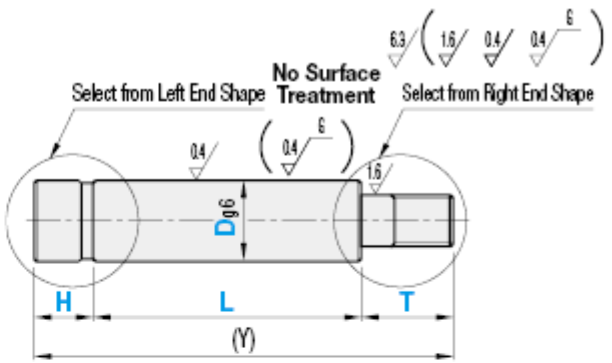
Precision Linear Shaft with Configurable Shaft Ends (MISUMI)

MiSUMi

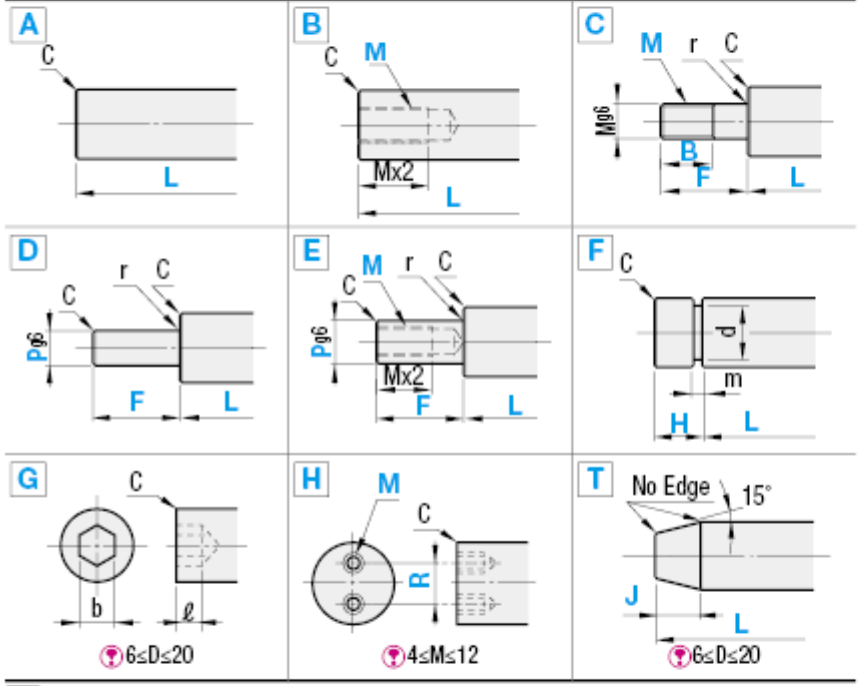
Part Number **FSSFJCB-D12-L493.5-F12-M5-B10-N5-SC30**

20220317112726

Basic Shape	Straight	**End Shape (Left)**	Threaded
End Shape (Right)	Tapped	**Shaft End Perpendicularity**	Perpendicularity (0.2)
Material	[Stainless Steel] SUS440C(13Cr) Stainless Steel Equivalent	**Heat Treated**	Induction Hardened
Surface Finish	None	**Shaft Fits Tolerance**	g6
Shaft Dia. D(mm)	12	**Length L(mm)**	493.5
Hardness	Induction Hardened (56HRC~)	**B(mm)**	10
Change to Fine Threads [MMC] (mm)	-	**Change to Fine Threads [MMS] (mm)**	-
Coarse Thread [M](mm)	5	**Thread (Super-Fine) [PMC] in place of M(mm)**	-
F(mm)	12	**Thread (Fine) [PMS] in place of M(mm)**	-
H(mm)	-	**J(mm)**	-
Thread (Fine) [QMS] in place of N(mm)	-	**Thread (Super-Fine) [QMC] in place of N(mm)**	-
Q(mm)	-	**R(mm)**	-
S(mm)	-	**T(mm)**	-
P(mm)	-	**Thread (Super-Fine) [PMC](mm)**	-
U(mm)	-	**W(mm)**	-
Z(mm)	-	**Thread (Coarse) [N](mm)**	5
Add Wrench Flats at One Location [SC](mm)	30	-	-

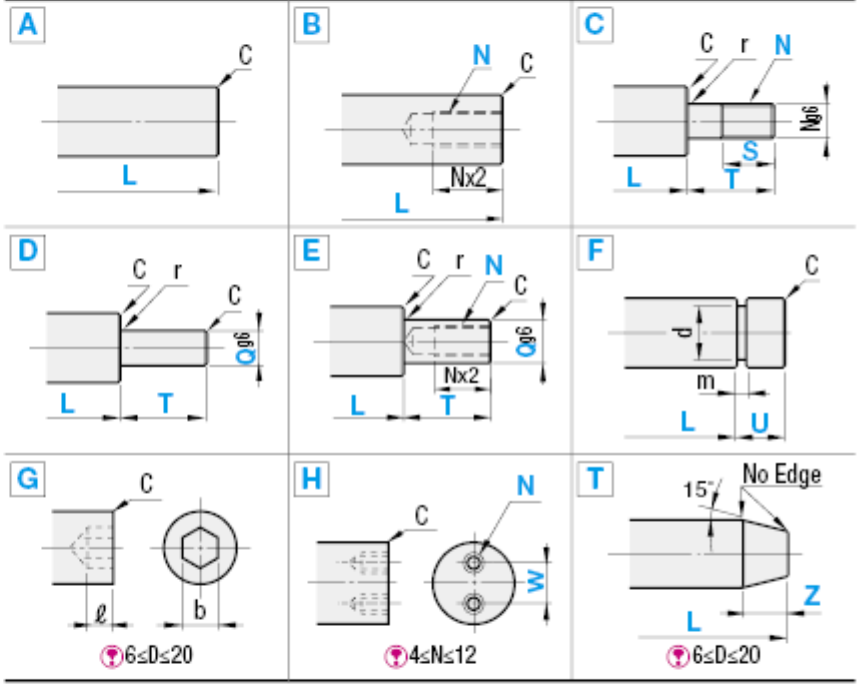


Left End Shape



(P)6≤D≤20 (P)4≤M≤12 (P)6≤D≤20

Right End Shape



(P)6≤D≤20 (P)4≤N≤12 (P)6≤D≤20

Machining Conditions

(P) A No alteration condition for Shape

B

- When M3 ~ 8 M(N)≤D-3
- When M10 or 12 M(N)≤D-4
- When M16, 20 or 24 M(N)≤D-5
- When M30 M(N)≤D-6

L≥M(N)x4

C

D	r
6~30	0.3 or Less
31~50	0.5 or Less

Specify M(N) dimensions.
(P)B, S≥Pitchx3 is required.

D

D	r
6~30	0.3 or Less
31~50	0.5 or Less

E

D	r	
6~30	0.3 or Less	P(Q)≥M(N)+3
31~50	0.5 or Less	

- When M3 ~ 8 M(N)≤P(Q)-3
- When M10 or 12 M(N)≤P(Q)-4
- When M16, 20 or 24 M(N)≤P(Q)-5
- When M30 M(N)≤P(Q)-6

F

D dimensions 31 and 38 can not be specified.

G

D	b	Hex Socket Depth ℓ
6, 7	2.5	3.5
8, 9	3	4.5
10	4	6
12~15	5	7.5
16~19	6	9
20	8	12

H

D≥16
D≥M+4+R
D≥N+4+W

	Tap Depth
R≥M+3	Mx2
W≥N+3	Nx2

T

D-J(Z)tan15°x2≥2
(Tip diameter Ø2 or More)

- L requires L-J(Z)≥20.
- When both ends are in T shape, L-(J+Z)≥20 is required.

When only one end requires alteration, select Shape A for the opposite end.
G and H will not be symmetrical when applied to both ends of the shaft.

When D=P or D=N is selected for shaft shape C, B(S) needs to be specified as F=B(T=S).
However, L, F, and T dimensions have manufacturing priority and B(S) dimension will be F(T)-(Pitch x2).

Alterations

For details, please see Alteration Overview **See below**

Applicable to LKC, SC, WSC, PMC, PMS, QMC and QMS only.