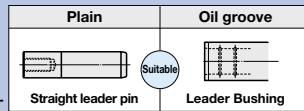


PRECISION LEADER PINS

— STRAIGHT · PLAIN PRESS-FIT LENGTH DESIGNATION TYPE · PRESS-FIT DIAMETER · LENGTH DESIGNATION TYPE —

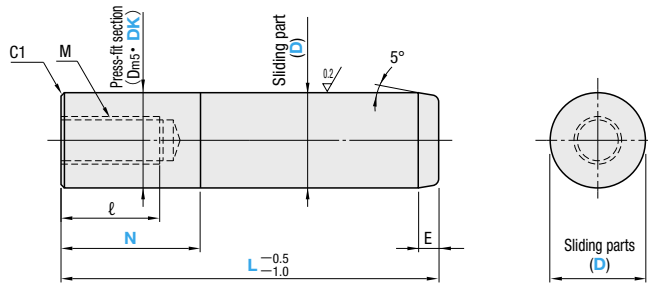


Ⓢ Non JIS material definition is listed on P.1351 - 1352



RoHS

GPSL (Press-fit length designation required)
GPS-XL (Press-fit diameter · length designation required)



Sliding parts D	Press-fit section D _{ms} GPSL	M × Pitch	ℓ	H
8	+0.012 +0.006	M 5×0.8	10	3
10	+0.015 +0.007	M 5×0.8	10	4
12	+0.017 +0.008	M 6×1.0	12	5
13	+0.017 +0.008	M 6×1.0	12	
16	+0.017 +0.008	M 8×1.25	16	5
20	+0.017 +0.008	M 8×1.25	16	
25	+0.017 +0.008	M 12×1.75	24	8
28	+0.017 +0.008	M 12×1.75	24	
30	+0.020 +0.009	M 16×2.0	32	8
32	+0.020 +0.009	M 16×2.0	32	
35	+0.024 +0.011	M 20×2.5	40	8
40	+0.024 +0.011	M 20×2.5	40	
50	+0.024 +0.011	M 20×2.5	40	8
60	+0.024 +0.011	M 20×2.5	40	

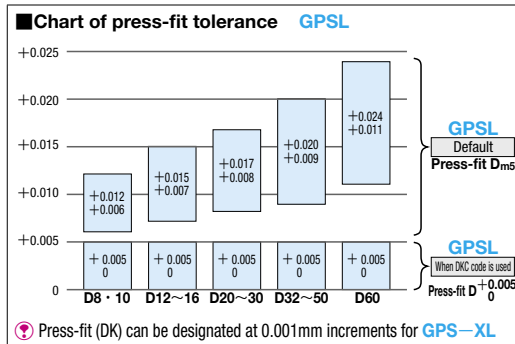
Ⓢ Recommended mold temperature for the usage of a precision leader pin and bushing is 80°C or less because of a little clearance between them. (P.878)

Ⓢ SUJ2 Ⓢ 58HRC~ (Induction hardening)

Order Part Number — L — N — DK
 GPSL 32 — 180 — N100
 GPS-XL32 — 180 — N100 — DK32.025

Days to Ship **Quotation**

Alterations Part Number — L(LC) — N — DK — (OC · MC...etc.)
 GPS-XL32 — LC 179 — N100 — DK32.025 — GC-E20-K10
 Ⓢ Combination of GC with OC not available.



Alteration details P.879 · 880

Alterations	Code	Spec.	1Code
	LC	Total length alteration LC=1mm increments Shortens the full length (L) as shown in the drawing. (Tip dimension E remains unchanged.) Ⓢ Lmin. < LC < Lmax.	
	OC	Adds oil grooves. Ⓢ Please note that the designation range of N dimension is changed. Alteration details P.880	
	MC	Tip tapping Ⓢ D=Not available for 8 and 10. D M × Pitch ℓ 12 · 13 M 6 × 1.0 12 16 M 10 × 1.5 20 20 M 12 × 1.75 24 25~60 M 16 × 2.0 32	Quotation
	YC	Adds a stopper groove. Use this alteration when a tap cannot be used. Ⓢ D=Not available for 8~12.	
	AC	Groove processing for air relief [Designation method] AC124 AC=1mm increments 10 ≤ AC ≤ L - (N + 5)	

Alterations	Code	Spec.	1Code
	GC	Tapers the tip. [Designation method] GC-E20-K10 E=1mm increments K=1° increments 1° ≤ K ≤ 10° Ⓢ E > 20 of D16~30 is available only when L ≥ 50. D E 8 · 10 5 ≤ E ≤ 15 12 · 13 5 ≤ E ≤ 20 16 5 ≤ E ≤ 25 20 5 ≤ E ≤ 30 25 · 28 5 ≤ E ≤ 35 30 5 ≤ E ≤ 40 32~60 5 ≤ E ≤ 20	Quotation
	DKC	Changes press-fit section tolerance. D _{ms} → D _{ms} +0.005 Ⓢ Available for GPSL	
	FC	Introduction recess processing Adds an introduction recess processing on the press-fit section. FC=1mm increments 3 ≤ FC ≤ N - 10 Recess processing section D -0.03	
	GA	Adds a tap to attach a leader assist pin. Ⓢ Available for D40/50/60. Alteration details P.879	

P Price **Quotation**

GPSL (Press-fit length designation type)

Part Number Type	D	L 5mm increments	N 1mm increments	U/Price 1~9	
GPSL	8	40~70	0~40	Quotation	
	10	40~70			
	32	12	40~110		
		13	115~160		
		16	165~200		
	35	16	40~110		0~120
		20	115~160		
		25	165~200		
	40	20	40~110		0~140
		25	115~160		
		30	165~200		
	50	25	165~200		0~200
		30	205~260		
		35	245~300		
	60	30	205~260		0~200
		35	245~300		
		40	305~360		
	60	40	305~360		0~200
		45	365~400		
		50	455~500		

Ⓢ Designate N=0 for GPSL, when no press-fit part is required.
 Ⓢ Please designate process-fit length with N ≤ L - E.

GPS-XL (Press-fit diameter · length designation type)

Part Number Type	D	L 5mm increments	N 1mm increments	Press-fit diameter DK 0.001mm increments	U/Price 1~9
GPS-XL	8	40~70	5~40	Quotation	
	10	40~70			
	32	12	40~110		12.000~12.050
		13	115~160		
		16	165~200		
	35	16	40~110		13.000~13.050
		20	115~160		
		25	165~200		
	40	20	40~110		16.000~16.050
		25	115~160		
		30	165~200		
	50	25	115~160		20.000~20.050
		30	165~200		
		35	245~300		
	60	30	115~160		25.000~25.050
		35	165~200		
		40	205~260		
	60	35	115~160		28.000~28.050
		40	165~200		
		45	205~260		
	60	40	115~160		30.000~30.050
		45	165~200		
		50	205~260		

Ⓢ DK tolerance of press-fit diameter of D8~30: DK ± 0.002.
 Ⓢ Please designate process-fit length with N ≤ L - E.

Part Number Type	D	L 5mm increments	N 1mm increments	Press-fit diameter DK 0.001mm increments	U/Price 1~9
GPSL	32	70~100	0~120	Quotation	
		105~160			
		165~200			
	35	100~140	0~140		
		145~190			
		195~240			
	40	100~150	0~200		
		155~190			
		195~240			
	50	245~300	0~200		
		305~360			
		365~400			
	60	150~190	0~200		
		195~240			
		245~300			
	60	305~360	0~200		
		365~400			
		405~450			
	60	455~500	0~200		
		405~450			
		305~360			

Ⓢ DK tolerance of press-fit diameter of D32~60: DK ± 0.003.

ex Example **P.880**