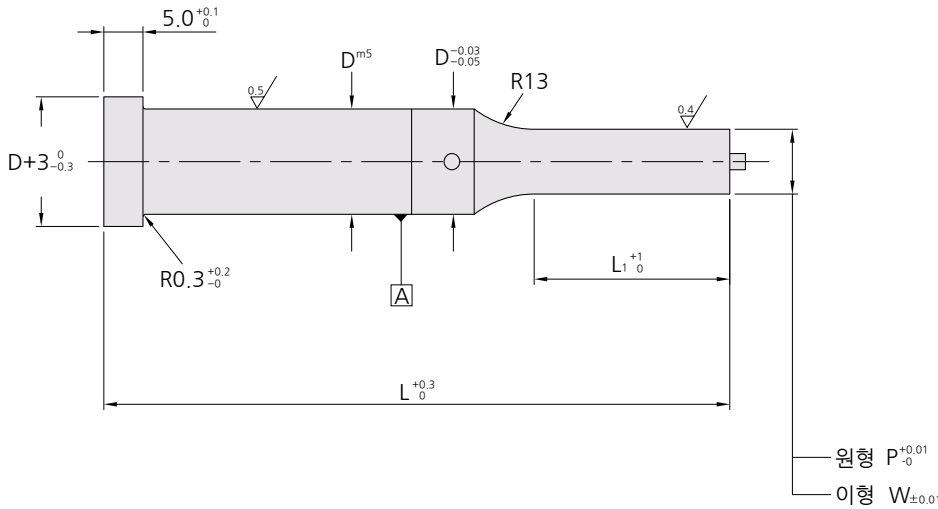
PUNCH 부품

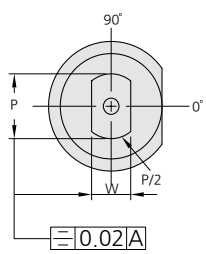
PUNCH & MATRIX

PUNCH 부품 Contents

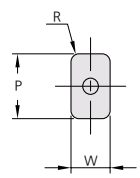
TYPE TJ_



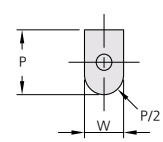
TJH



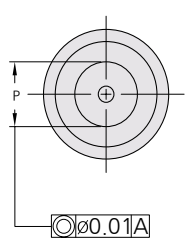
TJK



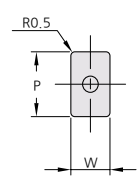
TJJ



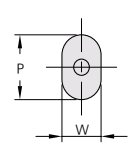
TJX



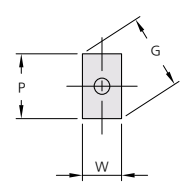
TJL



TJO



TJR



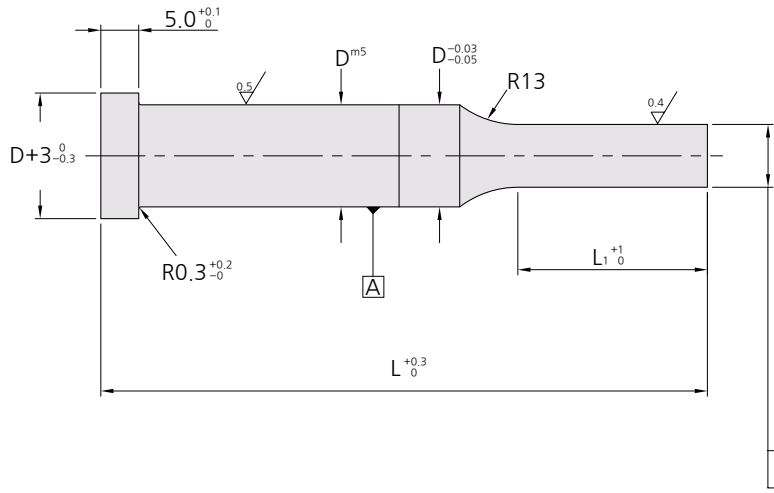
* P≧W
* R= 지정가능
* G=$\sqrt{P^2+W^2}$

호칭경 D	L1 Std.	L1 Alt.	Type&D TJX	원형 P	Type&D TJ_	이형 min. – max. W P/G	L 40	50	56	60	63	70	71	80	90	100
5	13	19	TJX05	1.60–4.99	TJ_05	1.60–5.00	●	●	●	●	●	●	●	●		
6	13	19	TJX06	2.40–5.99	TJ_06	2.40–6.00	●	●	●	●	●	●	●	●	●	●
8	19	25	TJX08	3.20–7.99	TJ_08	3.20–8.00		●	●	●	●	●	●	●	●	●
10	19	25	TJX10	4.50–9.99	TJ_10	4.50–10.00		●	●	●	●	●	●	●	●	●
13	19	25	TJX13	6.00–12.99	TJ_13	6.00–13.00		●	●	●	●	●	●	●	●	●
16	19	25	TJX16	8.00–15.99	TJ_16	7.20–16.00		●	●	●	●	●	●	●	●	●
20	19	25	TJX20	10.00–19.99	TJ_20	8.00–20.00			●	●	●	●	●	●	●	●
25	19	25	TJX25	12.00–24.99	TJ_25	9.00–25.00			●	●	●	●	●	●	●	●
32	25	30	TJX32	16.00–31.99	TJ_32	10.00–32.00					●	●	●		●	●

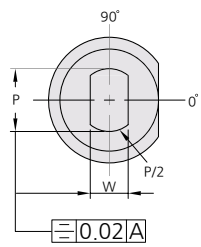
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
TJX	16	–	19	–	80	–	P8.0
TJR	16	–	25	–	80	–	P8.5, W8.0

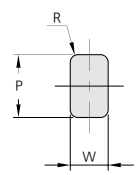
TYPE TP_



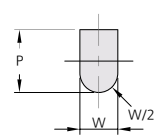
TPH



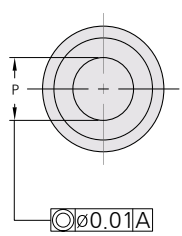
TPK



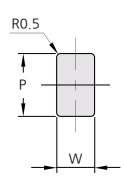
TPJ



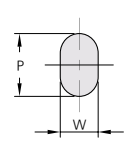
TPX



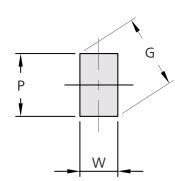
TPL



TPO



TPR



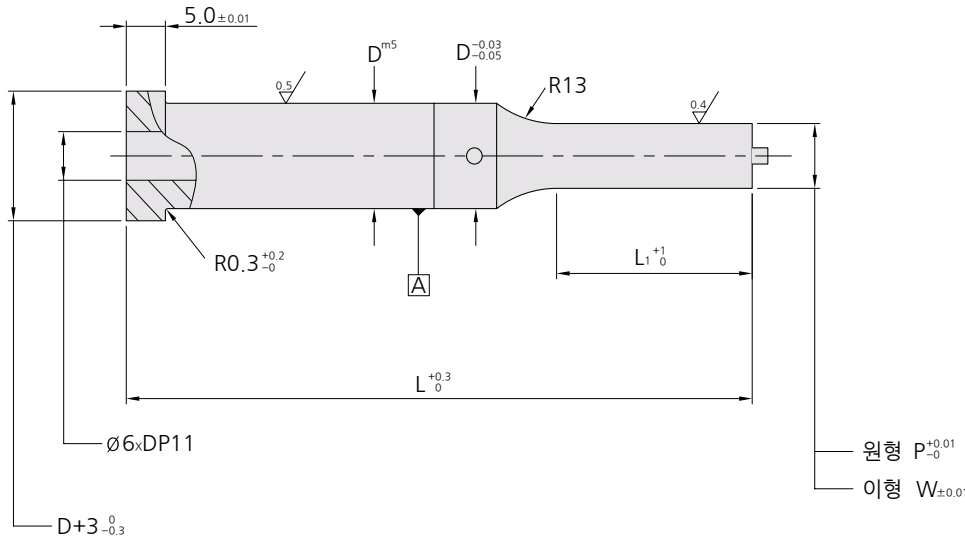
* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

호칭경 D	L1 Std.	L1 Alt.	Type&D TPX	원형 P	Type&D TP_	이형 min. – max. W P/G	L 40	50	56	60	63	70	71	80	90	100
4	8	13	TPX04	1.60–3.99	TP_04	1.60–4.00	●	●	●	●	●	●	●	●		
5	13	19	TPX05	1.60–4.99	TP_05	1.60–5.00	●	●	●	●	●	●	●	●		
6	13	19	TPX06	1.60–5.99	TP_06	1.60–6.00	●	●	●	●	●	●	●	●	●	●
8	19	25	TPX08	2.50–7.99	TP_08	2.50–8.00		●	●	●	●	●	●	●	●	●
10	19	25	TPX10	3.20–9.99	TP_10	3.20–10.00		●	●	●	●	●	●	●	●	●
13	19	25	TPX13	5.00–12.99	TP_13	4.50–13.00		●	●	●	●	●	●	●	●	●
16	19	25	TPX16	8.00–15.99	TP_16	6.00–16.00		●	●	●	●	●	●	●	●	●
20	19	25	TPX20	10.00–19.99	TP_20	8.00–20.00			●	●	●	●	●	●	●	●
25	19	25	TPX25	12.00–24.99	TP_25	9.00–25.00			●	●	●	●	●	●	●	●
32	25	30	TPX32	16.00–31.99	TP_32	10.00–32.00					●	●	●	●	●	●

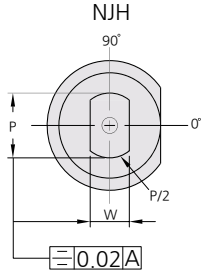
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
TPX	16	–	19	–	80	–	P8.0
TPR	16	–	25	–	80	–	P8.5, W8.0

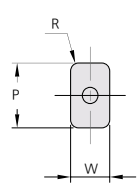
TYPE NJ_



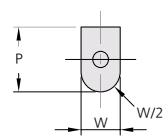
NJH



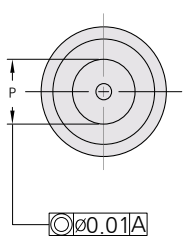
NJK



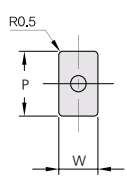
NJJ



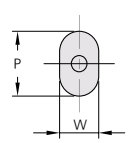
NJX



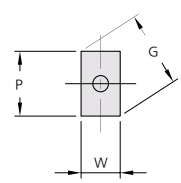
NJL



NJO



NJR



* P≧W
* R= 지정가능
* $G=\sqrt{P^2+W^2}$

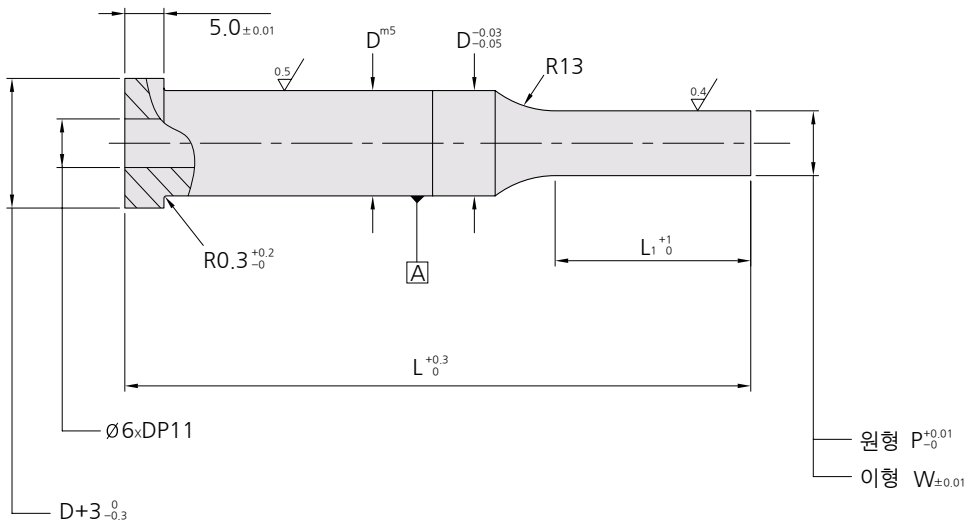
호칭경 D	L1 Std.	L1 Alt.	Type&D NJX	원형 P	Type&D NJ_	이형 min. – max. W P/G	L 71	L 80	L 90	L 100
10	19	25	NJX10	4.50–9.99	NJ_10	4.50–10.00	●	●	●	●
13	19	25	NJX13	6.00–12.99	NJ_13	6.00–13.00	●	●	●	●
16	19	25	NJX16	8.00–15.99	NJ_16	7.20–16.00	●	●	●	●
20	19	25	NJX20	10.00–19.99	NJ_20	8.00–20.00	●	●	●	●
25	19	25	NJX25	12.00–24.99	NJ_25	9.00–25.00	●	●	●	●
32	25	30	NJX32	16.00–31.99	NJ_32	10.00–32.00	●	●	●	●

Threaded dowel 6mm x 25

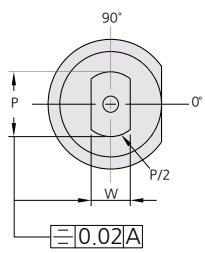
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
NJX	16	–	19	–	80	–	P8.0
NJR	16	–	25	–	80	–	P8.5, W8.0

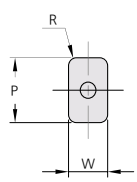
TYPE NP_



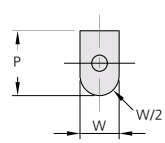
NPH



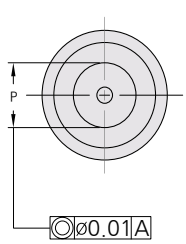
NPK



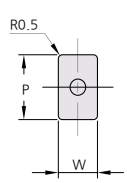
NPJ



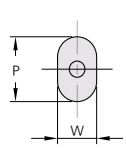
NPX



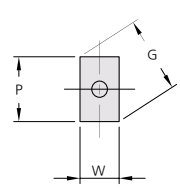
NPL



NPO



NPR



* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

호칭경 D	L1 Std.	L1 Alt.	Type&D NPX	원형 P	Type&D NP_	이형 min. – max. W P/G	L 71	L 80	L 90	L 100
10	19	25	NPX10	4.50–9.99	NP_10	4.50–10.00	●	●	●	●
13	19	25	NPX13	6.00–12.99	NP_13	6.00–13.00	●	●	●	●
16	19	25	NPX16	8.00–15.99	NP_16	7.20–16.00	●	●	●	●
20	19	25	NPX20	10.00–19.99	NP_20	8.00–20.00	●	●	●	●
25	19	25	NPX25	12.00–24.99	NP_25	9.00–25.00	●	●	●	●
32	25	30	NPX32	16.00–31.99	NP_32	10.00–32.00	●	●	●	●

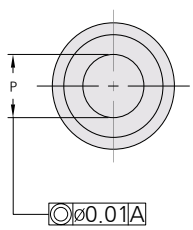
Threaded dowel 6mm x 25

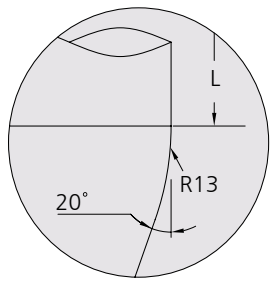
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
NPX	16	–	19	–	80	–	P8.0
NPR	16	–	25	–	80	–	P8.5, W8.0

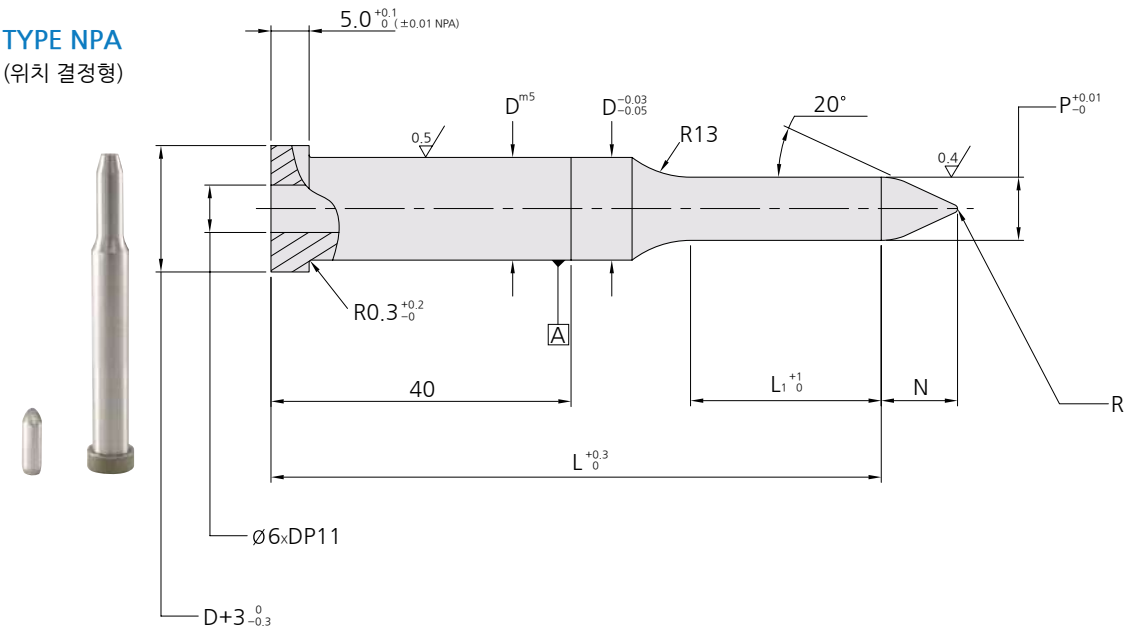
TYPE TPA
(표준형)

TPA





TYPE NPA
(위치 결정형)



호칭경 D	L1 Std.	L1 Alt.	Type&D TPA/NPA	원형 P	Nose Lgth. N	L 65	72	73	82	92	102	112	127	142
10	21	27	TPA/NPA10	4.85–10.00	8	●	●	●	●	●	●	●		
13	21	27	TPA/NPA13	6.30–13.00	10	●	●	●	●	●	●	●	●	
16	21	27	TPA/NPA16	9.95–16.00	15		●	●	●	●	●	●	●	●
20	21	27	TPA/NPA20	13.60–20.00	20		●	●	●	●	●	●	●	●
25	21	27	TPA/NPA25	17.25–25.00	25		●	●	●	●	●	●	●	●
32	27	32	TPA/NPA27	20.85–32.00	30			●	●	●	●	●	●	●

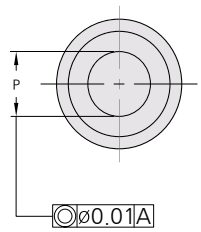
Threaded dowel 6mm x 25

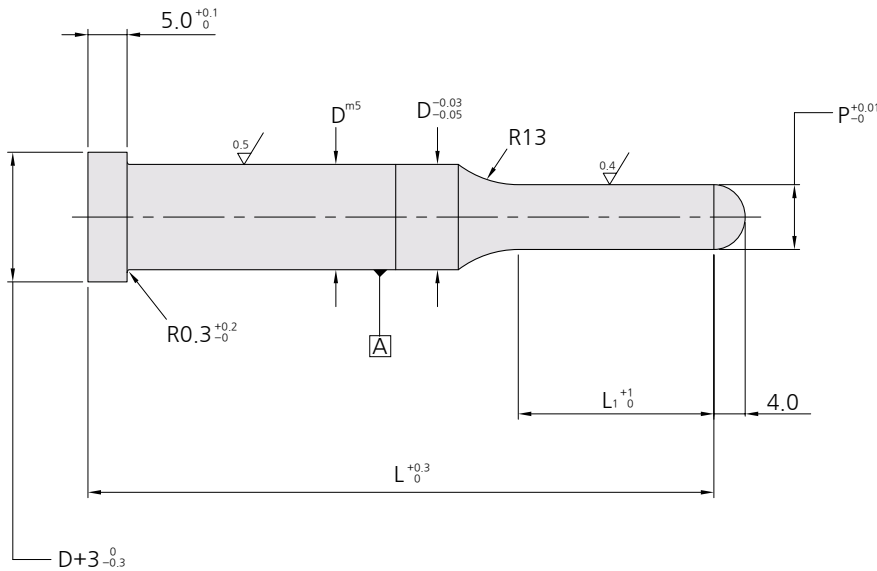
규격표기 방법

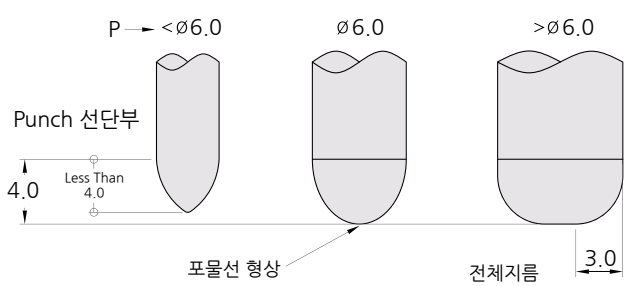
Catalog No.	D	–	L1	–	L	–	P
TPA	13	–	27	–	114	–	12.9

TYPE TPT

TPT


P
⌀0.01 A


5.0 +0.1 0
D m5
D −0.03 −0.05
R13
P +0.01 −0
0.5
0.4
R0.3 +0.2 −0
A
L1 +1 0
4.0
L +0.3 0
D+3 0 −0.3


P
<⌀6.0
⌀6.0
>⌀6.0
Punch 선단부
4.0
Less Than 4.0
포물선 형상
전체지름
3.0

호칭경 D	L1 Std.	L1 Alt.	Type&D TPT	원형 P	L 42	52	58	62	65	72	73	82	92	102
04	8	13	TPT04	1.55–4.00	●	●	●	●	●	●	●	●		
05	13	19	TPT05	1.55–5.00	●	●	●	●	●	●	●	●		
06	13	19	TPT06	1.55–6.00	●	●	●	●	●	●	●	●	●	●
08	19	25	TPT08	2.45–8.00		●	●	●	●	●	●	●	●	●
10	19	25	TPT10	3.15–10.00		●	●	●	●	●	●	●	●	●
13	19	25	TPT13	4.95–13.00		●	●		●	●	●	●	●	●
16	19	25	TPT16	7.95–16.00		●	●	●	●	●	●	●	●	●
20	19	25	TPT20	9.95–20.00			●	●	●	●	●	●	●	●
25	19	25	TPT25	11.95–25.00			●	●	●	●	●	●	●	●
32	25	30	TPT32	15.95–32.00					●	●	●	●	●	●

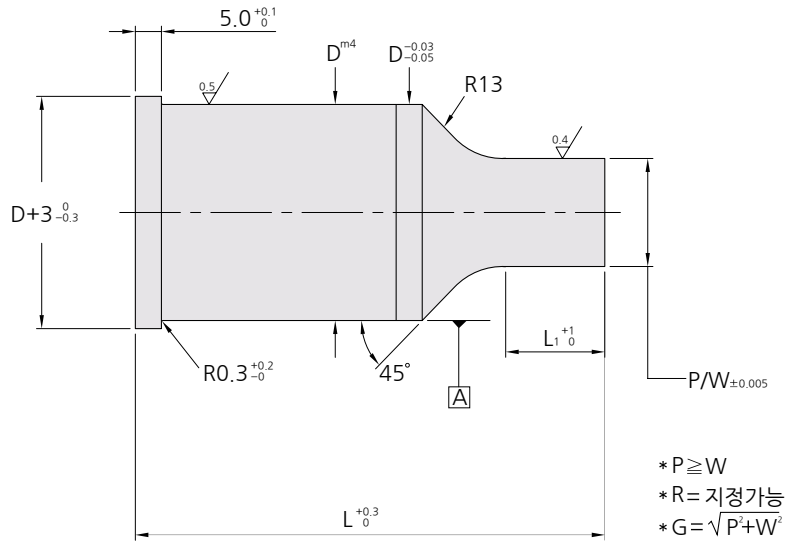
Alternate point length not available

규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
TPT	16	–	21	–	182	–	8.7

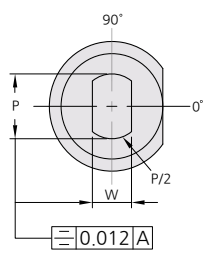
TYPE THJ_ (EJECTOR)

TYPE THP_ (표준형)

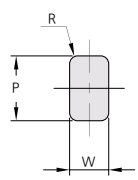


* P≧W
* R= 지정가능
* G=$\sqrt{P^2+W^2}$

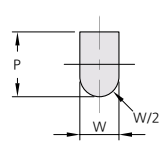
TH_H



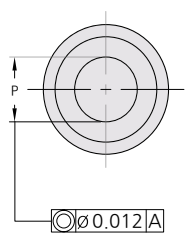
TH_K



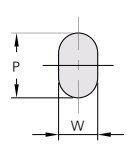
TH_J



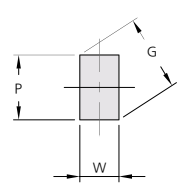
TH_X

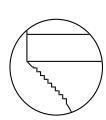


TH_O



TH_R





*D-P(or W) 가 10보다 클때,
층이 생길수 있습니다.

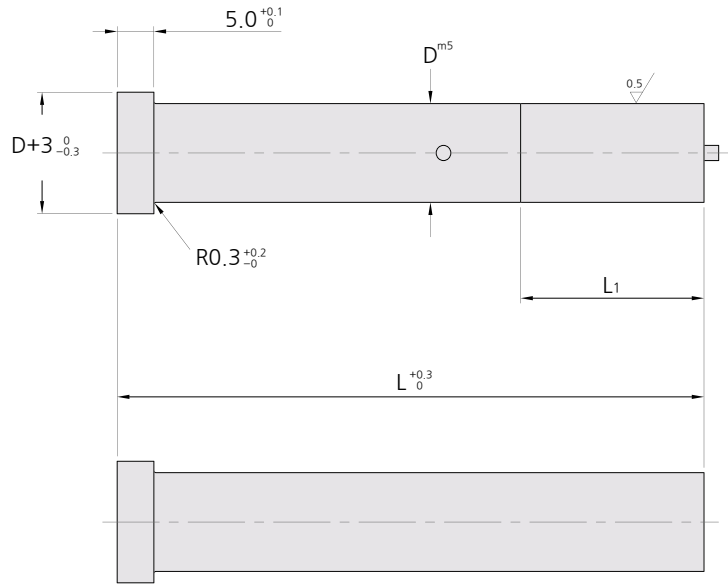
Type	호칭경 D	L1 Std.	L1 Alt.	L1 Alt.	원형 P	이형 W	L 60.0	63.0	70.0	71.0	80.0	90.0	100.0
	40.0	19			20.00–39.99	8.00–40.00	●	●	●	●	●	●	●
	45.0	19			25.00–44.99	9.00–45.00	●	●	●	●	●	●	●
	50.0	19			30.00–49.99	10.00–50.00	●	●	●	●	●	●	●
	56.0	19			35.00–55.99	11.00–56.00	●	●	●	●	●	●	●
	63.0	19			40.00–62.99	12.00–63.00	●	●	●	●	●	●	●
THJ_ THP_	40.0	19	25		20.00–39.99	8.00–40.00		●	●	●	●	●	●
	45.0	19	25		25.00–44.99	9.00–45.00		●	●	●	●	●	●
	50.0	19	25		30.00–49.99	10.00–50.00		●	●	●	●	●	●
	56.0	19	25		35.00–55.99	11.00–56.00		●	●	●	●	●	●
	63.0	19	25		40.00–62.99	12.00–63.00		●	●	●	●	●	●
	40.0	19	25	30	20.00–39.99	8.00–40.00			●	●	●	●	●
	45.0	19	25	30	25.00–44.99	9.00–45.00			●	●	●	●	●
	50.0	19	25	30	30.00–49.99	10.00–50.00			●	●	●	●	●
	56.0	19	25	30	35.00–55.99	11.00–56.00			●	●	●	●	●
	63.0	19	25	30	40.00–62.99	12.00–63.00			●	●	●	●	●

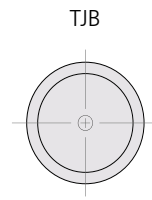
규격표기 방법

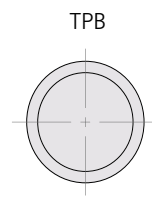
Catalog No.	D	–	L1	–	L	–	P,W
THPR	50	–	30	–	70	–	P30.0, W10

TYPE TJB (EJECTOR)

TYPE TPB (표준형)







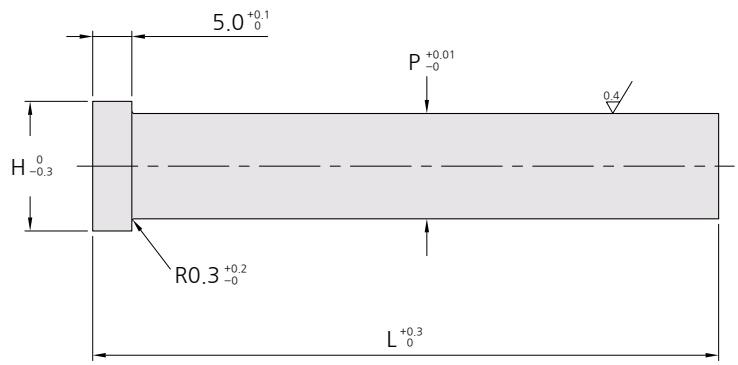
호칭경 D	L1 Std.	L1 Alt.	Type&D TJB	Type&D TPB	L 42	52	58	62	65	72	73	82	92	102
04	–	–	–	TPB04	●	●	●	●	●	●	●	●		
05	13	19	TJB05	TPB05	●	●	●	●	●	●	●	●		
06	13	19	TJB06	TPB06	●	●	●	●	●	●	●	●	●	●
08	19	25	TJB08	TPB08		●	●	●	●	●	●	●	●	●
10	19	25	TJB10	TPB10		●	●	●	●	●	●	●	●	●
13	19	25	TJB13	TPB13		●	●	●	●	●	●	●	●	●
16	19	25	TJB16	TPB16		●	●	●	●	●	●	●	●	●
20	19	25	TJB20	TPB20			●	●	●	●	●	●	●	●
25	19	25	TJB25	TPB25			●	●	●	●	●	●	●	●
32	25	30	TJB32	TPB32					●	●	●	●	●	●

Alternate point length not available

규격표기 방법

Catalog No.	D	–	L1	–	L
TJB	20	–	19	–	92

TYPE TUX

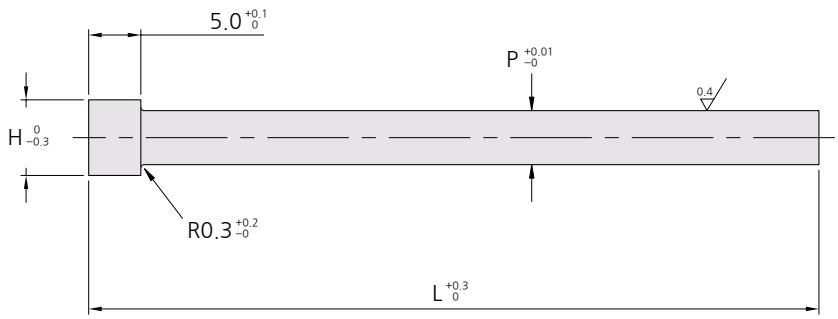


원형	L									TUX
P	50	56	60	63	70	71	80	90	100	H
3.00–4.00	●	●	●	●	●	●	●	●	●	7
4.01–5.00	●	●	●	●	●	●	●	●	●	8
5.01–6.00	●	●	●	●	●	●	●	●	●	9
6.01–8.00	●	●	●	●	●	●	●	●	●	11
8.01–10.00	●	●	●	●	●	●	●	●	●	13

규격표기 방법

Catalog No.	L	–	P
TUX	63	–	P7.0

TYPE TXX

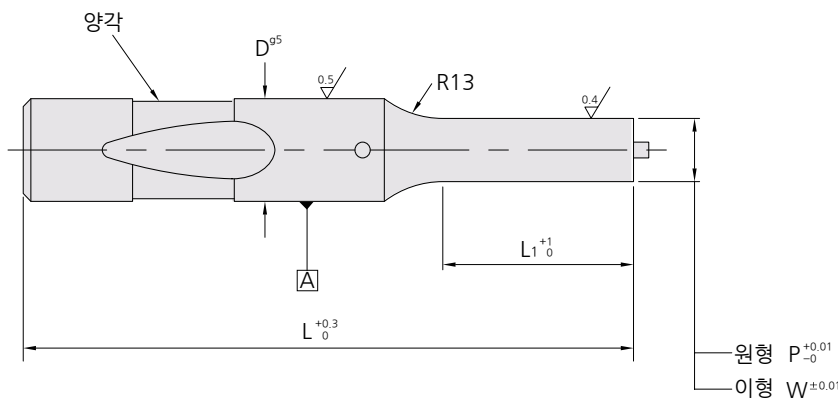


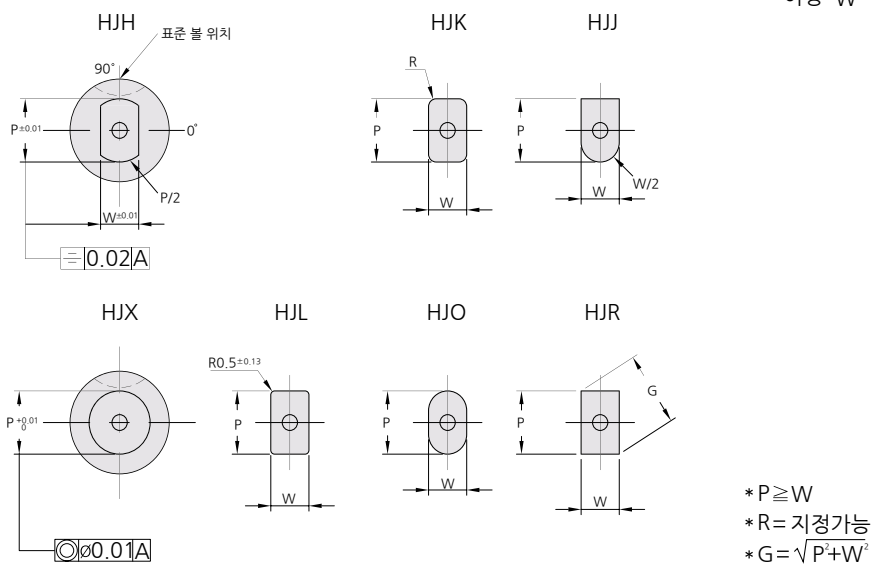
원형	L									TXX
P	40	45	50	56	60	63	70	71	80	H
0.80–1.60	●	●	●	●	●	●	●	●	●	3
1.61–2.00	●	●	●	●	●	●	●	●	●	4
2.01–3.00	●	●	●	●	●	●	●	●	●	5
3.01–4.00	●	●	●	●	●	●	●	●	●	6
4.01–5.00	●	●	●	●	●	●	●	●	●	7
5.01–6.00	●	●	●	●	●	●	●	●	●	8
6.01–7.00	●	●	●	●	●	●	●	●	●	9

규격표기 방법

Catalog No.	L	–	P
TXX	63	–	2.5

TYPE HJ_
(중하중용)





* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

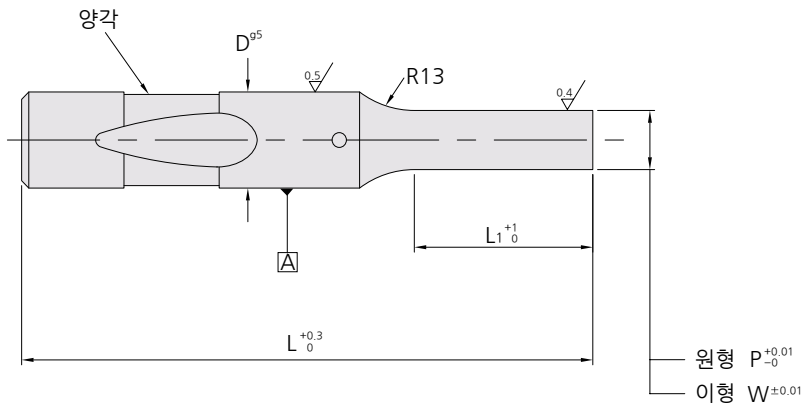
호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 63	71	80	90	100	110	125
10	19	10*	–	HPX10	2.10–9.97	HP_10	2.10–9.97	●	●	●	●	●	●	●
13	19	13	25	HPX13	5.00–12.97	HP_13	4.50–12.97	●	●	●	●	●	●	●
16	19	13	25	HPX16	8.00–15.97	HP_16	6.00–15.97	●	●	●	●	●	●	●
20	19	13	25	HPX20	12.00–19.97	HP_20	8.00–19.97	●	●	●	●	●	●	●
25	19	13	25	HPX25	16.00–24.97	HP_25	10.00–24.97		●	●	●	●	●	●
32	19	13	25	HPX32	24.97–31.97	HP_32	12.97–31.97		●	●	●	●	●	●
40	25	19	30	HPX40	30.00–39.97	HP_40	14.00–39.97			●	●	●	●	●

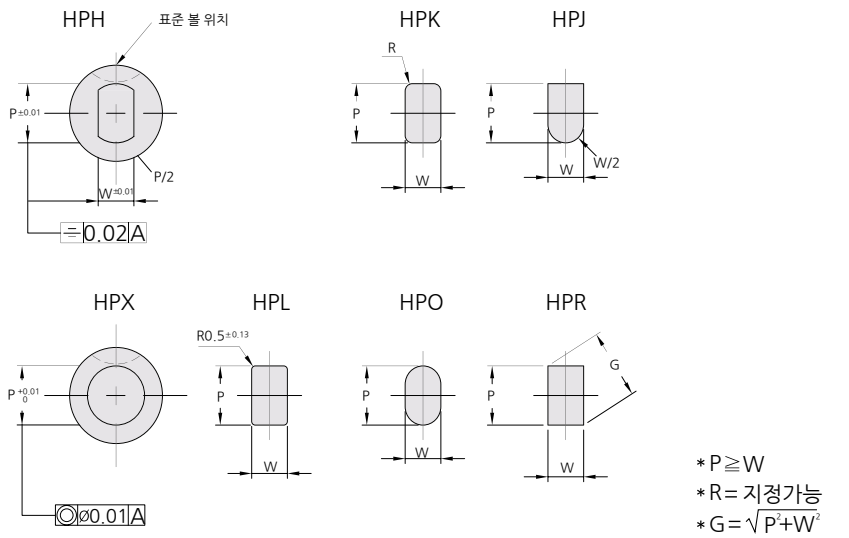
* Min P or W = 1.60 when L1 = 10

규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
HJX	13	–	13	–	80	–	P7.0
HJR	10	–	10	–	71	–	P8.5, W6.5

TYPE HP_
(중하중용)





* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W	이형 min. – max. P/G	L 63	71	80	90	100	110	125
10	19	10*	–	HPX10	2.10–9.97	HP_10	2.10–9.97		●	●	●	●	●	●	●
13	19	13	25	HPX13	5.00–12.97	HP_13	4.50–12.97		●	●	●	●	●	●	●
16	19	13	25	HPX16	8.00–15.97	HP_16	6.00–15.97		●	●	●	●	●	●	●
20	19	13	25	HPX20	12.00–19.97	HP_20	8.00–19.97		●	●	●	●	●	●	●
25	19	13	25	HPX25	16.00–24.97	HP_25	10.00–24.97			●	●	●	●	●	●
32	19	13	25	HPX32	24.97–31.97	HP_32	12.97–31.97			●	●	●	●	●	●
40	25	19	30	HPX40	30.00–39.97	HP_40	14.00–39.97				●	●	●	●	●

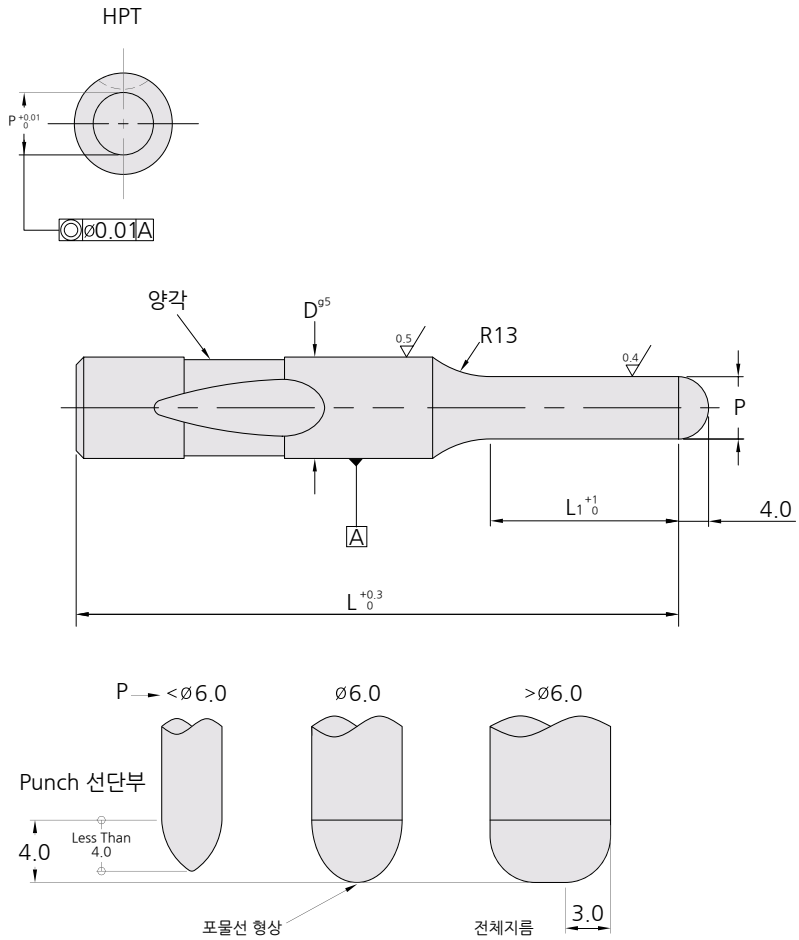
* Min P or W = 1.60 when L1 = 10

규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
HPX	13	–	13	–	80	–	P7.0
HPR	10	–	10	–	71	–	P8.5, W6.5

TYPE HPT
(중하중용)

HPT



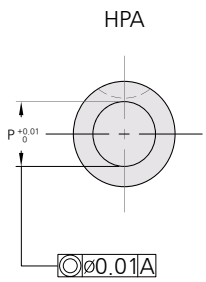
호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	L 65	73	82	92	102	112	127
10	21	12*	–	HPT10	2.05–10.00	●	●	●	●	●	●	●
13	21	15	27	HPT13	4.95–13.00	●	●	●	●	●	●	●
16	21	15	27	HPT16	7.95–16.00	●	●	●	●	●	●	●
20	21	15	27	HPT20	11.95–20.00	●	●	●	●	●	●	●
25	21	15	27	HPT25	15.95–25.00		●	●	●	●	●	●
32	21	15	27	HPT32	23.95–32.00				●	●	●	●
40	27	21	32	HPT40	29.95–40.00						●	●

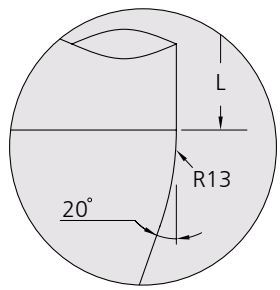
* Min P = 1.55 when L1 = 10

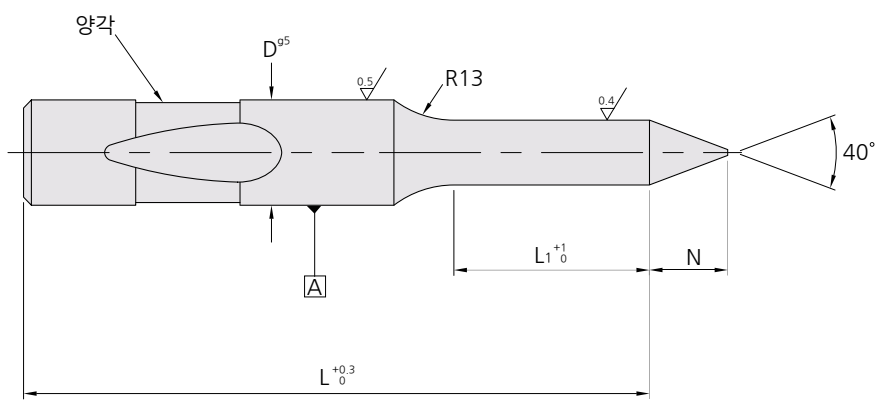
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
HPT	13	–	12	–	73	–	P12.0

TYPE HPA
(중하중용)





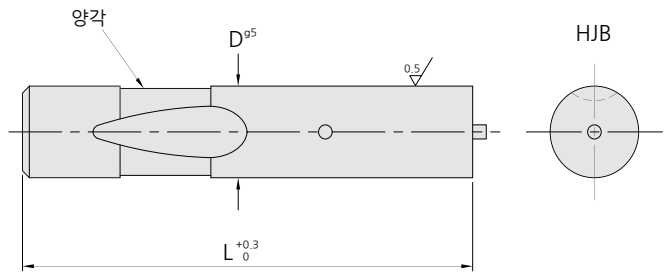


호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	N	L 80	90	100	110	125	140	150
10	19	32		HPA10	5.00–10.00	8	●	●	●	●			
13	19	32		HPA13	9.00–13.00	10	●	●	●	●	●	●	
16	25	38	L	HPA16	12.00–16.00	15	●	●	●	●	●	●	●
20	25	38	Minus	HPA20	15.00–20.00	20	●	●	●	●	●	●	●
25	25	38	48	HPA25	19.00–25.00	25	●	●	●	●	●	●	●
32	25	38		HPA32	24.00–32.00	30	●	●	●	●	●	●	●
40	30	45		HPA40	30.00–40.00	40	●	●	●	●	●	●	●

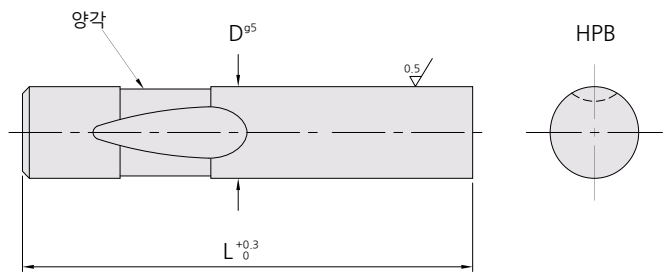
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
HPA	16	–	25	–	80	–	P12.0

TYPE HJB EJECTOR
(중하중용)



TYPE HPB 표준형
(중하중용)



EJECTOR

호칭경 D	Type&D	L						
		63	71	80	90	100	110	125
10	HJB10	●	●	●	●	●	●	●
13	HJB13	●	●	●	●	●	●	●
16	HJB16	●	●	●	●	●	●	●
20	HJB20	●	●	●	●	●	●	●
25	HJB25		●	●	●	●	●	●
32	HJB32		●	●	●	●	●	●
40	HJB40			●	●	●	●	●

Regular

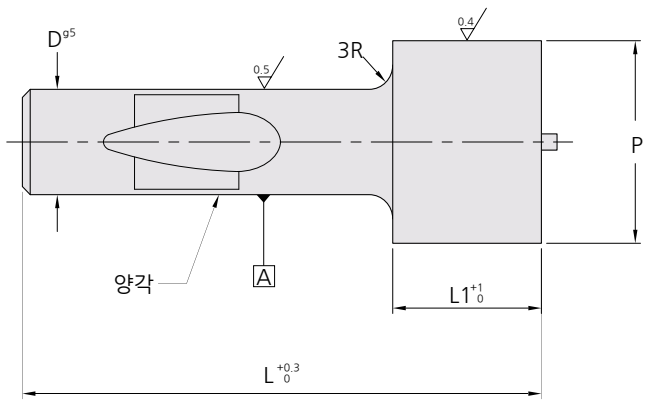
호칭경 D	Type&D	L						
		63	71	80	90	100	110	125
10	HPB10	●	●	●	●	●	●	●
13	HPB13	●	●	●	●	●	●	●
16	HPB16	●	●	●	●	●	●	●
20	HPB20	●	●	●	●	●	●	●
25	HPB25		●	●	●	●	●	●
32	HPB32		●	●	●	●	●	●
40	HPB40			●	●	●	●	●

규격표기 방법

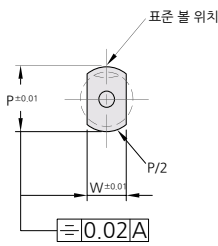
Catalog No.	D	–	L
HJB	20	–	100

TYPE EJECTOR HZ_ (중하중용)

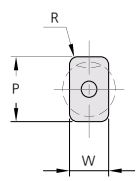
TYPE 표준형HK_ (중하중용)



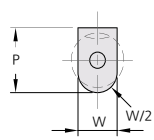
H_H



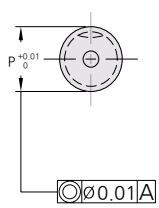
H_K



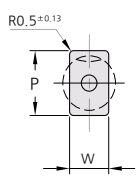
H_J



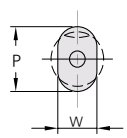
H_X



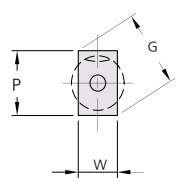
H_L



H_O



H_R



* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

EJECTOR

L1 Std. S	L1 Alt. A	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 80	L 90	L 100
19	30	HZX13	13.10–32.00	HZ_13	5.00–32.00	●	●	●
19	30	HZX16	16.10–38.00	HZ_16	6.50–35.00	●	●	●
19	30	HZX20	20.10–40.00	HZ_20	8.00–40.00	●	●	●
19	30	HZX25	25.10–44.00	HZ_25	10.00–44.00	●	●	●
19	30	HZX32	32.10–50.00	HZ_32	11.50–50.00	●	●	●
19	30	HZX40	40.10–56.00	HZ_40	14.00–56.00	●	●	●

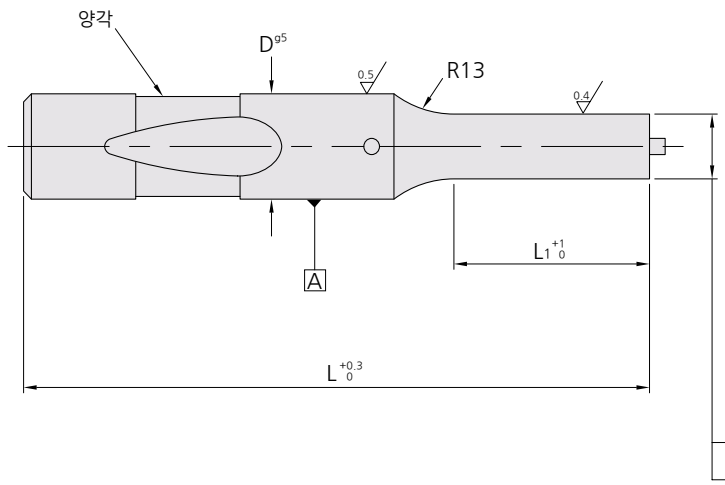
표준형

L1 Std. S	L1 Alt. A	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 80	L 90	L 100
19	30	HKX13	13.10–32.00	HK_13	5.00–32.00	●	●	●
19	30	HKX16	16.10–38.00	HK_16	6.50–35.00	●	●	●
19	30	HKX20	20.10–40.00	HK_20	8.00–40.00	●	●	●
19	30	HKX25	25.10–44.00	HK_25	10.00–44.00	●	●	●
19	30	HKX32	32.10–50.00	HK_32	11.50–50.00	●	●	●
19	30	HKX40	40.10–56.00	HK_40	14.00–56.00	●	●	●

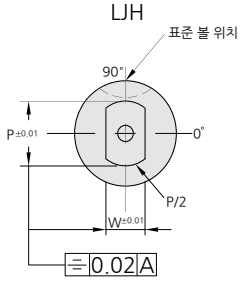
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
HKX	16	–	30	–	80	–	30.5

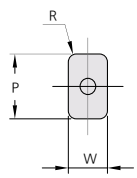
TYPE LJ_
(경하중용)



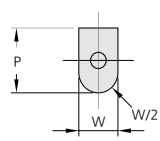
LJH



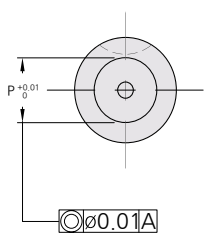
LJK



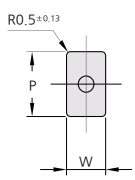
LJJ



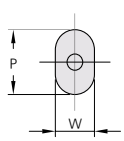
LJX



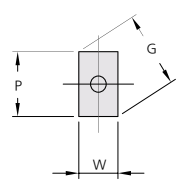
LJL



LJO



LJR



* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

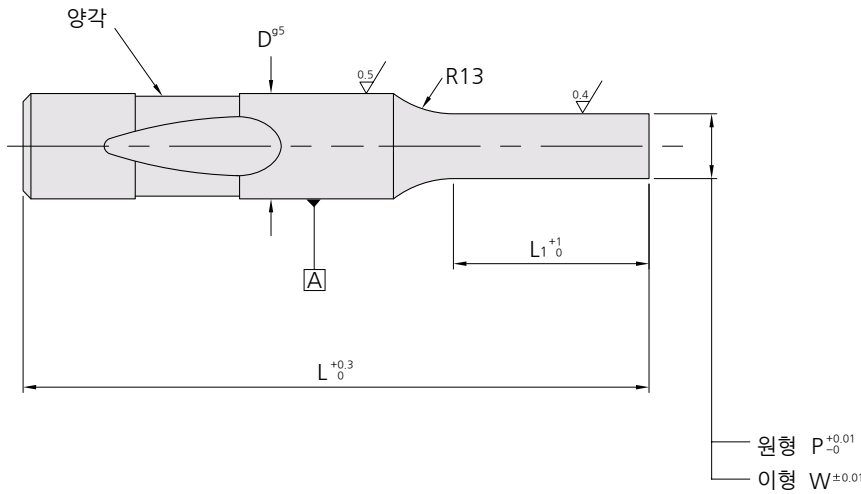
호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 63	L 71	L 80	L 90	L 100
06	13	10*	–	LJX06	2.10–5.97	LJ_06	2.10–5.97	●	●	●	●	●
10	19	10	–	LJX10	2.10–9.97	LJ_10	2.10–9.97	●	●	●	●	●
13	19	13	25	LJX13	5.00–12.97	LJ_13	4.50–12.97	●	●	●	●	●
16	19	13	25	LJX16	8.00–15.97	LJ_16	6.00–15.97	●	●	●	●	●
20	19	13	25	LJX20	12.00–19.97	LJ_20	8.00–19.97	●	●	●	●	●
25	19	13	25	LJX25	16.00–24.97	LJ_25	10.00–24.97	●	●	●	●	●
32	19	13	25	LJX32	24.97–31.97	LJ_32	12.97–31.97		●	●	●	●
38	25	19	30	LJX38	30.00–37.97	LJ_38	14.00–37.97			●	●	●

* Min P or W = 1.60 when L1=10

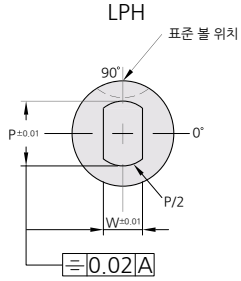
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P,W
LJX	16	–	19	–	80	–	P8.0
LJR	16	–	25	–	80	–	P8.5, W8.0

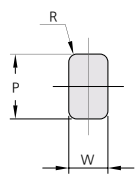
TYPE LP_
(경하중용)



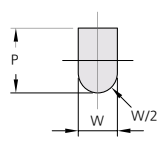
LPH



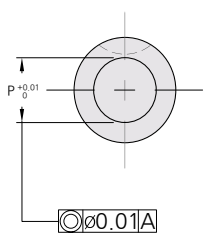
LPK



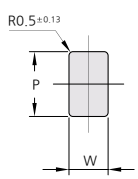
LPJ



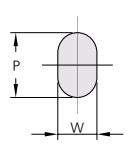
LPX



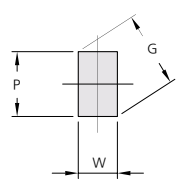
LPL



LPO



LPR



* P ≧ W
* R = 지정가능
* G = $\sqrt{P^2+W^2}$

호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 80	90	100	110	125
6	13	10*	–	LPX06	2.10–5.97	LP_06	2.10–5.97	●	●	●	●	●
10	19	10	–	LPX10	2.10–9.97	LP_10	2.10–9.97	●	●	●	●	●
13	19	13	25	LPX13	5.00–12.97	LP_13	4.50–12.97	●	●	●	●	●
16	19	13	25	LPX16	8.00–15.97	LP_16	6.00–15.97	●	●	●	●	●
20	19	13	25	LPX20	12.00–19.97	LP_20	8.00–19.97	●	●	●	●	●
25	19	13	25	LPX25	16.00–24.97	LP_25	10.00–24.97	●	●	●	●	●
32	19	13	25	LPX32	24.97–31.97	LP_32	12.97–31.97		●	●	●	●
38	25	19	30	LPX38	30.00–37.97	LP_38	14.00–37.97			●	●	●

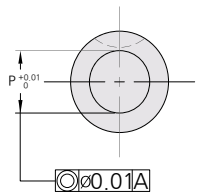
* Min P or W = 1.60 when L1=10

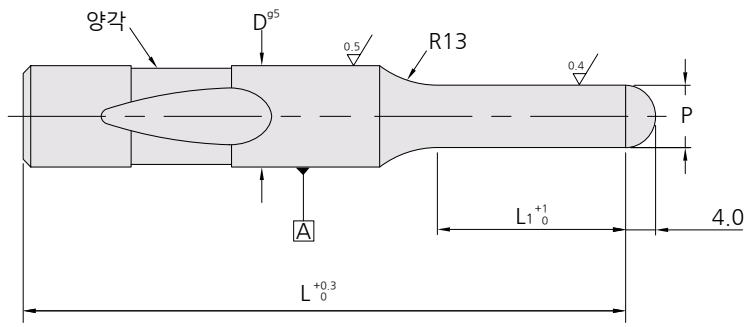
규격표기 방법

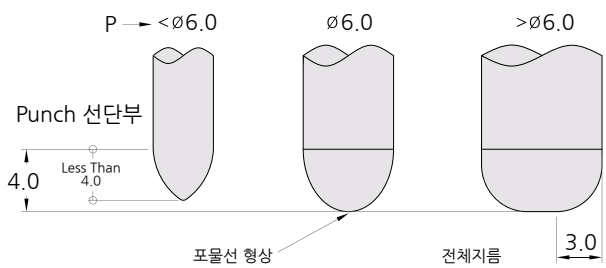
Catalog No.	D	–	L1	–	L	–	P,W
LPO	13	–	13	–	71	–	P8.2, W6.9

TYPE LPT
(경하중용)

LPT







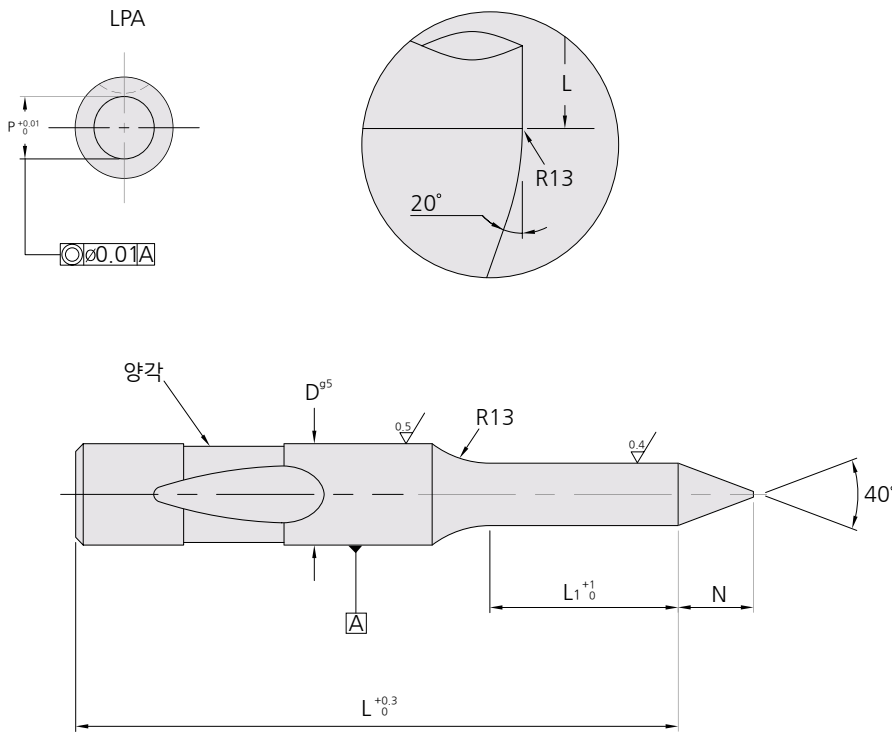
호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	L 65	73	82	92	102	112	127
06	15	12*	–	LPT06	2.05–6.00	●	●	●	●	●	●	●
10	21	12*	–	LPT10	2.05–10.00	●	●	●	●	●	●	●
13	21	15	27	LPT13	4.95–13.00	●	●	●	●	●	●	●
16	21	15	27	LPT16	7.95–16.00		●	●	●	●	●	●
20	21	15	27	LPT20	11.95–20.00		●	●	●	●	●	●
25	21	15	27	LPT25	15.95–25.00		●	●	●	●	●	●
32	21	15	27	LPT32	23.92–32.00				●	●	●	●
40	27	21	32	LPT40	29.95–40.00						●	●

* Min P = 1.55 when L1 = 12

규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
LPT	13	–	12	–	73	–	8.4

TYPE LPA
(경하중용)

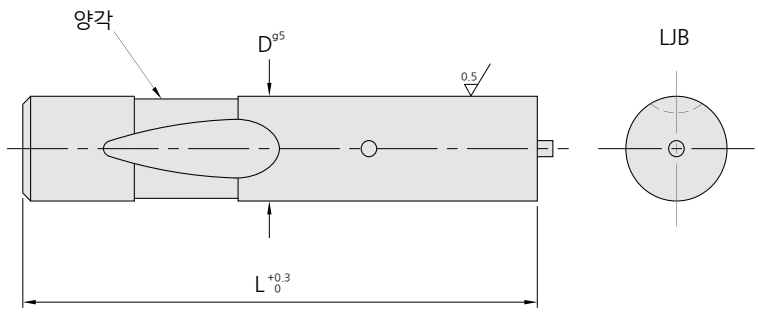


호칭경 D	L1 Std. S	L1 Alt. A	L1 Alt. B	Type&D	원형 P	N	L 71	80	90	100	110	125	140	150
10	19	32		LPA10	5.00–10.00	8	●	●	●	●				
13	19	32		LPA13	9.00–13.00	10	●	●	●	●	●	●	●	
16	25	38	L	LPA16	12.00–16.00	15	●	●	●	●	●	●	●	●
20	25	38	Minus	LPA20	15.00–20.00	20	●	●	●	●	●	●	●	●
25	25	38	48	LPA25	19.00–25.00	25	●	●	●	●	●	●	●	●
32	25	38		LPA32	24.00–32.00	30		●	●	●	●	●	●	●
38	30	45		LPA38	30.00–38.00	35		●	●	●	●	●	●	●

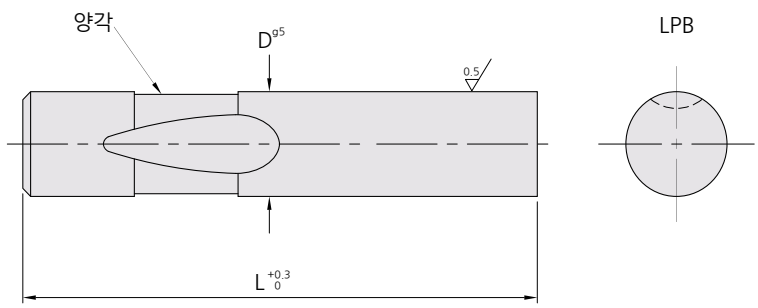
규격표기 방법

Catalog No.	D	–	L1	–	L	–	P
LPA	16	–	25	–	80	–	12

TYPE LJB EJECTOR
(경하중용)



TYPE LPB 표준형
(경하중용)



EJECTOR

호칭경 D	Type&D	L				
		63	71	80	90	100
06	LJB06	●	●	●	●	●
10	LJB10	●	●	●	●	●
13	LJB13	●	●	●	●	●
16	LJB16	●	●	●	●	●
20	LJB20	●	●	●	●	●
25	LJB25	●	●	●	●	●
32	LJB32		●	●	●	●
40	LJB40			●	●	●

REGULAR

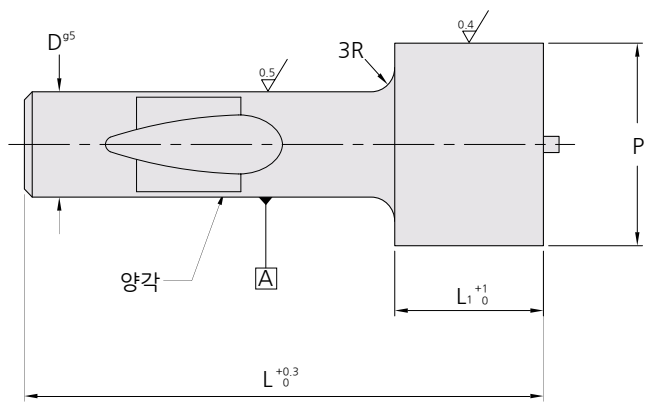
호칭경 D	Type&D	L				
		63	71	80	90	100
06	LPB06	●	●	●	●	●
10	LPB10	●	●	●	●	●
13	LPB13	●	●	●	●	●
16	LPB16	●	●	●	●	●
20	LPB20	●	●	●	●	●
25	LPB25	●	●	●	●	●
32	LPB32		●	●	●	●
40	LPB40			●	●	●

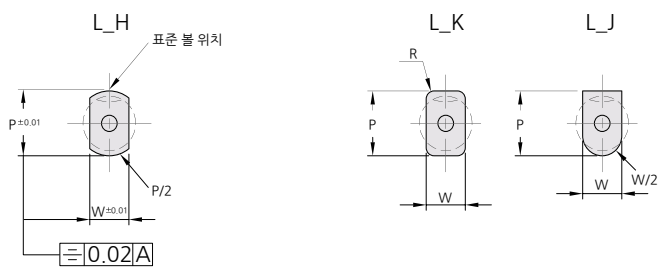
규격표기 방법

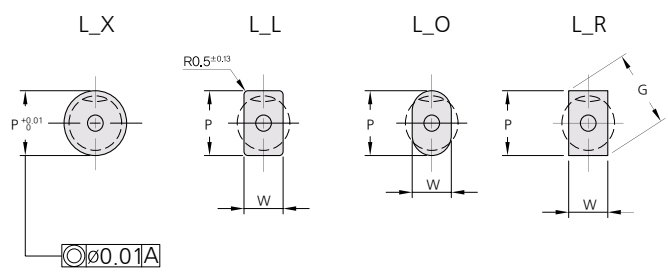
Catalog No.	D	–	L
LJB	20	–	100

TYPE EJECTOR LZ_
(경하중용)

TYPE 표준형LK_
(경하중용)







* P≧W
* R= 지정가능
* G=$\sqrt{P^2+W^2}$

EJECTOR

L1 Std. S	L1 Alt. A	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 80	L 90	L 100
19	30	LZX13	13.10–32.00	LZ_13	5.00–32.00	●	●	●
19	30	LZX16	16.10–38.00	LZ_16	6.50–35.00	●	●	●
19	30	LZX20	20.10–40.00	LZ_20	8.00–40.00	●	●	●
19	30	LZX25	25.10–44.00	LZ_25	10.00–44.00	●	●	●
19	30	LZX32	32.10–50.00	LZ_32	11.50–50.00	●	●	●

REGULAR

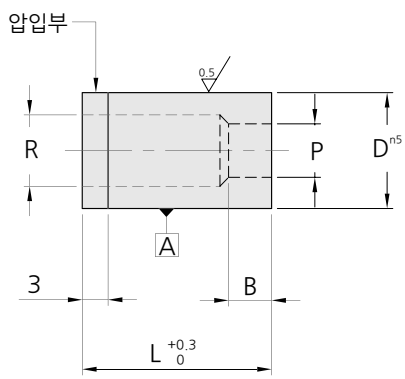
L1 Std. S	L1 Alt. A	Type&D	원형 P	Type&D	이형 min. – max. W P/G	L 80	L 90	L 100
19	30	LKX13	13.10–32.00	LK_13	5.00–32.00	●	●	●
19	30	LKX16	16.10–38.00	LK_16	6.50–35.00	●	●	●
19	30	LKX20	20.10–40.00	LK_20	8.00–40.00	●	●	●
19	30	LKX25	25.10–44.00	LK_25	10.00–44.00	●	●	●
19	30	LKX32	32.10–50.00	LK_32	11.50–50.00	●	●	●

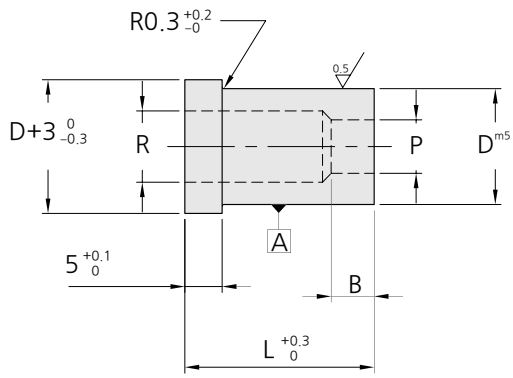
규격표기 방법

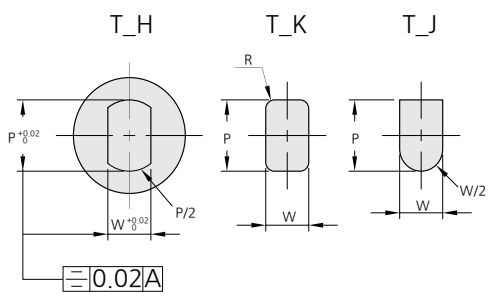
Catalog No.	D	–	L1	–	L	–	P
LKX	16	–	30	–	80	–	30.5

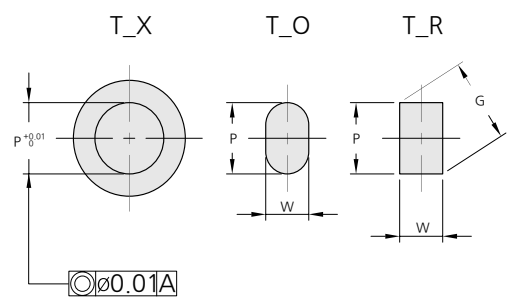
TYPE TD_
(Headless)

TYPE TH_
(Headed)









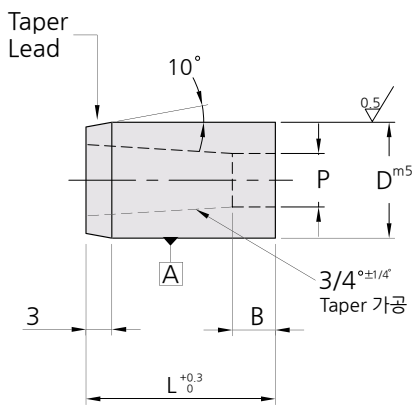
* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

호칭경 D	L1 Std. S	Alt. A	Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W P/G	max R	L 20	22	25	28	30	32	35	40
08	4	8*	–	T_X08	1.50–3.20	–	–	4.0	●	●	●	●	●	●	●	
10	4	8*	–	T_X10	1.50–5.00	T_10	1.20–5.00	5.8	●	●	●	●	●	●	●	
13	5	8*	–	T_X13	1.50–7.20	T_13	2.00–7.20	8.0	●	●	●	●	●	●	●	
16	5	8*	–	T_X16	5.00–8.80	T_16	2.40–8.80	9.5	●	●	●	●	●	●	●	
20	5	12	20	T_X20	7.00–11.00	T_20	3.20–11.00	12.0	●	●	●	●	●	●	●	
22	6	12	20	T_X22	9.00–14.00	T_22	4.00–14.00	15.0	●	●	●	●	●	●	●	
25	6	12	20	T_X25	11.00–16.50	T_25	4.80–16.50	17.5	●	●	●	●	●	●	●	
32	6	12	20	T_X32	13.00–20.00	T_32	5.50–20.00	21.0	●	●	●	●	●	●	●	
38	8	12	20	T_X38	16.00–26.00	T_38	6.40–26.00	27.0	●	●	●	●	●	●	●	
40	8	12	20	T_X40	16.00–26.00	T_40	6.40–26.00	27.0	●	●	●	●	●	●	●	
45	8	12	20	TDX45	19.00–35.00	TD_45	8.00–35.00	36.0		●	●	●	●	●	●	●
50	8	12	20	TDX50	22.00–40.00	TD_50	9.00–40.00	41.0		●	●	●	●	●	●	●
56	8	12	20	TDX56	25.00–45.00	TD_56	10.00–45.00	46.0		●	●	●	●	●	●	●
63	8	12	20	TDX63	28.00–50.00	TD_63	11.00–50.00	51.0		●	●	●	●	●	●	●
71	8	12	20	TDX71	31.00–56.00	TD_71	12.00–56.00	57.0		●	●	●	●	●	●	●
76	8	12	20	TDX76	39.00–60.00	TD_76	15.00–60.00	61.0			●	●	●	●	●	●
85	8	12	20	TDX85	43.00–66.00	TD_85	21.00–66.00	67.0			●	●	●	●	●	●
90	8	12	20	TDX90	45.00–70.00	TD_90	25.00–70.00	71.0			●	●	●	●	●	●
100	8	12	20	TDX100	50.00–78.00	TD_100	33.00–78.00	79.0			●	●	●	●	●	●

규격표기 방법

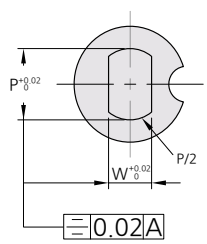
Catalog No.	D	–	Std. Alt.	–	L	–	P,W
TDX	25	–	A	–	32	–	P5.3
THR	13	–	S	–	28	–	P8.5, W8.0

TYPE TN_

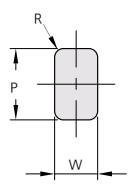


TN형은 ø6맞춤핀을 사용한다.

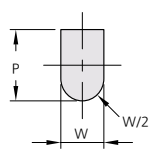
TNH



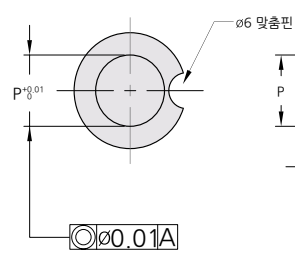
TNK



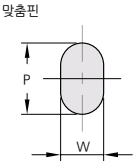
TNJ



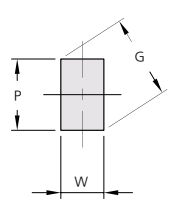
TNX



TNO



TNR



* P≧W
* R= 지정가능
* G= $\sqrt{P^2+W^2}$

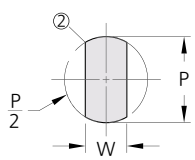
호칭경 D	L1 Std. S	Alt. A	Alt. B	Type&D	원형 P	Type&D	이형 min. – max. W	P/G	L 13	16	20	22	25	28	30	32	35	40
10	4	5	3	TNX10	1.60–6.80	TN_10	1.30–6.80		●	●	●	●	●	●	●	●	●	
13	5	8	3	TNX13	3.00–8.80	TN_13	1.90–8.80		●	●	●	●	●	●	●	●	●	
16	5	8	3	TNX16	7.40–10.80	TN_16	1.90–10.80				●	●	●	●	●	●	●	
20	5	10	3	TNX20	9.50–13.60	TN_20	1.90–13.60				●	●	●	●	●	●	●	
22	6	10	3	TNX22	10.00–15.00	TN_22	1.90–15.00				●	●	●	●	●	●	●	
25	6	10	3	TNX25	12.00–17.00	TN_25	1.90–17.00				●	●	●	●	●	●	●	
32	6	12	3	TNX32	16.00–22.00	TN_32	1.90–22.00				●	●	●	●	●	●	●	
38	8	12	3	TNX38	18.00–27.00	TN_38	1.90–27.00				●	●	●	●	●	●	●	
40	8	12	3	TNX40	18.00–27.00	TN_40	1.90–27.00				●	●	●	●	●	●	●	
45	8	12	3	TNX45	18.00–35.00	TN_45	2.40–35.00					●	●	●	●	●	●	●
50	8	12	3	TNX50	18.00–40.00	TN_50	4.00–40.00					●	●	●	●	●	●	●
56	8	12	3	TNX56	18.00–45.00	TN_56	4.00–45.00					●	●	●	●	●	●	●
63	8	12	3	TNX63	18.00–50.00	TN_63	4.00–50.00					●	●	●	●	●	●	●
71	8	12	3	TNX71	18.00–56.00	TN_71	4.00–56.00					●	●	●	●	●	●	●
76	8	12	3	TNX76	25.00–60.00	TN_76	5.60–60.00						●	●	●	●	●	●
85	8	12	3	TNX85	25.00–66.00	TN_85	5.60–66.00						●	●	●	●	●	●
90	8	12	3	TNX90	32.00–70.00	TN_90	5.60–70.00						●	●	●	●	●	●
100	8	12	3	TNX100	32.00–78.00	TN_100	5.60–78.00						●	●	●	●	●	●

규격표기 방법

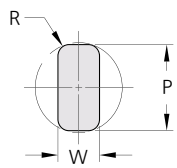
Catalog No.	D	–	Std. Alt.	–	L	–	P,W
TNX	13	–	S	–	28	–	P5.3
TNO	25	–	A	–	32	–	P8.7, W5.0

Flatted Rounds

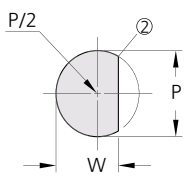
C10**



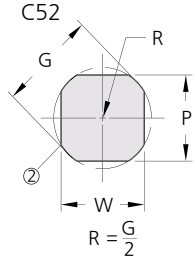
C11**



C33

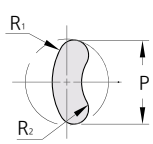


C52

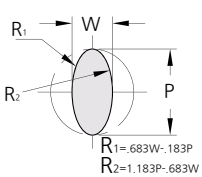


Miscellaneous

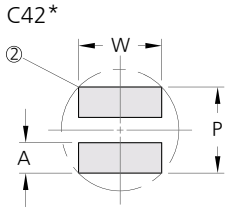
C40



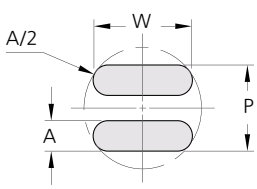
C41



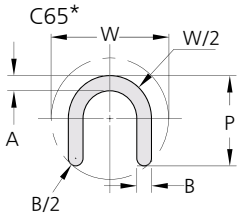
C42*



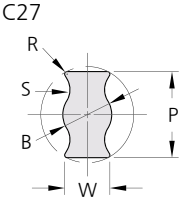
C43*



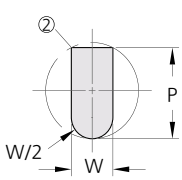
C65*



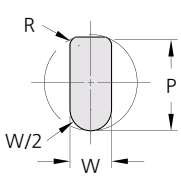
C27



C28**

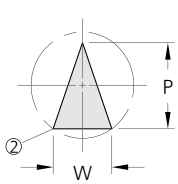


C29

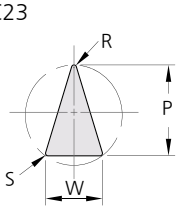


Triangles/Trapezoids

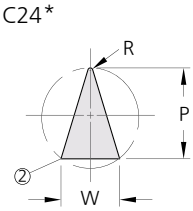
C22**



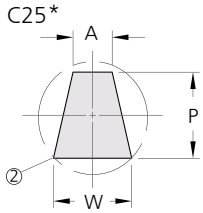
C23



C24*

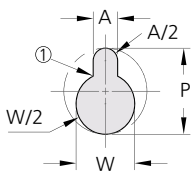


C25*

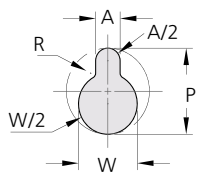


Mono Libes

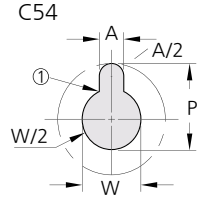
C13



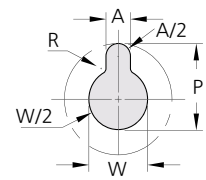
C53



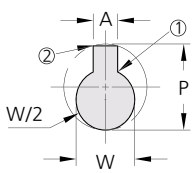
C54



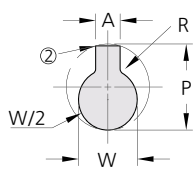
C55



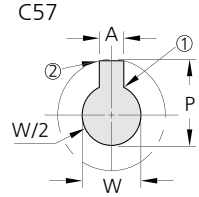
C14



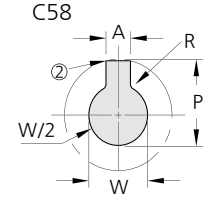
C56



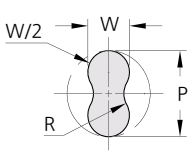
C57



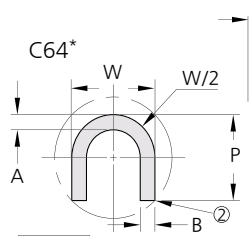
C58



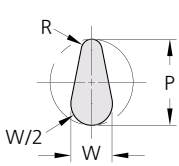
C93



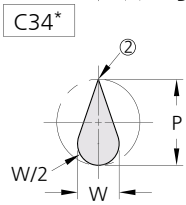
C64*



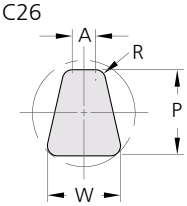
C16



C34*

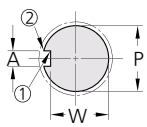


C26

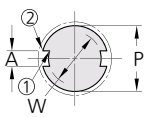


Keys

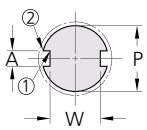
C30



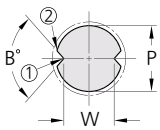
C31



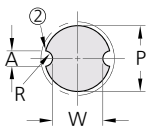
C32



C61

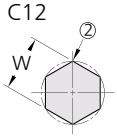


C62

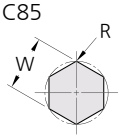


Polygons

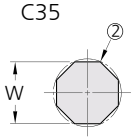
C12



C85

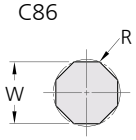


C35



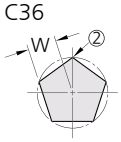
A=Even No of Sides

C86



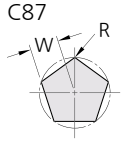
A=Even No of Sides

C36



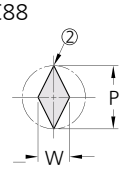
A=Odd No of Sides

C87

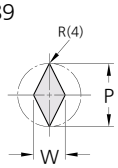


A=Odd No of Sides

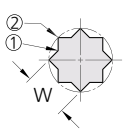
C88



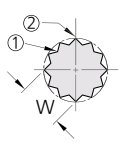
C89



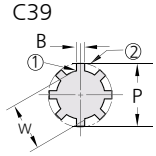
C37



C38

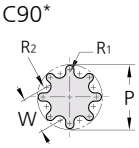


C39



A=Odd No of teeth
(3, 4, 6 or 8 only)

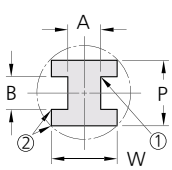
C90*



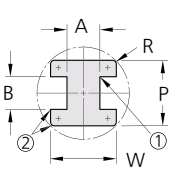
A=Odd No of teeth
(3, 4, 6 or 8 only)

Duo Tees

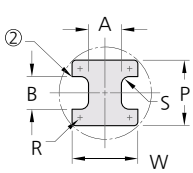
C21*



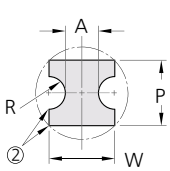
C91*



C92

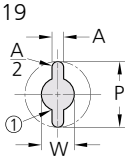


C15*

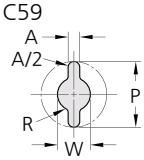


Multi Lobes

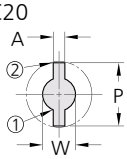
C19



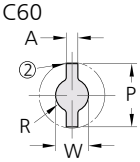
C59



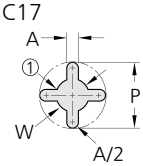
C20



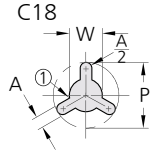
C60



C17

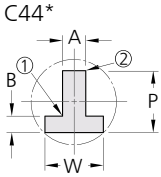


C18

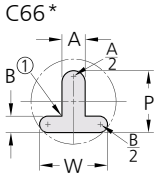


T's

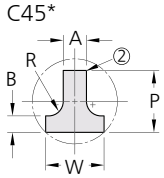
C44*



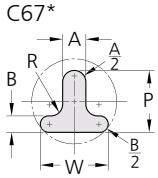
C66*



C45*

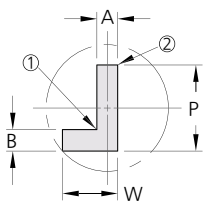


C67*

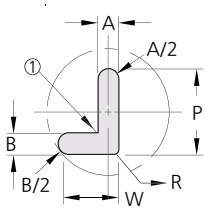


L's

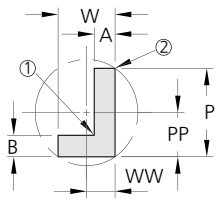
C46*



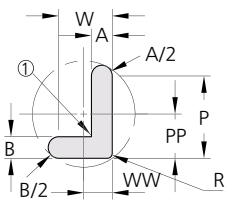
C77*



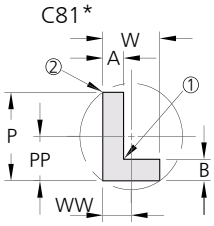
C78*



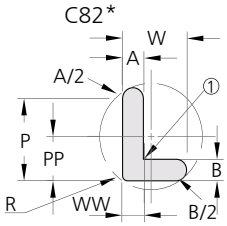
C79*



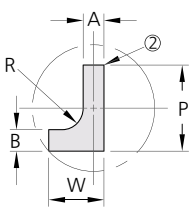
C81*



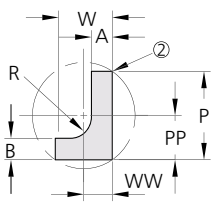
C82*



C47*

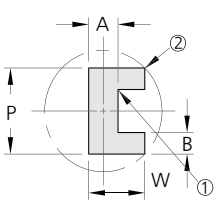


C83*

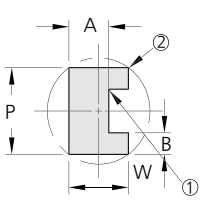


U's

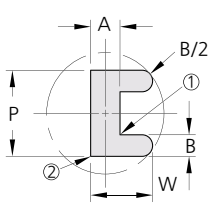
C50*



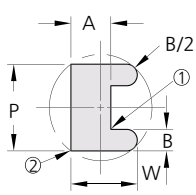
C68*



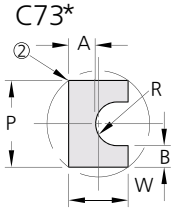
C69*



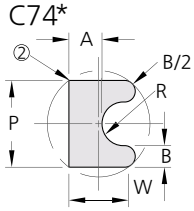
C70*



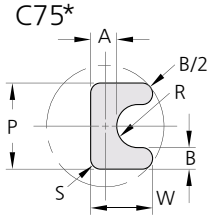
C73*



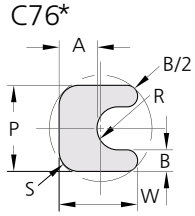
C74*



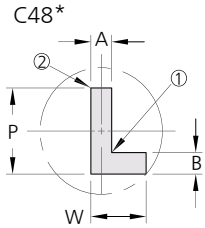
C75*



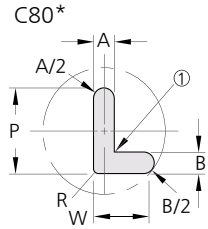
C76*



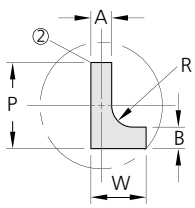
C48*



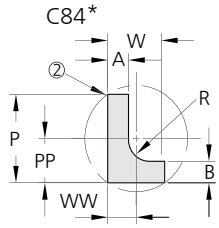
C80*



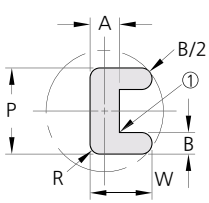
C49*



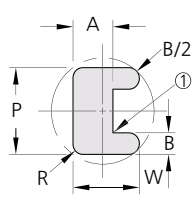
C84*



C71*



C72*



C51*