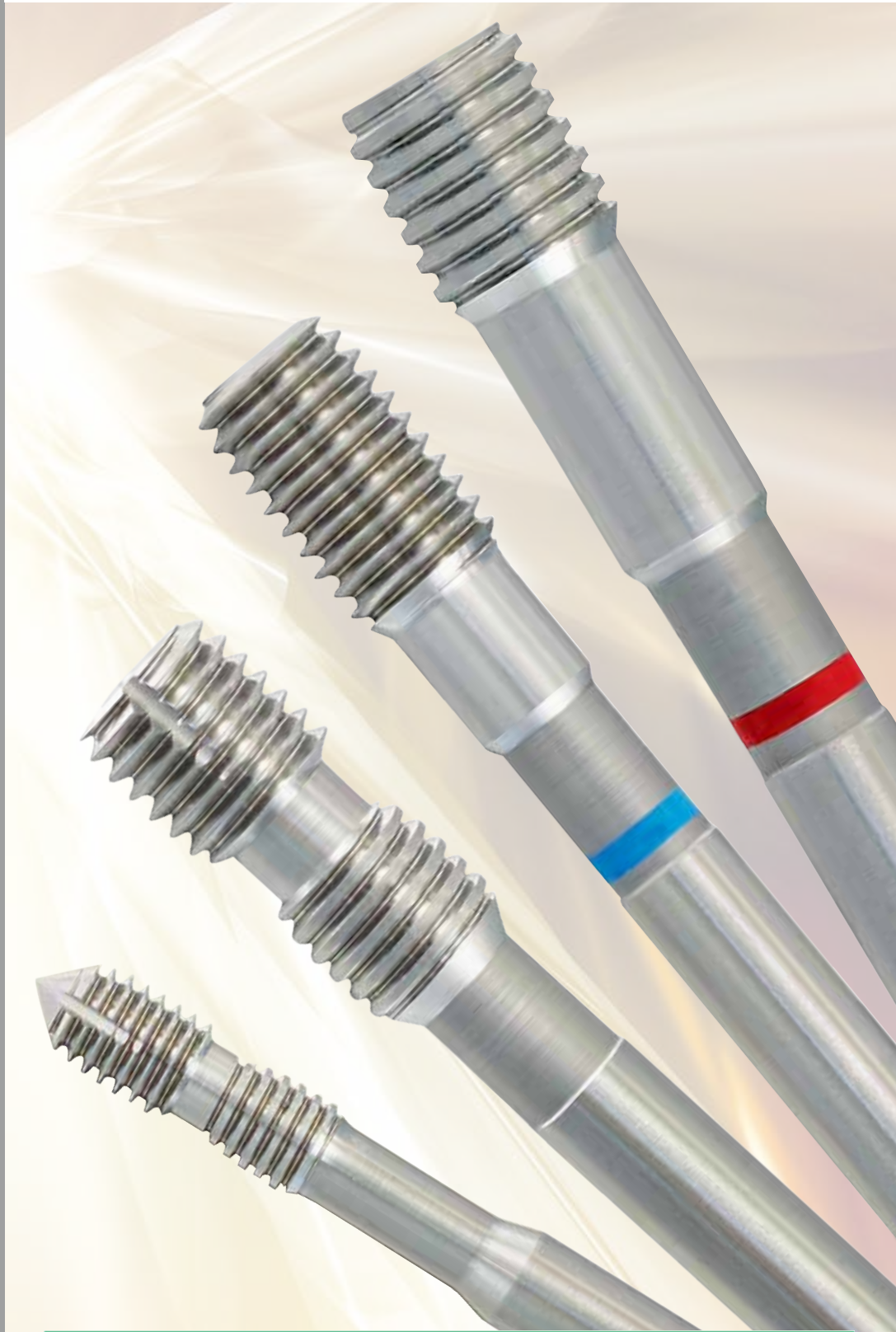


SIT / SITD



Simple Thread Inspection Tools

Simple Thread Inspection Tools,
Tandem Type

A new proposal for thread inspection tools

**Understanding
YAMAWA products
by Manga**



Please let us
introduce our
list of characters

Product Features

Simple Thread Inspection Tools

SIT For Go(GB) / SIT For NoGo(NB,WB)

HSS



GB (Metric and Unified threads) for Go

NB (Metric threads) for NoGo
WB (Unified threads) for NoGo

Features

- GB (Go) uses a step thread at the tip of the threaded section to reduce the inspection workload and improve efficiency.
- Premium material (HSS) is used, greatly extending tool life.
- “Go” and “NoGo” can be purchased separately.
- Color marking makes storage/identification easier.
- The shank diameter is the same as a tap, so it can be mounted in a tap holder.

Thread section accuracy

GB and NB are manufactured to be equal to the JIS Go-thread plug gauges GP/NP in the “pitch diameter tolerance,” “pitch tolerance,” and “thread half-angle tolerance.”

Also, for unified threads, GB is manufactured to be equal to the JIS Go-thread plug gauge (combined working/inspection type), and WB is manufactured to be equal to the working-type NoGo-thread plug gauge.”

Although the thread accuracy is the same as thread gauges, some specifications—such as “thread length” and “root relief geometry”—are original. Therefore, we do not use the name “thread gauge,” and distinguish this as “simple inspection tools for internal screw threads.”

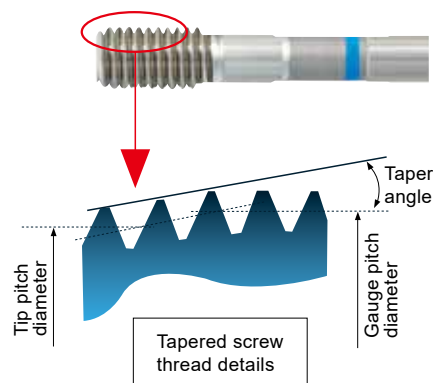


Quick Tip

What is a “Stepped Thread”?

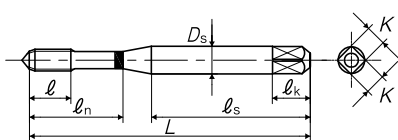
The Go end of the SIT uses a tapered-lead (stepped) thread, where the thread height increases gradually. This makes it easier to start into the internal thread and is especially effective for fine-pitch inspection.

Note: The tapered-lead (stepped) thread is not used on the NoGo end.

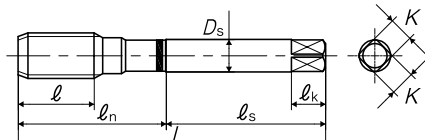


SIT GB (Metric threads, Go) Configuration

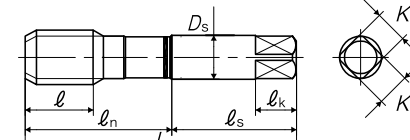
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TYPE:3

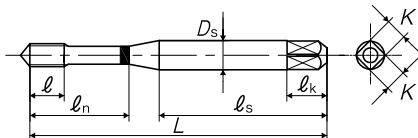


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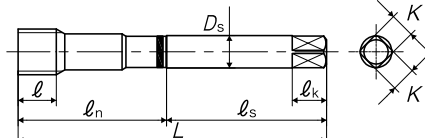


SIT NB (Metric threads, NoGo) Configuration

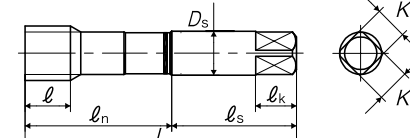
TYPE:2



TYPE:4



TYPE:6



Shape and Dimensions

Size	Class	Code	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	TYPE	
For Metric Threads											
M2 × 0.4	GB	6H	ITM62.0EG	42	5.5	12	27	3	2.5	5	1
M2 × 0.4	NB	6H	ITM62.0EN	42	4.5	12	27	3	2.5	5	2
M2 × 0.25	GB	5H	ITM52.0BG	42	4	12	27	3	2.5	5	1
M2 × 0.25	NB	5H	ITM52.0BN	42	3.5	12	27	3	2.5	5	2
M2.2 × 0.45	GB	6H	ITM62.2FG	42	5.5	12	27	3	2.5	5	1
M2.2 × 0.45	NB	6H	ITM62.2FN	42	4.5	12	27	3	2.5	5	2
M2.2 × 0.25	GB	5H	ITM52.2BG	42	4	12	27	3	2.5	5	1
M2.2 × 0.25	NB	5H	ITM52.2BN	42	3.5	12	27	3	2.5	5	2
M2.3 × 0.4	GB	6H	ITM62.3EG	42	5.5	12	27	3	2.5	5	1
M2.3 × 0.4	NB	6H	ITM62.3EN	42	4.5	12	27	3	2.5	5	2
M2.3 × 0.25	GB	5H	ITM52.3BG	42	4	12	27	3	2.5	5	1
M2.3 × 0.25	NB	5H	ITM52.3BN	42	3.5	12	27	3	2.5	5	2
M2.5 × 0.45	GB	6H	ITM62.5FG	46	5.5	14	29	3	2.5	5	1
M2.5 × 0.45	NB	6H	ITM62.5FN	46	4.5	14	29	3	2.5	5	2
M2.5 × 0.35	GB	6H	ITM62.5DG	46	4.5	14	29	3	2.5	5	1
M2.5 × 0.35	NB	6H	ITM62.5DN	46	3.5	14	29	3	2.5	5	2
M2.6 × 0.45	GB	6H	ITM62.6FG	46	5.5	14	29	3	2.5	5	1
M2.6 × 0.45	NB	6H	ITM62.6FN	46	4.5	14	29	3	2.5	5	2
M2.6 × 0.35	GB	6H	ITM62.6DG	46	4.5	14	29	3	2.5	5	1
M2.6 × 0.35	NB	6H	ITM62.6DN	46	3.5	14	29	3	2.5	5	2
M3 × 0.5	GB	6H	ITM63.0GG	46	5.5	14	26	4	3.2	6	1
M3 × 0.5	NB	6H	ITM63.0GN	46	4.5	14	26	4	3.2	6	2
M3 × 0.35	GB	6H	ITM63.0DG	46	4.5	14	26	4	3.2	6	1
M3 × 0.35	NB	6H	ITM63.0DN	46	3.5	14	26	4	3.2	6	2
M3.5 × 0.6	GB	6H	ITM63.5HG	52	7.5	16	29	5	4	7	1
M3.5 × 0.6	NB	6H	ITM63.5HN	52	6	16	29	5	4	7	2
M3.5 × 0.35	GB	6H	ITM63.5DG	52	4.5	16	29	5	4	7	1
M3.5 × 0.35	NB	6H	ITM63.5DN	52	3.5	16	29	5	4	7	2
M4 × 0.7	GB	6H	ITM64.0IG	52	7.5	17	29	5	4	7	1
M4 × 0.7	NB	6H	ITM64.0IN	52	6	17	29	5	4	7	2
M4 × 0.5	GB	6H	ITM64.0GG	52	7.5	17	29	5	4	7	1
M4 × 0.5	NB	6H	ITM64.0GN	52	6	17	29	5	4	7	2
M4.5 × 0.75	GB	6H	ITM64.5JG	60	7.5	21	33	5.5	4.5	7	1
M4.5 × 0.75	NB	6H	ITM64.5JN	60	6	21	33	5.5	4.5	7	2
M4.5 × 0.5	GB	6H	ITM64.5GG	60	7.5	21	33	5.5	4.5	7	1
M4.5 × 0.5	NB	6H	ITM64.5GN	60	6	21	33	5.5	4.5	7	2
M5 × 0.8	GB	6H	ITM65.0KG	60	10	22	33	5.5	4.5	7	1
M5 × 0.8	NB	6H	ITM65.0KN	60	6	22	33	5.5	4.5	7	2
M5 × 0.5	GB	6H	ITM65.0GG	60	7	22	33	5.5	4.5	7	1
M5 × 0.5	NB	6H	ITM65.0GN	60	6	22	33	5.5	4.5	7	2
M5.5 × 0.5	GB	6H	ITM65.5GG	62	7	26	33	6	4.5	7	1
M5.5 × 0.5	NB	6H	ITM65.5GN	62	6	26	33	6	4.5	7	2
M6 × 1	GB	6H	ITM66.0MG	62	10	26	33	6	4.5	7	1
M6 × 1	NB	6H	ITM66.0MN	62	6	26	33	6	4.5	7	2
M6 × 0.75	GB	6H	ITM66.0JG	62	7.5	26	33	6	4.5	7	1
M6 × 0.75	NB	6H	ITM66.0JN	62	6	26	33	6	4.5	7	2

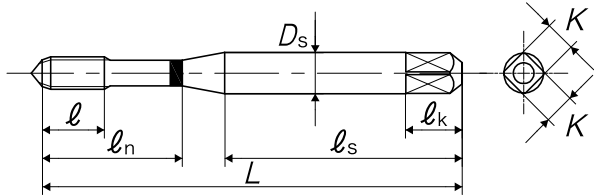
Shape and Dimensions

Size	Class	Code	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	TYPE	
M7 × 1	GB	6H	ITM67.0MG	70	12	34	36	6.2	5	8	3
M7 × 1	NB	6H	ITM67.0MN	70	6	34	36	6.2	5	8	4
M7 × 0.75	GB	6H	ITM67.0JG	70	9	34	36	6.2	5	8	3
M7 × 0.75	NB	6H	ITM67.0JN	70	6	34	36	6.2	5	8	4
M8 × 1.25	GB	6H	ITM68.0NG	70	15	34	36	6.2	5	8	3
M8 × 1.25	NB	6H	ITM68.0NN	70	10	34	36	6.2	5	8	4
M8 × 1	GB	6H	ITM68.0MG	70	12	34	36	6.2	5	8	3
M8 × 1	NB	6H	ITM68.0MN	70	6	34	36	6.2	5	8	4
M8 × 0.75	GB	6H	ITM68.0JG	70	9	34	36	6.2	5	8	3
M8 × 0.75	NB	6H	ITM68.0JN	70	6	34	36	6.2	5	8	4
M9 × 1.25	GB	6H	ITM69.0NG	75	15	37	38	7	5.5	8	3
M9 × 1.25	NB	6H	ITM69.0NN	75	10	37	38	7	5.5	8	4
M9 × 1	GB	6H	ITM69.0MG	75	12	37	38	7	5.5	8	3
M9 × 1	NB	6H	ITM69.0MN	75	6	37	38	7	5.5	8	4
M9 × 0.75	GB	6H	ITM69.0JG	75	9	37	38	7	5.5	8	3
M9 × 0.75	NB	6H	ITM69.0JN	75	6	37	38	7	5.5	8	4
M10 × 1.5	GB	6H	ITM6010OG	75	15	37	38	7	5.5	8	3
M10 × 1.5	NB	6H	ITM6010ON	75	10	37	38	7	5.5	8	4
M10 × 1.25	GB	6H	ITM6010NG	75	15	37	38	7	5.5	8	3
M10 × 1.25	NB	6H	ITM6010NN	75	10	37	38	7	5.5	8	4
M10 × 1	GB	6H	ITM6010MG	75	12	37	38	7	5.5	8	3
M10 × 1	NB	6H	ITM6010MN	75	6	37	38	7	5.5	8	4
M10 × 0.75	GB	6H	ITM6010JG	75	9	37	38	7	5.5	8	3
M10 × 0.75	NB	6H	ITM6010JN	75	6	37	38	7	5.5	8	4
M11 × 1.5	GB	6H	ITM6011OG	82	19	40	42	8.5	6.5	9	3
M11 × 1.5	NB	6H	ITM6011ON	82	10	40	42	8.5	6.5	9	4
M11 × 1	GB	6H	ITM6011MG	82	12	40	42	8.5	6.5	9	3
M11 × 1	NB	6H	ITM6011MN	82	6	40	42	8.5	6.5	9	4
M11 × 0.75	GB	6H	ITM6011JG	82	10	40	42	8.5	6.5	9	3
M11 × 0.75	NB	6H	ITM6011JN	82	6	40	42	8.5	6.5	9	4
M12 × 1.75	GB	6H	ITM6012PG	82	20	40	42	8.5	6.5	9	3
M12 × 1.75	NB	6H	ITM6012PN	82	10	40	42	8.5	6.5	9	4
M12 × 1.5	GB	6H	ITM6012OG	82	20	40	42	8.5	6.5	9	3
M12 × 1.5	NB	6H	ITM6012ON	82	10	40	42	8.5	6.5	9	4
M12 × 1.25	GB	6H	ITM6012NG	82	15	40	42	8.5	6.5	9	3
M12 × 1.25	NB	6H	ITM6012NN	82	10	40	42	8.5	6.5	9	4
M12 × 1	GB	6H	ITM6012MG	82	12	40	42	8.5	6.5	9	3
M12 × 1	NB	6H	ITM6012MN	82	6	40	42	8.5	6.5	9	4
M14 × 2	GB	6H	ITM6014QG	88	20	43	45	10.5	8	11	3
M14 × 2	NB	6H	ITM6014QN	88	12	43	45	10.5	8	11	4
M14 × 1.5	GB	6H	ITM6014OG	88	20	43	45	10.5	8	11	3
M14 × 1.5	NB	6H	ITM6014ON	88	12	43	45	10.5	8	11	4
M14 × 1.25	GB	6H	ITM6014NG	88	15	43	45	10.5	8	11	3
M14 × 1.25	NB	6H	ITM6014NN	88	12	43	45	10.5	8	11	4
M14 × 1	GB	6H	ITM6014MG	88	12	43	45	10.5	8	11	3
M14 × 1	NB	6H	ITM6014MN	88	6	43	45	10.5	8	11	4

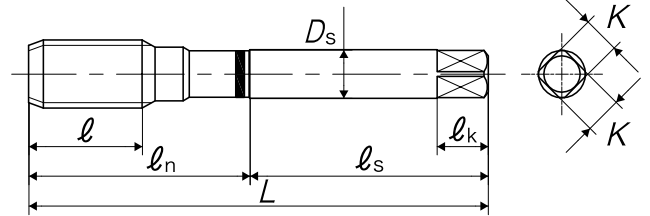
Size	Class	Code	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	TYPE	
M15 × 1.5	GB	6H	TM6015OG	95	19	47	48	12.5	10	13	3
M15 × 1.5	NB	6H	TM6015ON	95	10	47	48	12.5	10	13	4
M15 × 1	GB	6H	ITM6015MG	95	12	47	48	12.5	10	13	3
M15 × 1	NB	6H	ITM6015MN	95	10	47	48	12.5	10	13	4
M16 × 2	GB	6H	ITM6016QG	95	20	47	48	12.5	10	13	3
M16 × 2	NB	6H	ITM6016QN	95	12	47	48	12.5	10	13	4
M16 × 1.5	GB	6H	ITM6016OG	95	20	47	48	12.5	10	13	3
M16 × 1.5	NB	6H	ITM6016ON	95	12	47	48	12.5	10	13	4
M16 × 1	GB	6H	ITM6016MG	95	12	47	48	12.5	10	13	3
M16 × 1	NB	6H	ITM6016MN	95	8	47	48	12.5	10	13	4
M17 × 1.5	GB	6H	ITM6017OG	100	19	49	51	14	11	14	3
M17 × 1.5	NB	6H	ITM6017ON	100	10	49	51	14	11	14	4
M17 × 1	GB	6H	ITM6017MG	100	12	49	51	14	11	14	3
M17 × 1	NB	6H	ITM6017MN	100	10	49	51	14	11	14	4
M18 × 2.5	GB	6H	ITM6018RG	100	25	49	51	14	11	14	3
M18 × 2.5	NB	6H	ITM6018RN	100	16	49	51	14	11	14	4
M18 × 2	GB	6H	ITM6018QG	100	20	49	51	14	11	14	3
M18 × 2	NB	6H	ITM6018QN	100	12	49	51	14	11	14	4
M18 × 1.5	GB	6H	ITM6018OG	100	20	49	51	14	11	14	3
M18 × 1.5	NB	6H	ITM6018ON	100	12	49	51	14	11	14	4
M18 × 1	GB	6H	ITM6018MG	100	12	49	51	14	11	14	3
M18 × 1	NB	6H	ITM6018MN	100	8	49	51	14	11	14	4
M20 × 2.5	GB	6H	ITM6020RG	105	25	55	50	15	12	15	5
M20 × 2.5	NB	6H	ITM6020RN	105	16	55	50	15	12	15	6
M20 × 2	GB	6H	ITM6020QG	105	20	55	50	15	12	15	5
M20 × 2	NB	6H	ITM6020QN	105	12	55	50	15	12	15	6
M20 × 1.5	GB	6H	ITM6020OG	105	20	55	50	15	12	15	5
M20 × 1.5	NB	6H	ITM6020ON	105	12	55	50	15	12	15	6
M20 × 1	GB	6H	ITM6020MG	105	14	55	50	15	12	15	5
M20 × 1	NB	6H	ITM6020MN	105	8	55	50	15	12	15	6
M22 × 2.5	GB	6H	ITM6022RG	115	33	60	55	17	13	16	5
M22 × 2.5	NB	6H	ITM6022RN	115	16	60	55	17	13	16	6
M22 × 2	GB	6H	ITM6022QG	115	20	60	55	17	13	16	5
M22 × 2	NB	6H	ITM6022QN	115	14	60	55	17	13	16	6
M22 × 1.5	GB	6H	ITM6022OG	115	20	60	55	17	13	16	5
M22 × 1.5	NB	6H	ITM6022ON	115	14	60	55	17	13	16	6
M22 × 1	GB	6H	ITM6022MG	115	14	60	55	17	13	16	5
M22 × 1	NB	6H	ITM6022MN	115	8	60	55	17	13	16	6
M24 × 3	GB	6H	ITM6024SG	120	30	65	55	19	15	18	5
M24 × 3	NB	6H	ITM6024SN	120	20	65	55	19	15	18	6
M24 × 2	GB	6H	ITM6024QG	120	20	65	55	19	15	18	5
M24 × 2	NB	6H	ITM6024QN	120	14	65	55	19	15	18	6
M24 × 1.5	GB	6H	ITM6024OG	120	20	65	55	19	15	18	5
M24 × 1.5	NB	6H	ITM6024ON	120	14	65	55	19	15	18	6
M24 × 1	GB	6H	ITM6024MG	120	14	65	55	19	15	18	5
M24 × 1	NB	6H	ITM6024MN	120	8	65	55	19	15	18	6

SIT GB (Unified threads, Go) — Dimensions

TYPE:1

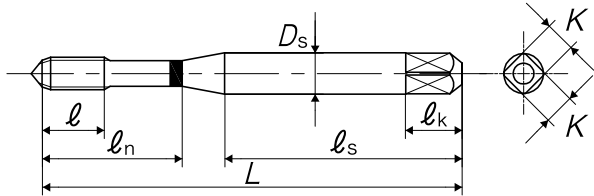


TYPE:3

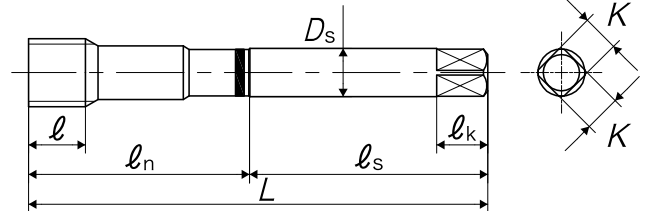


SIT WB (Unified threads, NoGo) — Dimensions

TYPE:2



TYPE:4



Go / NoGo Notation

Unified threads

Thread to be inspected	Area inspected	Types of thread limit gauges (Go / NoGo)	Gauge symbols
Internal thread	Pitch diameter	Go thread plug gauge (production & inspection combined)	GP
		NoGo thread plug gage for production	WP
		NoGo thread plug gage for inspection	IP

Although the thread accuracy is the same as thread gauges, some specifications—such as “thread length” and “root relief geometry”—are original. Therefore, we do not use the name “thread gauge,” and distinguish this as “simple inspection tools for internal screw threads.”

For Unified threads, the designation is GB for Go, and WB for NoGo for work.

Size	Class	Code	L (mm)	l (mm)	ln (mm)	ls (mm)	Ds (mm)	K (mm)	lk (mm)	TYPE	
For Unified Threads											
№2-56UNC	GB	2B	ITM2UN2EG	42	4.5	12	26	3	2.5	5	1
№2-56UNC	WB	2B	ITM2UN2EN	42	3.5	12	26	3	2.5	5	2
№2-64UNF	GB	2B	ITM2UN2DG	42	4.5	12	26	3	2.5	5	1
№2-64UNF	WB	2B	ITM2UN2DN	42	3.5	12	26	3	2.5	5	2
№3-48UNC	GB	2B	ITM2UN3FG	46	6.5	14	28	3	2.5	5	1
№3-48UNC	WB	2B	ITM2UN3FN	46	3.5	14	28	3	2.5	5	2
№3-56UNF	GB	2B	ITM2UN3EG	46	6.5	14	28	3	2.5	5	1
№3-56UNF	WB	2B	ITM2UN3EN	46	3.5	14	28	3	2.5	5	2
№4-40UNC	GB	2B	ITM2UN4HG	46	6.5	14	25	4	3.2	6	1
№4-40UNC	WB	2B	ITM2UN4HN	46	3.5	14	25	4	3.2	6	2
№4-48UNF	GB	2B	ITM2UN4FG	46	6.5	14	25	4	3.2	6	1
№4-48UNF	WB	2B	ITM2UN4FN	46	3.5	14	25	4	3.2	6	2
№5-40UNC	GB	2B	ITM2UN5HG	52	6.5	16	28	5	4	7	1
№5-40UNC	WB	2B	ITM2UN5HN	52	3.5	16	28	5	4	7	2
№5-44UNF	GB	2B	ITM2UN5GG	52	6.5	16	28	5	4	7	1
№5-44UNF	WB	2B	ITM2UN5GN	52	3.5	16	28	5	4	7	2
№6-32UNC	GB	2B	ITM2UN6JG	52	7	16	28	5	4	7	1
№6-32UNC	WB	2B	ITM2UN6JN	52	3.5	16	28	5	4	7	2
№6-40UNF	GB	2B	ITM2UN6HG	52	7	16	28	5	4	7	1
№6-40UNF	WB	2B	ITM2UN6HN	52	3.5	16	28	5	4	7	2

Shape and Dimensions

Size	Class	Code	L (mm)	ℓ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	TYPE
№8-32UNC GB	2B	ITM2UN8JG	60	9	21	32	5.5	4.5	7	1
№8-32UNC WB	2B	ITM2UN8JN	60	5	21	32	5.5	4.5	7	2
№8-36UNF GB	2B	ITM2UN8IG	60	9	21	32	5.5	4.5	7	1
№8-36UNF WB	2B	ITM2UN8IN	60	5	21	32	5.5	4.5	7	2
№10-24UNC GB	2B	ITM2UNAMG	60	9.5	22	32	5.5	4.5	7	1
№10-24UNC WB	2B	ITM2UNAMN	60	5	22	32	5.5	4.5	7	2
№10-32UNF GB	2B	ITM2UNAJG	60	9.5	22	32	5.5	4.5	7	1
№10-32UNF WB	2B	ITM2UNAJN	60	5	22	32	5.5	4.5	7	2
№12-24UNC GB	2B	ITM2UNCMG	62	9.5	26	32	6	4.5	7	1
№12-24UNC WB	2B	ITM2UNCMN	62	5	26	32	6	4.5	7	2
№12-28UNF GB	2B	ITM2UNCKG	62	9.5	26	32	6	4.5	7	1
№12-28UNF WB	2B	ITM2UNCKN	62	5	26	32	6	4.5	7	2
1/4-20UNC GB	2B	ITM2U04NG	62	15	26	32	6	4.5	7	1
1/4-20UNC WB	2B	ITM2U04NN	62	10	26	32	6	4.5	7	2
1/4-28UNF GB	2B	ITM2U04KG	62	12	26	32	6	4.5	7	1
1/4-28UNF WB	2B	ITM2U04KN	62	7	26	32	6	4.5	7	2
5/16-18UNC GB	2B	ITM2U05OG	70	15	34	36	6.2	5	8	3
5/16-18UNC WB	2B	ITM2U05ON	70	10	34	36	6.2	5	8	4
5/16-24UNF GB	2B	ITM2U05MG	70	15	34	36	6.2	5	8	3
5/16-24UNF WB	2B	ITM2U05MN	70	7	34	36	6.2	5	8	4
3/8-16UNC GB	2B	ITM2U06PG	75	17	37	38	7	5.5	8	3
3/8-16UNC WB	2B	ITM2U06PN	75	10	37	38	7	5.5	8	4
3/8-24UNF GB	2B	ITM2U06MG	75	17	37	38	7	5.5	8	3
3/8-24UNF WB	2B	ITM2U06MN	75	10	37	38	7	5.5	8	4
7/16-14UNC GB	2B	ITM2U07QG	82	17	40	42	8.5	6.5	9	3
7/16-14UNC WB	2B	ITM2U07QN	82	10	40	42	8.5	6.5	9	4
7/16-20UNF GB	2B	ITM2U07NG	82	17	40	42	8.5	6.5	9	3
7/16-20UNF WB	2B	ITM2U07NN	82	10	40	42	8.5	6.5	9	4
1/2-13UNC GB	2B	ITM2U08RG	88	17	43	45	10.5	8	11	3
1/2-13UNC WB	2B	ITM2U08RN	88	13	43	45	10.5	8	11	4
1/2-20UNF GB	2B	ITM2U08NG	88	17	43	45	10.5	8	11	3
1/2-20UNF WB	2B	ITM2U08NN	88	10	43	45	10.5	8	11	4
9/16-12UNC GB	2B	ITM2U09SG	95	26	47	48	12.5	10	13	3
9/16-12UNC WB	2B	ITM2U09SN	95	17	47	48	12.5	10	13	4
9/16-18UNF GB	2B	ITM2U09OG	95	20	47	48	12.5	10	13	3
9/16-18UNF WB	2B	ITM2U09ON	95	13	47	48	12.5	10	13	4
5/8-11UNC GB	2B	ITM2U10UG	95	26	47	48	12.5	10	13	3
5/8-11UNC WB	2B	ITM2U10UN	95	17	47	48	12.5	10	13	4
5/8-18UNF GB	2B	ITM2U10OG	95	20	47	48	12.5	10	13	3
5/8-18UNF WB	2B	ITM2U10ON	95	13	47	48	12.5	10	13	4

Product Features

Simple Thread
Inspection Tools,
Tandem

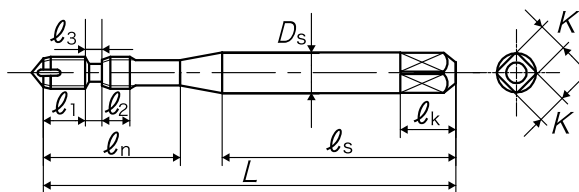
SITD (Metric threads, Tandem: GB/NB)
SITD (Unified threads, Tandem: GB/WB)

HSS

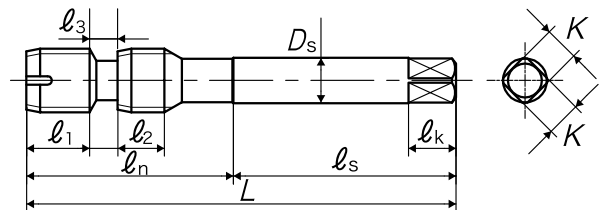


SITD (Tandem) — Configuration

■ TYPE:1



■ TYPE:2



Shape and Dimensions

Size	Class	Code	L (mm)	ℓ ₁ (mm)	ℓ ₂ (mm)	ℓ ₃ (mm)	ℓ _n (mm)	ℓ _s (mm)	D _s (mm)	K (mm)	ℓ _k (mm)	TYPE
For Metric Threads												
M2 × 0.4	6H	ITDM62.0E	42	4	2	1.2	12	27	3	2.5	5	1
M2 × 0.25	5H	ITDM52.0B	42	4.9	1.3	1	12	27	3	2.5	5	1
M2.2 × 0.45	6H	ITDM62.2F	42	4.4	2.3	1.4	12	27	3	2.5	5	1
M2.2 × 0.25	5H	ITDM52.2B	42	5.8	1.3	1	12	27	3	2.5	5	1
M2.3 × 0.4	6H	ITDM62.3E	42	4	2	1.2	12	27	3	2.5	5	1
M2.3 × 0.25	5H	ITDM52.3B	42	4.9	1.3	1	12	27	3	2.5	5	1
M2.5 × 0.45	6H	ITDM62.5F	46	4.4	2.3	1.4	14	29	3	2.5	5	1
M2.5 × 0.35	6H	ITDM62.5D	46	5.2	1.8	1.1	14	29	3	2.5	5	1
M2.6 × 0.45	6H	ITDM62.6F	46	4.4	2.3	1.4	14	29	3	2.5	5	1
M2.6 × 0.35	6H	ITDM62.6D	46	5.2	1.8	1.1	14	29	3	2.5	5	1
M3 × 0.5	6H	ITDM63.0G	46	5	2.5	1.5	14	26	4	3.2	6	1
M3 × 0.35	6H	ITDM63.0D	46	6.1	1.8	1.1	14	26	4	3.2	6	1
M3.5 × 0.6	6H	ITDM63.5H	52	6.2	3	1.8	16	29	5	4	7	1
M3.5 × 0.35	6H	ITDM63.5D	52	8.1	1.8	1.1	16	29	5	4	7	1
M4 × 0.7	6H	ITDM64.0I	52	5.4	3.5	2.1	17	29	5	4	7	1
M4 × 0.5	6H	ITDM64.0G	52	7	2.5	1.5	17	29	5	4	7	1
M4.5 × 0.75	6H	ITDM64.5J	60	6.9	3.8	2.3	21	33	5.5	4.5	7	1
M4.5 × 0.5	6H	ITDM64.5G	60	9	2.5	1.5	21	33	5.5	4.5	7	1
M5 × 0.8	6H	ITDM65.0K	60	6.6	4	2.4	22	33	5.5	4.5	7	1
M5 × 0.5	6H	ITDM65.0G	60	9	2.5	1.5	22	33	5.5	4.5	7	1
M5.5 × 0.5	6H	ITDM65.5G	62	11	2.5	1.5	26	33	6	4.5	7	1
M6 × 1	6H	ITDM66.0M	62	7	5	3	26	33	6	4.5	7	1
M6 × 0.75	6H	ITDM66.0J	62	8.9	3.8	2.3	26	33	6	4.5	7	1
M7 × 1	6H	ITDM67.0M	70	11.9	5	3	34	36	6.2	5	8	2
M7 × 0.75	6H	ITDM67.0J	70	13.8	3.8	2.3	34	36	6.2	5	8	2
M8 × 1.25	6H	ITDM68.0N	70	8.9	6.3	3.8	34	36	6.2	5	8	2
M8 × 1	6H	ITDM68.0M	70	11	5	3	34	36	6.2	5	8	2
M8 × 0.75	6H	ITDM68.0J	70	12.9	3.8	2.3	34	36	6.2	5	8	2
M9 × 1.25	6H	ITDM69.0N	70	13.8	6.3	3.8	37	38	7	5.5	8	2
M9 × 1	6H	ITDM69.0M	75	15.9	5	3	37	38	7	5.5	8	2
M9 × 0.75	6H	ITDM69.0J	75	17.8	3.8	2.3	37	38	7	5.5	8	2
M10 × 1.5	6H	ITDM6010O	75	11	7.5	4.5	37	38	7	5.5	8	2
M10 × 1.25	6H	ITDM6010N	75	12.9	6.3	3.8	37	38	7	5.5	8	2
M10 × 1	6H	ITDM6010M	75	15	5	3	37	38	7	5.5	8	2
M10 × 0.75	6H	ITDM6010J	75	16.9	3.8	2.3	37	38	7	5.5	8	2
M11 × 1.5	6H	ITDM6011O	82	14.9	7.5	4.5	40	42	8.5	6.5	9	2
M11 × 1	6H	ITDM6011M	82	18.9	5	3	40	42	8.5	6.5	9	2
M11 × 0.75	6H	ITDM6011J	82	20.8	3.8	2.3	40	42	8.5	6.5	9	2
M12 × 1.75	6H	ITDM6012P	82	11.9	8.8	5.3	40	42	8.5	6.5	9	2
M12 × 1.5	6H	ITDM6012O	82	14	7.5	4.5	40	42	8.5	6.5	9	2
M12 × 1.25	6H	ITDM6012N	82	15.9	6.3	3.8	40	42	8.5	6.5	9	2
M12 × 1	6H	ITDM6012M	82	18	5	3	40	42	8.5	6.5	9	2
M14 × 2	6H	ITDM6014Q	88	10	10	6	43	45	10.5	8	11	2
M14 × 1.5	6H	ITDM6014O	88	14	7.5	4.5	43	45	10.5	8	11	2

1. The NoGo thread length (ℓ₂) is set to 5 threads (5 pitches).

2. The relief between the Go and NoGo sections is set to the minimum manufacturable width.

Size	Class	Code	L (mm)	ℓ_1 (mm)	ℓ_2 (mm)	ℓ_3 (mm)	ℓ_n (mm)	ℓ_s (mm)	Ds (mm)	K (mm)	ℓ_k (mm)	TYPE
M14 × 1.25	6H	ITDM6014N	88	15.9	6.3	3.8	43	45	10.5	8	11	2
M14 × 1	6H	ITDM6014M	88	18	5	3	43	45	10.5	8	11	2
M15 × 1.5	6H	ITDM6015O	95	14.9	7.5	4.5	47	48	12.5	10	13	2
M15 × 1	6H	ITDM6015M	95	18.9	5	3	47	48	12.5	10	13	2
M16 × 2	6H	ITDM6016Q	95	10	10	6	47	48	12.5	10	13	2
M16 × 1.5	6H	ITDM6016O	95	14	7.5	4.5	47	48	12.5	10	13	2
M16 × 1	6H	ITDM6016M	95	18	5	3	47	48	12.5	10	13	2
M17 × 1.5	6H	ITDM6017O	100	21.9	7.5	4.5	49	51	14	11	14	2
M17 × 1	6H	ITDM6017M	100	25.9	5	3	49	51	14	11	14	2
M18 × 2.5	6H	ITDM6018R	100	13	12.5	7.5	49	51	14	11	14	2
M18 × 2	6H	ITDM6018Q	100	17	10	6	49	51	14	11	14	2
M18 × 1.5	6H	ITDM6018O	100	21	7.5	4.5	49	51	14	11	14	2
M18 × 1	6H	ITDM6018M	100	25	5	3	49	51	14	11	14	2
For Unified Threads												
No.2-56UNC	2B	ITDM2UN2E	42	4.4	2.3	1.4	12	26	3	2.5	5	1
No.2-64UNF	2B	ITDM2UN2D	42	4.9	2	1.2	12	26	3	2.5	5	1
No.3-48UNC	2B	ITDM2UN3F	46	3.9	2.6	1.6	14	28	3	2.5	5	1
No.3-56UNF	2B	ITDM2UN3E	46	4.4	2.3	1.4	14	28	3	2.5	5	1
No.4-40UNC	2B	ITDM2UN4H	46	3.9	3.2	1.9	14	25	4	3.2	6	1
No.4-48UNF	2B	ITDM2UN4F	46	4.8	2.6	1.6	14	25	4	3.2	6	1
No.5-40UNC	2B	ITDM2UN5H	52	5.9	3.2	1.9	16	28	5	4	7	1
No.5-44UNF	2B	ITDM2UN5G	52	6.4	2.9	1.7	16	28	5	4	7	1
No.6-32UNC	2B	ITDM2UN6J	52	4.6	4	2.4	16	28	5	4	7	1
No.6-40UNF	2B	ITDM2UN6H	52	5.9	3.2	1.9	16	28	5	4	7	1
No.8-32UNC	2B	ITDM2UN8J	60	6.6	4	2.4	21	32	5.5	4.5	7	1
No.8-36UNF	2B	ITDM2UN8I	60	7.4	3.5	2.1	21	32	5.5	4.5	7	1
No.10-24UNC	2B	ITDM2UNAM	62	7.5	5.3	3.2	26	32	6	4.5	7	1
No.10-32UNF	2B	ITDM2UNAJ	62	9.6	4	2.4	26	32	6	4.5	7	1
No.12-24UNC	2B	ITDM2UNCM	62	6.5	5.3	3.2	26	32	6	4.5	7	1
No.12-28UNF	2B	ITDM2UNCK	62	7.8	4.5	2.7	26	32	6	4.5	7	1
1/4-20UNC	2B	ITDM2U04N	70	10.2	6.4	3.8	34	36	6.2	5	8	2
1/4-28UNF	2B	ITDM2U04K	70	13.2	4.5	2.7	34	36	6.2	5	8	2
5/16-18UNC	2B	ITDM2U05O	70	7.7	7.1	4.2	34	36	6.2	5	8	2
5/16-24UNF	2B	ITDM2U05M	70	10.5	5.3	3.2	34	36	6.2	5	8	2
3/8-16UNC	2B	ITDM2U06P	75	10.7	7.9	4.8	37	38	7	5.5	8	2
3/8-24UNF	2B	ITDM2U06M	75	14.9	5.3	3.2	37	38	7	5.5	8	2
7/16-14UNC	2B	ITDM2U07Q	82	12.3	9.1	5.4	40	42	8.5	6.5	9	2
7/16-20UNF	2B	ITDM2U07N	82	16.6	6.4	3.8	40	42	8.5	6.5	9	2
1/2-13UNC	2B	ITDM2U08R	88	11.4	9.8	5.9	43	45	10.5	8	11	2
1/2-20UNF	2B	ITDM2U08N	88	16.9	6.4	3.8	43	45	10.5	8	11	2
9/16-12UNC	2B	ITDM2U09S	95	10.5	10.6	6.4	47	48	12.5	10	13	2
9/16-18UNF	2B	ITDM2U09O	95	16.2	7.1	4.2	47	48	12.5	10	13	2
5/8-11UNC	2B	ITDM2U10U	100	16.4	11.5	6.9	49	51	14	11	14	2
5/8-18UNF	2B	ITDM2U10O	100	23.5	7.1	4.2	49	51	14	11	14	2

1. The NoGo thread length (ℓ_2) is set to 5 threads (5 pitches).

2. The relief between the Go and NoGo sections is set to the minimum manufacturable width.

Quick Tip What are SIT / SITD?

Although the thread accuracy is the same as thread gauges, some specifications—such as “thread length” and “root relief geometry”—are original. Therefore, we do not use the name “thread gauge,” and distinguish this as “simple inspection tools for internal screw threads.”

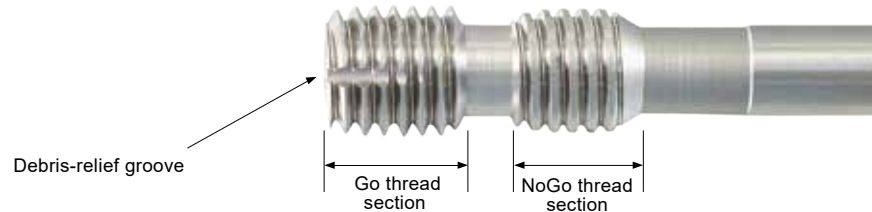


■ What is “SITD”?

The Go and NoGo thread sections are integrated into one tool.

■ What is the “debris-relief groove”

Debris-relief grooves are machined into the thread section to clear small particles from the internal thread and ensure accurate inspection.



SIT/SITD Accuracy

Key tolerances for internal-thread inspection - single pitch diameter tolerance, pitch tolerance, and thread half-angle tolerance - are manufactured to the same accuracy as thread plug gauges.

■ Comparison: Go Thread Section “GB-6H” vs. Go Thread Plug Gauge “GP-6H”

(Unit:mm)

Nominal size M6×1	Major diameter				Pitch diameter				Pitch Tolerance (per25mm) ±	Thread half-angle tolerance (minutes) ±
	Basic size	Max	Min	Tolerance	Basic size	Max	Min	Tolerance		
GB-6H	6.000	6.023	6.001	0.022	5.350	5.3675	5.3565	0.011	0.005	15
GP-6H	6.000	6.023	6.001	0.022	5.350	5.3675	5.3565	0.011	0.005	15

This is the single pitch diameter. Pitch tolerance includes helix variation (drunken lead).

■ Comparison: NoGo thread section “NB-6H” vs. NoGo thread plug gauge “NP-6H”

(Unit:mm)

Nominal size M6×1	Major diameter				Pitch diameter				Pitch Tolerance (per25mm) ±	Thread half-angle tolerance (minutes) ±
	Theoretical size	Max	Min	Tolerance	Theoretical size	Max	Min	Tolerance		
NB-6H	5.7055	5.711	5.700	0.011	5.5055	5.511	5.500	0.011	0.005	16
NP-6H	5.7055	5.711	5.700	0.011	5.5055	5.511	5.500	0.011	0.005	16

This is the single pitch diameter. Pitch tolerance includes helix variation (drunken lead).

YAMAWA's website contains a lot of valuable information!



Understanding YAMAWA products by Manga

Understanding by Manga!
YAMAWA's Tools

Bored Hole size / Bar diameter

NC Program

Safety Data Sheet (SDS)

Catalog · Flyer

YAMAWA Online EXPO NEJITEN

A convenient app that allows you to search anywhere on your smartphone! You can search for products, calculate speeds, and even check recommended drill hole diameters! Please download and use it.



Android



iPhone

A handy application for quick search

Find products on your smartphone wherever you are.

Warning

- ◆Tools may shatter during use. Wear safety eye cover or eye glasses to avoid injury during tapping.
- ◆Use tools under the proper tapping condition.
- ◆Never wear gloves during turning operations as the gloves may get caught in the tools.
- ◆Wear safety shoes to avoid foot injury by the falling tools.
- ◆When attaching tools to the machine, fasten firmly to avoid chatter and run-out.
- ◆Fasten the workpiece firmly so it never moves during the tapping operation. Never use worn tools or damaged tools.
- ◆Take a special care to prevent fire during machining. High temperature during tapping can cause a fire.

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