

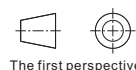
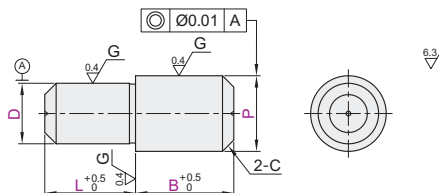
Locating Pins

Tolerance Selectable • Standard Large Flat Head

Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
YGL02	Standard	9CrWMn	SKS3	Treated Hardness:58-61HRC, Plating Hardness:850HV~	Hard Chrome Plating, Plating Thickness: 3~5 µm

Tolerance Selection

D or P	g6	h7	m6	p6	s
1.50~3.00	-0.002 -0.008	0 -0.010	+0.008 +0.002	+0.012 +0.006	
3.01~6.00	-0.004 -0.012	0 -0.012	+0.012 +0.004	+0.020 +0.012	
6.01~10.00	-0.005 -0.014	0 -0.015	+0.015 +0.006	+0.024 +0.015	0 -0.01
10.01~18.00	-0.006 -0.017	0 -0.018	+0.018 +0.007	+0.029 +0.018	
18.01~30.00	-0.007 -0.020	0 -0.021	+0.021 +0.008	+0.035 +0.022	



The first perspective

Part Number				0.01 mm Inc.	1 mm Inc.	0.1 mm Inc.	C
Code	D Tol.	P Tol.	D	P	L	B	
YGL02	m6 p6 g6 h7	s m6 p6 g6 h7	1	1.00~3.00	2~3		0.1
			2	2.00~6.00	2~8		0.5
			3	3.00~8.00	3~10	2.0~15.0	
			4	4.00~8.00	3~15		1
			5	5.00~10.00	5~15		
			6	6.00~10.00	5~15	2.0~30.0	
			8	8.00~15.00	5~18		1.5
			10	10.00~17.00	5~22	3.0~30.0	2
			12	12.00~20.00	6~26		
			13	13.00~20.00	7~28	5.0~30.0	
			16	16.00~27.00	8~35	5.0~35.0	3
			20	20.00~30.00	10~42	5.0~40.0	

Optional Processing

Part Number				0.01 mm Inc.	1 mm Inc.	0.1 mm Inc.
Code	D Tol.	P Tol.	D	P	L	B
YGL02	m6	p6	5	5.00~10.00	5~15	2.0~15.0
YGL02	m6	p6	6	6.00~10.00	6~15	2.0~30.0

YGL02—m6—s—D6—P7.5—L10—B8

Part Number				0.01 mm Inc.	1 mm Inc.	0.1 mm Inc.	Optional Processing Code
Code	D Tol.	P Tol.	D	P	L	B	
YGL02	m6	p6	5	5.00~10.00	5~15	2.0~15.0	CN RC DB DC
YGL02	m6	p6	6	6.00~10.00	6~15	2.0~30.0	

YGL02—m6—s—D6—P7.5—L10—B8—CN



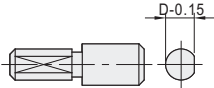
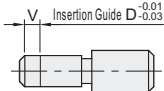
Discount price
Per 1~19 20~
Price 100% Additional quotation



Delivery
7



Optional Processing

Code	Spec.						
DC	Adds an Air Vent	Ordering Code DC					
							
DB	Adds Insertion Guide	Ordering Code DB					
		<table><tr><th>D</th><th>V</th></tr><tr><td>3~12</td><td>1</td></tr><tr><td>13~20</td><td>2</td></tr></table>	D	V	3~12	1	13~20
D	V						
3~12	1						
13~20	2						

Code	Spec.	
RC	Changes the Relief to R0.5	Ordering Code RC
		□ P-D≤2 not applicable.
CN	Changes C Chamfering	Ordering Code CN
		Changes C Chamfering at P dimension part to 0.5 or less. □ When D≤3, not applicable. □ Not applicable to D dimension part.

Standard/Tapped ▶

Straight, Spherical Tip / Tapered Tip

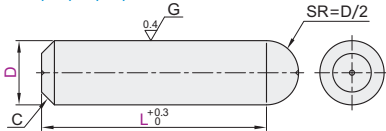
Locating Pins

Spherical Tip		Tapered Tip		Material		Hardness	Surface Treatment
Standard	Tapped	Standard	Tapped	GB	Equiv.		
YHD01	YHD41	YHE01	YHE41	9CrWMn	SKS3	Treated Hardness:58-61HRC	—
YHD02	YHD42	YHE02	—			Treated Hardness:58-61HRC, Plating Hardness:850HV~	Hard Chrome Plating, Plating Thickness: 3-5 μm
YHD03	—	YHE03	—			—	—
YHD11	YHD51	YHE11	—	0Cr18Ni9	SUS304	Plating Hardness:850HV~	Hard Chrome Plating, Plating Thickness: 3-5 μm
—	—	YHE12	—			—	—
YHD21	YHD61	YHE21	—	9Cr18Mo	SUS440C	Treated Hardness:48-53HRC	—



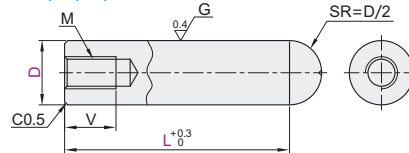
Self-made

Spherical Tip · Standard
YHD01/02/03/11/21



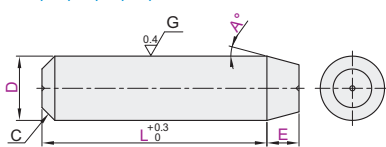
① Total length=(D/2)+L.

Spherical Tip · Tapped
YHD41/42/51/61



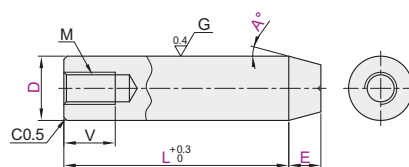
① Total length=(D/2)+L.

Tapered Tip · Standard
YHE01/02/03/11/12/21



① Total length=E+L.

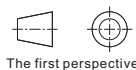
Tapered Tip · Tapped
YHE41



① Total length=E+L.

□ Tolerance Selection

D	M	P	G	H
	m6	p6	g6	h7
1~3	+0.008 +0.002	+0.012 +0.006	-0.002 -0.008	0 -0.010
4~6	+0.012 +0.004	+0.020 +0.012	-0.004 -0.012	0 -0.012
8~10	+0.015 +0.006	+0.024 +0.015	-0.005 -0.014	0 -0.015



The first perspective

□ Spherical Tip, Standard

Part Number		L		C
Code	D Tol.	D	0.1 mm Inc.	
YHD01 YHD02 YHD03 YHD11 YHD21	M(m6)	1	3.0~12.0	0.1
		2		
	P(p6)	3	3.0~25.0	0.5
		4		
	G(g6)	5	4.0~42.0	1
		6		
	H(h7)	8	5.0~42.0	1.5
		10		2

□ Spherical Tip, Tapped

Part Number		L		M	V
Code	D Tol.	D	0.1 mm Inc.		
YHD41 YHD51 YHD42 YHD61	M(m6)	5		M2	3
		6	10.0~42.0	M3	5
	P(p6)	8	15.0~42.0	M5	8
		10		M5	8

□ Tapered Tip, Standard

Part Number		L		A	C
Code	D Tol.	D	0.1 mm Inc.	Selection	
YHE01 YHE11 YHE02 YHE12 YHE03 YHE21	M(m6)	1	3.0~12.0	0.2~1.5	0.1
		2		0.5~3.5	15
	P(p6)	3	3.0~25.0	0.5~5.5	30
		4		0.5~7.0	
	G(g6)	5	4.0~42.0	0.5~9.0	45
		6			
	H(h7)	8	5.0~42.0	0.5~10.0	60
		10			2

① D, E, A parameters need to meet 0 < D-2EtanA < D.

□ Tapered Tip, Tapped

Part Number		L		A	M	V
Code	D Tol.	D	0.1 mm Inc.	Selection		
YHE41	M(m6)	5	10.0~42.0	0.5~9.0	15	M2 3
		6			30	M3 5
	P(p6)	8	15.0~42.0	0.5~10.0	45	M5 8
		10			60	M5 8

① D, E, A parameters need to meet 0 < D-2EtanA < D.

□ Spherical Tip, Standard

Part Number		L		C
Code	D Tol.	D	0.1 mm Inc.	
YHD01	M(m6)	1	3.0~12.0	0.1
YHD02	P(p6)	3	3.0~25.0	0.5

YHD01—M—D2—L12

□ Tapered Tip, Standard

Part Number		L		A
Code	D Tol.	D	0.1 mm Inc.	Selection
YHE01	M(m6)	1	3.0~12.0	0.2~1.5
YHE02	P(p6)	3	3.0~25.0	0.5~5.5

YHE01—M—D2—L10—E2—A15

□ Optional Processing

Part Number		L		A	Optional Processing Code
Code	D Tol.	D	0.1 mm Inc.	Selection	
YHE01	M(m6)	1	3.0~12.0	0.2~1.5	DB
YHE02	P(p6)	3	3.0~25.0	0.5~5.5	DB

YHE01—M—D2—L10—E2—A15—DC



Optional Processing

Code	Spec.																															
DB	Adds Insertion Guide Guide Part $D-0.03$ 1 <table><tr><td>Ordering Code</td><td>DB</td></tr></table> ❏ Not applicable to $D \leq 2$.	Ordering Code	DB																													
Ordering Code	DB																															
DC	Adds an Air Vent $D-0.15$ $D-0.15$ <table><tr><td>Ordering Code</td><td>DC</td></tr></table>	Ordering Code	DC																													
Ordering Code	DC																															
MA	Adds a Tapped Hole MA E1 <table><tr><td>Ordering Code</td><td>MA</td></tr><tr><td>D</td><td>MA</td><td>E1</td></tr><tr><td>6</td><td>M3</td><td>4</td></tr><tr><td>8-10</td><td>M4</td><td>6</td></tr></table> ❏ Applicable when $D \geq 6$. ❏ Only applicable to Tapered Tip, Standard.	Ordering Code	MA	D	MA	E1	6	M3	4	8-10	M4	6																				
Ordering Code	MA																															
D	MA	E1																														
6	M3	4																														
8-10	M4	6																														
DM DP DG DH	Changes Outer Diameter Tolerance $L \pm 0.3$ L <table><tr><td>Ordering Code</td><td>DM10</td></tr></table> Changes outer diameter tolerance by L_1 distance. <table><tr><th rowspan="2">D</th><th colspan="4">Tolerance Code</th></tr><tr><th>DM</th><th>DP</th><th>DG</th><th>DH</th></tr><tr><td></td><td>m6</td><td>p6</td><td>g6</td><td>h7</td></tr><tr><td>1~3</td><td>+0.008 +0.002</td><td>+0.012 +0.006</td><td>-0.002 -0.008</td><td>0 -0.010</td></tr><tr><td>4~6</td><td>+0.012 +0.004</td><td>+0.020 +0.012</td><td>-0.004 -0.012</td><td>0 -0.012</td></tr><tr><td>8-10</td><td>+0.015 +0.006</td><td>+0.024 +0.015</td><td>-0.005 -0.014</td><td>0 -0.015</td></tr></table> ❏ In selection, L_1 Dimensions must be changed to DM (DP / DG / DH).	Ordering Code	DM10	D	Tolerance Code				DM	DP	DG	DH		m6	p6	g6	h7	1~3	+0.008 +0.002	+0.012 +0.006	-0.002 -0.008	0 -0.010	4~6	+0.012 +0.004	+0.020 +0.012	-0.004 -0.012	0 -0.012	8-10	+0.015 +0.006	+0.024 +0.015	-0.005 -0.014	0 -0.015
Ordering Code	DM10																															
D	Tolerance Code																															
	DM	DP	DG	DH																												
	m6	p6	g6	h7																												
1~3	+0.008 +0.002	+0.012 +0.006	-0.002 -0.008	0 -0.010																												
4~6	+0.012 +0.004	+0.020 +0.012	-0.004 -0.012	0 -0.012																												
8-10	+0.015 +0.006	+0.024 +0.015	-0.005 -0.014	0 -0.015																												



Please order as shown



Discount price
Per 1~19 20~
Price 100% Additional quotation



Delivery 4

YHD03/11/51
YHE03/11



Delivery 6

YHD01/21/41/61
YHE01/21/41



Delivery 7

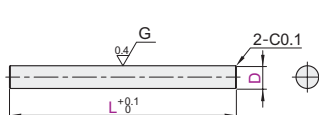
YHD02/42
YHE02/12

Locating Pins
Bushings

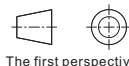
Locating Pins

Tolerance Fixed Small Diameter

Code	Type	Shape	Material		Hardness	Surface Treatment
			GB	Equiv.		
YHF01	Tolerance Fixed	Flat	9CrWMn	SKS3	Treated Hardness:48-56HRC	—
YHF05			0Cr18Ni9	SUS304	—	
YHF08			9Cr18Mo	SUS440C	Treated Hardness:48-53HRC	



Self-made



The first perspective

Part Number		D Tol.	0.5 mm Inc.	R
Code	0.1 mm Inc.		L	
YHF01 YHF05 YHF08	D			
	0.40~1.00			0.1
	1.01~2.00	0 -0.005	3.0~32.0	0.2
	2.01~3.00			0.4



Code	Spec.
CN	Changes C Chamfering
	Ordering Code CN D dimension C chamfering 0.1 is changed to 0.3. ① Applicable when $D \geq 1.5$. ① Combination of CN and DB is not available.

Code	Spec.
DB	Adds Insertion Guide
	Ordering Code DB ① Applicable when $D \geq 2.1$ and $L \geq 5.0$ ① Combination of CN and DB is not available.



Part Number		0.5 mm Inc.
Code	D	L
YHF01	1.01~2.00	
YHF05	2.01~3.00	3.0~32.0

YHF05—D2.5—L15

Optional Processing

Part Number		0.5 mm Inc.	Optional Processing
Code	D	L	Code
YHF01	1.01~2.00		
YHF05	2.01~3.00	3.0~32.0	DB CN

YHF05—D2—L30—CN



Discount price	
Per	1~9 10~
Price	100% Additional quotation



Delivery	
	4

① YHF05

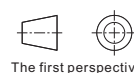
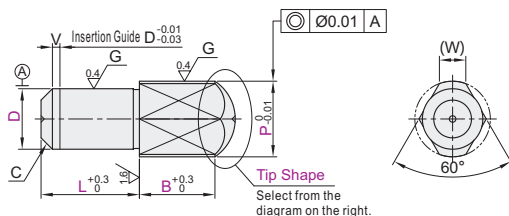


Delivery	
	6

① YHF01/08

Code	Type	Tolerance Grade	Material		Hardness	Surface Treatment
			GB	Equiv.		
YHP31	Diamond	Dm6	0Cr18Ni9	SUS304	—	—

Self-made



The first perspective

Tip Shape

A		$V_1 = R - \sqrt{R^2 - \frac{P^2}{4}}$	$R \geq \frac{P}{2}$
B		$V_2 = \frac{P-G}{2 \tan 30^\circ}$	$G \leq P$ When G=P, add about C0.2 chamfering.
C		$V_3 = \frac{P}{2} + \tan 30^\circ \cdot (R - \frac{P}{2} \sin 30^\circ)$	$R \leq \frac{P}{2}$

Part Number		D Tol.		0.1 mm Inc.		R 1 mm Inc.	G 1 mm Inc.	1 mm Inc.	C	V	(W)
Code	Tip Shape	D	m6	P	B	A Shape only, C Shape	B Shape only	L			
YHP31	A	2	+0.008	2.50~6.00		Shape A $R \geq P/2$		2~8	0.5	0	1.2
		3	+0.002	3.50~8.00	2.0~10.0			3~12			1.5
		4		4.50~9.00				4~15			1.8
		5	+0.012	5.50~10.00	2.0~10.0			5~15	1		2.2
	B	6	+0.004	6.50~12.00	2.0~12.0	Shape C $R \leq P/2$	$G \leq P$	5~15		1	3
		8		9.00~15.00	2.0~15.0			5~18	1.5		3.5
	C	10	+0.015	11.00~20.00	3.0~20.0			5~22			4
		12	+0.006	13.00~20.00				6~26	2		5
		16	+0.018	17.00~27.00				8~35			7
		20	+0.007	21.00~30.00	5.0~20.0			10~42	3	2	9



Please order as shown

Part Number		0.1 mm Inc.		G 1 mm Inc.	1 mm Inc.
Code	Tip Shape	D	P	B	L
YHP31	A	10	11.00~20.00		5~22
YHP31	B	12	13.00~20.00	3.0~20.0	6~26

YHP31 — B — D12 — P15 — B20 — G10 — L18



Discount price	
Per	1~19
Price	100%



Delivery	
Per	1~19
Price	100%

Part Number		0.1 mm Inc.		R 1 mm Inc.	1 mm Inc.
Code	Tip Shape	D	P	B	L
YHP31	A	10	11.00~20.00		5~22
YHP31	B	12	13.00~20.00	3.0~20.0	6~26

YHP31 — A — D12 — P15 — B20 — R10 — L18

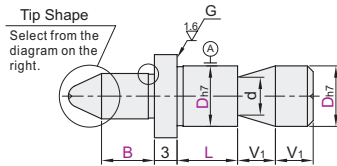
Locating Pins

with Shoulder, Short Set Screw, Circumference Groove Shape for Ordinary Fixtures, Tip Shape Selectable

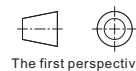
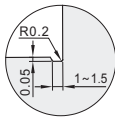
Code	Type	Shape	Material		Hardness	Surface Treatment
			GB	Equiv.		
YKC02	Short Set Screw	Circumference Groove Shape	Round	35CrMo SCM435	Treated Hardness:33~38HRC, Plating Hardness:850HV~	Hard Chrome Plating, Plating Thickness: 3~5 μm



Self-made



Surface Finish Relief



The first perspective

Tip Shape	
—	Taper R (Angle 30°)
	$e = P/2 + \tan(A/2) \cdot R - [R \cdot \sin(A/2)]$
	① The center hole remains.
B	Tapered
	① The center hole remains.
	① $P - 2E \tan(A/2) \geq 0.73$
R	Angle Selectable (Taper R)
	① The center hole remains.
	① $e = P/2 + \tan(A/2) \cdot R - [R \cdot \sin(A/2)]$

Part Number		0.1 mm Inc.	1 mm Inc.	1 mm Inc.	A	1 mm Inc.	S	R	V ₁	d	Applicable Set Screw
Code	Tip Shape	D _{h7}	P	B	L	E (Shape B)					
YKC02	(Standard)	6	3.0~8.0				9	1		4	
	Not Specified	8	3.0~10.0				11	1.5	6	5	M5
	(Tip Shape Selectable)	10	4.5~12.0				13	2		7	
	B	12	9.0~13.0				15	3		9	
	R	16	13.0~16.0				19	4		13	M6
				2~32 (B ≤ P × 4)	5~12	30 60 90 120					



Optional Processing

Code	Spec.
HC	Flat Machining
	Ordering Code HC ① H-P ≥ 2
TC	Adds Wrench Flats
	Ordering Code TC S S ₁ 9 7 11 8 13 11 15 13 19 17

Code	Spec.
RB	Changes the Relief to Radius R
	Ordering Code RB 1 ① Changes the relief to the following radius R, R(Selection): R1, R2, R3.



Please order as shown

Part Number		0.1 mm Inc.	1 mm Inc.	1 mm Inc.	A	1 mm Inc.
Code	Tip Shape	D _{h7}	P	B	L	E (Shape B)
YKC02	B	6	3~9	5~32	5~12	30
	R	8	3~9	5~32	5~12	60

YKC02—B—D6—P6—B20—L10—A30—E6

Optional Processing

Part Number		0.1 mm Inc.	1 mm Inc.	1 mm Inc.	A	1 mm Inc.	Optional processing Code
Code	Tip Shape	D _{h7}	P	B	L	E (Shape B)	
YKC02	B	6	3~9	5~32	5~12	30	HC
	R	8	3~9	5~32	5~12	60	TC RB

YKC02—B—D6—P6—B20—L10—A30—E6—HC



Discount price
Per 1~19 20~
Price 100% Additional quotation

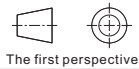
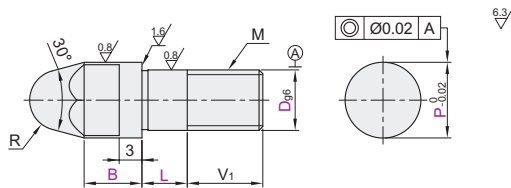


Delivery
7

No Shoulder, Threaded Type ▶ for Fixtures, Taper R

Locating Pins

Code	Type		Shape	Material		Hardness	Surface Treatment
				GB	Equiv.		
YKP11	No Shoulder	Threaded Type	Round	35CrMo	SCM435	Treated Hardness:33~38HRC, Plating Hardness:850HV~	Hard Chrome Plating , Plating Thickness: 3~5 μm



Part Number			0.1 mm Inc.		1 mm Inc.	V ₁	R	M
Code	D _{g6}		P	B	L			
YKP11	3	-0.002 -0.008	4.0~6.0	2.0~16.0		5	2	M3
	4		5.0~8.0	2.0~20.0				M4
	5	-0.004 -0.012	6.0~10.0	2.0~24.0	5~12	6	3	M5
	6		8.0~12.0	2.0~24.0				M6
	8	-0.005 -0.014	10.0~16.0	2.0~26.0		10	4	M8
	10		12.0~20.0	3.0~35.0	8~17	12		M10
	12	-0.006 -0.017	14.0~25.0	3.0~35.0	10~20	15	6	M12
	16		18.0~32.0	5.0~35.0	12~22	18		M16
	20	-0.007 -0.020	22.0~35.0	5.0~35.0	15~22	22	8	M20



Code	Spec.	
HC	Flat Machining	Ordering Code HC
AG ()	Tip Angle Change	Ordering Code AG60 Selection 60°, 90°, 120°.

Code	Spec.	
MD	Adds a Relief at the Thread End	Ordering Code MD



Part Number	0.1 mm Inc.	1 mm Inc.
Code	D _{g6}	P B L
YKP11	4 5~8 2~16	3~12
	YKP11—D3—P5—B8—L8	

Optional Processing

Part Number	0.1 mm Inc.	1 mm Inc.	Optional processing Code
Code	D _{g6}	P B L	
YKP11	4 5~8 2~16	3~12	HC AGD
	YKP11—D3—P5—B8—L8—AG60		



Discount price	
Per	1~19 20~
Price	100% Additional quotation



Delivery	
	7

Bushings for Locating Pins

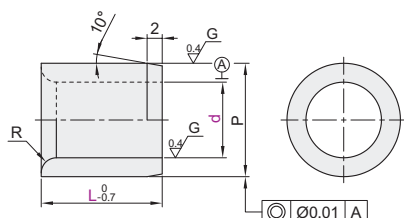
L Selectable, Standard/Thin Wall Type No Shoulder/with Shoulder

No Shoulder		with Shoulder		L Size	Tolerance Grade	Material		Treated Hardness	Surface Treatment
Standard	Thin Wall	Standard	Thin Wall			GB	Equiv.		
YLJ01	YLJ41	YKY01	YKY41	Selection	Pp6	9CrWMn	SKS3	58HRC~	—
YLJ02	—	YKY02	YKY42			9Cr18Mo	SUS440C	48~53HRC~	Electroless Nickel Plating
—	YLJ51	YKY11	—			9CrWMn	SKS3	58HRC~	—
YLJ21	YLJ61	YKY21	—	Selection	Pm6	9CrWMn	SKS3	58HRC~	Electroless Nickel Plating
YLJ22	YLJ62	YKY22	YKY62			9Cr18Mo	SUS440C	48~53HRC~	—
YLJ31	YLJ71	YKY31	—			9Cr18Mo	SUS440C	48~53HRC~	—

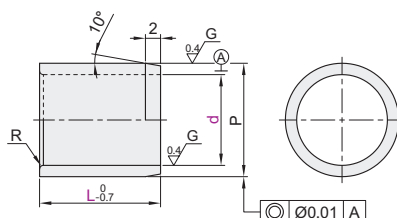
Inventory



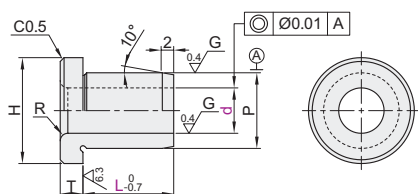
No Shoulder, Standard
YLJ01/02/21/22/31



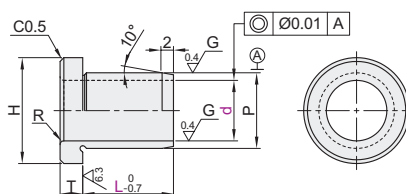
No Shoulder, Thin wall Type
YLJ41/51/61/62/71



with Shoulder, Standard
YKY01/02/11/21/22/31



with shoulder, Thin wall Type
YKY41/42/62



The first perspective

Standard

Part Number		d Tol.		L	R	H	T	P	P Tol.	
Code	d	No Surface Treatment	Electroless Nickel Plating						p6	m6
No Shoulder	2	+0.008 +0.002		5 6 8 10 12	0.8	9	2.5	5	+0.020 +0.012	+0.012 +0.004
with Shoulder	3					11		7		
Pp6	4		H7	5 6 8 10 12 15 16 20	1.0	12	3	8	+0.024 +0.015	+0.015 +0.006
YLJ01	5	+0.012 +0.004				14		10		
YLJ02	6			5 6 8 10 12 15 16 20 25		16		12		
YKY01	8	+0.014 +0.005		6 8 10 12 15 16 20 25		19	4	15	+0.029 +0.018	+0.018 +0.007
YKY11	10			8 10 12 15 16 20 25 30		22		18		
Pm6	12	+0.017 +0.006	G6	10 12 15 16 20 25 30	2.0	26		22	+0.035 +0.022	+0.021 +0.008
YLJ21	13					30	5	25		
YLJ22	15			10 12 15 16 20 25 30		35		30	+0.042 +0.026	+0.025 +0.009
YLJ31	16					40	6	35		
YKY31	20	+0.020 +0.007		12 15 16 20 25 30 35						
	25									

Thin Wall Type

Part Number		d Tol.		L	R	H	T	P	P Tol.	
Code	d	No Surface Treatment	Electroless Nickel Plating						p6	m6
No Shoulder	3	+0.008 +0.002		6 8 10 12		9	2.5	5	+0.020 +0.012	+0.012 +0.004
with Shoulder	4			6 8 10 12 15 16		10		6		
Pp6	5	+0.012 +0.004	H7			11	3	7	+0.024 +0.015	+0.015 +0.006
YLJ41	6			6 8 10 12 15 16 20	0.5	12		8		
YLJ51	8	+0.014 +0.005				14		10		
YKY41	10			8 10 12 15 16 20		17	4	13	+0.029 +0.018	+0.018 +0.007
YKY42	12	+0.017 +0.006	G6	10 12 15 16 20		19		15	+0.035 +0.022	+0.021 +0.008
Pm6	13			10 12 15 16 20	1.0	21		17		
YLJ61	15			10 12 15 16 20		24	5	19		
YLJ62	16			10 12 15 16 20 25		26		21	+0.042 +0.026	+0.025 +0.009
YLJ71	20	+0.020 +0.007		16 20 25	2.0	31	6	26		
	25					36		31		



Please order as shown

Standard

Part Number	d	L
YKY01	2	5 6 8 10 12
YKY02	3	5 6 8 10 12
YKY01	d3	L8

Thin Wall Type

Part Number	d	L
YKY41	3	6 8 10 12
YKY42	4	6 8 10 12 15 16
YKY41	d4	L12



Discount price

Per	1~49	50~
Price	100%	Additional quotation



Delivery
6

Surface free treatment



Delivery
7

Surface finish

L Configurable, Standard/Thin Wall Type

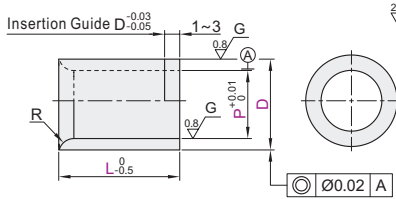
No Shoulder/with Shoulder

Bushings for Locating Pins

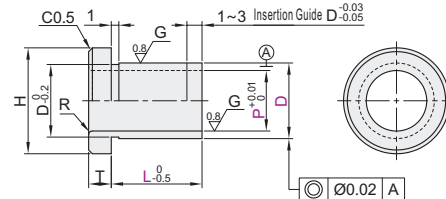


No Shoulder		with Shoulder		L Size	Material		Hardness	Surface Treatment
Standard		Thin Wall Type			GB	Equiv.		
Dp6	Dm6	Dp6	Dm6					
YLL01	YLL21	—	—	Configurable	9CrWMn	SKS3	54~58HRC	—
—	—	YLF43	YLF63					Electroless Nickel Plating

No Shoulder, Standard
YLL01
YLL21



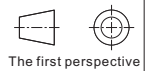
with Shoulder, Thin Wall Type
YLF43
YLF63



Length of the guiding part

L	Length of the guiding part
5 ~ 14.9	1
15 ~ 29.9	2
30 ~	3

when L<5, no processing on the guiding part.



The first perspective

No Shoulder, Standard

Part Number		D Tol.		0.01 mm Inc.		0.1 mm Inc.		R
Code	D	p6	m6	P	L			
Dp6 YLL01	5	+0.020 +0.012	+0.012 +0.004	2.00~2.50	5.0~8.0			0.8
	7			2.00~3.50	5.0~10.0			
	8	+0.024 +0.015	+0.015 +0.006	3.00~4.50	5.0~15.0			1.0
	10			4.00~6.50	5.0~22.0			
Dm6 YLL21	12			6.00~8.50				
	15	+0.029 +0.018	+0.018 +0.007	8.00~10.50				
	18			10.00~12.50				
	20			12.00~13.50	10.0~42.0			2.0
	22			12.00~13.50				
	25	+0.035 +0.022	+0.021 +0.008	13.00~15.50				
	26			15.00~16.50				
	30			16.00~20.50				
	35	+0.042 +0.028	+0.025 +0.009	20.00~25.00	12.0~62.0			3.0

with Shoulder, Thin Wall Type

Part Number	D Tol.	0.01 mm Inc.	0.1 mm Inc.	R	H	T
Code	D	p6	m6	P	L	
Dp6 YLF43	5	+0.020 +0.012	+0.012 +0.004	2.20~3.00	3.0~5.0	≤0.5
	6			3.00~4.00	3.0~5.5	9
	7			3.51~5.00	3.0~8.0	11
	8	+0.024 +0.015	+0.015 +0.006	4.51~6.00	3.0~12.0	12
Dm6 YLF63	9			4.51~6.50		13.5
	10			6.51~8.00		14
	11			8.00~9.00	3.0~17.0	15
	12			8.51~9.00		16
	13			8.51~10.00		17
	14	+0.029 +0.018	+0.018 +0.007	9.00~11.00		18
	15			10.51~12.00	10.0~37.0	19
	17			10.51~13.00		21
	18			12.51~14.00		22
	19				5.0~35.0	24
	20			13.51~15.00	10.0~37.0	26
	21				5.0~35.0	5
	22	+0.035 +0.022	+0.021 +0.008	13.51~17.00		30
	25			15.51~19.00	10.0~37.0	
	26			16.51~20.00		35
	30			20.51~24.00		36
	31	+0.042 +0.028	+0.025 +0.009	25.01~29.00	12.0~52.0	40
	35					

When P≤3.59, L+T≤P×2.5; When P≥3.60, L+T≤P×3.0.



Optional Processing

Code	TD()	DA	RE
Spec.	Change Shoulder Thickness	Adds an adhesive reservoir groove	Machines Radius R on both sides
	Ordering Code TD4 ① 1 mm Inc. ② Applicable when D≥12. ③ Only applicable to with shoulder types.	When L≤13.0 When L>13.0 Ordering Code DA ① When L≤13, 2 oil grooves are processed. ② When L>13, 3 oil grooves will be processed. ③ When D≤13, D-P≥3. When D≥14, D-P≥4. ④ Only applicable to standard types and L>9 and above specifications.	Ordering Code RE ① Applicable to Thickness 1.5 mm or more. ② Size of R will be the same as R on shoulder side with D dimension 10 or more.



Please order as shown

with Shoulder- Thin wall Type

Part Number		0.01 mm Inc.	0.1 mm Inc.
Code	D	P	L
YLF43	7	3.51~5	3~8
	8	4.51~6	3~12

YLF43—D8—P5—L5

YLF43—D8—P5—L5

Optional Processing

Part Number	0.01 mm Inc.	0.1 mm Inc.	Optional processing Code
Code	D	P	L
YLF43	30	20.51~24	10~37
YLF63	35	25.01~29	12~52

YLF43—D35—P26—L50—TD4



Discount price
Per 1~4 5~
Price 100% Additional quotation



① Surface free treatment

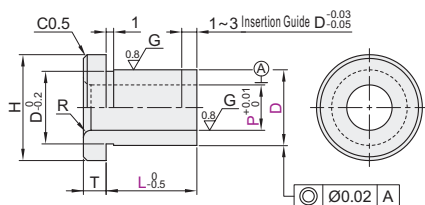
② Surface finish

Bushings for Locating Pins

- with Shoulder, L Configurable, Standard
- No Shoulder/with Shoulder(Copper Alloy)

with Shoulder, L Configurable, Standard

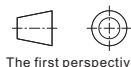
Standard		L Size	Material		Hardness	Surface Treatment
Dp6	Dm6		GB	Equiv.		
YLC01	YLC21	Configurable	9CrWMn	SKS3	48~58HRC	—
—	YLC22		9Cr18Mo	SUS440C	48~53HRC	Black Oxide
YLC16	—					



Length of the guiding part

L	Length of the guiding part
5 ~ 14.9	1
15 ~ 29.9	2
30 ~	3

when L<5, no processing on the guiding part.



The first perspective

Part Number	D Tol.	0.01 mm Inc.	0.1 mm Inc.	R	H	T
Code	D	p6	m6	P	L	
Dp6 YLC01 YLC16	5	+0.020 +0.012	+0.012 +0.004	2.20~2.50	3.0~5.5	0.8 9 2.5
	7	+0.024 +0.015	+0.015 +0.006	3.00~4.50	3.0~8.0	1.0 12 3
	8			4.00~6.50	3.0~12.0	1.0 14 3
	10			6.00~8.50	3.0~17.0	1.0 16 3
	12			8.00~10.50		1.0 19 4
	15			10.00~12.50		1.0 22 4
Dm6 YLC21 YLC22	20	+0.029 +0.018	+0.018 +0.007	12.00~13.50	10.0~37.0	2.0 26 5
	22			13.00~15.50		2.0 30 5
	25	+0.035 +0.022	+0.021 +0.008	15.00~16.50		2.0 35 6
	26			16.00~20.50		2.0 35 6
	30			20.00~25.00		2.0 40 6
	35	+0.042 +0.026	+0.025 +0.009			



Please order as shown

Part Number	D	P	L
Code	D	P	L
YLC01	5	2.2~2.5	3~5.5
YLC01	7	2.2~2.5	3~8.0

YLC01—D7—P3—L5

Optional Processing

Part Number	D	P	L	Optional processing Code
Code	D	P	L	TD() ME() RE()
YLC01	5	2.2~2.5	3~5.5	TD() ME() RE()
YLC01	7	2.2~2.5	3~8.0	TD() ME() RE()

YLC01—D7—P3—L5—DA



Discount price

Per	1~4	5~
Price	100%	Additional quotation



Delivery

7



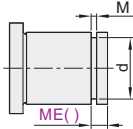
Optional Processing

Code	Spec.
TD()	Change Shoulder Thickness [Ordering Code] TD4 ① 1 mm Inc. ② Applicable when D≥12.
DA	Adds an Adhesive Eservoir Groove When L≤13.0 ① When L≤13, 2 oil grooves are processed. When L>13, 3 oil grooves will be processed. ② When D≤13, D-P≥3. When D≥14, D-P≥4. Only applicable to standard types and L>9 and above specifications.
RE	Machines Radius R on Both Sides [Ordering Code] RE ① Applicable to Thickness 1.5 mm or more. ② Size of R will be the same as R on shoulder side with D dimension 10 or more.

Code

Spec.

Add Snap Ring Groove



Ordering Code

ME2.0

① Only applicable to standard type L10 and above.

ME(

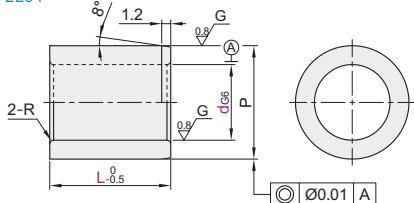
D	d	M	ME
8	7 ^{+0.09} ₀	0.9	1.9~3.0
10	9.6 ^{+0.09} _{-0.09}		
12	11.5	1.15	2.2~4.0
15	14.3 ⁰ _{-0.11}		
18	17		2.4~5.0
20	19		
22	21	1.35	2.4~5.0
25	23.9 ⁰ _{-0.21}		
26	24.9		
30	28.6	1.65	2.7~5.0
35	33 ⁰ _{-0.25}		

No Shoulder/with Shoulder(Copper Alloy)

Code	Type	Tol.	Material
YLL91	No Shoulder	Pp6	High-tensile Brass
YLF81	with Shoulder	Pp6	
YLF86		Pm6	

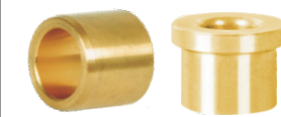
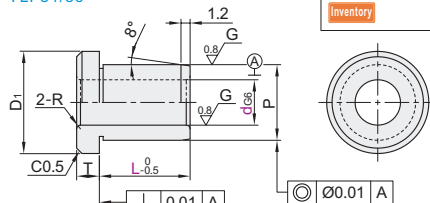
No Shoulder

YLL91



with Shoulder

YLF81/86



Inventory

The first perspective

Part Number		L		R	P	P Tol.		with Shoulder	
Code	dG6					p6	m6	D1	T
No Shoulder (Pp6) YLL91	5	+0.012	5 6 8 10 12 15	0.5	10	+0.024 +0.015	+0.015 +0.006	13.5	3
	6	+0.004	5 6 8 10 12 15 16		12			15.5	
	8	+0.014 +0.005	5 6 8 10 12 15 16 20		15	+0.029 +0.018	+0.018 +0.007	18.5	4
	10		6 8 10 12 15 16 20 25	1	18			21.5	
12		8 10 12 15 16 20 25 30	22				25.5		
13	+0.017 +0.006	10 12 15 16 20 25 30	25		+0.035 +0.022	+0.021 +0.008	29.5	5	
15		12 15 16 20 25 30	26						
16		12 15 16 20 25 30	30				34.5		
with Shoulder (Pp6) YLF81 (Pm6) YLF86	20		12 15 16 20 25 30	1.5	35	+0.042 +0.026	+0.025 +0.009	39.5	6
25	+0.020 +0.007		16 20 25 30 35						



Please order as shown

Part Number	d	L
Code	d	L
YLF81	6	6 8 10 12
YLF86	12	8 10 12

YLF81—d10—L8



Discount price

Per	1~9	10~
Price	100%	Additional quotation



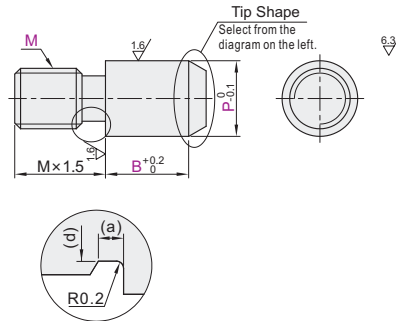
Delivery

7

Fully Threaded Shank Pins

Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
YLN02	Fully Threaded	9CrWMn	SKS3	Treated Hardness: 53~58HRC, Plating Hardness: 850HV-	Hard Chrome Plating, Plating Thickness: 3~5 μm
YLN11	Shank Pins	0Cr18Ni9	SUS304	—	—

Tip Shape	
A	



Self-made

M	(a)	(d)
3	1.3	2.2
4	1.8	2.9
5	2	3.7
6	2.5	4.4
8	3.1	6
10	3.7	7.7
12	4.4	9.4
16	5	13
20	6.3	16.4

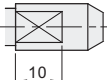
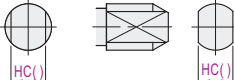
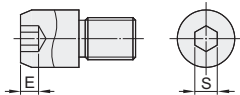
① Above dimensions are for reference and not guaranteed.



Part Number			P 0.01 mm Inc.	B 0.1 mm Inc.	R 1 mm Inc.	G 1 mm Inc.
Code	Tip Shape	M			A Shape only, C Shape	B Shape only
YLN02 (SKS3)	A	3	3.50~8.00		Shape A R≥P/2	Shape B R≤P
		4	4.50~8.00	1.0~12.0		
		5	5.50~8.00			
		6	6.50~10.00	1.0~15.0		
YLN11 (SUS304)	B	8	9.00~15.00	1.0~30.0	Shape C R≤P/2	
	C	10	11.00~17.00	3.0~30.0		
		12	13.00~20.00			
		16	17.00~27.00			
		20	21.00~30.00			



Optional Processing

Code	TA	HC ()	SA ()																																								
Spec.	Wrench Hole (Ø3.5) 	Wrench Flats When B>12  When B≤12 	Hex Socket Machining 																																								
	Ordering Code TA Adds a Ø3.5 hole. ① Not applicable when B≤10, P≤8.	Ordering Code HC10 ① 1 mm Inc. ② D≤HC < P	Ordering Code SA3 <table><tr><th>G</th><th>B</th><th>S</th><th>S</th><th>E</th></tr><tr><td>4~5</td><td></td><td>2 2.5</td><td>2</td><td>2</td></tr><tr><td>6~7</td><td>10~</td><td>2 2.5 3 4</td><td>2.5</td><td>2</td></tr><tr><td>8~9</td><td></td><td>2 2.5 3 4 5</td><td>3</td><td>2</td></tr><tr><td>10~30</td><td>10~12.9</td><td>2 2.5 3 4 5 6</td><td>4</td><td>2.5</td></tr><tr><td></td><td>13</td><td>2 2.5 3 4 5 6 8</td><td>5</td><td>3</td></tr><tr><td></td><td></td><td></td><td>6</td><td>4</td></tr><tr><td></td><td></td><td></td><td>8</td><td>5</td></tr></table> ① A-shaped and c-shaped are not applicable. ② Applicable to Shape B with M≥6 only	G	B	S	S	E	4~5		2 2.5	2	2	6~7	10~	2 2.5 3 4	2.5	2	8~9		2 2.5 3 4 5	3	2	10~30	10~12.9	2 2.5 3 4 5 6	4	2.5		13	2 2.5 3 4 5 6 8	5	3				6	4				8	5
	G	B	S	S	E																																						
4~5		2 2.5	2	2																																							
6~7	10~	2 2.5 3 4	2.5	2																																							
8~9		2 2.5 3 4 5	3	2																																							
10~30	10~12.9	2 2.5 3 4 5 6	4	2.5																																							
	13	2 2.5 3 4 5 6 8	5	3																																							
			6	4																																							
			8	5																																							



Please order as shown

Part Number		P	B	R 1 mm Inc.
Code	Tip Shape	0.01 mm Inc.	0.1 mm Inc.	A Shape only, C Shape
YLN02	A	3	3.50~8.00	Shape A
YLN11	B	4	4.50~10.00	R ≥ P/2

YLN02—A—M4—P6—B6—R6

Optional Processing

Part Number		P	B	R 1 mm Inc.	Optional processing Code
Code	Tip Shape	0.01 mm Inc.	0.1 mm Inc.	A Shape only, C Shape	
YLN02	A	17.00~27.00		Shape A	① HC () SA ()
YLN11	B	21.00~30.00	5.0~30.0	R ≥ P/2	

YLN02—A—M16—P25—B20—R6—TA



Discount price	
Per	20~
Price	100% Additional quotation



Delivery	
Per	4
Price	Surface free treatment No hardness



Delivery	
Per	7
Price	Surface finish

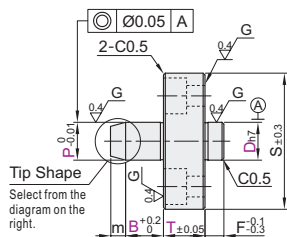
◀ Round Flanged/Compact Flanged Flat Head

Code	Type	Shape	Material		Hardness	Surface Treatment
			GB	Equiv.		
YLP01	Round	Round	9CrWMn	SKS3	Treated Hardness:58~61HRC	Hard Chrome Plating,Plating Thickness: 3~5μm
YLP21	Flange	Diamond	9CrWMn	SKS3	Treated Hardness:58~61HRC	
YLP41	Compact Flange	Round	0Cr18Ni9	SUS304	Plating Hardness:850HV	
YLP52			9CrWMn	SKS3	Treated Hardness:58~61HRC	
YLP61		Diamond	9CrWMn	SKS3	Treated Hardness:58~61HRC	

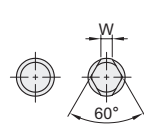


Round Flange
YLP01
YLP21

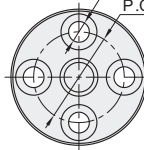
Compact Flanged
YLP41
YLP52
YLP61



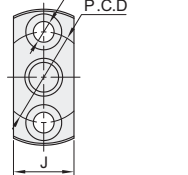
Round Diamond



4-d Through
Counterbore d: Depth h



2-d Through
Counterbore d₁ Depth h



The first perspective

[illegible]

Locating Pins Bushings



Please order
as shown

Part Number			P	B	T
Code	Tip Shape	D	0.01 mm Inc.	0.1 mm Inc.	0.1 mm Inc.
YLP01	A	5	3.00~6.00	3.0~12.0	5.0~10.0
YLP21	B	6	4.00~7.00	3.0~15.0	

YLP01—B—D6—P6—B4—T6



- Discount price

Per	1~10	11~
Price	100%	Additional quotation



Delivery

6



Delivery

7

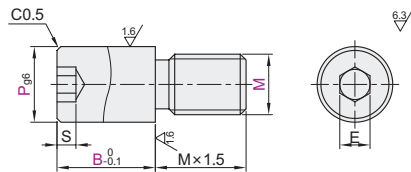
❗ Surface free treatment

❗ Surface finish

Marker Pins/Feed Pins

Marker Pins

Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
YMC11	Hex Socket Type	0Cr18Ni9	SUS304	—	—

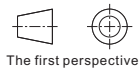


P Tol.

P	g6
5.0~6.0	-0.004 -0.012
6.1~10.0	-0.005 -0.014
10.1~15.0	-0.006 -0.017



Self-made



Part Number		P 0.1 mm Inc.	B 0.1 mm Inc.	S	E
Code	M				
YMC11	3	5.0~6.0	6.5~12.0	2	2
	4	5.0~7.0	6.5~12.0	2	2.5
	5	6.0~8.0	6.5~12.0	2	3
	6	6.5~10.0	6.5~15.0	2	3
	8	8.5~12.0	7.5~15.0	2.5	4
	10	10.5~15.0	8.5~15.0	3	5



Part Number		P	B
Code	M	0.1 mm Inc.	0.1 mm Inc.
YMC11	3	5.0~6.0	6.5~12.0
	4	5.0~7.0	6.5~15.0

YMC11—M4—P6—B8

YMC11—M4—P6—B8



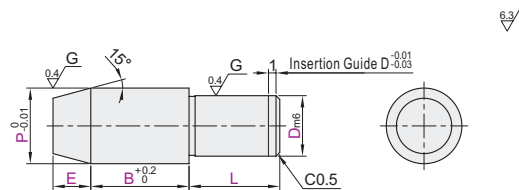
Discount price	Per	1~4	5~
Price	100%	Additional quotation	



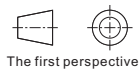
Delivery	4
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Feed Pins

Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
YMF06	Round	0Cr18Ni9	SUS304	Plating Hardness:850HV~	Hard Chrome Plating , Plating Thickness: 5~8 μm



Self-made



Part Number			0.01 mm Inc.	1 mm Inc.	0.1 mm Inc.	
Code	D _{m6}		P	L	B	E
YMF06	2	+ 0.008 + 0.002	2.50~5.00	2~8	2.0~10.0	0.5~10.0
	3		3.50~5.00	3~8		
	4		4.50~7.00	4~10		
	5	+ 0.012 + 0.004	5.50~8.00	5~12		
	6		6.50~10.00	6~15	2.0~12.0	
	8		9.00~13.00	8~18	2.0~15.0	
	10	+ 0.015 + 0.006	10.00~13.00	10~22	2.0~20.0	



Part Number		0.01 mm Inc.	1 mm Inc.	0.1 mm Inc.	
Code	D	P	L	B	E
YMF06	2	2.5~5	2~8	2~10	0.5~10
	3	3.5~6	3~8		

YMF06—D—P—L—B—E

YMF06—D3—P4—L5—B5—E5



Discount price	Per	1~19	20~
Price	100%	Additional quotation	



Delivery	7
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