0,15	d3 +0,01 Progressione/step 0,01	k +0,2 +0,1	r +0,1	l2 ±0,5	l1 +0,5 +0,2					
						63	71	80	90	100	120
3	5	1,6 - 2,9	5	0,2	7	●	●	●	●		
4	6	1,6 - 3,9	5	0,2	10	●	●	●	●	●	
5	8	2,5 - 4,9	5	0,3	10	●	●	●	●	●	●
6	9	3,0 - 5,9	5	0,3	10	●	●	●	●	●	●
8	11	4,0 - 7,9	5	0,3	13	●	●	●	●	●	●
10	13	5,0 - 9,9	5	0,3	17	●	●	●	●	●	●
13	16	9,0 - 12,9	5	0,5	17	●	●	●	●	●	●
16	19	12,0 - 15,9	5	0,5	17	●	●	●	●	●	●
20	23	16,0 - 19,9	5	0,5	17	●	●	●	●	●	●
25	28	20,0 - 24,9	5	0,5	17	●	●	●	●	●	●
32	35	27,0 - 31,9	5	0,5	17	●	●	●	●	●	●
38	41	33,0 - 37,9	5	0,5	17	●	●	●	●	●	●

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
 - Punzoni senza chiavetta antirotazione a richiesta.
- Per dimensioni mancanti vd. SE 775

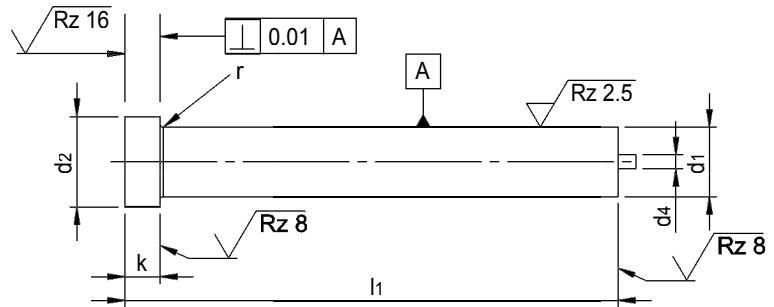
- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Length l2 freely selectable.
 - Punches without key flat available upon request.
- For missing dimensions see SE 775



d1 m5	a x b $\pm 0,01$ Progressione/step 0,01 \geq \leq	d2 -0,15	k $+0,2$ $+0,1$	r $+0,1$	l2 $\pm 0,5$	l1 $+0,5$ $+0,2$					
						63	71	80	90	100	120
3	1,6 - 2,9	6	5	0,2	7	●	●	●	●		
4	1,6 - 3,9	7	5	0,2	10	●	●	●	●	●	
5	2,5 - 4,9	8	5	0,3	10	●	●	●	●	●	●
6	3,0 - 5,9	9	5	0,3	10	●	●	●	●	●	●
8	4,0 - 7,9	11	5	0,3	13	●	●	●	●	●	●
10	5,0 - 9,9	13	5	0,3	17	●	●	●	●	●	●
13	9,0 - 12,9	16	5	0,5	17	●	●	●	●	●	●
16	12,0 - 15,9	19	5	0,5	17	●	●	●	●	●	●
20	16,0 - 19,9	23	5	0,5	17	●	●	●	●	●	●
25	20,0 - 24,9	28	5	0,5	17	●	●	●	●	●	●
32	27,0 - 31,9	35	5	0,5	17	●	●	●	●	●	●
38	33,0 - 37,9	41	5	0,5	17	●	●	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

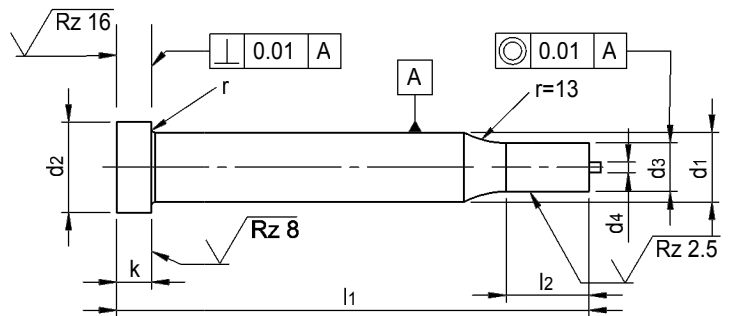
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC



d1 m5	d2 -0,05	d4	k +0,2 +0,1	r +0,1	l1 +0,5 +0,2					
					63	71	80	90	100	120
5	8	1,0	5	0,3	●	●	●	●	●	
6	9	1,0	5	0,3	●	●	●	●	●	
8	11	1,5	5	0,3	●	●	●	●	●	●
10	13	1,5	5	0,3	●	●	●	●	●	●
13	16	1,5	5	0,5	●	●	●	●	●	●
16	19	2,3	5	0,5	●	●	●	●	●	●
20	23	2,3	5	0,5	●	●	●	●	●	●
25	28	2,3	5	0,5	●	●	●	●	●	●
32	35	3,0	5	0,5	●	●	●	●	●	●
38	41	3,0	5	0,5	●	●	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64±2 HRC
- Durezza testa: 50±5 HRC
- Lunghezza l2 speciale a richiesta.

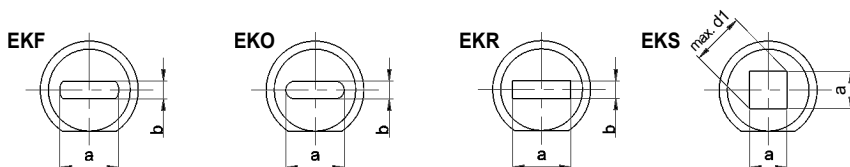
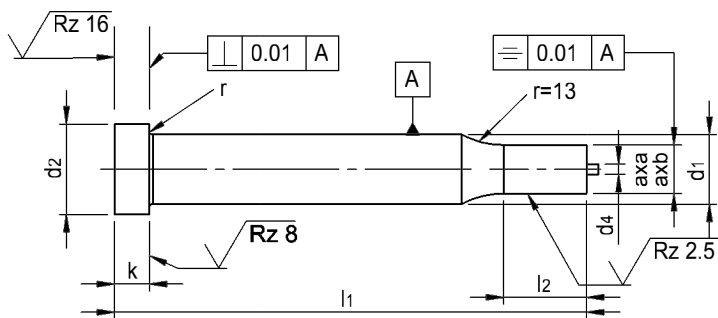
- Material: HSS - M2
- Hardness shank: 64±2 HRC
- Hardness head: 50±5 HRC
- Length l2 freely selectable.



d1 m5	d2 -0,15	d3 +0,01 Progressione/step 0,01	d4	k +0,2 +0,1	r +0,1	l2 ±0,5	l1 +0,5 +0,2					
							63	71	80	90	100	120
5	8	2,5 - 4,9	1,0	5	0,3	10	●	●	●	●	●	
6	9	3,0 - 5,9	1,0	5	0,3	10	●	●	●	●	●	
8	11	4,0 - 7,9	1,5	5	0,3	13	●	●	●	●	●	●
10	13	5,0 - 9,9	1,5	5	0,3	17	●	●	●	●	●	●
13	16	9,0 - 12,9	1,5	5	0,5	17	●	●	●	●	●	●
16	19	12,0 - 15,9	2,3	5	0,5	17	●	●	●	●	●	●
20	23	16,0 - 19,9	2,3	5	0,5	17	●	●	●	●	●	●
25	28	20,0 - 24,9	2,3	5	0,5	17	●	●	●	●	●	●
32	35	24,0 - 31,9	3,0	5	0,5	17	●	●	●	●	●	●
38	41	28,0 - 37,9	3,0	5	0,5	17	●	●	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64±2 HRC
- Durezza testa: 50±5 HRC
- Lunghezza l2 speciale a richiesta.
- Punzoni senza chiavetta antirotazione a richiesta.

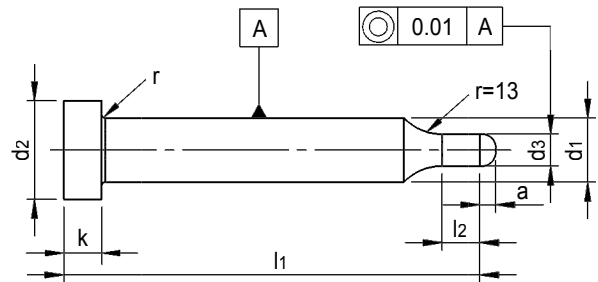
- Material: HSS - M2
- Hardness shank: 64±2 HRC
- Hardness head: 50±5 HRC
- Length l2 freely selectable.
- Punches without key flat available upon request.



d1 m5	d2 -0,15	a x b ±0,01 Progressione/step 0,01 ≥ ≤	d4	k +0,2 +0,1	r +0,1	l2 ±0,5	l1 +0,5 +0,2					
							63	71	80	90	100	120
5	8	2,5 - 4,9	1,0	5	0,3	10	●	●	●	●	●	
6	9	3,0 - 5,9	1,0	5	0,3	10	●	●	●	●	●	
8	11	4,0 - 7,9	1,6	5	0,3	13	●	●	●	●	●	●
10	13	5,0 - 9,9	1,6	5	0,3	17	●	●	●	●	●	●
13	16	9,0 - 12,9	1,6	5	0,5	17	●	●	●	●	●	●
16	19	12,0 - 15,9	2,4	5	0,5	17	●	●	●	●	●	●
20	23	16,0 - 19,9	2,4	5	0,5	17	●	●	●	●	●	●
25	28	20,0 - 24,9	2,4	5	0,5	17	●	●	●	●	●	●
32	35	24,0 - 31,9	2,4	5	0,5	17	●	●	●	●	●	●
38	41	28,0 - 37,9	2,4	5	0,5	17	●	●	●	●	●	●

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza totale = $l_1 + a$
 - Lunghezza l_2 speciale a richiesta.
- Per dimensioni mancanti vd. SE 775

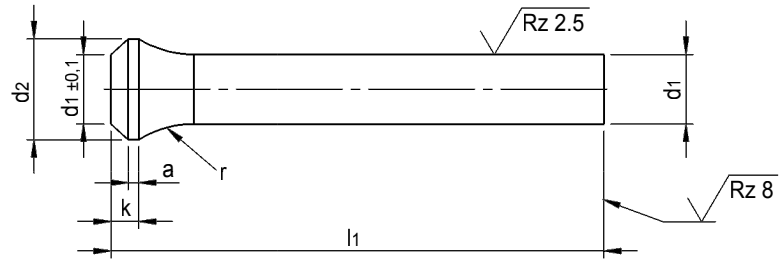
- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Total length = $l_1 + a$
 - Length l_2 freely selectable.
- For missing dimensions see SE 775



d1 m5	d3 +0,01 Progressione/step 0,01	l2	a	l1 +0,5 +0,2				
				63	71	80	90	100
5	0,8 - 2,0	10	3,0	●	●	●	●	●
6	2,1 - 4,5	10	4,5	●	●	●	●	●
8	4,6 - 7,5	13	6,5	●	●	●	●	●
10	7,6 - 10,0	17	8,0	●	●	●	●	●
13	10,1 - 13,0	17	9,5	●	●	●	●	●
16	13,1 - 16,0	17	11,5	●	●	●	●	●
20	16,1 - 20,0	17	13,5	●	●	●	●	●
25	20,1 - 25,0	17	13,5	●	●	●	●	●

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

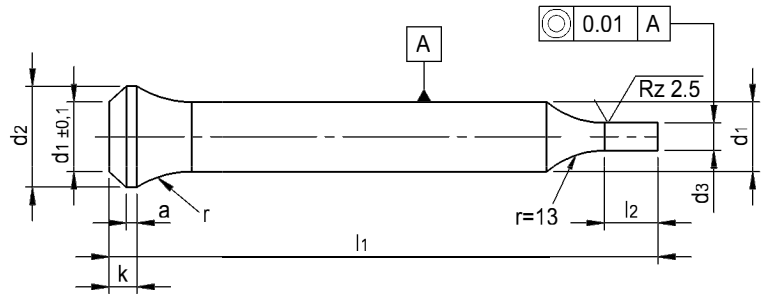
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC



d1 h6	d2 -0,2	k +0,2	a	r -0,2	l1 +0,5				
					71	80	90	100	120
2,0	3,0	3	1,0	3,5	●	●	●		
2,5	3,5	3	1,0	3,5	●	●	●		
3,0	4,5	4	1,5	6,5	●	●	●		
3,5	5,0	4	1,5	8,0	●	●	●		
4,0	5,5	4	1,5	8,0	●	●	●	●	
4,5	6,0	4	1,5	8,0	●	●	●	●	
5,0	7,0	4	1,5	10,0	●	●	●	●	●
5,5	8,0	4	1,5	10,0	●	●	●	●	●
6,0	9,0	4	1,5	10,0	●	●	●	●	●
6,5	10,0	4	1,5	12,0	●	●	●	●	●
7,0	10,0	4	1,5	12,0	●	●	●	●	●
7,5	11,0	4	1,5	12,0	●	●	●	●	●
8,0	11,0	4	1,5	12,0	●	●	●	●	●
8,5	13,0	4	1,5	15,0	●	●	●	●	●
9,0	13,0	4	1,5	15,0	●	●	●	●	●
9,5	14,0	4	1,5	15,0	●	●	●	●	●
10,0	14,0	4	1,5	15,0	●	●	●	●	●
10,5	15,0	4	1,5	15,0	●	●	●	●	●
11,0	15,0	4	1,5	15,0	●	●	●	●	●
11,5	16,0	4	1,5	15,0	●	●	●	●	●
12,0	16,0	4	1,5	15,0	●	●	●	●	●
12,5	17,0	4	1,5	15,0	●	●	●	●	●
13,0	17,0	4	1,5	15,0	●	●	●	●	●
13,5	18,0	4	1,5	15,0	●	●	●	●	●
14,0	18,0	4	1,5	15,0	●	●	●	●	●
14,5	19,0	4	1,5	15,0	●	●	●	●	●
15,0	19,0	4	1,5	15,0	●	●	●	●	●
15,5	20,0	4	1,5	15,0	●	●	●	●	●
16,0	20,0	4	1,5	15,0	●	●	●	●	●
16,5	21,0	4	1,5	15,0	●	●	●	●	●
17,0	21,0	4	1,5	15,0	●	●	●	●	●
17,5	22,0	4	1,5	15,0	●	●	●	●	●
18,0	22,0	4	1,5	15,0	●	●	●	●	●
18,5	23,0	4	1,5	15,0	●	●	●	●	●
19,0	23,0	4	1,5	15,0	●	●	●	●	●
19,5	25,0	4	1,5	15,0	●	●	●	●	●
20,0	25,0	4	1,5	15,0	●	●	●	●	●
25,0	30,0	4	1,5	15,0	●	●	●	●	●

= dimensioni standard / preferred dimensions

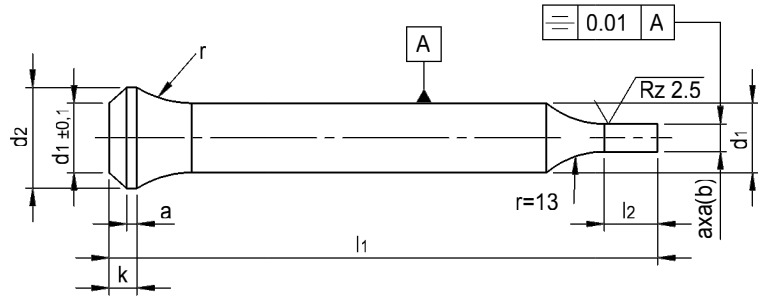
- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
-
- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Length l2 freely selectable.



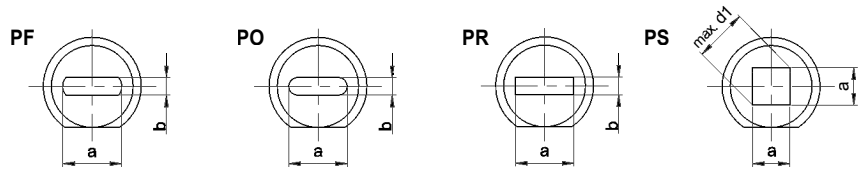
d1 h6	d3 h6 Stufung/step 0,01	d2 -0,2	k +0,2	a	r -0,2	l2 +0,5	l1 +0,5				
							71	80	90	100	120
2,0	0,5 - 1,9	3,0	3	1,0	3,5	7	●	●	●		
2,5	0,5 - 2,4	3,5	3	1,0	3,5	7	●	●	●		
3,0	1,6 - 2,9	4,5	4	1,5	6,5	7	●	●	●		
3,5	1,6 - 3,4	5,0	4	1,5	8,0	10	●	●	●		
4,0	1,6 - 3,9	5,5	4	1,5	8,0	10	●	●	●	●	
4,5	2,0 - 4,4	6,0	4	1,5	8,0	10	●	●	●	●	
5,0	2,5 - 4,9	7,0	4	1,5	10,0	10	●	●	●	●	●
5,5	2,5 - 5,4	8,0	4	1,5	10,0	10	●	●	●	●	●
6,0	3,0 - 5,9	9,0	4	1,5	10,0	10	●	●	●	●	●
6,5	3,0 - 6,4	10,0	4	1,5	12,0	10	●	●	●	●	●
7,0	3,5 - 6,9	10,0	4	1,5	12,0	10	●	●	●	●	●
7,5	3,5 - 7,4	11,0	4	1,5	12,0	10	●	●	●	●	●
8,0	3,5 - 7,9	11,0	4	1,5	12,0	13	●	●	●	●	●
8,5	4,0 - 8,4	13,0	4	1,5	15,0	13	●	●	●	●	●
9,0	4,0 - 8,9	13,0	4	1,5	15,0	13	●	●	●	●	●
9,5	4,5 - 9,4	14,0	4	1,5	15,0	13	●	●	●	●	●
10,0	5,0 - 9,9	14,0	4	1,5	15,0	17	●	●	●	●	●
10,5	5,5 - 10,4	15,0	4	1,5	15,0	17	●	●	●	●	●
11,0	5,5 - 10,9	15,0	4	1,5	15,0	17	●	●	●	●	●
11,5	6,0 - 11,4	16,0	4	1,5	15,0	17	●	●	●	●	●
12,0	6,0 - 11,9	16,0	4	1,5	15,0	17	●	●	●	●	●
12,5	7,0 - 12,4	17,0	4	1,5	15,0	17	●	●	●	●	●
13,0	9,0 - 12,9	17,0	4	1,5	15,0	17	●	●	●	●	●
13,5	9,0 - 13,4	18,0	4	1,5	15,0	17	●	●	●	●	●
14,0	9,5 - 13,9	18,0	4	1,5	15,0	17	●	●	●	●	●
14,5	9,5 - 14,4	19,0	4	1,5	15,0	17	●	●	●	●	●
15,0	10,0 - 14,9	19,0	4	1,5	15,0	17	●	●	●	●	●
15,5	10,5 - 15,4	20,0	4	1,5	15,0	17	●	●	●	●	●
16,0	12,0 - 15,9	20,0	4	1,5	15,0	17	●	●	●	●	●
16,5	12,5 - 16,4	21,0	4	1,5	15,0	17	●	●	●	●	●
17,0	13,0 - 16,9	21,0	4	1,5	15,0	17	●	●	●	●	●
17,5	13,0 - 17,4	22,0	4	1,5	15,0	17	●	●	●	●	●
18,0	13,5 - 17,9	22,0	4	1,5	15,0	17	●	●	●	●	●
18,5	13,5 - 18,4	23,0	4	1,5	15,0	17	●	●	●	●	●
19,0	14,0 - 18,9	23,0	4	1,5	15,0	17	●	●	●	●	●
19,5	15,0 - 19,4	25,0	4	1,5	15,0	17	●	●	●	●	●
20,0	16,0 - 19,9	25,0	4	1,5	15,0	17	●	●	●	●	●
25,0	18,0 - 24,9	30,0	4	1,5	15,0	17	●	●	●	●	●

= dimensioni standard / preferred dimensions

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta.
- Punzoni senza chiavetta antirotazione a richiesta.



- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable.
- Punches without key flat available upon request.

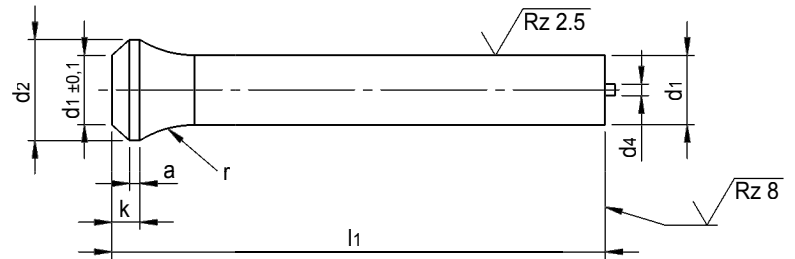


d1 h6	a x b $\pm 0,01$ Progressione/step 0,01		d2 -0,2	k +0,2	a	r -0,2	l2 +0,5	l1 +0,5				
	≥	≤						71	80	90	100	120
2,0	0,5 - 1,9		3,0	3	1,0	3,5	7	●	●	●		
2,5	0,5 - 2,4		3,5	3	1,0	3,5	7	●	●	●		
3,0	1,6 - 2,9		4,5	4	1,5	6,5	7	●	●	●		
3,5	1,6 - 3,4		5,0	4	1,5	8,0	10	●	●	●		
4,0	1,6 - 3,9		5,5	4	1,5	8,0	10	●	●	●	●	
4,5	2,0 - 4,4		6,0	4	1,5	8,0	10	●	●	●	●	
5,0	2,5 - 4,9		7,0	4	1,5	10,0	10	●	●	●	●	●
5,5	2,5 - 5,4		8,0	4	1,5	10,0	10	●	●	●	●	●
6,0	3,0 - 5,9		9,0	4	1,5	10,0	10	●	●	●	●	●
6,5	3,0 - 6,4		10,0	4	1,5	12,0	10	●	●	●	●	●
7,0	3,5 - 6,9		10,0	4	1,5	12,0	10	●	●	●	●	●
7,5	3,5 - 7,4		11,0	4	1,5	12,0	10	●	●	●	●	●
8,0	3,5 - 7,9		11,0	4	1,5	12,0	13	●	●	●	●	●
8,5	4,0 - 8,4		13,0	4	1,5	15,0	13	●	●	●	●	●
9,0	4,0 - 8,9		13,0	4	1,5	15,0	13	●	●	●	●	●
9,5	4,5 - 9,4		14,0	4	1,5	15,0	13	●	●	●	●	●
10,0	5,0 - 9,9		14,0	4	1,5	15,0	17	●	●	●	●	●
10,5	5,5 - 10,4		15,0	4	1,5	15,0	17	●	●	●	●	●
11,0	5,5 - 10,9		15,0	4	1,5	15,0	17	●	●	●	●	●
11,5	6,0 - 11,4		16,0	4	1,5	15,0	17	●	●	●	●	●

d1 h6	a x b $\pm 0,01$ Progressione/step 0,01		d2 -0,2	k +0,2	a	r -0,2	l2 +0,5	l1 +0,5				
	≥	≤						71	80	90	100	120
12,0	6,0 - 11,9		16,0	4	1,5	15,0	17	●	●	●	●	●
12,5	7,0 - 12,4		17,0	4	1,5	15,0	17	●	●	●	●	●
13,0	9,0 - 12,9		17,0	4	1,5	15,0	17	●	●	●	●	●
13,5	9,0 - 13,4		18,0	4	1,5	15,0	17	●	●	●	●	●
14,0	9,5 - 13,9		18,0	4	1,5	15,0	17	●	●	●	●	●
14,5	9,5 - 14,4		19,0	4	1,5	15,0	17	●	●	●	●	●
15,0	10,0 - 14,9		19,0	4	1,5	15,0	17	●	●	●	●	●
15,5	10,5 - 15,4		20,0	4	1,5	15,0	17	●	●	●	●	●
16,0	12,0 - 15,9		20,0	4	1,5	15,0	17	●	●	●	●	●
16,5	12,5 - 16,4		21,0	4	1,5	15,0	17	●	●	●	●	●
17,0	13,0 - 16,9		21,0	4	1,5	15,0	17	●	●	●	●	●
17,5	13,0 - 17,4		22,0	4	1,5	15,0	17	●	●	●	●	●
18,0	13,5 - 17,9		22,0	4	1,5	15,0	17	●	●	●	●	●
18,5	13,5 - 18,4		23,0	4	1,5	15,0	17	●	●	●	●	●
19,0	14,0 - 18,9		23,0	4	1,5	15,0	17	●	●	●	●	●
19,5	15,0 - 19,4		25,0	4	1,5	15,0	17	●	●	●	●	●
20,0	16,0 - 19,9		25,0	4	1,5	15,0	17	●	●	●	●	●
25,0	18,0 - 24,9		30,0	4	1,5	15,0	17	●	●	●	●	●
= dimensioni standard / preferred dimensions												

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC

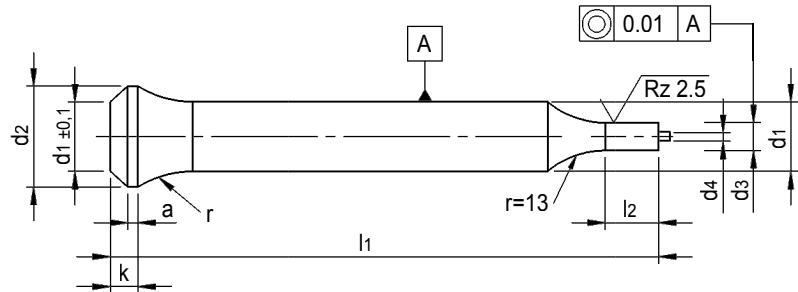


d1 h6	d2 -0,2	k +0,2	a	r -0,2	d4	l1 +0,5				
						71	80	90	100	120
5,0	7	4	1,5	10	1,0	●	●	●	●	
6,0	9	4	1,5	10	1,0	●	●	●	●	
8,0	11	4	1,5	12	1,5	●	●	●	●	●
10,0	14	4	1,5	15	1,5	●	●	●	●	●
13,0	17	4	1,5	15	1,5	●	●	●	●	●
16,0	20	4	1,5	15	2,3	●	●	●	●	●
20,0	25	4	1,5	15	2,3	●	●	●	●	●
25,0	30	4	1,5	15	2,3	●	●	●	●	●

Misure intermedie a richiesta / Intermediate dimensions on request!

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta.

- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable.

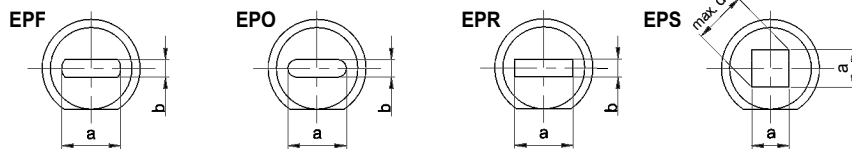
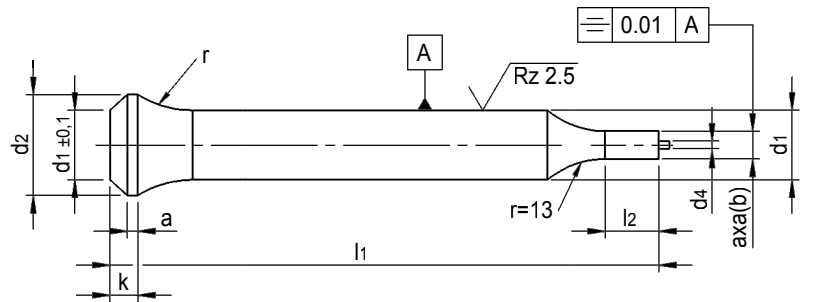


d1 h6	d3 h6 Stufung/step 0,01 ≥ ≤	d2	k -0,2	a +0,2	r	l2 -0,2	d4 +0,5	l1 +0,5				
								71	80	90	100	120
5,0	2,5 - 4,9	7	4,0	1,5	10,0	10	1,0	●	●	●	●	
6,0	3,0 - 5,9	9	4,0	1,5	10,0	10	1,0	●	●	●	●	
8,0	4,0 - 7,9	11	4,0	1,5	12,0	13	1,5	●	●	●	●	●
10,0	5,0 - 9,9	14	4,0	1,5	15,0	17	1,5	●	●	●	●	●
13,0	9,0 - 12,9	17	4,0	1,5	15,0	17	1,5	●	●	●	●	●
16,0	12,0 - 15,9	20	4,0	1,5	15,0	17	2,3	●	●	●	●	●
20,0	16,0 - 19,9	25	4,0	1,5	15,0	17	2,3	●	●	●	●	●
25,0	18,0 - 24,9	30	4,0	1,5	15,0	17	2,3	●	●	●	●	●

Misure intermedie a richiesta / Intermediate dimensions on request!

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC
- Lunghezza l2 speciale a richiesta.

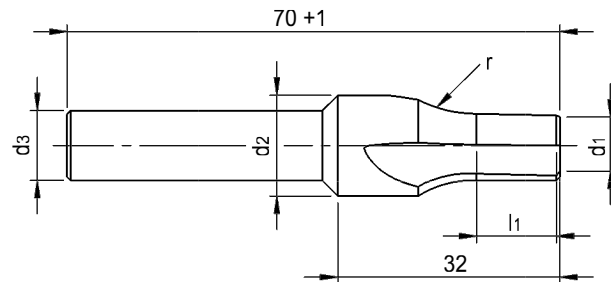
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC
- Length l2 freely selectable.



d1 h6	a x b ±0,01 Progressione/step 0,01 ≥ ≤	d2	k -0.2	a +0.2	r	l2 -0.2	d4 +0.5	l1 +0.5				
								71	80	90	100	120
5,0	2,5 - 4,9	7	4,0	1,5	10	10	1,0	●	●	●	●	
6,0	3,0 - 5,9	9	4,0	1,5	10	10	1,0	●	●	●	●	
8,0	4,0 - 7,9	11	4,0	1,5	12	13	1,5	●	●	●	●	●
10,0	5,0 - 9,9	14	4,0	1,5	15	17	1,5	●	●	●	●	●
13,0	9,0 - 12,9	17	4,0	1,5	15	17	1,5	●	●	●	●	●
16,0	12,0-15,9	20	4,0	1,5	15	17	2,3	●	●	●	●	●
20,0	16,0-19,9	25	4,0	1,5	15	17	2,3	●	●	●	●	●
25,0	18,0-24,9	30	4,0	1,5	15	17	2,3	●	●	●	●	●

Misure intermedie a richiesta / Intermediate dimensions on request!

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC

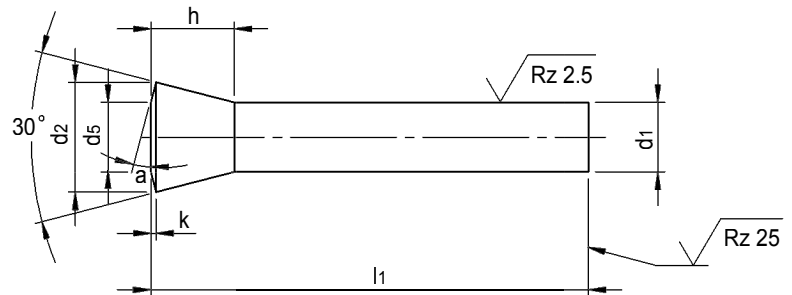


d1 f7	d2 h8	d3 h11	r	l1
5,0	7,4	d2	10	10
5,5	8,5	d2	10	10
6,0	9,5	d2	10	10
6,5 / 7,0	10,5	10	12	12
7,5 / 8,0	11,5	10	12	12
8,5 / 9,0	13,5	10	15	12
9,5 / 10,0	14,5	10	15	12
10,5 / 11,0	15,5	10	15	15
11,5 / 12,0	16,5	10	15	15
12,5 / 13,0	17,5	10	15	15
13,5 / 14,0	18,5	10	15	15
14,5 / 15,0	19,5	10	15	15
15,5 / 16,0	20,5	10	15	15
16,5 / 17,0	21,5	16	15	15
17,5 / 18,0	22,5	16	15	15
18,5 / 19,0	23,5	16	15	15
19,5 / 20,0	25,5	16	15	15
25,0	26,5	16	15	15

Misure intermedie a richiesta / Intermediate dimensions on request!

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Durezza testa: 50 ± 5 HRC

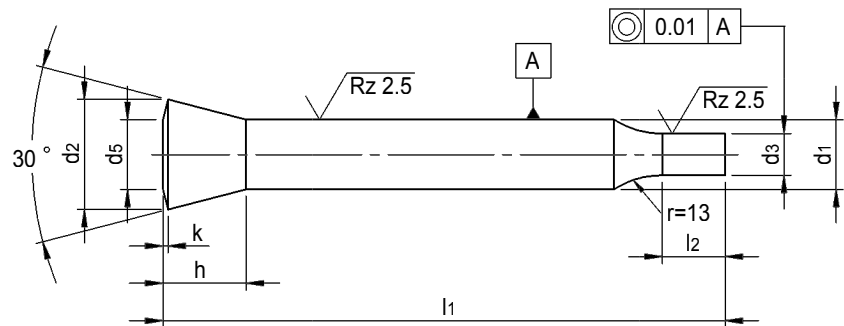
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Hardness head: 50 ± 5 HRC



d1 h6	d2 -0,3	d5	h	k	a	l1 +1				
						71	80	90	100	120
4	6,6	3,8	6	1,0	35,0	●	●	●	●	
5	8,2	5,0	7	1,0	32,0	●	●	●	●	●
6	9,7	6,0	8	1,0	28,0	●	●	●	●	●
7	11,8	7,0	10	1,0	22,6	●	●	●	●	●
8	12,8	8,0	10	1,0	22,5	●	●	●	●	●
9	14,4	9,0	11	1,0	20,0	●	●	●	●	●
10	15,9	10,0	12	1,0	19,0	●	●	●	●	●
11	17,4	11,0	13	1,5	25,0	●	●	●	●	●
12	18,7	12,0	14	1,5	24,0	●	●	●	●	●
13	20,2	13,0	15	1,5	26,0	●	●	●	●	●
14	21,8	14,0	16	1,5	21,0	●	●	●	●	●
15	23,3	15,0	17	1,5	20,0	●	●	●	●	●
16	24,6	16,0	18	2,0	25,0	●	●	●	●	●

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
- Per dimensioni mancanti vd. SE 730

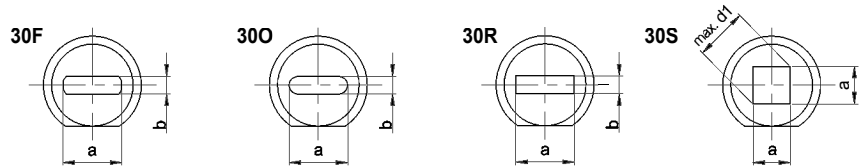
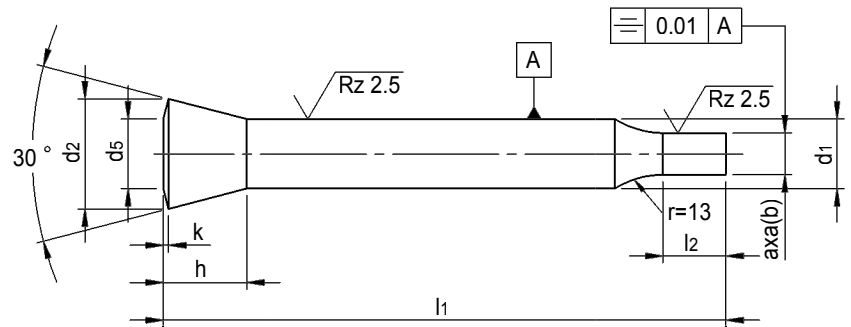
- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Length l2 freely selectable.
- For missing dimensions see SE 730



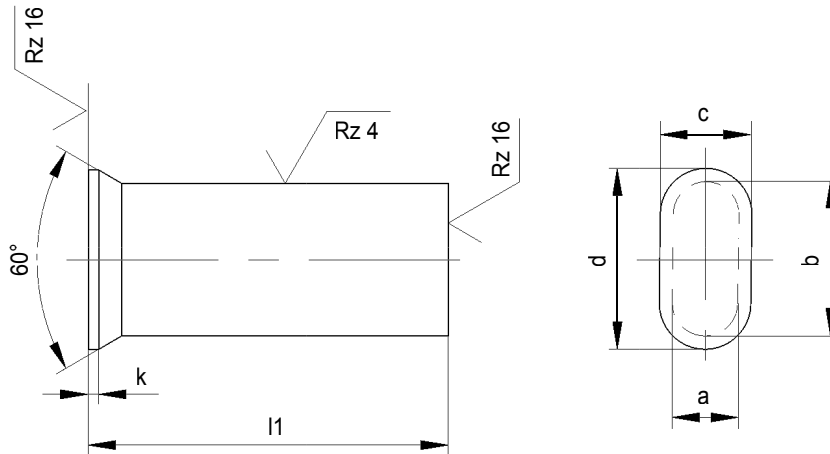
d1 h6	d3 h6 Progressione/step 0,01	l2	d5	h	k	l1 +1				
						71	80	90	100	120
4	1,6 - 3,9	10	3,8	6	1,0	●	●	●	●	
5	2,5 - 4,9	10	5,0	7	1,0	●	●	●	●	●
6	3,0 - 5,9	10	6,0	8	1,0	●	●	●	●	●
7	3,0 - 6,9	10	7,0	10	1,0	●	●	●	●	●
8	4,0 - 7,9	13	8,0	10	1,0	●	●	●	●	●
9	4,5 - 8,9	13	9,0	11	1,0	●	●	●	●	●
10	5,0 - 9,9	17	10,0	12	1,0	●	●	●	●	●
11	5,0 - 10,9	17	11,0	13	1,5	●	●	●	●	●
12	6,0 - 11,9	17	12,0	14	1,5	●	●	●	●	●
13	9,0 - 12,9	17	13,0	15	1,5	●	●	●	●	●
14	9,5 - 13,9	17	14,0	16	1,5	●	●	●	●	●
15	10,0 - 14,9	17	15,0	17	1,5	●	●	●	●	●
16	12,0 - 15,9	17	16,0	18	2,0	●	●	●	●	●

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 50 ± 5 HRC
 - Lunghezza l2 speciale a richiesta.
 - Punzoni senza chiave antirotazione a richiesta.
- Per dimensioni mancanti vd. SE 730

- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 50 ± 5 HRC
 - Length l2 freely selectable.
 - Punches without key flat available upon request.
- For missing dimensions see SE 730



d1 h6	a x b $\pm 0,01$ Progressione/step 0,01 \geq \leq	l2 +0,5	d5	h	k	l1 +1				
						71	80	90	100	120
4	1,6 - 3,9	10	3,8	6	1,0	●	●	●	●	
5	2,5 - 4,9	10	5,0	7	1,0	●	●	●	●	●
6	3,0 - 5,9	10	6,0	8	1,0	●	●	●	●	●
7	3,0 - 6,9	10	7,0	10	1,0	●	●	●	●	●
8	4,0 - 7,9	13	8,0	10	1,0	●	●	●	●	●
9	4,5 - 8,9	13	9,0	11	1,0	●	●	●	●	●
10	5,0 - 9,9	17	10,0	12	1,0	●	●	●	●	●
11	5,0 - 10,9	17	11,0	13	1,5	●	●	●	●	●
12	6,0 - 11,9	17	12,0	14	1,5	●	●	●	●	●
13	9,0 - 12,9	17	13,0	15	1,5	●	●	●	●	●
14	9,5 - 13,9	17	14,0	16	1,5	●	●	●	●	●
15	10,0 - 14,9	17	15,0	17	1,5	●	●	●	●	●
16	12,0 - 15,9	17	16,0	18	2,0	●	●	●	●	●



SE 744

- Finitura - Grado A
 - Testa e corpo rettificati. Testa ricalcata.
 - Materiale: HWS - A2
 - Durezza corpo: 62 ± 2 HRC
 - Durezza testa: 45 ± 5 HRC
 - Tolleranza standard a/b: $\pm 0,02$
 - Tolleranza standard l: $+0,5/+1,0$
- Dimensioni testa speciali a richiesta.

- Grade A - finish
 - Head and shank finish-ground. Jolted head.
 - Material: HWS - A2
 - Hardness shank: 62 ± 2 HRC
 - Hardness head: 45 ± 5 HRC
 - Untoleranced a/b: $\pm 0,02$
 - Untoleranced l: $+0,5/+1,0$
- Head dimensions can be produced as per customers request.

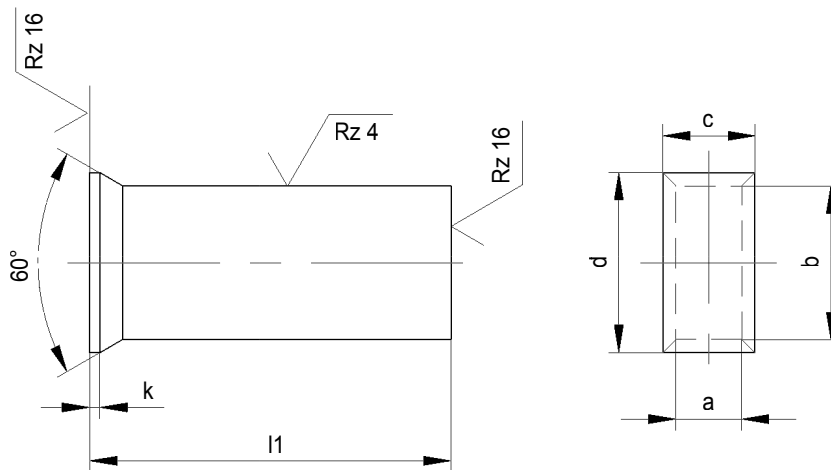
Esempio di ordinazione / Example of order:
SE 744/a x b x l1 x c x d x k

SE 745

- Finitura - Grado A
 - Testa e corpo rettificati. Testa ricalcata.
 - Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 45 ± 5 HRC
 - Tolleranza standard a/b: $\pm 0,02$
 - Tolleranza standard l: $+0,5/+1,0$
- Dimensioni testa speciali a richiesta.

- Grade A - finish
 - Head and shank finish-ground. Jolted head.
 - Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 45 ± 5 HRC
 - Untoleranced a/b: $\pm 0,02$
 - Untoleranced l: $+0,5/+1,0$
- Head dimensions can be produced as per customers request.

Esempio di ordinazione / Example of order:
SE 745/a x b x l1 x c x d x k



SE 748

- Finitura - Grado A
 - Testa e corpo rettificati. Testa ricalcata.
 - Materiale: HWS - A2
 - Durezza corpo: 62 ± 2 HRC
 - Durezza testa: 45 ± 5 HRC
 - Tolleranza standard a/b: $\pm 0,02$
 - Tolleranza standard l: $+0,5/+1,0$
- Dimensioni testa speciali a richiesta.

- Grade A - finish
 - Head and shank finish-ground. Jolted head.
 - Material: HWS - A2
 - Hardness shank: 62 ± 2 HRC
 - Hardness head: 45 ± 5 HRC
 - Untoleranced a/b: $\pm 0,02$
 - Untoleranced l: $+0,5/+1,0$
- Head dimensions can be produced as per customers request.

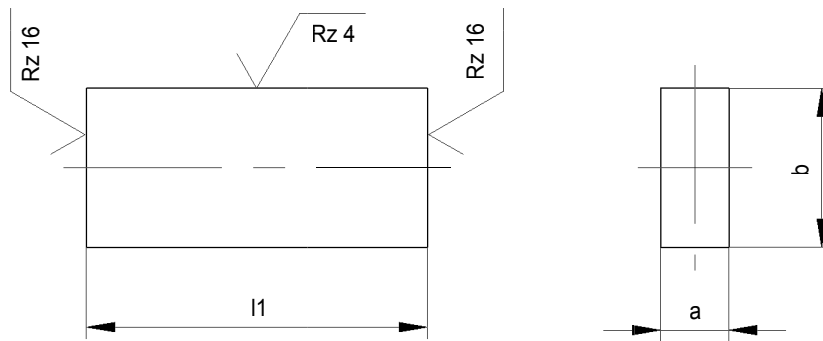
Esempio di ordinazione / Example of order:
 SE 748/a x b x l1 x c x d x k

SE 749

- Finitura - Grado A
 - Testa e corpo rettificati. Testa ricalcata.
 - Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
 - Durezza testa: 45 ± 5 HRC
 - Tolleranza standard a/b: $\pm 0,02$
 - Tolleranza standard l: $+0,5/+1,0$
- Dimensioni testa speciali a richiesta.

- Grade A - finish
 - Head and shank finish-ground. Jolted head.
 - Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
 - Hardness head: 45 ± 5 HRC
 - Untoleranced a/b: $\pm 0,02$
 - Untoleranced l: $+0,5/+1,0$
- Head dimensions can be produced as per customers request.

Esempio di ordinazione / Example of order:
 SE 749/a x b x l1 x c x d x k



SE 738

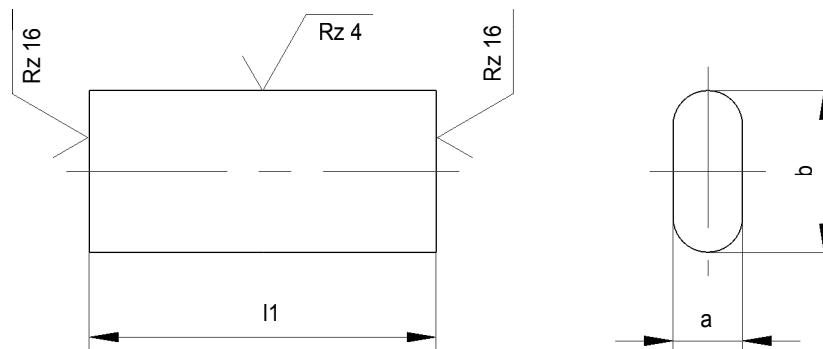
- Materiale: HWS - A2
- Durezza corpo: 62 ± 2 HRC
- Tolleranza standard a/b: $\pm 0,02$
Tolleranza standard l: $+0,5/+1,0$
- Material: HWS - A2
- Hardness shank: 62 ± 2 HRC
- Untoleranced a/b: $\pm 0,02$
Untoleranced l: $+0,5/+1,0$

Esempio di ordinazione / Example of order:
SE 738/a x b x l1

SE 739

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Tolleranza standard a/b: $\pm 0,02$
Tolleranza standard l: $+0,5/+1,0$
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Untoleranced a/b: $\pm 0,02$
Untoleranced l: $+0,5/+1,0$

Esempio di ordinazione / Example of order:
SE 739/a x b x l1



SE 740

- Materiale: HWS - A2
- Durezza corpo: 62 ± 2 HRC
- Tolleranza standard a/b: $\pm 0,02$
Tolleranza standard l: $+0,5/+1,0$
- Material: HWS - A2
- Hardness shank: 62 ± 2 HRC
- Untoleranced a/b: $\pm 0,02$
Untoleranced l: $+0,5/+1,0$

Esempio di ordinazione / Example of order:
SE 740/a x b x l1

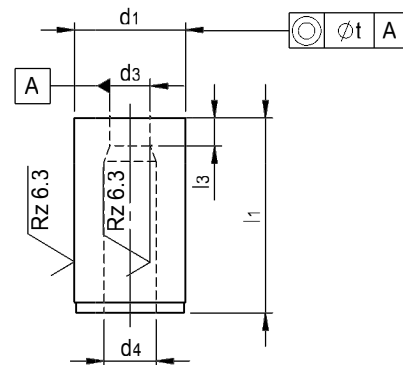
SE 741

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Tolleranza standard a/b: $\pm 0,02$
Tolleranza standard l: $+0,5/+1,0$
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC
- Untoleranced a/b: $\pm 0,02$
Untoleranced l: $+0,5/+1,0$

Esempio di ordinazione / Example of order:
SE 741/a x b x l1

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC

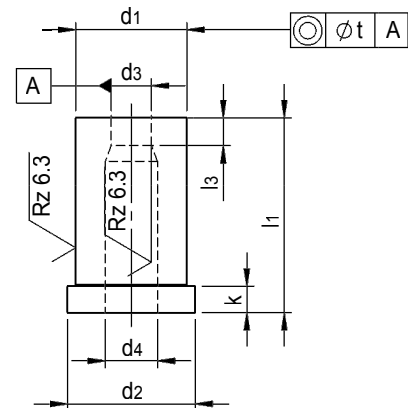
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC



d3 H8	Progressione Graduation	d1 n6	d4	versione corta short version		versione lunga long version		t
				l1 +0,5	l3	l1 +0,5	l3	
1,0	0,1	5	d3 + 0,3	20	2	–	–	0,01
1,1 - 2,0	0,1	6	d3 + 0,3	20	3	28	3	0,01
2,1 - 3,0	0,1	7	d3 + 0,5	20	3	28	3	0,01
3,1 - 4,0	0,1	8	d3 + 0,5	20	3	28	3	0,01
4,1 - 5,0	0,1	10	d3 + 0,7	20	4	28	4	0,01
5,1 - 6,0	0,1	12	d3 + 0,7	20	4	28	4	0,02
6,1 - 8,0	0,1	15	d3 + 0,7	20	4	28	4	0,02
8,1 - 10,0	0,1	18	d3 + 1,0	20	4	28	4	0,02
10,1 - 12,0	0,1	22	d3 + 1,0	20	5	28	5	0,02
12,1 - 15,0	0,1	26	d3 + 1,0	20	5	28	5	0,02
15,5 - 18,0	0,5	30	d3 + 1,0	–	–	28	5	0,02

- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC

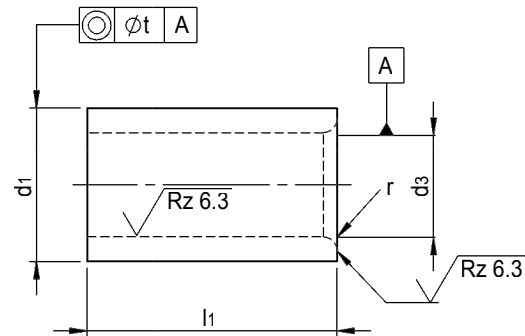
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC



d3 H8	Progressione Graduation	d1 k6	d2	d4	versione corta short version			versione lunga long version			t
					l1 +0,5	l3	k	l1 +0,5	l3	k	
1,0	0,1	5	7	d3 + 0,3	20	2	4	—	—	—	0,01
1,1 - 2,0	0,1	6	8	d3 + 0,3	20	3	4	28	3	4	0,01
2,1 - 3,0	0,1	7	9	d3 + 0,5	20	3	4	28	3	4	0,01
3,1 - 4,0	0,1	8	10	d3 + 0,5	20	3	4	28	3	4	0,01
4,1 - 5,0	0,1	10	12	d3 + 0,7	20	4	4	28	4	4	0,01
5,1 - 6,0	0,1	12	14	d3 + 0,7	20	4	4	28	4	4	0,02
6,1 - 8,0	0,1	15	17	d3 + 0,7	20	4	4	28	4	4	0,02
8,1 - 10,0	0,1	18	20	d3 + 1,0	20	4	4	28	4	4	0,02
10,1 - 12,0	0,1	22	24	d3 + 1,0	20	5	4	28	5	4	0,02
12,1 - 15,0	0,1	26	28	d3 + 1,0	20	5	4	28	5	4	0,02
15,5 - 18,0	0,5	30	32	d3 + 1,0	—	—	—	28	5	4	0,02

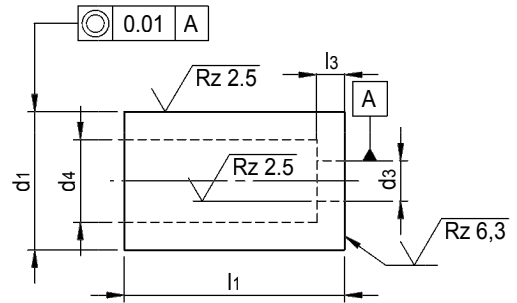
- Materiale: HSS - M2
- Durezza corpo: 62 ± 2 HRC

- Material: HSS - M2
- Hardness shank: 62 ± 2 HRC



d3 H7	Progressione Graduation	d1 n6	l1	r	t
1,0	0,1	5	9	1,0	0,01
1,1-2,0	0,1	6	12	1,0	0,01
2,1-3,0	0,1	7	12	1,0	0,01
3,1-4,0	0,1	8	12	1,0	0,01
4,1-5,0	0,1	10	16	1,0	0,01
5,1-6,0	0,1	12	16	1,5	0,02
6,1-8,0	0,1	15	20	1,5	0,02
8,1-10,0	0,1	18	20	2,0	0,02
10,1-12,0	0,1	22	28	2,0	0,02
12,1-15,0	0,1	26	28	2,0	0,02
15,5-18,0	0,5	30	36	2,0	0,02

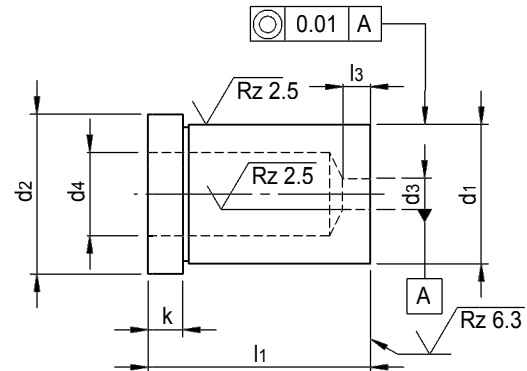
- Materiale: HSS - M2
- Durezza corpo: 64 ± 2 HRC
- Material: HSS - M2
- Hardness shank: 64 ± 2 HRC



d1 m5	l3	d3 +0,02 Progressione/step 0,01	d4	l1 +0,5									
				16	19	20	22	25	28	30	32	35	
5	2	1,0-2,4	2,8	●		●	●	●	●	●	●	●	●
6	3	1,6-3,0	3,5	●		●	●	●	●	●	●	●	●
8	4	2,0-3,5	4,0	●		●	●	●	●	●	●	●	●
10	4	2,5-5,0	5,8	●		●	●	●	●	●	●	●	●
13	5	3,0-7,0	8,0			●	●	●	●	●	●	●	●
16	5	4,0-9,0	9,5			●	●	●	●	●	●	●	●
19*	4	5,0-10,0	11,0		●			●		●	●		
20	8	6,0-11,0	12,0			●	●	●	●	●	●	●	●
22	8	8,0-11,0	15,0			●	●	●	●	●	●	●	●
25	8	8,0-16,0	17,3			●	●	●	●	●	●	●	●
32	8	8,0-20,0	20,7			●	●	●	●	●	●	●	●
38*	6	16,0-26,0	28,0							●	●		
40	8	19,0-27,0	27,7			●	●	●	●	●	●	●	●
50	8	26,0-36,0	37,0			●	●	●	●	●	●	●	●
55*	8	35,0-41,0	42,0							●	●		
*	= non secondo ISO 8977A / not in acc. with ISO 8977A												

- Materiale: HSS - M2
- Durezza corpo: 64±2 HRC

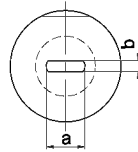
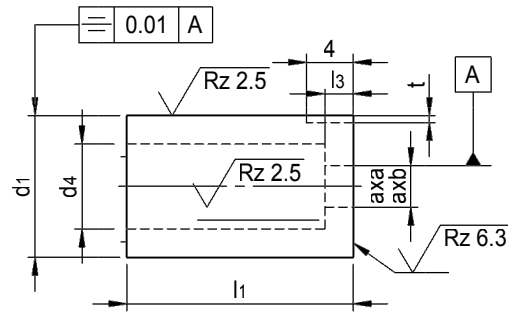
- Material: HSS - M2
- Hardness shank: 64±2 HRC



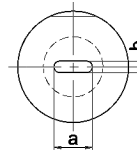
d1 m5	d2 +0,3	l3	k	d3 +0,02 Progressione/step 0,01	d4	l1 +0,5							
						16	20	22	25	28	30	32	35
5	8	2	5	1,0 - 2,4	2,8	●	●	●	●	●	●	●	●
6	9	3	5	1,6 - 3,0	3,5	●	●	●	●	●	●	●	●
8	11	4	5	2,0 - 3,5	4,0	●	●	●	●	●	●	●	●
10	13	4	5	2,5 - 5,0	5,8	●	●	●	●	●	●	●	●
13	16	5	5	3,0 - 7,0	8,0		●	●	●	●	●	●	●
16	19	5	5	4,0 - 9,0	9,5		●	●	●	●	●	●	●
19*	22	4	5	5,0 - 10,0	11,0				●	●	●	●	●
20	23	8	5	6,0 - 11,0	12,0		●	●	●	●	●	●	●
22	25	8	5	8,0 - 14,0	15,0		●	●	●	●	●	●	●
25	28	8	5	8,0 - 16,0	17,3		●	●	●	●	●	●	●
32	35	8	5	8,0 - 20,0	20,7		●	●	●	●	●	●	●
38*	42	6	5	16,0 - 26,0	28,0					●		●	●
40	43	8	5	19,0 - 27,0	27,7		●	●	●	●	●	●	●
50	53	8	5	26,0 - 36,0	37,0		●	●	●	●	●	●	●
55*	58	8	5	35,0 - 41,0	42,0								●
* = non secondo ISO 8977B / not in acc. with ISO 8977B													

■ Materiale: HSS - M2
 ■ Durezza corpo: 64 ± 2 HRC
 Matrici senza chiave antirotazione a richiesta.

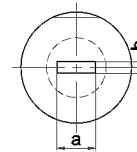
■ Material: HSS - M2
 ■ Hardness shank: 64 ± 2 HRC
 Bushings without key flats available upon request.



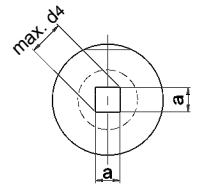
EDF



EDO



EDR



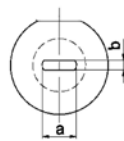
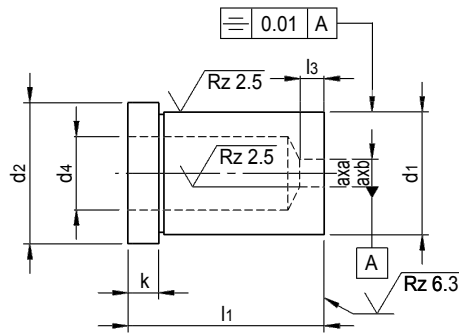
EDS

d1 n5	a x b $\pm 0,01$ Progressione/step 0,01 \geq \leq	l3	d4	t	l1 +0,5								
					16	19	20	22	25	28	30	32	35
5	1,0 - 2,4	2	2,8	0,5	●		●	●	●	●	●	●	●
6	1,6 - 3,0	3	3,5	0,5	●		●	●	●	●	●	●	●
8	2,0 - 3,5	4	4,0	0,5	●		●	●	●	●	●	●	●
10	2,5 - 5,0	4	5,8	2,0	●		●	●	●	●	●	●	●
13	3,0 - 7,0	5	8,0	2,0			●	●	●	●	●	●	●
16	4,0 - 9,0	5	9,5	2,0			●	●	●	●	●	●	●
19*	5,0 - 10,0	4	11,0	2,0		●			●		●	●	
20	6,0 - 11,0	8	12,0	2,0			●	●	●	●	●	●	●
22	8,0 - 11,0	8	12,0	2,0			●	●	●	●	●	●	●
25	8,0 - 16,0	8	17,3	2,0			●	●	●	●	●	●	●
32	8,0 - 20,0	8	20,7	2,0			●	●	●	●	●	●	●
38*	16,0 - 26,0	6	28,0	2,0							●	●	
40	19,0 - 27,0	8	27,7	2,0			●	●	●	●	●	●	●
50	26,0 - 36,0	8	37,0	2,0			●	●	●	●	●	●	●
55*	35,0 - 41,0	8	42,0	2,0							●	●	

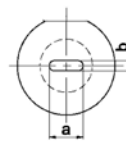
* = non secondo ISO 8977A / not in acc. with ISO 8977A

■ Materiale: HSS - M2
 ■ Durezza corpo: 64±2 HRC
 Matrici senza chiave antirotazione a richiesta

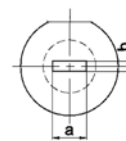
■ Material: HSS - M2
 ■ Hardness shank: 64±2 HRC
 Bushings without key flat available upon request



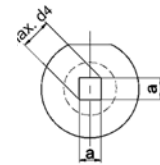
EKDF



EKDO



EKDR



EKDS

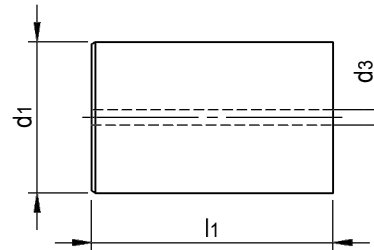
d1 m5	a x b ±0,01 Progressione/step 0,01 ≥ ≤	d2 +0,3	l3	k +0,25	d4	l1 +0,5							
						16	20	22	25	28	30	32	35
5	1,0 - 2,4	8	2	5	2,8	●	●	●	●	●	●	●	●
6	1,6 - 3,0	9	3	5	3,5	●	●	●	●	●	●	●	●
8	2,0 - 3,5	11	4	5	4,0	●	●	●	●	●	●	●	●
10	2,5 - 5,0	13	4	5	5,8	●	●	●	●	●	●	●	●
13	3,0 - 7,0	16	5	5	8,0		●	●	●	●	●	●	●
16	4,0 - 9,0	19	5	5	9,5		●	●	●	●	●	●	●
19*	5,0 - 10,0	22	4	5	11,0				●	●	●	●	●
20	6,0 - 11,0	23	8	5	12,0		●	●	●	●	●	●	●
22	8,0 - 14,0	25	8	5	15,0		●	●	●	●	●	●	●
25	8,0 - 16,0	28	8	5	17,3		●	●	●	●	●	●	●
32	8,0 - 20,0	35	8	5	20,7		●	●	●	●	●	●	●
38*	16,0 - 26,0	42	6	5	28,0					●		●	●
40	19,0 - 27,0	43	8	5	27,7		●	●	●	●	●	●	●
50	26,0 - 36,0	53	8	5	37,0		●	●	●	●	●	●	●
55*	35,0 - 41,0	58	8	5	42,0								●
*	= non secondo ISO 8977B / not in acc. with ISO 8977B												

Tipo EDL liscia

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
- Lunghezze speciali a richiesta.

Type EDL without collar

- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
- Other lengths available upon request.

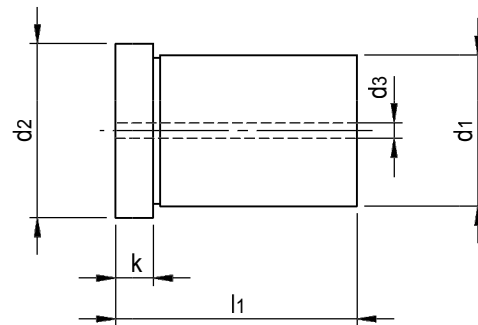


d_1 n5	d_3	l_1 +0,5 35
5	1,5	●
6	1,5	●
8	2	●
10	3	●
13	3	●
16	3	●
19*	3	●
20	4	●
22	4	●
25	4	●
32	4	●
38*	5	●
40	5	●
50	5	●
55*	5	●

* = non secondo ISO 8977A / not in acc. with ISO 8977A

Tipo EKDL con collare
 ■ Materiale: HSS - M2
 ■ Durezza corpo: 64 ± 2 HRC
 Lunghezze speciali a richiesta.

Type EKDL with collar
 ■ Material: HSS - M2
 ■ Hardness shank: 64 ± 2 HRC
 Other lengths available upon request.



d1 m5	d2	d3	k +0,25	l1 +0,5 35
5	8	1,5	5	●
6	9	1,5	5	●
8	11	2	5	●
10	13	3	5	●
13	16	3	5	●
16	19	3	5	●
19*	22	3	5	●
20	23	4	5	●
22	25	4	5	●
25	28	4	5	●
32	35	4	5	●
38*	42	5	5	●
40	43	5	5	●
50	53	5	5	●
55*	58	5	5	●

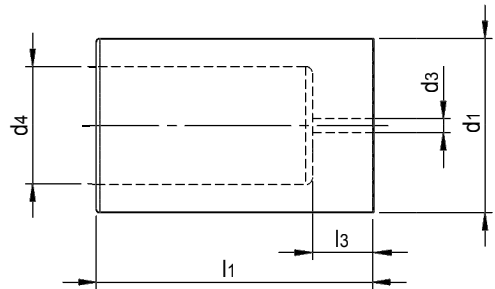
* = non secondo ISO 8977B / not in acc. with ISO 8977B

Tipo EDM liscia

- Materiale: HSS - M2
 - Durezza corpo: 64 ± 2 HRC
- Lunghezze speciali a richiesta.

Type EDM without collar

- Material: HSS - M2
 - Hardness shank: 64 ± 2 HRC
- Other lengths available upon request.

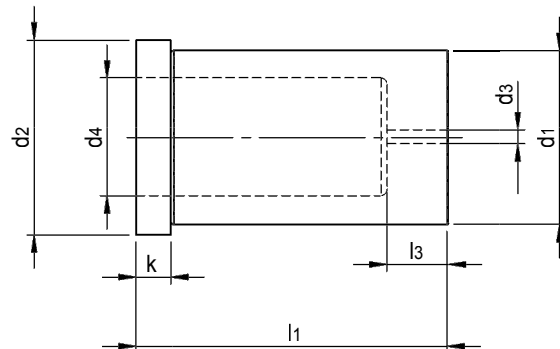


d1 n5	d3	l3	d4	l1 +0,5									
				16	19	20	22	25	28	30	32	35	
5	1,5	2	2,8	●		●	●	●	●	●	●	●	●
6	1,5	3	3,5	●		●	●	●	●	●	●	●	●
8	2,0	4	4,0	●		●	●	●	●	●	●	●	●
10	3,0	4	5,8	●		●	●	●	●	●	●	●	●
13	3,0	5	8,0			●	●	●	●	●	●	●	●
16	3,0	5	9,5			●	●	●	●	●	●	●	●
19*	3,0	5	11,0		●			●		●	●		
20	4,0	8	12,0			●	●	●	●	●	●	●	●
22	4,0	8	15,0			●	●	●	●	●	●	●	●
25	4,0	8	17,3			●	●	●	●	●	●	●	●
32	4,0	8	20,7			●	●	●	●	●	●	●	●
38*	5,0	6	28,0							●	●		
40	5,0	8	27,7			●	●	●	●	●	●	●	●
50	5,0	8	37,0			●	●	●	●	●	●	●	●
55*	5,0	8	42,0							●	●		

* = non secondo ISO 8977A / not in acc. with ISO 8977A

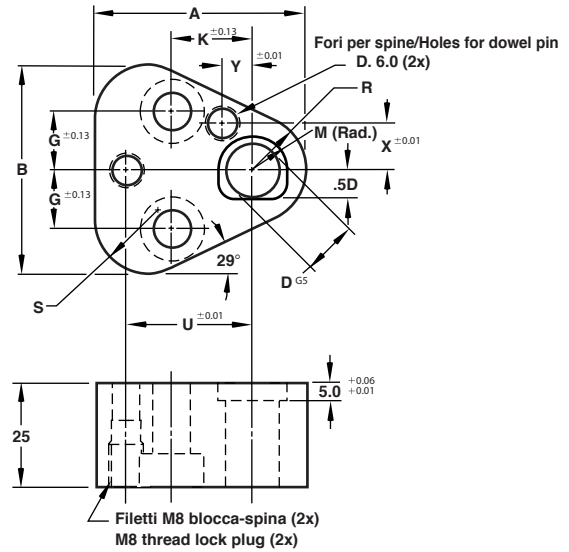
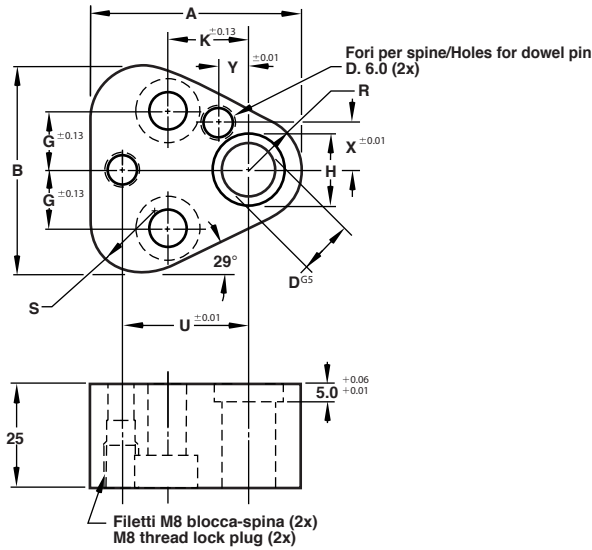
Tipo EKDM con collare
 ■ Materiale: HSS - M2
 ■ Durezza corpo: 64 ± 2 HRC
 Lunghezze speciali a richiesta.

Type EKDM with collar
 ■ Material: HSS - M2
 ■ Hardness shank: 64 ± 2 HRC
 Other lengths available upon request.



d1 m5	d3	d2 +0,3	l3	d4	k +0,25	l1 +0,5								
						16	20	22	25	28	30	32	35	
5	1,5	8	2,0	2,8	5	●	●	●	●	●	●	●	●	
6	1,5	9	3,0	3,5	5	●	●	●	●	●	●	●	●	
8	2,0	11	4,0	4,0	5	●	●	●	●	●	●	●	●	
10	3,0	13	4,0	5,8	5	●	●	●	●	●	●	●	●	
13	3,0	16	5,0	8,0	5		●	●	●	●	●	●	●	
16	3,0	19	5,0	9,5	5		●	●	●	●	●	●	●	
19*	3,0	22	4,0	11,0	5				●	●	●	●	●	
20	4,0	23	8,0	12,0	5		●	●	●	●	●	●	●	
22	4,0	25	8,0	15,0	5		●	●	●	●	●	●	●	
25	4,0	28	8,0	17,3	5		●	●	●	●	●	●	●	
32	4,0	35	8,0	20,7	5		●	●	●	●	●	●	●	
38*	5,0	42	6,0	28,0	5					●		●	●	
40	5,0	43	8,0	27,7	5		●	●	●	●	●	●	●	
50	5,0	53	8,0	37,0	5		●	●	●	●	●	●	●	
55*	5,0	58	8,0	42,0	5								●	

* = non secondo ISO 8977B / not in acc. with ISO 8977B



SE 800 Tondi / Round

ISO 8020 Tondi
Il porta punzone viene fornito con 2 spine filettate, 2 viti.

ISO 8020 Round
Retainer is supplied with 2 thread dowel pins and 2 screws.

SE 801 con chiavetta / with flat

ISO 8020 Sagome
Il porta punzone verrà fornito con 2 spine filettate, 2 viti.

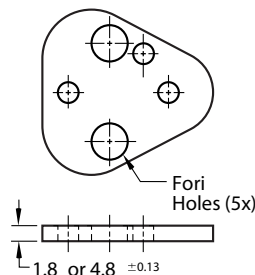
ISO 8020 Shaped
Retainer is supplied with 2 thread dowel pins and 2 screws.

Art. Nr.					SE 800			SE 801					Vite	
Tipo/Type	Codice/Code	D	A	B	H	G	K	M	R	S	U	X	Y	Screw
SE800/SE801	10	10.00	44.5	43.7	14.0	11.1	19.0	7.0	9.5	12.0	26.925	9.0	7.5	M8
SE800/SE801	13	13.00	50.8	50.0	17.0	14.3	19.0	8.5	12.7	15.2	29.970	12.0	6.5	M8
SE800/SE801	16	16.00	54.0	53.2	20.0	15.9	19.0	10.0	14.3	16.8	31.750	13.5	6.0	M8
SE800/SE801	20	20.00	60.3	59.5	24.0	17.5	19.0	12.0	17.5	20.0	33.530	16.5	5.0	M10
SE800/SE801	25	25.00	69.9	69.1	29.0	19.8	23.8	14.5	22.2	24.7	40.640	22.0	7.0	M12
SE800/SE801	32	32.00	69.9	69.1	36.0	19.8	23.8	18.0	22.2	24.7	40.640	22.0	7.0	M12

Esempio di ordinazione / Example of order: SE 800/10

SE 803 Piastrine di reazione / Shim plates

Disponibile a richiesta spessore 5,8
Available upon request thickness 5,8

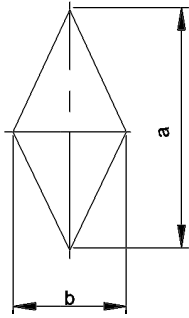


D	1.8 (soft)	4.8 (Rc55)
10	SE802 10 18	SE803 10 48
13	SE802 13 18	SE803 13 48
16	SE802 16 18	SE803 16 48
20	SE802 20 18	SE803 20 48
25	SE802 25 18	SE803 25 48
32	SE802 32 18	SE803 32 48

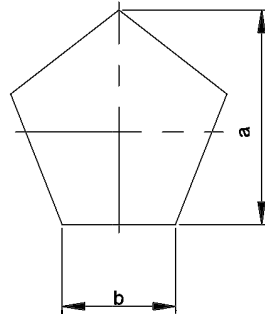
Esempio di ordinazione / Example of order: SE 802/10/18

Meter - È vietata la riproduzione, anche parziale, del presente catalogo.

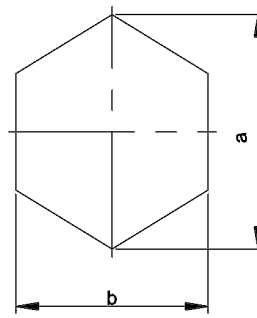
SP1



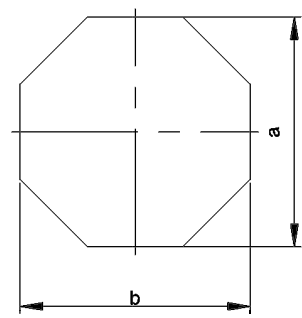
SP2



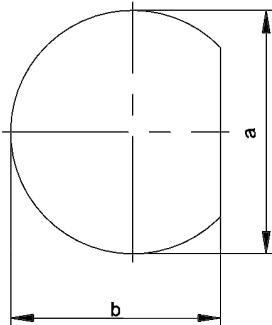
SP3



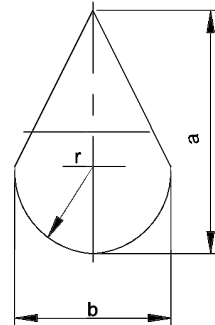
SP4



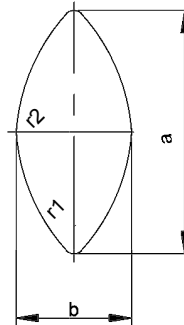
SP5



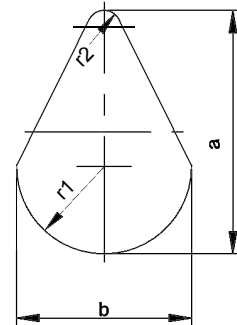
SP6



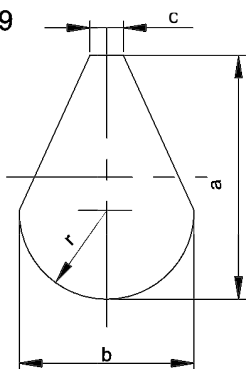
SP7



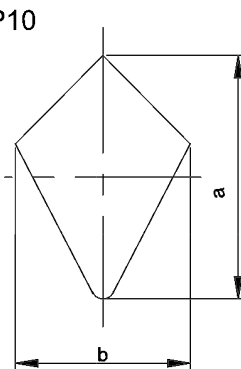
SP8



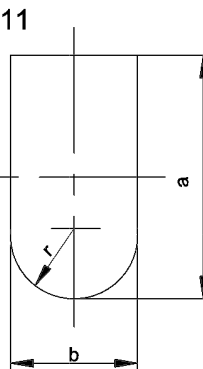
SP9



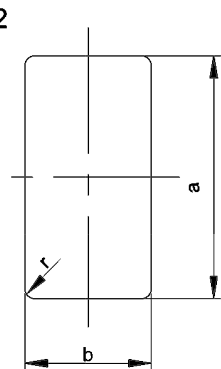
SP10



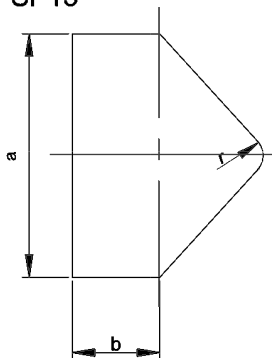
SP11



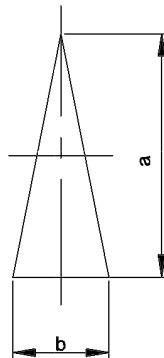
SP12



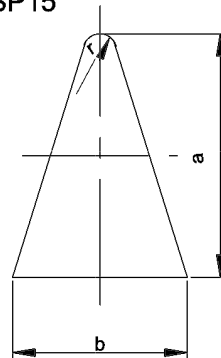
SP13



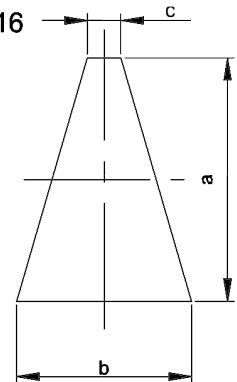
SP14



SP15



SP16



SP17

