

## 30020

TENONS, LOCATING PADS & DRILL BUSHES

### Material

Steel, case-hardened (C15), blackened and ground.

elements onto machine tables.

### Tips

For especially heavy duty applications we recommend tenons no. 30040.

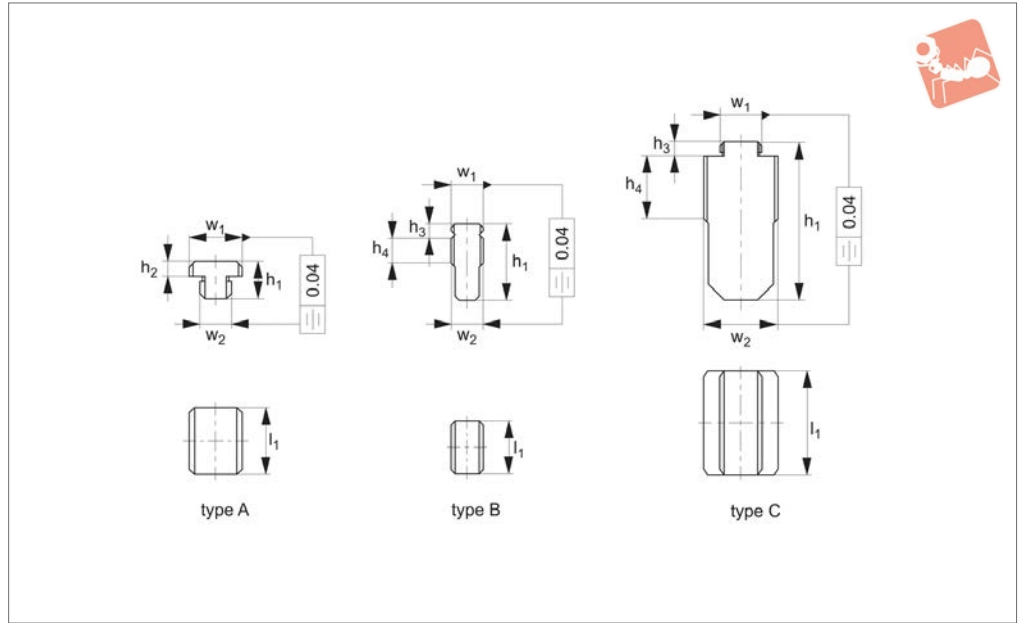
### Technical Notes

Used for locating fixtures and clamping

Order No.	$l_1$	$w_1$ tol. h6	$d_1$	$d_2$	$h_1$	$h_2$	For screws DIN 84 & DIN 912	Weight g
30020.W0010	20	10	4.5	8	8	4.3	M 4x10	15
30020.W0012	20	12	5.5	10	8	5.3	M 5x12	19
30020.W0014	22	14	6.6	11	10	6.3	M 6x16	21
30020.W0016	22	16	6.6	11	10	6.3	M 6x16	26
30020.W0018	22	18	6.6	11	10	6.3	M 6x16	30
30020.W0020	22	20	6.6	11	10	6.3	M 6x16	34
30020.W0022	32	22	6.6	11	12	6.3	M 6x16	55
30020.W0024	32	24	6.6	11	12	6.3	M 6x16	62



## 30040



### Material

Steel, case-hardened (C15), blackened and ground.

Used for locating fixtures and clamping elements onto machine tables. Simply push into position after fixture or clamping element has been roughly positioned.

### Technical Notes

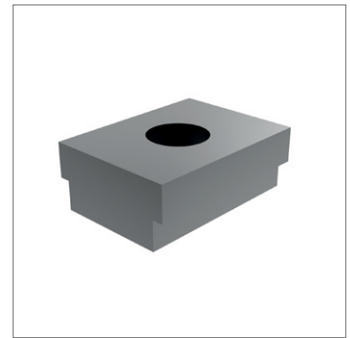
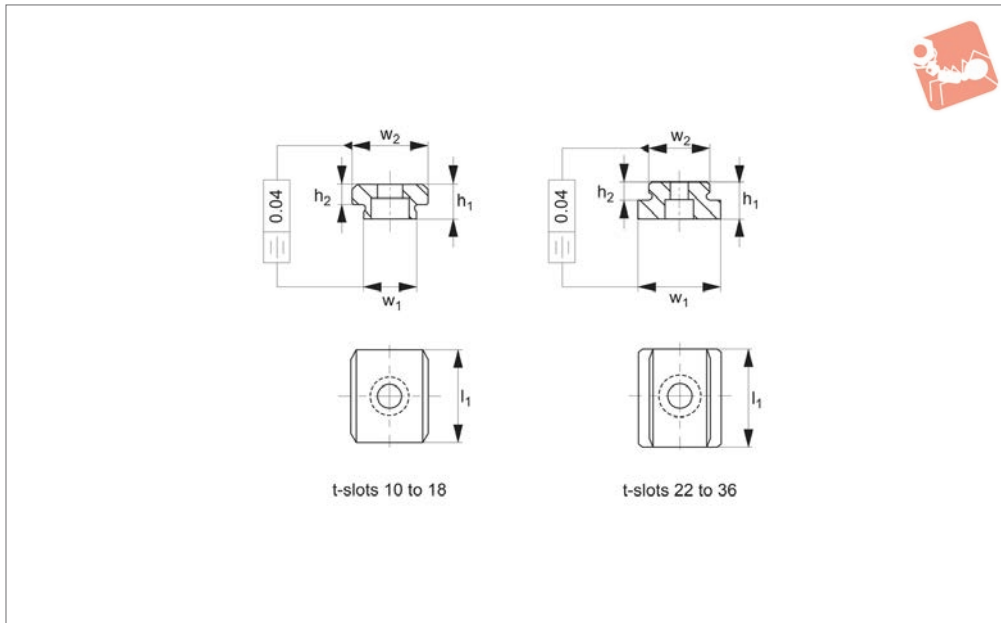
Produced to DIN 6323.

Order No.	Type	Machine slot size $w_2$ tol. h6	$l_1$	Fixture slot size $w_1$ tol. h6	$h_1$	$h_2$	$h_3$	$h_4$	Weight g
30040.W0010	Type A	10	20	12	12.0	3.6	-	-	20
30040.W0012	Type A	12	32	20	14.0	5.5	-	-	50
30040.W0014	Type A	14	32	20	14.0	5.5	-	-	55
30040.W0016	Type A	16	32	20	14.0	5.5	-	-	60
30040.W0018	Type A	18	32	20	14.0	5.5	-	-	65
30040.W0011	Type B	12	20	12	28.6	-	5.5	9	45
30040.W0020	Type B	20	32	20	45.5	-	7.0	16	200
30040.W0022	Type C	22	40	20	50.5	-	7.0	18	290
30040.W0024	Type C	24	40	20	55.5	-	7.0	20	350
30040.W0028	Type C	28	40	20	61.5	-	7.0	24	460
30040.W0036	Type C	36	50	20	76.5	-	7.0	30	940



# Fixed Slot Tenons with cylindrical fastening

## Tenons, Locating Pads & Drill



**30060**

TENONS, LOCATING PADS & DRILL BUSHES

### Material

Steel, case-hardened (C15), blackened and ground.

### Technical Notes

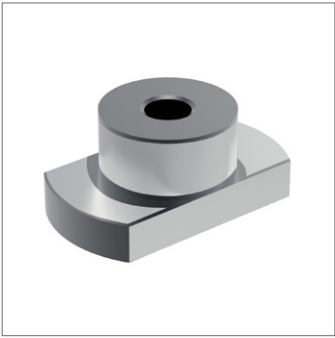
Fixed type tenons, used in pairs, are

screwed onto the bases of vices and fixtures having standard slot sizes of 20mm. The tenon interfaces into machine T-slots of varying widths. For heavy fixtures use loose tenons no. 30040.

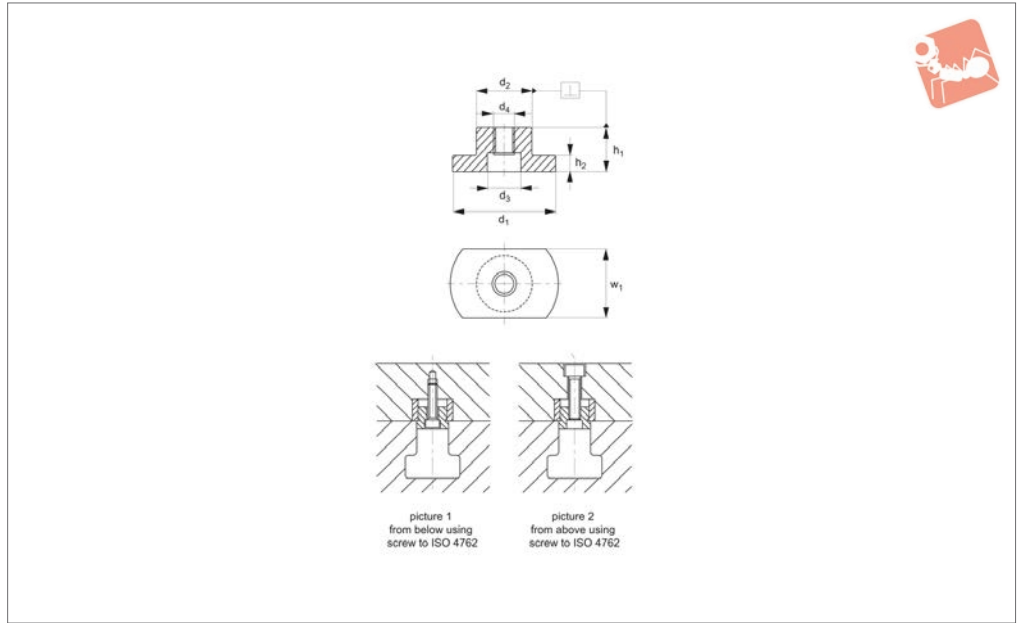
Order No.	Machine slot Size $w_1$ tol. h6	$l_1$	Fixture slot size $w_2$ tol. h6	$h_1$	$h_2$	For screws DIN 84 & DIN 912	Weight g
<b>30060.W0010</b>	10	22	20	10	5.5	M 6x10	20
<b>30060.W0012</b>	12	22	20	10	5.5	M 6x10	25
<b>30060.W0014</b>	14	25	20	10	5.5	M 6x16	28
<b>30060.W0016</b>	16	25	20	10	5.5	M 6x16	30
<b>30060.W0018</b>	18	25	20	10	5.5	M 6x16	30
<b>30060.W0022</b>	22	32	20	12	5.5	M 6x16	50
<b>30060.W0024</b>	24	32	20	12	5.5	M 6x16	55
<b>30060.W0028</b>	28	32	20	12	5.5	M 6x16	60
<b>30060.W0036</b>	36	32	20	12	5.5	M 6x16	75



TENONS, LOCATING PADS & DRILL BUSHES



## 30080



### Material

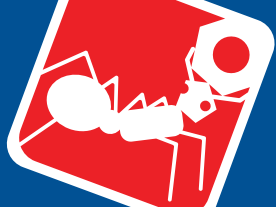
Steel, heat-treated, case-hardened, blackened and ground.

### Technical Notes

Used for locating fixtures and clamping elements on mounting pallets with cylindrical location holes. They can also be inserted into bored holes and T-slots.

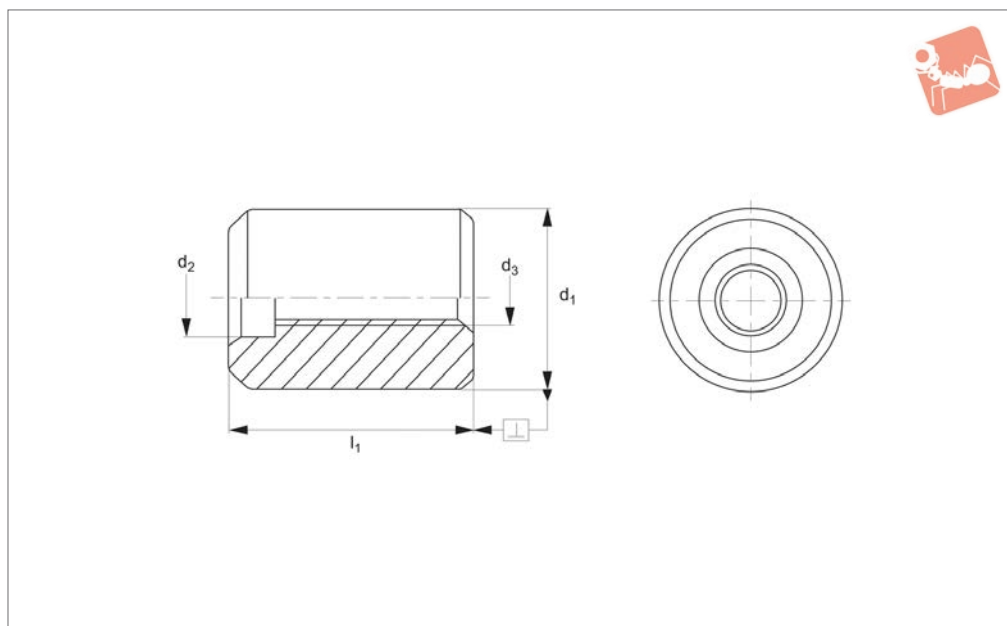
drical location holes. They can also be inserted into bored holes and T-slots.

Order No.	Machine slot Size $w_1$ tol. h6	$d_1$	Fixture slot size $d_2$ tol. h6	$d_3$	$h_1$	$h_2$	For screws ISO 4762 picture 1	For screws ISO 4762 picture 2 $d_4$	Weight g
30080.W0110	10	30	20	11	15,5	5,8	M 6x10	M 8	28
30080.W0112	12	30	20	11	15,5	5,8	M 6x10	M 8	39
30080.W0114	14	30	20	11	15,5	5,8	M 6x16	M 8	41
30080.W0116	16	30	20	11	15,5	5,8	M 6x16	M 8	36
30080.W0118	18	30	20	11	15,5	5,8	M 6x16	M 8	45
30080.W0120	20	36	20	11	15,5	5,8	M 6x16	M 8	48
30080.W0122	22	40	20	11	15,5	5,8	M 6x16	M 8	54
30080.W0128	28	42	20	11	15,5	5,8	M 6x16	M 8	65
30080.W0136	36	48	20	11	15,5	5,8	M 6x16	M 8	86



# Centering Pins for fixtures and pallets

# Tenons, Locating Pads & Drill



**30090**

TENONS, LOCATING PADS & DRILL BUSHES

### Material

Steel, alloyed, case-hardened, ground.

### Technical Notes

Used for centering fixtures on pallets.

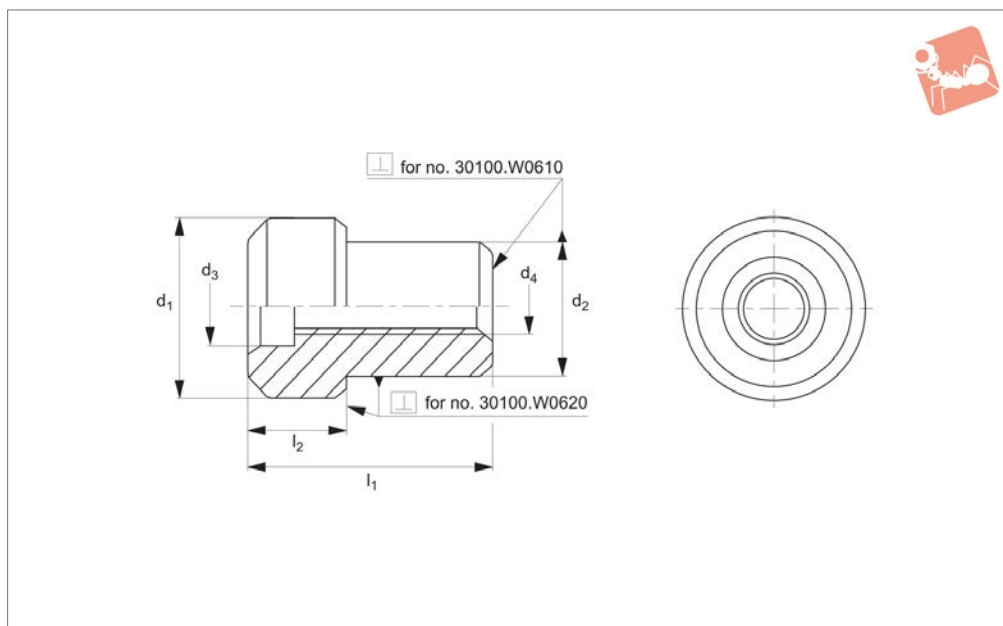
Order No.	$l_1$	$d_1$ tol. h6	$d_2$	$d_3$	Weight g
30090.W0510	31	20	11	M 8	70
30090.W0520	35	25	11	M 8	118
30090.W0530	31	50	11	M 8	473
30090.W0540	45	50	11	M 8	672



TENONS, LOCATING PADS & DRILL BUSHES



## 30100



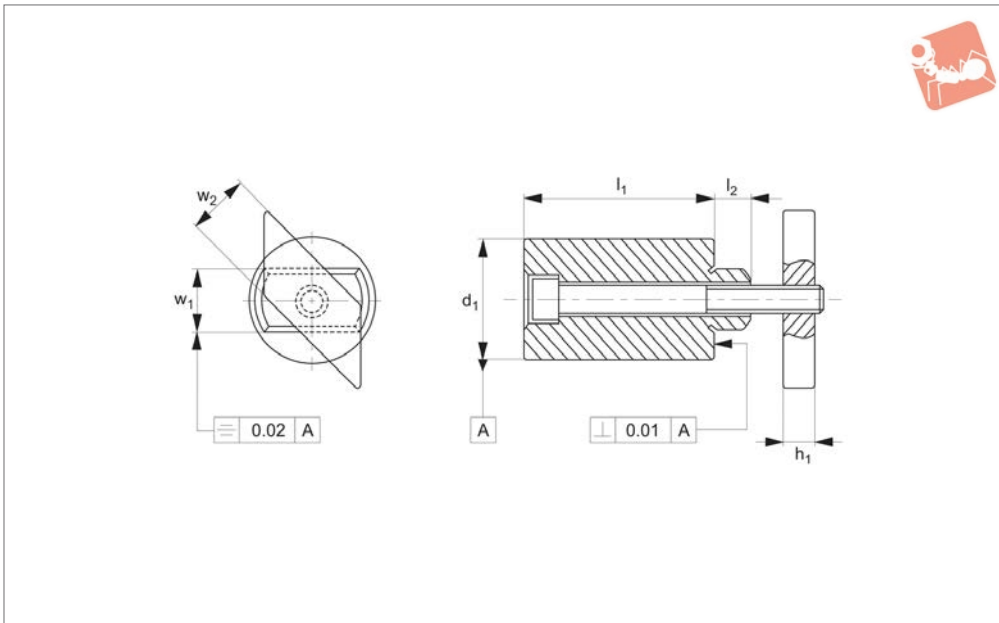
### Material

Steel, alloyed, case-hardened, ground.

### Technical Notes

Used for centering fixtures on pallets.

Order No.	$l_1$	$l_2$	$d_1$ tol. h6	$d_2$ tol. h6	$d_3$	$d_4$	Weight g
30100.W0610	35	12	25	20	11	M 8	87
30100.W0620	35	20	50	20	11	M 8	330



## 30200

TENONS, LOCATING PADS & DRILL BUSHES

### Material

Cylindrical stop: steel, case-hardened and ground.  
Holding plate: steel, blackened.

Screw: DIN 912, quality 8.8.

### Technical Notes

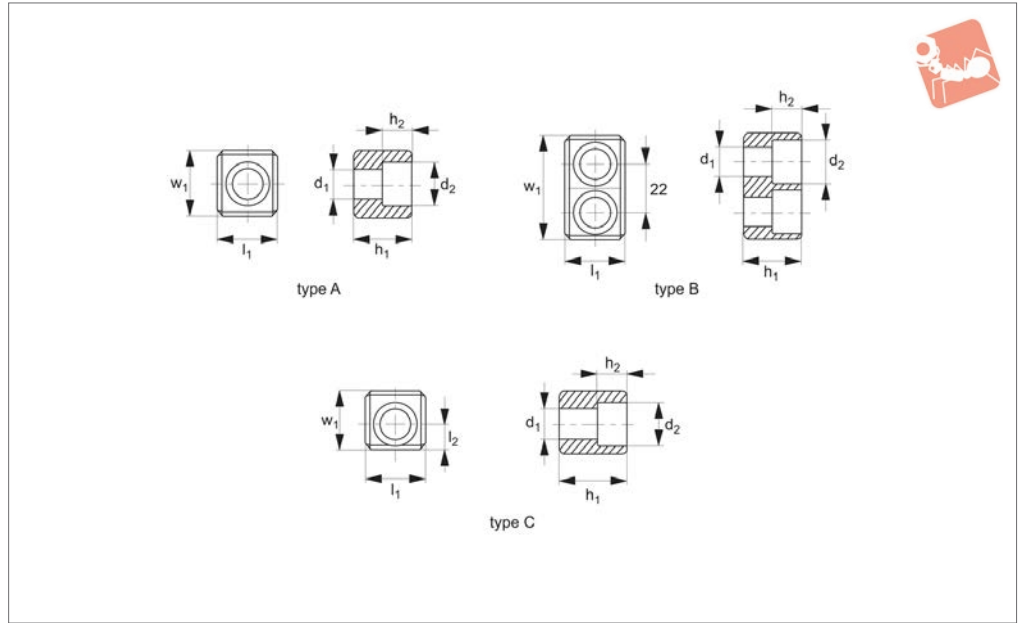
Used as workpiece stops on machine

tables, and as datum points. The short form is ground to a height tolerance of  $\pm 0,01\text{mm}$  and can also be used as a seating element.

Order No.	Short $l_1$ $\pm 0.01$	Long $l_1$ $\pm 0.2$	$l_2$	$w_2$ -0.6	$d_1$ $\pm 0.01$	$h_1$	Screw DIN 912	T-slot $w_1$ tol. h6	Weight g
30200.W0110	15	-	8	10	20	6	M 6x25	10	53
30200.W0112	15	-	8	12	20	6	M 6x25	12	58
30200.W0114	25	-	9	14	32	8	M 8x35	14	202
30200.W0116	25	-	10	16	32	8	M 8x45	16	221
30200.W0118	25	-	15	18	40	10	M10x50	18	371
30200.W0122	25	-	15	20	40	14	M10x55	22	435
30200.W0128	25	-	20	22	46	16	M12x60	28	661
30200.W0210	-	25	8	10	20	6	M 6x35	10	76
30200.W0212	-	25	8	12	20	6	M 6x35	12	83
30200.W0214	-	50	9	14	32	8	M 8x60	14	357
30200.W0216	-	50	10	16	32	8	M 8x70	16	371
30200.W0218	-	50	15	18	40	10	M10x75	18	613
30200.W0222	-	50	15	20	40	14	M10x80	22	679
30200.W0228	-	50	20	22	46	16	M12x90	28	985



## 30300



### Material

Steel, alloyed, case-hardened, blackened and ground.

### Technical Notes

Produced to DIN 2079.  
Used on machine tool spindle heads for

positioning and locking of spindle head.

Order No.	Type	$l_1$ tol. h5	$l_2$ $\pm 0.1$	$w_1$	$d_1$	$d_2$	$h_1$	$h_2$	For spindle head no.	Matching screw DIN 912	Weight g
30300.W0030	A	15.9	-	16.5	6.4	10.4	16.0	6.2	30	M 6x16	25
30300.W0040	A	15.9	-	19.5	6.4	10.4	16.0	6.2	40	M 6x16	31
30300.W0045	A	19.0	-	19.5	8.4	13.5	19.0	8.3	45	M 8x20	38
30300.W0050	A	25.4	-	26.5	13.0	19.0	25.0	12.3	50-55	M12x25	85
30300.W0060	A	25.4	-	45.5	13.0	19.0	25.0	12.3	60	M12x25	179
30300.W0160	B	25.4	-	45.5	13.0	19.0	25.0	12.3	60	M12x25	140
30300.W0230	C	15.9	5.5	13.5	6.4	10.4	24.5	6.2	30	M 6x25	30
30300.W0240	C	15.9	7.0	16.5	6.4	10.4	24.5	6.2	40	M 6x25	39
30300.W0245	C	19.0	7.5	17.5	8.4	13.5	26.0	10.0	45	M 8x25	47
30300.W0250	C	25.4	11.0	24.0	13.0	19.0	29.0	12.3	50	M12x30	89

