



Pages 16 - 38

Clevis Joints

Stocked to DIN 71752 in steel and stainless steel. Plain clevis joints or clevis joints and pin assemblies available in right and left hand threads zinc plated steel and stainless steel.

Sizes Steel from M4 up to M48, stainless from M4 up to M27.

Male Clevis Joints

Stocked in zinc plated steel and stainless steel, right and left hand threads.

Sizes M6 up to M20.

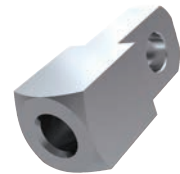


Pages 40 - 43

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.



Pages 44 - 47

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.

Sizes Available for clevis joints from 4mm up to 20mm.



Pages 49- 50

Clevis Pins and Clips

Various styles of pins and clips to suit clevis joints in zinc plated steel and stainless steel.

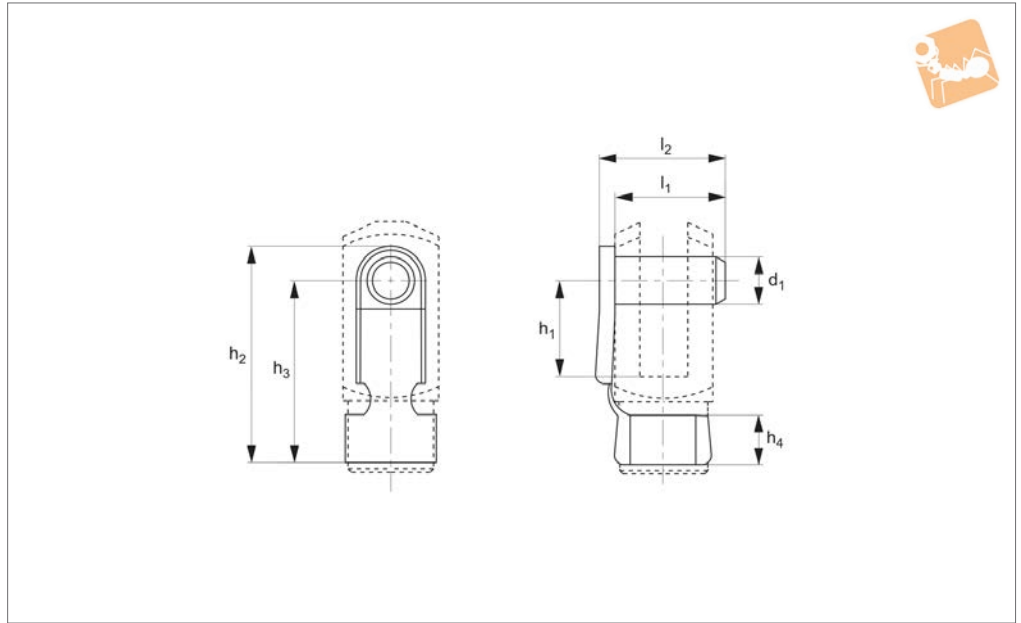
Sizes Available to suit all sizes of clevis joints we offer.



Pages 51 - 62



R3438



Material

Stainless Steel 1.4305 AISI 303

Tips

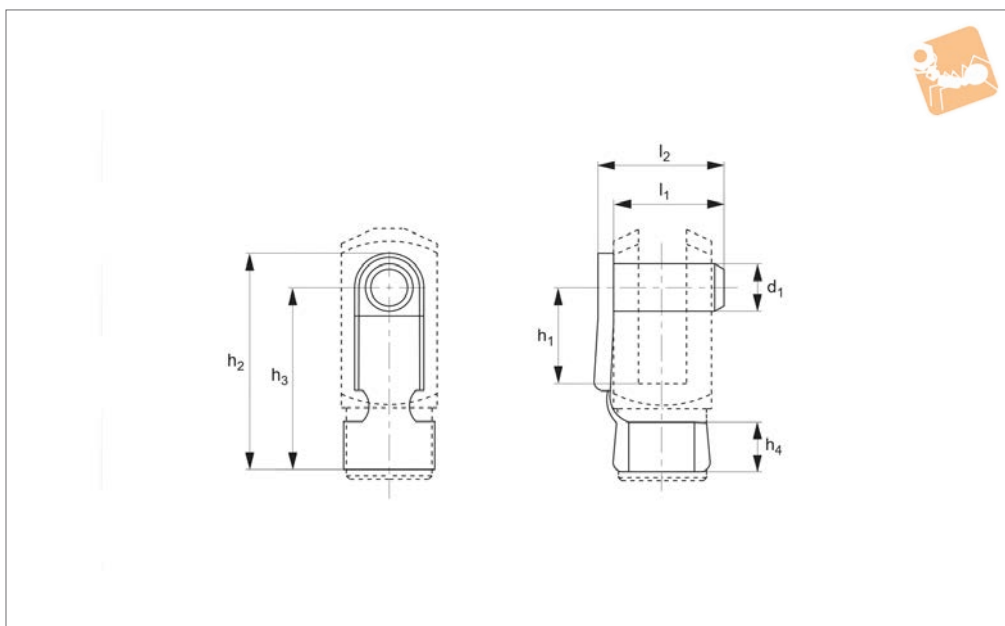
Clips on to base of clevis joint, for clevis joint see part numbers R3402 and R3403.

Order No.	Size	d_1	h_1	h_2	h_3	h_4	l_1	l_2	Weight g
R3438.048	4x8	4	8	19	15	4	9	11	2
R3438.051	5x10	5	10	23	19	4.5	9	14	3
R3438.052	5x20	5	20	33	29	4.5	12	14	3
R3438.061	6x12	6	12	28	23	6	14	16	5
R3438.062	6x24	6	24	40	35	6	14	16	6
R3438.081	8x16	8	16	37	31	8	19	23	11
R3438.083	8x32	8	32	53	47	8	19	23	12
R3438.102	10x20	10	20	46	39	10	23	27	19
R3438.104	10x40	10	40	66	59	10	23	27	20
R3438.122	12x24	12	24	55	46	12	28	32	32
R3438.124	12x48	12	48	79	71	12	28	32	34
R3438.142	14x28	14	28	62	52	14	31	34	47
R3438.145	14x56	14	56	92	82	14	31	34	50
R3438.163	16x32	16	32	72	62	16	36	41	67
R3438.166	16x64	16	64	103	92	16	36	39	74
R3438.204	20x40	20	40	88	72	16	44	49	130

Clevis Retention Clips

silver zinc plated

Clevis Joints & Clips



R3435

CLEVIS JOINTS & CLIPS

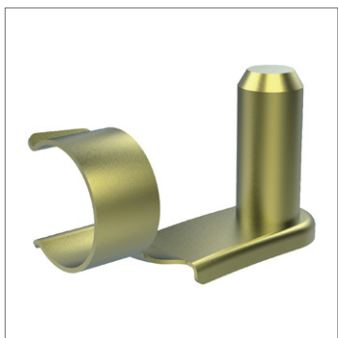
Material

Pin - steel (9SMnPb28), spring - carbon steel C70, silver zinc plated.

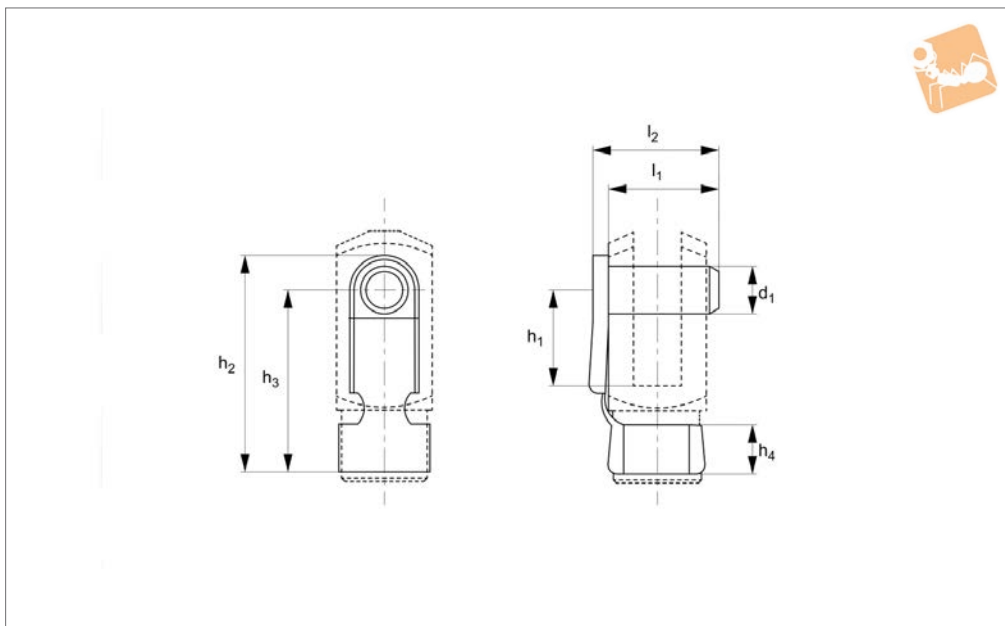
Tips

Clips on to base of clevis joint, for clevis joint see part numbers R3385 and R3386.

Order No.	Size	d ₁ tol. H11	h ₁	h ₂	h ₃	h ₄	l ₁	l ₂	Weight g
R3435.048	4x8	4	8	19	15	4	9	11	2
R3435.051	5x10	5	10	23	19	4.5	12	14	3
R3435.052	5x20	5	20	33	29	4.5	12	14	3
R3435.061	6x12	6	12	28	23	6	14	16	5
R3435.062	6x24	6	24	40	35	6	14	16	5
R3435.081	8x16	8	16	37	31	8	19	23	11
R3435.083	8x32	8	32	53	47	8	19	23	12
R3435.102	10x20	10	20	46	39	10	23	27	19
R3435.104	10x40	10	40	66	59	10	23	27	20
R3435.122	12x24	12	24	55	46	12	28	32	32
R3435.124	12x48	12	48	79	71	12	28	32	34
R3435.142	14x28	14	28	62	52	14	31	34	47
R3435.145	14x56	14	56	92	82	14	31	34	50
R3435.163	16x32	16	32	72	62	16	36	41	67
R3435.166	16x64	16	64	103	92	16	36	39	74
R3435.204	20x40	20	40	88	72	16	44	49	130



R3436.i



Material

Yellow zinc-plated steel

Technical Notes

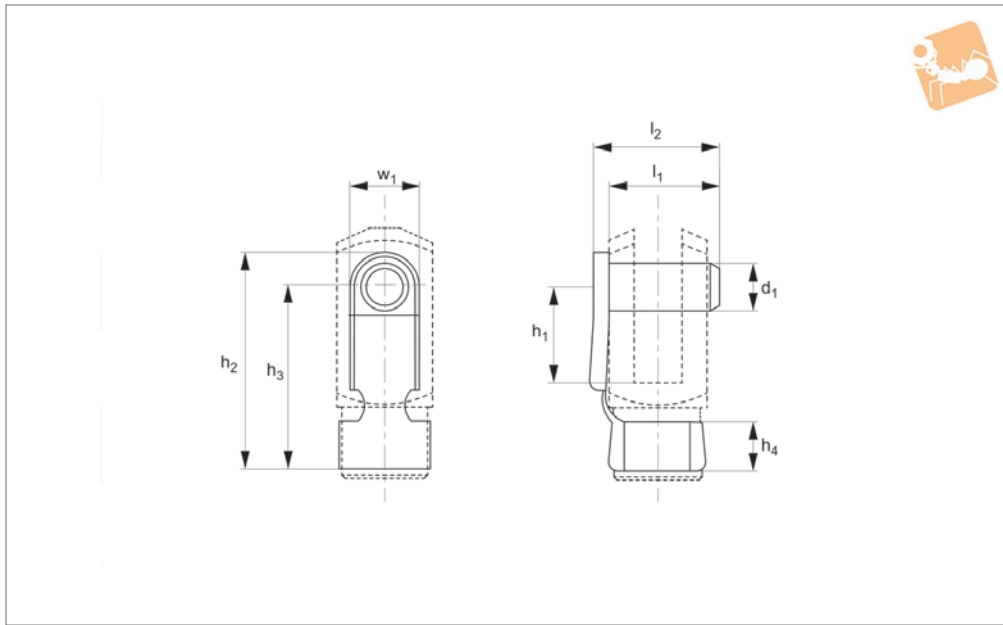
Yellow zinc is not RoHS Compliant.

All measurements are in inches.

Tips

Equivalent to ESI and ESIL Springfix clips

Order No.	d	h ₁	h ₂	h ₃	h ₄	l ₁	l ₂	Weight g
R3436.I187	0.1875	0.394	0.90	0.75	0.22	0.43	0.49	3
R3436.IL187	0.1855	0.787	1.30	1.14	0.22	0.43	0.49	4
R3436.I250	0.2500	0.472	1.10	0.90	0.25	0.56	0.64	5
R3436.IL250	0.2470	0.945	1.57	1.38	0.25	0.56	0.64	6
R3436.I312	0.3125	0.630	1.43	1.18	0.31	0.70	0.79	11
R3436.IL312	0.3095	1.260	2.05	1.81	0.31	0.70	0.79	12
R3436.I375	0.3750	0.787	1.77	1.50	0.39	0.83	0.95	17
R3436.IL375	0.3720	1.575	2.56	2.28	0.39	0.83	0.95	18
R3436.I500	0.5000	1.102	2.44	2.05	0.55	1.09	1.21	40
R3436.IL500	0.4970	1.205	3.58	3.23	0.55	1.09	1.21	43



R3437

CLEVIS JOINTS & CLIPS

Material

Black plastic (Igumid G).

Technical Notes

Spring loaded pins.

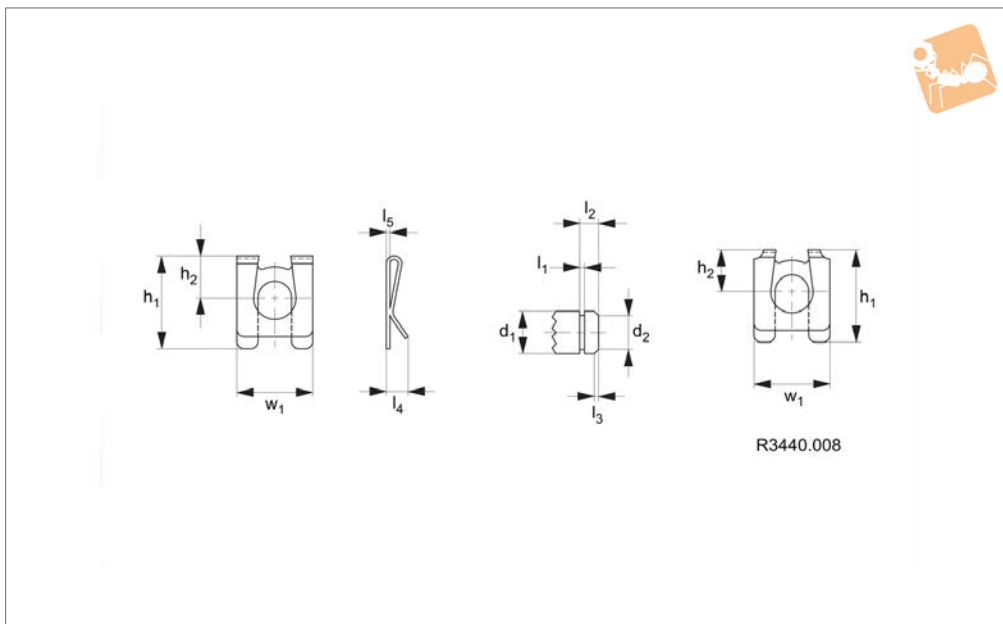
Tips

Clips on to base of clevis joint, for clevis joint see part number R3409.

Order No.	Size	d ₁ tol. h11	h ₁ ±0.5	h ₂	h ₃	h ₄	l ₁	l ₂	w ₁
R3437.048	4x8	4	8	19.0	15	4.5	9.5	10.5	8
R3437.050	5x10	5	10	23.0	19	5.5	12	13.5	8
R3437.051	5x12	5	12	27.0	23	6.5	14	15.5	8
R3437.061	6x12	6	12	27.0	23	6.5	14	15.5	8
R3437.081	8x16	8	16	35.5	30	8.0	19	21.0	11
R3437.102	10x20	10	20	45.0	38	10.0	23	25.5	14
R3437.122	12x24	12	24	53.0	45	12.0	28	31.0	16
R3437.162	16x32	16	32	73.0	62	16.0	36	40.0	22



R3440



Material

Spring steel, silver zinc plated, hardened and annealed 1450 to 1600°C N/mm².

Tips

Easily assembled and removed by hand

without special tools, compatible with clevis pins.

Safety lip prevents accidental removal.

Assembly „rattle“ is eliminated by the fasteners concave back holding the clevis

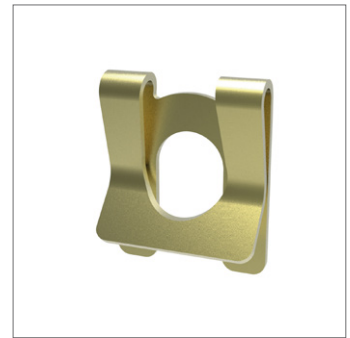
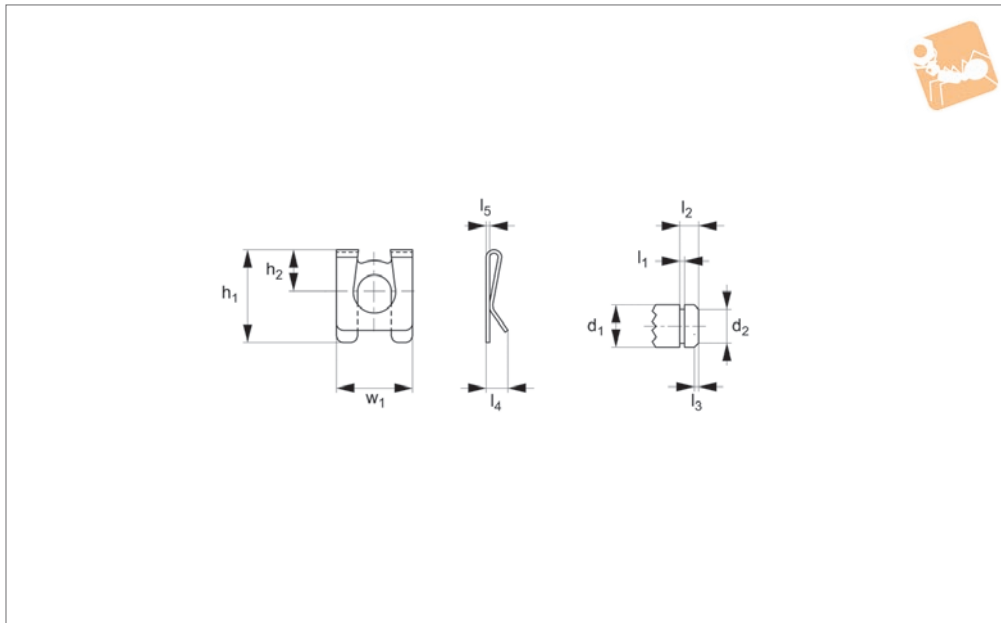
pin under tension.

Order No.	d ₁ tol. h11	d ₂ tol. h11	h ₁	h ₂	l ₁ +0.1	l ₂	l ₃	l ₄	l ₅	w ₁	Axial thrust kN max.	Weight g
R3440.004	4	3.2	8.5	4.0	0.64	2.0	0.5	2.3	0.3	7	1.00	0.19
R3440.005	5	4.0	10.7	5.0	0.74	2.5	0.5	3.3	0.4	9	1.30	0.34
R3440.006	6	5.0	14.1	6.0	0.74	3.0	0.75	3.8	0.4	11	1.50	0.63
R3440.008	8	6.0	17.5	8.0	0.94	3.5	1.0	4.0	0.5	14	3.60	1.10
R3440.010	10	8.0	22.1	10.0	1.05	4.5	1.0	5.0	0.5	18	6.40	2.11
R3440.012	12	9.0	26.0	12.0	1.15	5.0	1.25	5.0	0.5	22	9.60	2.80
R3440.014	14	10.0	30.0	13.5	1.25	5.5	1.5	6.0	0.6	25	11.32	4.74
R3440.016	16	12.0	34.0	16.0	1.35	6.0	1.5	6.0	0.6	28	13.50	5.63



Safety Fastener - Imperial (SLI) for bolts and shafts

Clevis Joints & Clips



R3441.i

CLEVIS JOINTS & CLIPS

Material

Spring steel, yellow zinc plated, hardened and annealed 1450 to 160c N/mm² tensile strength.

Technical Notes

Yellow zinc is not RoHS Compliant

Tips

Easily assembled and removed by hand without special tools. Compatible with clevis pins. safety lip prevents accidental removal.

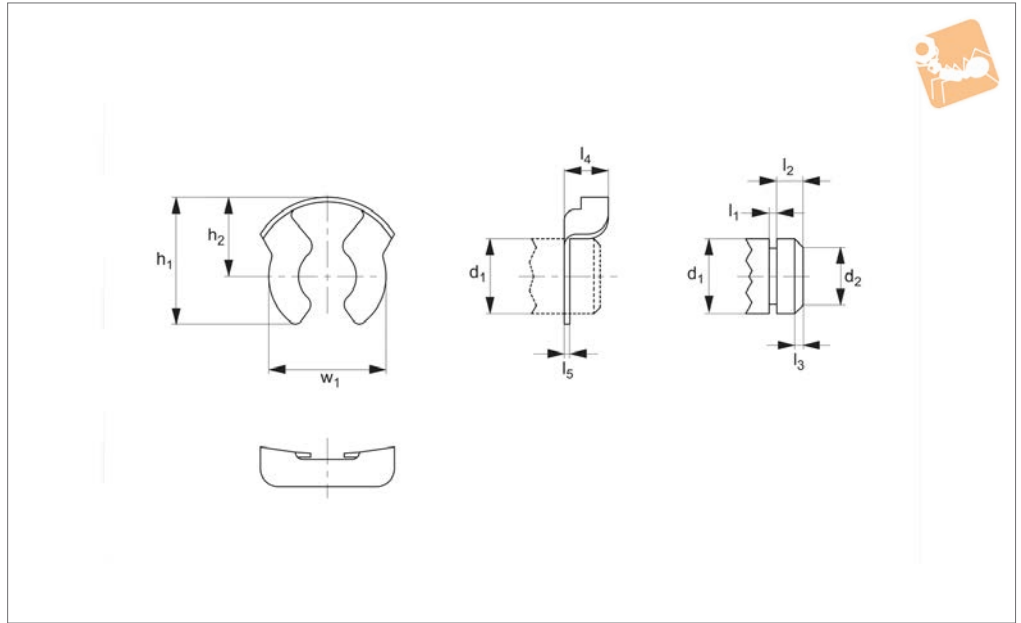
Assembly rattle is eliminated by the faste-

ners concave back holding the clevis pin under tension.

Order No.	d ₁	d ₂	h ₁	h ₂	l ₁	l ₂	l ₃	l ₄	l ₅	w	Weight g
R3441.1187	0.1875	0.140	0.429	0.195	0.020	0.090	0.030	0.084	0.015	0.355	0.3
R3441.1250	0.250	0.193	0.562	0.245	0.026	0.110	0.030	0.130	0.018	0.437	0.6
R3441.1312	0.312	0.240	0.679	0.315	0.033	0.130	0.030	0.138	0.020	0.551	1.1
R3441.1375	0.375	0.301	0.844	0.385	0.037	0.167	0.037	0.211	0.020	0.710	2.2
R3441.1500	0.500	0.388	1.200	0.520	0.046	0.208	0.037	0.263	0.020	1.000	5.1



R3444



Material

Steel, silver zinc plated.

Tips

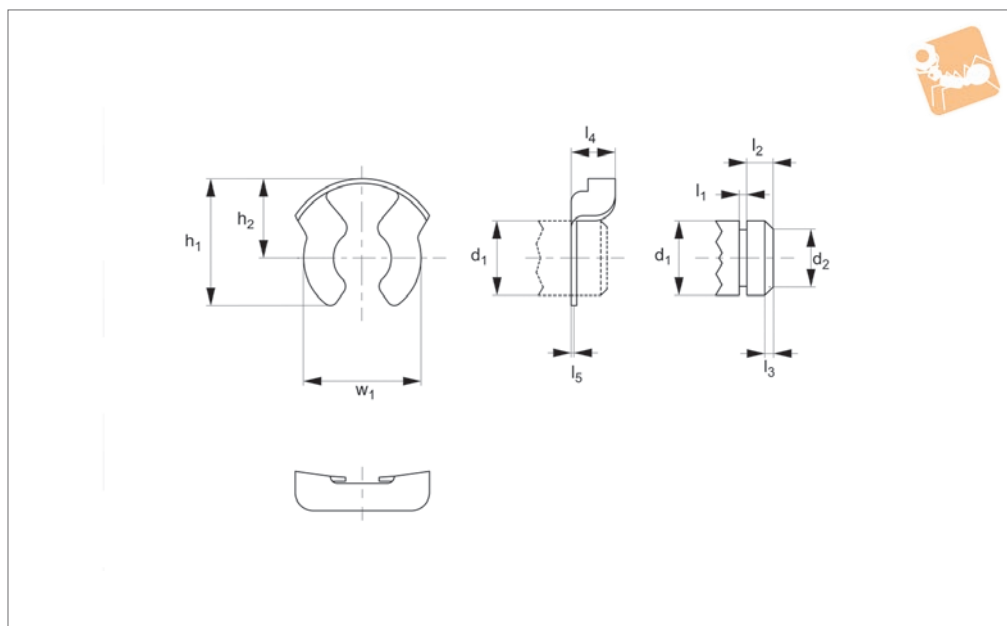
Easily assembled and removed by hand without special tools.

Order No.	d ₁ tol. h11	d ₂ tol. h11	h ₁	h ₂	l ₁ +0.10	l ₂	l ₃	l ₄	l ₅	w	Axial force kN max.
R3444.004	4	3.2	7.2	4.3	0.64	2.0	0.5	2.8	0.4	6.6	1.50
R3444.005	5	4.0	8.4	5.2	0.74	2.5	0.5	2.8	0.5	7.5	3.00
R3444.006	6	5.0	11.25	6.8	0.74	3.0	0.75	3.5	0.5	10.6	4.85
R3444.008	8	6.0	11.9	7.4	0.94	3.5	1.0	4.5	0.5	11.5	5.50
R3444.010	10	8.0	16.3	9.5	1.05	4.5	1.0	5.9	0.6	15.5	9.50
R3444.012	12	9.0	18.0	10.5	1.15	5.5	1.25	6.2	0.6	16.8	10.70
R3444.014	14	10.0	20.0	12.2	1.25	5.5	1.5	6.8	0.7	19.2	12.70
R3444.016	16-18	12.0	24.0	14.3	1.35	5,5-6,0	1.5	7.6	0.8	22.7	14.00
R3444.024	20-25	16-18	34.0	19.0	1.80	5,5-6,5	1.5	9.8	1.0	34.0	16.00

Safety Fastener (KLM)

yellow zinc plated

Clevis Joints & Clips



R3445

CLEVIS JOINTS & CLIPS

Material
Steel, yellow zinc plated.

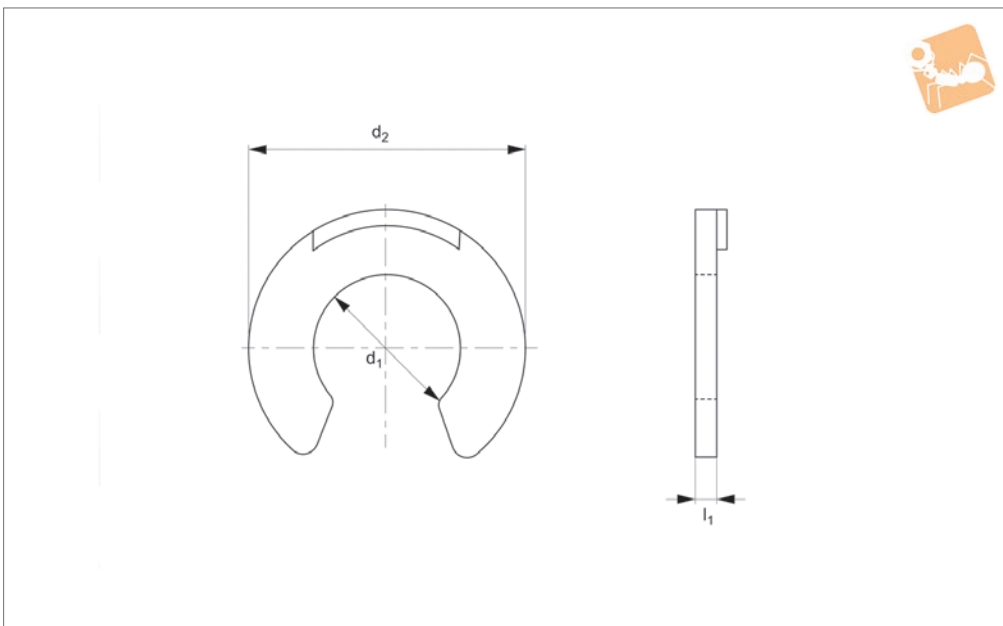
without special tools, for yellow zinc plated version see R3445.

Tips
Easily assembled and removed by hand

Order No.	d ₁ tol. h11	d ₂ tol. h11	h ₁	h ₂	l ₁ +0.10	l ₂	l ₃	l ₄	l ₅	w	Axial force kN max.
R3445.004	4	3.2	7.2	4.3	0.64	2.0	0.5	2.8	0.4	6.6	1.50
R3445.005	5	4.0	8.4	5.2	0.74	2.5	0.5	2.8	0.5	7.5	3.00
R3445.006	6	5.0	11.25	6.8	0.74	3.0	0.75	3.5	0.5	10.6	4.85
R3445.008	8	6.0	11.9	7.4	0.94	3.5	1.0	4.5	0.5	11.5	5.50
R3445.010	10	8.0	16.3	9.5	1.05	4.5	1.0	5.9	0.6	15.5	9.50
R3445.012	12	9.0	18.0	10.5	1.15	5.5	1.25	6.2	0.6	16.8	10.70
R3445.014	14	10.0	20.0	12.2	1.25	5.5	1.5	6.8	0.7	19.2	12.70
R3445.016	16-18	12.0	24.0	14.3	1.35	5,5-6,0	1.5	7.6	0.8	22.7	14.00
R3445.020	20-25	16-18	34.0	19.0	1.80	5,5-6,5	1.5	9.8	1.0	34.0	16.00



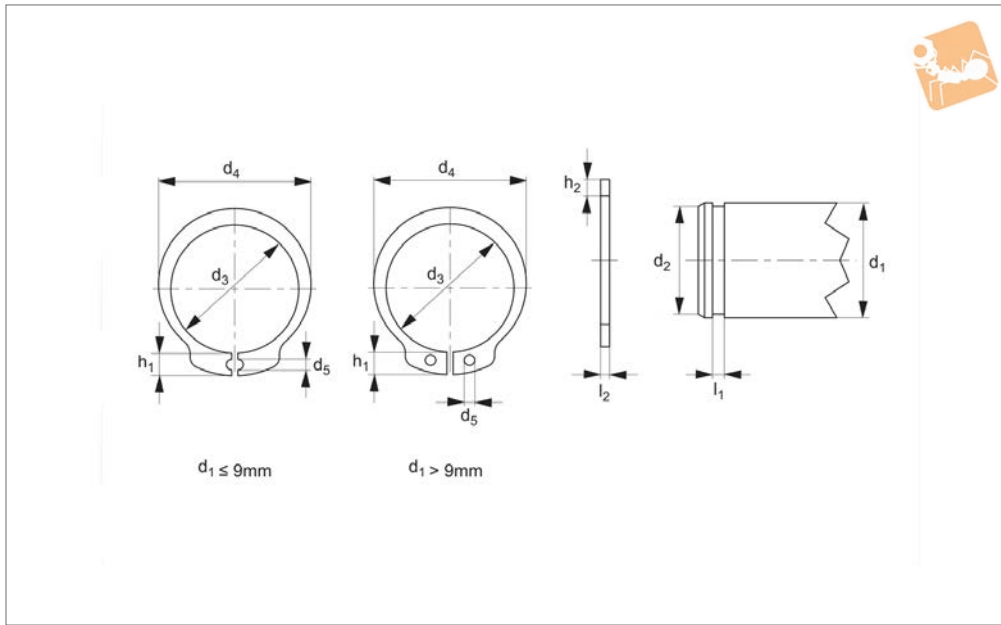
R3446



Material
Black plastic (POM).

Important Notes
For use with R3409 clevis joints and R3453 clevis pins.

Order No.	d ₁	d ₂	l ₁
R3446.004	3.2	7.0	1.0
R3446.006	4.0	9.0	1.1
R3446.008	5.0	11.0	1.1
R3446.010	7.0	14.0	1.3
R3446.012	9.0	18.5	1.4
R3446.016	12.0	23.0	1.6
R3446.020	15.0	28.0	1.9



R3447

CLEVIS JOINTS & CLIPS

Material

Stainless steel (AISI 303).

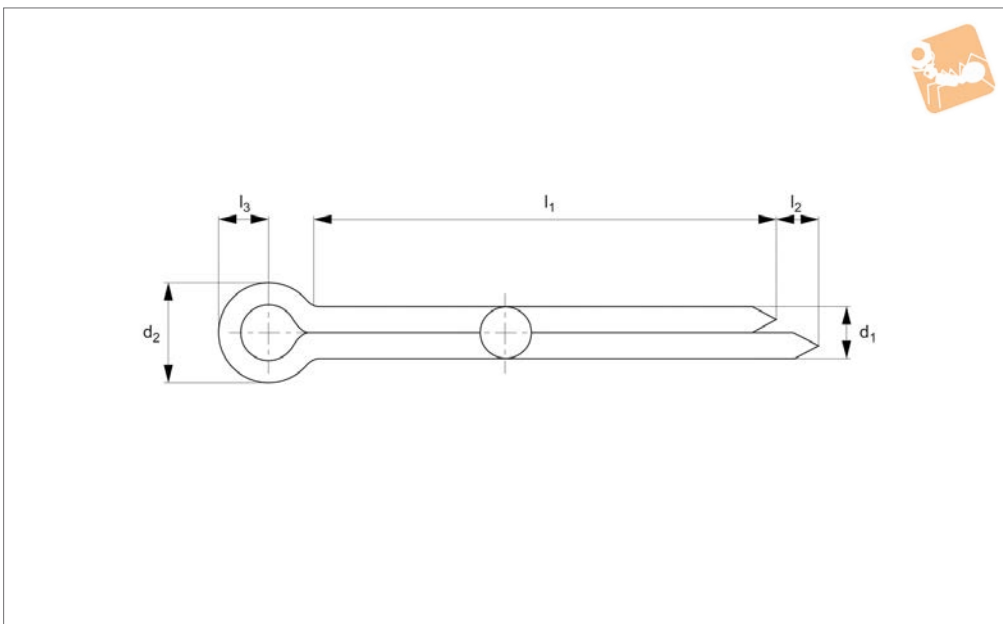
Technical Notes

To DIN 471, for use with R3454 clevis pins and R3402-R3403 clevis joints.

Order No.	d ₁	d ₂	d ₃	d ₄	d ₅ min.	h ₁	h ₂	l ₁	l ₂
R3447.005	5	4.8	3.7	6.2	1.0	2.5	1.1	0.7	0.6
R3447.006	6	5.7	5.6	7.5	1.15	2.7	1.3	0.8	0.7
R3447.008	8	7.6	7.4	9.6	1.2	3.2	1.5	1.1	0.8
R3447.010	10	9.6	9.3	12.7	1.7	3.3	1.8	1.1	1.0
R3447.012	12	11.5	11.0	7.7	1.7	3.3	1.8	1.1	1.0
R3447.016	16	15.2	14.7	12.2	1.7	3.7	2.2	1.1	1.0
R3447.020	20	19.0	18.5	16.2	2.0	4.0	2.6	1.3	1.2



R3448



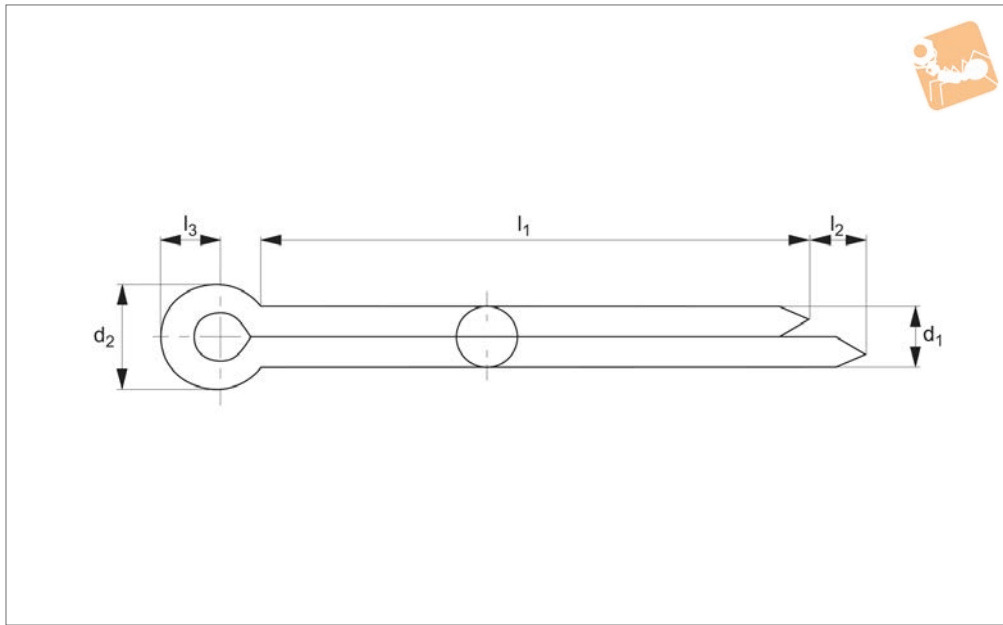
Material
Mild steel, silver zinc plated.

Technical Notes
To DIN 94 (equivalent to ISO 1234).

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

Tips
Used with clevis pins as denoted in product table, with clevis joints R3385 and R3386, and washers R3457.

Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	d ₂ min.	d ₂ max.	l ₁	l ₂	l ₃	For use with clevis pin
R3448.01.0-10	1.0	0.8	0.9	0.8	1.6	10	1.6	3	R3455.005
R3448.01.6-18	1.6	1.3	1.4	1.25	2.5	18	2.5	3.2	R3455.006
R3448.02-18	2.0	1.7	1.8	1.25	2.5	18	2.5	4.0	R3455.008
R3448.03.2-22	3.2	2.7	2.9	1.6	3.2	22	3.2	6.4	R3455.010
R3448.04-28	4.0	3.5	3.7	2.0	4.0	28	4	8	R3455.012-016
R3448.05-50	5.0	4.4	4.6	2.0	4.0	50	4	10	R3455.018-020
R3448.06.3-71	6.0	5.7	5.9	2.0	4.0	71	4	12.6	R3455.025-030
R3448.08-112	8.0	7.3	7.5	2.0	4.0	112	4	16	R3455.035-042
R3448.10-112	10.0	9.3	9.5	3.2	6.3	112	6.3	20	R3455.050



R3449

CLEVIS JOINTS & CLIPS

Material

Stainless steel (A2, DIN 1,4301).

Technical Notes

To DIN 94 (equivalent to ISO 1234).

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

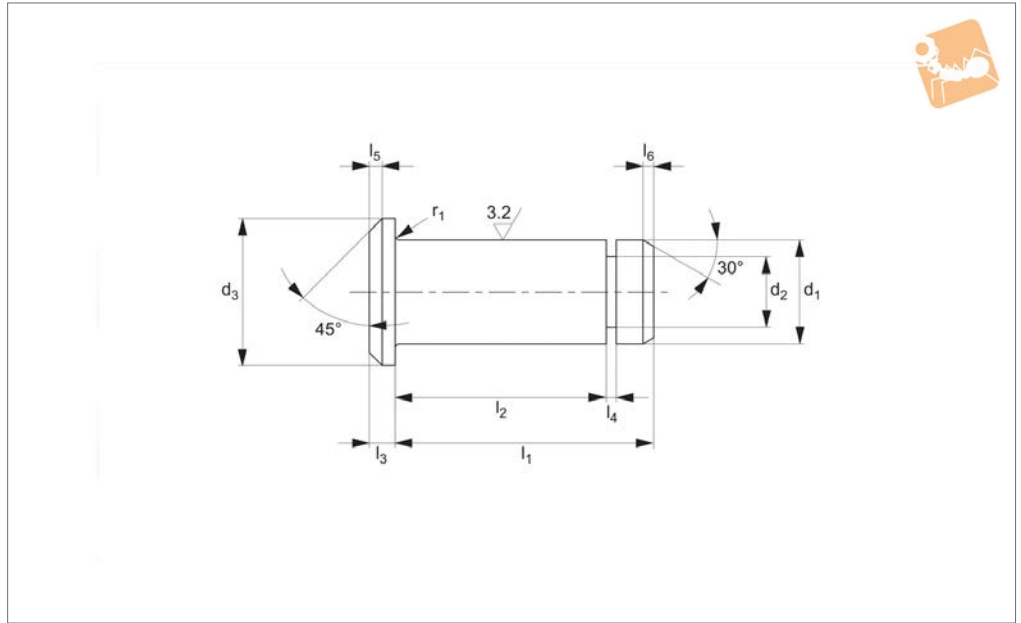
Tips

Used with clevis pins as denoted in product table, with clevis joints R3402 and R3403 and washer R3458.

Order No.	d_1 nom.	d_1 min.	d_1 max.	d_2 min.	d_2 max.	l_1	l_2	l_3	For use with clevis pin
R3449.01.0-10	1.0	0.8	0.9	0.8	1.6	10	1.6	3	R3456.004-005
R3449.01.6-18	1.6	1.3	1.4	1.25	2.5	18	2.5	3.2	R3456.006
R3449.02.0-18	2.0	1.7	1.8	1.25	2.5	18	1.25	2.5	R3456.008
R3449.03.2-22	3.2	2.7	2.9	1.6	3.2	22	3.2	6.4	R3456.010
R3449.04-28	4.0	3.5	3.7	2.0	4.0	28	4	8	R3456.012-016
R3449.05-50	5.0	4.4	4.6	2.0	4.0	50	4	10	R3456.020
R3449.06.3-71	6.3	5.7	5.9	2.0	4.0	71	4	12.6	R3456.025



R3450



Material

Steel (9SMnPb28), silver zinc plated.
Stainless steel (A2, AISI 303).

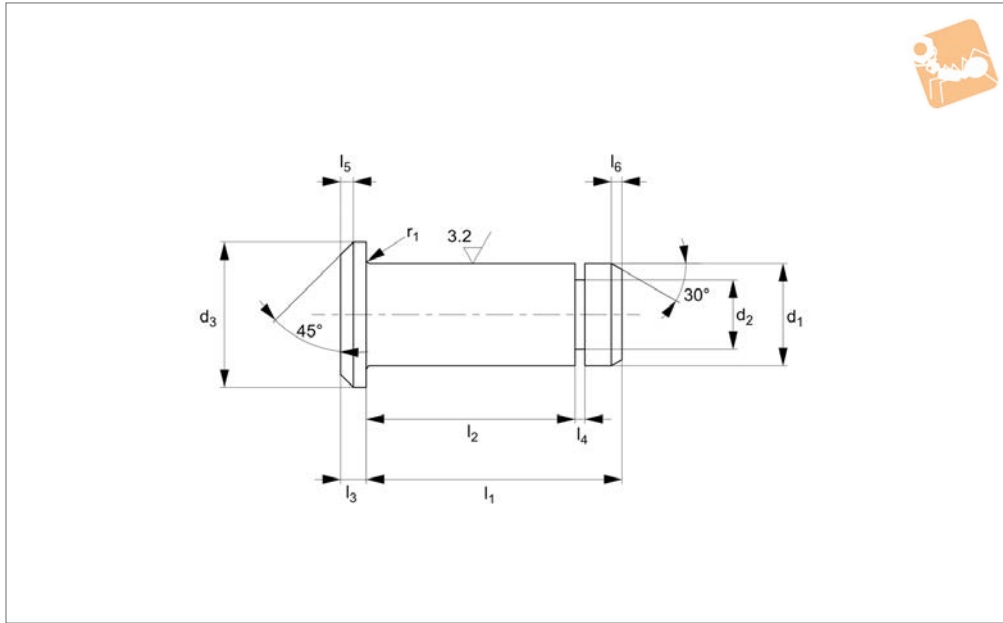
Technical Notes

Designed for use with clevis joints.

Tips

For safety fasteners, see R3440-R3445.

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
R3450.004-ZP	4	3.2	6	10.5	8.5	1.0	0.64	0.5	0.5	0.3	2
R3450.005-ZP	5	4.0	8	13.0	10.5	1.5	0.74	0.5	0.5	0.5	3
R3450.006-ZP	6	5.0	9	15.5	12.5	1.5	0.74	0.5	0.75	0.5	4
R3450.008-ZP	8	6.0	12	20.0	16.5	2.0	0.94	1.0	1.0	0.5	9
R3450.010-ZP	10	8.0	14	25.0	20.5	2.0	1.05	1.0	1.0	0.5	17
R3450.012-ZP	12	9.0	17	30.0	24.5	3.0	1.15	1.25	1.25	0.5	30
R3450.014-ZP	14	10.0	19	33.0	27.5	3.0	1.25	1.5	1.5	1.0	48
R3450.016-ZP	16	12.0	20	38.5	32.5	3.0	1.35	1.5	1.5	1.0	67
R3450.020-ZP	20	17.5	26	46.0	40.5	4.0	1.8	2.0	1.5	1.0	125
R3450.025-ZP	25	18.0	32	57.0	50.5	5.0	1.8	2.0	1.5	1.0	260
R3450.004-A2	4	3.2	6	10.5	8.5	1.0	0.64	0.5	0.5	0.3	2
R3450.005-A2	5	4.0	8	13.0	10.5	1.5	0.74	0.5	0.5	0.5	3
R3450.006-A2	6	5.0	9	15.5	12.5	1.5	0.74	0.5	0.75	0.5	4
R3450.008-A2	8	6.0	12	20.0	16.5	2.0	0.94	1.0	1.0	0.5	9
R3450.010-A2	10	8.0	14	25.0	20.5	2.0	1.05	1.0	1.0	0.5	17
R3450.012-A2	12	9.0	17	30.0	24.5	3.0	1.15	1.25	1.25	0.5	30
R3450.014-A2	14	10.0	19	33.0	27.5	3.0	1.25	1.5	1.5	1.0	48
R3450.016-A2	16	12.0	20	38.5	32.5	3.0	1.35	1.5	1.5	1.0	67
R3450.020-A2	20	17.5	26	46.0	40.5	4.0	1.8	2.0	1.5	1.0	125
R3450.025-A2	25	18.0	32	57.0	50.5	5.0	1.8	2.0	1.5	1.0	260



R3451.i

CLEVIS JOINTS & CLIPS

Material
Steel (9SMnPb28) yellow zinc plated.

use with clevis joints, yellow zinc is not RoHS Compliant.

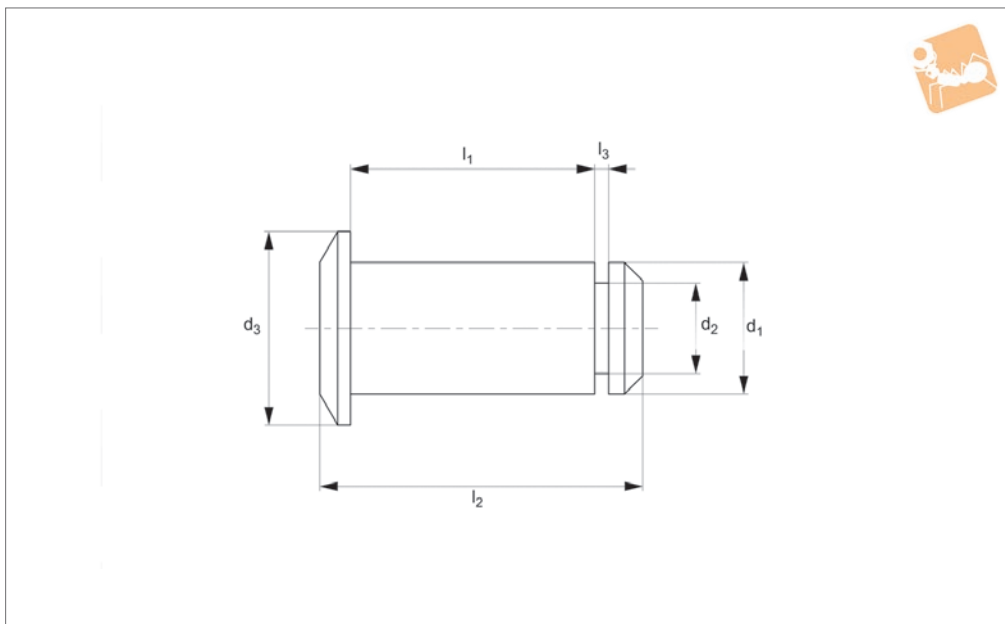
Technical Notes
Equivalent to Springfix NBI, designed for

Tips
For safety fasteners, see R3441.

Order No.	d_1	d_2	d_3	l_1	l_2	l_3	l_4	Weight g
R3451.1187	0.1875	0.140	0.250	0.475	0.380	0.050	0.020	3
R3451.1250	0.250	0.193	0.343	0.620	0.505	0.062	0.026	4
R3451.1312	0.312	0.240	0.437	0.765	0.630	0.078	0.033	10
R3451.1375	0.375	0.301	0.500	0.927	0.755	0.090	0.037	17
R3451.1500	0.500	0.388	0.625	1.218	1.005	0.110	0.046	30



R3453



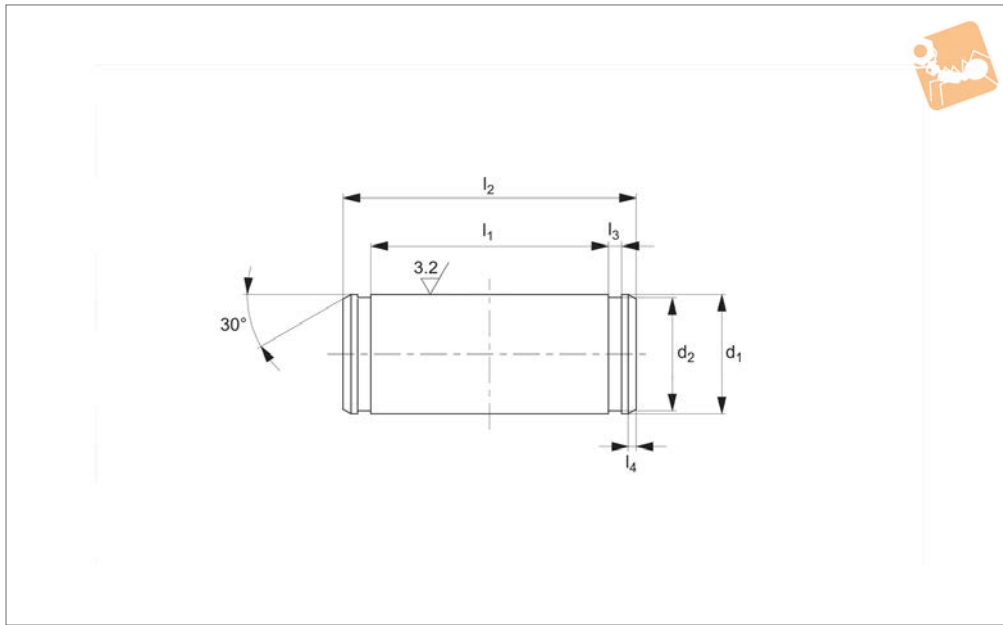
Material

Black plastic (Igumid G).

Important Notes

For use with R3409 clevis joints and R3446 circlips.

Order No.	d_1 tol. h11	d_2	d_3	l_1	l_2	l_3	Weight g
R3453.004	4	3.2	7	8	12.5	1.05	0.3
R3453.005	5	4.0	8	12	16.5	1.15	0.5
R3453.005-1	5	4.0	8	10	14.5	1.15	0.5
R3453.006	6	4.0	9	12	16.5	1.15	0.7
R3453.008	8	5.0	12	16	21.5	1.15	1.5
R3453.010	10	7.0	15	20	27.0	1.35	1.35
R3453.012	12	9.0	18	24	31.5	1.50	1.5
R3453.014	14	12.0	22	27	36.0	1.70	1.7
R3453.015	15	12.0	23	27	36.0	1.70	1.7
R3453.016	16	12.0	24	32	42.0	1.70	1.7
R3453.017	17	12.0	25	32	42.0	1.70	1.7
R3453.020	20	15.0	30	40	51.0	2.00	2.0



R3454

CLEVIS JOINTS & CLIPS

Material

Stainless steel (AISI 303).

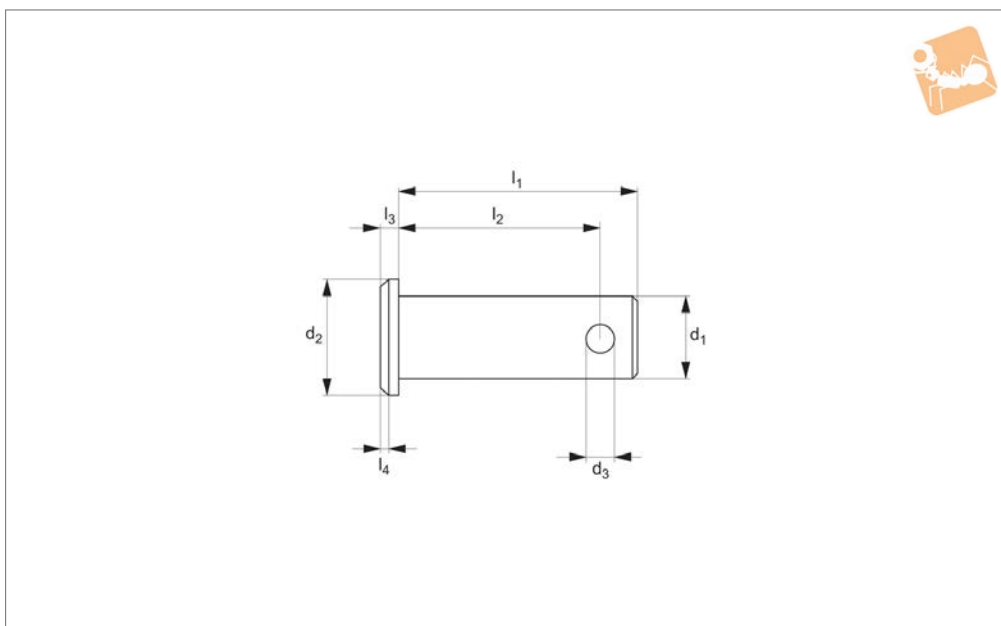
Technical Notes

For use with R3402-R3403 clevis joints and R3447 circlips.

Order No.	d_1 tol. h11	d_2 tol. h11	l_1 +0.30	l_2 +0.40	l_3 tol. h13	l_4	Weight g
R3454.005	5	4.8	10.5	15	0.7	1	3
R3454.006	6	5.7	12.2	17	0.8	1	5
R3454.008	8	7.6	16.5	20	0.9	1	8
R3454.010	10	9.6	20.5	25	1.1	1	15
R3454.012	12	11.5	24.5	30	1.1	1	26
R3454.016	16	15.2	32.5	39	1.1	1	61
R3454.020	20	19.0	40.5	48	1.3	1	118



R3455



CLEVIS JOINTS & CLIPS

Material

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

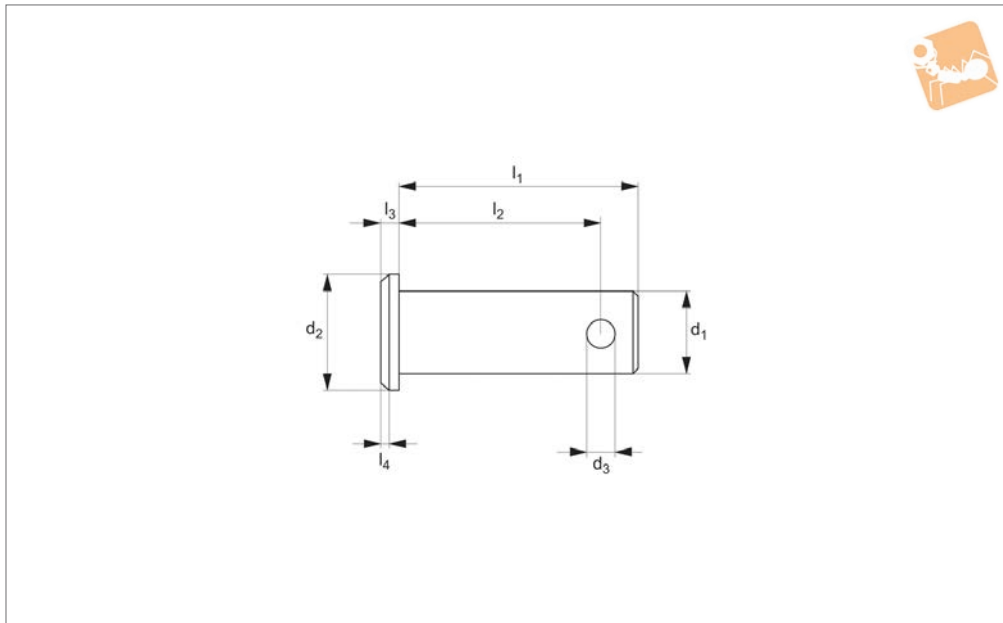
Technical Notes

Designed for use with clevis joints.

Tips

For use with clevis joints R3385 and R3386,
 for split cotter pins to suit see part number
 P1240.
 For washers see part number P0330-ZP.

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
R3455.005	5	8	1.0	15	12.3	1.5	0.5	2.6
R3455.006	6	9	1.6	18	15.3	1.5	0.5	4.6
R3455.008	8	12	2.0	23	19.5	2.0	1.0	10.0
R3455.010	10	14	3.2	29	24.5	2.0	1.0	19.0
R3455.012	12	17	4.0	35	29.5	3.0	1.5	34.0
R3455.014	14	19	4.0	40	32.5	3.0	1.5	53.0
R3455.016	16	20	4.0	45	38.2	3.5	1.5	72.0
R3455.018	18	25	5.0	50	43.5	3.5	1.5	104.0
R3455.020	20	28	5.0	53	47.0	4.0	1.5	139.0
R3455.025	25	34	6.3	67	59.0	5.5	1.5	266.0
R3455.028	28	34	6.3	72	63.2	5.5	2.0	361.0
R3455.030	30	36	6.3	77	68.2	5.5	2.0	428.0
R3455.035	35	45	8.0	87	76.5	7.0	2.0	677.0
R3455.040	40	48	8.0	100	90.0	6.0	5.0	1035.0
R3455.042	42	48	8.0	100	90.0	7.0	5.0	1151.0
R3455.050	50	58	10.0	115	103.0	7.0	6.0	1846.0



R3456

CLEVIS JOINTS & CLIPS

Material

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

Tips

For use with clevis joints R3402 and R3403, for split cotter pins to suit see part number P1241.

For washers see part number P0330.A2.

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
R3456.005	5	8	1.2	15	12.3	1.5	0.5	2.6
R3456.006	6	9	1.6	18	15.3	1.5	0.5	4.6
R3456.008	8	12	2.0	23	19.5	2.0	1.0	10.0
R3456.010	10	14	3.2	29	24.5	2.0	1.0	19.0
R3456.012	12	17	4.0	35	29.5	3.0	1.5	34.0
R3456.014	14	19	4.0	40	32.5	3.0	1.5	53.0
R3456.016	16	21	4.0	45	38.2	3.0	-	73.0
R3456.020	20	28	5.0	53	47.0	4.0	-	139.0
R3456.025	25	34	6.3	67	59.0	5.5	-	266.0