

# PIN-POINT GATE BUSHINGS [INNER DIAMETER SR]

—STANDARD • HIGH HARDNESS B DIMENSION SELECTION TYPE—

Inner diameter SR B dimension selection type



(?) Non JIS material definition is listed on P.1351 - 1352

	<b>Shape 1A</b>	<p>Enlarged view of the tip *This bushing has a flat area of 0~0.1 on its tip (P dimension).</p>												
	<b>Shape 2A</b>	<p>Enlarged view of the tip *This bushing has a flat area of 0~0.1 on its tip (P dimension).</p>												
	<b>Shape 3A</b>	<p>Enlarged view of the tip *This bushing has a flat area of 0~0.1 on its tip (P dimension).</p>												
	<b>Shape 4A</b>	<p>Enlarged view of the tip *This bushing has a flat area of 0~0.1 on its tip (P dimension).</p> <p>(?) <math>R \geq (P/2)^2 + C^2</math> (?) <math>V = 2 \times \sqrt{R^2 - ((R^2 - (P/2)^2) - C^2)}</math></p>												
	<b>Shape 5A</b>	<p>Enlarged view of the tip *This bushing has a flat area of 0~0.1 on its tip (P dimension).</p>												
<p>• Calculation for the inlet diameter * <math>\alpha</math> * <math>\alpha = 2SR + 2(L - G - SR)\tan\frac{\alpha}{2}</math></p> <p>(?) The dimension acquired using the above calculation is the theoretical (reference) value.</p>														
<table border="1"> <thead> <tr> <th>Part Number</th> <th>Type</th> <th>M</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>PGBE□A</td> <td>Standard</td> <td>Nickel alloy</td> <td>(Inside) 55~60HRC depth: 0.5 (Outside) 40~45HRC</td> </tr> <tr> <td>PGKB□A</td> <td>High hardness</td> <td></td> <td>55~62HRC (The inner and outer surface have the same hardness)</td> </tr> </tbody> </table>			Part Number	Type	M	H	PGBE□A	Standard	Nickel alloy	(Inside) 55~60HRC depth: 0.5 (Outside) 40~45HRC	PGKB□A	High hardness		55~62HRC (The inner and outer surface have the same hardness)
Part Number	Type	M	H											
PGBE□A	Standard	Nickel alloy	(Inside) 55~60HRC depth: 0.5 (Outside) 40~45HRC											
PGKB□A	High hardness		55~62HRC (The inner and outer surface have the same hardness)											

Please use the D dimension designation type PGED and PGKD (P.859), if D dimension is designated.

H	G	B	SR	Part Number		L 0.01mm increments	P	A°	None for 2A 0.1mm increments C	Shape 1A only 0.1mm increments V	Shape 3A only 0.1mm increments S	Shape 4A only 0.1mm increments R
				Type	Shape							
3	0.7	3	0.60	PGBE (Standard) type	2	6.00~20.00	0.3 0.4	1	0.2~0.4	1.3~1.9	1~45	0.4~0.8
4	1.0	4	0.75		2.5	8.00~25.00	0.3 0.4 0.5		0.2~0.5	1.5~2.4		0.6~1.0
5			1.00		3		0.5 0.6 0.7 0.8 0.9 <sup>(*)2</sup>			2.0~2.9		0.8~1.5
6	1.2	6	1.00		4	10.00~40.00	0.6 0.7			2.5~3.9		1.0~2.0
			1.25				0.8 0.9 1.0 1.2					
8			1.25		5		0.8 0.9 1.0			3.5~4.9		
9	1.5	10	1.50	PGKB (High hardness type)	4A	15.00~80.00 <sup>(*)1</sup>	1.2 1.4 1.5 <sup>(*)3</sup>	3	0.5~1.5	4.0~5.9	1~50	1.5~3.0
11			2.00		5A		1.2 1.4 1.5 <sup>(*)3</sup>			4.5~7.9		1~60

(\*)1 PGKB will be available for maximum L dimension as 60.

(\*)2 When P0.9(D3), G is 1.0.

(\*)3 When P1.5(D5 • D6 • D8) • P1.6(D6), G is 1.2.

(\*)4 When P1.8(D8), G is 1.1.

(\*)5 When P1.8(D6) • P2.0(D8), G is 0.8.

(?) For shape 4A,  $R \geq (P/2)^2 + C^2$ 

(\*)4)(\*)5 P1.8 • P2.0 are not available for PGKB.



Order

Part Number	L	P	A	C	V	S	R
PGBE1A4	— 20.01 —	P0.8 —	A2 —	C0.5 —	V3.0		
PGBE2A4	— 20.01 —	P0.8 —	A2 —				
PGBE3A4	— 20.01 —	P0.8 —	A2 —	C0.5 —	S30		
PGBE4A4	— 20.01 —	P0.8 —	A2 —	C0.5 —	R1.0		
PGBE5A4	— 20.01 —	P0.8 —	A2 —	C0.5 —			



Days to Ship

Quotation

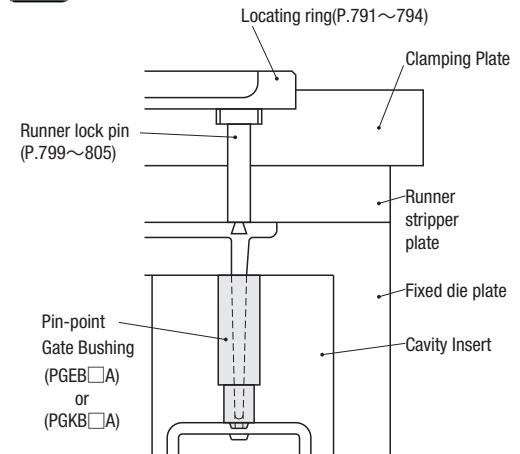


Price

Quotation



Example



Alterations

Part Number	L	P	A	C	V	S	R	(CC • LKC)
PGBE1A4	— 20.01 —	P0.8 —	A2 —	C0.5 —	V3.0			CC



Alterations

Code	Spec.	1Code
CC	C chamfering for inlay relief. D2 • 2.5 → C0.2 D3 • 4 → C0.3 D5~8 → C0.5	Quotation



Alterations

Code	Spec.	1Code
	Changes the tolerances of the dimensions below.	
1A	(L-C-B) 0 ~ -0.05 ... -0.02	
4A	(L-C) +0.05 ... +0.02	
2A	(L-B) 0 ~ -0.05 ... -0.02	
3A	L +0.05 ... +0.02	
5A	(L-C-B) 0 ~ -0.05 ... -0.02	
	The tolerance of L-C remains unchanged.	

Quotation