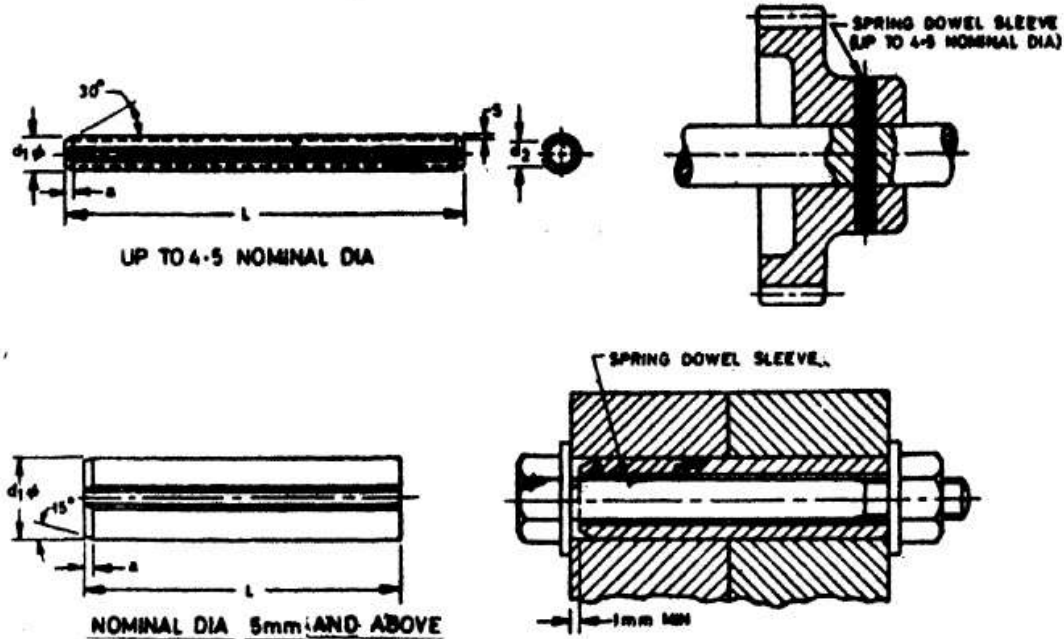


# SPECIFICATION FOR SPRING DOWEL SLEEVES

**1. Scope** — Requirements for spring dowel sleeves for use in foundries. Also used as spring dowel pins.

**2. Dimensions and Tolerances**

**2.1** As given in Tables 1 to 4 and in Fig. 1.



All dimensions in millimetres.  
**FIG. 1 SPRING DOWEL SLEEVES**

**TABLE 1 DIMENSIONS FOR SPRING DOWEL SLEEVES (LIGHT PATTERN)**

Nominal Diameter mm	S	a	Before Fitting			For Bolt Size [ IS : 4318 (Part VI) - 1967* ] &g	Corresponding Washer ( IS : 2016-1967† )	Preferred Length Range (from Up to and including) L
			d <sub>1</sub>	Tolerance on d <sub>1</sub>	d <sub>2</sub>			
2	0.2	0.35	2.3	+0.1	1.9	—	—	4-30
2.5	0.25	0.45	2.8	+0.2	2.3	—	—	4-30
3	0.3	0.5	3.3		2.7	—	—	4-40
3.5	0.35	0.6	3.8		3.1	—	—	4-40
4	0.5	0.7	4.4		3.4	—	—	4-50
4.5	0.5	0.8	4.8	+0.3	3.8	M3	3.2	4-50
5	0.5	1.0	5.4		4.4	—	—	5-80
6	0.75	1.0	6.4		4.9	M4	4.3	10-100
7	0.75	1.0	7.5	+0.4	6.0	M5	5.3	10-100
8	0.75	2	8.5		7.0	M6	6.4	10-120
10	1	2	10.5		8.5	—	—	10-160
11	1	2	11.5		9.5	M8	8.4	10-160
12	1	2	12.5	+0.4	10.5	—	—	10-180
13	1.25	2	13.5		11.0	M10	10.5	10-180
14	1.5	2	14.5		11.5	—	—	10-180
16	1.5	2	16.5		13.5	M12	13	10-200
18	1.75	2	18.5	+0.4	15.0	M14	15	10-200
20	2	2	20.5		16.5	—	—	10-200
21	2	2	21.5		17.5	M16	17	14-200
23	2	3	23.5		19.5	M18	19	14-200
25	2	3	25.5	+0.4	21.5	M20	21	14-200
28	2.5	3	28.5		23.5	M22	23	14-200
30	2.5	3	30.5		25.5	M24	25	14-200
35	3.5	3	35.5		28.5	M27	28	20-200
40	4	4	40.5	+0.4	32.5	M30	31	20-200
45	4	4	45.5		37.5	M36	37	20-200
50	5	4	50.5		40.5	M39	40	20-200

**DIMENSIONS FOR SPRING DOWEL SLEEVES (HEAVY PATTERN)**

Nominal Diameter mm	S	a	Before Fitting			For Bolt Size [IS : 4218 (Part VI) - 1967] 6g	Corresponding Washer (IS : 2016- 1967)	Preferred Length Range (from Up to and Including) L
			$d_1$	Tolerance on $d_1$	$d_2$ ≈			
1	0.2	0.15	1.2		0.8	—	—	4-20
1.5	0.3	0.25	1.7	+0.1	1.1	—	—	4-20
2	0.4	0.35	2.3		1.5	—	—	4-30
2.5	0.5	0.45	2.8		1.8	—	—	4-30
3	0.6	0.5	3.3		2.1	—	—	4-40
3.5	0.75	0.6	3.8		2.3	—	—	4-40
4	0.8	0.7	4.4	+0.2	2.8	—	—	4-50
4.5	1	0.8	4.9		2.9	—	—	5-50
5	1	1.6	5.4		3.4	—	—	5-80
6	1.25	1.6	6.4		3.9	M3	3.2	10-100
8	1.5	2	8.5		5.5	M4	4.3	10-120
10	2	2	10.5		6.5	M5	5.3	10-160
12	2.5	2	12.5	+0.3	7.5	M6	6.4	10-180
13	2.5	2	13.5		8.5	—	—	10-180
14	3	2	14.5		8.5	—	—	10-200
16	3	2	16.5		10.5	M8	8.4	10-200
18	3.5	2	18.5		11.5	M10	10.5	10-200
20	4	3	20.5		12.5	—	—	10-200
21	4	3	21.5		13.5	M12	13	14-200
25	5	3	25.5		15.5	M14	15	14-200
28	5.5	3	28.5		17.5	M16	17	14-200
30	6	3	30.5	+0.4	18.5	—	—	14-200
32	6	3	32.5		20.5	M18	19	20-200
35	7	3	35.5		21.5	M20	21	20-200
38	7.5	4	38.5		23.5	M22	23	20-200
40	7.5	4	40.5		25.5	M24	25	20-200
45	8.5	4	45.5		28.5	M27	28	20-200
50	8.5	4	50.5		31.5	M30	31	20-200

**Designation** — Spring dowel sleeve (heavy pattern) of 10 mm nominal diameter and length 40 mm to be designated as:

Spring dowel sleeve heavy 10 × 40 IS : 5988.

Length mm	In Steps of mm
4 to 6	1
6 " 32	2
32 " 40	4
40 " 100	5
100 " 200	20

Length mm	Tolerance mm
4 to 10	+ 0.5
12 " 50	+ 1.0
50 " 200	+ 1.5