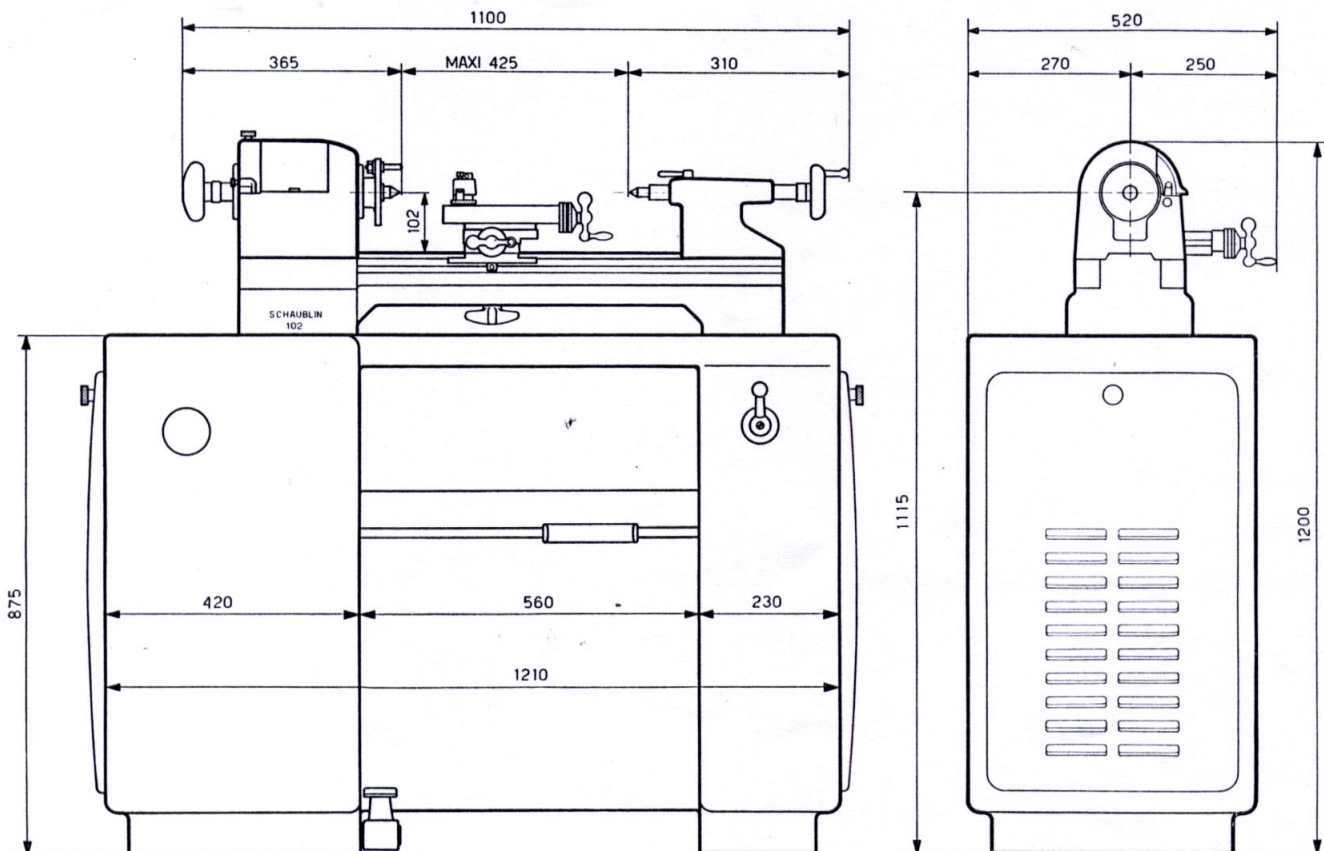


# MAIN CHARACTERISTICS OF SCHAUBLIN LATHES 102 AND BASE 102-80

CAPACITIES		Toolmaker's lathe	Second-operations lathe	Turret lathe
Height of centres . . . . .	mm (in.)	102 (4 <sup>1</sup> / <sub>64</sub> )	102 (4 <sup>1</sup> / <sub>64</sub> )	102 (4 <sup>1</sup> / <sub>64</sub> )
Distance between centres . . . . .	mm (in.)	425 (16 <sup>47</sup> / <sub>64</sub> )	—	—
Distance between headstock and tailstock . . . . .	mm (in.)	—	450 (17 <sup>23</sup> / <sub>32</sub> )	—
Distance between headstock and turret . . . . .	mm (in.)	—	—	300 (11 <sup>13</sup> / <sub>16</sub> )
<b>Bed</b>				
Length . . . . .	mm (in.)	900 (35 <sup>7</sup> / <sub>16</sub> )	900 (35 <sup>7</sup> / <sub>16</sub> )	900 (35 <sup>7</sup> / <sub>16</sub> )
Height . . . . .	mm (in.)	168 (6 <sup>5</sup> / <sub>8</sub> )	168 (6 <sup>5</sup> / <sub>8</sub> )	168 (6 <sup>5</sup> / <sub>8</sub> )
<b>Headstocks</b> for collets . . . . .	type	W 20 *	W 20 *	F 27 *
Spindle bore . . . . .	mm (in.)	20 (2 <sup>5</sup> / <sub>32</sub> )	20 (2 <sup>5</sup> / <sub>32</sub> )	—
Bore through collet . . . . .	mm (in.)	14,5 (9 <sup>9</sup> / <sub>16</sub> )	14,5 (9 <sup>9</sup> / <sub>16</sub> )	22 (7 <sup>7</sup> / <sub>8</sub> )
Width of pulley steps (see page 16) . . . . .	mm (in.)	32 (1 <sup>1</sup> / <sub>4</sub> )	32 (1 <sup>1</sup> / <sub>4</sub> )	37 (1 <sup>7</sup> / <sub>16</sub> )
Diameter of pulley steps (see page 16) . . . . .	mm (in.)	75-100-125 (2 <sup>15</sup> / <sub>16</sub> -3 <sup>15</sup> / <sub>16</sub> -4 <sup>15</sup> / <sub>16</sub> )	75-100-125 (2 <sup>15</sup> / <sub>16</sub> -3 <sup>15</sup> / <sub>16</sub> -4 <sup>15</sup> / <sub>16</sub> )	75-100-125 (2 <sup>15</sup> / <sub>16</sub> -3 <sup>15</sup> / <sub>16</sub> -4 <sup>15</sup> / <sub>16</sub> )
* For specification of other collets, (see page 29)				
<b>Carriages</b>		screw-operated	lever-operated	cutting-off
Stroke of longitudinal slide . . . . .	mm (in.)	90 (3 <sup>1</sup> / <sub>2</sub> )	85 (3 <sup>3</sup> / <sub>8</sub> )	—
Stroke of cross slide . . . . .	mm (in.)	100 (4)	60 (2 <sup>3</sup> / <sub>8</sub> )	—
Stroke of slide (lever-operated) . . . . .	mm (in.)	—	—	90 (3 <sup>1</sup> / <sub>2</sub> )
Swing over carriage . . . . .	mm (in.)	130 (5 <sup>1</sup> / <sub>8</sub> )	120 (4 <sup>3</sup> / <sub>4</sub> )	85 (3 <sup>3</sup> / <sub>8</sub> )
Dimensions of tools . . . . .	mm (in.)	10x12 (1 <sup>13</sup> / <sub>32</sub> x1 <sup>15</sup> / <sub>32</sub> )	10x12 (1 <sup>13</sup> / <sub>32</sub> x1 <sup>15</sup> / <sub>32</sub> )	10x12 (1 <sup>13</sup> / <sub>32</sub> x1 <sup>15</sup> / <sub>32</sub> )
<b>Turret carriage</b>				
Diameter of six holes in turret . . . . .	mm (in.)	—	—	20 (.787)
Working stroke . . . . .	mm (in.)	—	—	80 (3 <sup>5</sup> / <sub>32</sub> )
<b>Tailstocks</b>			lever-operated	
Internal taper of spindle . . . . .		2°	W20   W25	—
Bore of spindle for collets . . . . .	mm (in.)	—	20   25 (.787)   (.984)	—
Stroke of spindle . . . . .	mm (in.)	80 (3 <sup>5</sup> / <sub>32</sub> )	90   110 (3 <sup>1</sup> / <sub>2</sub> )   (4 <sup>11</sup> / <sub>32</sub> )	—
<b>Weight</b> (with standard equipment)				
Net . . . . .	kg (lbs)	85 (190)	90 (200)	110 (245)
Gross . . . . .	kg (lbs)	110 (245)	115 (255)	135 (300)
<b>Overall size</b> (length-depth-height) . . . . .	cm (in.)	113x40x38 (44 <sup>1</sup> / <sub>2</sub> x15 <sup>3</sup> / <sub>4</sub> x15)	135x51x38 (53 <sup>1</sup> / <sub>4</sub> x20x15)	117x43x46 (46x17x18)
<b>Packing</b> (dimensions of case) . . . . .	cm (in.)	105x50x50 (41 <sup>1</sup> / <sub>2</sub> x20x20)	105x50x50 (41 <sup>1</sup> / <sub>2</sub> x20x20)	105x50x50 (41 <sup>1</sup> / <sub>2</sub> x20x20)
<b>Base</b>		Type		
		with chip tray	with bench	
		102-80	102-82	
Weight . . . . .	kg (lbs)	274 (605)	265 (585)	
Overall size (length-depth-height) . . . . .	cm (in.)	135x61x88 (53 <sup>1</sup> / <sub>4</sub> x24x34 <sup>3</sup> / <sub>4</sub> )	135x61x88 (53 <sup>1</sup> / <sub>4</sub> x24x34 <sup>3</sup> / <sub>4</sub> )	
Packing (dimensions of case) . . . . .	cm (in.)	175x90x150 (69x35 <sup>1</sup> / <sub>2</sub> x59)	175x90x150 (69x35 <sup>1</sup> / <sub>2</sub> x59)	



## RANGE OF NORMAL SPINDLE SPEEDS \*

(pole-changing three-phase motor, 1/2-1 1/4 hp, 750/3000 rpm)

Item No.	Description	Type	With countershaft 102-80.100		With speed-reduction unit 102-81.100		With variable-speed unit 102-81.200 rpm	
			Speeds rpm	No. of speeds	Speeds rpm	No. of speeds	with head-stock reduction gear	Direct drive
<b>102-22</b>	W 20 headstock with plain bearings	closed	200 to 3000	12	40 to 3000	24	All speeds from 270 to 3000 (special motor, 750/1500 rpm, .9-1 1/4 hp)	
<b>102-24</b>	W 20 headstock with antifriction bearings	closed						
<b>102-31</b>	W 25 headstock with antifriction bearings	closed						
<b>102-35</b>	F 27 headstock with antifriction bearings	closed						
<b>102-27</b>	W 20 geared headstock with antifriction bearings	closed	with head-stock reduction gear	Direct drive	8 to 3000	40 to 3000	36	All speeds from 55 to 3000
<b>102-33</b>	W 25 geared headstock with antifriction bearings	closed	40 to 3000	200 to 3000				
<b>102-36</b>	F 38 headstock with antifriction bearings	closed	250 to 2000	8	50 to 2000	16	270 to 3000	
<b>102-37</b>	F 64 headstock with antifriction bearings	closed					—	

\* For details of normal speeds, see page 13  
For details of special speeds, see pages 14 and 15