

DIECASTING DIE PARTS



Feature

Safety is power ! A definitive edition of set screw !
From industrial machine to fixed die,
our hard lock set screws answer to various needs.

- THE SEMI PERMANENT LOCKING STRUCTURE

- RE-USABILITY

Repeated removal and installation does not affect anti-loosening effect.

- WORKABILITY

Easy locking,
using a single hexagon wrench.

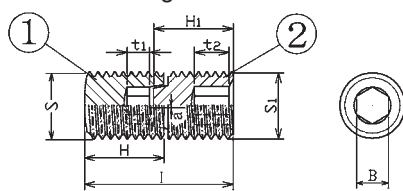
- ECONOMICAL

Lifetime cost is lower
because of the reduced maintenance.



HARD LOCK SETSCREW

HLS drawing



HLS Standard spec of material/Surface treatment

Size	Hardness(material)	Surface treatment
M8~M20	Class10(SCM435 refining / surface hardness HRC45~53)	Black oxidized
M24~M36	Class8(S45C refining / surface hardness HRC30~43)	Black oxidized

※Please feel free to contact us about the other.

HLS size table(Standard) (Coarse screw A type)

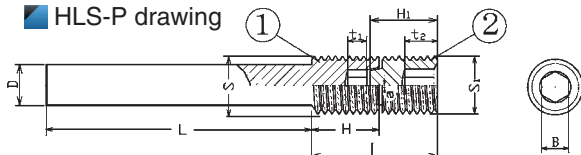
※We also have "HLS-T" (Order number is HLS-○-B)

Unit : mm

Thread Dia	Pitch		Fixing Screw ①			Lock Screw ②			in set	Hex. Hole ①②		Set weight (g)	Tightning torque value Set screw(凹) / Lock screw(凸)	Security torque
	S,S ₁	Coarse	F:Fine	H	tolerance	t ₁	H ₁	tolerance		t ₂	∅			
M8	1.25	—	10	±0.29	≥2.5	10	±0.29	≥5	17.5	4	+0.02 +0.10	4	9 ~ 11	16
M10	1.5	—	12	±0.35	≥3	12	±0.35	≥6	21	5	+0.02 +0.14	8	16 ~ 20	30
M12	1.75	1.5	16	±0.35	≥5	16	±0.35	≥8	29	6	+0.02 +0.14	16	27 ~ 33	52
M14	2.0	1.5	16	±0.35	≥4	16	±0.35	≥8	28	6	+0.02 +0.14	22	27 ~ 33	52
M16	2.0	1.5	20	±0.42	≥6	20	±0.42	≥10	36	8	+0.03 +0.18	37	63 ~ 77	120
M18	2.5	1.5	20	±0.42	≥6	20	±0.42	≥10	36	8	+0.03 +0.18	47	63 ~ 77	120
M20	2.5	1.5	20	±0.42	≥7	20	±0.42	≥12	35	10	+0.03 +0.18	52	90 ~ 110	220
M22	2.5	1.5	25	±0.42	≥10	25	±0.42	≥15	45	12	+0.03 +0.18	79	150 ~ 190	370
M24	3.0	1.5	25	±0.42	≥9	25	±0.42	≥15	44	12	+0.03 +0.21	95	150 ~ 190	370
M30	3.5	1.5	30	±0.42	≥9	30	±0.42	≥15	54	17	+0.03 +0.21	161	530 ~ 650	980
M36	4.0	1.5	35	±0.5	≥8	35	±0.5	≥15	63	17	+0.03 +0.21	368	530 ~ 650	980

※Hexagon socket set screw to JIS B 1177 (ISO4026) ※Screw accuracy...JIS B0205(1998) / (ISO 261)6g

HLS-P drawing



HLS-P Standard spec of material/Surface treatment

Size	Hardness(material)	Surface treatment
M12~M36	Class8(S45C refining / surface hardness HRC30~43)	Black oxidized

※Please feel free to contact us about the other.

HLS-P size table (Spacer combined unit) (Coarse screw C type)

※We also have "HLS-TP" (Order number is HLS-○-D-L○)

Unit : mm

Thread Dia	Pitch		L	Fixing Screw ①			Lock Screw ②			in set	Hex. Hole ①②		Pin diameter	Set weight (g)	Tightning torque value Set screw(凹) / Lock screw(凸)	Security torque	
	S,S ₁	Coarse		F:Fine	H	tolerance	t ₁	H ₁	tolerance		t ₂	∅					B
M12	1.75	1.5	100	15	±0.35	≥4	16	±0.35	12	28	6	+0.02 +0.14	8	0	27 ~ 33	52	
			200										-0.2	92			
M16	2.0	1.5	100	20	±0.42	≥6	20	±0.42	12	36	8	+0.03 +0.18	12	0	63 ~ 77	120	
			200											-0.2			123
			250											-0.2			212
			257											-0.2			257
M20	2.5	1.5	100	25	±0.42	≥6	20	±0.42	12	40	10	+0.03 +0.18	16	0	90 ~ 110	220	
			200											-0.2			217
			250											-0.2			374
			300											-0.2			453
M24	3.0	1.5	100	35	±0.42	≥7	25	±0.5	15	54	12	+0.03 +0.21	20	0	150 ~ 190	370	
			200											-0.2			369
			250											-0.2			613
			300											-0.2			735
M30	3.5	1.5	100	40	±0.42	≥7	30	±0.5	20	64	17	+0.03 +0.21	24	0	530 ~ 650	980	
			200											-0.2			570
			250											-0.2			922
			250											-0.2			1,098
M36	4.0	1.5	100	40	±0.5	≥7	35	±0.5	20	68	17	+0.03 +0.21	30	0	530 ~ 650	980	
			200											-0.2			948

※Hexagon socket set screw to JIS B 1177 (ISO4026) ※Screw accuracy...JIS B0205(1998) / (ISO 261)6g

〈Order number example〉

M12 Coarse + L125...HLS-12-C-L125
M12Fine + L125...HLS-12-DF-L125