

C50L Lockbolt®

拉铆钉利用铆接工具挤压套环发生塑性变形，将套环金属挤入铆钉环槽内，完成永久性连接。相比于其他类型紧固连接，拉铆钉具有连接强度高、可靠性好、抗震性能强、疲劳性能优异，安装简单方便、无需后期维护等特点。铆钉和套环经过特殊表面处理，具有优良的防腐性能，用于不同材料间紧固连接（铝和钢，铝和铝等）。



C50L Lockbolt® meet or exceed the performance of torqued bolts in both shear and tensile strength. With a longer fatigue life, the high-strength C50L lockbolt® are easy to install and future maintenance. C50L Lockbolt® offer superior vibration resistance and overall durability.

After special surface treatment, C50L Lockbolt® are highly anti-corrosion and qualified to fastening connection of different materials (eg. aluminum and steel)

C50L Lockbolt® has been designed for applications in

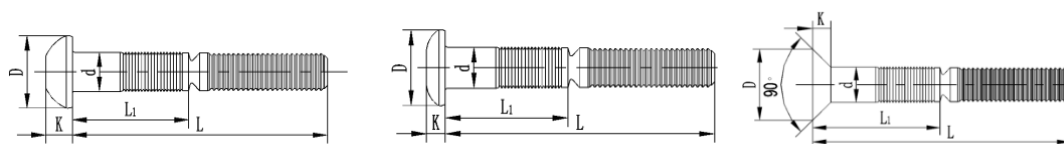
- Transportation (Heavy Vehicles),
- Railway/Rail track,
- Steel construction (bridge building/repair, renewable energy),
- Heavy equipment
- Containers

直径规格 Size: 12mm、16mm、20mm、22mm、24mm、25mm、28mm
 1/2" 5/8" 3/4" 7/8" 1" 1-1/8" 1-3/8"

材 料 Material: 钢 Carbon Steel 不锈钢 Stainless Steel 铝合金 Aluminium

头部结构 Head Style: 圆头 Dome head 平头 Flush head 90°沉头 Countersunk head

铆钉基本尺寸 Dimensions



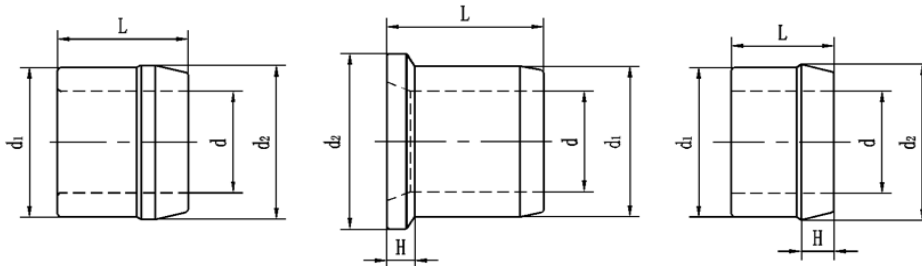
Dome head (LMY型)

Flush head平头型 (LMP型)

Countersunk 90°沉头型 (LMC型)

直径规格 DIA	d		LMY型		LMP型		LMC型	
			D	K	D	K	D	K
	min	max	min	min	min	min	min	min
12	12.5	13.1	23.0	7.5	23.0	6.0	23.0	6.3
16	15.7	16.3	26.9	9.5	26.9	7.5	26.9	7.9
20	18.8	19.5	32.9	11.5	32.9	9.1	32.9	9.5
22	22.0	22.7	38.5	13.5	38.5	10.3	38.5	11.1
24	23.9	24.5	42.0	14.0	42.0	11.0	42.0	12.0
25	25.1	26.0	44.4	15.0	44.4	11.9	44.8	12.7
28	27.9	29.2	50.3	17.0	-	-	-	-

套环基本尺寸 Collar Dimensions



Full Collar 普通型 (LMTF型) Flanged Collar 法兰盘型 (LMTF型) Low Profile Collar 抗剪型 (LMTJ型)

套环类型	直径规格 DIA	d		d1		L		H		d2	
		min	max	min	max	min	max	min	max	min	max
LMTF (Full)	12	13.1	13.7	19.4	20.3	15.5	16.6	-	-	19.9	20.9
	16	16.5	16.9	24.7	25.7	21.5	22.2	-	-	25.2	26.2
	20	19.7	20.1	29.6	30.0	23.6	24.4	-	-	30.0	31.0
	22	23.1	23.7	34.2	34.9	27.5	28.3	-	-	34.7	35.8
	24	24.8	25.4	36.3	37.0	29.5	30.5	-	-	36.8	38.2
	25	26.0	26.7	39.0	40.0	31.2	32.4	-	-	39.5	41.5
	28	29.2	30.0	44.2	45.0	35.2	36.2	-	-	44.7	46.5
LMTF (Flanged)	12	13.1	13.7	20.1	20.5	18.2	19.0	2.4	4.0	24.6	26.2
	16	16.5	16.9	24.6	25.7	23.6	24.4	3.2	4.8	31.0	32.5
	20	19.7	20.1	29.7	30.5	28.4	29.1	4.0	5.5	37.3	38.9
	22	23.1	23.7	34.5	34.9	33.0	33.8	4.8	6.4	39.7	41.3
	24	24.8	25.4	36.3	37.0	35.2	36.0	5.1	6.8	42.0	43.6
	25	26.0	26.7	39.4	40.0	37.7	38.5	5.5	7.1	46.8	48.4
	28	29.2	30.0	44.2	45.0	42.4	43.2	6.4	7.9	53.2	54.8
LMTJ (Low Profile)	12	13.1	13.7	19.7	20.3	11.9	12.7	3.6		20.2	20.9
	16	16.5	16.9	24.6	25.7	17.0	17.8	4.6		25.1	26.2
	20	19.7	20.1	29.6	30.0	18.2	18.9	5.5		30.1	31.0
	22	23.1	23.6	34.5	34.9	21.2	21.9	6.4		35.0	35.8
	24	24.8	25.4	36.3	37.0	23.3	24	6.9		36.8	38.2
	25	26.0	26.7	39.4	40.0	24.1	24.9	7.2		39.9	41.5

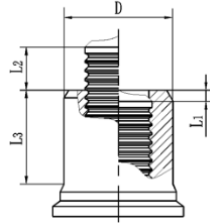
拉铆钉力学性能 Mechanical properties

直径规格 DIA	LMY/LMP/LMC型			
	拉断力kN Break Force	剪切力kN Shear	压紧力kN Pre-load Strength	拉脱力kN Tensile
12	70 ~ 100	≥64	≥54	≥75
16	115 ~ 145	≥100	≥85	≥120
20	140 ~ 170	≥144	≥126	≥178
22	205 ~ 230	≥193	≥175	≥246
24	230 ~ 260	≥223	≥208	≥268
25	240 ~ 270	≥251.2	≥229	≥323
28	270 ~ 300	≥308.9	≥260	≥369

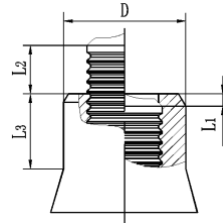
铆接厚度及相关尺寸 (Grip Range)

铆接 厚度 代号 Type No.s	铆接厚度 Grip Range		铆钉长度 Bolt Length (mm)													
			φ12		φ16		φ20		φ22		φ24		φ25		φ28	
	Min mm	Max mm	L ₁	L	L ₁	L	L ₁	L	L ₁	L	L ₁	L	L ₁	L	L ₁	L
6	6.35	12.7	31	81	36	93	39	106							-	-
12	12.7	19.1	37	87	43	99	45	112	49	119	51	121	53	137	-	-
18	19.1	25.4	44	93	49	106	51	118	55	125	57	127	59	143	-	-
24	25.4	31.8	50	100	55	112	58	125	62	132	64	134	65	149	-	-
31	31.8	38.1	56	106	62	118	64	131	68	138	70	140	72	156	-	-
37	38.1	44.5	63	112	68	125	70	137	74	145	76	147	78	162	-	-
44	44.5	50.8	69	119	75	131	77	144	81	151	83	153	84	168	-	-
50	50.8	57.2	75	125	81	137	83	150	87	157	89	159	91	175	-	-
57	57.2	63.5	82	131	87	144	89	156	93	164	95	166	97	181	-	-
63	63.5	69.9	88	138	94	150	96	163	100	170	102	172	104	187	-	-
70	69.8	76.2	94	144	100	156	102	169	106	176	108	178	110	194	-	-
77	76.2	82.6	101	150	106	163	108	175	112	183	114	185	116	200	-	-
83	82.6	88.9	107	157	113	169	115	182	119	189	121	191	123	206	-	-
89	88.9	95.3	113	163	119	175	121	188	125	195	127	197	129	213	133	218
95	95.3	101.6	120	170	125	182	128	195	131	202	133	204	135	219	140	224
102	101.6	108.0	126	176	132	188	134	201	138	208	140	210	142	225	146	230
108	108.0	114.3	132	182	138	195	140	207	144	214	146	216	148	232	152	237
114	114.3	120.7	139	189	144	201	147	214	150	221	152	223	154	238	159	243

拉铆钉铆接后的型式尺寸 After installation



Flanged法兰盘型 (LMTF型)



Full/Low profile普通型 (LMTJ型)、抗剪型 (LMTJ型)

直径规格 Dia	LMTF 型、LMTJ 型				LMTJ 型			
	L1	L2	L3	D	L1	L2	L3	D
	max	max	min	max	max	max	min	max
12	1.6mm	9.5mm	10.3	18.6	1.6mm	9.5mm	6.0	18.6
16			15.9	23.3			8.7	23.3
20			16.7	28.2			9.2	28.2
22			19.1	32.6			11.0	32.6
24			20.0	34.5			11.5	34.5
25			22.2	37.2			12.0	37.2
28			23.0	41.8			13.0	41.6

安装孔 Hole Sizes (mm)

直径规格 Dia	12	16	20	22	24	25	28
铆钉孔直径 Hole Dia	12.7-13.5	15.9-17.5	19.1-21	22.3-24	23.9-26	25.4-27	28.6-30

安装示意图

Installation sequence

