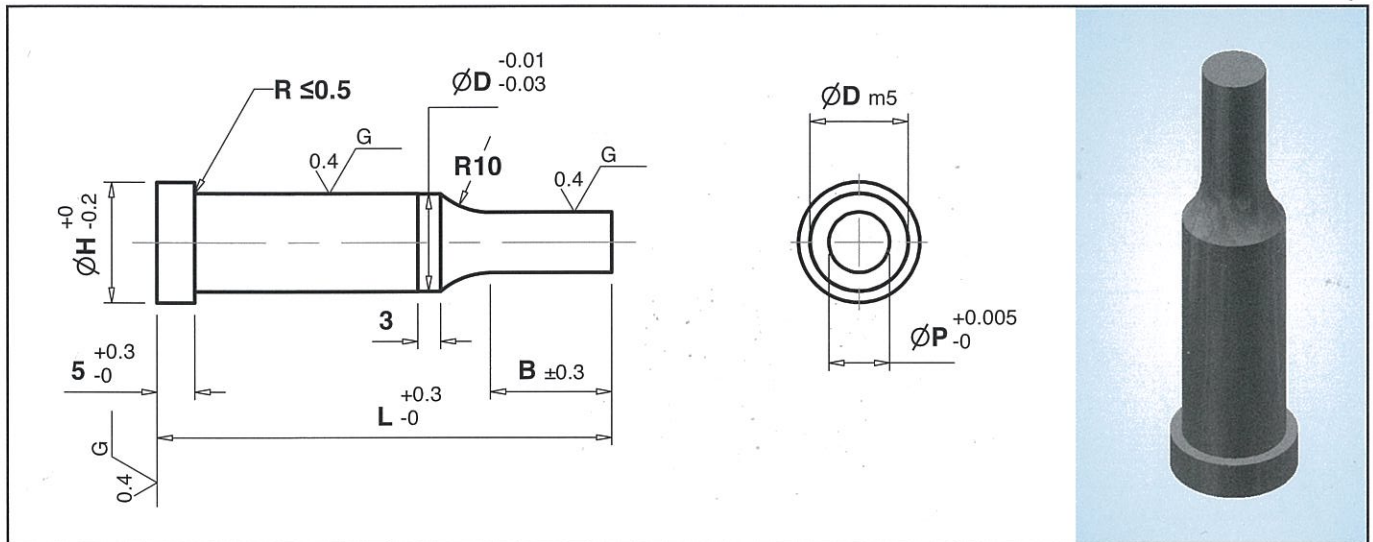


SOLID CARBIDE PUNCHES

- SHOULDER, ROUND (CPAA)
- SHOULDER, ROUND WITH TiCN COATING (TPAA)



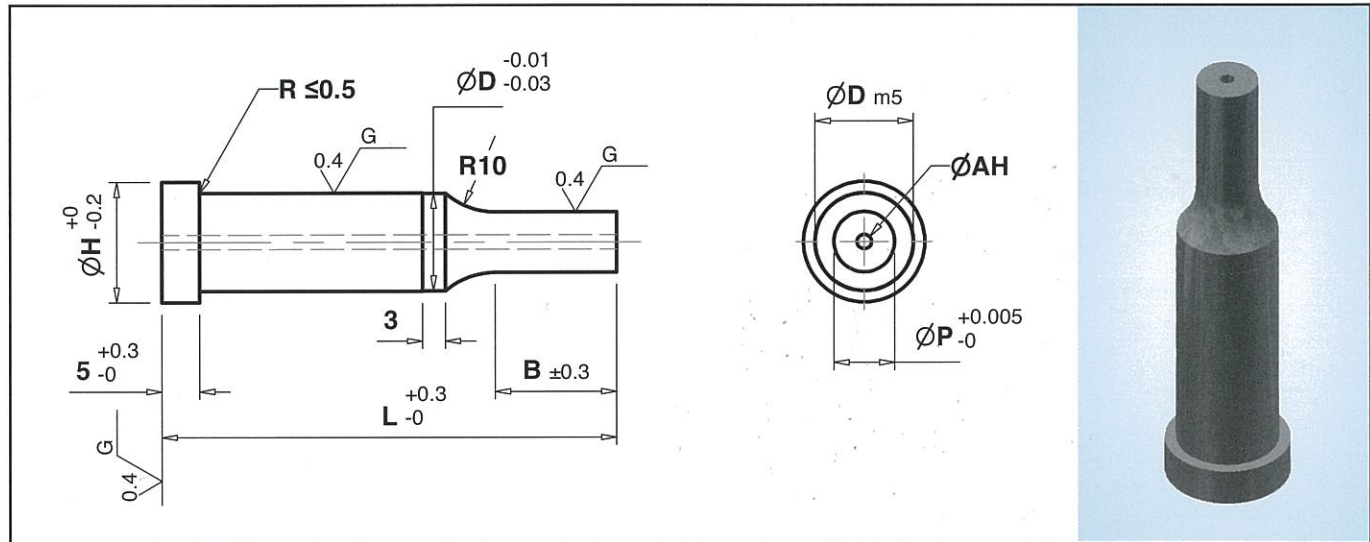
D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	L – Length				
				40	50	60	70	80
2.0	1.500 – 2.990	8 – 13	4.0	•	•	•		
3.0	1.500 – 2.990	8 – 13	5.0	•	•	•		
4.0	1.500 – 3.990	8 – 13	7.0	•	•	•	•	
5.0	1.500 – 4.990	8 – 13	8.0	•	•	•	•	
6.0	2.000 – 5.990	8 – 13	9.0	•	•	•	•	
8.0	3.000 – 7.990	13 – 19	11.0	•	•	•	•	•
10.0	3.000 – 9.990	13 – 19	13.0	•	•	•	•	•
13.0	6.000 – 12.990	13 – 19	16.0	•	•	•	•	•
16.0	10.000 – 15.990	19 – 25	19.0	•	•	•	•	•
20.0	13.000 – 19.990	19 – 25	23.0	•	•	•	•	•
25.0	18.000 – 24.990	19 – 25	28.0	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAA – D – P – B – L**
 Example : **TPAA – D2.0 – P1.500 – B8 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER, ROUND WITH AIR HOLE (**CPAB**)
- SHOULDER, ROUND WITH AIR HOLE WITH TiCN COATING (**TPAB**)



D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	AH Air Hole	L – Length				
					40	50	60	70	80
2.0	1.500 – 2.990	8 – 13	4.0	0.5	•	•	•		
3.0	1.500 – 2.990	8 – 13	5.0	0.5	•	•	•		
4.0	1.500 – 3.990	8 – 13	7.0	0.5	•	•	•	•	
5.0	1.500 – 4.990	8 – 13	8.0	0.8	•	•	•	•	
6.0	2.000 – 5.990	8 – 13	9.0	0.8	•	•	•	•	
8.0	3.000 – 7.990	13 – 19	11.0	1.2	•	•	•	•	•
10.0	3.000 – 9.990	13 – 19	13.0	1.6	•	•	•	•	•
13.0	6.000 – 12.990	13 – 19	16.0	1.9	•	•	•	•	•
16.0	10.000 – 15.990	19 – 25	19.0	2.9	•	•	•	•	•
20.0	13.000 – 19.990	19 – 25	23.0	2.9	•	•	•	•	•
25.0	18.000 – 24.990	19 – 25	28.0	2.9	•	•	•	•	•

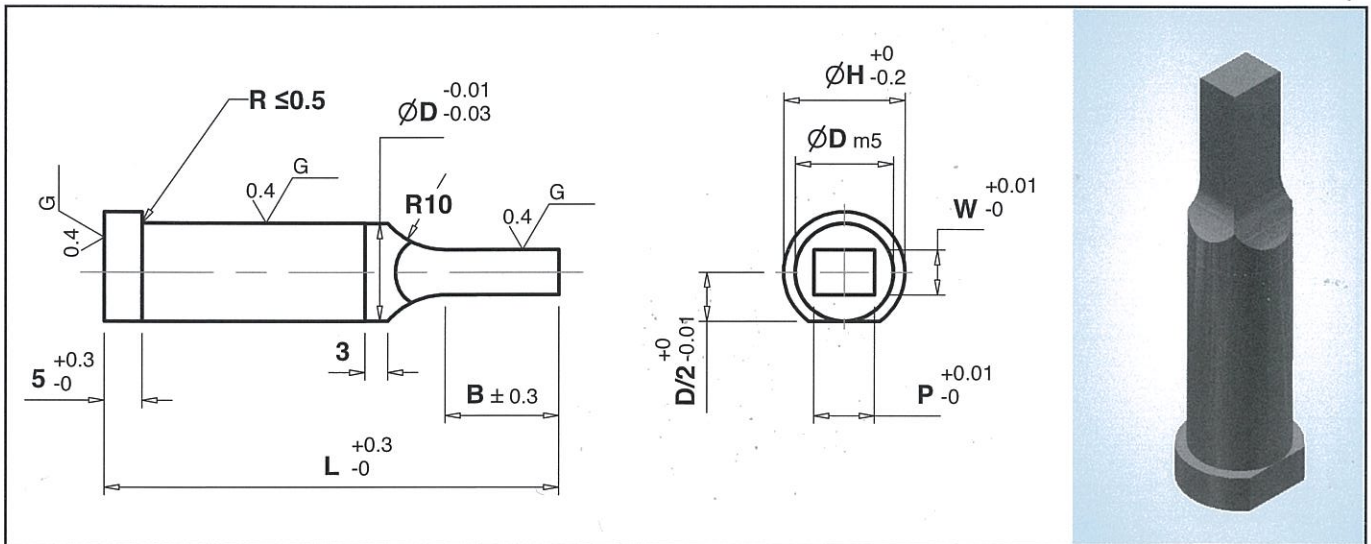
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAB – D – P – B – L**
 Example : **TPAB – D2.0 – P1.500 – B8 – L40**

SOLID CARBIDE PUNCHES



- SHOULDER, RECTANGLE (CPAC)
- SHOULDER, RECTANGLE WITH TiCN COATING (TPAC)



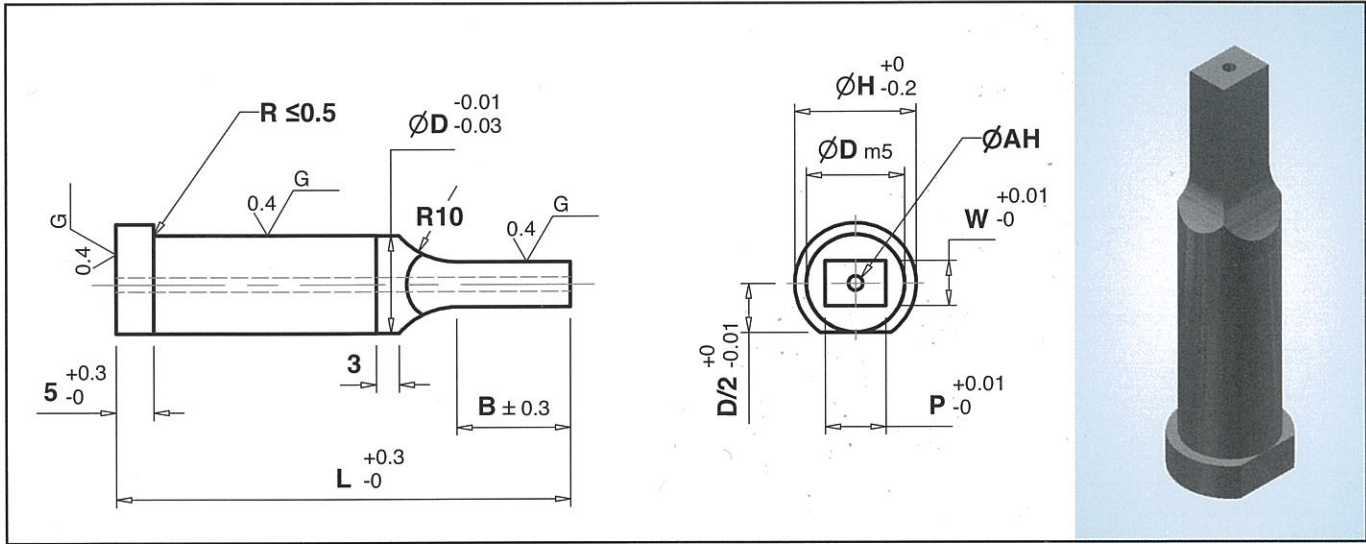
D Body Dia.	P Point Size		B Point Length	H Head Dia.	L – Length				
	P	W			40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAC – D – P – W – B – L**
 Example : **TPAC – D4.0 – P1.500 – W1.500 – B8 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER, RECTANGLE WITH AIR HOLE (**CPAD**)
- SHOULDER, RECTANGLE WITH AIR HOLE WITH TICN COATING (**TPAD**)



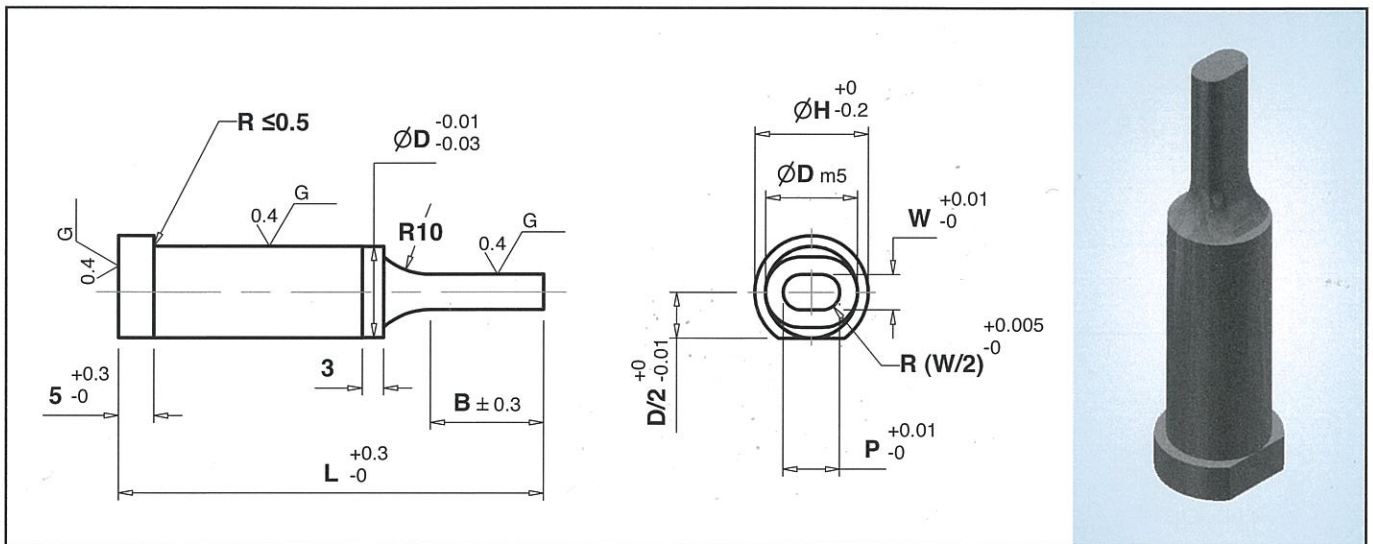
D Body Dia.	P Point Size		B Point Length	H Head Dia.	AH Air Hole	L – Length				
	P	W				40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	0.5	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	0.8	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	0.8	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	1.2	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	1.6	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	1.9	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	2.9	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	2.9	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	2.9	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAD – D – P – W – B – L**
 Example : **TPAD – D4.0 – P1.500 – W1.500 – B8 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER, OBLONG (CPAE)
- SHOULDER, OBLONG WITH TiCN COATING (TPAE)



D Body Dia.	P Point Size		B Point Length	H Head Dia.	L – Length				
	P	W			40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	•	•	•	•	•

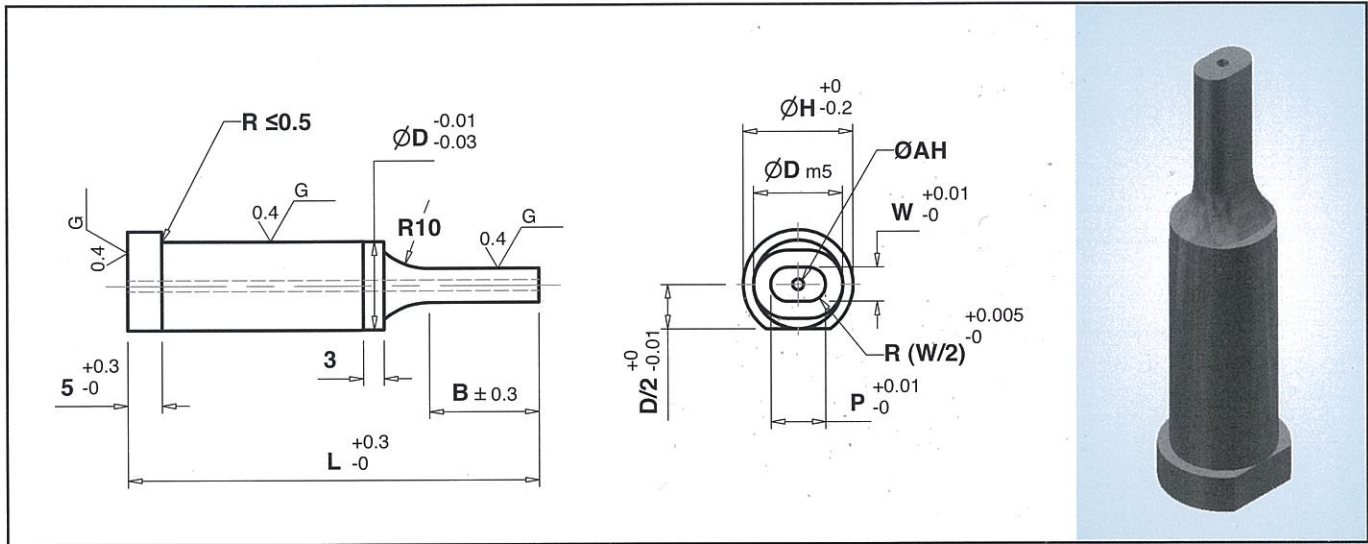
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPAE – D – P – W – B – L

Example : TPAE – D4.0 – P1.500 – W1.500 – B8 – L40

SOLID CARBIDE PUNCHES

- SHOULDER, OBLONG WITH AIR HOLE (CPAF)
- SHOULDER, OBLONG WITH AIR HOLE WITH TICN COATING (TPAF)



D Body Dia.	P Point Size		B Point Length	H Head Dia.	AH Air Hole	L – Length				
	P	W				40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	0.5	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	0.8	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	0.8	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	1.2	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	1.6	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	1.9	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	2.9	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	2.9	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	2.9	•	•	•	•	•

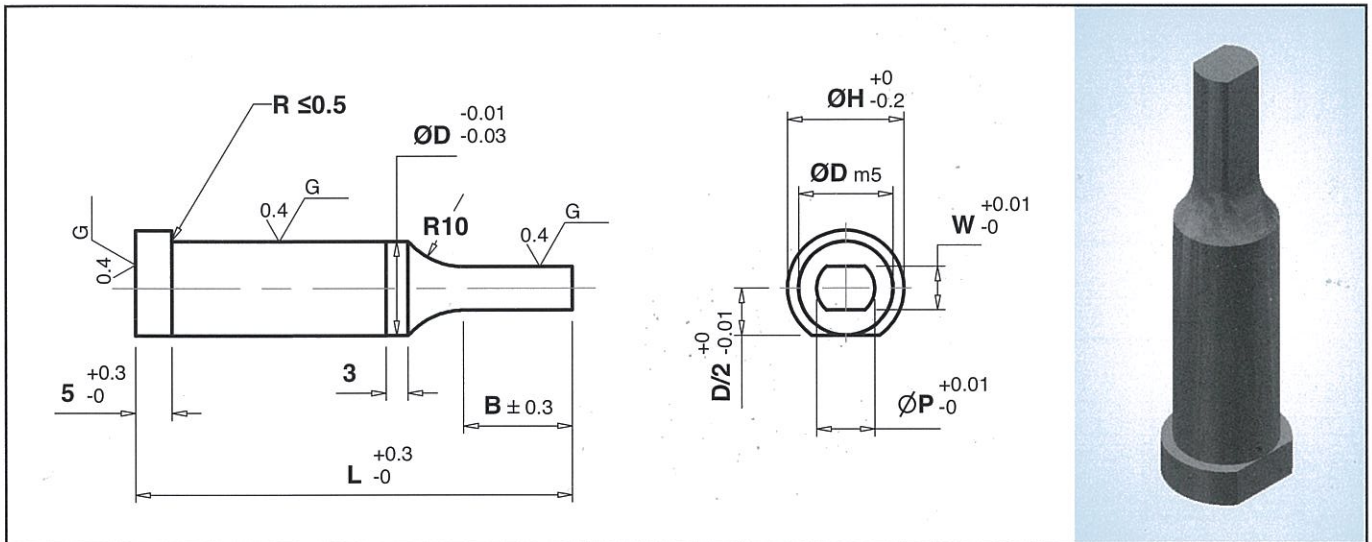
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPAF – D – P – W – B - L

Example : TPAF – D4.0 – P1.500 – W1.500 – B13 – L40

SOLID CARBIDE PUNCHES

- SHOULDER, FLATTED ROUND (CPAG)
- SHOULDER, FLATTED ROUND WITH TICN COATING (TPAG)



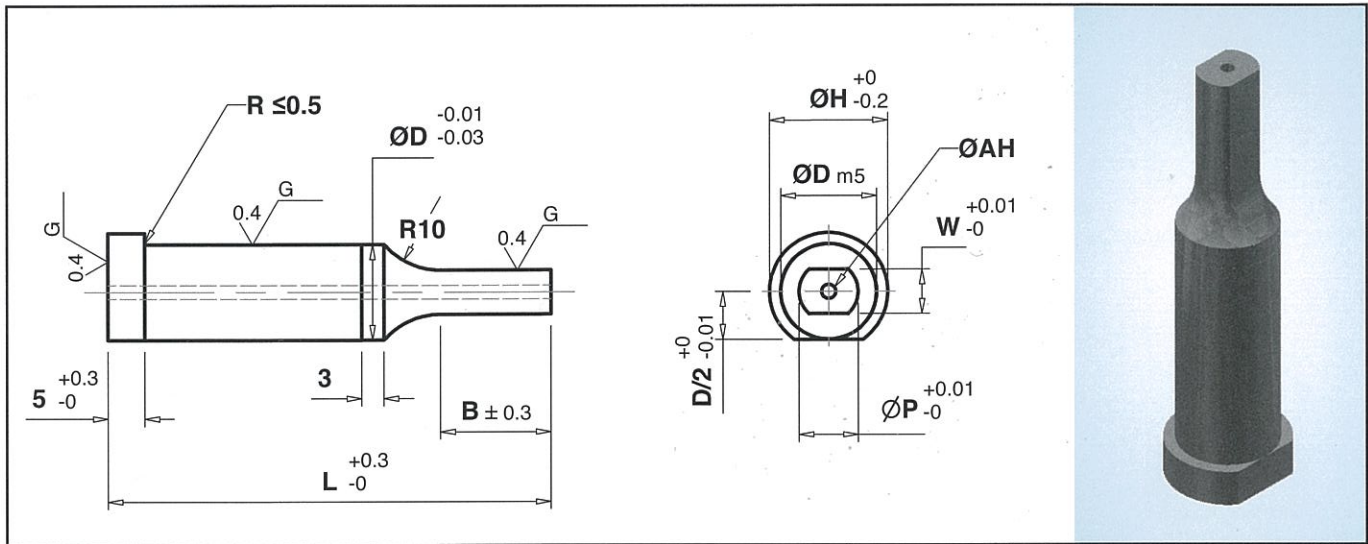
D Body Dia.	P Point Size		B Point Length	H Head Dia.	L – Length				
	P	W			40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAG – D – P – W – B – L**
 Example : **TPAG – D4.0 – P1.500 – W1.500 – B8 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER, FLATTED ROUND WITH AIR HOLE (**CPAH**)
- SHOULDER, FLATTED ROUND WITH AIR HOLE WITH TiCN COATING (**TPAH**)



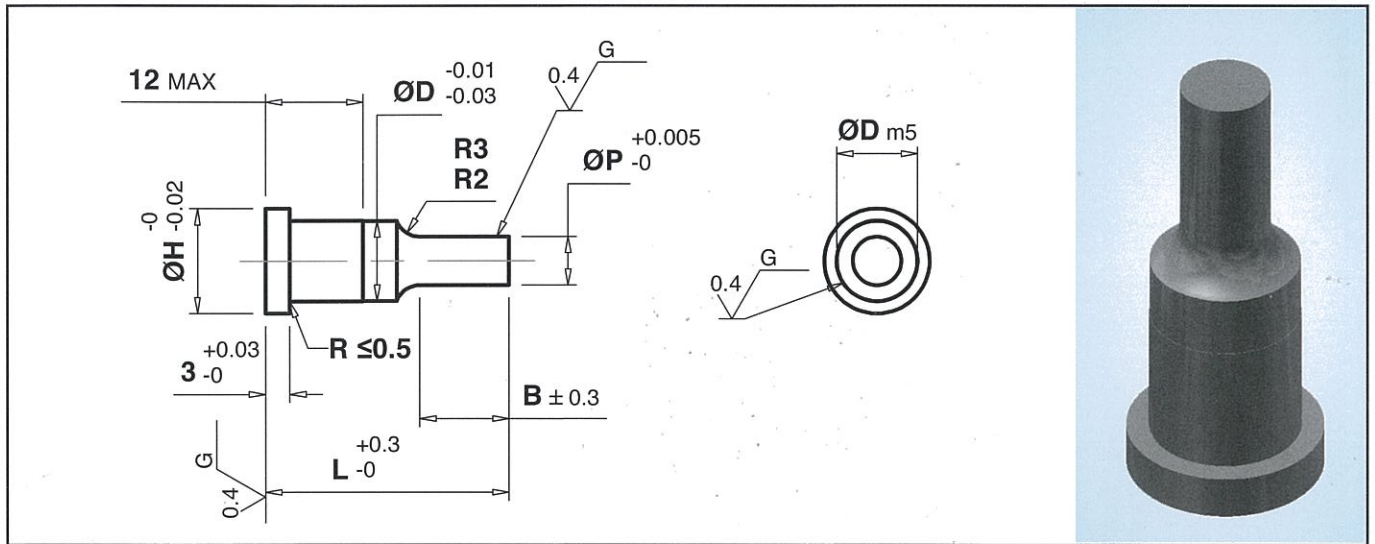
D Body Dia.	P Point Size		B Point Length	H Head Dia.	AH Air Hole	L – Length				
	P	W				40	50	60	70	80
4.0	1.500 – 3.990	1.500 – 3.990	8 – 13	7.0	0.5	•	•	•		
5.0	2.000 – 4.990	2.000 – 4.990	8 – 13	8.0	0.8	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990	8 – 13	9.0	0.8	•	•	•	•	
8.0	3.000 – 7.990	3.000 – 7.990	13 – 19	11.0	1.2	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990	13 – 19	13.0	1.6	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990	13 – 19	16.0	1.9	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990	19 – 25	19.0	2.9	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990	19 – 25	23.0	2.9	•	•	•	•	•
25.0	18.000 – 24.990	18.000 – 24.990	19 – 25	28.0	2.9	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPAH – D – P – W – B – L**
 Example : **TPAH – D4.0 – P1.500 – W1.500 – B8 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER SHORT TYPE, ROUND (CPBA)
- SHOULDER SHORT TYPE, ROUND WITH TiCN COATING (TPBA)



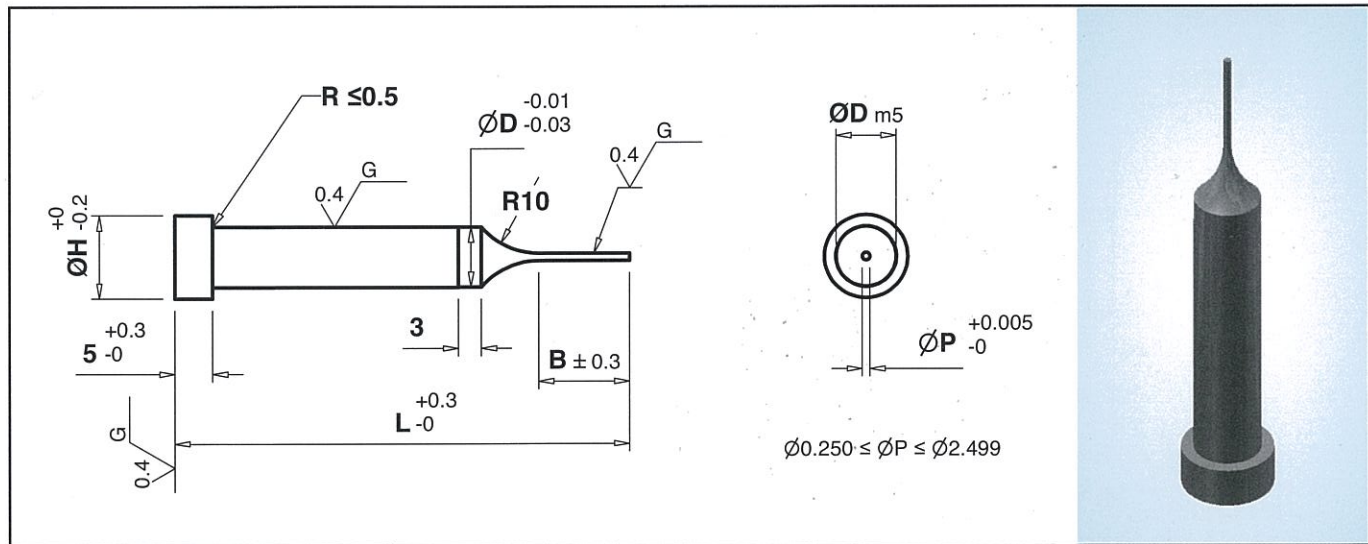
D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	L – Length			
				25	30	35	40
2.0	1.500 – 2.990	8 – 13	5.0	•	•	•	
3.0	1.500 – 2.990	8 – 13	5.0	•	•	•	
4.0	1.500 – 3.990	8 – 13	7.0	•	•	•	•
5.0	1.500 – 4.990	8 – 13	8.0	•	•	•	•
6.0	2.000 – 5.990	8 – 13	9.0	•	•	•	•
8.0	3.000 – 7.990	8 – 13	11.0	•	•	•	•
10.0	3.000 – 9.990	8 – 13	13.0	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPBA – D – P – B – L
 Example : TPBA – D2.0 – P1.500 – B8 – L25

SOLID CARBIDE PUNCHES

- SHOULDER MINI TYPE, ROUND (CPCA)
- SHOULDER MINI TYPE, ROUND WITH TiCN COATING (TPCA)



D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	L – Length						
				20	25	30	35	40	50	60
1.0	0.150 – 0.990	3	4.0	•	•	•	•	•		
1.1	0.150 – 1.090	3	5.0	•	•	•	•	•		
1.2	0.150 – 1.190	3	7.0	•	•	•	•	•		
1.3	0.150 – 1.290	4	8.0	•	•	•	•	•		
1.4	0.150 – 1.390	4	9.0	•	•	•	•	•		
1.5	0.150 – 1.490	4	11.0	•	•	•	•	•		
1.6	0.300 – 1.590	4	13.0	•	•	•	•	•	•	•
2.0	0.500 – 1.990	6	16.0	•	•	•	•	•	•	•
2.5	0.800 – 2.490	8	19.0	•	•	•	•	•	•	•

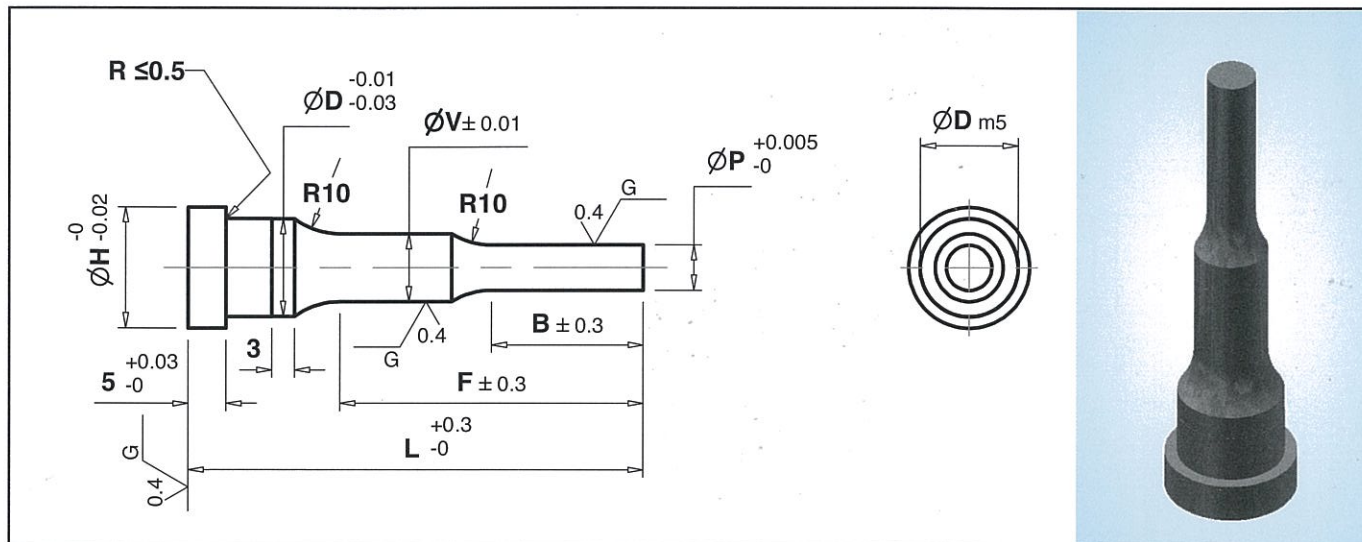
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPCA – D – P – L
 Example : TPCA – D1.0 – P0.150 – L20

SOLID CARBIDE PUNCHES



- SHOULDER TWO STEP, ROUND (CPDA)
- SHOULDER TWO STEP, ROUND WITH TiCN COATING (TPDA)



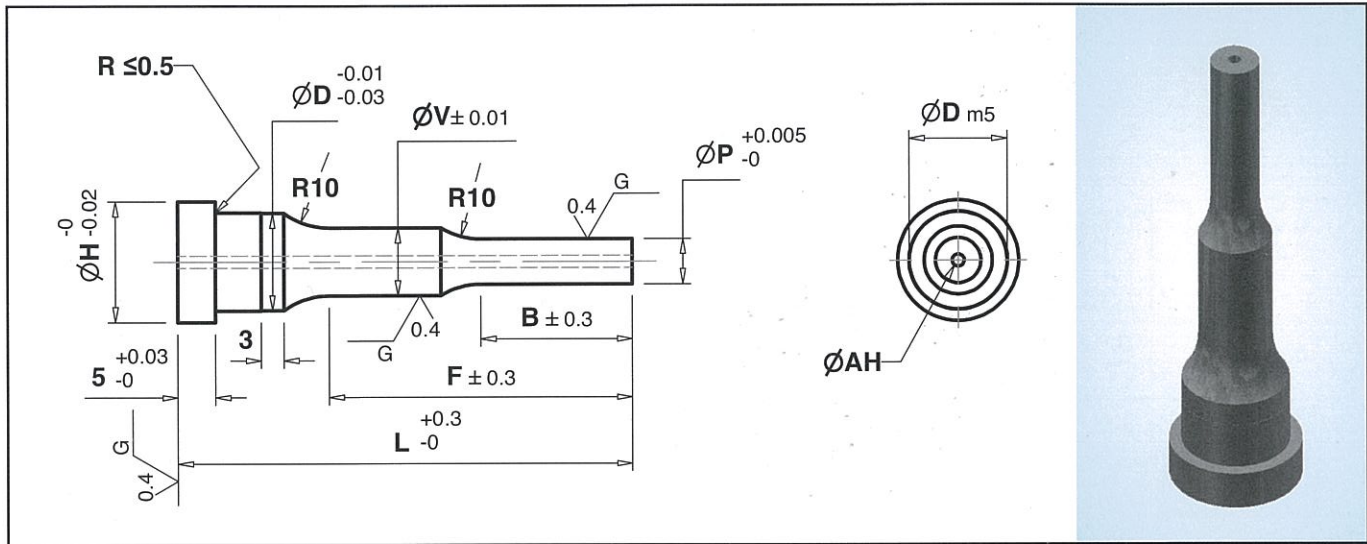
D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	V Step Dia.	F	L – Length				
						40	50	60	70	80
3	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	2.0 – 20.0	7.0	1.500 – 3.990	13 – 30	•	•	•		
5	2.000 – 4.990	2.0 – 40.0	8.0	2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.0 – 40.0	9.0	2.000 – 5.990	40 – 45	•	•	•	•	
8	3.000 – 7.990	2.0 – 45.0	11.0	3.000 – 7.990	40 – 45	•	•	•	•	
10	3.000 – 9.990	2.0 – 45.0	13.0	3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	2.0 – 45.0	16.0	6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	2.0 – 45.0	19.0	10.000 – 15.990	40 – 45	•	•	•	•	•
20	13.000 – 19.990	2.0 – 45.0	23.0	13.000 -19.990	40 – 45	•	•	•	•	•
25	18.000 – 24.990	2.0 – 45.0	28.0	18.000 – 24.990	40 – 45	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPDA – D – P – B – V – F – L**
 Example : **TPDA – D3 – P1.500 – B8.0 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER TWO STEP, ROUND WITH AIR HOLE (CPDB)
- SHOULDER TWO STEP, ROUND WITH AIR HOLE WITH TiCN COATING(TPDB)



D Body Dia.	P Point Dia.	B Point Length	H Head Dia.	V Step Dia.	F	AH Air Hole	L – Length				
							40	50	60	70	80
3	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	0.5	•	•	•		
4	1.500 – 3.990	2.0 – 20.0	7.0	1.500 – 3.990	13 – 30	0.5	•	•	•		
5	2.000 – 4.990	2.0 – 40.0	8.0	2.000 – 4.990	30 – 40	0.8	•	•	•	•	
6	2.000 – 5.990	2.0 – 40.0	9.0	2.000 – 5.990	40 – 45	0.8	•	•	•	•	
8	3.000 – 7.990	2.0 – 45.0	11.0	3.000 – 7.990	40 – 45	1.2	•	•	•	•	
10	3.000 – 9.990	2.0 – 45.0	13.0	3.000 – 9.990	40 – 45	1.6	•	•	•	•	•
13	6.000 – 12.990	2.0 – 45.0	16.0	6.000 – 12.990	40 – 45	1.9	•	•	•	•	•
16	10.000 – 15.990	2.0 – 45.0	19.0	10.000 – 15.990	40 – 45	2.9	•	•	•	•	•
20	13.000 – 19.990	2.0 – 45.0	23.0	13.000 – 19.990	40 – 45	2.9	•	•	•	•	•
25	18.000 – 24.990	2.0 – 45.0	28.0	18.000 – 24.990	40 – 45	2.9	•	•	•	•	•

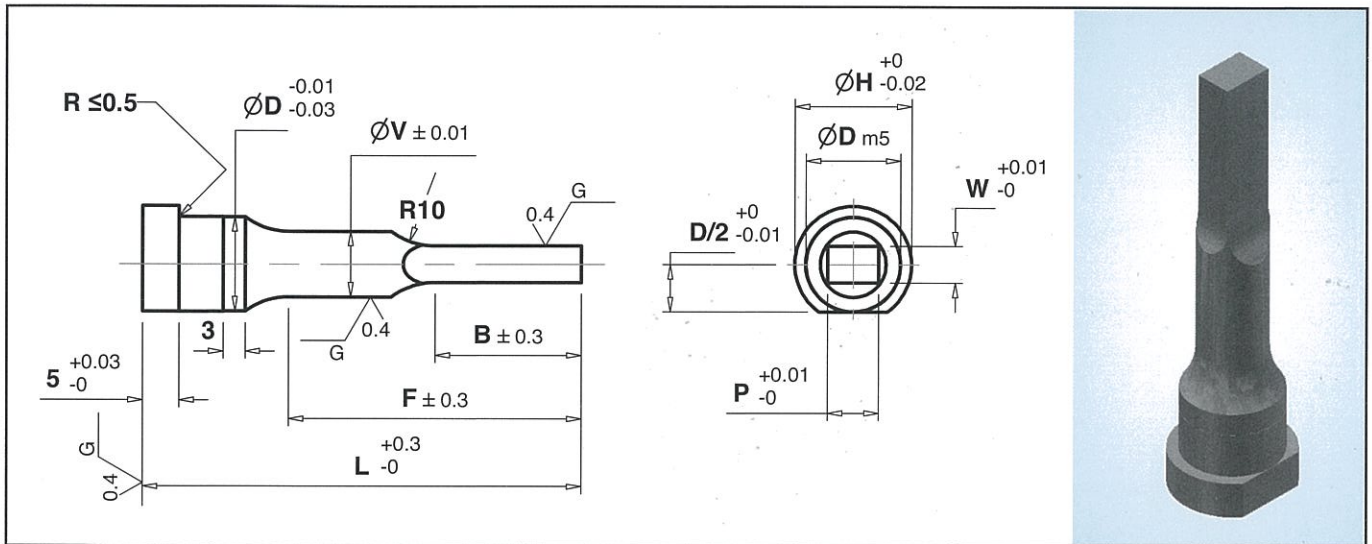
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPDB – D – P – B – V – F – L

Example : TPDB – D3 – P1.500 – B8.0 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES

- SHOULDER TWO STEP, RECTANGLE (CPDC)
- SHOULDER TWO STEP TYPE, RECTANGLE WITH TICN COATING (TPDC)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	L – Length				
	P	W					40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0	5.0	1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0	5.0	2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0	5.0	2.000 – 5.990	40 – 45	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0	5.0	3.000 – 7.990	40 – 45	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0	5.0	3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0	5.0	6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0	5.0	10.000 – 15.990	40 – 45	•	•	•	•	•
20	13.000 – 19.990	13.000 – 19.990	2.0 – 45.0	5.0	13.000 – 19.990	40 – 45	•	•	•	•	•
25	18.000 – 24.990	18.000 – 24.990	2.0 – 45.0	5.0	18.000 – 24.990	40 – 45	•	•	•	•	•

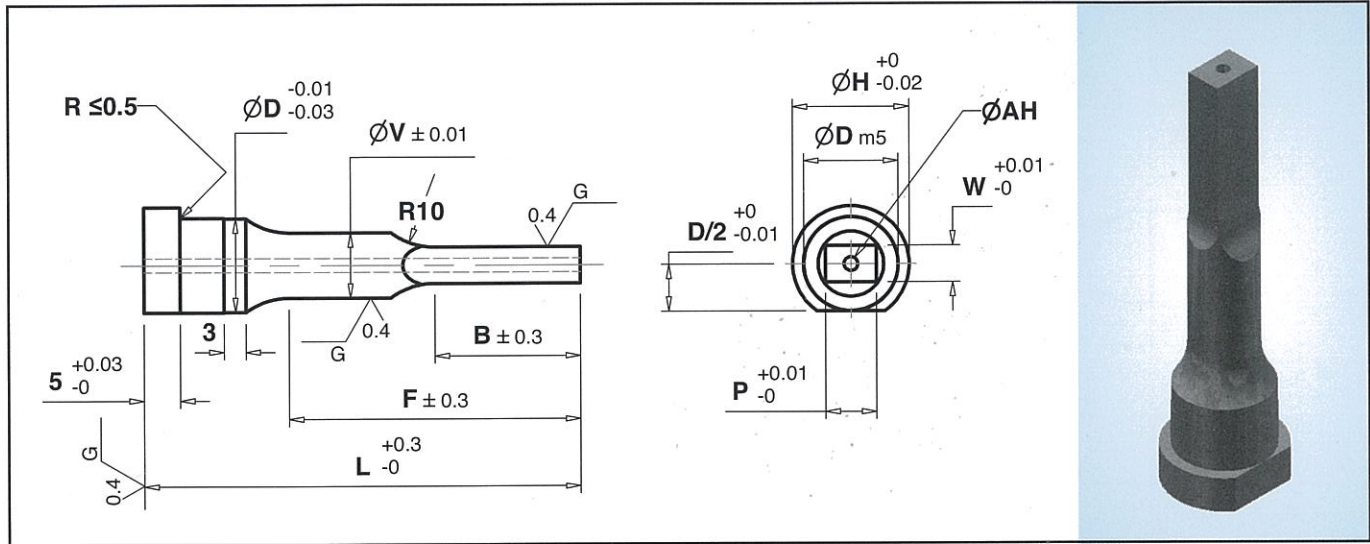
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPDC – D – P – W – B – V – F – L

Example : TPDC – D3 – P1.500 – W1.500 – B8.0 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES

- SHOULDER TWO STEP, RECTANGLE WITH AIR HOLE (CPDD)
- SHOULDER TWO STEP, RECTANGLE WITH AIR HOLE WITH TiCN COATING (TPDD)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	AH Air Hole	L - Length				
	P	W						40	50	60	70	80
3	1.500 - 2.990	1.500 - 2.990	2.0 - 19.0	5.0	1.500 - 2.990	13 - 19	0.5	•	•	•		
4	1.500 - 3.990	1.500 - 3.990	2.0 - 19.0	7.0	1.500 - 3.990	13 - 30	0.5	•	•	•	•	
5	2.000 - 4.990	2.000 - 4.990	2.0 - 20.0	8.0	2.000 - 4.990	30 - 40	0.8	•	•	•	•	
6	2.000 - 5.990	2.000 - 5.990	2.0 - 25.0	9.0	2.000 - 5.990	40 - 45	0.8	•	•	•	•	•
8	3.000 - 7.990	3.000 - 7.990	2.0 - 25.0	11.0	3.000 - 7.990	40 - 45	1.2	•	•	•	•	•
10	3.000 - 9.990	3.000 - 9.990	2.0 - 25.0	13.0	3.000 - 9.990	40 - 45	1.6	•	•	•	•	•
13	6.000 - 12.990	6.000 - 12.990	2.0 - 25.0	16.0	6.000 - 12.990	40 - 45	1.9	•	•	•	•	•
16	10.000 - 15.990	10.000 - 15.990	2.0 - 25.0	19.0	10.000 - 15.990	40 - 45	2.9	•	•	•	•	•
20	13.000 - 19.990	13.000 - 19.990	2.0 - 25.0	23.0	13.000 - 19.990	40 - 45	2.9	•	•	•	•	•
25	18.000 - 24.990	18.000 - 24.990	2.0 - 25.0	28.0	18.000 - 24.990	40 - 45	2.9	•	•	•	•	•

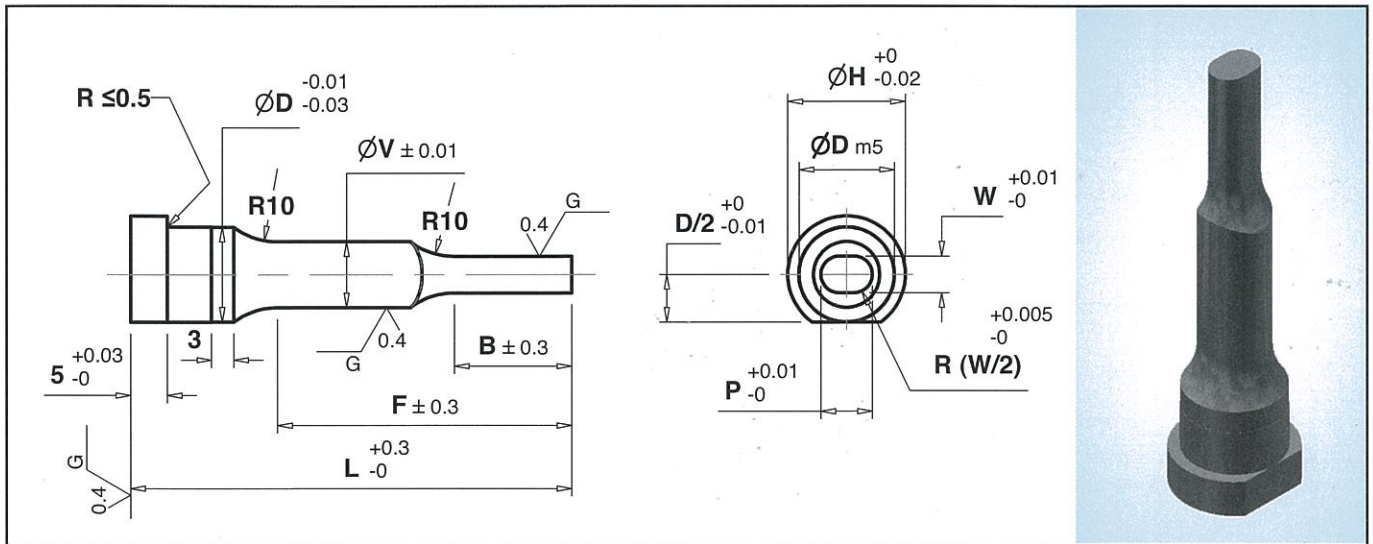
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPDD - D - P - W - B - V - F - L

Example : TPDD - D3 - P1.500 - W1.500 - B8.0 - V1.50 - F13 - L40

SOLID CARBIDE PUNCHES

- SHOULDER TWO STEP, OBLONG (CPDE)
- SHOULDER TWO STEP, OBLONG WITH TiCN COATING (TPDE)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	L – Length				
	P	W					40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0	5.0	1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0	5.0	2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0	5.0	2.000 – 5.990	40 – 45	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0	5.0	3.000 – 7.990	40 – 45	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0	5.0	3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0	5.0	6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0	5.0	10.000 – 15.990	40 – 45	•	•	•	•	•
20	13.000 – 19.990	13.000 – 19.990	2.0 – 45.0	5.0	13.000 – 19.990	40 – 45	•	•	•	•	•
25	18.000 – 24.990	18.000 – 24.990	2.0 – 45.0	5.0	18.000 – 24.990	40 – 45	•	•	•	•	•

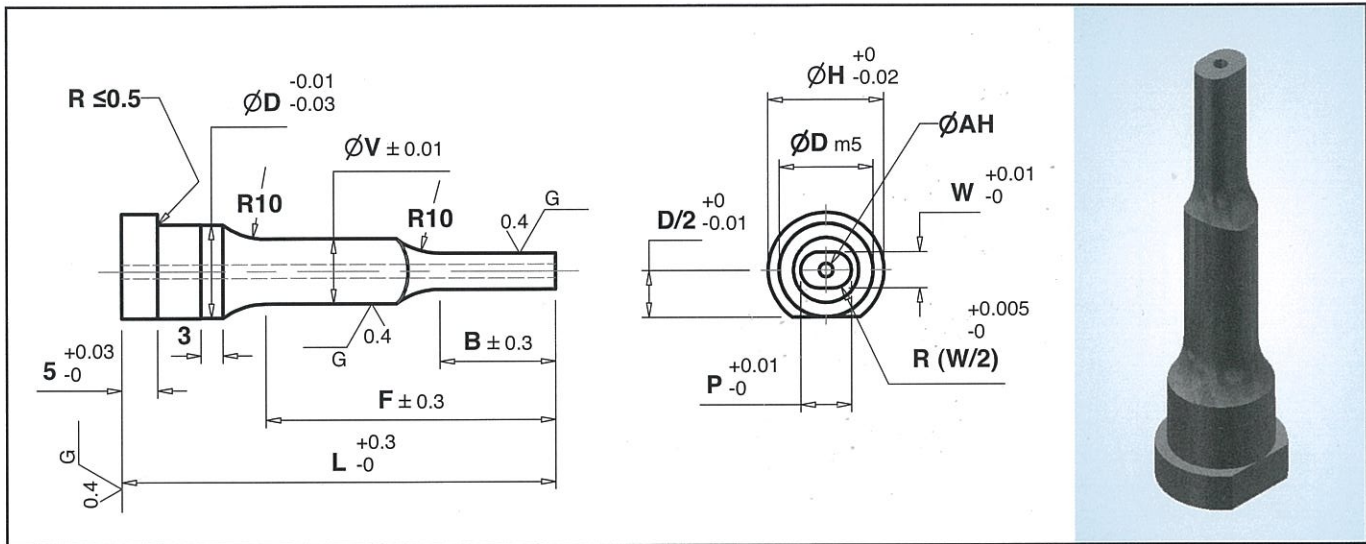
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPDE – D – P – W – B – V – F – L**

Example : **TPDE – D3 – P1.500 – W1.500 – B8.0 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES

- SHOULDER TWO STEP, OBLONG WITH AIR HOLE(CPDF)
- SHOULDER TWO STEP, OBLONG WITH AIR HOLE WITH TiCN COATING(TPDF)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	AH Air Hole	L – Length				
	P	W						40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	0.5	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 19.0	7.0	1.500 – 3.990	13 – 30	0.5	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 20.0	8.0	2.000 – 4.990	30 – 40	0.8	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 25.0	9.0	2.000 – 5.990	40 – 45	0.8	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 25.0	11.0	3.000 – 7.990	40 – 45	1.2	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 25.0	13.0	3.000 – 9.990	40 – 45	1.6	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 25.0	16.0	6.000 – 12.990	40 – 45	1.9	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 25.0	19.0	10.000 – 15.990	40 – 45	2.9	•	•	•	•	•
20	13.000 – 19.990	13.000 – 19.990	2.0 – 25.0	23.0	13.000 – 19.990	40 – 45	2.9	•	•	•	•	•
25	18.000 – 24.990	18.000 – 24.990	2.0 – 25.0	28.0	18.000 – 24.990	40 – 45	2.9	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

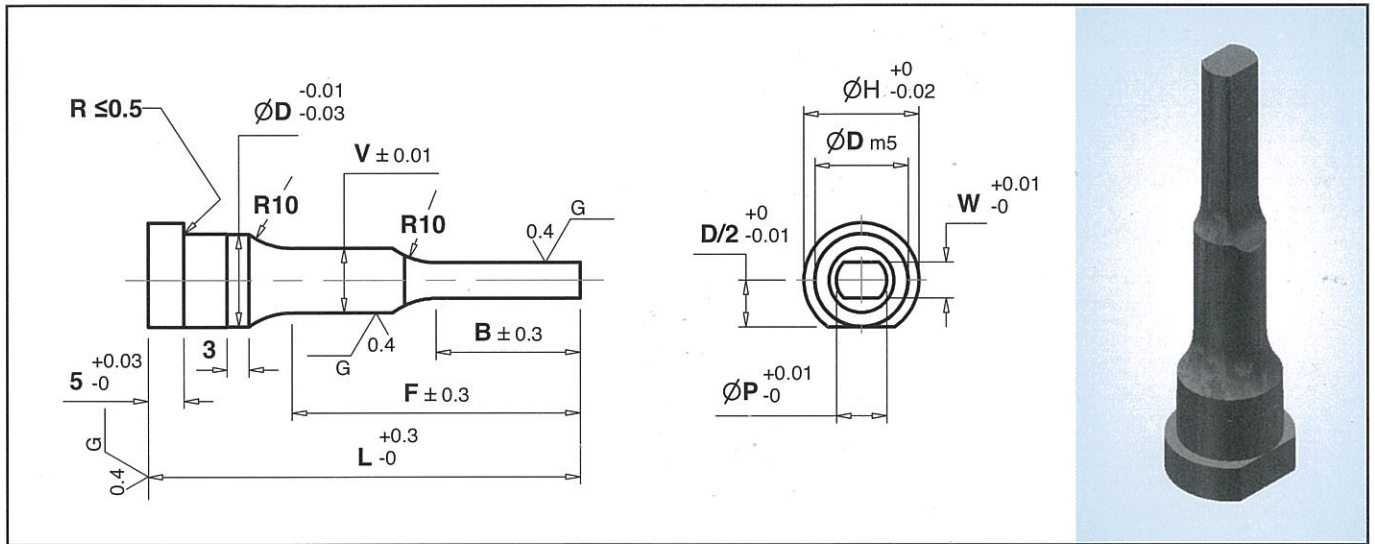
How to order : **CPDF – D – P – W – B – V – F – L**

Example : **TPDF – D3 – P1.500 – W1.500 – B8.0 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES



- SHOULDER TWO STEP, FLATTED ROUND (CPDG)
- SHOULDER TWO STEP, FLATTED ROUND WITH TiCN COATING (TPDG)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	L – Length				
	P	W					40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0	5.0	1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0	5.0	2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0	5.0	2.000 – 5.990	40 – 45	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0	5.0	3.000 – 7.990	40 – 45	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0	5.0	3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0	5.0	6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0	5.0	10.000 – 15.990	40 – 45	•	•	•	•	•
20	13.000 – 19.990	13.000 – 19.990	2.0 – 45.0	5.0	13.000 – 19.990	40 – 45	•	•	•	•	•
25	18.000 – 24.990	18.000 – 24.990	2.0 – 45.0	5.0	18.000 – 24.990	40 – 45	•	•	•	•	•

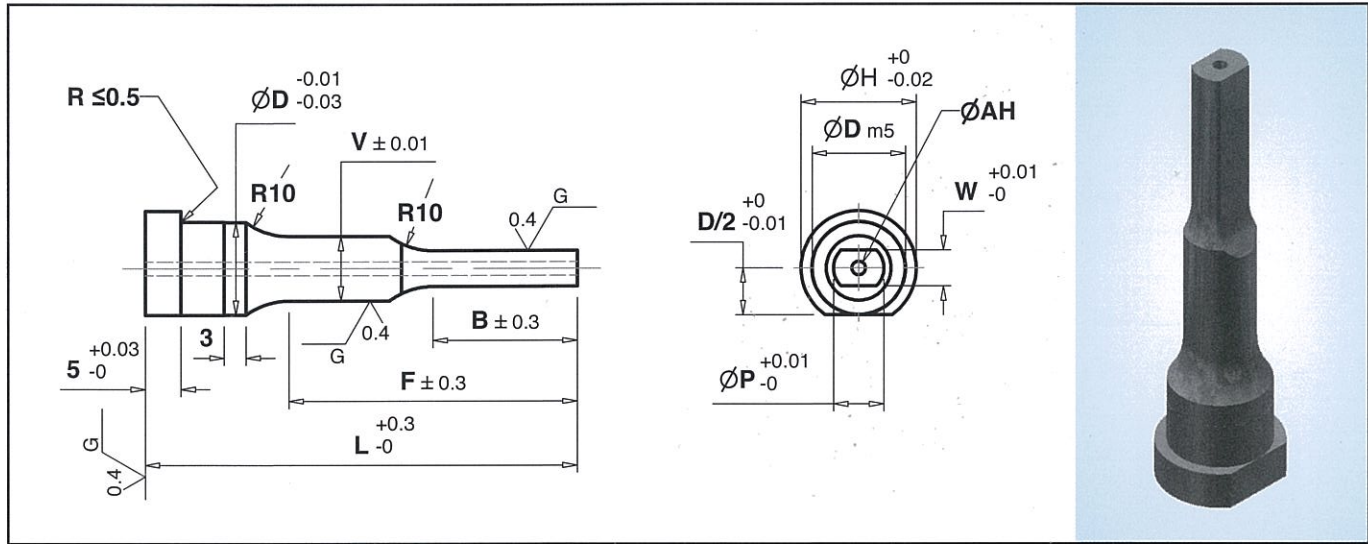
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPDG – D – P – W – B – V – F – L**
 Example : **TPDG – D3 – P1.500 – W1.500 – B8.0 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES



- SHOULDER TWO STEP, FLATTED ROUND WITH AIR HOLE (CPDH)
- SHOULDER TWO STEP, FLATTED ROUND WITH AIR HOLE WITH TiCN COATING (TPDH)



D Body Dia.	P Point Dia.		B Point Length	H Head Dia.	V Step Dia.	F	AH Air Hole	L – Length				
	P	W						40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	5.0	1.500 – 2.990	13 – 19	0.5	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 19.0	7.0	1.500 – 3.990	13 – 30	0.5	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 20.0	8.0	2.000 – 4.990	30 – 40	0.8	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 25.0	9.0	2.000 – 5.990	40 – 45	0.8	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 25.0	11.0	3.000 – 7.990	40 – 45	1.2	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 25.0	13.0	3.000 – 9.990	40 – 45	1.6	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 25.0	16.0	6.000 – 12.990	40 – 45	1.9	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 25.0	19.0	10.000 – 15.990	40 – 45	2.9	•	•	•	•	•
20	13.000 – 19.990	13.000 – 19.990	2.0 – 25.0	23.0	13.000 – 19.990	40 – 45	2.9	•	•	•	•	•
25	18.000 – 24.990	18.000 – 24.990	2.0 – 25.0	28.0	18.000 – 24.990	40 – 45	2.9	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

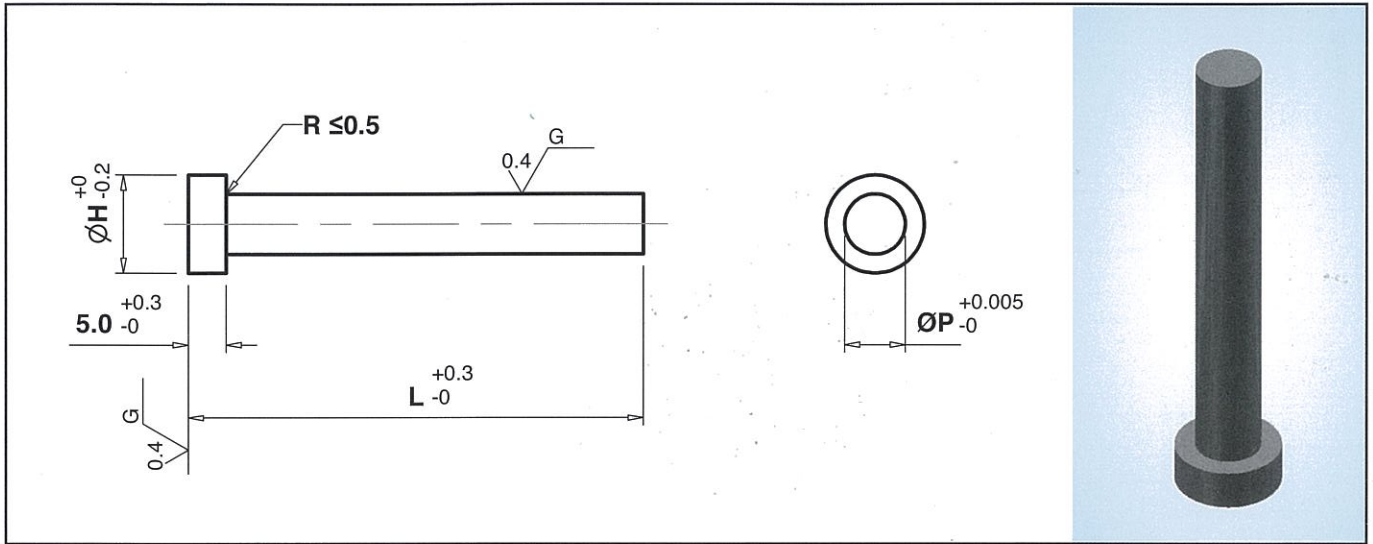
How to order : **CPDH – D – P – W – B – V – F – L**

Example : **TPDH – D3 – P1.500 – W1.500 – B8.0 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES



- STRAIGHT TYPE, ROUND (CPEA)
- STRAIGHT TYPE, ROUND WITH TiCN COATING (TPEA)



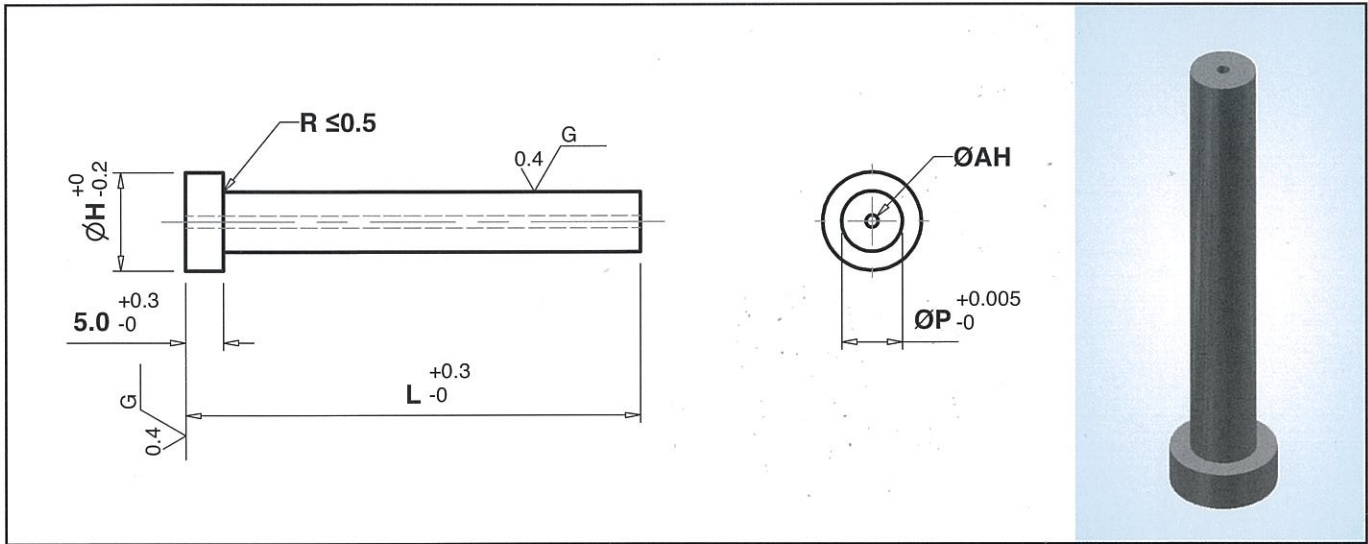
P Point Dia.	H Head Dia.	T Head Thickness	L – Length				
			40	50	60	70	80
1.500 – 2.990	5.0	5.0	•	•	•		
1.500 – 3.990	7.0	5.0	•	•	•	•	
1.500 – 4.990	8.0	5.0	•	•	•	•	
2.000 – 5.990	9.0	5.0	•	•	•	•	•
3.000 – 7.990	11.0	5.0	•	•	•	•	•
3.000 – 9.990	13.0	5.0	•	•	•	•	•
6.000 – 12.990	16.0	5.0	•	•	•	•	•
10.000 – 15.990	19.0	5.0	•	•	•	•	•
13.000 – 19.990	23.0	5.0	•	•	•	•	•
18.000 – 24.990	28.0	5.0	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPEA – P – L**
 Example : **TPEA – P1.500 – L40**

SOLID CARBIDE PUNCHES

- STRAIGHT TYPE, ROUND WITH AIR HOLE (**CPEB**)
- STRAIGHT TYPE, ROUND WITH AIR HOLE WITH TICN COATING (**TPEB**)



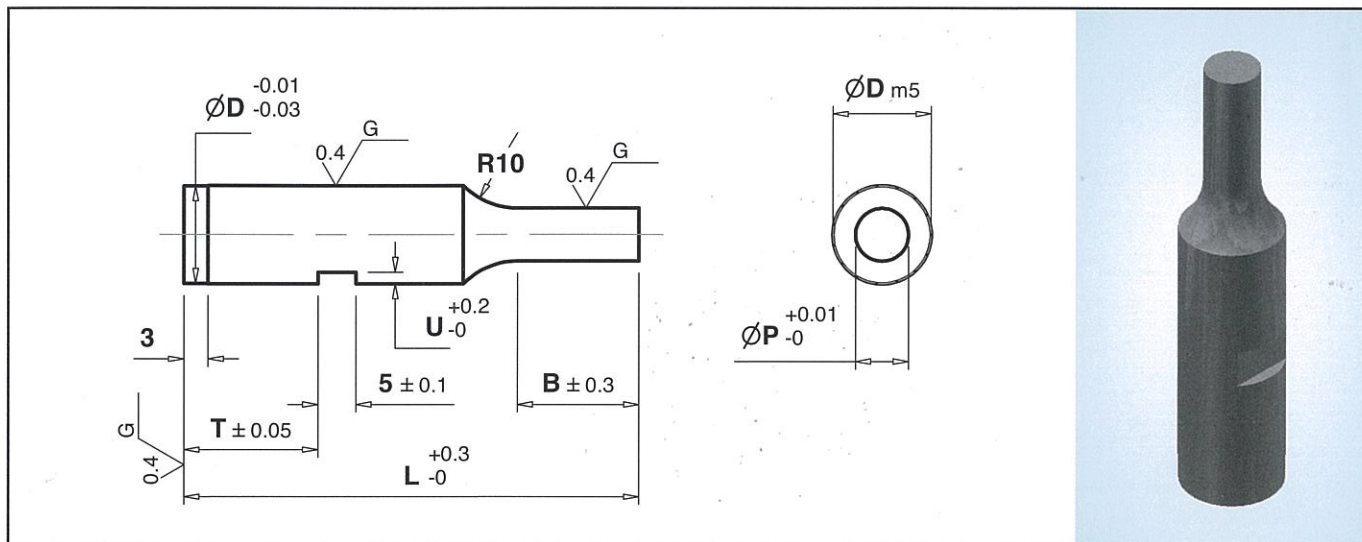
P Point Dia.	H Head Dia.	T Head Thickness	AH Air Hole	L – Length				
				40	50	60	70	80
1.500 – 2.990	5.0	5.0	0.5	•	•	•		
1.500 – 3.990	7.0	5.0	0.5	•	•	•	•	
1.500 – 4.990	8.0	5.0	0.8	•	•	•	•	
2.000 – 5.990	9.0	5.0	0.8	•	•	•	•	•
3.000 – 7.990	11.0	5.0	1.2	•	•	•	•	•
3.000 – 9.990	13.0	5.0	1.6	•	•	•	•	•
6.000 – 12.990	16.0	5.0	1.9	•	•	•	•	•
10.000 – 15.990	19.0	5.0	2.9	•	•	•	•	•
13.000 – 19.990	23.0	5.0	2.9	•	•	•	•	•
18.000 – 24.990	28.0	5.0	2.9	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPEB – P – L**
 Example : **TPEB – P1.500 – L40**

SOLID CARBIDE PUNCHES

- KEY GROOVE, ROUND (CPFA)
- KEY GROOVE, ROUND WITH TICN COATING (TPFA)



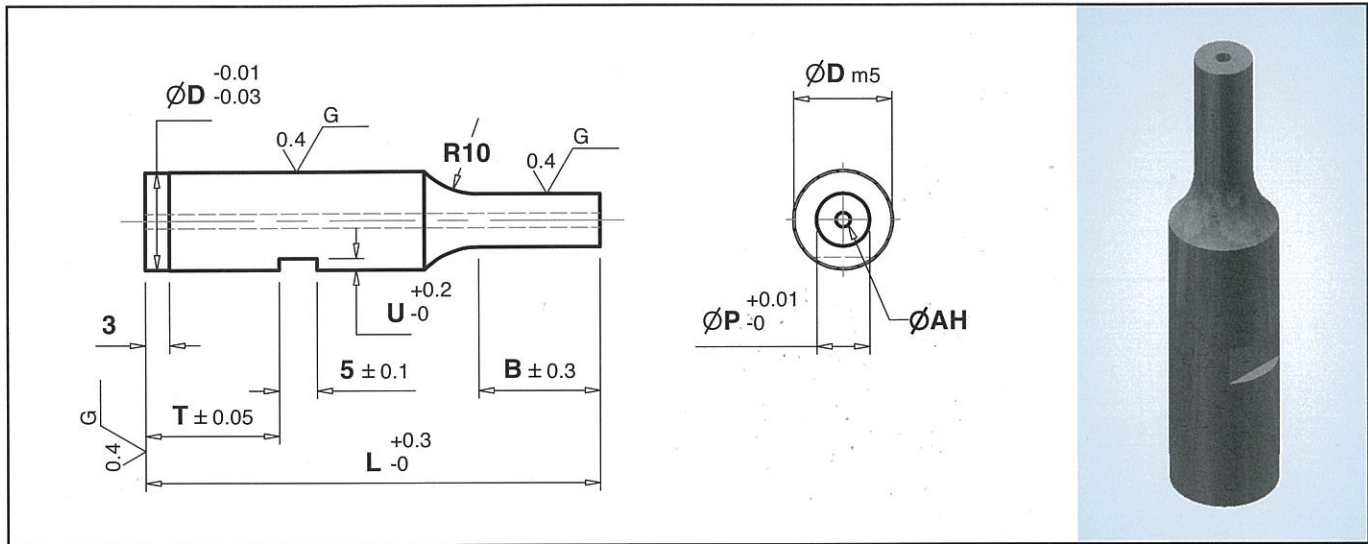
D Body Dia.	P Point Dia.	B Point Length	U Groove Depth	T	L – Length				
					40	50	60	70	80
2.0	1.500 – 2.990	8 – 13	0.5	T≥5.0	•	•	•		
3.0	1.500 – 2.990	8 – 13	0.5		•	•	•		
4.0	1.500 – 3.990	8 – 13	0.5		•	•	•	•	
5.0	1.500 – 4.990	8 – 13	0.5		•	•	•	•	
6.0	2.000 – 5.990	8 – 13	1.0		•	•	•	•	
8.0	3.000 – 7.990	13 – 19	1.5		•	•	•	•	•
10.0	3.000 – 9.990	13 – 19	1.5		•	•	•	•	•
13.0	6.000 – 12.990	13 – 19	1.5		•	•	•	•	•
16.0	10.000 – 15.990	19 – 25	1.5		•	•	•	•	•
20.0	13.000 – 19.990	19 – 25	1.5		•	•	•	•	•
25.0	18.000 – 24.990	19 – 25	1.5		•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPFA – D – P – B – T – L**
 Example : **TPFA – D2.0 – P1.500 – B8 – T55 – L40**

SOLID CARBIDE PUNCHES

- KEY GROOVE, ROUND WITH AIR HOLE (**CPF**)
- KEY GROOVE, ROUND WITH AIR HOLE WITH TiCN COATING (**TPF**)



D Body Dia.	P Point Dia.	B Point Length	U Groove Depth	T	AH Air Hole	L – Length				
						40	50	60	70	80
2.0	1.500 – 2.990	8 – 13	0.5	T≥5.0	0.5	•	•	•		
3.0	1.500 – 2.990	8 – 13	0.5		0.5	•	•	•		
4.0	1.500 – 3.990	8 – 13	0.5		0.5	•	•	•	•	
5.0	1.500 – 4.990	8 – 13	0.5		0.8	•	•	•	•	
6.0	2.000 – 5.990	8 – 13	1.0		0.8	•	•	•	•	
8.0	3.000 – 7.990	13 – 19	1.5		1.2	•	•	•	•	•
10.0	3.000 – 9.990	13 – 19	1.5		1.6	•	•	•	•	•
13.0	6.000 – 12.990	13 – 19	1.5		1.9	•	•	•	•	•
16.0	10.000 – 15.990	19 – 25	1.5		2.9	•	•	•	•	•
20.0	13.000 – 19.990	19 – 25	1.5		2.9	•	•	•	•	•
25.0	18.000 – 24.990	19 – 25	1.5		2.9	•	•	•	•	•

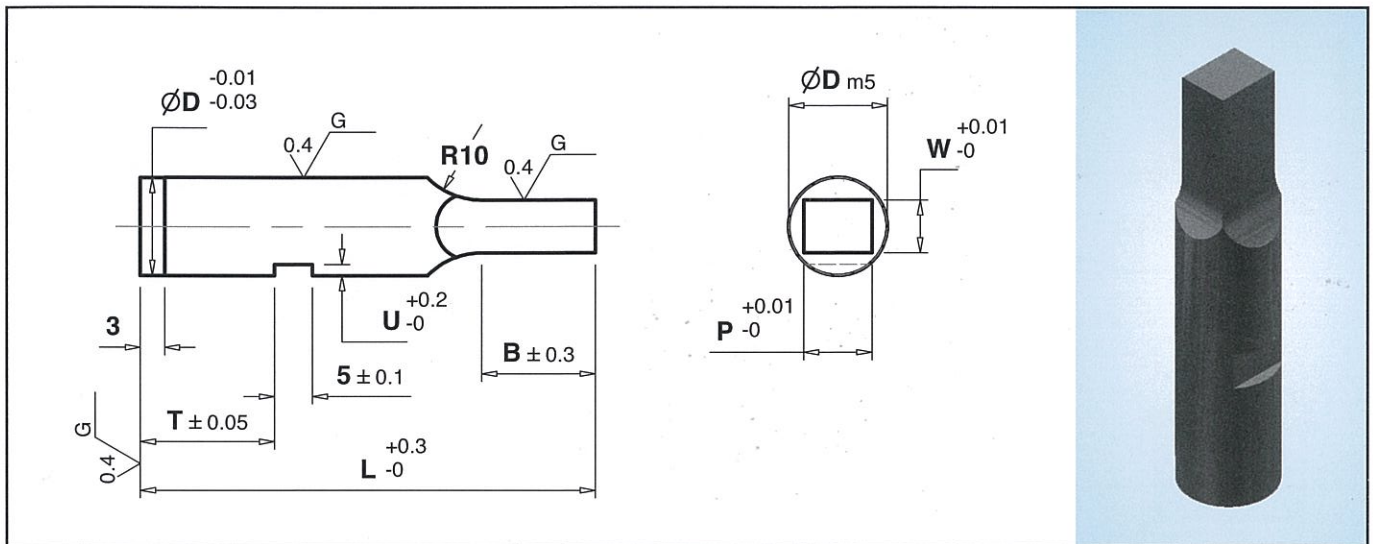
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPF** – **D** – **P** – **B** – **T** – **L**
 Example : **TPF** – **D2.0** – **P1.500** – **B8** – **T5** – **L40**

SOLID CARBIDE PUNCHES



- KEY GROOVE, RECTANGLE (CPFC)
- KEY GROOVE, RECTANGLE WITH TiCN COATING (TPFC)



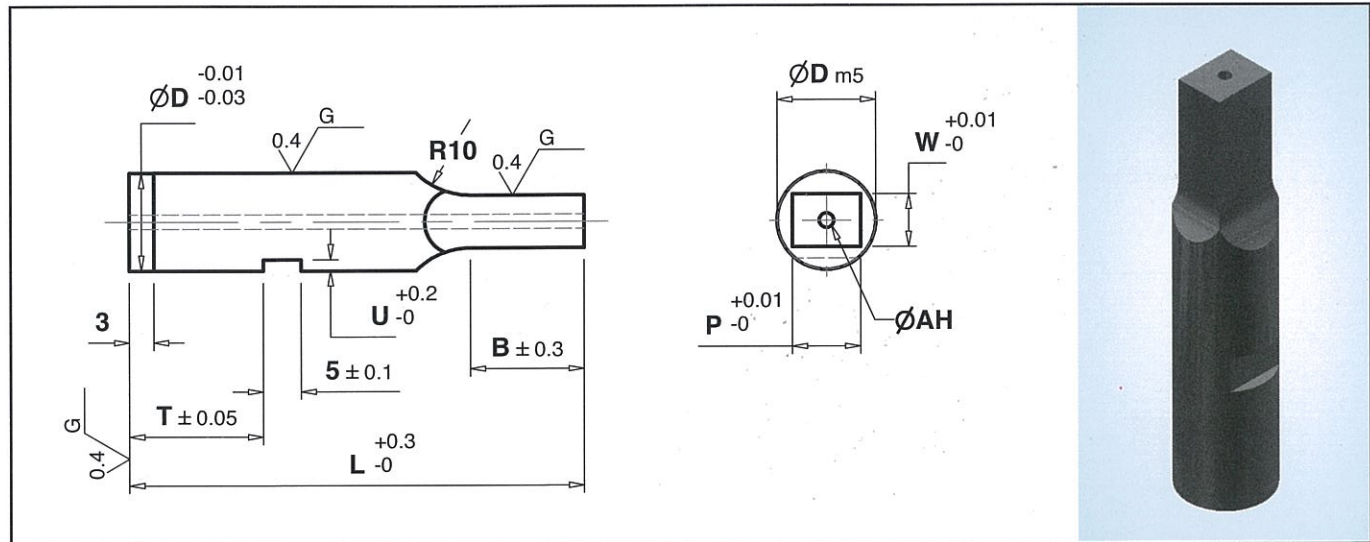
D Body Dia.	P Point Size		T	U	B	L – Length				
	P	W				40	50	60	70	80
3.0	1.500 – 2.990	1.500 – 2.990	T ≥ 5.0	1.0	8 – 13	•	•	•		
4.0	1.500 – 3.990	1.500 – 3.990			8 – 13	•	•	•	•	
5.0	1.500 – 4.990	1.500 – 4.990			8 – 13	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990			13 – 19	•	•	•	•	•
8.0	3.000 – 7.990	3.000 – 7.990		1.5	13 – 19	•	•	•	•	•
10.0	3.000 – 9.990	3.000 – 9.990			13 – 19	•	•	•	•	•
13.0	6.000 – 12.990	6.000 – 12.990			19 – 25	•	•	•	•	•
16.0	10.000 – 15.990	10.000 – 15.990			19 – 25	•	•	•	•	•
20.0	13.000 – 19.990	13.000 – 19.990			19 – 25	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPFC – H – V – P – W – T – B – L
 Example : TPFC – H2.000 – V2.00 – P1.500 – W1.500 – T5.0 – B8 – L40

SOLID CARBIDE PUNCHES

- KEY GROOVE, RECTANGLE WITH AIR HOLE (CPFD)
- KEY GROOVE, RECTANGLE WITH AIR HOLE WITH TiCN COATING (TPFD)



D Body Dia.	P Point Size		T	U	B	AH	L - Length				
	P	W					40	50	60	70	80
3.0	1.500 - 2.990	1.500 - 2.990	T ≥ 5.0	1.0	8 - 13	0.5	•	•	•		
4.0	1.500 - 3.990	1.500 - 3.990			8 - 13	0.8	•	•	•	•	
5.0	1.500 - 4.990	1.500 - 4.990			8 - 13	0.8	•	•	•	•	
6.0	2.000 - 5.990	2.000 - 5.990			13 - 19	1.2	•	•	•	•	•
8.0	3.000 - 7.990	3.000 - 7.990		13 - 19	1.6	•	•	•	•	•	
10.0	3.000 - 9.990	3.000 - 9.990		13 - 19	1.9	•	•	•	•	•	
13.0	6.000 - 12.990	6.000 - 12.990		19 - 25	2.9	•	•	•	•	•	
16.0	10.000 - 15.990	10.000 - 15.990		19 - 25	2.9	•	•	•	•	•	
20.0	13.000 - 19.990	13.000 - 19.990		19 - 25	2.9	•	•	•	•	•	

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

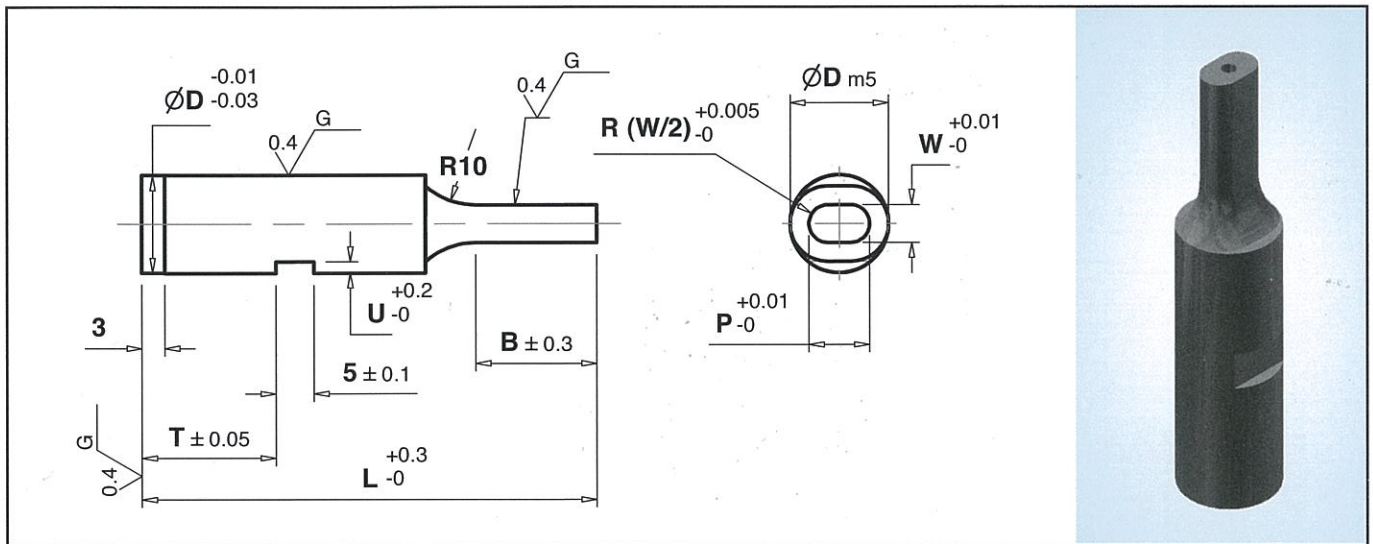
How to order : CPFD - H - V - P - W - T - B - L

Example : TPDFD - H2.000 - V2.00 - P1.500 - W1.500 - T5.0 - B8 - L40

SOLID CARBIDE PUNCHES



- KEY GROOVE, OBLONG (CPFE)
- KEY GROOVE, OBLONG WITH TiCN COATING (CPFE)



D Body Dia.	P Point Size		T	U	B	L - Length				
	P	W				40	50	60	70	80
3.0	1.500 - 2.990	1.500 - 2.990	T ≥ 5.0	1.0	8 - 13	•	•	•		
4.0	1.500 - 3.990	1.500 - 3.990			8 - 13	•	•	•	•	
5.0	1.500 - 4.990	1.500 - 4.990			8 - 13	•	•	•	•	
6.0	2.000 - 5.990	2.000 - 5.990			13 - 19	•	•	•	•	•
8.0	3.000 - 7.990	3.000 - 7.990		1.5	13 - 19	•	•	•	•	•
10.0	3.000 - 9.990	3.000 - 9.990			13 - 19	•	•	•	•	•
13.0	6.000 - 12.990	6.000 - 12.990			19 - 25	•	•	•	•	•
16.0	10.000 - 15.990	10.000 - 15.990			19 - 25	•	•	•	•	•
20.0	13.000 - 19.990	13.000 - 19.990			19 - 25	•	•	•	•	•

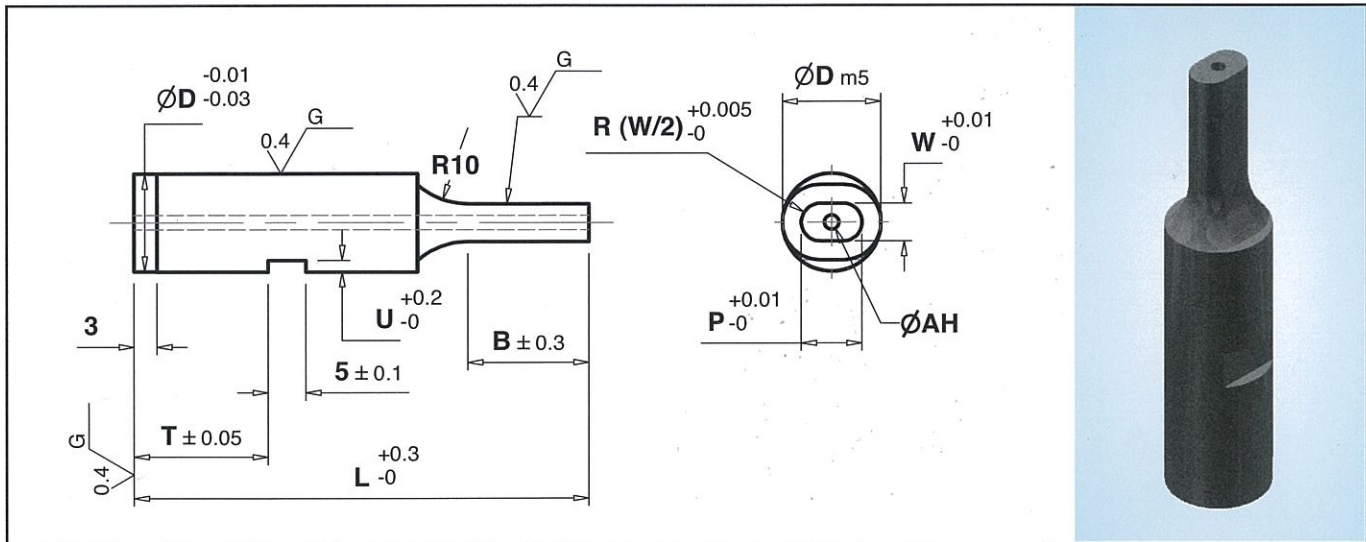
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPFE - H - V - P - W - T - B - L**

Example : **TPFE - H2.000 - V2.00 - P1.500 - W1.500 - T5.0 - B8 - L40**

SOLID CARBIDE PUNCHES

- KEY GROOVE, OBLONG WITH AIR HOLE (**CPFF**)
- KEY GROOVE, OBLONG WITH AIR HOLE WITH TiCN COATING (**TPFF**)



D Body Dia.	P Point Size		T	U	B	AH	L – Length				
	P	W					40	50	60	70	80
3.0	1.500 – 2.990	1.500 – 2.990	T \geq 5.0	1.0	8 – 13	0.5	•	•	•		
4.0	1.500 – 3.990	1.500 – 3.990			8 – 13	0.8	•	•	•	•	
5.0	1.500 – 4.990	1.500 – 4.990			8 – 13	0.8	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990			13 – 19	1.2	•	•	•	•	•
8.0	3.000 – 7.990	3.000 – 7.990		13 – 19	1.6	•	•	•	•	•	
10.0	3.000 – 9.990	3.000 – 9.990		13 – 19	1.9	•	•	•	•	•	
13.0	6.000 – 12.990	6.000 – 12.990		19 – 25	2.9	•	•	•	•	•	
16.0	10.000 – 15.990	10.000 – 15.990		19 – 25	2.9	•	•	•	•	•	
20.0	13.000 – 19.990	13.000 – 19.990		19 – 25	2.9	•	•	•	•	•	

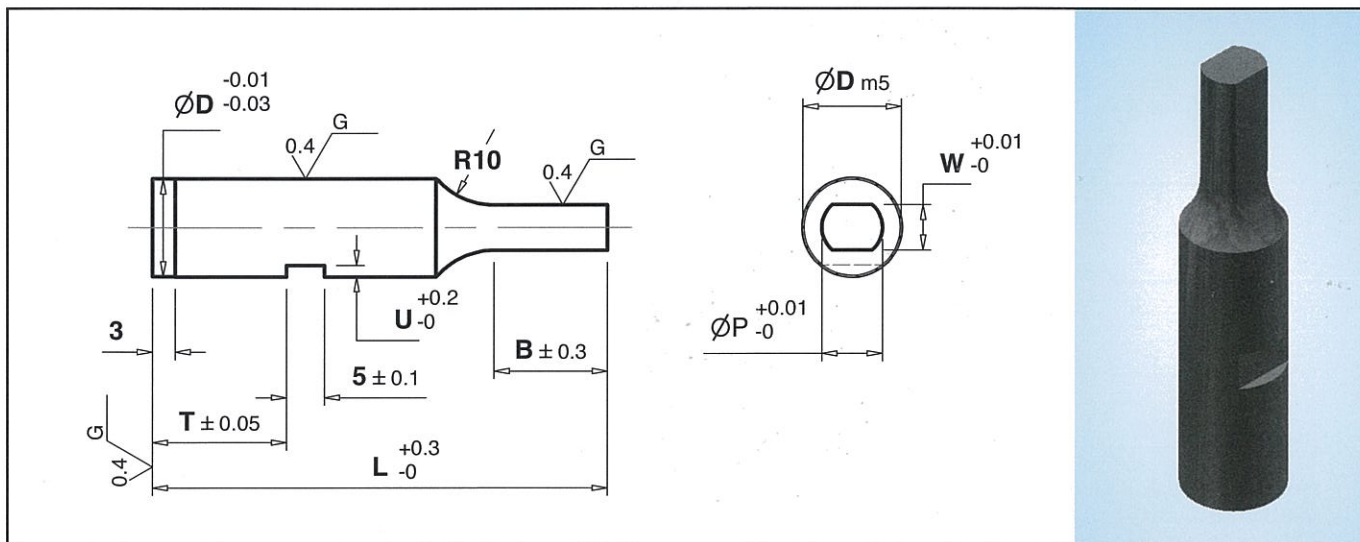
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPFF – H – V – P – W – T – B – L**

Example : **TPFF – H2.000 – V2.00 – P1.500 – W1.500 – T5.0 – B8 – L40**

SOLID CARBIDE PUNCHES

- KEY GROOVE, FLATTED ROUND (CPFG)
- KEY GROOVE, FLATTED ROUND WITH TiCN COATING (TPFG)



D Body Dia.	P Point Size		T	U	B	L - Length				
	P	W				40	50	60	70	80
3.0	1.500 - 2.990	1.500 - 2.990	T ≥ 5.0	1.0	8 - 13	•	•	•		
4.0	1.500 - 3.990	1.500 - 3.990			8 - 13	•	•	•	•	
5.0	1.500 - 4.990	1.500 - 4.990			8 - 13	•	•	•	•	
6.0	2.000 - 5.990	2.000 - 5.990			13 - 19	•	•	•	•	•
8.0	3.000 - 7.990	3.000 - 7.990		13 - 19	•	•	•	•	•	
10.0	3.000 - 9.990	3.000 - 9.990		13 - 19	•	•	•	•	•	
13.0	6.000 - 12.990	6.000 - 12.990		1.5	19 - 25	•	•	•	•	•
16.0	10.000 - 15.990	10.000 - 15.990			19 - 25	•	•	•	•	•
20.0	13.000 - 19.990	13.000 - 19.990			19 - 25	•	•	•	•	•
					19 - 25	•	•	•	•	•

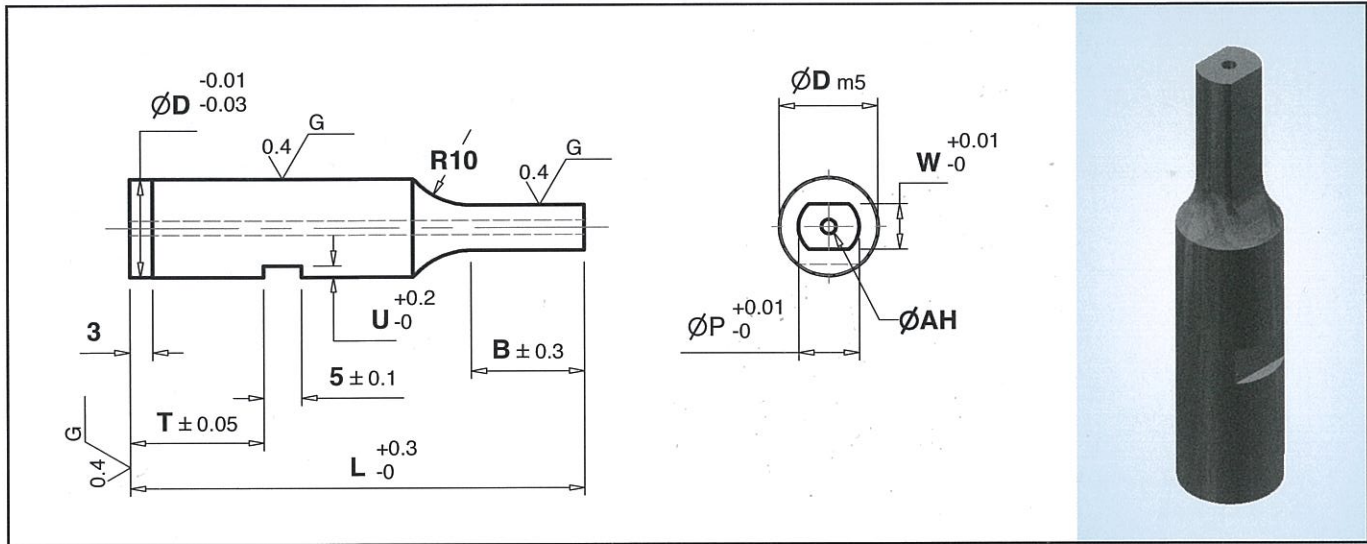
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPFG - H - V - P - W - T - B - L

Example : TPGF - H2.000 - V2.00 - P1.500 - W1.500 - T5.0 - B8 - L40

SOLID CARBIDE PUNCHES

- KEY GROOVE, FLATTED ROUND WITH AIR HOLE (CPFH)
- KEY GROOVE, FLATTED ROUND WITH AIR HOLE WITH TiCN COATING (TPFH)



D Body Dia.	P Point Size		T	U	B	AH	L – Length				
	P	W					40	50	60	70	80
3.0	1.500 – 2.990	1.500 – 2.990	T ≥ 5.0	1.0	8 – 13	0.5	•	•	•		
4.0	1.500 – 3.990	1.500 – 3.990			8 – 13	0.8	•	•	•	•	
5.0	1.500 – 4.990	1.500 – 4.990			8 – 13	0.8	•	•	•	•	
6.0	2.000 – 5.990	2.000 – 5.990			13 – 19	1.2	•	•	•	•	•
8.0	3.000 – 7.990	3.000 – 7.990		13 – 19	1.6	•	•	•	•	•	
10.0	3.000 – 9.990	3.000 – 9.990		13 – 19	1.9	•	•	•	•	•	
13.0	6.000 – 12.990	6.000 – 12.990		19 – 25	2.9	•	•	•	•	•	
16.0	10.000 – 15.990	10.000 – 15.990		19 – 25	2.9	•	•	•	•	•	
20.0	13.000 – 19.990	13.000 – 19.990		19 – 25	2.9	•	•	•	•	•	

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

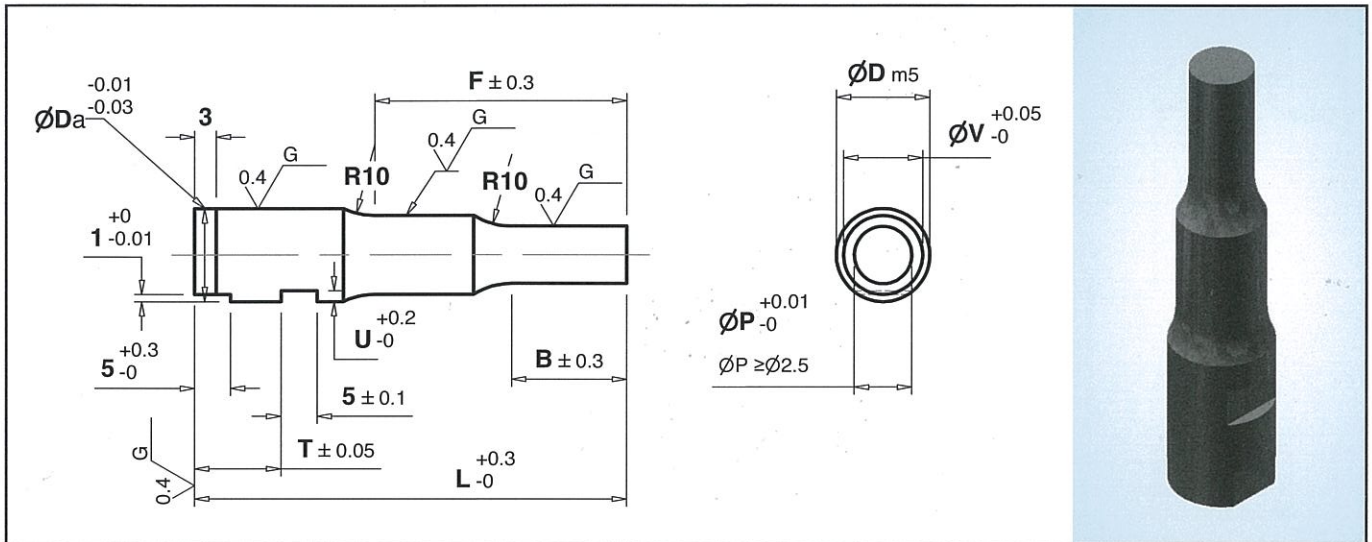
How to order : CPFH – H – V – P – W – T – B – L

Example : TPFH – H2.000 – V2.00 – P1.500 – W1.500 – T5.0 – B8 – L40

SOLID CARBIDE PUNCHES



- KEY TWO STEP, ROUND (CPGA)
- KEY TWO STEP, ROUND WITH TiCN COATING (TPGA)



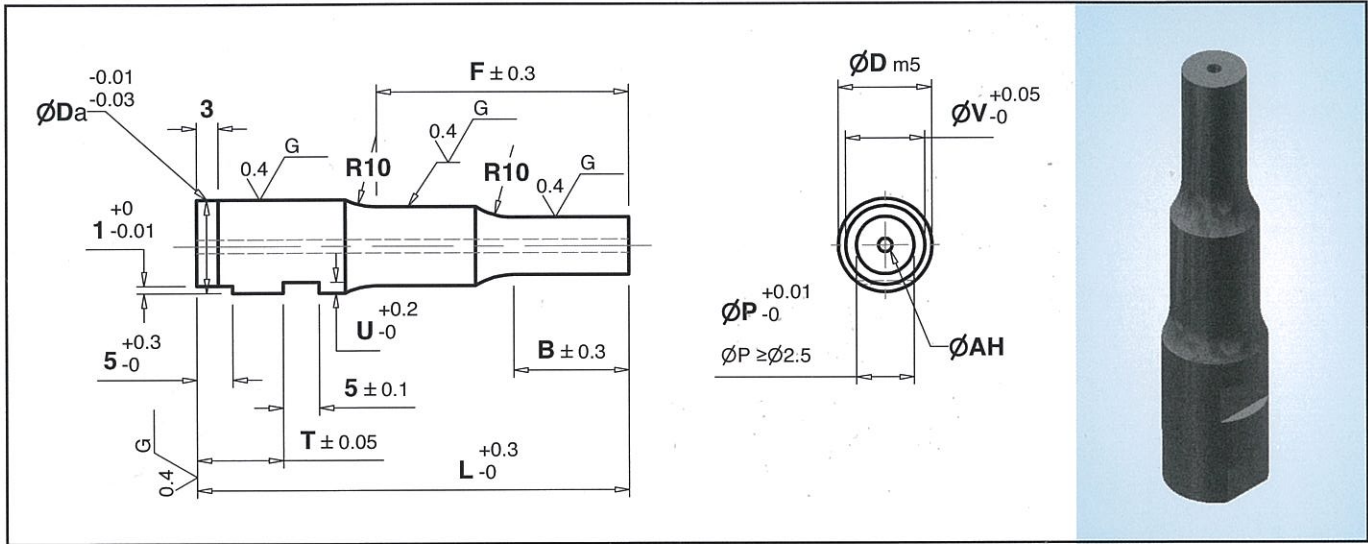
D Body Dia.	P Point Dia.	B Point Length	T	U	V Step Dia.	F	L – Length				
							40	50	60	70	80
3	1.500 – 2.990	2.0 – 19.0	T ≥ 5	0.5	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	2.0 – 20.0			1.500 – 3.990	13 – 30	•	•	•		
5	2.000 – 4.990	2.0 – 40.0			2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.0 – 40.0		2.000 – 5.990	40 – 45	•	•	•	•		
8	3.000 – 7.990	2.0 – 45.0		3.000 – 7.990	40 – 45	•	•	•	•		
10	3.000 – 9.990	2.0 – 45.0		3.000 – 9.990	40 – 45	•	•	•	•	•	
13	6.000 – 12.990	2.0 – 45.0		6.000 – 12.990	40 – 45	•	•	•	•	•	
16	10.000 – 15.990	2.0 – 45.0		10.000 – 15.990	40 – 45	•	•	•	•	•	

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPGA – D – P – B – T – V – F – L**
 Example : **TPGA – D3 – P1.500 – B8.0 – T5 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES

- KEY TWO STEP, ROUND WITH AIR HOLE (CPGB)
- KEY TWO STEP, ROUND WITH AIR HOLE WITH TiCN COATING (TPGB)



D Body Dia.	P Point Dia.	B Point Length	T	U	AH	V Step Dia.	F	L – Length				
								40	50	60	70	80
3	1.500 – 2.990	2.0 – 19.0	T ≥ 5	0.5	0.5	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	2.0 – 20.0			0.5	1.500 – 3.990	13 – 30	•	•	•		
5	2.000 – 4.990	2.0 – 40.0			0.8	2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.0 – 40.0		1.0	0.8	2.000 – 5.990	40 – 45	•	•	•	•	
8	3.000 – 7.990	2.0 – 45.0		1.5	1.2	3.000 – 7.990	40 – 45	•	•	•	•	
10	3.000 – 9.990	2.0 – 45.0			1.6	3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	2.0 – 45.0			1.9	6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	2.0 – 45.0			2.9	10.000 – 15.990	40 – 45	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

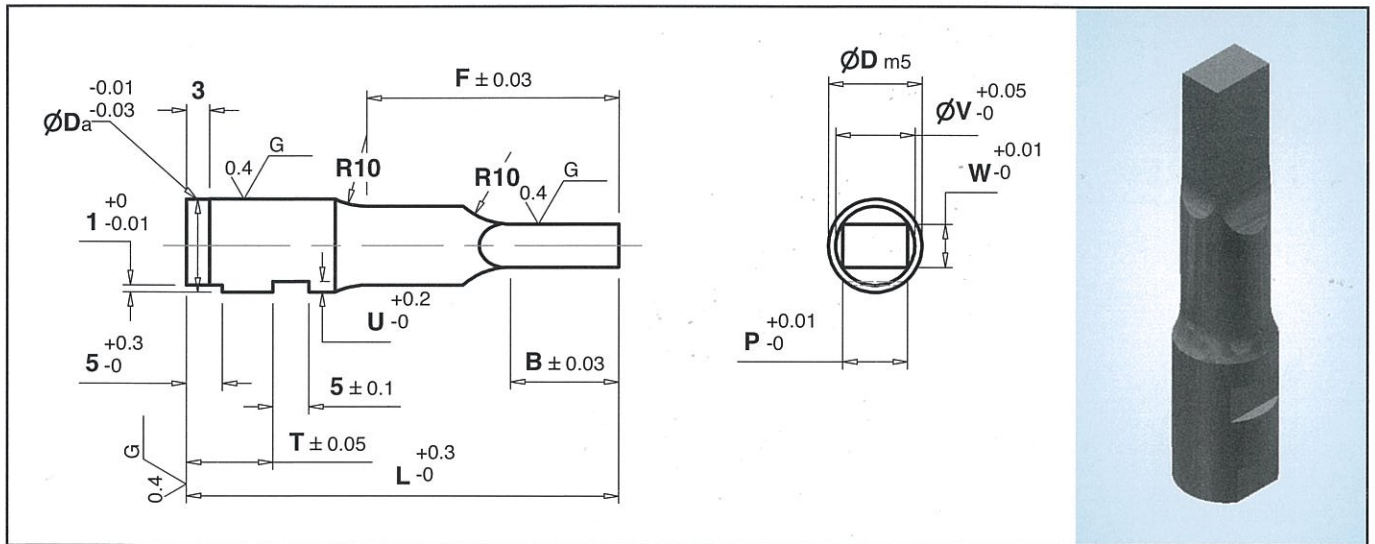
How to order : CPGB – D – P – W – B – T – V – F – L

Example : TPGB – D3 – P1.500 – W1.500 – B8.0 – T5 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES



- KEY TWO STEP, RECTANGLE (CPGC)
- KEY TWO STEP, RECTANGLE WITH TiCN COATING (TPGC)



D Body Dia.	P Point Dia.		B Point Length	T	U	V Step Dia.	F	L - Length				
	P	W						40	50	60	70	80
3	1.500 - 2.990	1.500 - 2.990	2.0 - 19.0	T ≥ 5	0.5	1.500 - 2.990	13 - 19	•	•	•		
4	1.500 - 3.990	1.500 - 3.990	2.0 - 20.0			1.500 - 3.990	13 - 30	•	•	•	•	
5	2.000 - 4.990	2.000 - 4.990	2.0 - 40.0			2.000 - 4.990	30 - 40	•	•	•	•	
6	2.000 - 5.990	2.000 - 5.990	2.0 - 40.0		1.0	2.000 - 5.990	40 - 45	•	•	•	•	•
8	3.000 - 7.990	3.000 - 7.990	2.0 - 45.0		1.5	3.000 - 7.990	40 - 45	•	•	•	•	•
10	3.000 - 9.990	3.000 - 9.990	2.0 - 45.0			3.000 - 9.990	40 - 45	•	•	•	•	•
13	6.000 - 12.990	6.000 - 12.990	2.0 - 45.0			6.000 - 12.990	40 - 45	•	•	•	•	•
16	10.000 - 15.990	10.000 - 15.990	2.0 - 45.0			10.000 - 15.990	40 - 45	•	•	•	•	•

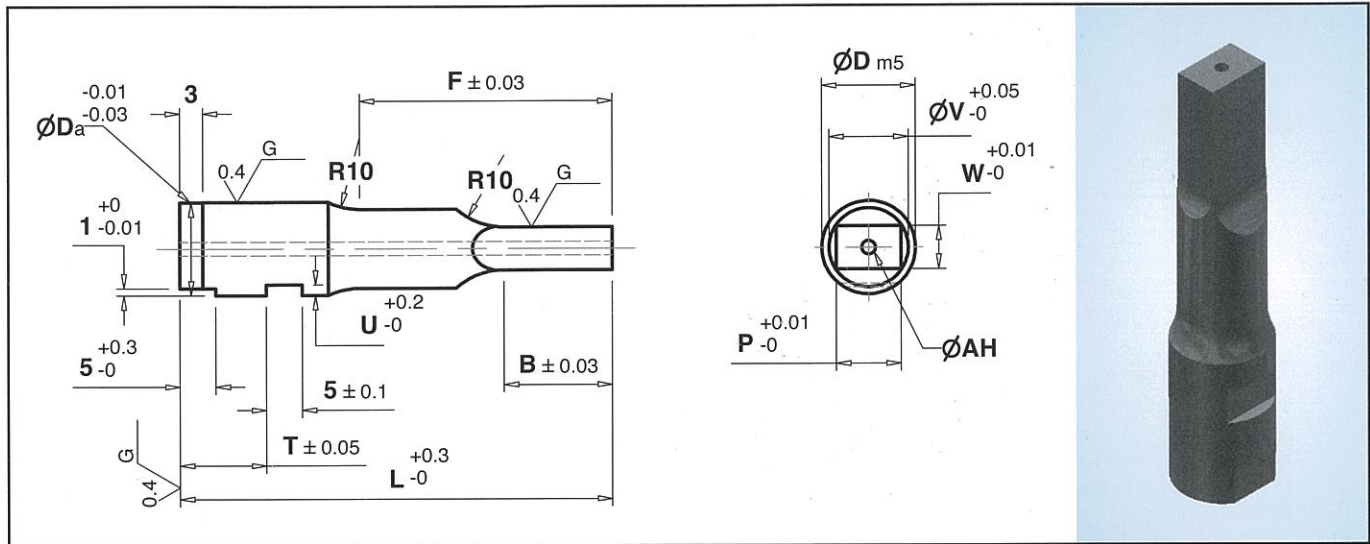
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPGC - D - P - W - B - T - V - F - L

Example : TPGC - D3 - P1.500 - W1.500 - B8.0 - T5 - V1.50 - F13 - L40

SOLID CARBIDE PUNCHES

- KEY TWO STEP, RECTANGLE WITH AIR HOLE (CPGD)
- KEY TWO STEP, RECTANGLE WITH AIR HOLE WITH TiCN COATING (TPGD)



D Body Dia.	P Point Dia.		B Point Length	T	U	AH	V Step Dia.	F	L - Length					
	P	W							40	50	60	70	80	
3	1.500 - 2.990	1.500 - 2.990	2.0 - 19.0	T \geq 5	0.5	0.5	1.500 - 2.990	13 - 19	•	•	•			
4	1.500 - 3.990	1.500 - 3.990	2.0 - 20.0			0.5	0.5	1.500 - 3.990	13 - 30	•	•	•	•	
5	2.000 - 4.990	2.000 - 4.990	2.0 - 40.0			0.8	2.000 - 4.990	30 - 40	•	•	•	•		
6	2.000 - 5.990	2.000 - 5.990	2.0 - 40.0		1.0	0.8	2.000 - 5.990	40 - 45	•	•	•	•	•	
8	3.000 - 7.990	3.000 - 7.990	2.0 - 45.0		1.5	1.2	3.000 - 7.990	40 - 45	•	•	•	•	•	
10	3.000 - 9.990	3.000 - 9.990	2.0 - 45.0			1.6	3.000 - 9.990	40 - 45	•	•	•	•	•	
13	6.000 - 12.990	6.000 - 12.990	2.0 - 45.0			1.9	6.000 - 12.990	40 - 45	•	•	•	•	•	
16	10.000 - 15.990	10.000 - 15.990	2.0 - 45.0			2.9	10.000 - 15.990	40 - 45	•	•	•	•	•	

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

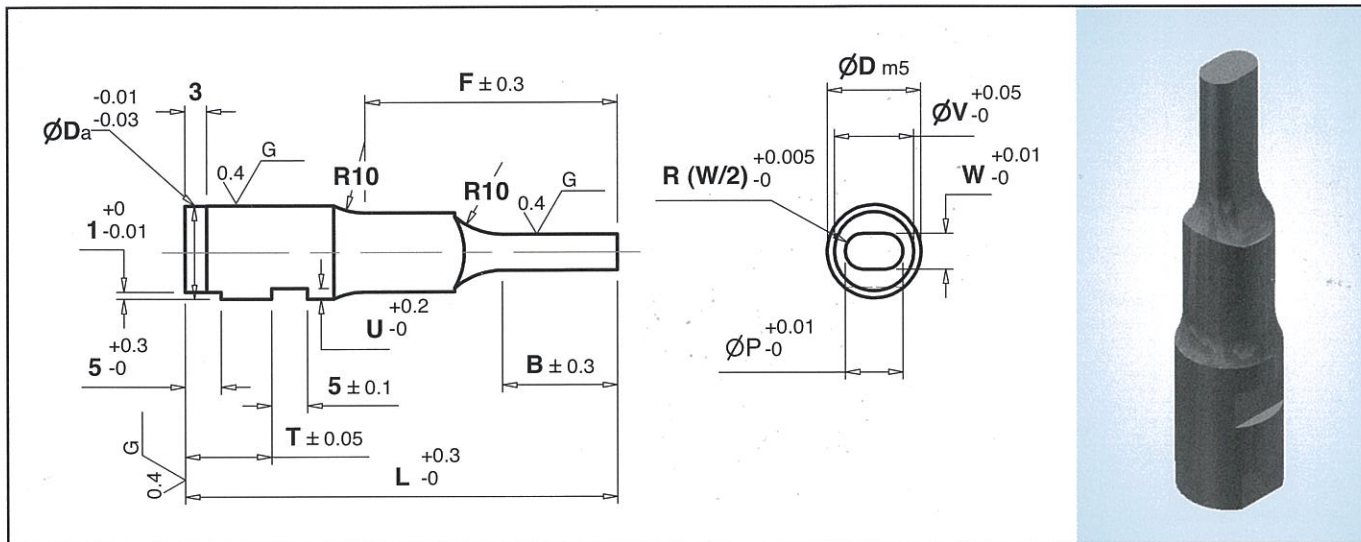
How to order : CPGD - D - P - W - B - T - V - F - L

Example : TPGD - D3 - P1.500 - W1.500 - B8.0 - T5 - V1.50 - F13 - L40

SOLID CARBIDE PUNCHES



- KEY TWO STEP, OBLONG (CPGE)
- KEY TWO STEP, OBLONG WITH TiCN COATING (TPGE)



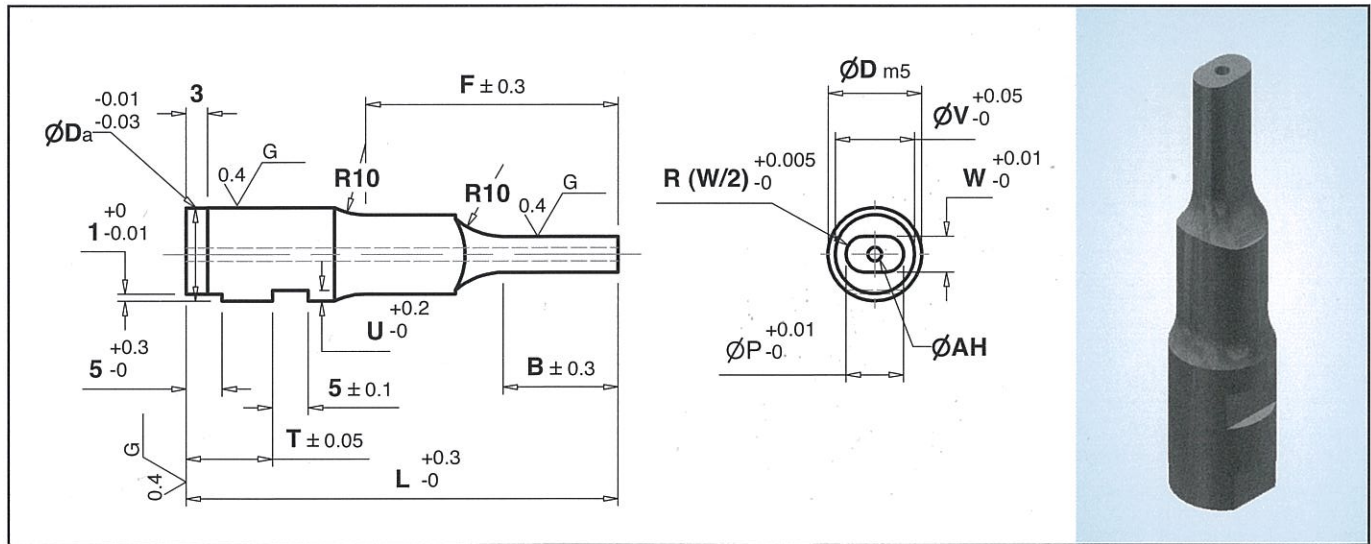
D Body Dia.	P Point Dia.		B Point Length	T	U	V Step Dia.	F	L – Length				
	P	W						40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	T ≥ 5	0.5	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0			1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0			2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0		1.0	2.000 – 5.990	40 – 45	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0		1.5	3.000 – 7.990	40 – 45	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0			3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0			6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0			10.000 – 15.990	40 – 45	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : **CPGE – D – P – W – B – T – V – F – L**
 Example : **TPGE – D3 – P1.500 – W1.500 – B8.0 – T5 – V1.50 – F13 – L40**

SOLID CARBIDE PUNCHES

- KEY TWO STEP, OBLONG WITH AIR HOLE(CPGF)
- KEY TWO STEP, OBLONG WITH AIR HOLE WITH TiCN COATING(TPGF)



D Body Dia.	P Point Dia.		B Point Length	T	U	AH	V Step Dia.	F	L – Length					
	P	W							40	50	60	70	80	
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	T≥5	0.5	0.5	1.500 – 2.990	13 – 19	•	•	•			
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0			0.5	0.5	1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0			0.8	2.000 – 4.990	30 – 40	•	•	•	•		
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0		1.0	0.8	2.000 – 5.990	40 – 45	•	•	•	•	•	
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0		1.5	1.2	3.000 – 7.990	40 – 45	•	•	•	•	•	
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0			1.6	3.000 – 9.990	40 – 45	•	•	•	•	•	
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0			1.9	6.000 – 12.990	40 – 45	•	•	•	•	•	
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0			2.9	10.000 – 15.990	40 – 45	•	•	•	•	•	

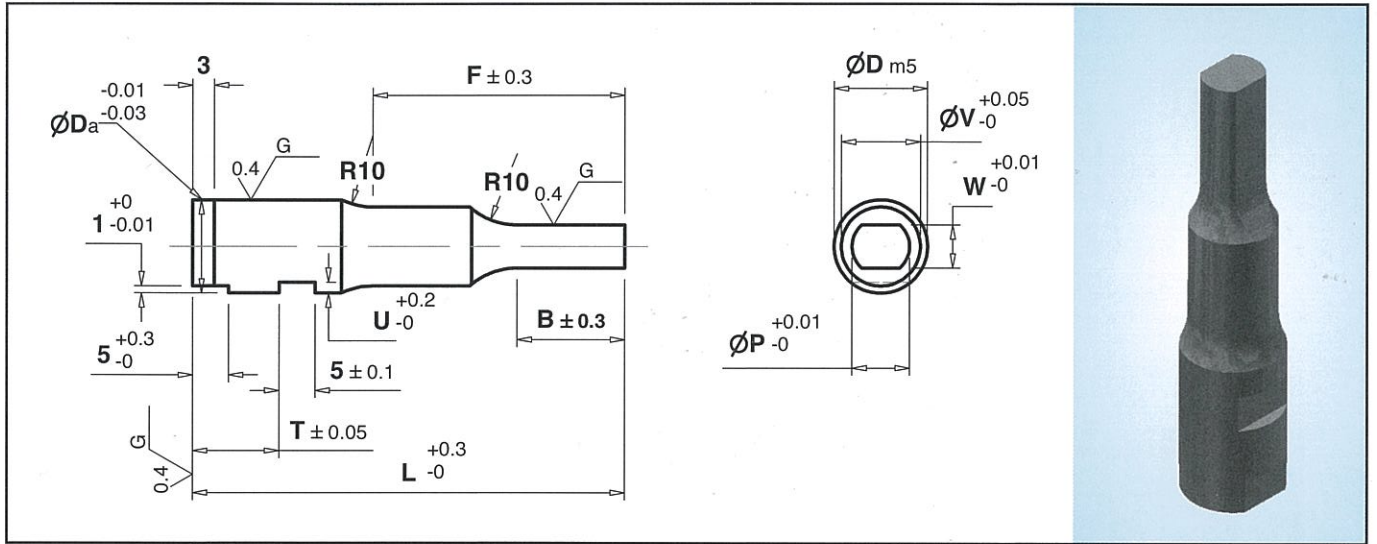
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPGF – D – P – W – B – T – V – F – L

Example : TPGF – D3 – P1.500 – W1.500 – B8.0 – T5 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES

- KEY TWO STEP, FLATTED ROUND (CPGG)
- KEY TWO STEP, FLATTED ROUND WITH TiCN COATING (TPGG)



D Body Dia.	P Point Dia.		B Point Length	T	U	V Step Dia.	F	L – Length				
	P	W						40	50	60	70	80
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	T≥5	0.5	1.500 – 2.990	13 – 19	•	•	•		
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0			1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0			2.000 – 4.990	30 – 40	•	•	•	•	
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0		1.0	2.000 – 5.990	40 – 45	•	•	•	•	•
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0		1.5	3.000 – 7.990	40 – 45	•	•	•	•	•
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0			3.000 – 9.990	40 – 45	•	•	•	•	•
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0			6.000 – 12.990	40 – 45	•	•	•	•	•
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0			10.000 – 15.990	40 – 45	•	•	•	•	•

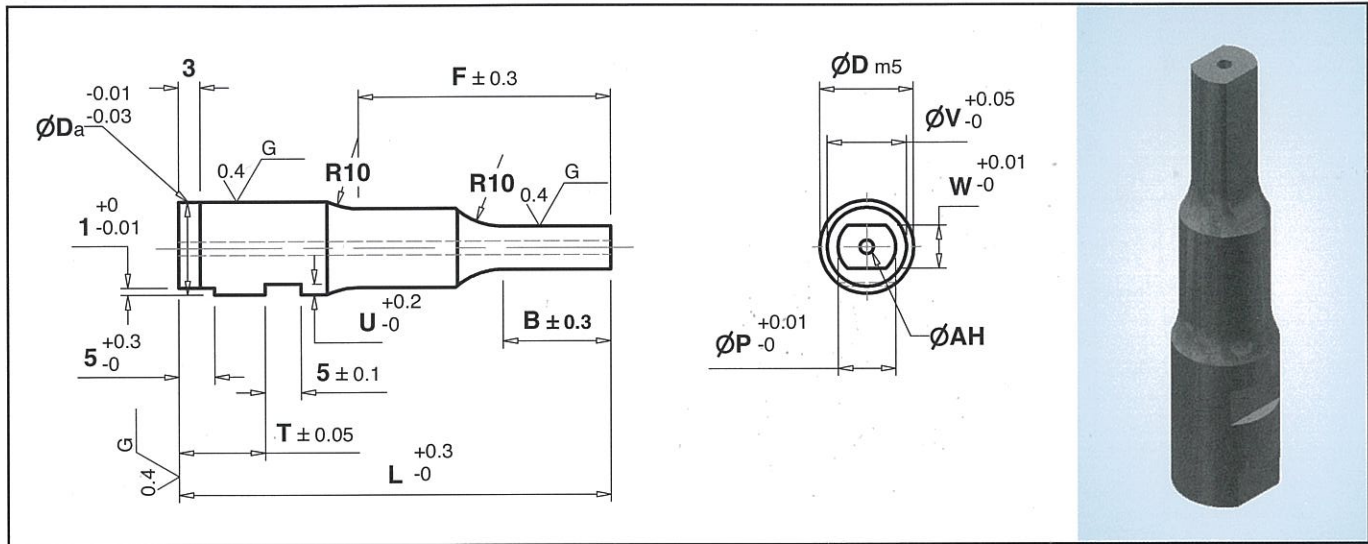
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : CPGG – D – P – W – B – T – V – F – L

Example : TPGG – D3 – P1.500 – W1.500 – B8.0 – T5 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES

- KEY TWO STEP, FLATTED ROUND WITH AIR HOLE (CPGH)
- KEY TWO STEP, FLATTED ROUND WITH AIR HOLE WITH TiCN COATING (TPGH)



D Body Dia.	P Point Dia.		B Point Length	T	U	AH	V Step Dia.	F	L – Length					
	P	W							40	50	60	70	80	
3	1.500 – 2.990	1.500 – 2.990	2.0 – 19.0	T≥5	0.5	0.5	1.500 – 2.990	13 – 19	•	•	•			
4	1.500 – 3.990	1.500 – 3.990	2.0 – 20.0			0.5	0.5	1.500 – 3.990	13 – 30	•	•	•	•	
5	2.000 – 4.990	2.000 – 4.990	2.0 – 40.0			0.8	2.000 – 4.990	30 – 40	•	•	•	•		
6	2.000 – 5.990	2.000 – 5.990	2.0 – 40.0		1.0	0.8	2.000 – 5.990	40 – 45	•	•	•	•	•	
8	3.000 – 7.990	3.000 – 7.990	2.0 – 45.0		1.5	1.2	3.000 – 7.990	40 – 45	•	•	•	•	•	
10	3.000 – 9.990	3.000 – 9.990	2.0 – 45.0			1.6	3.000 – 9.990	40 – 45	•	•	•	•	•	
13	6.000 – 12.990	6.000 – 12.990	2.0 – 45.0			1.9	6.000 – 12.990	40 – 45	•	•	•	•	•	
16	10.000 – 15.990	10.000 – 15.990	2.0 – 45.0			2.9	10.000 – 15.990	40 – 45	•	•	•	•	•	

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

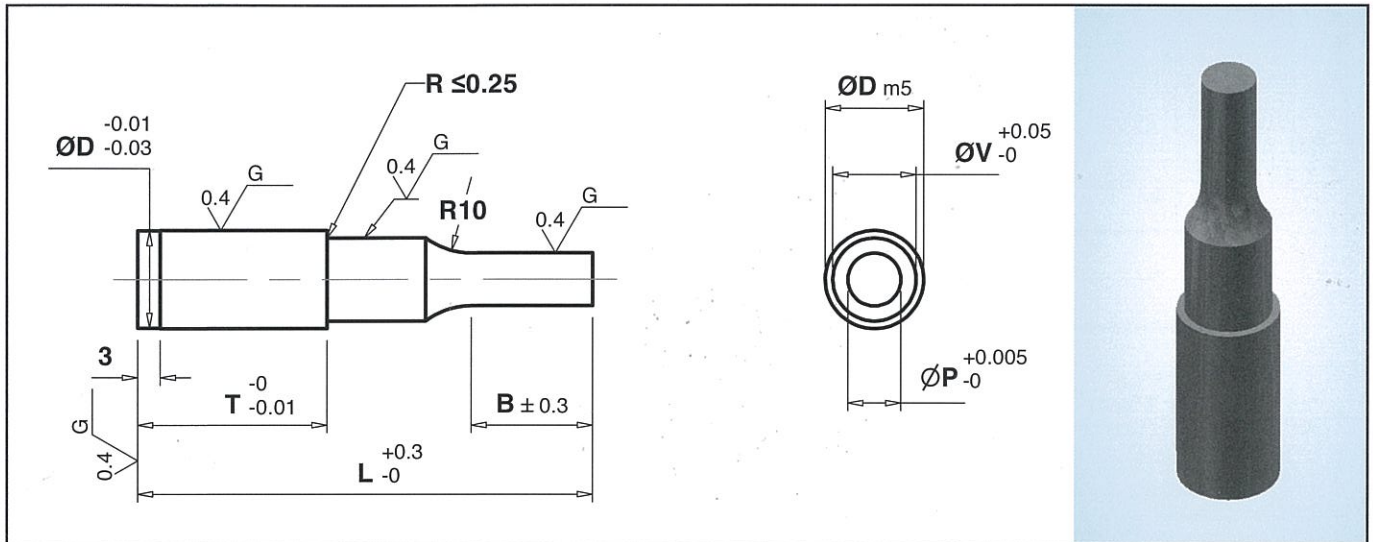
How to order : CPGH – D – P – W – B – T – V – F – L

Example : TPGH – D3 – P1.500 – W1.500 – B8.0 – T5 – V1.50 – F13 – L40

SOLID CARBIDE PUNCHES



- ROUND PUNCH, ROUND (CPHA)
- ROUND PUNCH, ROUND WITH TiCN COATING (TPHA)



D Body Dia.	P Point Dia.	B Point Length	V	T	L – Length				
					40	50	60	70	80
4.0	1.500 – 1.990	8 – 13	2	13 - 25	•	•	•		
5.0	1.500 – 2.990	8 – 13	3	13 - 25	•	•	•	•	
6.0	2.000 – 3.990	8 – 13	4	13 - 25	•	•	•	•	
8.0	3.000 – 5.990	13 – 19	6	13 - 25	•	•	•	•	
10.0	3.000 – 7.990	13 – 19	8	13 - 25	•	•	•	•	•
13.0	6.000 – 10.990	13 – 19	11	13 – 30	•	•	•	•	•
16.0	10.000 – 13.990	19 – 25	14	13 – 30	•	•	•	•	•
20.0	13.000 – 17.990	19 – 25	18	13 – 30	•	•	•	•	•
25.0	18.000 – 22.990	19 – 25	23	13 – 30	•	•	•	•	•

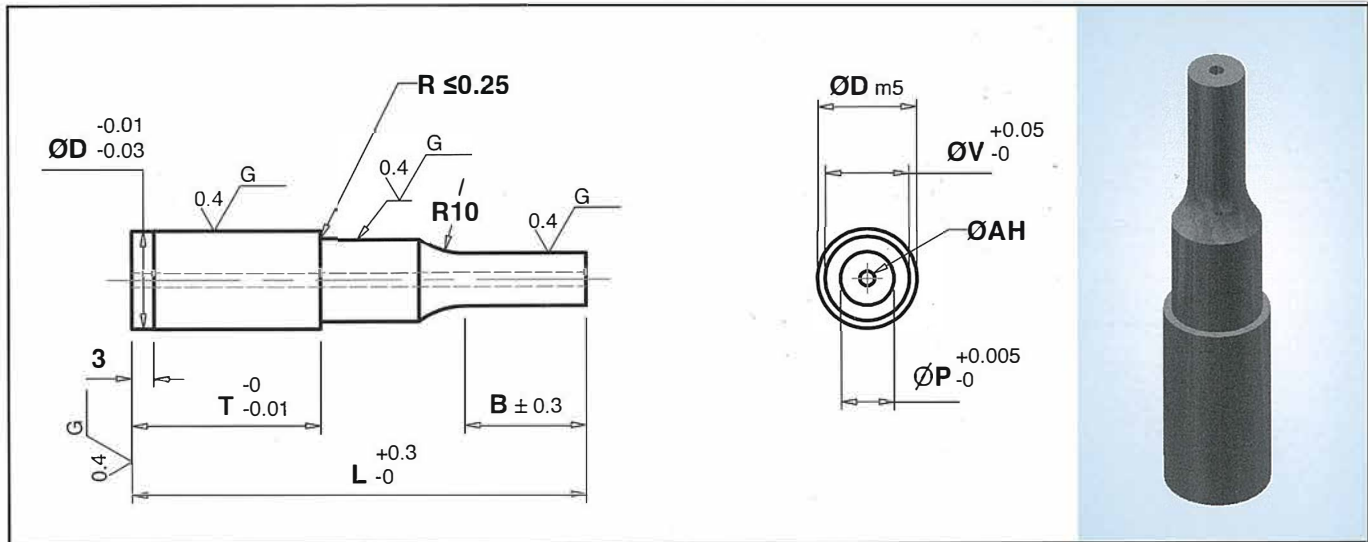
Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

How to order : : **CPHA – D – P – B – T – L**
 Example : **TPHA – D4.0 – P1.500 – B8 – T13 – L40**

SOLID CARBIDE PUNCHES



- ROUND PUNCH, ROUND WITH AIR HOLE (CPHB)
- ROUND PUNCH, ROUND WITH AIR HOLE WITH TiCN COATING (TPHB)



D Body Dia.	P Point Dia.	B Point Length	V	AH	T	L – Length				
						40	50	60	70	80
4.0	1.500 – 1.990	8 – 13	2	0.5	13 - 25	•	•	•		
5.0	1.500 – 2.990	8 – 13	3	0.5	13 - 25	•	•	•	•	
6.0	2.000 – 3.990	8 – 13	4	0.8	13 - 25	•	•	•	•	
8.0	3.000 – 5.990	13 – 19	6	1.2	13 - 25	•	•	•	•	
10.0	3.000 – 7.990	13 – 19	8	1.6	13 - 25	•	•	•	•	•
13.0	6.000 – 10.990	13 – 19	11	1.9	13 – 30	•	•	•	•	•
16.0	10.000 – 13.990	19 – 25	14	2.9	13 – 30	•	•	•	•	•
20.0	13.000 – 17.990	19 – 25	18	2.9	13 – 30	•	•	•	•	•
25.0	18.000 – 22.990	19 – 25	23	2.9	13 – 30	•	•	•	•	•

Note: Other Dimension Not Listed above can be ground to your specifications.
 If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
 Unless otherwise specified by customer all outside corners will be sharp.

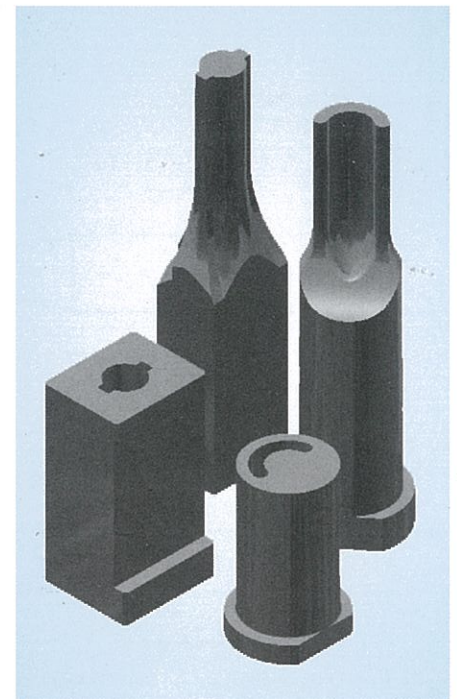
How to order : CPHB – D – P – B – T – L
 Example : TPHB – D4.0 – P1.500 – B8 – T13 – L40

SOLID CARBIDE PUNCHES



- SPECIAL SHAPES (CPSH)
- SPECIAL SHAPES WITH TiCN COATING (TPSH)

SH-01 	SH-02 	SH-03 	SH-04
SH-05 	SH-06 	SH-07 	SH-08
SH-09 	SH-10 	SH-11 	SH-12
SH-13 	SH-14 	SH-15 	SH-16
SH-17 	SH-18 	SH-19 	SH-20
SH-21 	SH-22 	SH-23 	SH-24
SH-25 	SH-26 	SH-27 	SH-28
SH-29 			



Note: If in doubt please send us your drawing. 'D' tolerance is m5 or +0.005.
Unless otherwise specified by customer all outside corners will be sharp.

How to order : : CPSH – SHAPE NO. – P – W – LENGTH
Example : TPSH – 01 – P3.0 – W4.0 – L40