



# Locating Pins

## Large Head with Resin Tip

Features: Plastic material bonded to the tip of insertion guide prevents workpiece from being scratched.



Material No.	Pin		Head Plastic Material	Type	D Tolerance & Shape Code
	Material	Hardness			
(1)	O1 Tool Steel	Treated Hardness: 60~63 HRC min.	MC Nylon	JPPH	B Standard, m6 PB Standard, p6 TA Tapped, g6 NA Threaded, g6
(2)	304 Stainless Steel	—		SJPPH	
(3)	440C or 420 Stainless Steel	Treated Hardness: 50~55 HRC min.		CJPPH	

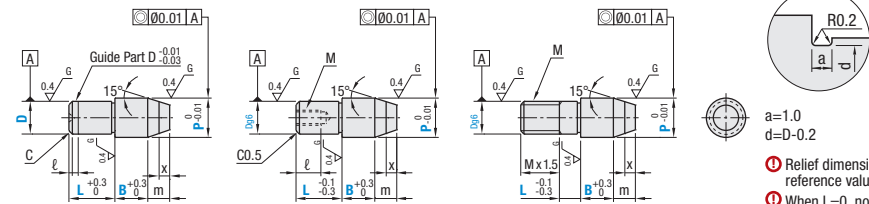
① Features of MC Nylon P.3067

② 440C or 420 Stainless Steel has an identification groove on D mounting section.

Standard

Tapped

Threaded



\*Insertion Guide is applicable to tolerance p6 type only.

① Relief dimension is reference value.  
② When L=0, no relief is provided. Specify alteration NNC.

### Standard

Type	Shape Code	D	D Tolerance		P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	C	m	x	ℓ
			m6	p6							
JPPH SJPPH CJPPH	B m6 PB p6	5	+0.012	+0.020	5.50-8.00	5-10	2.0-10.0	1	5	4	1
		6	+0.004	+0.012	6.50-10.00	6-12	2.0-12.0				
		8	+0.015	+0.024	9.00-13.00	8-16	2.0-15.0	2	6	5	2
		10	+0.006	+0.015	11.00-15.00	10-20	3.0-20.0				
		12	+0.018	+0.029	13.00-16.00	12-24	5.0-20.0	3	6	5	2
		13	+0.007	+0.018	14.00-18.00	13-26					
		16	+0.021	+0.035	17.00-25.00	16-32					
		20	+0.008	+0.022	22.00-30.00	20-40					

### Tapped

Type	Shape Code	D	D Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	m	x	M (Coarse)	ℓ
6	-0.012	6.50-10.00	6-12	2.0-12.0	M3	5				
8	-0.005	9.00-13.00	8-16	2.0-15.0	M5	8				
10	-0.014	11.00-15.00	10-20	3.0-20.0						
12	-0.006	13.00-16.00	12-24	5.0-20.0	6	5	M6	9		
13	-0.017	14.00-18.00	13-26							
16	-0.007	17.00-25.00	16-32							
20	-0.020	22.00-30.00	20-40							

① When D=5, L+B≥Mx4+1 When D≥6, L+B≥Mx3+1

\*The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.

### Threaded

Type	Shape Code	D	D Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	m	x	M (Coarse)
6	-0.012	6.50-10.00	0-10	2.0-12.0	M6				
8	-0.005	9.00-13.00	0-10	2.0-15.0	M8	10			
10	-0.014	11.00-15.00	0-15	3.0-20.0					
12	-0.006	13.00-16.00	0-15	5.0-20.0	6	5	M20		
16	-0.017	17.00-25.00	0-20						
20	-0.007	22.00-30.00	0-20						
20	-0.020	22.00-30.00	0-20						

\* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.

**Part Number Example**

Part Number: JPPH B 8 - P10.00 - L10 - B5.5

Part Number: CJPPH TA 16 - P25.00 - L22 - B13.0

**Part Number Alterations**

Part Number: SJPPHB10 - P15.00 - L12 - B6.4 - RC

Alteration	Wrench Hole	Relief	Radius																					
	Code	LAC	NNC	RC																				
Spec.	Machines wrench hole. -Ordering Code: LAC -Applies to D≥6 -The diamond-shaped wrench hole opens vertically. The direction is arbitrary.	Ordering Code: NNC - Applicable when L=0 - Adds a relief at the thread end. -Can not be combined with RC alteration.	Changes the relief to R0.5. Ordering Code:RC -Applicable when P-D≥2.																					
	<table border="1"> <thead> <tr> <th>D</th> <th>B Applicable Dim.</th> <th>Wrench Hole Dim.</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>5.0~</td> <td>P Q</td> </tr> <tr> <td>8</td> <td>5.0~</td> <td>6.50~9.99 2</td> </tr> <tr> <td>10</td> <td>5.0~</td> <td>10.00~16.99 3.5</td> </tr> <tr> <td>12</td> <td>5.0~</td> <td>17.00~ 5</td> </tr> <tr> <td>16</td> <td>5.0~</td> <td></td> </tr> <tr> <td>20</td> <td>5.0~</td> <td></td> </tr> </tbody> </table>	D	B Applicable Dim.	Wrench Hole Dim.	6	5.0~	P Q	8	5.0~	6.50~9.99 2	10	5.0~	10.00~16.99 3.5	12	5.0~	17.00~ 5	16	5.0~		20	5.0~			
D	B Applicable Dim.	Wrench Hole Dim.																						
6	5.0~	P Q																						
8	5.0~	6.50~9.99 2																						
10	5.0~	10.00~16.99 3.5																						
12	5.0~	17.00~ 5																						
16	5.0~																							
20	5.0~																							

# Resin Locating Pins

## Large Head



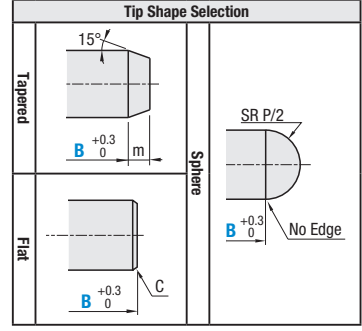
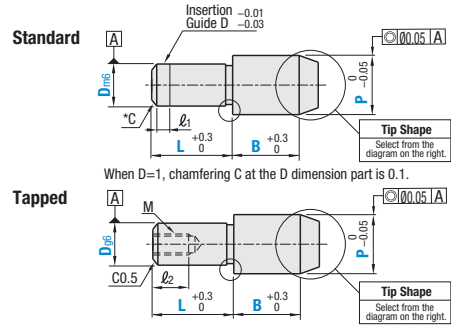
Resin Locating Pins – Large Head

Ⓢ The outer diameter tolerance is the result of measurement at room temperature.

P Configurable	Type	Fixed Part	Head Shape	Material	Operating Ambient Temperature
JP	FJP	Z (Standard)	A (Taper)	Polyacetal (Black)	-45~95°C
MJP	MFP			MC Nylon (Blue)	-40~120°C
DJP	DFP	Y (Tapped)	Q (Sphere)	Conductive MC Nylon CDR2 (Black)	-40~120°C
JKP	FKP			PEEK (Natural Ivory)	-50~250°C

Ⓢ Characteristics of Polyacetal, Conductive MC Nylon and PEEK P.3068-3069  
(For Polyacetal and MC Nylon, refer to Standard Grade.)

Ⓢ Some combinations are not available. Refer to the price list to select the available combination.



### P Configurable

Type	Fixed Part Selection	Head Shape	Part Number			P 0.01 mm Increment	L		B	C	m	ℓ <sub>1</sub>	M (Coarse)	ℓ <sub>2</sub>
			D	D Tolerance m6	D Tolerance g6		Standard	Tapped						
JP	Z (Standard)	A (Taper)	1	+0.008 +0.002	—	1.50-2.50	3	—	3	0.3	0.5	0	—	—
			2			2.50-4.00			4					
			3			3.50-6.00			5					
MJP	Y (Tapped)	FA (Flat)	4	+0.012 +0.004	—	4.50-7.00	10	10	6	1	3	1	—	—
DJP			5			5.50-8.00			8					
JKP	Ⓢ Applicable when D≥6	Q (Sphere)	6	+0.015 +0.006	-0.004 -0.012	6.50-10.00	15	15	10	1.5	4	1	M3	5
8			9.00-13.00			15			M5				8	
			10		-0.005 -0.014	11.00-15.00			10	2			M5	8

### P, L & B Configurable

Type	Fixed Part	Head Shape	Part Number			P 0.01 mm Increment	L 1 mm Increment		B 0.1 mm Increment	C	m	ℓ <sub>1</sub>	M (Coarse)	ℓ <sub>2</sub>
			D	D Tolerance m6	D Tolerance g6		Standard	Tapped						
FJP	Z (Standard)	A (Taper)	1	+0.008 +0.002	—	1.50-2.50	2, 3	—	2.0- 5.0	0.3	0.5	0	—	—
			2			2.50-4.00	2-6							
			3			3.50-6.00	3-6							
MFP	Y (Tapped)	FA (Flat)	4	+0.012 +0.004	—	4.50-7.00	4-8	2.0-10.0	0.5	2	1	—	—	
DFP			5			5.50-8.00	5-10							
FKP	Ⓢ Applicable when D≥6	Q (Sphere)	6	+0.015 +0.006	-0.004 -0.012	6.50-10.00	6-12	6-12	2.0-12.0	1	3	1	M3	5
8			9.00-13.00			8-16	8-16	2.0 (3.0) - 15.0	1.5				4	M5
			10		-0.005 -0.014	11.00-15.00	10-20	10-20	3.0 (4.0) - 20.0	2			M5	8

Ⓢ B dimension of Flat Type is in ( ). Ⓢ Taper Head Shape not available for JKPZA part type

**Part Number Example**

Type	Fixed Part	Head Shape	D	P	L	B
Standard	JP	Z	8	- P10.00		
Tapped	FJP	Y	10	- P12.00	- L12	- B7.0

**Part Number Alterations**

Part Number	- P	- L	- B	- (HSC)
JKPYA6	- P8.00	-	-	HSC
FKPYFA10	- P13.00	- L18	- B5.0	HSC

Alteration Code	Threaded Insert
HSC	
Spec.	Adds a threaded insert on internal threads. D6: M3 D8, 10: M5 <b>Ordering Code: HSC</b>

### Tapped

D	Tapered Available Types								Flat Available Types								Sphere Available Types							
	JPYA	MJPYA	DJPYA	JKPYA	FJPYA	MFPYA	DFPYA	FKPYA	JPYFA	MJPYFA	DJPYFA	JKPYFA	FJPYFA	MFPYFA	DFPYFA	FKPYFA	JPYQ	MJPYQ	DJPYQ	JKPYQ	FJPYQ	MFPYQ	DFPYQ	FKPYQ
6	—	•	•	—	•	•	•	—	—	•	•	•	—	•	•	•	—	•	•	•	•	•	•	•
8	—	•	•	—	•	•	•	—	—	•	•	•	—	•	•	•	—	•	•	•	•	•	•	•
10	—	•	•	—	•	•	•	—	—	•	•	•	—	•	•	•	—	•	•	•	•	•	•	•

# Resin Locating Pins

## Small Head

Locating Pins/Bushings for Locating Pins

**Resin Locating Pins – Small Head**

**RoHS 10**

Type		Head Shape	Material	Operating Ambient Temperature
P Configurable	P, L and B Configurable			
<b>JPZS</b>	<b>FJPZS</b>	<b>A</b> (Taper)	Polyacetal (Black)	-45~95°C
<b>MJPZS</b>	<b>MFPZS</b>		MC Nylon (Blue)	-40~120°C
<b>DJPZS</b>	<b>DFPZS</b>	<b>FA</b> (Flat)	Conductive MC Nylon CDR2 (Black)	-40~120°C
<b>JKPZS</b>	<b>FKPZS</b>		<b>Q</b> (Sphere)	PEEK (Natural Ivory)

ⓘ Some combinations are not available. Refer to the price list to select an available combination.

ⓘ The outer diameter tolerance is the result of measurement at room temperature.

ⓘ Characteristics of Polyacetal, MC Nylon, Conductive MC Nylon and PEEK **P.3068-3069** (For Polyacetal and MC Nylon, refer to Standard Grade.)

**Tapered**

**Flat**

**Sphere**

P	C*
1.00-2.50	0.3
2.51-4.00	0.5
4.01-10.00	1

When P<3, a=0.5, d=P-0.1  
When P≥3, a=1.0, d=P-0.2

### P Configurable

Type	Head Shape Selection	Part Number		P 0.01 mm Increment	L	B
		D	D Tolerance m6			
<b>JPZS</b> <b>MJPZS</b> <b>DJPZS</b> <b>JKPZS</b>	<b>A</b> (Taper) <b>Q</b> (Sphere)	2	+0.008	1.00-2.00	4	2
		3	+0.002	1.00-3.00	5	3
		4	+0.012	2.00-4.00	10	5
		5		2.00-5.00		
		6	+0.004	2.00-6.00	15	6
		8	+0.018	3.00-8.00		
10	+0.007	3.00-10.00	8			

ⓘ Sphere Head Shape not available for JPZS, JKPZS part types.



**Part Number Example**  
**MFPZSQ6 - P5.50 - L10 - B5.0**

### P, L & B Configurable

Type	Shape	Part Number		P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment
		D	D Tolerance m6			
<b>FJPZS</b> <b>MFPZS</b> <b>DFPZS</b> <b>FKPZS</b>	<b>A</b> (Taper) <b>FA</b> (Flat) <b>Q</b> (Sphere)	2	+0.008	1.00-2.00	2-4	2.0-10.0
		3		1.00-3.00	3-6	
		4	+0.012	2.00-4.00	4-8	
		5		+0.004	2.00-5.00	5-10
		6	+0.018	2.00-6.00	6-12	2.0-12.0
		8	+0.018	3.00-8.00	8-16	2.0-15.0
10	+0.007	3.00-10.00	10-20	3.0-20.0		


D	m	ℓ
2	0.5	0
3		
4	1	1
5	2	
6		
8	3	
10		

# Resin Locating Pins

## Small Diameter / Bolt Fixing

### Feature

Since this type has a metal core, it is less prone to be broken when used for locating with sides. Characteristic of resins P.3068-3069



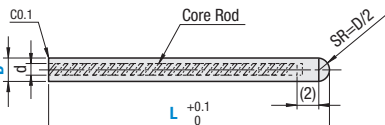
**RoHS 10**

Part Number		Material
Insertion Guide Shape, Tolerance	Material Code	
SNS (Sphere - Tolerance Standard)	BB	Bakelite (Black)
SNP (Sphere - Tolerance Selectable)	PM	Polyacetal (White)
SPS (Flat - Tolerance Standard)	EC	Conductive MC Nylon CDR6 (Black)
SNSH (Small Head - Tolerance Standard)	PK	PEEK (Natural Ivory)

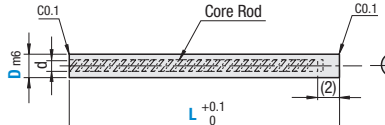
d	K
0.4	8.5
0.7	10
1.0	16

⊖ Some combinations are not available. Refer to the price list to select an available combination.  
⊖ Core Rod material is 304 Stainless Steel.  
⊖ There is a flat part of  $\varnothing 0.2$  or below at the tip of Straight Type, Spherical Type and Small Head Type.  
⊖ MC Nylon of flat is not available.  
⊖ The outer diameter tolerance is the result of measurement at room temperature.

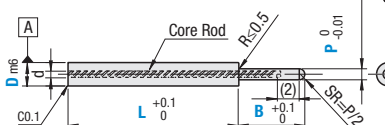
**Straight - Sphere**



**Straight - Flat**



**Small Head**



### Core Rod Length

**Straight, Sphere:** The smaller of the following:  $L - (D/2 + (2))$  or the value of column K in the table above

**Straight, Flat:** The smaller of the following:  $L - (2)$  or the value of column K in the table above

**Small Head:** The smaller of the following:  $(L+B) - (P/2 + (2))$  or the value of column K in the table above

### Sphere / Flat – Standard Tolerance

Part Number		D 0.1 mm Increment	D Dimension m6	L 0.5 mm Increment	d
Insertion Guide Shape	Material Code				
SNS (Sphere)	BB PM	1.0-2.0	+0.008 +0.002	5.0-20.0	0.7
SPS (Flat)	EC (Sphere only) PK				1.0

### Sphere – Selectable Tolerance

Part Number		D Tolerance Selectable	D 0.01 mm Increment	L 0.1 mm Increment	d
Insertion Guide Shape	Material Code				
SNP	BB PM PK	M (m6) G (g6) H (h7)	1.00-2.00	5.0-20.0	0.7
			2.01-3.00		1.0

### Small Head – Standard Tolerance


Part Number		D 0.1 mm Inc.	D Tolerance m6	L 0.1 mm Increment	P 0.1 mm Increment	B 0.1 mm Increment	d
Insertion Guide Shape	Material Code						
SNSH	PM EC	1.1-2.0	+0.008 +0.002	5.0-18.5	1.0-1.9 (D>P)	1.5-10.0 (B-P/2≥1.0)	0.4
		2.1-3.0			1.0-2.9 (D>P)		0.7

⊖ When  $D \leq 2$ ,  $L+B \leq 15$  When  $D > 2$ ,  $L+B \leq 20$

**Part Number Example**

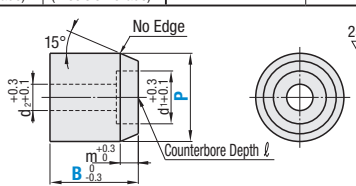
Part Number - D - L - P - B  
 SPSBB - D1.5 - L7.5  
 SNSHPM - D1.5 - L10.0 - P1.0 - B1.5

**Resin Locating Pins – Bolt Fixing**



**RoHS 10**

Type	Materials	Operating Ambient Temperature
JPAJ (Standard Grade) FPAJ (Precision Grade)	Polyacetal (White)	-45-95°C
JPEAJ (Standard Grade) FPEAJ (Precision Grade)	PEEK (Natural Ivory)	-50-250°C



**Part Number Example**

Part Number - P - B  
 JPAJ3 - P8 - B15


Part Number		P (Standard Grade)		P (Precision Grade)		B 1 mm Inc.	m	d <sub>1</sub>	d <sub>2</sub>	ℓ	Applicable Screw					
Type	No.	1 mm Increment	Tolerance	0.1 mm Increment	Tolerance											
JPAJ	FPAJ	3	8-10	0	-0.05	2	2	6.5	3.5	4.5	M3					
JPEAJ	FPEAJ	4	10-12			8.0-10.0						3	8.0	4.5	5.5	M4
		5	12-16			10.0-12.0						4	9.5	5.5	6.5	M5
				12.0-16.0												

⊖ Characteristics of Polyacetal and PEEK P.3068-3069

# Pusher Pins

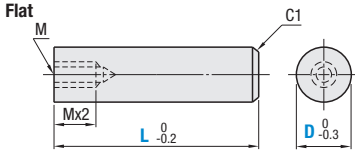
## Straight / Small Head

**Pusher Pins – Straight**

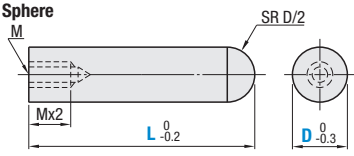


Type				Material	Operating Ambient Temperature
Flat	Spherical	Taper R	Tapered		
PPFJ	PPRJ	PPQJ	PPTJ	Polyacetal (White)	-45~95°C
PEPFJ	PEPRJ	PEPQJ	PEPTJ	PEEK (Natural Ivory)	-50~250°C
PMPFJ	PMPRJ	PMPQJ	—	Conductive MC Nylon CDR2 (Black)	-40~120°C

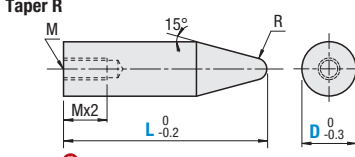
**Flat**



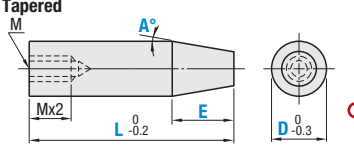
**Sphere**



**Taper R**



**Tapered**




Ⓢ When L<20, the thread length is Mx1.5. Ⓢ D-2EtanA≥1.0 (Tip diameter Ø1.0 or more)

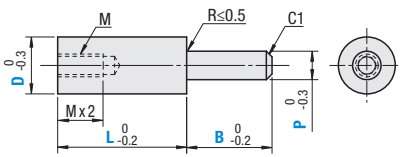
Part Number			L 0.5 mm Increment		M (Coarse)	R	
Type	D		Flat, Sphere	Taper R			
Flat	6		10.0~100.0	14.0~100.0	3	1	
	8		12.0~100.0	18.0~100.0	4	1.5	
	10		13.0~100.0	20.0~100.0	5	2	
PPFJ	PPRJ	PPQJ	12	16.0~100.0	26.0~100.0	5	2
PEPFJ	PEPRJ	PEPQJ	15	19.0~100.0	34.0~100.0	6	3
PMPFJ	PMPRJ	PMPQJ	20	20.0~100.0	40.0~100.0	6	3
			25	50.0~100.0			

Part Number		L	E	A	M
Type	D	0.5 mm Increment	0.5 mm Increment	1° Increment	(Coarse)
Tapered	6	14.0~100.0	5.0≤E≤40 and E≤L-Mx3	1~45	3
	8	18.0~100.0			4
	10				5
PPTJ		20.0~100.0			6
PEPTJ					

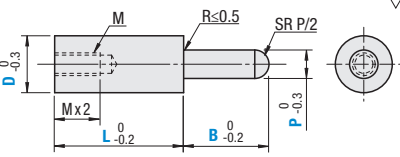
**Pusher Pins – Small Head**



**PPFS**  
Flat



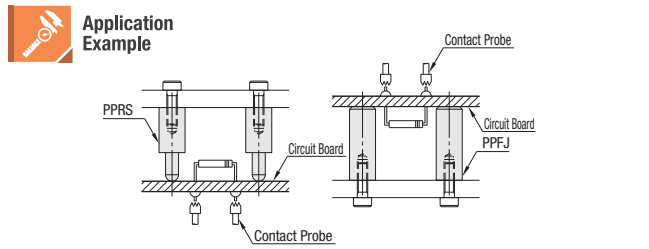
**PPRS**  
Sphere



Ⓢ When L<20, the thread length is M x 1.5. Ⓢ Material: Polyacetal (White) Ⓢ Operating Ambient Temperature: -45~95°C

Part Number		P	L	B	M
Type	D	0.5 mm Increment	0.5 mm Increment	0.5 mm Increment	(Coarse)
PPFS Flat	6	3.0~6.0	10.0~100.0	3.0~20.0	3
	8	4.0~8.0	11.0~100.0		4
	10	5.0~10.0	13.0~100.0		5
	12	6.0~12.0			6
PPRS Sphere	15	8.0~15.0			
	20	10.0~20.0	14.0~100.0		
	25	13.0~25.0			

Ⓢ B≥P/2+1

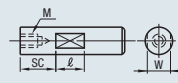
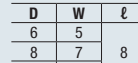


**Part Number Example**

**Straight**  
Part Number - L - E - A  
PPFJ10 - 40.0  
PPTJ12 - 40.0 - E10 - A5

**Small Head**  
Part Number - P - L - B  
PPFS6 - P3.0 - L50.5 - B10.5

**Part Number Alterations**  
Part Number - L - E - A - (HSC, SC)  
PPFJ10 - 40.0 - SC15

Alterations	Thread insert	Width Across Flats																			
Code	HSC	SC																			
Spec.	Adds thread insert to M section part. Ordering Code: HSC D6 : M3 D8~10 : M4 D12 : M5 D15~25 : M6	Width Across Flats SC: 1 mm Increment Ⓢ SC+ℓ+D/2≤L Ⓢ SC>Mx3 Ordering Code: SC15																			
																					
		<table border="1"> <thead> <tr> <th>D</th> <th>W</th> <th>ℓ</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>5</td> <td rowspan="3">8</td> </tr> <tr> <td>8</td> <td>7</td> </tr> <tr> <td>10</td> <td>8</td> </tr> <tr> <td>12</td> <td>10</td> <td rowspan="4">10</td> </tr> <tr> <td>15</td> <td>13</td> </tr> <tr> <td>20</td> <td>17</td> </tr> <tr> <td>25</td> <td>22</td> </tr> </tbody> </table>	D	W	ℓ	6	5	8	8	7	10	8	12	10	10	15	13	20	17	25	22
D	W	ℓ																			
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