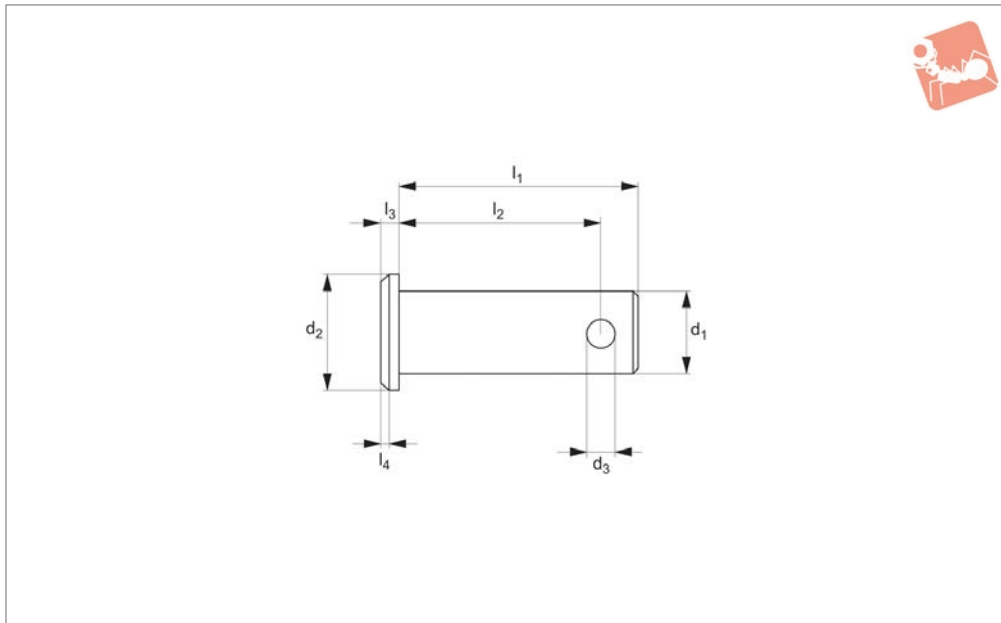




# Steel Clevis Pin With Hole

steel - zinc-plated

## Clevis Joints



**65660**

CLEVIS JOINTS

### Material

Sizes 5-14 steel 1,0214 (QST 36-3).  
 Sizes 16-50 steel (1,0718 11SMnPb30+C).  
 Zinc-plated.

### Tips

For use with clevis joints 65630 and 65631,  
 for split cotter pins to suit see part number  
 65674.  
 For washers see part number P0330-ZP.

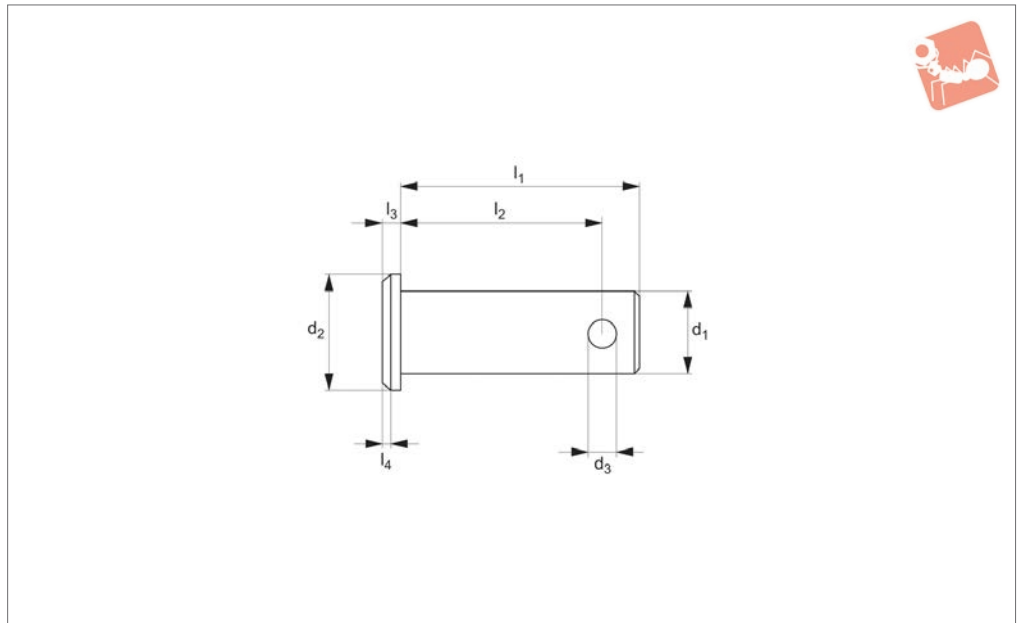
### Technical Notes

Designed for use with clevis joints.

Order No.	$d_1$ tol. h11	$d_2$ tol. h14	$d_3$ tol. h14	$l_1$ tol. js15	$l_2$ +0.5	$l_3$ tol. js14	$l_4$	Weight g
65660.W0105	5	8	1.0	15	12.3	1.5	0.5	2.6
65660.W0106	6	9	1.6	18	15.3	1.5	0.5	4.6
65660.W0108	8	12	2.0	23	19.5	2.0	1.0	10.0
65660.W0110	10	14	3.2	29	24.5	2.0	1.0	19.0
65660.W0112	12	17	4.0	35	29.5	3.0	1.5	34.0
65660.W0114	14	19	4.0	40	32.5	3.0	1.5	53.0
65660.W0116	16	20	4.0	45	38.2	3.5	1.5	72.0
65660.W0118	18	25	5.0	50	43.5	3.5	1.5	104.0
65660.W0120	20	28	5.0	53	47.0	4.0	1.5	139.0
65660.W0125	25	34	6.3	67	59.0	5.5	1.5	266.0
65660.W0128	28	34	6.3	72	63.2	5.5	2.0	361.0
65660.W0130	30	36	6.3	77	68.2	5.5	2.0	428.0
65660.W0135	35	45	8.0	87	76.5	7.0	2.0	677.0
65660.W0140	40	48	8.0	100	90.0	6.0	5.0	1035.0
65660.W0142	42	48	8.0	100	90.0	7.0	5.0	1151.0
65660.W0150	50	58	10.0	115	103.0	7.0	6.0	1846.0



65661



**Material**

Stainless steel (1.4305, X8CrNiS18-9), for sizes 6-8: stainless steel (1.4567, X3CrNiCu18-9-4).

**Tips**

For use with clevis joints 65635 and 65636, for split cotter pins to suit see part number 65675.

For washers see part number 65671.

**Technical Notes**

Designed for use with clevis joints.

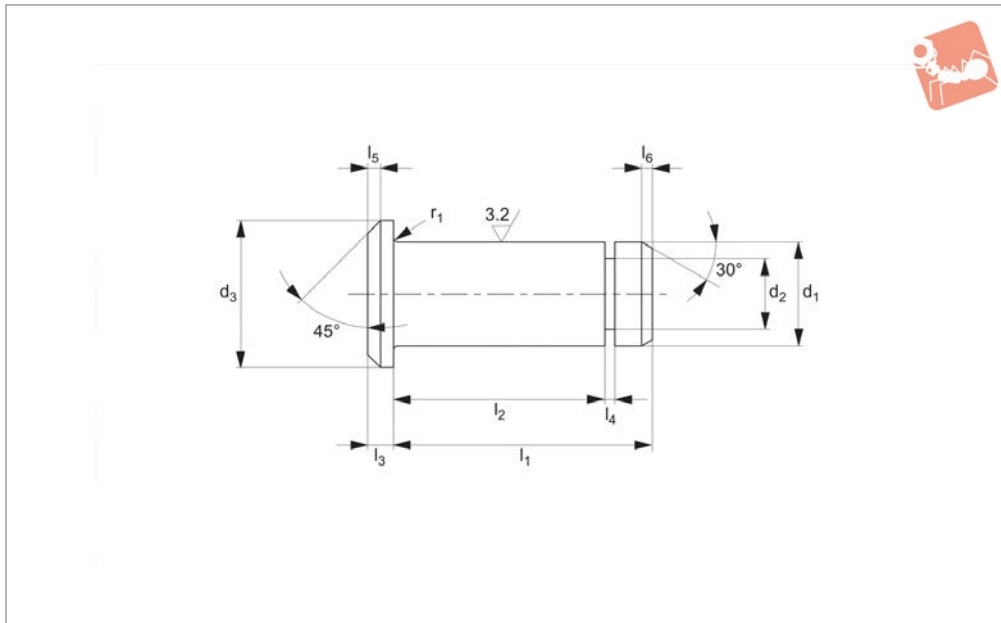
Order No.	d <sub>1</sub> tol. h11	d <sub>2</sub> tol. h14	d <sub>3</sub> tol. h14	l <sub>1</sub> tol. js15	l <sub>2</sub> +0.5	l <sub>3</sub> tol. js14	l <sub>4</sub>	Weight g
65661.W0005	5	8	1.2	15	12.3	1.5	0.5	2.6
65661.W0006	6	9	1.6	18	15.3	1.5	0.5	4.6
65661.W0008	8	12	2.0	23	19.5	2.0	1.0	10.0
65661.W0010	10	14	3.2	29	24.5	2.0	1.0	19.0
65661.W0012	12	17	4.0	35	29.5	3.0	1.5	34.0
65661.W0014	14	19	4.0	40	32.5	3.0	1.5	53.0
65661.W0016	16	21	4.0	45	38.2	3.0	-	73.0
65661.W0020	20	28	5.0	53	47.0	4.0	-	139.0
65661.W0025	25	34	6.3	67	59.0	5.5	-	266.0



# Clevis Pin

silver zinc plated

# Clevis Joints



**65664**

CLEVIS JOINTS

### Material

Steel (9SMnPb28), silver zinc plated.

### Tips

For safety fasteners, see 65680-.

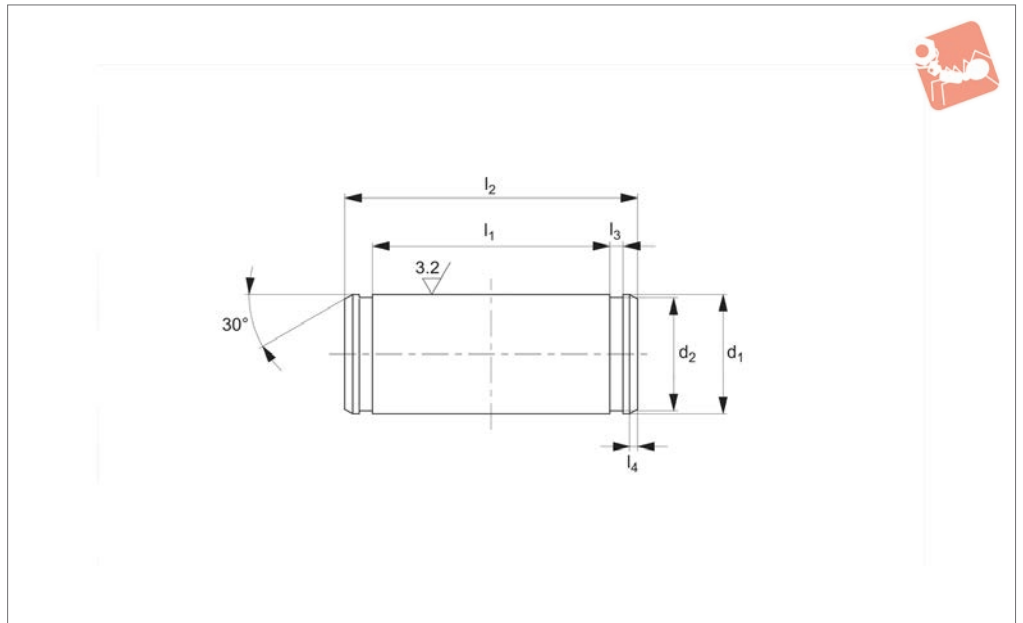
### Technical Notes

Designed for use with clevis joints.

Order No.	$d_1$ tol. h11	$d_2$ tol. h11	$d_3$ tol. h12	$l_1$	$l_2$ +0.30	$l_3$ tol. js14	$l_4$ +0.10	$l_5$	$l_6$	R	Weight g
<b>65664.W0104</b>	4	3.2	6	10.5	8.5	1.0	0.64	0.5	0.5	0.3	2
<b>65664.W0105</b>	5	4.0	8	13.0	10.5	1.5	0.74	0.5	0.5	0.5	3
<b>65664.W0106</b>	6	5.0	9	15.5	12.5	1.5	0.74	0.5	0.75	0.5	4
<b>65664.W0108</b>	8	6.0	12	20.0	16.5	2.0	0.94	1.0	1.0	0.5	9
<b>65664.W0110</b>	10	8.0	14	25.0	20.5	2.0	1.05	1.0	1.0	0.5	17
<b>65664.W0112</b>	12	9.0	17	30.0	24.5	3.0	1.15	1.25	1.25	0.5	30
<b>65664.W0114</b>	14	10.0	19	33.0	27.5	3.0	1.25	1.5	1.5	1.0	48
<b>65664.W0116</b>	16	12.0	20	38.5	32.5	3.0	1.35	1.5	1.5	1.0	67
<b>65664.W0120</b>	20	17.5	26	46.0	40.5	4.0	1.8	2.0	1.5	1.0	125
<b>65664.W0125</b>	25	18.0	32	57.0	50.5	5.0	1.8	2.0	1.5	1.0	260



**65666**



**Material**

Stainless steel (AISI 303).

**Technical Notes**

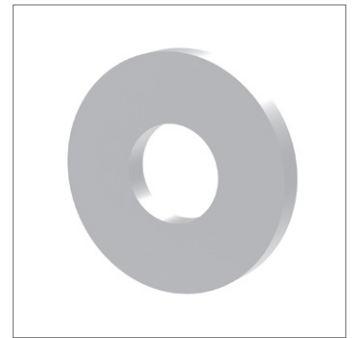
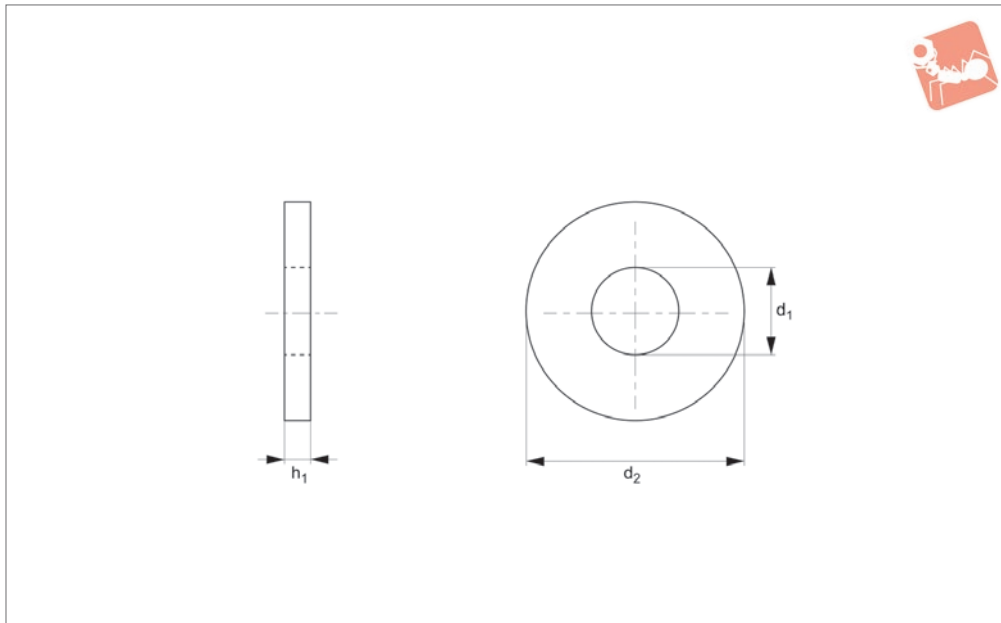
For use with 65635-65636 clevis joints and 65678 circlips.

Order No.	d <sub>1</sub> tol. h11	d <sub>2</sub> tol. h11	l <sub>1</sub> +0.30	l <sub>2</sub> +0.40	l <sub>3</sub> tol. h13	l <sub>4</sub>	Weight g
65666.W0005	5	4.8	10.5	15	0.7	1	3
65666.W0006	6	5.7	12.2	17	0.8	1	5
65666.W0008	8	7.6	16.5	20	0.9	1	8
65666.W0010	10	9.6	20.5	25	1.1	1	15
65666.W0012	12	11.5	24.5	30	1.1	1	26
65666.W0016	16	15.2	32.5	39	1.1	1	61
65666.W0020	20	19.0	40.5	48	1.3	1	118



# Flat Washers Form A

Steel, zinc-plated



**65670**

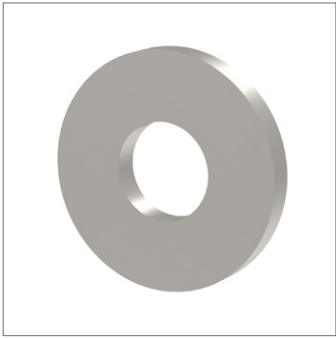
### Material

Steel, zinc-plated.

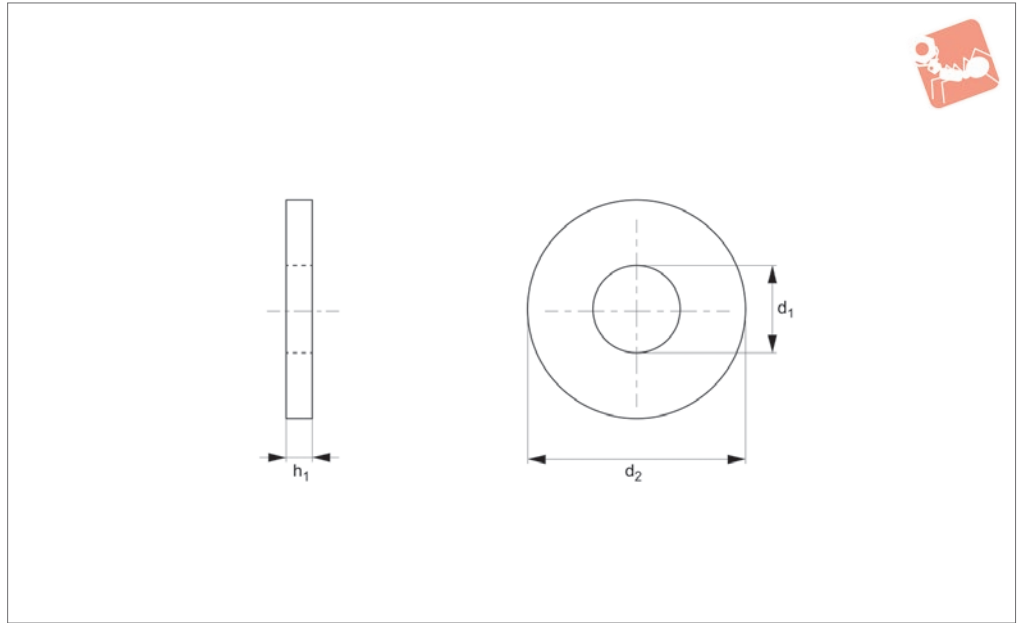
### Technical Notes

To DIN 125 A.

Order No.	For thread	$d_1$	$d_2$	$h_1$	Material
65670.W0004	M 4	4.3	9	0.8	Steel ZP
65670.W0005	M 5	5.3	10	1.0	Steel ZP
65670.W0006	M 6	6.4	12	1.6	Steel ZP
65670.W0007	M 7	7.4	14	1.6	Steel ZP
65670.W0008	M 8	8.4	16	1.6	Steel ZP
65670.W0010	M10	10.5	20	2.0	Steel ZP
65670.W0012	M12	13.0	24	2.5	Steel ZP
65670.W0014	M14	15.0	28	2.5	Steel ZP
65670.W0016	M16	17.0	30	3.0	Steel ZP
65670.W0018	M18	19.0	34	3.0	Steel ZP
65670.W0020	M20	21.0	37	3.0	Steel ZP
65670.W0022	M22	23.0	39	3.0	Steel ZP
65670.W0025	M24	25.0	44	4.0	Steel ZP
65670.W0028	M27	28.0	50	4.0	Steel ZP
65670.W0030	M30	31.0	56	4.0	Steel ZP



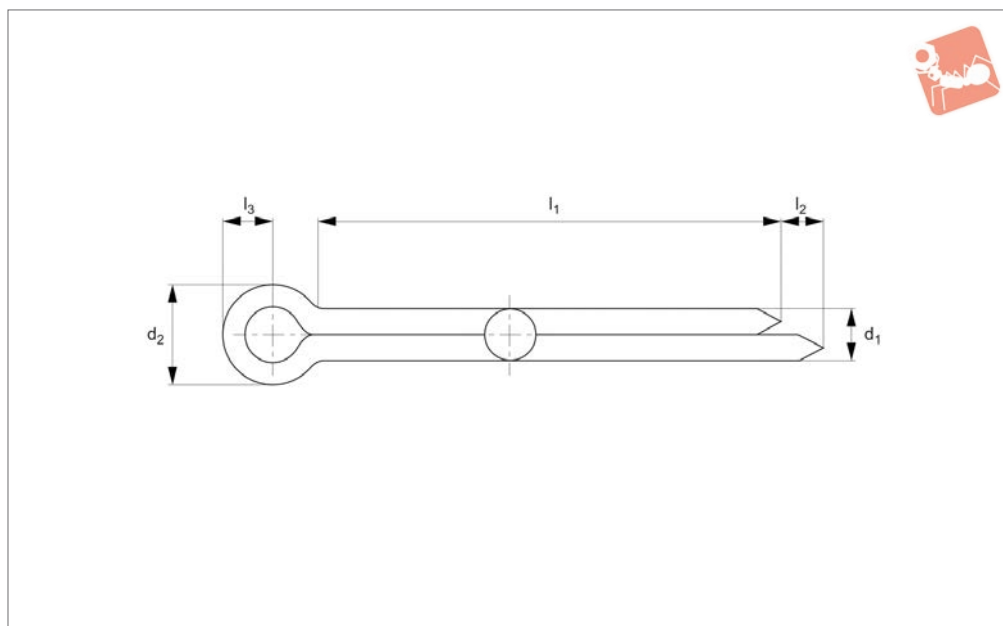
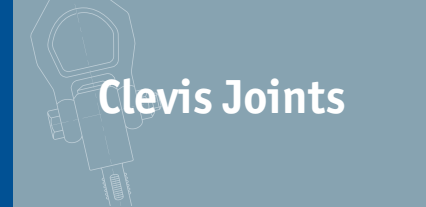
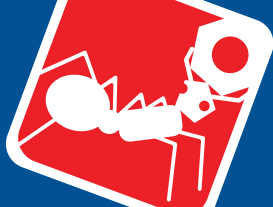
65671



**Material**  
Stainless steel (A2).

**Technical Notes**  
To DIN 125 A.

Order No.	For thread	$d_1$	$d_2$	$h_1$	Material
65671.W0004	M 4	4.3	9	0.8	A2 s/s
65671.W0005	M 5	5.3	10	1.0	A2 s/s
65671.W0006	M 6	6.4	12	1.6	A2 s/s
65671.W0007	M 7	7.4	14	1.6	A2 s/s
65671.W0008	M 8	8.4	16	1.6	A2 s/s
65671.W0010	M10	10.5	20	2.0	A2 s/s
65671.W0012	M12	13.0	24	2.5	A2 s/s
65671.W0014	M14	15.0	28	2.5	A2 s/s
65671.W0016	M16	17.0	30	3.0	A2 s/s
65671.W0020	M20	21.0	37	3.0	A2 s/s
65671.W0025	M24	25.0	44	4.0	A2 s/s



**65674**

CLEVIS JOINTS

**Material**

Mild steel (zinc-plated).

pins require a loose fit, and as a result the metric versions can also be for inch sizes.

H14 (under this diameter recommended tolerance is H13).

**Technical Notes**

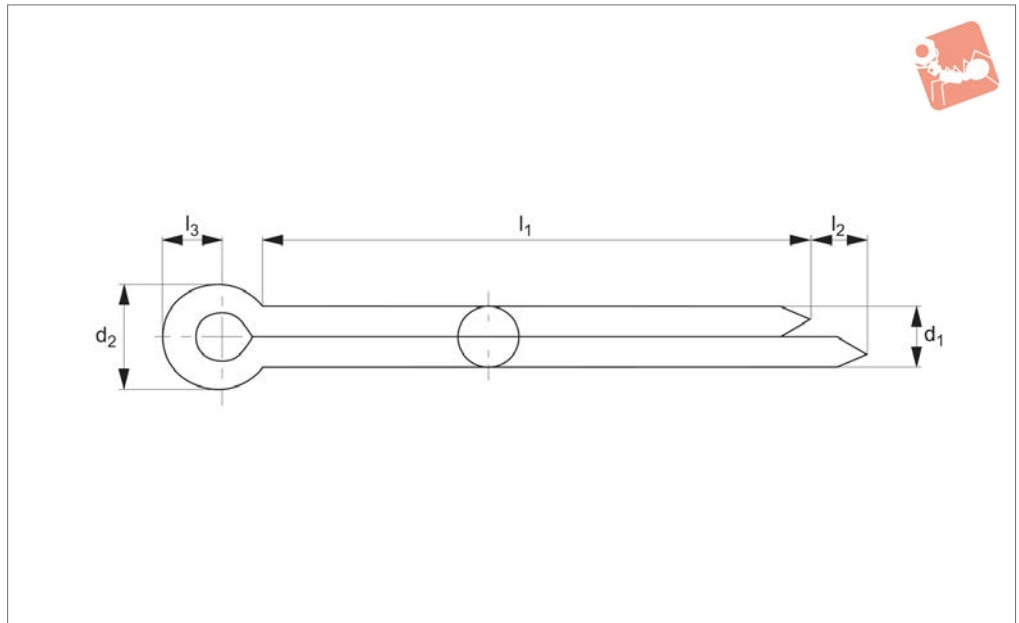
To DIN 94 (equivalent to ISO 1234). Cotter

Recommended hole tolerance for  $d_1$  1,6 is

Order No.	$d_1$ nom.	$d_1$ min.	$d_1$ max.	$d_2$ max.	$l_1$	$l_2$ max.	$l_3$ ≈
65674.W0010	1	0.8	0.9	1.8	10	1.6	3
65674.W0016	1.6	1.3	1.4	2.8	18	2.5	3.2
65674.W0020	2	1.7	1.8	3.6	18	2.5	4.0
65674.W0032	3.2	2.7	2.9	5.8	22	3.2	6.4
65674.W0040	4	3.5	3.7	7.4	28	4.0	8.0
65674.W0050	5	4.4	4.6	9.2	50	4.0	10.0
65674.W0060	6	5.7	5.9	11.8	71	4.0	12.6
65674.W0080	8	7.3	7.5	15	112	4.0	16.0
65674.W0100	10	9.3	9.5	19	112	6.3	20.0



**65675**



**Material**

Stainless steel (A2, AISI 303).

pins require a loose fit, and as a result the metric versions can also be for inch sizes.

**Technical Notes**

To DIN 94 (equivalent to ISO 1234). Cotter

Order No.	$d_1$ nom.	$d_2$ max.	$l_1$	$l_2$ max.	$l_3$ $\approx$
65675.W1010	1	1.8	10	1.6	3.0
65675.W1018	1.6	2.8	18	2.5	3.2
65675.W2018	2	3.6	18	2.5	4.0
65675.W3022	3.2	5.8	22	3.2	6.4
65675.W4028	4	7.4	28	4.0	8.0
65675.W5050	5	9.2	50	4.0	10
65675.W6071	6.3	11.8	71	4.0	12.6





## Parts overview

### Clevis Joints

Stocked to DIN 71752 in steel and stainless steel. Plain clevis joints available in right and left hand threads zinc plated steel and stainless steel. Steel sizes from M4 up to M48. Stainless sizes from M4 up to M27.



### Clevis Mating Pieces

These are designed to fit in between our clevis joints to create a linkage where an angular offset is required. Available in zinc plated steel and stainless steel. Sizes M4 up to M20.



### Clevis Pins and Clips

Various styles of pins and clips to suit clevis joints in zinc plated steel and stainless steel. Sizes available to suit all sizes of clevis joints that we offer.



### Clevis Retention Clips

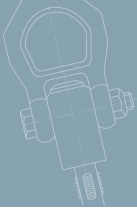
These are the most popular type of clip used with our clevis joints. They create a neat compact assembly, only available in zinc plated steel. Size available for clevis joints from 4mm up to 20mm.



### Male Clevis Joints

Stocked in zinc plated steel and stainless steel, right and left hand threads. Sizes M6 up to M20.





## Zinc plated steel

Clevis with retention clip  
65630 and 65684



Clevis with clevis pin 65664  
Safety fastener 65680

Clevis with clevis pin,  
washer and cotter pin  
65660 and 65674



## Stainless steel

Clevis with clevis pin  
and circlips 65666  
and 65678



Clevis with clevis pin,  
washer and cotter pin  
65661 and 65675



## Assembly options

Clevis with 65652  
mating piece  
and 65684 clevis  
retention clip



Clevis with 65880  
rod end and 65684  
clevis retention clip



## Tensile tests, statistically to failure (break)

### Clevises M6 - M42

Clevis joints axially loaded.

### Material

Leaded low carbon steel (AISI 12L14, 1.0718).

Important note: values in this table are indicative only and should only be used as a rough guide. The Company cannot foresee the intended applications of their products and we accept no liability for any actions taken by third parties. Customers are advised to use their own safety factors and/or perform their own testing on the clevis joint to ensure it meets requirements for their application.

Clevis size	F min (kN)	F max (kN)	F average value (kN)	Avg. force when clevis starts to deform (kN)
6 x 24 M 6	16,0	19,5	17,6	15,3
8 x 32 M 8	33,2	35,6	34,6	29,3
10 x 40 M10	42,0	52,0	47,5	41,3
12 x 48 M12	53,0	68,5	61,1	50,2
14 x 56 M14	60,5	64,5	63,0	48,8
16 x 64 M16	133,5	146,0	140,2	115
20 x 40 M20	194,5	234,0	213,5	176
25 x 50 M25	311,0	336,0	328,0	260
30 x 60 M30	428,0	450,0	440,6	343
36 x 72 M36	566,0	573,0	569,5	300
35 x 72 M36	561,2	567,9	564,6	370
42 x 84 M42	904,6	904,6	904,6	420