MechaLock
Easy Mounting (Nut) / Thin

Feature: Installation can be completed easily just by tightening one nut.

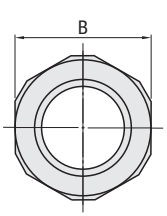
Easy Mounting (Nut)

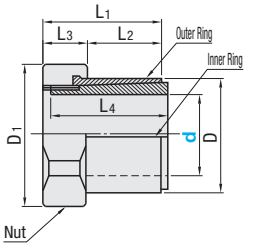
RoHS 10

MLN
MLNB (Black Oxide)
MLNP (Electroless Nickel Plating)

Type	Material	Surface Treatment
MLN	S45C	-
MLNB		Black Oxide
MLNP		Electroless Nickel Plating

Nut of MLNP is colored with RED coating material.





Part Number Type	d	D	B	D1	L1	L2	L3	L4	Max. Allowable Torque (N · m) MLN, MLNP	Max. Allowable Torque (N · m) MLNB	Allowable Thrust Load (kN) MLN, MLNP	Allowable Thrust Load (kN) MLNB	Tightening Torque (N · m)	Mass (g)	Side Surface Pressure of Hub MPa MLN, MLNP	Side Surface Pressure of Hub MPa MLNB	H Hub Minimum O.D. Yield Point Stress of Hub Material (MPa) 206 FC350, SS400, S10C MLN, MLNP	206 FC350, SS400, S10C MLNB	294 FCD450, S35C MLN, MLNP	294 FCD450, S35C MLNB	392 FCD600, S55C MLN, MLNP	392 FCD600, S55C MLNB	Hub Machining Depth L	Unit Price MLN	Unit Price MLNB	Unit Price MLNP
MLN MLNB MLNP	8	14	22	23.5	19	11	8	19	29.4	21	6.9	5.2	24.5	34	178	128	31	24	24	21	22	19	13			
	10	17	24	26	21	12	9	21	34.3	24		4.8	29.4	43	128	89	33	28	26	23	24	21	14			
	11	18			22		10	22	39.2	28		5.1	34.3	46	132	92	38	30	29	25	25	23				
	12	20			23	13		23	49.0	34	7.3	5.7	44.1	50	122	82	40	32	31	27	28	25	15			
	14	23	30	32.5	26	15	11	26	88.3	62	12.3	8.9	58.8	80	106	73	41	34	34	30	31	28	17			
	15	24			27	16		27	108	76	13.7	10.1	68.6	85			43	36	35	31	32	29	18			
	17	26			31	19	12	31	186	130	19.6	15.3	98.1	96	107	74	50	41	40	35	36	33	21			
	20	29	36	39	33	20	13	33	245	172	24.5	17.2	137	135	114	80	52	44	45	39	40	37	22			
	22	32			35	22		35	275	193		17.6	147	147	90	62	54	46		41	41	38	24			
	24	34	41	44	37	24		37	314	220	25.5	18.3	167	185	83	58	55	48	47	42	43	40	26			
	25	35			38	25		38	353	247	27.5	19.8	186	187	85.1	60		49	48	44	44	41	27			
	28	40	50	54	43	28	15	43	378	265	26.5	18.9	226	320	68.9	48	57	52	51	48	48	45	30			
	30	42	55	60	46	30	16	46	392	274	25.5	18.3	255	398	66.3	46	61	55	54	50	50	48	32			
	35	48	60	66	52	35	17	52	461	323		18.5	294	521	50	35	64	59	58	55	55	53	37			

Ordering Example: Part Number **MLN25**

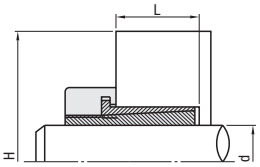
kgf=Nx0.101972 kgf/mm²=MPax0.101972

Recommended Tolerance of Shaft and Hub / Roughness of Surface

Shaft O.D.	h7(g6)	Ra1.6 or less
Hub I.D.	H7	Ra3.2 or less

How to Determine Hub O.D.

After selecting the MechaLock size, hub size and material, confirm that the selected values meet the conditions H≤hub in the Minimum O.D. Table.



Features: Because the screw is installed directly on the hub, the inner and outer diameter difference is small and thin. Applicable to installation on a small hub.

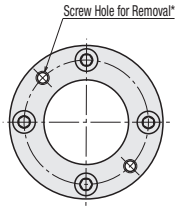
Thin

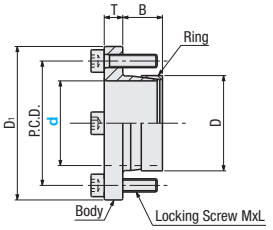
RoHS 10

MLSL

TYPE	Material	Surface Treatment
MLSL	S45C	-

* Thread diameter of screw hole for removal is the same as that of locking screw.





Part Number Type	d	D	D1	P.C.D.	T	B	Locking Screw MxL	Locking Screw Qty.	Locking Screw Tightening Torque (N · m)	Max. Allowable Torque (N · m)	Allowable Thrust Load (kN)	Mass (g)	Side Surface Pressure of Hub MPa	H Hub Minimum O.D. Yield Point Stress of Hub Material (MPa) 206 FC350 SS400 S10C	294 FCD450 S35C	392 FCD600 S55C	Hub Machining Depth L1	Unit Price
MLSL	5	8	22	15	4	10	M3x10	3	2	4	2	13	134	21.5	21.5	21.5	8	
	6	9	23	16						6	2	15	132	23	22.5	22.5		
	8	11	25	18						9	2	17	123	25	24.5	24.5		
	10	13	29	21	5	12	M4x18	4	4	18	4	28	153	38	29	29	9.5	
	12	15	31	23						23	4	31	139	39	31	31		
	14	18	36	26	6	14		4		37	5	52	161	56	38	36	11	
	15	19	37	27						39	5	55	149	52	38	37		
	16	20	38	28						42	5	57	143	52	39	38		
	17	21	39	29						45	5	59	138	52	39	39		
	19	24	42	32						49	5	71	118	51	42	42		
	20	25	46	36	7	15	M5x20	4	8	97	10	103	198	-*	62	49	12	
	22	26	47	37						110	10	101	196		64	51		
	24	28	49	39						121	10	106	184		64	52		
	25	30	51	41						124	10	119	169	101	63	53		
	28	32	53	43						141	10	118	160	96	64	55		
	30	35	56	46						149	10	135	145	89	66	57		

* Unavailable due to excessive Side Surface Pressure

Ordering Example: Part Number **MLSL10**

How to Determine Hub O.D.

After selecting the MechaLock size, hub size and material, confirm that the selected values meet the conditions H≤hub in the right-hand Hub Minimum O.D. Table.

Recommended Tolerance of Shaft and Hub / Roughness of Surface

Shaft O.D.	h7(g6)	Ra1.6 or less
Hub I.D.	H7	Ra3.2 or less