



Name	Precision Leader Pin	Precision Leader Pin with Oil Groove	Precision Leader Pin with Spiral Oil Groove	Straight Precision Leader Pin
Model	25GPAL	25GPJL	25GPALSP	25GPLP
Page	3	4	5	5



Name	Leader Pin & Assist Pin for Large Mold		Leader Pin & Assist Pin for Large Mold (Bolt Type)		Support Pin	Support Pin with Oil Groove
Model	25GPXL / 25GPPPL	25GA	25GPPA	25GAT	25SPP / 25SPPZ	25SPP-O / 25SPPZ-O
Page	6	6	7	7	8	9



Name	Support Pin Collar	Precision Leader Bushes (Oil Groove)		Leader Bushes (Plain)		Leader Bushes (Oil Groove)	
Model	25SPS / 25SPD	25GBH	25GBS	25GBAS	25GBBS	25GBHE	25GBSE
Page	9	10	10	11	12	13	14



Name	Leader Bushs (Oil Free™)		Guide Bushs for Large Mold (Oil Free™)	Injection Guide Bushs (Oil Free™)	
Model	25GBHEZ / 25GBHDZ-W	25GBSEZ / 25GBSDZ-W	25RGBD-W / 25RGBTD-W	25RGB-W	25RGBF-W
Page	15	16	17	18	19



Name	Die Casting Guide Bushes	Oil Free™ Bush (Universal)	Oil Free™ Washer (Universal)	Oil Free™ Flange Bush (Universal)
Model	25SOST	25SBW	25WSBW / 25WSBW-N	25FSBW
Page	20	21	23	24

ตารางการเลือกไกด์และบุช | Guide & Bush Selecting Chart

Types				Model	Page
ไกด์เรียบ - Plain Guide	Headed Type			25GPAL	P.3
	Straight Type			25GPLP	P.5
	Support Pin			25SPP 25SPPZ	P.8

ใช้ร่วมกันได้
Suitable

Types				Model	Page
บุชมีร่องน้ำมัน - Oil Groove Bush	Flange + Copper Alloy		Oil Free Universal	25RGBF-W	P.19
			Oil Free Precision	25GBHDZ-W	P.15
	Frange		Oil Free Precision	25GBHEZ	P.15
			Oil Groove Precision	25GBHE	P.13
			Oil Groove	25GBH	P.10
	Straight + Copper Alloy		Oil Free Universal	25RGB-W	P.18
			Oil Free Precision	25GBSDZ-W	P.16
	Straight		Oil Free Precision	25GBSEZ	P.16
			Oil Groove Precision	25GBSE	P.14
			Oil Groove	25GBS	P.10

Types				Model	Page
ไกด์มีร่องน้ำมัน - Oil Groove Guide	Headed Type			25GPJL	P.4
	Headed Type			25GPALSP	P.5
	Support Pin			25SPP-O 25SPPZ-O	P.9

ใช้ร่วมกันได้
Suitable

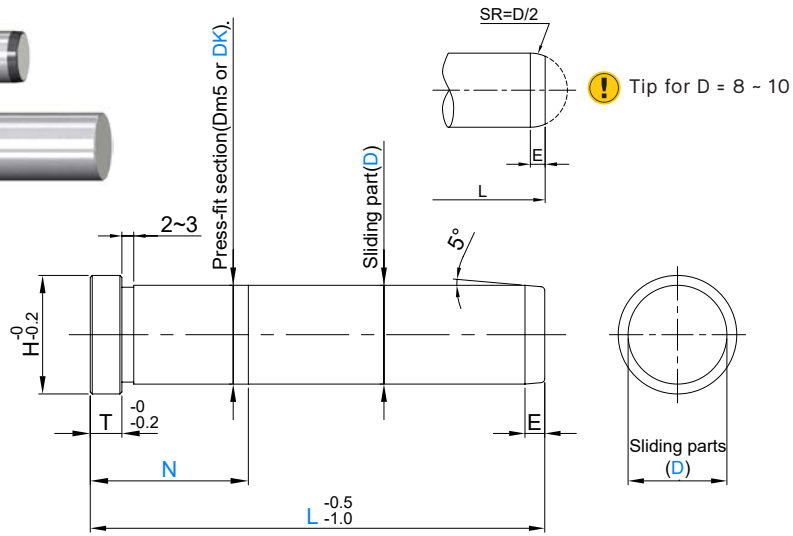
Types				Model	Page
บุชเรียบ - Plain Bush	Flange		Plain	25GBAS	P.11
	Straight		Plain	25GBBS	P.12

Types				Model	Page
Large Mold Guide	Joint Type			25GPXL 25GPPL	P.6
	Bolt Type			25GPPA	P.7

ใช้ร่วมกันได้
Suitable

Types				Model	Page
Large Mold Bush	Flange + Copper Alloy		Oil Free Universal	25RGBF-W	P.19
			Oil Free Large Mold	25RGBTD-W	P.17
	Straight + Copper Alloy		Oil Free Universal	25RGB-W	P.18
			Oil Free Large Mold	25RGBD-W	P.17

Model: 25GPAL



ORDER Model D - L - N
EXAMPLE 25GPAL20-100-30

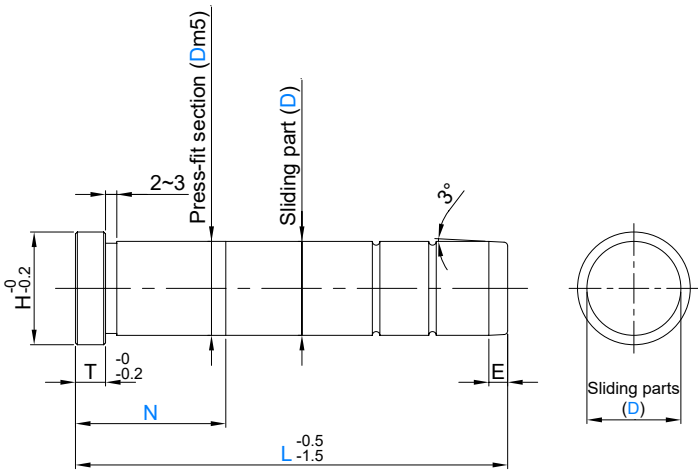
M SUJ2
58HRC-

Model	D		L 5mm increment	N 1mm increment	T	H	E	Press-Fit Diameter	
25GPAL	8	-0.015	30 - 80	5 - 60	5	11	3	8	+0.012
	10	-0.020	30 - 80	5 - 60		13	4	10	+0.006
	12	-0.020 -0.025	30 - 200	5 - 80		17	5	12	+0.015 +0.007
	13		30 - 200	5 - 80		18		13	
	16	-0.025 -0.030	30 - 250	8 - 80	8	21		16	+0.017 +0.008
	20		30 - 300	8 - 100		25		20	
	25		40 - 350	8 - 120		30		25	
	28		50 - 300	8 - 120		33		28	
	30	-0.030 -0.035	50 - 400	8 - 130		35	8	30	+0.020 +0.009
	32		50 - 350	8 - 130		37		32	
	35	-0.030 -0.040	60 - 450	8 - 130		40		35	
	40		80 - 500	10 - 200	10	45		40	
	50	-0.030 -0.050	100 - 550	12 - 200	12	55		50	
	60		200 - 550	15 - 200	15	65		60	+0.024 +0.011

Precision Leader Pin with Oil Groove - ลีดเดอร์พิน มีร่องน้ำมัน



Model: 25GPJL



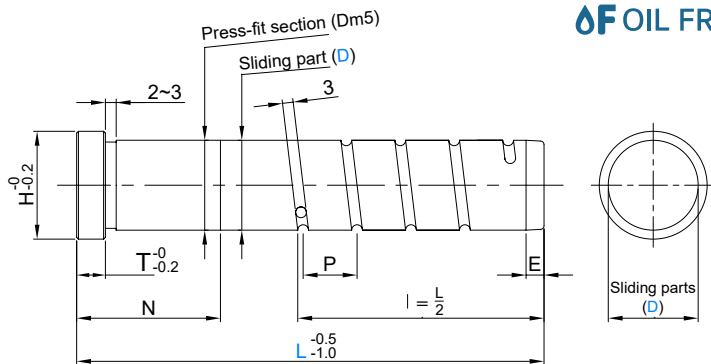
ORDER Model D - L - N
EXAMPLE 25GPJL20-100-30 SUJ2 58HRC- (Induction Hardened)

Model	D		L 5mm increment	N 1mm increment	T	H	E	Press-Fit Diameter	
25GPJL	8	-0.015 -0.020	40 - 80	5 - 40	5	11	3	8	+0.012 +0.006
	10		40 - 80	5 - 40		13	4	10	
	12	-0.020 -0.025	40 - 200	5 - 80		17	5	12	+0.015 +0.007
	13		40 - 200	6 - 80		18		13	
	16		40 - 250	6 - 80		21		16	
	20	-0.025 -0.030	50 - 300	6 - 100	8	25		20	+0.017 +0.008
	25		50 - 350	8 - 120		30		25	
	28		50 - 200	8 - 120		33		28	
	30		60 - 400	8 - 130		35		30	
	32	-0.030 -0.035	70 - 350	8 - 130		37		32	+0.020 +0.009
	35		70 - 450	8 - 130		40		35	
	40	-0.030 -0.040	100 - 500	10 - 140		45	8	40	
	50		120 - 550	12 - 200		55		50	
	60	-0.030 -0.050	200 - 550	15 - 200		65		60	+0.024 +0.011

Precision Leader Pin with Spiral Oil Groove - ลีดเดอร์พิน มีร่องน้ำมันแบบเกลียว

FOIL FREE™

Model: 25GPALSP



ORDER
EXAMPLE

Model D - L - N
25GPALSP25-100-24



$N \leq L/2$



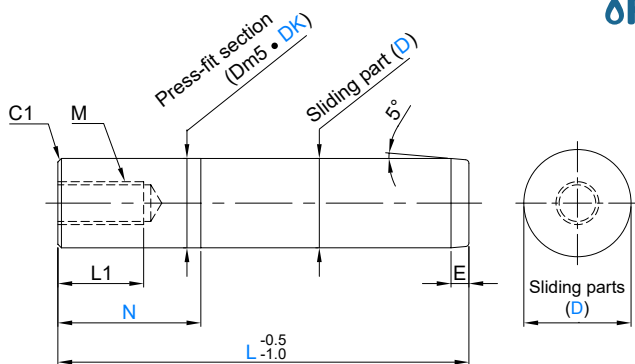
SUJ2
58HRC- (Induction Hardened)

Model	D		L 10mm increment	N 1mm increment	T	H	E	Press-Fit Diameter	
25GPALSP	20	-0.025 -0.030	60 - 210	$8 \leq N < L/2$	8	25	5	20	+0.017 +0.008
	25		60 - 230	$8 \leq N < L/2$		30		25	
	30		130 - 230	$8 \leq N < L/2$		35		30	
	40	-0.030 -0.040	200 - 360	$10 \leq N < L/2$	10	45	8	40	+0.020 +0.009
	50		230 - 350	$12 \leq N < L/2$	12	55		50	

Straight Precision Leader Pin - ลีดเดอร์พิน แบบตรง

FOIL FREE™

Model: 25GPLP



ORDER
EXAMPLE

Model D - L - N
25GPLP32-180-100



$N \leq L - E$



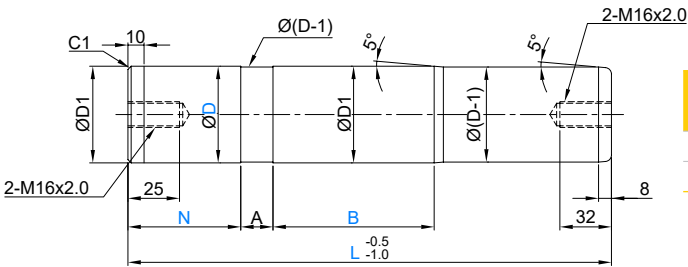
SUJ2
58HRC- (Induction Hardened)

Model	D		L 5mm increment	N 1mm increment	M	L1	E	Press-Fit Diameter	
25GPLP	8	-0.015 -0.020	40 - 70	0 - 40	M5x0.8	10	3	8	+0.012 +0.006
	10		40 - 70	0 - 40			4	10	
	12	-0.020 -0.025	40 - 160	0 - 100	M6x1.0	12	5	12	+0.015 +0.007
	13		40 - 200	0 - 100				13	
	16		40 - 200	0 - 100				16	
	20	-0.025 -0.030	40 - 220	0 - 100	M8x1.25	16		20	+0.017 +0.008
	25		50 - 260	0 - 100	M12x1.75	24		25	
	28		60 - 260	0 - 100				28	
	30		70 - 260	0 - 100				30	
	32	-0.030 -0.035	70 - 260	0 - 120	M16x2.0	32	8	32	+0.020 +0.009
	35		100 - 300	0 - 120				35	
	40	-0.030 -0.040	100 - 300	0 -140	M20xP2.5	40		40	
	50		100 - 400	0 - 200				50	
	60	-0.030 -0.050	150 - 500	0 - 200				60	

Leader Pin for Large Mold - ลีดเดอร์พิน สำหรับแม่พิมพ์ขนาดใหญ่



Models:
25GPXL
25GPPL



Model	Tolerance	
	D	D1
25GPXL	h6	f6
25GPPL	±0.015	e7

ORDER
EXAMPLE

Model D - L - N - B

25GPXL40-250-N100-B50



S45C
58HRC- (Induction Hardened)



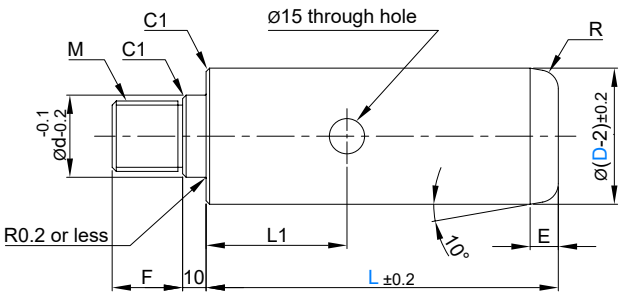
เลือก N = 0 หากไม่ต้องการช่วงสวมอัด
Choose N = 0 when do not want press-fit section

Model	D	D tolerance		L	N	B	A	D1	D1 Tolerance	
		25GPXL (h6)	25GPPL						5mm increments	1mm increments
25GPXL	40	0	±0.015	100 – 360	0 or 5 – 140	0 or 5 – 200	10	40	-0.025	-0.050
	50	-0.016		100 – 400	0 or 5 – 200			50	-0.041	-0.075
25GPPL	60	0		150 – 500			0 or 5 – 200	20	60	-0.030
	80	-0.019		150 – 400	80				-0.049	-0.090

Assist Pin for Leader Pin - ส่วนต่อลีดเดอร์พิน สำหรับแม่พิมพ์ขนาดใหญ่



Model: 25GA



ORDER
EXAMPLE

Model D - L

25GA60-500



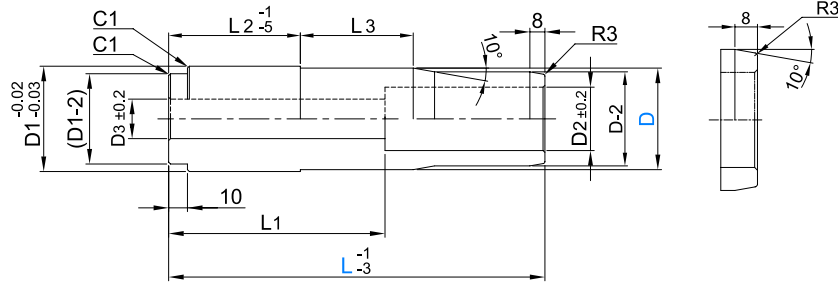
S45C

Model	D	L 5mm increment	R	L1	E	d	F	M
25GA	40	60 - 100	5	40	10	28	25	M24
		105 - 150		85				
		155 - 200		135				
	50	80 - 150	5	55	12	35	30	M30
		155 - 200		130				
		205 - 250		180				
	60	100 - 150	8	70	15	40	40	M36
		155 - 200		125				
		205 - 250		175				
	80	120 - 150	10	85	15	40	40	M36
		155 - 200		120				
		205 - 250		170				
		255 - 300		220				

Leader Pin for Large Mold (Bolt Type) - ลีดเดอร์พิน สำหรับแม่พิมพ์ขนาดใหญ่

FOIL FREE™

Model: 25GPPA



ORDER
EXAMPLE

Model D - L
25GPPA60-230



S50C
55 ~ 65HRC (Induction Hardened)



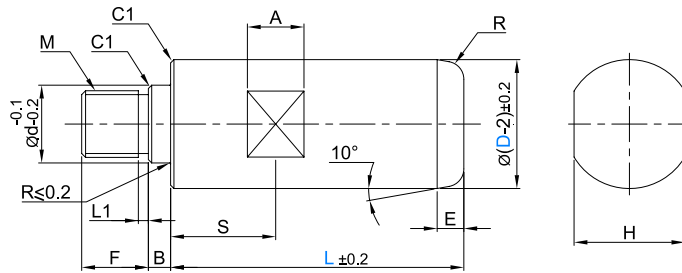
มีสกรูในชุด
Bolt Included

Model	D		L 10mm increments	D1	D2	D3	L1	L2	L3	Through Bolt
25GPPA	40	-0.004 -0.005	160 ~ 210	40	17	11	95	80	70	M10x120
	50	-0.006 -0.007	190 ~ 260	50	20	14	120	100	80	M12x150
	60	-0.007 -0.008	230 ~ 320	60	26	18	145	120	100	M16x170
	80	-0.008 -0.010	290 ~ 400	80	32	22	200	160	120	M20x230

Assist Pin for Leader Pin (Bolt Type) - ส่วนต่อลีดเดอร์พิน สำหรับแม่พิมพ์ขนาดใหญ่

FOIL FREE™

Model: 25GAT



ORDER
EXAMPLE

Model D - L
25GAT50-200



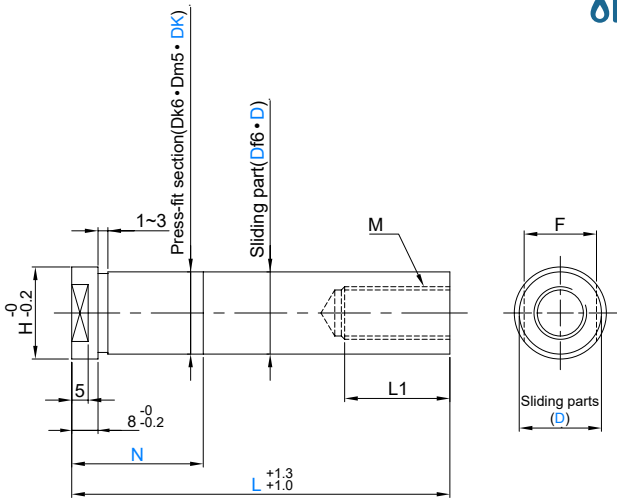
S45C มีสปริงวอชเชอร์ในชุด
Spring Washer Included

Model	D	L 10mm increments	d	B	M	F	E	L1	H	S	R	A	Spring Washer
25GAT	40	60 ~ 200	22	14	M20	20	10	4	32	15	5	25	M22
	50	80 ~ 250	27	16	M24	28	12	5	41	20		30	M27
	60	100 ~ 250	33	18	M30	30			50	25	8	35	M33
	80	120 ~ 300	40		M36	40	15		70	30	10		M42

Model: 25SPP

Model: 25SPPZ

ความเที่ยงตรงสูง
Precision Type



ORDER EXAMPLE Model D - L - N 25SPP20-200-50 SUJ2 58HRC- (Induction Hardened)

Model	Sliding Area			L 5mm increment	N 1mm increment	F	H	M	L1	Press-Fit Area		
	D	25SPP	25SPPZ							Dia	25SPP	25SPPZ
25SPP 25SPPZ	13	-0.016 -0.027	-0.020 -0.025	60 - 120	8 - 60	12	16	M6x1.00	12	13	+0.012 +0.001	+0.015 +0.007
	16			80 - 210		14	19	M10x1.50	20	16		
	20	-0.020 -0.033	-0.025 -0.030	90 - 250		19	23	M12x1.75	24	20	+0.015 +0.002	+0.017 +0.008
	25			100 - 300		22	28	M16x2.00	32	25		
	28			100 - 300		27	31			28		
	30			150 - 350		29	35			30		
	32	-0.025 -0.041	-0.030 -0.035	150 - 350		30	35			32	+0.018 +0.002	+0.020 +0.009
	35			150 - 350		32	40			35		
	36			150 - 350		36	41			36		
	40		-0.030 -0.040	150 - 350		36	45			40		

โกดพิน และ บุช

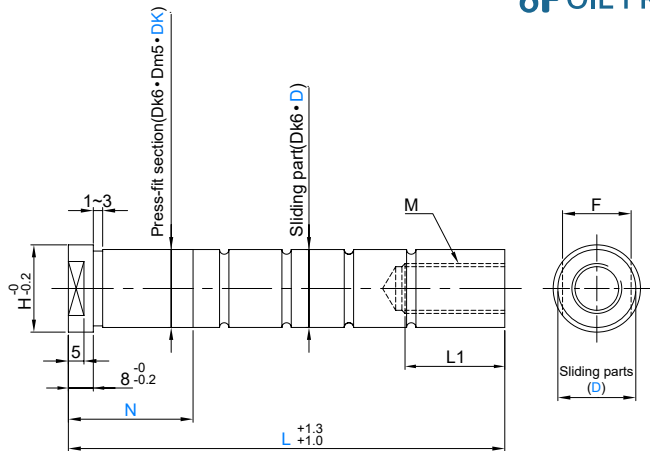
Support Pin with Oil Groove - ซัพพอร์ทพิน แบบมีร่องน้ำมัน



Model: 25SPP-O

Model: 25SPPZ-O

ความเที่ยงตรงสูง
Precision Type



ORDER MODEL D - L - N
EXAMPLE 25SPP-O20-200-50

SUJ2
58HRC- (Induction Hardened)

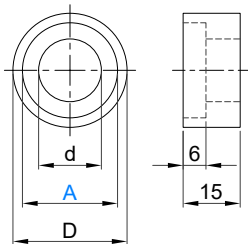
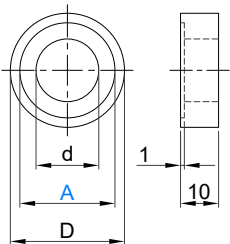
Model	Sliding Area			L 5mm increment	N 1mm increment	F	H	M	L1	Press-Fit Area		
	D	25SPP-O	25SPPZ-O							Dia	25SPP-O	25SPPZ-O
25SPP-O 25SPPZ-O	13	-0.016	-0.020	60 - 120	8 - 30	12	16	M6x1.00	12	13	+0.012	+0.015
	16	-0.027	-0.025	80 - 210		14	19	M10x1.50	20	16	+0.001	+0.007
	20	-0.020 -0.033	-0.025 -0.030	90 - 250		19	23	M12x1.75	24	20	+0.015 +0.002	+0.017 +0.008
	25			100 - 300	8 - 40	22	28	M16x2.00	32	25		
	28			100 - 300		27	31			28		
	30			150 - 350		29	35			30		
	32	-0.025 -0.041	-0.030 -0.035	150 - 350	8 - 50	30	35			32	+0.018 +0.002	+0.020 +0.009
	35			150 - 350		32	40			35		
	36			150 - 350		36	41			36		
	40		-0.030 -0.040	150 - 350	8 - 60	36	45			40		

Support Pin Collar - ซัพพอร์ทพินคอลลาร์



Model: 25SPS

Model: 25SPD



ORDER MODEL A
EXAMPLE 25SPS30

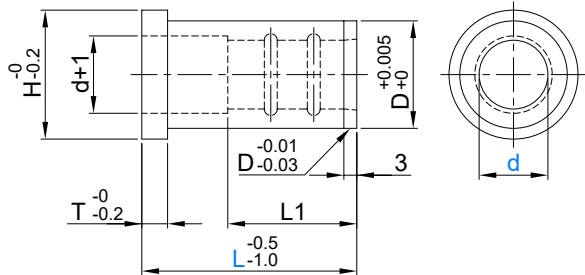
S45C
34 - 43HRC
(Black Oxide)

Model	A	D	d	for Support Pin (D)
25SPS 25SPD	13	18	6.5	13
	16	21	10.5	16
	20	25	12.5	20
	25	30	16.5	25
	28	33		28
	30	35		30
	32	37		32
	35	40		35
	36	41		36
	40	45		40

Precision Leader Bushs (Head Type) - ลีดเดอร์บุชรุ่นพรีจิชั่น แบบมีป้า

ΔF OIL FREE™

Model: 25GBH



ORDER
EXAMPLE

Model d - L
25GBH25-60



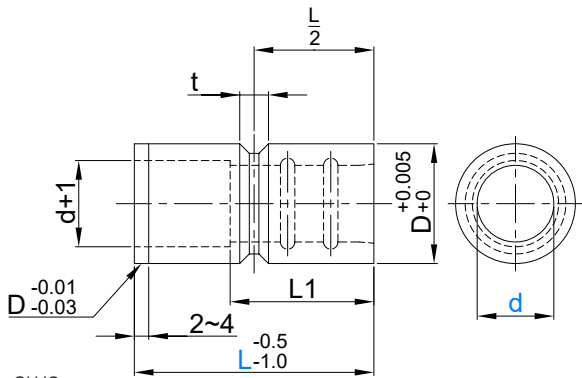
SUJ2
58HRC-

d		L												T	D	H	L1													
																	L15	L20	L25	L30	L35	L40	L45	L50	L60	L70	L80	L90	L100	
8	-0.000	15	20	25										5	12	14	15	15	15											
10	-0.005	15	20	25	30	35	40								14	16	15	20	20	20	20	20								
12	-0.005 -0.010	15	20	25	30	35	40	45	50						18	22	15	20	25	25	25	25	25	25						
13		15	20	25	30	35	40	45	50					20	25	15	20	25	25	25	25	25	25							
16			20	25	30	35	40	45	50					6	25	30		20	25	30	35	30	30	30						
20	-0.010 -0.015		20	25	30	35	40	45	50	60	70			8	30	35		20	25	30	35	40	40	40	40	40				
25				25	30	35	40	45	50	60	70	80			35	40			25	30	35	40	45	50	50	50	50			
28						35			50	60		80			40	45			25	30	35	40	45	50	56	56	56			
30					25	30	35	40	45	50	60	70	80		90	100	42	47			25	30	35	40	45	50	60	60	60	60

Precision Leader Bushs (Straight Type) - ลีดเดอร์บุชรุ่นพรีจิชั่น แบบตรง

ΔF OIL FREE™

Model: 25GBS



ORDER
EXAMPLE

Model d - L
25GBS25-50



SUJ2
58HRC-

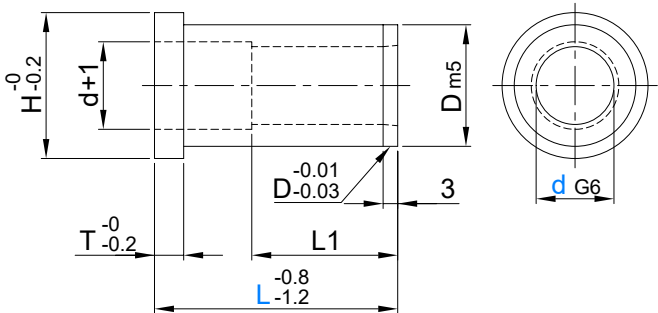
Model	d		L										D	t	L1												
															L 15	L 20	L 25	L 30	L 35	L 40	L 50	L 60	L 70	L 80			
25GBS	8	-0.000	15	20	25								12	6	15	15	15										
	10	-0.005	15	20	25	30	35	40					14		15	20	20	20	20	20							
	12	-0.005 -0.010	15	20	25	30	35	40					18		15	20	25	25	25	25							
	13		15	20	25	30	35	40					20	15	20	25	25	25	25								
	16		15	20	25	30	35	40	50				25	15	20	25	30	35	30	30							
	20	-0.010 -0.015	15	20	25	30	35	40	50	60	70		30	8	15	20	25	30	35	40	40	40	40				
	25			20	25	30	35	40	50	60	70		35			20	25	30	35	40	50	50	50	50			
	28							40	50			80	40				25	30	35	40	50	56	56	56			
	30				25	30	35	40	50	60	70	80	42				25	30	35	40	50	60	60	60			

ไคด์พิน และ บุช

Plain Leader Bushs (Head Type) - สีดเตอร์บุช แบบมีบ่า ไม่มีร่องน้ำมัน



Model: 25GBAS



ORDER
EXAMPLE

Model d - L
25GBAS8-25

SUJ2
58HRC~

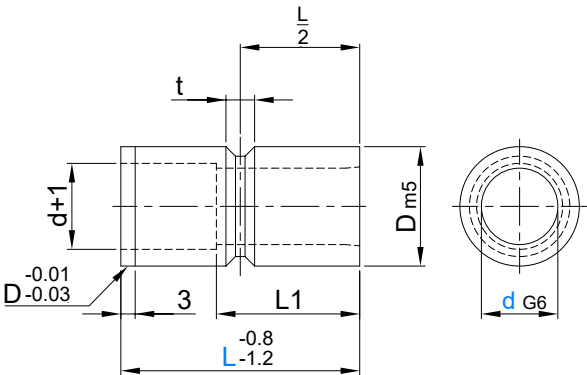
Model	d G6		L															T	D m5		H
25GBAS	8	+0.014 +0.005	15	20	25													5	12	+0.015 +0.007	14
	10		15	20	25	30	35	40											14		16
	12		15	20	25	30	35	40	45	50									18		22
	13	+0.017 +0.006	15	20	25	30	35	40	45	50								6	20	+0.017 +0.008	25
	16		15	20	25	30	35	40	45	50	60								25		30
	20		15	20	25	30	35	40	45	50	60	70	80	90	100			8	30		35
	25	+0.020 +0.007			25	30	35	40	45	50	60	70	80	90	100	110	120		35		40
	28				25	30	35	40	45	50	60	70	80	90	100	110	120		40		45
	30					30	35	40	45	50	60	70	80	90	100	110	120	10	42	+0.020 +0.009	47
	32					30	35	40	45	50	60	70	80	90	100	110	120		45		50
	35	+0.025 +0.009				30	35	40	45	50	60	70	80	90	100	110	120		48		54
	40					30	35	40	45	50	60	70	80	90	100	110	120	12	55	+0.024 +0.011	61
	50						40	45	50	60	70	80	90	100	110	120	130		70		76
	60	+0.029 +0.010								60	70	80	90	100	110	120	130		80		86

d	L1																	
	L 15	L 20	L 25	L 30	L 35	L 40	L 45	L 50	L 60	L 70	L 80	L 90	L 100	L 110	L 120	L 130	L 140	L 150
8	15	15	15															
10	15	20	20	20	20	20												
12	15	20	25	25	25	25	25	25										
13	15	20	25	25	25	25	25	25										
16	15	20	25	30	35	30	30	30										
20		20	25	30	35	40	40	40	40	40	40							
25		20	25	30	35	40	45	50	50	50	50	50	50	50	50			
28		20	25	30	35	40	45	50	50	50	50	50	50	50	50			
30				30	35	40	45	50	60	60	60	60	60	60	60	60	60	60
32				30	35	40	45	50	60	60	60	60	60	60	60	60	60	60
35				30	35	40	45	50	60	70	70	70	70	70	70	70	70	70
40				30	35	40	45	50	60	70	80	80	80	80	80	80	80	80
50				30	35	40	45	50	60	70	80	90	100	100	100	100	100	100
60				30	35	40	45	50	60	70	80	90	100	110	120	120	120	120

Plain Leader Bushes (Straight Type) - ลีดเดอร์บุช แบบตรง ไม่มีร่องน้ำมัน



Model: 25GBBS



ORDER
EXAMPLE

Model d - L
25GBBS8-25

M SUJ2
58HRC-

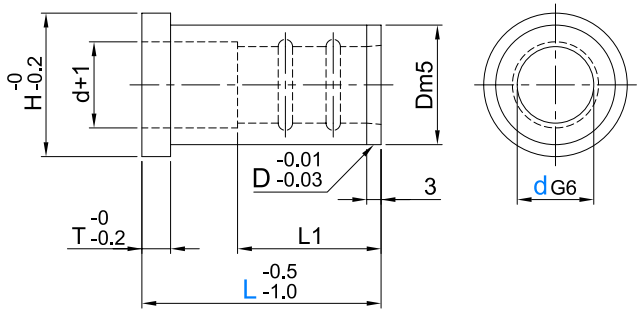
Model	d G6		L														t	D m5		
25GBBS	8	+0.014 +0.005	15	20	25											4	12	+0.015 +0.007		
	10		15	20	25	30	35	40							14					
	12	+0.017 +0.006	15	20	25	30	35	40									18			
	13		15	20	25	30	35	40	45	50						5	20	+0.017 +0.008		
	16		15	20	25	30	35	40	45	50	60						25			
	20	+0.020 +0.007	15	20	25	30	35	40	45	50	60	70	80				6	30	+0.020 +0.009	
	25			20	25	30	35	40	45	50	60	70	80	90	100			35		
	28			20	25	30	35	40	45	50	60	70	80	90	100			40		
	30	+0.025 +0.009		20	25	30	35	40	45	50	60	70	80	90	100			8	42	
	32				25	30	35	40	45	50	60	70	80	90	100				45	
	35				25	30	35	40	45	50	60	70	80	90	100				48	
	40					30	35	40	45	50	60	70	80	90	100	110	120	9	55	
	50	+0.029 +0.010				30	35	40	45	50	60	70	80	90	100	110	120	11	70	+0.024 +0.011
	60									50	60	70	80	90	100	110	120		80	

d	L1															
	L 15	L 20	L 25	L 30	L 35	L 40	L 45	L 50	L 60	L 70	L 80	L 90	L 100	L 110	L 120	
8	15	15	15													
10	15	20	20	20	20	20										
12	15	20	25	25	25	25										
13	15	20	25	25	25	25	25	25								
16	15	20	25	30	35	30	30	30	30							
20	15	20	25	30	35	40	40	40	40	40	40					
25		20	25	30	35	40	45	50	50	50	50	50	50			
28		20	25	30	35	40	45	50	56	56	56	56	56			
30		20	25	30	35	40	45	50	60	60	60	60	60			
32			25	30	35	40	45	50	60	60	60	60	60			
35			25	30	35	40	45	50	60	70	70	70	70	70	70	
40				30	35	40	45	50	60	70	80	80	80	80	80	
50				30	35	40	45	50	60	70	80	90	100	100	100	
60								50	60	70	80	90	100	110	120	

Leader Bushs (Head Type) - ลีดเดอร์บุช แบบมีป๋า



Model: 25GBHE



ORDER
EXAMPLE

Model d - L
25GBHE25-60

SUJ2
58HRC-

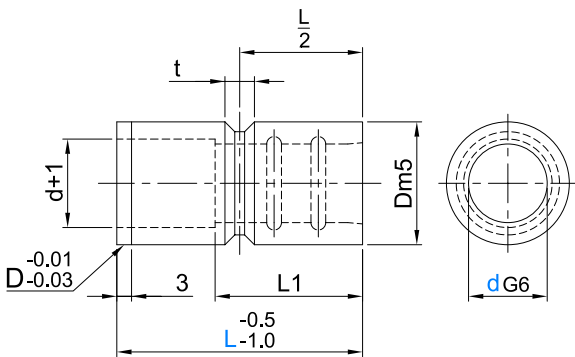
Model	d G6		L															T	D m5		H		
25GBHE	8	+0.014 +0.005	15	20	25													5	12	+0.015 +0.007	14		
	10		15	20	25	30	35	40											14		16		
	12	+0.017 +0.006	15	20	25	30	35	40	45	50									18		22		
	13		15	20	25	30	35	40	45	50									20	25			
	16		15	20	25	30	35	40	45	50								6	25	+0.017 +0.008	30		
	20	+0.020 +0.007		20	25	30	35	40	45	50	60	70	80						8	30	+0.020 +0.009	35	
	25			20	25	30	35	40	45	50	60	70	80	90	100	110	120	130				40	
	28				25	30	35	40	45	50	60	70	80							40		45	
	30				25	30	35	40	45	50	60	70	80	90	100	110	120	130				42	47
	32	+0.025 +0.009			25	30	35	40	45	50	60	70	80	90	100	110	120	130				45	50
	35					30	35	40	45	50	60	70	80	90	100	110	120	130				48	54
	36					30	35	40	45	50	60	70								50	55		
	40					30	35	40	45	50	60	70	80	90	100	110	120	130		10	55	+0.024 +0.011	60
	50							40	45	50	60	70	80	90	100	110	120	130	140	150	12		70
	60	+0.029 +0.010								60	70	80	90	100	110	120	130	140	150			80	86

d	L1																	
	L 15	L 20	L 25	L 30	L 35	L 40	L 45	L 50	L 60	L 70	L 80	L 90	L 100	L 110	L 120	L 130	L 140	L 150
8	15	15	15															
10	15	20	20	20	20	20												
12	15	20	25	25	25	25	25	25										
13	15	20	25	25	25	25	25	25										
16	15	20	25	30	35	30	30	30										
20		20	25	30	35	40	40	40	40	40	40							
25		20	25	30	35	40	45	50	50	50	50	50	50	50	50	50		
28			25	30	35	40	45	50	56	56	56							
30			25	30	35	40	45	50	60	60	60	60	60	60	60	60		
32			25	30	35	40	45	50	60	60	60	60	60	60	60	60		
35				30	35	40	45	50	60	70	70	70	70	70	70	70	70	
36				30	35	40	45	50	60	70	70							
40				30	35	40	45	50	60	70	80	80	80	80	80	80	80	
50						40	45	50	60	70	80	90	100	100	100	100	100	100
60									60	70	80	90	100	110	120	120	120	120

Leader Bushs (Straight Type) - ลีดเดอร์บุช แบบตรง



Model: 25GBSE



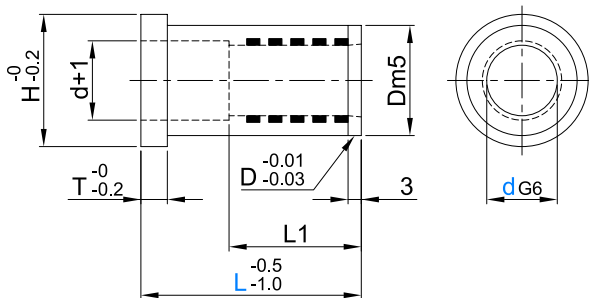
ORDER Model d - L M SUJ2 58HRC-
EXAMPLE 25GBSE25-50

Model	d G6		L												t	D m5			
25GBSE	8	+0.014 +0.005	15	20	25										6	12	+0.015 +0.007		
	10		15	20	25	30	35	40								14			
	12		15	20	25	30	35	40								18			
	13	+0.017 +0.006	15	20	25	30	35	40								20	+0.017 +0.008		
	16		15	20	25	30	35	40	45	50						25			
	20		15	20	25	30	35	40	45	50	60	70	80			30			
	25	+0.020 +0.007		20	25	30	35	40	45	50	60	70	80	90	100		8	35	+0.020 +0.009
	28			20	25	30	35	40	45	50	60	70	80	90	100			40	
	30			20	25	30	35	40	45	50	60	70	80	90	100			42	
	32		20	25	30	35	40	45	50	60	70	80	90	100		45			
	35	+0.025 +0.009			25	30	35	40	45	50	60	70	80	90	100			48	+0.024 +0.011
	36				25	30	35	40	45	50	60	70	80	90	100			50	
	40				25	30	35	40	45	50	60	70	80	90	100	110	120	55	
	50					30	35	40	45	50	60	70	80	90	100	110	120	70	
	60	+0.029 +0.010								50	60	70	80	90	100	110	120	80	

d	L1															
	L 15	L 20	L 25	L 30	L 35	L 40	L 45	L 50	L 60	L 70	L 80	L 90	L 100	L 110	L 120	
8	15	15	15													
10	15	20	20	20	20	20										
12	15	20	25	25	25	25										
13	15	20	25	25	25	25										
16	15	20	25	30	35	30	30	30								
20	15	20	25	30	35	40	40	40	40	40	40					
25	15	20	25	30	35	40	45	50	50	50	50	50	50			
28		20	25	30	35	40	45	50	56	56	56	56	56			
30		20	25	30	35	40	45	50	60	60	60	60	60			
32		20	25	30	35	40	45	50	60	60	60	60	60			
35			25	30	35	40	45	50	60	70	70	70	70			
36			25	30	35	40	45	50	60	70	70	70	70			
40			25	30	35	40	45	50	60	70	80	80	80	80	80	
50				30	35	40	45	50	60	70	80	90	100	100	100	
60								50	60	70	80	90	100	110	120	

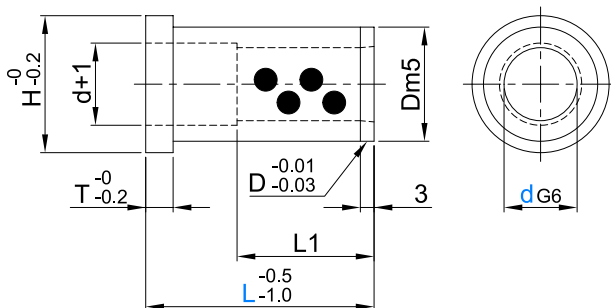
Model: 25GBHEZ

M SUJ2
58HRC-
Oil Free™ Solid Lubricant



Model: 25GBHDZ-W

M Copper Alloy
Oil Free™ Solid Lubricant



ORDER EXAMPLE

Model d - L
25GBHEZ25-60

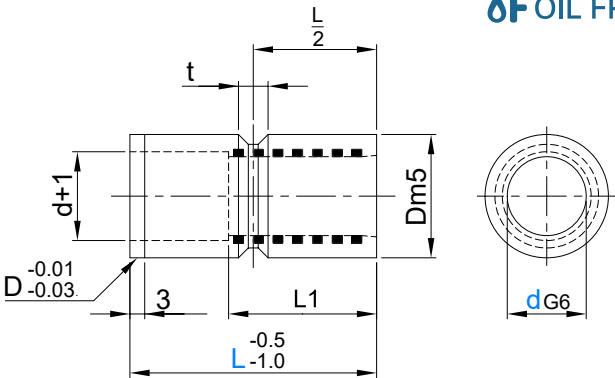
d G6	L										T	D m5	H	L1													
	15	20	25	30	35	40	50	60	70	80				15	20	25	30	35	40	50	60	70	80	100	120	130	150
10	+0.014 +0.005										5	14	+0.015 +0.007	16	15	20	20	20	20								
13												20		25	15	20	25	25	25	25							
16	+0.017 +0.006										6	25	+0.017 +0.008	30	15	20	25	30	35	30	30						
20												30		35	20	25	30	35	40	40	40						
25	+0.020 +0.007										8	35		40		25	30	35	40	50	50	50	50				
30												42	+0.020 +0.009	47		25	30	35	40	50	60	60	60	60			
35											10	48		54					40	50	60	70	70	70	70	70	
40	+0.025 +0.009											55		60					40	50	60	70	80	80	80	80	
50											12	70	+0.024 +0.011	75							60	70	80	100	100	100	100
60	+0.029 +0.010											80		86								80	100	120	120	120	

Oil Free Leader Bushes (Straight Type) - ออยฟรีลีดเดอร์บุช แบบตรง



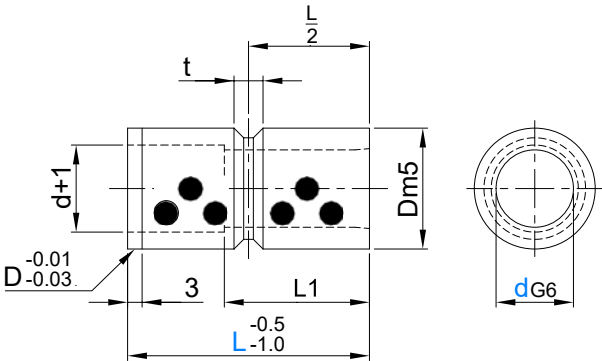
Model: 25GBSEZ

SUJ2
58HRC-
Oil Free™ Solid Lubricant



Model: 25GBSDZ-W

Copper Alloy
Oil Free™ Solid Lubricant



ORDER
EXAMPLE Model d - L
25GBSEZ25-50

Model	d G6		L								t	D m5		L1														
														L 15	L 20	L 25	L 30	L 35	L 40	L 50	L 60	L 80	L 100	L 120				
25GBSEZ 25GBSDZ-W	13	+0.017 +0.006	15	20	25	30							6	20	+0.017 +0.008	15	20	25	25									
	16		15	20	25	30	35							25		15	20	25	30	35								
	20	+0.020 +0.007	15	20	25	30	35	40						30		15	20	25	30	35	40							
	25			20	25	30	35	40	50					35			20	25	30	35	40	50						
	30			20	25	30	35	40	50					42	+0.020 +0.009		20	25	30	35	40	50						
	35					30	35	40	50	60				48						30	35	40	50	60				
	40	+0.025 +0.009					30	35	40	50	60	80			55	+0.024 +0.011					30	35	40	50	60	80		
	50							40	50	60	80	100			70							40	50	60	80	100		
		60	+0.029 +0.010							50	60	80	100	120		80							50	60	80	100	120	

โถดพิน และ บุช

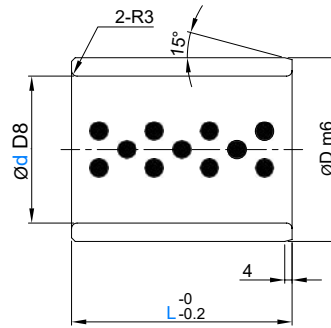
Guide Bushes for Large Mold - โถดบุชสำหรับแม่พิมพ์ขนาดใหญ่

FOIL FREE™

Model: 25RGBD-W

แบบตรง

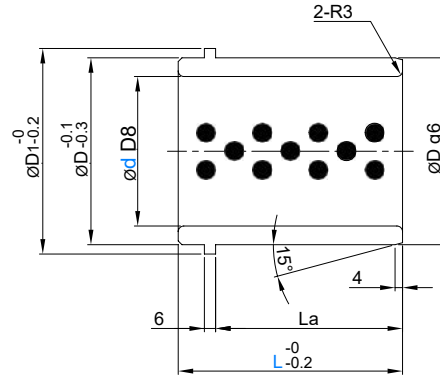
Straight Type



Model: 25RGBTD-W

แบบมีปาก

Flange Type



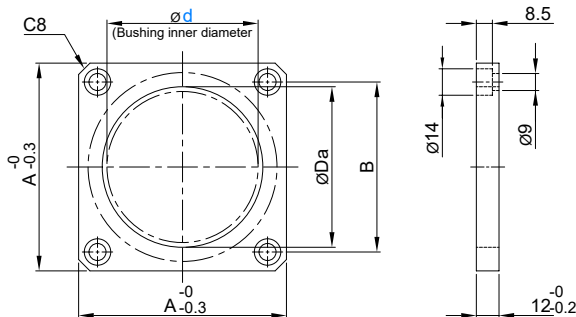
ORDER
EXAMPLE

Model d - L
25RGBD-W80-100



Copper Alloy
Oil Free™ Solid Lubricant

Model	d D8		L	D	D tolerance		D1	La
					25RGBD-W m6	25RGBTD-W g6		
25RGBD-W	60	+0.146 +0.100	70	80	+0.030	-0.010	90	53
			90		+0.011	-0.029		73
25RGBTD-W	80		100	100	+0.035	-0.012	110	80
			120		+0.013	-0.034		100



Model: 25GBSP

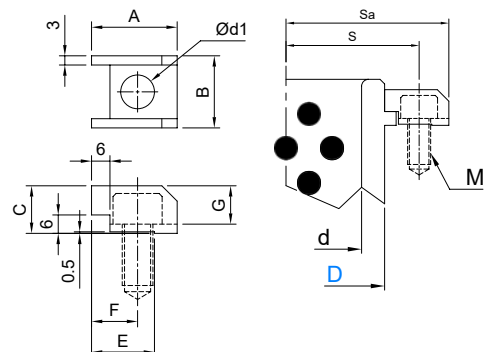


S45C
Black Oxide

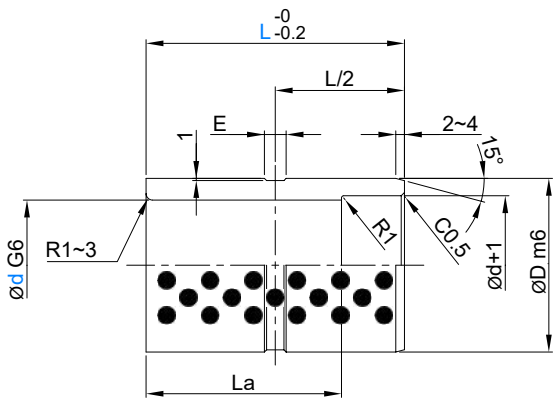
Model	d	A	B	Da	Use with D
25GBSP	60	90	70	65	80
	80	110	90	85	100

Model: 25SNG S45C

Order Code	d	D	M	S	Sa	A	B	d1	C	E	F	G
25SNG720000	60	80	M8	54	65.1	24.6	18.9	9	13	18	13.5	10
	80	100		65	76.1							
25SNG730000	60	80	M10	55.5	68.4	27.9	23.5	11	15.5	20.5	15	12.5
	80	100		66.5	79.4							



Model: 25RGB-W



ORDER
EXAMPLE

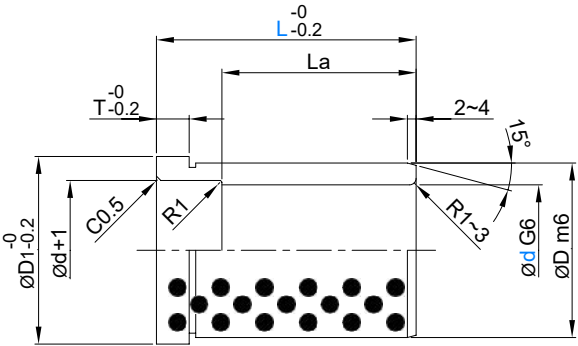
Model d - L
25RGB-W50-89

Copper Alloy
Oil Free™ Solid Lubricant

Model	d G6		L	D m6		La	E
25RGB-W	12		9	18	+0.018 +0.007	9	4
			14			14	
			19			19	
			24			24	
	16	+0.017 +0.006	14	25		14	4
			19			19	
			24			4	
			29			29	6
			34			34	
			39			35	
	20		14	30	+0.021 +0.008	14	4
			19			19	
			24			24	
			29			29	6
			34			34	
			39			39	
			49			40	
	25	+0.020 +0.007	24	35		24	
			29			29	
			34			34	
			39			39	
	30		49	42		49	
			59			50	
			29		+0.025 +0.009	29	8
			34			34	
			39			39	
			49			49	
			59			59	
			69			60	
			79			60	

Model	d G6		L	D m6		La	E
25RGB-W	35	+0.025 +0.009	29	48		29	
			34			34	
			39			39	
			49			49	
			59			59	
			69			69	
			79			70	
	40		55	39		39	10
				49		49	
				59		59	
				69		69	
				79		79	
				89		80	
	50		70	49	+0.030 +0.011	49	
		59		59			
		69		69			
		79		79			
		89		89			
		99		90			
	60	+0.029 +0.010	59	80	59		
			69		69		
			79		79		
			89		89		
			99		90		
			109		90		
	80		69	100	+0.035 +0.013	69	
79			79				
89			89				
99			99				
109			100				
119			100				

Model: 25RGBF-W



ORDER
EXAMPLE

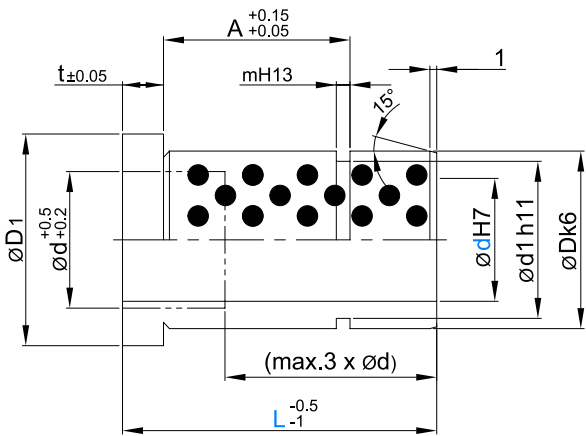
Model d - L
25RGBF-W50-89

Copper Alloy
Oil Free™ Solid Lubricant

Model	d G6		L	D m6		D1	T	La
25RGBF-W	12	+0.017 +0.006	19	18	+0.018 +0.007	25	4	19
			24					24
			29					29
			34					34
	16	+0.017 +0.006	19	25	+0.021 +0.008	30	6	19
			24					24
			29					29
			34					30
	20	+0.020 +0.007	39	30	+0.025 +0.009	35	8	30
			49					40
			59					40
			69					40
	25	+0.020 +0.007	24	35	+0.025 +0.009	40	10	24
			29					29
			34					34
			39					39
			49					49
			59					50
			69					50
			79					60
	30	+0.029 +0.010	29	42	+0.025 +0.009	47	10	29
			34					34
			39					39
			49					49

Model	d G6		L	D m6		D1	T	La
25RGBF-W	35	+0.025 +0.009	39	48	+0.030 +0.011	54	12	39
			49					49
			59					59
			69					69
	40	+0.025 +0.009	79	55	+0.030 +0.011	61	12	70
			89					70
			99					70
			109					80
	50	+0.029 +0.010	49	70	+0.030 +0.011	76	15	49
			59					59
			69					69
			79					79
	60	+0.029 +0.010	89	80	+0.030 +0.011	86	15	89
			99					90
			109					90
			119					90
		+0.029 +0.010	99	80	+0.030 +0.011	86	15	99
			109					109
			129					110
			149					110

Model: 25SOST



ORDER
EXAMPLE

Model d - L
25SOST9-12



Copper Alloy
Oil Free™ Solid Lubricant

d H7		L	t	D k6		D1	d1 h11		A	m H13		d H7		L	t	D k6		D1	d1 h11		A	m H13		
9	+0.015 +0.000	12	3	14	-0.032 -0.050	16	13.4	-0.000 -0.110	6.6	1.1			16			22	27	21			8.3	1.3	+0.140 +0.000	
		17							11.6												13.3			
		22							16.6												18.3			
		27							21.6												27.3			
		36							30.6												37.3			
10		12							6.6				+0.018 +0.000								47.3			
		17							11.6												8.3			
		22							16.6												13.3			
		27							21.6												18.3			
		36							30.6												27.3			
12		17		18	+0.012 +0.001	23	17		8.3					6		+0.015 +0.002			-0.000 -0.130			37.3		
		22							13.3													47.3		
		27							18.3													57.3		
		36							27.3													8.3		
																						13.3		
14	+0.018 +0.000	17	6						8.3	1.3														
		22							13.3															18.3
		27							18.3															27.3
		36							27.3															37.3
		46							37.3															47.3
15		56		20	+0.015 +0.002	25	19	-0.000 -0.130	47.3															
		17							8.3															57.3
		22							13.3															
		27							18.3															
		36							27.3															

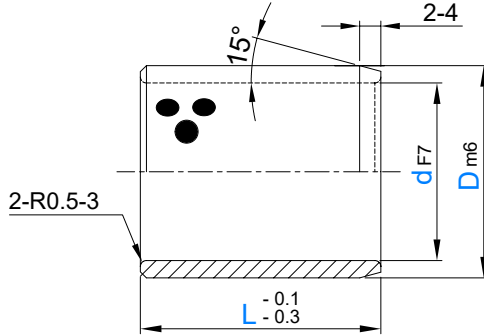
Oil Free™ Bush (Universal) - บุชออยฟรี™

Model: 25SBW



บุชทองเหลืองออยฟรี สำหรับนำไปใช้ได้หลากหลายอุตสาหกรรม เช่น แม่พิมพ์ ปัม/ฉีด, ชิ้นส่วนเครื่องจักร, ระบบอัตโนมัติ, งานก่อสร้าง, ยานยนต์ สามารถหล่อขึ้นได้โดยไม่ต้องเติมน้ำมันขณะใช้งาน

Oil Free bush for universal use in many dry application such as die/mold, machinery, automation, construction, automobile. The Oil Free bush is self lubrication and work without grease.



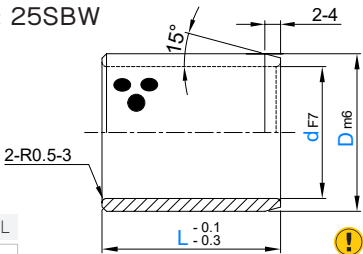
ORDER 25SBW d - D - L **Temperature Resistance** -40° C ~ 300° C **Copper Alloy**
EXAMPLE 25SBW25-35-50 **Oil Free™ Solid Lubricant**

d F7		D m6		L																								
5	+0.022	9	+0.015	8	10	12	15																					
6	+0.010	10	+0.006	8	10	12	15	16	20																			
8	+0.028	12	+0.018 +0.007	8	10	12	15	16	20	25																		
10	+0.013	14		8	10	12	15	16	20	25	30																	
12	+0.034 +0.016	18	+0.021 +0.008	8	10	12	15	16	20	25	30	35																
13		19			10	12	15	16	20	25	30	35																
14		20			10	12	15	16	20	25	30	35																
15		21			10	12	15	16	20	25	30	35	40															
16		22			10	12	15	16	20	25	30	35	40															
17		23					15				30	35																
18		24			10	12	15	16	20	25	30	35	40															
19		26					15		20																			
20	+0.041 +0.020	28	+0.025 +0.009		10	12	15	16	20	25	30	35	40	50	60	70												
22		30						16	20	25	30	35	40	50	60	70												
25		32					12	15		20	25																	
28		33					12	15	16	20	25	30	35	40	50	60												
30		35					12	15	16	20	25	30	35	40	50	60	70	80										
31.5		38							20	25	30		40															
32		38					12	15	16	20	25	30	35	40	50	60	70	80										
32		40					12	15	16	20	25	30	35	40	50	60												
31.5	+0.050	40	+0.025 +0.009								30		40															
32	+0.025	42							20		30		40															

Oil Free™ Bush (Universal) - บุษออยฟรี™



Model: 25SBW



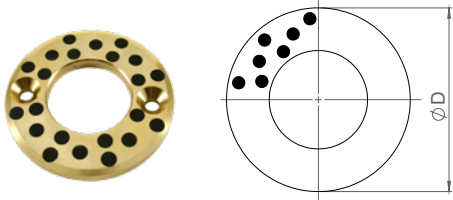
ORDER
EXAMPLE 25SBW d - D - L
25SBW25-35-50

⚠ Temperature Resistance
-40° C ~ 300°C

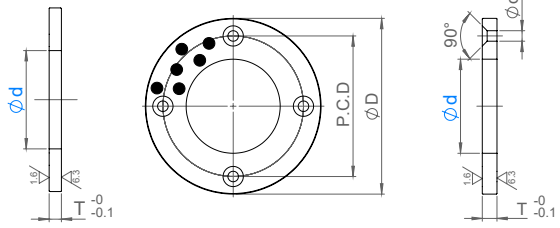
Ⓜ Copper Alloy
Oil Free™ Solid Lubricant

d F7		D m6		L																			
35	+0.050 +0.025	44	+0.025 +0.009						20	25	30	35	40	50	60	70							
		45						20	25	30	35	40	50	60	70								
38		48									30		40										
40		50				15		20	25	30	35	40	50	60	70	80							
		55				15			25	30	35	40	50	60									
45		55								30	35	40	50	60									
		56								30	35	40	50	60	70	80							
		60								30	35	40	50	60	70	80							
50		60						20		30	35	40	50	60	70	80							
		62								30	35	40	50	60	70	80							
		65								30		40	50	60	70	80		100					
55		70									40	50	60	70									
60		74								30	35	40	50	60	70	80		100					
		75								30	35	40	50	60	70	80		100					
63		75												60	70	80							
65		80										40	50	60	70	80							
70		85								30	35	40	50	60	70	80		100					
		90											50	60	70	80		100					
		90											50	60	70	80		100					
75		95												60	70	80		100					
	96										40	50	60	70	80		100	120					
80	100										40	50	60	70	80		100	120		140			
85	100												60		80								
90	110								30				50	60	70	80	90	100	120				
100	120												50	60	70	80		100	120		140		
110	130												50		70	80		100	120				
120	140														70	80	90	100	120		140		
125	145																	100	120				
130	150		+0.040 +0.015													80		100		130			
140	160																100			140			
150	170															80		100				150	
160	180															80		100				150	
															80		100				150		

ไม่มีรูยึดสกรู
No bolt holes
Model: 25WSBW-N



มีรูยึดสกรู
With bolt holes
Model: 25WSBW



ORDER
EXAMPLE

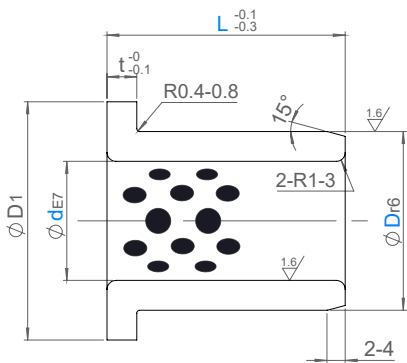
Model - No.
25WSBW-25

! Temperature Resistance
-40° C ~ 300°C

M Copper Alloy
Oil Free™ Solid Lubricant

Model	No.	d	D	T	P.C.D	Number of Holes	Flat Head Screw	d1
25WSBW (with holes) 25WSBW-N (no holes)	6	6.2	25	3	15	2	M3	3.5
	8	8.2	28		18			
	10	10.2	30		20			
	12	12.2	40		28			
	13	13.2						
	14	14.2						
	15	15.2	50		35			
	16	16.2						
	18	18.2						
	20	20.2	5	40	M5	6		
	25	25.2					55	45
	30	30.2					60	50
	35	35.2	70	7	60	M6	7	
	40	40.2	80		67.5			
	45	45.3	90	8	75	4	M8	9
	50	50.3	100		85			
	55	55.3	110		90			
	60	60.3	120		95			
	65	65.3	125	10	100	4	M10	11
	70	70.3	130		110			
75	75.3	140	120					
80	80.3	150	140					
90	90.5	170	160					
100	100.5	190	175					
	120	120.5	200					

Model: 25FSBW



ORDER
EXAMPLE

25FSBW d - D - L
25FSBW25-35-50



Temperature Resistance
-40° C ~ 300° C



Copper Alloy
Oil Free™ Solid Lubricant

d E7		D r6		L												D1	t
5	+0.032 +0.020	9	+0.028 +0.019	10	12											14	2
6		10		10	12	15										16	
8	+0.040 +0.025	12	+0.034 +0.023	10	12	15		20								20	
10		14		10	12	15		20	25	30						22	
12	+0.050 +0.032	18		10	12	15		20	25	30						25	3
13		19		10	12	15	17	20	25	30						26	
14		20				15		20	25	30						27	
15		21		10	12	15		20	25	30						28	
16	+0.061 +0.040	22	+0.041 +0.028		12	15		20	25	30	35	40				29	4
18		24				15		20	25	30	35	40				32	
20		30				15		20	25	30	35	40				40	
25		35				15		20	25	30	35	40	50			45	5
30	+0.075 +0.050	40	+0.050 +0.034					20	25	30	35	40	50			50	
31.5								20	25	30	35	40	50			50	
35		45						20	25	30	35	40	50			60	
40		50						20	25	30	35	40	50			65	
45	+0.090 +0.060	55	+0.060 +0.041					20	25	30	35	40	50	60		70	6
50		60						20	25	30	35	40	50	60		75	
55		65								30	35	40		60		80	
60		75								30	35	40	50	60	80	90	7.5
70	+0.107 +0.072	85	+0.073 +0.051										50	60	80	105	
75		90												60	80	110	
80		100												60	80	100	10
90		110												60	80	100	
100	+0.107 +0.072	120	+0.076 +0.054												80	100	150
120		140													80	100	170