DIN 939 Studs, Metal End ≈ 1.25d

Double-end studs with a metal (tap) end bm of approximately 1.25 d, product class A, metric coarse thread M4 to M52 and fine thread M8×1 to M52×3. All dimensions in mm, from DIN 939 Tables 1 and 3.

STANDARD	METAL END	SIZE RANGE	PRODUCT CLASS
DIN 939	**bm ≈ 1.25 d**	**M4 to M52**	**A (ISO 4759-1)**

DIMENSIONS mm · sizes in brackets should be avoided

Thread d	Fine thread d×P	bm	b l ≤ 125	b 125 < l ≤ 200	b l > 200	ds max	ds min	x1 max	x2 max
M4	-	5	14	20	-	4	3.82	1.75	0.9
M5	-	6.5	16	22	-	5	4.82	2.0	1.0
M6	-	7.5	18	24	-	6	5.82	2.5	1.25
(M7)	-	9	20	26	-	7	6.78	2.5	1.25
M8	M8×1	10	22	28	-	8	7.78	3.2	1.6
M10	M10×1.25	12	26	32	45	10	9.78	3.8	1.9
M12	M12×1.25, M12×1.5	15	30	36	49	12	11.73	4.3	2.2
(M14)	(M14×1.5)	18	34	40	53	14	13.73	5.0	2.5
M16	M16×1.5	20	38	44	57	16	15.73	5.0	2.5
(M18)	(M18×1.5)	22	42	48	61	18	17.73	6.3	3.2
M20	M20×1.5	25	46	52	65	20	19.67	6.3	3.2
(M22)	(M22×1.5)	28	50	56	69	22	21.67	6.3	3.2
M24	M24×2	30	54	60	73	24	23.67	7.5	3.8
(M27)	(M27×2)	35	60	66	79	27	26.67	7.5	3.8
M30	M30×2	38	66	72	85	30	29.67	9.0	4.5
(M33)	(M33×2)	42	72	78	91	33	32.61	9.0	4.5
M36	M36×3	45	78	84	97	36	35.61	10.0	5.0
(M39)	(M39×3)	50	84	90	103	39	38.61	10.0	5.0
M42	M42×3	52	90	96	109	42	41.61	11.0	5.5
(M45)	(M45×3)	58	96	102	115	45	44.61	11.0	5.5
M48	M48×3	60	102	108	121	48	47.61	12.5	6.3
(M52)	(M52×3)	65	110	116	129	52	51.54	12.5	6.3

- b = nut-end thread length for the nominal length l shown. x1 and x2 are thread run-outs per DIN 76-1. Nominal length tolerance js15.
- Studs above the upper step line of the length tables cannot be made with the b values above; for them b ≈ l - (x1 + 3).
- Where b + x1 < 1.2 bm, the nut end has a rounded end (RN) per DIN EN ISO 4753, unless the property class or grade mark is on the nut-end face.

TECHNICAL DELIVERY CONDITIONS DIN 939 Table 5

General requirements	DIN ISO 8992
Thread, metal (tap) end	Tolerance class Sk 6 (interference fit) per DIN 13-51, or Sn 4; Fo = without interference fit
Thread, nut end	6g per DIN ISO 965-1
Steel, property class	M4 to M39: 5.6, 8.8, 10.9 · above M39: by agreement · DIN EN ISO 898-1
Stainless steel, grade	M4 to M24: A2-70, A4-70, A4-80 · above M24 to M39: A2-50, A2-70, A4-50, A4-70 · above M39: by agreement · DIN EN ISO 3506-1
Tolerances	Product class A · DIN EN ISO 4759-1
Surface, steel	As manufactured; electroplated per DIN EN ISO 4042; zinc flake per DIN EN ISO 10683; others by agreement
Surface, stainless steel	Clean and bright and/or passivated
Surface discontinuities · acceptance	DIN EN 26157-1 (by agreement) · DIN EN ISO 3269
Designation example	`Stud DIN 939 – M12 × 80 – 8.8`