



SPT

small precision tools

BUSHINGS

— GUIDING-BUSHINGS

— SUPPORT-BUSHINGS

— CUTTING-BUSHINGS

- for general Tool + Diemaking
- for Stamping Tools
- for Moulds
- for the Sewing Industry
- for the Watch Industry

SPT Roth Ltd

Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel : ++ 41 32 387 80 80
Fax : ++ 41 32 387 80 88
E-Mail : info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel : (86) 510-511 1968
Fax : (86) 510-511 5233
E-Mail : sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>

BUSHINGS

GUIDING-BUSHINGS

SUPPORT-BUSHINGS

CUTTING-BUSHINGS

C O N T E N T S

Materials/Dimensions/Tolerances	page 1
Cylindrical Prefabricated Tools	page 2
Cylindrical Design	page 3
Tools with Conical Relief	page 4
Tools with Cylindrical Relief	page 5

SPT Roth Ltd

Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel: ++ 41 32 387 80 80
Fax: ++ 41 32 387 80 88
E-Mail: info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel: (86) 510-511 1968
Fax: (86) 510-511 5233
E-Mail: sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>

Our Know How is originated from the manufacturing of watch jewels. It is our aim to produce high quality canons and bushings - from the blank to the final products.

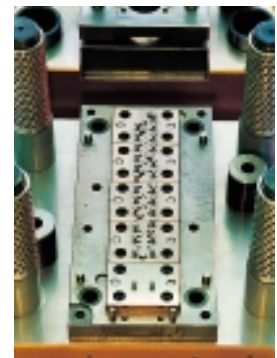
- BUSHINGS
- Guiding-Bushings
- Support-Bushings
- Cutting-Bushings

- ☐ for general Tool + Diemaking
- ☐ for Stamping Tools
- ☐ for Moulds
- ☐ for the Sewing Industry
- ☐ for the Watch Industry

Material	Specify
Full Carbide	WC
Tool Steel hardened	TS
High Speed Steel	HSS

Available dimensions	mm
Outside diameter	0.50 - 10.00
Hole	0.15 - 6.00
Length	0.50 -100.00

Minimum available tolerance	mm
Outside diameter	0.002
Hole	0.002
Concentricity	0.002
Surface finish	N2



Custom design to your drawing

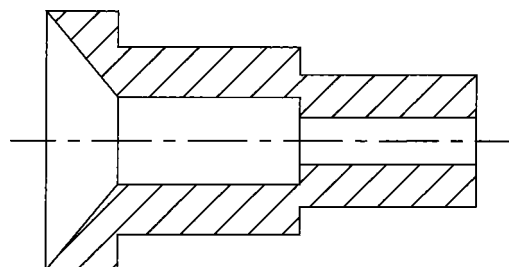
SPT Roth Ltd

Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel : ++ 41 32 387 80 80
Fax : ++ 41 32 387 80 88
E-Mail : info@sptroth.com

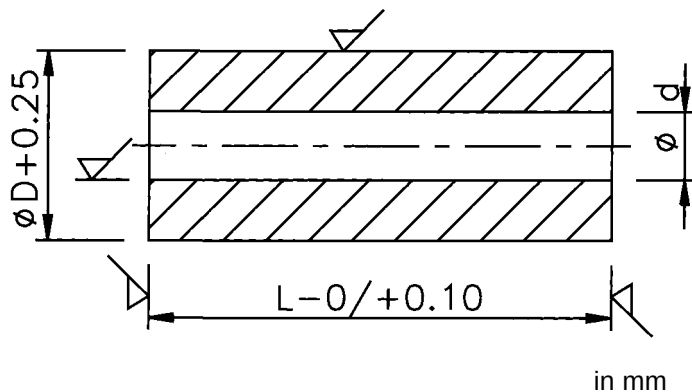
Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel : (86) 510-511 1968
Fax : (86) 510-511 5233
E-Mail : sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>



Type A10 - A50 Cylindrical prefabricated



* D = as sintered + 0.25 mm of final dimension.
Specify your final Diameter after grinding

Type	Tolerance "d"
A10	± 0.001
A20	+ 0.002 0
A30	0 - 0.003
A40	+ 0.01 0
A50	+ 0.02 0
A00	non standard

Example How To Order	A10
Final ground diameter D	3.00
Hole diameter d	0.60
Length L	6.00
Material	WC
Quantity	10

How To Order					
	Type	D	d	L	Material
10 pcs.	A10	- 3.00	- 0.60	- 6.00	- WC

How To Order non-standard					
10 pcs.	A00	- 3.00	- 0.60	- 6.00	- WC
			d = -0.002		

SPT Roth Ltd

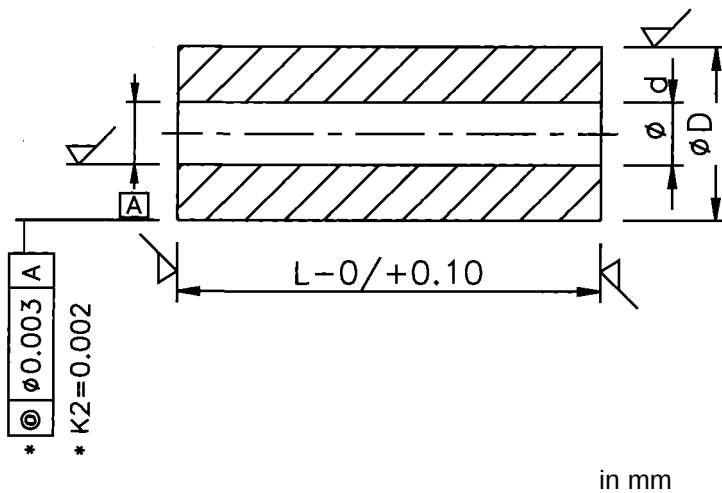
Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel: ++ 41 32 387 80 80
Fax: ++ 41 32 387 80 88
E-Mail: info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel: (86) 510-511 1968
Fax: (86) 510-511 5233
E-Mail: sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>

Type B10 - B50 Cylindrical design



Type	Tolerance "d"
B10	± 0.001
B20	$+ 0.002$ 0
B30	0 $- 0.003$
B40	$+ 0.01$ 0
B50	$+ 0.02$ 0
B00	non standard

Type	Tolerance "D"
D10	$+ 0.004$ $+ 0.002$
D20	$+ 0.002$ 0
D30	$+ 0.004$ 0
D40	$+ 0.006$ 0
D50	$+ 0.05$ 0
D00	non standard

Example How To Order	B10 / D10
Final ground diameter D	3.00
Hole diameter d	0.60
Length L	6.00
Material	WC
Quantity	10

How To Order				
Type d/Type D	D	d	L	Material
10 pcs. B10/D10	- 3.00	- 0.60	- 6.00	- WC

How To Order non-standard				
10 pcs.	B00/D00	- 3.00	- 0.60	- 6.00 - WC
	d = +0.003			
	D = -0.003 , K2*			(*concentricity 0.002)

SPT Roth Ltd

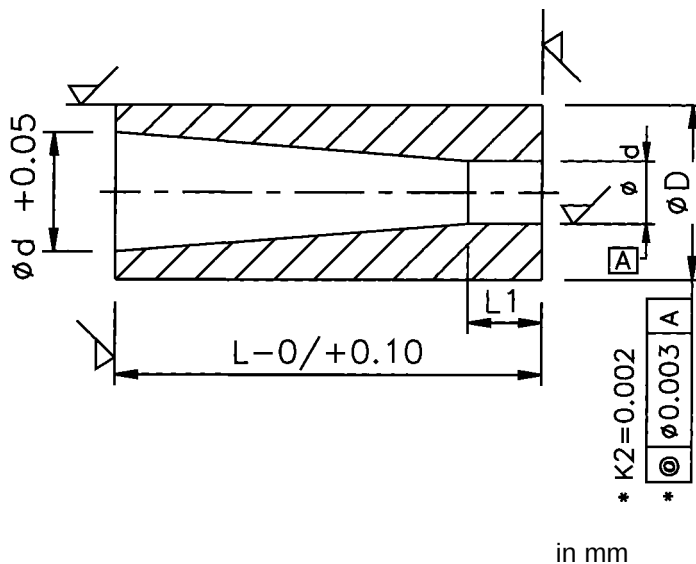
Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel: ++ 41 32 387 80 80
Fax: ++ 41 32 387 80 88
E-Mail: info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel: (86) 510-511 1968
Fax: (86) 510-511 5233
E-Mail: sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>

Type C10 - C50 with Conical Relief



Type	Tolerance "d"
C10	± 0.001
C20	+ 0.002 0
C30	0 - 0.003
C40	+ 0.01 0
C50	+ 0.02 0
C00	non standard

Type	Tolerance "D"
D10	+ 0.004 + 0.002
D20	+ 0.002 0
D30	+ 0.004 0
D40	+ 0.006 0
D50	+ 0.05 0
D00	non standard

Example How To Order	C10 / D10
Final ground diameter D	3.00
Hole diameter d	0.60
Length L1	1.00
Length L	6.00
Material	WC
Quantity	10

How To Order					
Typ d/Typ D	D	d	L1	L	Material
10 pcs. C10/D10	- 3.00	- 0.60	- 1.00	- 6.00	- WC

How To Order non-standard					
10 pcs	C00/D00	- 3.00	- 0.60	- 1.00	- 6.00 - WC
		d = +0.003			
		D = -0.005 , K2*			(*concentricity 0.002)

SPT Roth Ltd

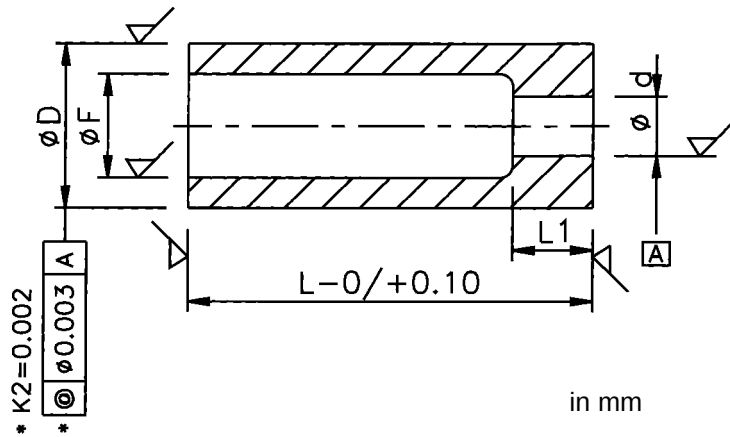
Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel: ++ 41 32 387 80 80
Fax: ++ 41 32 387 80 88
E-Mail: info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel: (86) 510-511 1968
Fax: (86) 510-511 5233
E-Mail: sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>

Type E10 - E50 with Cylindrical Relief



Example How To Order	E10 / D10 / F10
Final ground diameter D	3.00
Hole diameter d	0.60
Relief F	1.60
Length L1	1.50
Length L	6.00
Material	WC
Quantity	10

How To Order						
Type d/Type D/Type F	D	d	L1	L	Mat'l	
10 pcs. E10/D10/F20	- 3.00	- 0.60	- 1.50	- 6.00	- WC	

How To Order non-standard						
10 pcs. E00/D00/F30	- 3.00	- 0.60	- 1.00	- 6.00	- WC	
d = -0.003						
D = -0.005 , K2*						(*concentricity 0.002)

Type	Tolerance "d"
E10	± 0.001
E20	+ 0.002 0
E30	0 - 0.003
E40	+ 0.01 0
E50	+ 0.02 0
E00	non standard

Type	Tolerance "D"
D10	+ 0.004 + 0.002
D20	+ 0.002 0
D30	+ 0.004 0
D40	+ 0.006 0
D50	+ 0.05 0
D00	non standard

Type	Tolerance "F"
F10	+ 0.02 0
F20	+ 0.05 0
F30	+ 0.10 0
F00	non standard

SPT Roth Ltd

Fabrikstrasse 23 CH-3250 Lyss, Switzerland
Tel: ++ 41 32 387 80 80
Fax: ++ 41 32 387 80 88
E-Mail: info@sptroth.com

Small Precision Tools Co Ltd

A2 Building, Liyuan Economic Development Zone,
Wuxi, Jiangsu, P.R.China 214072
Tel: (86) 510-511 1968
Fax: (86) 510-511 5233
E-Mail: sptchina@public1.wx.js.cn

<http://www.smallprecisiontools.com>