
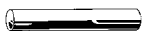






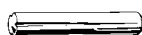


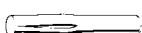






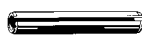
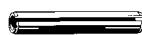
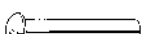
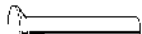























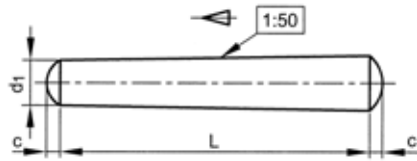


Rivets/pins/keys 9

 Page 9-2 ISO 2339 B DIN 1 B Conical	 Page 9-4 ISO 2338 DIN 7 Parallel	 Page 9-7 ISO 8734 A DIN 6325 Parallel tolerance m6	 Page 9-9 ISO ≈8734 A DIN ≈6325 Parallel tolerance h6	 Page 9-10 ISO 8737 DIN 7977 Conical with external thread
 Page 9-11 ISO 8736 A DIN 7978 A Conical with internal thread	 Page 9-12 ISO 8735 A DIN 7979 D Parallel with internal thread	 Page 9-13 ISO 8739 DIN 1470 Parallel grooved with pin	 Page 9-14 ISO 8744 DIN 1471 Taper grooved	 Page 9-15 ISO 8745 DIN 1472 Half length taper grooved
 Page 9-16 ISO 8740 DIN 1473 Parallel grooved	 Page 9-17 ISO 8741 DIN 1474 Parallel grooved	 Page 9-18 ISO 8742 DIN 1475 Center grooved	 Page 9-19 ISO 8746 DIN 1476 Grooved pin	 Page 9-20 ISO 8750 DIN 7343 Standard duty
 Page 9-22 ISO ≈8750 DIN ≈7343 Stainless steel	 Page 9-23 ISO 8748 DIN 7344 Heavy	 Page 9-24 ISO 8752 DIN 1481 Heavy	 Page 9-26 ISO 13337 DIN 7346 Light	 Page 9-28 ISO ≈8752 DIN ≈1481 Heavy stainless steel
 Page 9-30 ISO 1051 DIN 660/124 Round head	 Page 9-32 ISO 1051 DIN 661 Countersunk	 Page 9-34 DIN 1434 Clevis pin with pin hole	 Page 9-35 ISO 1234 DIN 94 Split pin	 Page 9-39 DIN ≈11024 Single
 Page 9-40 DIN ≈11024 Double	 Page 9-41 DIN 11024 Double A4	 Page 9-42 Pipe pin	 Page 9-43 Linch pin	 Page 9-44 DIN 6880 Length 1 meter
 Page 9-45 ISO 3912 DIN 6888 Woodruff key	 Page 9-47 ISO R 774 DIN 6887 Gib head	 Page 9-48 ISO R 773 DIN 6885 A Parallel key high type	 Page 9-52 Domed head blind rivet	 Page 9-59 Large domed head blind rivet
 Page 9-61 Countersunk blind rivet	 Page 9-64 Domed head blind rivet BULB	 Page 9-65 Countersunk blind rivet BULB	 Page 9-66 For license plates	 Page 9-67 Domed head multigrip blind rivet
 Page 9-68 Sealed domed head rivet	 Page 9-71 Sealed countersunk rivet	 Page 9-72 Domed head expanding blind rivet	 Page 9-73 Domed head expanding blind rivet trip	 Page 9-74 Blind rivet tool

Taper pin turned



ISO 2339 B
 DIN 1 B
 NEN 10 B

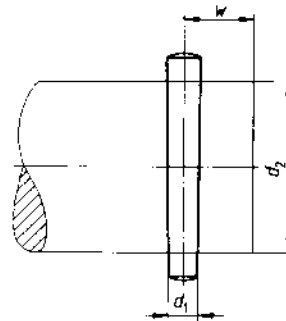


Technical data

d1 (h10)	0,6	0,8	1	1,5	2	2,5	3	4	5	6	6,5 (#DIN)	7 (#DIN)	8	10	12	13 (#DIN)	14	16	
c (max.)	0,1	0,12	0,15	0,23	0,3	0,4	0,45	0,6	0,75	0,9	1	1,2	1,2	1,5	1,8	1,8	2	2,5	
Assembly data																			
d ₂ >	1	2	3	4/5	6	8	8	11	17	23	25	33	30/38	45/50	75	75	75	110	
d ₂ ≤	2	3	4	5/6	8	9	11	17	23	30	33	40	38/45	50/75	110	110	110	160	
W (min.)	2	2,5	3	3,5/4	4,5	5	5	6	7,5	9	10	12	10/11	11,5/13	15	15	15	18	

- Taper pins are designed for the friction type fastening and/or locking together of two or more individual elements. The tapered shape allows the connection to be disconnected repeatedly, and when the elements are joined together again, their location remains as accurate as it was previously, and the frictional connection remains as strong as before.
- The nominal length (L) does not include the rounded ends (tolerance js15).

Assembly data



Article groups

Material	Packaging	Code	Page
Free-cutting steel	Standard	39000	9-2
St.St. A1	Standard	51560	9-3

39000 Taper pin turned

L11A

Material Free-cutting steel
Packaging Standard



9

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1X14MM	200	39000.010.014	2,5X16MM	200	39000.025.016	4X20MM	100	39000.040.020
1X18MM	200	39000.010.018	2,5X20MM	100	39000.025.020	4X24MM	100	39000.040.024
1X20MM	200	39000.010.020	2,5X24MM	100	39000.025.024	4X26MM	50	39000.040.026
			2,5X26MM	100	39000.025.026	4X30MM	50	39000.040.030
1,5X10MM	200	39000.015.010	2,5X30MM	100	39000.025.030	4X36MM	50	39000.040.036
1,5X14MM	200	39000.015.014	2,5X36MM	50	39000.025.036	4X40MM	50	39000.040.040
1,5X20MM	200	39000.015.020	2,5X40MM	50	39000.025.040	4X50MM	50	39000.040.050
1,5X24MM	200	39000.015.024	2,5X50MM	50	39000.025.050	4X60MM	25	39000.040.060
1,5X30MM	200	39000.015.030				4X70MM	25	39000.040.070
			3X12MM	100	39000.030.012	4X80MM	25	39000.040.080
2X10MM	200	39000.020.010	3X14MM	100	39000.030.014	4X100MM	25	39000.040.100
2X12MM	200	39000.020.012	3X16MM	100	39000.030.016			
2X14MM	200	39000.020.014	3X20MM	100	39000.030.020	5X20MM	100	39000.050.020
2X16MM	200	39000.020.016	3X24MM	100	39000.030.024	5X24MM	50	39000.050.024
2X20MM	100	39000.020.020	3X30MM	100	39000.030.030	5X26MM	50	39000.050.026
2X24MM	100	39000.020.024	3X36MM	50	39000.030.036	5X30MM	50	39000.050.030
2X30MM	100	39000.020.030	3X40MM	50	39000.030.040	5X40MM	50	39000.050.040
2X40MM	100	39000.020.040	3X50MM	50	39000.030.050	5X50MM	50	39000.050.050
2X50MM	50	39000.020.050	3X60MM	25	39000.030.060	5X60MM	25	39000.050.060
			4X16MM	100	39000.040.016	5X70MM	25	39000.050.070
2,5X12MM	200	39000.025.012				5X80MM	25	39000.050.080

39000 Taper pin turned

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
5X100MM	25	39000.050.100	8X30MM	25	39000.080.030	12X40MM	10	39000.120.040
6X20MM	50	39000.060.020	8X36MM	25	39000.080.036	12X50MM	10	39000.120.050
6X24MM	50	39000.060.024	8X40MM	25	39000.080.040	12X60MM	10	39000.120.060
6X30MM	50	39000.060.030	8X50MM	25	39000.080.050	12X70MM	10	39000.120.070
6X40MM	25	39000.060.040	8X60MM	25	39000.080.060	12X80MM	10	39000.120.080
6X50MM	25	39000.060.050	8X70MM	25	39000.080.070	12X100MM	10	39000.120.100
6X60MM	25	39000.060.060	8X80MM	10	39000.080.080	12X120MM	10	39000.120.120
6X70MM	25	39000.060.070	8X90MM	10	39000.080.090	12X140MM	10	39000.120.140
6X80MM	25	39000.060.080	8X100MM	10	39000.080.100	12X160MM	10	39000.120.160
6X100MM	10	39000.060.100	8X120MM	10	39000.080.120			
6X120MM	10	39000.060.120	8X140MM	10	39000.080.140	13X100MM	10	39000.130.100
6X140MM	10	39000.060.140	8X160MM	10	39000.080.160	13X120MM	10	39000.130.120
						13X150MM	10	39000.130.150
6,5X50MM	25	39000.065.050	10X30MM	25	39000.100.030	14X90MM	10	39000.140.090
6,5X60MM	25	39000.065.060	10X40MM	25	39000.100.040	16X50MM	5	39000.160.050
6,5X80MM	25	39000.065.080	10X50MM	25	39000.100.050	16X60MM	5	39000.160.060
6,5X100MM	10	39000.065.100	10X60MM	25	39000.100.060	16X70MM	5	39000.160.070
			10X70MM	10	39000.100.070	16X80MM	5	39000.160.080
7X50MM	25	39000.070.050	10X80MM	10	39000.100.080	16X100MM	5	39000.160.100
7X60MM	25	39000.070.060	10X100MM	10	39000.100.100	16X120MM	5	39000.160.120
7X70MM	25	39000.070.070	10X110MM	10	39000.100.110	16X150MM	5	39000.160.150
7X80MM	10	39000.070.080	10X120MM	10	39000.100.120	16X180MM	5	39000.160.180
7X100MM	10	39000.070.100	10X140MM	10	39000.100.140	16X200MM	5	39000.160.200
			10X150MM	10	39000.100.150			
			10X160MM	10	39000.100.160			

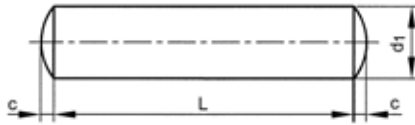
51560 Taper pin turned R09A

Material	Stainless steel A1
Packaging	Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1X10MM	100	51560.010.010	4X10MM	100	51560.040.010	6X55MM *	100	51560.060.055
1X12MM	100	51560.010.012	4X12MM	100	51560.040.012	6X70MM *	100	51560.060.070
			4X16MM	100	51560.040.016			
1,5X12MM *	200	51560.015.012	4X20MM	100	51560.040.020	8X16MM	50	51560.080.016
2X8MM	100	51560.020.008	4X24MM	100	51560.040.024	8X24MM	50	51560.080.024
2X10MM	100	51560.020.010	4X26MM *	100	51560.040.026	8X30MM	50	51560.080.030
2X12MM	100	51560.020.012	4X28MM *	100	51560.040.028	8X36MM	50	51560.080.036
2X24MM *	200	51560.020.024	4X30MM	100	51560.040.030	8X40MM	50	51560.080.040
2X30MM *	200	51560.020.030	4X36MM	100	51560.040.036	8X45MM *	50	51560.080.045
						8X50MM	25	51560.080.050
2,5X10MM	100	51560.025.010	5X16MM	100	51560.050.016	8X55MM *	50	51560.080.055
2,5X16MM	100	51560.025.016	5X20MM	100	51560.050.020	8X60MM	25	51560.080.060
2,5X20MM	100	51560.025.020	5X24MM	100	51560.050.024	8X70MM *	50	51560.080.070
2,5X24MM	100	51560.025.024	5X30MM	100	51560.050.030	8X80MM *	50	51560.080.080
			5X32MM *	100	51560.050.032	8X90MM *	50	51560.080.090
3X6MM	100	51560.030.006	5X36MM	100	51560.050.036	8X100MM *	50	51560.080.100
3X8MM	100	51560.030.008	5X40MM	100	51560.050.040			
3X10MM	100	51560.030.010	5X70MM *	100	51560.050.070	10X24MM	50	51560.100.024
3X12MM	100	51560.030.012				10X30MM	50	51560.100.030
3X14MM *	100	51560.030.014	6X12MM	100	51560.060.012	10X40MM	25	51560.100.040
3X16MM	100	51560.030.016	6X16MM	100	51560.060.016	10X45MM *	25	51560.100.045
3X20MM	100	51560.030.020	6X20MM	100	51560.060.020	10X50MM	25	51560.100.050
3X22MM *	100	51560.030.022	6X24MM	100	51560.060.024	10X55MM *	25	51560.100.055
3X24MM	100	51560.030.024	6X25MM *	100	51560.060.025	10X60MM	25	51560.100.060
3X26MM *	100	51560.030.026	6X26MM *	100	51560.060.026	10X70MM	25	51560.100.070
3X30MM	100	51560.030.030	6X30MM	50	51560.060.030	10X80MM	25	51560.100.080
3X32MM *	100	51560.030.032	6X32MM *	100	51560.060.032	10X100MM *	25	51560.100.100
3X40MM *	100	51560.030.040	6X40MM	50	51560.060.040			
3X45MM *	100	51560.030.045	6X45MM *	100	51560.060.045			
			6X50MM	50	51560.060.050			

Parallel pin (dowel pin)



ISO 2338
 DIN 7
 NEN 2281
 BS 1804-2



Technical data

d1 (m6)	c (max.)	d1 (m6)	c (max.)	d1 (m6)	c (max.)
1	0,15	4	0,6	12	1,8
1,5	0,23	5	0,75	14	2
2	0,3	6	0,9	16	2,5
2,5	0,4	8	1,2		
3	0,45	10	1,5		

- Parallel pins are designed for the fastening of two or more individual elements. A friction type connection can be achieved by the selection of suitable fits. If such connection is meant to be disconnected repeatedly, then it becomes preferable to use taper pins in accordance with DIN 1.
- d x L: The nominal length (L) does not include the rounded ends.

Article groups

Material	Packaging	Code	Page
Free-cutting steel	Standard	39070	9-4
St.St. A1/A2	Standard	51580	9-5
St.St. A4	Standard	55580	9-6

39070 Parallel pin (dowel pin)

L11A

Material Free-cutting steel
Packaging Standard



9

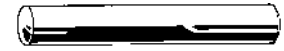
d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X10MM	200	39070.020.010	5X10MM	100	39070.050.010	8X14MM	50	39070.080.014
2X12MM	200	39070.020.012	5X12MM	100	39070.050.012	8X16MM	50	39070.080.016
2X14MM	200	39070.020.014	5X14MM	100	39070.050.014	8X18MM	50	39070.080.018
2X16MM	200	39070.020.016	5X16MM	100	39070.050.016	8X20MM	50	39070.080.020
2X18MM	200	39070.020.018	5X18MM	100	39070.050.018	8X24MM	50	39070.080.024
2X20MM	200	39070.020.020	5X20MM	100	39070.050.020	8X28MM	50	39070.080.028
2X24MM	200	39070.020.024	5X22MM	100	39070.050.022	8X30MM	50	39070.080.030
			5X24MM	100	39070.050.024	8X32MM	50	39070.080.032
2,5X10MM	200	39070.025.010	5X28MM	100	39070.050.028	8X36MM	50	39070.080.036
2,5X12MM	200	39070.025.012	5X30MM	100	39070.050.030	8X40MM	25	39070.080.040
2,5X14MM	200	39070.025.014	5X32MM	100	39070.050.032	8X50MM	25	39070.080.050
2,5X16MM	200	39070.025.016	5X36MM	100	39070.050.036	8X60MM	25	39070.080.060
2,5X20MM	200	39070.025.020	5X40MM	50	39070.050.040	8X70MM	25	39070.080.070
			5X45MM	50	39070.050.045	8X80MM	25	39070.080.080
3X10MM	200	39070.030.010	5X50MM	50	39070.050.050	8X100MM	25	39070.080.100
3X12MM	200	39070.030.012	5X60MM	50	39070.050.060	8X120MM	25	39070.080.120
3X14MM	200	39070.030.014	5X70MM	50	39070.050.070			
3X16MM	200	39070.030.016				10X16MM	25	39070.100.016
3X18MM	200	39070.030.018	6X10MM	100	39070.060.010	10X18MM	25	39070.100.018
3X20MM	200	39070.030.020	6X12MM	100	39070.060.012	10X20MM	25	39070.100.020
3X24MM	100	39070.030.024	6X14MM	100	39070.060.014	10X24MM	25	39070.100.024
3X26MM	100	39070.030.026	6X16MM	100	39070.060.016	10X28MM	25	39070.100.028
3X28MM	100	39070.030.028	6X18MM	100	39070.060.018	10X30MM	25	39070.100.030
3X30MM	100	39070.030.030	6X20MM	100	39070.060.020	10X32MM	25	39070.100.032
			6X24MM	50	39070.060.024	10X36MM	25	39070.100.036
4X8MM	100	39070.040.008	6X28MM	50	39070.060.028	10X40MM	25	39070.100.040
4X10MM	100	39070.040.010	6X30MM	50	39070.060.030	10X50MM	25	39070.100.050
4X12MM	100	39070.040.012	6X32MM	50	39070.060.032	10X60MM	25	39070.100.060
4X14MM	100	39070.040.014	6X36MM	50	39070.060.036	10X70MM	25	39070.100.070
4X16MM	100	39070.040.016	6X40MM	50	39070.060.040	10X80MM	25	39070.100.080
4X18MM	100	39070.040.018	6X45MM	50	39070.060.045	10X100MM	25	39070.100.100
4X20MM	100	39070.040.020	6X50MM	50	39070.060.050	10X120MM	25	39070.100.120
4X24MM	100	39070.040.024	6X60MM	25	39070.060.060			
4X28MM	100	39070.040.028	6X70MM	25	39070.060.070	12X24MM	25	39070.120.024
4X30MM	100	39070.040.030	6X80MM	25	39070.060.080	12X30MM	25	39070.120.030
4X36MM	100	39070.040.036				12X32MM	25	39070.120.032
4X40MM	100	39070.040.040	8X10MM	50	39070.080.010	12X36MM	25	39070.120.036
4X50MM	100	39070.040.050	8X12MM	50	39070.080.012	12X40MM	25	39070.120.040
4X60MM	100	39070.040.060				12X45MM	25	39070.120.045

39070 Parallel pin (dowel pin)

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
12X50MM	10	39070.120.050	12X80MM	10	39070.120.080	12X120MM	10	39070.120.120
12X60MM	10	39070.120.060	12X100MM	10	39070.120.100			
12X70MM	10	39070.120.070						

51580 Parallel pin (dowel pin)
R09A

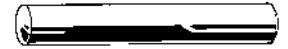
Material Stainless steel A1/A2
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1X4MM	100	51580.010.004	4X16MM	100	51580.040.016	8X50MM	25	51580.080.050
1X5MM	100	51580.010.005	4X18MM	100	51580.040.018	8X55MM	25	51580.080.055
1X6MM	100	51580.010.006	4X20MM	100	51580.040.020	8X60MM	25	51580.080.060
1X8MM	100	51580.010.008	4X24MM	100	51580.040.024	8X70MM	25	51580.080.070
1X10MM	100	51580.010.010	4X28MM	100	51580.040.028	8X80MM	25	51580.080.080
1X12MM	100	51580.010.012	4X30MM	100	51580.040.030			
			4X32MM	100	51580.040.032	10X12MM	25	51580.100.012
1,5X4MM	100	51580.015.004	4X36MM	100	51580.040.036	10X14MM	25	51580.100.014
1,5X5MM	100	51580.015.005	4X40MM	100	51580.040.040	10X16MM	50	51580.100.016
1,5X6MM	100	51580.015.006	4X50MM	100	51580.040.050	10X18MM	25	51580.100.018
1,5X8MM	100	51580.015.008				10X20MM	50	51580.100.020
1,5X10MM	100	51580.015.010	5X6MM	100	51580.050.006	10X24MM	50	51580.100.024
1,5X12MM	100	51580.015.012	5X8MM	100	51580.050.008	10X28MM	25	51580.100.028
1,5X14MM	100	51580.015.014	5X10MM	100	51580.050.010	10X30MM	50	51580.100.030
1,5X16MM	100	51580.015.016	5X12MM	100	51580.050.012	10X32MM	25	51580.100.032
1,5X18MM	100	51580.015.018	5X14MM	100	51580.050.014	10X36MM	25	51580.100.036
1,5X20MM	100	51580.015.020	5X16MM	100	51580.050.016	10X40MM	25	51580.100.040
			5X18MM	100	51580.050.018	10X45MM	25	51580.100.045
2X5MM	100	51580.020.005	5X20MM	100	51580.050.020	10X50MM	25	51580.100.050
2X6MM	100	51580.020.006	5X24MM	100	51580.050.024	10X55MM	25	51580.100.055
2X8MM	100	51580.020.008	5X28MM	100	51580.050.028	10X60MM	25	51580.100.060
2X10MM	100	51580.020.010	5X30MM	100	51580.050.030	10X70MM	25	51580.100.070
2X12MM	100	51580.020.012	5X32MM	100	51580.050.032	10X80MM	25	51580.100.080
2X14MM	100	51580.020.014	5X36MM	100	51580.050.036	10X90MM	25	51580.100.090
2X16MM	100	51580.020.016	5X40MM	100	51580.050.040	10X100MM	25	51580.100.100
2X18MM	100	51580.020.018	5X45MM	50	51580.050.045			
2X20MM	100	51580.020.020	5X50MM	50	51580.050.050	12X20MM	25	51580.120.020
2X24MM	100	51580.020.024	5X60MM	50	51580.050.060	12X32MM	25	51580.120.032
2X28MM	100	51580.020.028				12X36MM	25	51580.120.036
2X32MM	100	51580.020.032	6X10MM	100	51580.060.010	12X40MM	25	51580.120.040
			6X12MM	100	51580.060.012	12X45MM	10	51580.120.045
2,5X5MM	100	51580.025.005	6X14MM	100	51580.060.014	12X50MM	10	51580.120.050
2,5X6MM	100	51580.025.006	6X16MM	100	51580.060.016	12X55MM	10	51580.120.055
2,5X8MM	100	51580.025.008	6X18MM	100	51580.060.018	12X60MM	10	51580.120.060
2,5X10MM	100	51580.025.010	6X20MM	100	51580.060.020	12X70MM	10	51580.120.070
2,5X12MM	100	51580.025.012	6X24MM	100	51580.060.024	12X80MM	10	51580.120.080
2,5X14MM	100	51580.025.014	6X28MM	50	51580.060.028	12X90MM	10	51580.120.090
2,5X16MM	100	51580.025.016	6X30MM	50	51580.060.030	12X100MM	10	51580.120.100
2,5X20MM	100	51580.025.020	6X32MM	50	51580.060.032			
2,5X24MM	100	51580.025.024	6X36MM	50	51580.060.036	14X20MM	25	51580.140.020
			6X40MM	50	51580.060.040	14X24MM	25	51580.140.024
3X6MM	100	51580.030.006	6X45MM	50	51580.060.045	14X28MM	25	51580.140.028
3X8MM	100	51580.030.008	6X50MM	50	51580.060.050	14X32MM	25	51580.140.032
3X10MM	100	51580.030.010	6X60MM	50	51580.060.060	14X36MM	25	51580.140.036
3X12MM	100	51580.030.012	6X70MM	25	51580.060.070	14X40MM	25	51580.140.040
3X14MM	100	51580.030.014	6X80MM	25	51580.060.080	14X50MM	10	51580.140.050
3X16MM	100	51580.030.016				14X100MM	10	51580.140.100
3X18MM	100	51580.030.018	8X8MM	100	51580.080.008			
3X20MM	100	51580.030.020	8X10MM	100	51580.080.010	16X24MM	25	51580.160.024
3X24MM	100	51580.030.024	8X12MM	100	51580.080.012	16X28MM	25	51580.160.028
3X28MM	100	51580.030.028	8X14MM	100	51580.080.014	16X32MM	25	51580.160.032
3X30MM	100	51580.030.030	8X16MM	100	51580.080.016	16X36MM	25	51580.160.036
3X32MM	100	51580.030.032	8X18MM	50	51580.080.018	16X40MM	25	51580.160.040
3X36MM	100	51580.030.036	8X20MM	100	51580.080.020	16X45MM	10	51580.160.045
3X40MM	100	51580.030.040	8X24MM	50	51580.080.024	16X50MM	10	51580.160.050
			8X28MM	50	51580.080.028	16X55MM	10	51580.160.055
4X6MM	100	51580.040.006	8X30MM	50	51580.080.030	16X60MM	10	51580.160.060
4X8MM	100	51580.040.008	8X32MM	50	51580.080.032	16X70MM	10	51580.160.070
4X10MM	100	51580.040.010	8X36MM	50	51580.080.036	16X80MM	10	51580.160.080
4X12MM	100	51580.040.012	8X40MM	50	51580.080.040			
4X14MM	100	51580.040.014	8X45MM	25	51580.080.045			

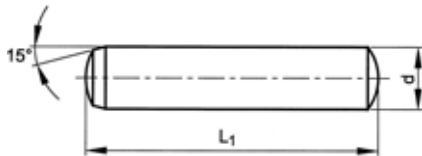
• Depending on availability A1 can be supplied as well as A2.

55580 Parallel pin (dowel pin)		R49A
Material	Stainless steel A4	
Packaging	Standard	

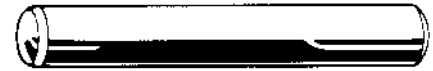


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1X5MM	100	55580.010.005	4X18MM	100	55580.040.018	8X18MM	50	55580.080.018
1X8MM	100	55580.010.008	4X20MM	100	55580.040.020	8X20MM	100	55580.080.020
			4X24MM	100	55580.040.024	8X24MM	50	55580.080.024
1,5X5MM	100	55580.015.005	4X28MM	100	55580.040.028	8X28MM	50	55580.080.028
1,5X6MM	100	55580.015.006	4X30MM	100	55580.040.030	8X30MM	50	55580.080.030
1,5X8MM	100	55580.015.008	4X32MM	100	55580.040.032	8X32MM	50	55580.080.032
1,5X10MM	100	55580.015.010	4X36MM	100	55580.040.036	8X36MM	50	55580.080.036
1,5X12MM	100	55580.015.012	4X40MM	100	55580.040.040	8X40MM	50	55580.080.040
1,5X14MM	100	55580.015.014	4X50MM	100	55580.040.050	8X45MM	25	55580.080.045
1,5X16MM	100	55580.015.016				8X50MM	25	55580.080.050
			5X8MM	100	55580.050.008	8X60MM	25	55580.080.060
2X6MM	100	55580.020.006	5X10MM	100	55580.050.010	8X70MM	25	55580.080.070
2X8MM	100	55580.020.008	5X12MM	100	55580.050.012	8X80MM	25	55580.080.080
2X10MM	100	55580.020.010	5X14MM	100	55580.050.014			
2X12MM	100	55580.020.012	5X16MM	100	55580.050.016	10X14MM	25	55580.100.014
2X14MM	100	55580.020.014	5X18MM	100	55580.050.018	10X16MM	50	55580.100.016
2X16MM	100	55580.020.016	5X20MM	100	55580.050.020	10X18MM	25	55580.100.018
2X18MM	100	55580.020.018	5X24MM	100	55580.050.024	10X20MM	50	55580.100.020
2X20MM	100	55580.020.020	5X28MM	100	55580.050.028	10X24MM	50	55580.100.024
			5X30MM	100	55580.050.030	10X28MM	25	55580.100.028
2,5X6MM	100	55580.025.006	5X32MM	100	55580.050.032	10X30MM	50	55580.100.030
2,5X8MM	100	55580.025.008	5X36MM	100	55580.050.036	10X32MM	25	55580.100.032
2,5X10MM	100	55580.025.010	5X40MM	100	55580.050.040	10X36MM	25	55580.100.036
2,5X12MM	100	55580.025.012	5X45MM	50	55580.050.045	10X40MM	25	55580.100.040
2,5X14MM	100	55580.025.014	5X50MM	50	55580.050.050	10X45MM	25	55580.100.045
2,5X16MM	100	55580.025.016	5X60MM	50	55580.050.060	10X50MM	25	55580.100.050
2,5X20MM	100	55580.025.020				10X55MM	25	55580.100.055
			6X10MM	100	55580.060.010	10X60MM	25	55580.100.060
3X8MM	100	55580.030.008	6X12MM	100	55580.060.012	10X70MM	25	55580.100.070
3X10MM	100	55580.030.010	6X14MM	100	55580.060.014	10X80MM	25	55580.100.080
3X12MM	100	55580.030.012	6X16MM	100	55580.060.016	10X90MM	25	55580.100.090
3X14MM	100	55580.030.014	6X18MM	100	55580.060.018	10X100MM	25	55580.100.100
3X16MM	100	55580.030.016	6X20MM	100	55580.060.020			
3X18MM	100	55580.030.018	6X24MM	100	55580.060.024	12X16MM	25	55580.120.016
3X20MM	100	55580.030.020	6X28MM	50	55580.060.028	12X18MM	25	55580.120.018
3X24MM	100	55580.030.024	6X30MM	50	55580.060.030	12X20MM	25	55580.120.020
3X28MM	100	55580.030.028	6X32MM	50	55580.060.032	12X32MM	25	55580.120.032
3X30MM	100	55580.030.030	6X36MM	50	55580.060.036	12X36MM	25	55580.120.036
3X32MM	100	55580.030.032	6X40MM	50	55580.060.040	12X40MM	25	55580.120.040
3X36MM	100	55580.030.036	6X45MM	50	55580.060.045	12X45MM	10	55580.120.045
3X40MM	100	55580.030.040	6X50MM	50	55580.060.050	12X50MM	10	55580.120.050
			6X60MM	50	55580.060.060	12X55MM	10	55580.120.055
4X8MM	100	55580.040.008				12X60MM	10	55580.120.060
4X10MM	100	55580.040.010	8X10MM	100	55580.080.010	12X80MM	10	55580.120.080
4X12MM	100	55580.040.012	8X12MM	100	55580.080.012	12X90MM	10	55580.120.090
4X14MM	100	55580.040.014	8X14MM	100	55580.080.014	12X100MM	10	55580.120.100
4X16MM	100	55580.040.016	8X16MM	100	55580.080.016			

Parallel pin (dowel pin) hardened tolerance zone m6



ISO 8734 A
DIN 6325
 NEN 2282
 NF E27-475



- Parallel pins are used mainly as dowels for tools, clamping devices and measuring devices.
- The nominal length (L_1) is inclusive the rounded ends (tolerance js14).

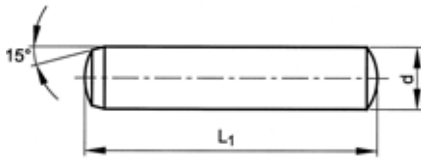
39080 Parallel pin (dowel pin) hardened tolerance zone m6		L11A
Material	Steel 60 ± 2HRC	
Packaging	Standard	

d x L1	✉	Art.number	d x L1	✉	Art.number	d x L1	✉	Art.number
1X4MM	100	39080.010.004	3X30MM	100	39080.030.030	6X55MM	50	39080.060.055
1X5MM	100	39080.010.005	3X32MM	100	39080.030.032	6X60MM	50	39080.060.060
1X6MM	100	39080.010.006	3X36MM	100	39080.030.036	6X70MM	25	39080.060.070
1X8MM	100	39080.010.008	3X40MM	100	39080.030.040	6X80MM	25	39080.060.080
1X10MM	100	39080.010.010	3X50MM	100	39080.030.050			
1X12MM	100	39080.010.012	3X60MM	100	39080.030.060			
1,5X5MM	100	39080.015.005	4X6MM	100	39080.040.006	8X10MM	100	39080.080.010
1,5X6MM	100	39080.015.006	4X8MM	100	39080.040.008	8X12MM	100	39080.080.012
1,5X8MM	100	39080.015.008	4X10MM	100	39080.040.010	8X14MM	100	39080.080.014
1,5X10MM	100	39080.015.010	4X12MM	100	39080.040.012	8X16MM	100	39080.080.016
1,5X12MM	100	39080.015.012	4X14MM	100	39080.040.014	8X18MM	100	39080.080.018
1,5X14MM	100	39080.015.014	4X16MM	100	39080.040.016	8X20MM	100	39080.080.020
1,5X16MM	100	39080.015.016	4X18MM	100	39080.040.018	8X24MM	50	39080.080.024
1,5X18MM	100	39080.015.018	4X20MM	100	39080.040.020	8X26MM	50	39080.080.026
1,5X20MM	100	39080.015.020	4X24MM	100	39080.040.024	8X28MM	50	39080.080.028
1,5X24MM	100	39080.015.024	4X26MM	100	39080.040.026	8X30MM	50	39080.080.030
1,5X28MM	100	39080.015.028	4X28MM	100	39080.040.028	8X32MM	50	39080.080.032
1,5X32MM	100	39080.015.032	4X30MM	100	39080.040.030	8X36MM	50	39080.080.036
			4X32MM	100	39080.040.032	8X40MM	50	39080.080.040
2X5MM	100	39080.020.005	4X36MM	100	39080.040.036	8X45MM	50	39080.080.045
2X6MM	100	39080.020.006	4X40MM	100	39080.040.040	8X50MM	25	39080.080.050
2X8MM	100	39080.020.008	4X45MM	100	39080.040.045	8X55MM	25	39080.080.055
2X10MM	100	39080.020.010	4X50MM	100	39080.040.050	8X60MM	25	39080.080.060
2X12MM	100	39080.020.012	4X60MM	100	39080.040.060	8X70MM	25	39080.080.070
2X14MM	100	39080.020.014				8X80MM	25	39080.080.080
2X16MM	100	39080.020.016	5X8MM	100	39080.050.008	8X90MM	25	39080.080.090
2X20MM	100	39080.020.020	5X10MM	100	39080.050.010	8X100MM	25	39080.080.100
2X24MM	100	39080.020.024	5X12MM	100	39080.050.012	10X12MM	50	39080.100.012
2X28MM	100	39080.020.028	5X14MM	100	39080.050.014	10X14MM	50	39080.100.014
2X30MM	100	39080.020.030	5X16MM	100	39080.050.016	10X16MM	50	39080.100.016
2X32MM	100	39080.020.032	5X18MM	100	39080.050.018	10X20MM	50	39080.100.020
2X36MM	100	39080.020.036	5X20MM	100	39080.050.020	10X24MM	50	39080.100.024
2X40MM	100	39080.020.040	5X24MM	100	39080.050.024	10X28MM	50	39080.100.028
			5X26MM	100	39080.050.026	10X30MM	50	39080.100.030
2,5X6MM	100	39080.025.006	5X28MM	100	39080.050.028	10X32MM	50	39080.100.032
2,5X8MM	100	39080.025.008	5X30MM	100	39080.050.030	10X36MM	25	39080.100.036
2,5X10MM	100	39080.025.010	5X32MM	100	39080.050.032	10X40MM	25	39080.100.040
2,5X12MM	100	39080.025.012	5X36MM	100	39080.050.036	10X45MM	25	39080.100.045
2,5X14MM	100	39080.025.014	5X40MM	100	39080.050.040	10X50MM	25	39080.100.050
2,5X16MM	100	39080.025.016	5X45MM	50	39080.050.045	10X55MM	25	39080.100.055
2,5X18MM	100	39080.025.018	5X50MM	50	39080.050.050	10X60MM	25	39080.100.060
2,5X20MM	100	39080.025.020	5X55MM	50	39080.050.055	10X70MM	25	39080.100.070
2,5X24MM	100	39080.025.024	5X60MM	50	39080.050.060	10X80MM	25	39080.100.080
2,5X28MM	100	39080.025.028				10X90MM	25	39080.100.090
2,5X32MM	100	39080.025.032	6X8MM	100	39080.060.008	10X100MM	25	39080.100.100
2,5X36MM	100	39080.025.036	6X10MM	100	39080.060.010	12X16MM	25	39080.120.016
2,5X40MM	100	39080.025.040	6X12MM	100	39080.060.012	12X20MM	25	39080.120.020
2,5X45MM	100	39080.025.045	6X14MM	100	39080.060.014	12X24MM	25	39080.120.024
2,5X50MM	100	39080.025.050	6X16MM	100	39080.060.016	12X26MM	25	39080.120.026
			6X18MM	100	39080.060.018	12X28MM	25	39080.120.028
3X6MM	100	39080.030.006	6X20MM	100	39080.060.020	12X30MM	25	39080.120.030
3X8MM	100	39080.030.008	6X24MM	100	39080.060.024	12X32MM	25	39080.120.032
3X10MM	100	39080.030.010	6X26MM	100	39080.060.026	12X36MM	25	39080.120.036
3X12MM	100	39080.030.012	6X28MM	100	39080.060.028	12X40MM	25	39080.120.040
3X14MM	100	39080.030.014	6X30MM	100	39080.060.030	12X45MM	25	39080.120.045
3X16MM	100	39080.030.016	6X32MM	50	39080.060.032	12X50MM	25	39080.120.050
3X18MM	100	39080.030.018	6X36MM	50	39080.060.036	12X55MM	25	39080.120.055
3X20MM	100	39080.030.020	6X40MM	50	39080.060.040	12X60MM	25	39080.120.060
3X24MM	100	39080.030.024	6X45MM	50	39080.060.045	12X70MM	25	39080.120.070
3X28MM	100	39080.030.028	6X50MM	50	39080.060.050	12X80MM	10	39080.120.080

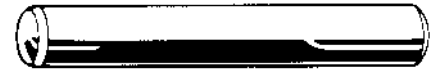
39080 Parallel pin (dowel pin) hardened tolerance zone m6

d x L1	Art.number	d x L1	Art.number	d x L1	Art.number
12X90MM	10 39080.120.090	14X120MM	10 39080.140.120	20X32MM	10 39080.200.032
12X100MM	10 39080.120.100	16X36MM	10 39080.160.036	20X36MM	10 39080.200.036
12X120MM	10 39080.120.120	16X40MM	10 39080.160.040	20X40MM	10 39080.200.040
14X32MM	25 39080.140.032	16X50MM	10 39080.160.050	20X50MM	10 39080.200.050
14X36MM	25 39080.140.036	16X60MM	10 39080.160.060	20X60MM	10 39080.200.060
14X40MM	25 39080.140.040	16X80MM	10 39080.160.080	20X70MM	10 39080.200.070
14X50MM	25 39080.140.050	16X100MM	10 39080.160.100	20X80MM	10 39080.200.080
14X60MM	10 39080.140.060	16X120MM	10 39080.160.120	20X100MM	10 39080.200.100
14X80MM	10 39080.140.080	20X30MM	100 39080.200.030	20X120MM	10 39080.200.120
14X100MM	10 39080.140.100				

Parallel pin (dowel pin) hardened tolerance zone h6



ISO ≈8734 A
 DIN ≈6325
 NEN ≈2282
 NF ≈E27-475

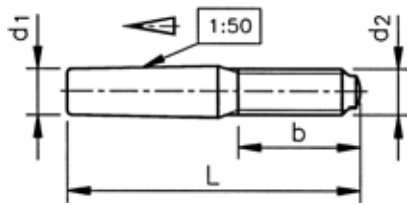


- Parallel pins are used mainly as dowels for tools, clamping devices and measuring devices.
- $d \times L_1$: The nominal length (L_1) is inclusive the rounded ends (tolerance js14).

39078 Parallel pin (dowel pin) hardened tolerance zone h6		L11A
Material	Steel 60 ± 2HRC	
Packaging	Standard	

$d \times L_1$	✉	Art.number	$d \times L_1$	✉	Art.number	$d \times L_1$	✉	Art.number
2X5MM	100	39078.020.005	4X40MM	100	39078.040.040	8X32MM	50	39078.080.032
2X6MM	100	39078.020.006	4X50MM	100	39078.040.050	8X36MM	50	39078.080.036
2X8MM	100	39078.020.008				8X40MM	50	39078.080.040
2X10MM	100	39078.020.010	5X8MM	100	39078.050.008	8X50MM	25	39078.080.050
2X12MM	100	39078.020.012	5X10MM	100	39078.050.010	8X60MM	25	39078.080.060
2X14MM	100	39078.020.014	5X12MM	100	39078.050.012	8X70MM	25	39078.080.070
2X16MM	100	39078.020.016	5X14MM	100	39078.050.014	8X80MM	25	39078.080.080
2X20MM	100	39078.020.020	5X16MM	100	39078.050.016			
2X24MM	100	39078.020.024	5X20MM	100	39078.050.020	10X20MM	50	39078.100.020
2X28MM	100	39078.020.028	5X24MM	100	39078.050.024	10X24MM	50	39078.100.024
			5X26MM	100	39078.050.026	10X28MM	50	39078.100.028
2,5X6MM	100	39078.025.006	5X28MM	100	39078.050.028	10X30MM	50	39078.100.030
2,5X8MM	100	39078.025.008	5X30MM	100	39078.050.030	10X32MM	50	39078.100.032
2,5X10MM	100	39078.025.010	5X32MM	100	39078.050.032	10X36MM	25	39078.100.036
2,5X16MM	100	39078.025.016	5X36MM	100	39078.050.036	10X40MM	25	39078.100.040
2,5X24MM	100	39078.025.024	5X40MM	100	39078.050.040	10X50MM	25	39078.100.050
			5X50MM	100	39078.050.050	10X60MM	25	39078.100.060
			5X60MM	100	39078.050.060	10X80MM	25	39078.100.080
						10X100MM	25	39078.100.100
3X6MM	100	39078.030.006	6X10MM	100	39078.060.010			
3X8MM	100	39078.030.008	6X12MM	100	39078.060.012	12X24MM	25	39078.120.024
3X10MM	100	39078.030.010	6X14MM	100	39078.060.014	12X32MM	25	39078.120.032
3X12MM	100	39078.030.012	6X16MM	100	39078.060.016	12X36MM	25	39078.120.036
3X14MM	100	39078.030.014	6X18MM	100	39078.060.018	12X40MM	25	39078.120.040
3X16MM	100	39078.030.016	6X20MM	100	39078.060.020	12X45MM	25	39078.120.045
3X20MM	100	39078.030.020	6X24MM	100	39078.060.024	12X50MM	25	39078.120.050
3X24MM	100	39078.030.024	6X26MM	100	39078.060.026	12X60MM	25	39078.120.060
3X28MM	100	39078.030.028	6X28MM	100	39078.060.028	12X80MM	10	39078.120.080
3X30MM	100	39078.030.030	6X30MM	100	39078.060.030	12X100MM	10	39078.120.100
3X32MM	100	39078.030.032	6X32MM	50	39078.060.032			
3X40MM	100	39078.030.040	6X36MM	50	39078.060.036	16X40MM	10	39078.160.040
			6X40MM	50	39078.060.040	16X50MM	10	39078.160.050
4X8MM	100	39078.040.008	6X45MM	50	39078.060.045	16X60MM	10	39078.160.060
4X10MM	100	39078.040.010	6X50MM	50	39078.060.050	16X80MM	10	39078.160.080
4X12MM	100	39078.040.012	6X60MM	50	39078.060.060	16X100MM	10	39078.160.100
4X14MM	100	39078.040.014						
4X16MM	100	39078.040.016	8X16MM	100	39078.080.016	20X40MM	10	39078.200.040
4X18MM	100	39078.040.018	8X20MM	100	39078.080.020	20X50MM	10	39078.200.050
4X20MM	100	39078.040.020	8X24MM	50	39078.080.024	20X60MM	10	39078.200.060
4X24MM	100	39078.040.024	8X28MM	50	39078.080.028	20X80MM	10	39078.200.080
4X28MM	100	39078.040.028	8X30MM	50	39078.080.030			
4X30MM	100	39078.040.030						
4X32MM	100	39078.040.032						

Taper pin with external thread



ISO 8737
DIN 7977
NEN 2462



Technical data

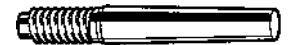
d1	d ₂	b
5	M5	14
6	M6	18
8	M8	22
10	M10	24
12	M12	27
16	M16	35
20	M16	35

- d₁ x L: The nominal length (L) is inclusive the rounded ends (tolerance js15).

39011 Taper pin with external thread

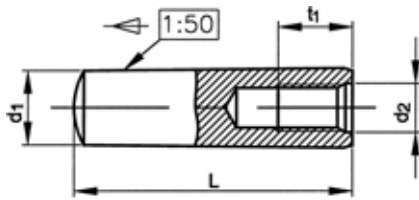
L11A

Material Free-cutting steel
Packaging Standard

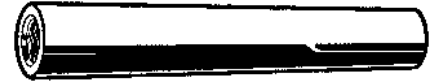


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
5X40MM	50	39011.050.040	8X75MM	10	39011.080.075	16X85MM	5	39011.160.085
5X45MM	50	39011.050.045	10X60MM	10	39011.100.060	16X100MM	5	39011.160.100
5X50MM	50	39011.050.050	10X65MM	10	39011.100.065	16X120MM	5	39011.160.120
6X45MM	25	39011.060.045	10X75MM	10	39011.100.075	16X140MM	5	39011.160.140
6X50MM	25	39011.060.050	10X85MM	10	39011.100.085	16X160MM	5	39011.160.160
6X55MM	25	39011.060.055	10X100MM	10	39011.100.100	20X100MM	5	39011.200.100
6X60MM	25	39011.060.060	12X85MM	5	39011.120.085	20X120MM	5	39011.200.120
8X55MM	10	39011.080.055	12X100MM	5	39011.120.100	20X140MM	5	39011.200.140
8X60MM	10	39011.080.060	12X120MM	5	39011.120.120	20X160MM	5	39011.200.160
8X65MM	10	39011.080.065						

Taper pin with internal thread ground



ISO 8736 A
 DIN 7978 A
 NEN 2463
 NF E27-479



Technical data

d1	d2	t1
6	M4	6
8	M5	8
10	M6	10
12	M8	12
16	M10	16
20	M12	18

- d₁ x L: The nominal length (L) is inclusive the rounded ends (tolerance js15).

39012 Taper pin with internal thread ground

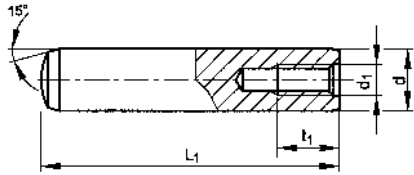
L11A

Material Free-cutting steel
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
6X16MM	50	39012.060.016	8X60MM	10	39012.080.060	12X80MM	5	39012.120.080
6X24MM	50	39012.060.024	8X70MM	10	39012.080.070	12X100MM	5	39012.120.100
6X28MM	50	39012.060.028						
6X30MM	50	39012.060.030	10X24MM	25	39012.100.024	16X40MM	5	39012.160.040
6X32MM	25	39012.060.032	10X28MM	25	39012.100.028	16X50MM	5	39012.160.050
6X36MM	25	39012.060.036	10X32MM	25	39012.100.032	16X60MM	5	39012.160.060
6X40MM	25	39012.060.040	10X40MM	10	39012.100.040	16X80MM	5	39012.160.080
6X50MM	25	39012.060.050	10X50MM	10	39012.100.050	16X90MM	5	39012.160.090
6X60MM	25	39012.060.060	10X60MM	10	39012.100.060	16X100MM	5	39012.160.100
			10X70MM	10	39012.100.070	16X120MM	5	39012.160.120
8X20MM	50	39012.080.020	10X80MM	10	39012.100.080			
8X24MM	25	39012.080.024	10X80MM	10	39012.100.080	20X60MM	5	39012.200.060
8X28MM	25	39012.080.028	10X100MM	10	39012.100.100	20X80MM	5	39012.200.080
8X30MM	25	39012.080.030				20X100MM	5	39012.200.100
8X32MM	25	39012.080.032	12X32MM	10	39012.120.032	20X120MM	5	39012.200.120
8X36MM	25	39012.080.036	12X40MM	10	39012.120.040			
8X40MM	25	39012.080.040	12X50MM	10	39012.120.050			
8X50MM	10	39012.080.050	12X60MM	10	39012.120.060			
			12X70MM	10	39012.120.070			

Parallel pin with internal thread hardened



ISO 8735 A
DIN 7979 D
 NEN 2464
 NF E27-475



Technical data

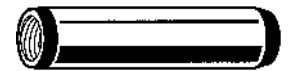
d (m6)	d ₁	t ₁	d (m6)	d ₁	t ₁	d (m6)	d ₁	t ₁
5 (#DIN)	M3	4	12	M6	10	25	M16	24
6	M4	6	14	M8	12	30	M20	30
8	M5	8	16	M8	12			
10	M6	10	20	M10	16			

- d x L₁: The nominal length (L₁) is inclusive the rounded ends (tolerance js15).

39090 Parallel pin with internal thread hardened

L11A

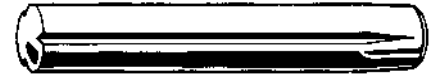
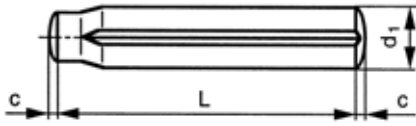
Material Steel 60 ± 2HRC
Packaging Standard



d x L1	☒	Art.number	d x L1	☒	Art.number	d x L1	☒	Art.number
5X12MM	100	39090.050.012	8X40MM	25	39090.080.040	12X60MM	10	39090.120.060
5X16MM	50	39090.050.016	8X45MM	25	39090.080.045	12X70MM	10	39090.120.070
5X20MM	50	39090.050.020	8X50MM	10	39090.080.050	12X80MM	5	39090.120.080
5X24MM	50	39090.050.024	8X60MM	10	39090.080.060	12X100MM	5	39090.120.100
5X28MM	50	39090.050.028	8X70MM	10	39090.080.070			
5X30MM	25	39090.050.030	8X80MM	50	39090.080.080	14X60MM	5	39090.140.060
5X32MM	25	39090.050.032				16X32MM	5	39090.160.032
5X36MM	1	39090.050.036	10X20MM	25	39090.100.020	16X40MM	5	39090.160.040
5X40MM	25	39090.050.040	10X24MM	25	39090.100.024	16X50MM	5	39090.160.050
			10X28MM	25	39090.100.028	16X60MM	5	39090.160.060
6X16MM	50	39090.060.016	10X30MM	25	39090.100.030	16X70MM	5	39090.160.070
6X20MM	50	39090.060.020	10X32MM	25	39090.100.032	16X80MM	5	39090.160.080
6X24MM	50	39090.060.024	10X36MM	10	39090.100.036	16X90MM	5	39090.160.090
6X28MM	50	39090.060.028	10X40MM	10	39090.100.040	16X100MM	5	39090.160.100
6X30MM	50	39090.060.030	10X45MM	10	39090.100.045	16X120MM	5	39090.160.120
6X32MM	25	39090.060.032	10X50MM	10	39090.100.050			
6X40MM	25	39090.060.040	10X60MM	10	39090.100.060	20X50MM	5	39090.200.050
6X45MM	25	39090.060.045	10X70MM	10	39090.100.070	20X60MM	5	39090.200.060
6X50MM	25	39090.060.050	10X80MM	10	39090.100.080	20X70MM	5	39090.200.070
6X60MM	25	39090.060.060				20X80MM	5	39090.200.080
			12X24MM	10	39090.120.024	20X100MM	5	39090.200.100
8X16MM	50	39090.080.016	12X28MM	10	39090.120.028	20X120MM	5	39090.200.120
8X20MM	50	39090.080.020	12X30MM	10	39090.120.030			
8X24MM	25	39090.080.024	12X32MM	10	39090.120.032	25X60MM	5	39090.250.060
8X28MM	25	39090.080.028	12X36MM	10	39090.120.036	25X70MM	5	39090.250.070
8X30MM	25	39090.080.030	12X40MM	10	39090.120.040			
8X32MM	25	39090.080.032	12X45MM	10	39090.120.045			
8X36MM	25	39090.080.036	12X50MM	10	39090.120.050			

Grooved pin, full length parallel grooved with pilot

ISO 8739
DIN 1470
NEN 2601

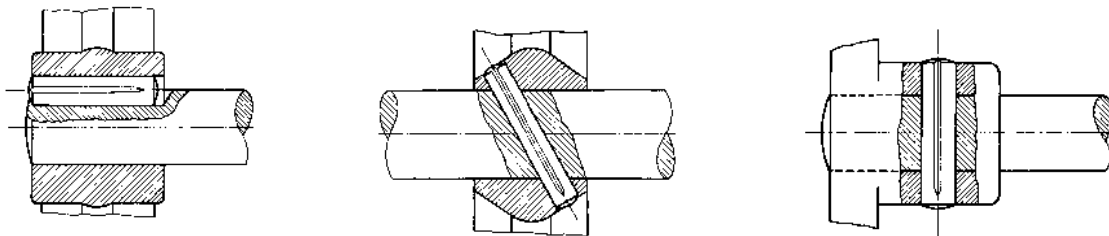


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h9	0,4	6,15
4	h11	0,5	10,6
5	h11	0,6	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d_1 (nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

Examples of application



39700 Grooved pin, full length parallel grooved with pilot

L11F

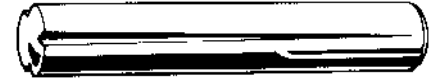
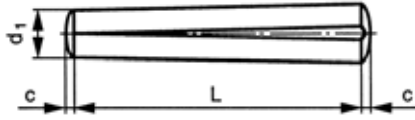
Material Free-cutting steel
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X4MM	200	39700.015.004	3X20MM	200	39700.030.020	6X16MM	100	39700.060.016
1,5X6MM	200	39700.015.006	3X30MM	200	39700.030.030	6X20MM	100	39700.060.020
1,5X8MM	200	39700.015.008				6X24MM	100	39700.060.024
1,5X10MM	200	39700.015.010	4X8MM	200	39700.040.008	6X30MM	100	39700.060.030
1,5X16MM	200	39700.015.016	4X10MM	200	39700.040.010	6X36MM	100	39700.060.036
			4X12MM	200	39700.040.012	6X40MM	100	39700.060.040
2X5MM	200	39700.020.005	4X16MM	200	39700.040.016	6X45MM	100	39700.060.045
2X6MM	200	39700.020.006	4X20MM	200	39700.040.020	6X50MM	100	39700.060.050
2X8MM	200	39700.020.008	4X24MM	200	39700.040.024	6X60MM	100	39700.060.060
2X10MM	200	39700.020.010	4X30MM	200	39700.040.030			
2X16MM	200	39700.020.016	4X36MM	100	39700.040.036	8X12MM	100	39700.080.012
2X20MM	200	39700.020.020	4X40MM	100	39700.040.040	8X16MM	100	39700.080.016
2X24MM	200	39700.020.024				8X20MM	100	39700.080.020
			5X12MM	200	39700.050.012	8X24MM	100	39700.080.024
2,5X10MM	200	39700.025.010	5X16MM	200	39700.050.016	8X30MM	100	39700.080.030
2,5X12MM	200	39700.025.012	5X20MM	100	39700.050.020	8X36MM	50	39700.080.036
2,5X16MM	200	39700.025.016	5X24MM	100	39700.050.024	8X40MM	50	39700.080.040
2,5X20MM	200	39700.025.020	5X30MM	100	39700.050.030	8X45MM	50	39700.080.045
			5X36MM	100	39700.050.036	8X50MM	50	39700.080.050
3X10MM	200	39700.030.010	5X40MM	100	39700.050.040	8X60MM	50	39700.080.060
3X12MM	200	39700.030.012				8X70MM	50	39700.080.070
3X16MM	200	39700.030.016	6X10MM	100	39700.060.010			

Grooved pin, full length taper grooved

ISO 8744
 DIN 1471
 NEN 2602

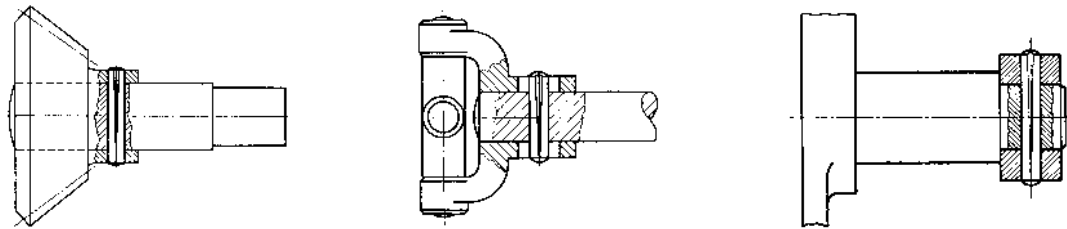


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h9	0,4	6,15
4	h11	0,5	10,6
5	h11	0,63	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d_1 (nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

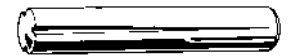
Examples of application



39710 Grooved pin, full length taper grooved

L11F

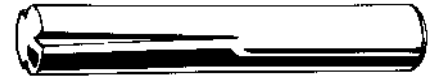
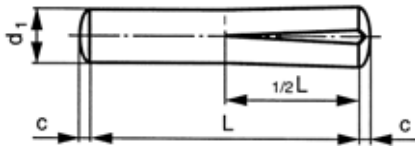
Material Free-cutting steel
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X4MM	200	39710.015.004	3X6MM	200	39710.030.006	5X40MM	100	39710.050.040
1,5X5MM	200	39710.015.005	3X8MM	200	39710.030.008	6X10MM	100	39710.060.010
1,5X8MM	200	39710.015.008	3X10MM	200	39710.030.010	6X12MM	100	39710.060.012
1,5X10MM	200	39710.015.010	3X12MM	200	39710.030.012	6X16MM	100	39710.060.016
1,5X16MM	200	39710.015.016	3X16MM	200	39710.030.016	6X20MM	100	39710.060.020
1,5X20MM	200	39710.015.020	3X20MM	200	39710.030.020	6X24MM	100	39710.060.024
2X5MM	200	39710.020.005	3X24MM	200	39710.030.024	6X30MM	100	39710.060.030
2X6MM	200	39710.020.006	4X8MM	200	39710.040.008	6X40MM	100	39710.060.040
2X8MM	200	39710.020.008	4X10MM	200	39710.040.010	6X45MM	100	39710.060.045
2X10MM	200	39710.020.010	4X12MM	200	39710.040.012	6X50MM	100	39710.060.050
2X12MM	200	39710.020.012	4X16MM	200	39710.040.016	6X60MM	100	39710.060.060
2X16MM	200	39710.020.016	4X20MM	200	39710.040.020	8X12MM	100	39710.080.012
2X20MM	200	39710.020.020	4X24MM	200	39710.040.024	8X16MM	100	39710.080.016
2X24MM	200	39710.020.024	4X30MM	200	39710.040.030	8X20MM	100	39710.080.020
2X30MM	200	39710.020.030	4X36MM	100	39710.040.036	8X24MM	100	39710.080.024
2,5X6MM	200	39710.025.006	4X40MM	100	39710.040.040	8X30MM	100	39710.080.030
2,5X8MM	200	39710.025.008	5X10MM	200	39710.050.010	8X40MM	50	39710.080.040
2,5X10MM	200	39710.025.010	5X12MM	200	39710.050.012	8X50MM	50	39710.080.050
2,5X12MM	200	39710.025.012	5X16MM	200	39710.050.016	8X60MM	50	39710.080.060
2,5X16MM	200	39710.025.016	5X20MM	100	39710.050.020	8X70MM	50	39710.080.070
2,5X20MM	200	39710.025.020	5X24MM	100	39710.050.024			
2,5X30MM	200	39710.025.030	5X30MM	100	39710.050.030			
			5X36MM	100	39710.050.036			

Grooved pin, half length taper grooved

ISO 8745
DIN 1472
NEN 2603

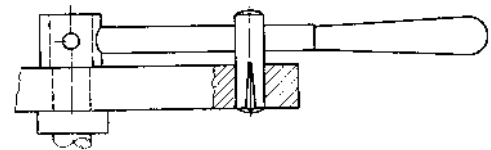
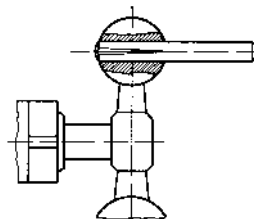
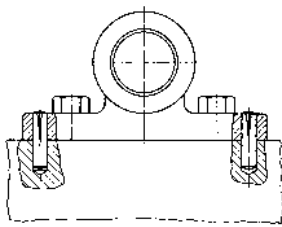


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h9	0,4	6,15
4	h11	0,5	10,6
5	h11	0,6	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d₁(nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

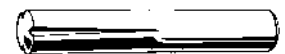
Examples of application



39720 Grooved pin, half length taper grooved

L11F

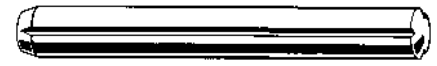
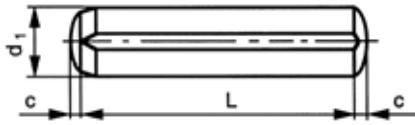
Material Free-cutting steel
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X4MM	200	39720.015.004	3X24MM	200	39720.030.024	6X12MM	100	39720.060.012
1,5X6MM	200	39720.015.006	3X30MM	200	39720.030.030	6X16MM	100	39720.060.016
1,5X8MM	200	39720.015.008				6X20MM	100	39720.060.020
1,5X12MM	200	39720.015.012	4X8MM	200	39720.040.008	6X24MM	100	39720.060.024
1,5X16MM	200	39720.015.016	4X10MM	200	39720.040.010	6X30MM	100	39720.060.030
			4X12MM	200	39720.040.012	6X36MM	100	39720.060.036
2X6MM	200	39720.020.006	4X16MM	200	39720.040.016	6X40MM	100	39720.060.040
2X8MM	200	39720.020.008	4X20MM	200	39720.040.020	6X50MM	100	39720.060.050
2X10MM	200	39720.020.010	4X24MM	200	39720.040.024	6X60MM	100	39720.060.060
2X12MM	200	39720.020.012	4X28MM	200	39720.040.028			
2X16MM	200	39720.020.016	4X30MM	200	39720.040.030	8X12MM	100	39720.080.012
2X20MM	200	39720.020.020	4X36MM	100	39720.040.036	8X16MM	100	39720.080.016
						8X20MM	100	39720.080.020
2,5X6MM	200	39720.025.006	5X8MM	200	39720.050.008	8X24MM	100	39720.080.024
2,5X10MM	200	39720.025.010	5X10MM	200	39720.050.010	8X30MM	100	39720.080.030
2,5X12MM	200	39720.025.012	5X12MM	200	39720.050.012	8X36MM	50	39720.080.036
2,5X16MM	200	39720.025.016	5X16MM	200	39720.050.016	8X40MM	50	39720.080.040
			5X20MM	100	39720.050.020	8X45MM	50	39720.080.045
3X8MM	200	39720.030.008	5X24MM	100	39720.050.024	8X50MM	50	39720.080.050
3X10MM	200	39720.030.010	5X30MM	100	39720.050.030	8X60MM	50	39720.080.060
3X12MM	200	39720.030.012	5X40MM	100	39720.050.040	8X70MM	50	39720.080.070
3X16MM	200	39720.030.016						
3X20MM	200	39720.030.020	6X10MM	100	39720.060.010			

Grooved pin, full length parallel grooved with chamfer

ISO 8740
 DIN 1473
 NEN 2604

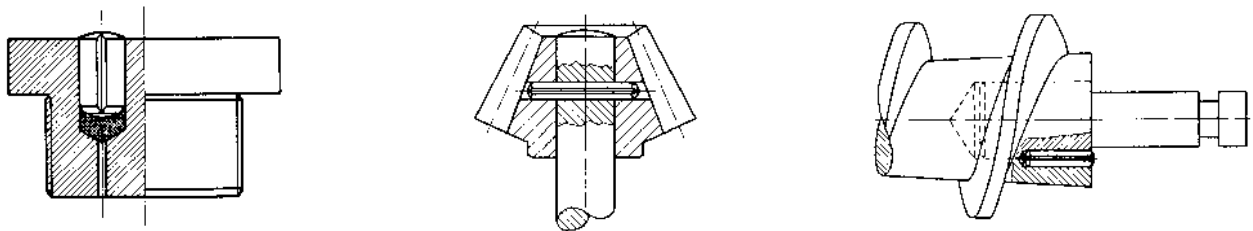


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h9	0,4	6,15
4	h11	0,4	10,6
5	h11	0,6	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d_1 (nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

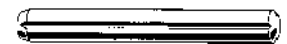
Examples of application



39730 Grooved pin, full length parallel grooved with chamfer

L11F

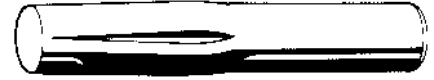
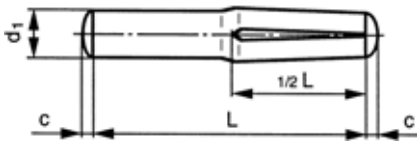
Material Free-cutting steel
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X5MM	200	39730.015.005	3X12MM	200	39730.030.012	6X10MM	100	39730.060.010
1,5X6MM	200	39730.015.006	3X16MM	200	39730.030.016	6X12MM	100	39730.060.012
1,5X8MM	200	39730.015.008	3X20MM	200	39730.030.020	6X16MM	100	39730.060.016
1,5X10MM	200	39730.015.010	3X24MM	200	39730.030.024	6X20MM	100	39730.060.020
1,5X12MM	200	39730.015.012	3X30MM	200	39730.030.030	6X24MM	100	39730.060.024
1,5X16MM	200	39730.015.016				6X30MM	100	39730.060.030
			4X8MM	200	39730.040.008	6X36MM	100	39730.060.036
2X5MM	200	39730.020.005	4X10MM	200	39730.040.010	6X40MM	100	39730.060.040
2X6MM	200	39730.020.006	4X12MM	200	39730.040.012	6X45MM	100	39730.060.045
2X8MM	200	39730.020.008	4X16MM	200	39730.040.016	6X50MM	100	39730.060.050
2X10MM	200	39730.020.010	4X20MM	200	39730.040.020	6X60MM	100	39730.060.060
2X12MM	200	39730.020.012	4X24MM	200	39730.040.024			
2X16MM	200	39730.020.016	4X30MM	200	39730.040.030	8X12MM	100	39730.080.012
2X20MM	200	39730.020.020	4X36MM	100	39730.040.036	8X16MM	100	39730.080.016
2X24MM	200	39730.020.024	4X40MM	100	39730.040.040	8X20MM	100	39730.080.020
2X30MM	200	39730.020.030				8X24MM	100	39730.080.024
			5X8MM	200	39730.050.008	8X30MM	100	39730.080.030
2,5X10MM	200	39730.025.010	5X10MM	200	39730.050.010	8X36MM	50	39730.080.036
2,5X12MM	200	39730.025.012	5X12MM	200	39730.050.012	8X40MM	50	39730.080.040
2,5X16MM	200	39730.025.016	5X16MM	200	39730.050.016	8X45MM	50	39730.080.045
2,5X20MM	200	39730.025.020	5X20MM	100	39730.050.020	8X50MM	50	39730.080.050
2,5X24MM	200	39730.025.024	5X24MM	100	39730.050.024	8X60MM	50	39730.080.060
			5X30MM	100	39730.050.030	8X70MM	50	39730.080.070
3X6MM	200	39730.030.006	5X36MM	100	39730.050.036			
3X8MM	200	39730.030.008	5X40MM	100	39730.050.040			
3X10MM	200	39730.030.010						

Grooved pin, half length reverse grooved

ISO 8741
DIN 1474
NEN 2605

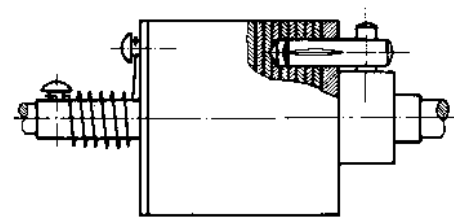
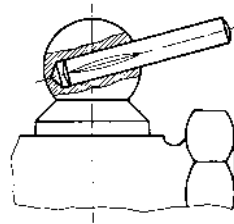
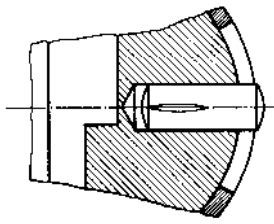


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h9	0,4	6,15
4	h11	0,5	10,6
5	h11	0,63	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d₁(nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

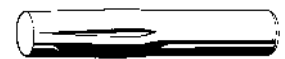
Examples of application



39740 Grooved pin, half length reverse grooved

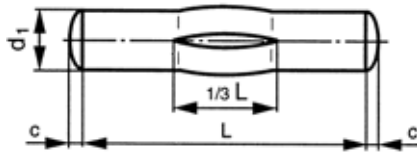
L11F

Material Free-cutting steel
Packaging Standard

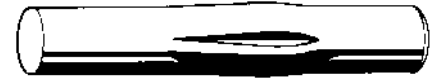


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X5MM	200	39740.015.005	3X20MM	200	39740.030.020	6X20MM	100	39740.060.020
1,5X6MM	200	39740.015.006	3X24MM	200	39740.030.024	6X24MM	100	39740.060.024
1,5X8MM	200	39740.015.008	3X30MM	200	39740.030.030	6X30MM	100	39740.060.030
1,5X10MM	200	39740.015.010				6X40MM	100	39740.060.040
1,5X12MM	200	39740.015.012	4X8MM	200	39740.040.008	6X45MM	100	39740.060.045
			4X10MM	200	39740.040.010	6X50MM	100	39740.060.050
2X5MM	200	39740.020.005	4X12MM	200	39740.040.012	6X60MM	100	39740.060.060
2X6MM	200	39740.020.006	4X16MM	200	39740.040.016			
2X8MM	200	39740.020.008	4X20MM	200	39740.040.020	8X12MM	100	39740.080.012
2X10MM	200	39740.020.010	4X24MM	200	39740.040.024	8X16MM	100	39740.080.016
2X12MM	200	39740.020.012	4X30MM	200	39740.040.030	8X20MM	100	39740.080.020
2X16MM	200	39740.020.016	4X36MM	100	39740.040.036	8X24MM	100	39740.080.024
						8X30MM	100	39740.080.030
2,5X6MM	200	39740.025.006	5X8MM	200	39740.050.008	8X36MM	50	39740.080.036
2,5X8MM	200	39740.025.008	5X10MM	200	39740.050.010	8X40MM	50	39740.080.040
2,5X10MM	200	39740.025.010	5X12MM	200	39740.050.012	8X45MM	50	39740.080.045
2,5X12MM	200	39740.025.012	5X16MM	200	39740.050.016	8X50MM	50	39740.080.050
2,5X16MM	200	39740.025.016	5X20MM	100	39740.050.020	8X60MM	50	39740.080.060
			5X24MM	100	39740.050.024	8X70MM	50	39740.080.070
3X6MM	200	39740.030.006	5X30MM	100	39740.050.030			
3X8MM	200	39740.030.008	5X36MM	100	39740.050.036			
3X10MM	200	39740.030.010						
3X12MM	200	39740.030.012	6X12MM	100	39740.060.012			
3X16MM	200	39740.030.016	6X16MM	100	39740.060.016			

Grooved pin, third length center grooved



ISO 8742
 DIN 1475
 NEN 2606

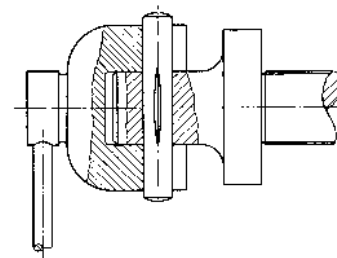
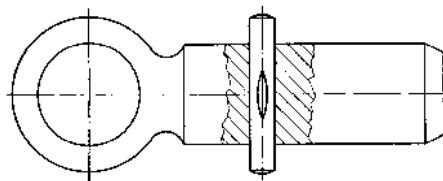


Technical data

d1	Tolerance	c ≈	V
1,5	h9	0,2	1,6
2	h9	0,25	2,85
2,5	h9	0,3	4,25
3	h11	0,4	6,15
4	h11	0,5	10,6
5	h11	0,6	16,5
6	h11	0,8	22,8
8	h11	1	40,5

- V = Shear strength double min. in kN.
- For the hole diameter d_1 (nom.) with tolerance field H11 is recommended.
- The nominal length (L) does not include the rounded ends (tolerance js15).

Examples of application



39750 Grooved pin, third length center grooved

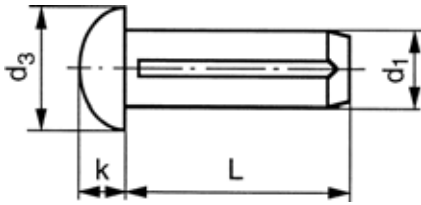
L11F

Material Free-cutting steel
Packaging Standard

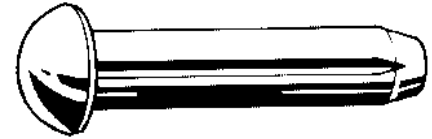


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,5X8MM	200	39750.015.008	3X12MM	200	39750.030.012	6X12MM	100	39750.060.012
1,5X10MM	200	39750.015.010	3X16MM	200	39750.030.016	6X16MM	100	39750.060.016
1,5X16MM	200	39750.015.016	3X20MM	200	39750.030.020	6X20MM	100	39750.060.020
2X6MM	200	39750.020.006	3X24MM	200	39750.030.024	6X24MM	100	39750.060.024
2X10MM	200	39750.020.010	3X30MM	200	39750.030.030	6X30MM	100	39750.060.030
2X12MM	200	39750.020.012	4X12MM	200	39750.040.012	6X36MM	100	39750.060.036
2X16MM	200	39750.020.016	4X16MM	200	39750.040.016	6X40MM	100	39750.060.040
2X20MM	200	39750.020.020	4X20MM	200	39750.040.020	6X45MM	100	39750.060.045
2X24MM	200	39750.020.024	4X24MM	200	39750.040.024	6X50MM	100	39750.060.050
2,5X8MM	200	39750.025.008	4X30MM	200	39750.040.030	6X60MM	100	39750.060.060
2,5X10MM	200	39750.025.010	4X36MM	100	39750.040.036	8X20MM	100	39750.080.020
2,5X12MM	200	39750.025.012	4X40MM	100	39750.040.040	8X24MM	100	39750.080.024
2,5X16MM	200	39750.025.016	5X10MM	200	39750.050.010	8X30MM	100	39750.080.030
2,5X20MM	200	39750.025.020	5X12MM	200	39750.050.012	8X36MM	50	39750.080.036
2,5X24MM	200	39750.025.024	5X16MM	200	39750.050.016	8X40MM	50	39750.080.040
2,5X30MM	200	39750.025.030	5X20MM	100	39750.050.020	8X45MM	50	39750.080.045
3X6MM	200	39750.030.006	5X24MM	100	39750.050.024	8X50MM	50	39750.080.050
3X8MM	200	39750.030.008	5X30MM	100	39750.050.030	8X60MM	50	39750.080.060
3X10MM	200	39750.030.010	5X36MM	100	39750.050.036			
			5X40MM	100	39750.050.040			

Round head grooved pin



ISO 8746
DIN 1476
NEN 2460



Technical data

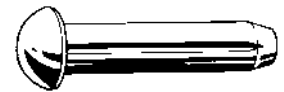
d1	Tolerance	d3	k
1,4	0/ - 0,05	2,4	0,8
1,7 (#DIN)	0/ - 0,05	3	1
2	0/ - 0,05	3,5	1,2
2,5	-	4,4	1,4
2,6 (#DIN)	0/ - 0,075	4,5	1,6
3	0/ - 0,075	5,2	1,8
4	0/ - 0,1	7	2,4
5	0/ - 0,1	8,8	3
6	0/ - 0,1	10,5	3,6

- For the hole diameter d_1 (nom.) with tolerance field H11 is recommended.
- The nominal length (L) is with tolerance js15.

39760 Round head grooved pin

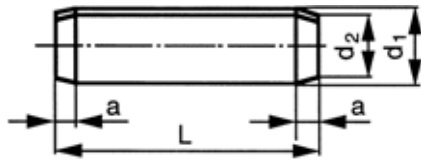
L11F

Material Steel USt 36-2
Packaging Standard

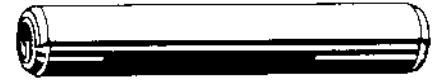


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
1,4X3MM	200	39760.014.003	2,6X4MM	200	39760.026.004	4X12MM	200	39760.040.012
1,4X4MM	200	39760.014.004	2,6X5MM	200	39760.026.005	4X15MM	200	39760.040.015
1,4X6MM	200	39760.014.006	2,6X6MM	200	39760.026.006			
			2,6X8MM	200	39760.026.008	5X8MM	200	39760.050.008
1,7X3MM	200	39760.017.003	2,6X10MM	200	39760.026.010	5X10MM	200	39760.050.010
1,7X4MM	200	39760.017.004				5X12MM	200	39760.050.012
1,7X5MM	200	39760.017.005	3X4MM	200	39760.030.004	5X15MM	200	39760.050.015
1,7X6MM	200	39760.017.006	3X5MM	200	39760.030.005	5X20MM	200	39760.050.020
			3X6MM	200	39760.030.006	5X25MM	200	39760.050.025
2X3MM	200	39760.020.003	3X8MM	200	39760.030.008			
2X4MM	200	39760.020.004	3X10MM	200	39760.030.010	6X10MM	200	39760.060.010
2X5MM	200	39760.020.005	3X12MM	200	39760.030.012	6X12MM	200	39760.060.012
2X6MM	200	39760.020.006	3X15MM	200	39760.030.015	6X15MM	200	39760.060.015
2X8MM	200	39760.020.008				6X20MM	200	39760.060.020
2X10MM	200	39760.020.010	4X6MM	200	39760.040.006	6X25MM	200	39760.060.025
			4X8MM	200	39760.040.008			
2,6X3MM	200	39760.026.003	4X10MM	200	39760.040.010			

Spring-type straight pin (spiral pin) coiled, standard duty



ISO 8750
 DIN 7343
 NEN 2553

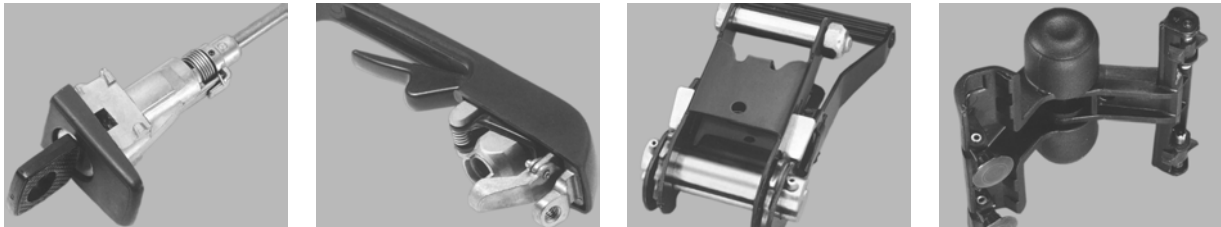


Technical data

d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂	a ≈	V
1	1,05	1,15	0,95	0,3	0,6
1,5	1,62	1,73	1,4	0,5	1,45
2	2,13	2,25	1,9	0,7	2,5
2,5	2,65	2,78	2,4	0,7	3,9
3	3,15	3,3	2,9	0,9	5,5
4	4,2	4,4	3,9	1,1	9,6
5	5,25	5,5	4,85	1,3	15
6	6,25	6,5	5,85	1,5	22
8	8,3	8,63	7,8	2	39
10	10,35	10,8	9,75	2,5	62
12	12,4	12,85	11,7	3	89
14	14,45	14,95	13,6	3,5	120
16	16,45	17	15,6	4	155

- V = Shear strength double min. in kN.
- Special features of spring-type straight pins (spiral pins):
- Are used for the dismantable connection (positioning) of two or more parts and can also be applied as shafts and hinge-, stop- or carrierpins.
- Due to the spiral shaped cross section (approx. 2.1/4 coils) the spring-type straight pins (spiral pins) are very flexible and suitable to be used more times for dynamic loads. Equal stress distribution throughout its cross section against the hole wall produces a good press fit, which can absorb shear forces unaffected by the direction.
- Swaged chamfer at both ends, so they can easily be inserted and installed automatically.
- For the hole diameter d (nom.) the tolerance H12 is recommended except for d (nom.)1mm, the tolerance H10 is recommended.

Examples of application



39140 Spring-type straight pin (spiral pin) coiled, standard duty

L09A

Material Spring steel 420-560 HV30
Packaging Standard



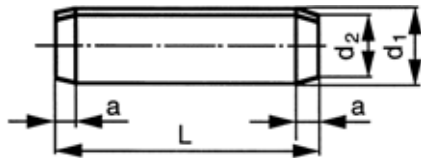
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,5X4MM	200	39140.015.004	2,5X10MM	200	39140.025.010	3X28MM	200	39140.030.028
1,5X6MM	200	39140.015.006	2,5X12MM	200	39140.025.012	3X30MM	200	39140.030.030
1,5X8MM	200	39140.015.008	2,5X14MM	200	39140.025.014			
1,5X10MM	200	39140.015.010	2,5X16MM	200	39140.025.016	4X10MM	200	39140.040.010
1,5X12MM	200	39140.015.012	2,5X18MM	200	39140.025.018	4X12MM	200	39140.040.012
1,5X14MM	200	39140.015.014	2,5X20MM	200	39140.025.020	4X16MM	200	39140.040.016
1,5X16MM	200	39140.015.016	2,5X24MM	200	39140.025.024	4X18MM	200	39140.040.018
						4X20MM	200	39140.040.020
2X6MM	200	39140.020.006	3X8MM	200	39140.030.008	4X22MM	200	39140.040.022
2X8MM	200	39140.020.008	3X10MM	200	39140.030.010	4X24MM	200	39140.040.024
2X10MM	200	39140.020.010	3X12MM	200	39140.030.012	4X26MM	200	39140.040.026
2X12MM	200	39140.020.012	3X14MM	200	39140.030.014	4X28MM	200	39140.040.028
2X14MM	200	39140.020.014	3X16MM	200	39140.030.016	4X30MM	200	39140.040.030
2X16MM	200	39140.020.016	3X20MM	200	39140.030.020	4X32MM	100	39140.040.032
2X20MM	200	39140.020.020	3X22MM	200	39140.030.022	4X35MM	100	39140.040.035
			3X24MM	200	39140.030.024	4X40MM	100	39140.040.040
2,5X8MM	200	39140.025.008	3X26MM	200	39140.030.026			

39140 Spring-type straight pin (spiral pin) coiled, standard duty

d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
5X12MM	200	39140.050.012	6X50MM	50	39140.060.050	12X30MM	25	39140.120.030
5X16MM	200	39140.050.016				12X35MM	25	39140.120.035
5X20MM	100	39140.050.020	8X20MM	100	39140.080.020	12X40MM	25	39140.120.040
5X22MM	100	39140.050.022	8X24MM	100	39140.080.024	12X50MM	10	39140.120.050
5X24MM	100	39140.050.024	8X30MM	50	39140.080.030	12X55MM	10	39140.120.055
5X26MM	100	39140.050.026	8X32MM	50	39140.080.032	12X60MM	10	39140.120.060
5X28MM	100	39140.050.028	8X35MM	50	39140.080.035	12X70MM	10	39140.120.070
5X30MM	100	39140.050.030	8X40MM	50	39140.080.040	12X80MM	10	39140.120.080
5X32MM	100	39140.050.032	8X50MM	50	39140.080.050	12X85MM	10	39140.120.085
5X35MM	100	39140.050.035	8X60MM	50	39140.080.060	12X90MM	10	39140.120.090
5X40MM	100	39140.050.040	8X70MM	25	39140.080.070	12X100MM	10	39140.120.100
5X45MM	100	39140.050.045				12X120MM	10	39140.120.120
6X12MM	200	39140.060.012	10X20MM	50	39140.100.020			
6X16MM	200	39140.060.016	10X22MM	50	39140.100.022	16X40MM	5	39140.160.040
6X20MM	100	39140.060.020	10X24MM	50	39140.100.024	16X50MM	5	39140.160.050
6X24MM	100	39140.060.024	10X28MM	50	39140.100.028	16X60MM	5	39140.160.060
6X26MM	100	39140.060.026	10X30MM	50	39140.100.030	16X80MM	5	39140.160.080
6X28MM	100	39140.060.028	10X35MM	25	39140.100.035	16X90MM	5	39140.160.090
6X30MM	100	39140.060.030	10X40MM	25	39140.100.040	16X100MM	5	39140.160.100
6X32MM	100	39140.060.032	10X45MM	25	39140.100.045	16X120MM	5	39140.160.120
6X35MM	100	39140.060.035	10X50MM	25	39140.100.050			
6X40MM	100	39140.060.040	10X60MM	25	39140.100.060			
6X45MM	50	39140.060.045	10X70MM	25	39140.100.070			
			10X80MM	10	39140.100.080			

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring-type straight pin (spiral pin) coiled, standard duty A2



ISO ≈8750
DIN ≈7343
NEN ≈2553



Technical data

d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂	a ≈	V
1	1,05	1,15	0,95	0,3	0,45
1,5	1,62	1,73	1,4	0,5	1,05
2	2,13	2,25	1,9	0,7	1,9
2,5	2,65	2,78	2,4	0,7	2,9
3	3,15	3,3	2,9	0,9	4,2
4	4,2	4,4	3,9	1,1	7,6
5	5,25	5,5	4,85	1,3	11,5
6	6,25	6,5	5,85	1,5	16,8
8	8,3	8,63	7,8	2	30

- V = Shear strength double min. in kN.
- Special features of spring-type straight pins (spiral pins):
- Are used for the dismantlable connection (positioning) of two or more parts and can also be applied as shafts and hinge-, stop- or carrierpins.
- Due to the spiral shaped cross section (approx. 2.1/4 coils) the spring-type straight pins (spiral pins) are very flexible and suitable to be used more times for dynamic loads.
- Equal stress distribution throughout its cross section against the hole wall produces a good press fit, which can absorb shear forces unaffected by the direction.
- Swaged chamfer at both ends, so they can easily be inserted and installed automatically.
- The austenetic steel type is at the manufacturer's discretion, and can vary from the steel types stated in DIN 267-11.
- For the hole diameter d (nom.) with tolerance H12 is recommended except for d (nom.) 1mm the tolerance H10 is recommended.

51430 Spring-type straight pin (spiral pin) coiled, standard duty

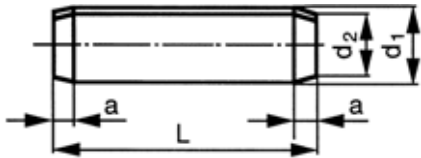
R09A

Material Stainless steel A2
Packaging Standard



d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
1X4MM	200	51430.010.004	3X12MM	200	51430.030.012	5X30MM	100	51430.050.030
1X6MM	200	51430.010.006	3X14MM	200	51430.030.014	5X32MM	100	51430.050.032
1X8MM	200	51430.010.008	3X16MM	200	51430.030.016	5X35MM	100	51430.050.035
1X10MM	200	51430.010.010	3X18MM	200	51430.030.018	5X40MM	100	51430.050.040
1X12MM	200	51430.010.012	3X20MM	200	51430.030.020	5X45MM	100	51430.050.045
			3X22MM	200	51430.030.022			
1,5X4MM	200	51430.015.004	3X24MM	200	51430.030.024	6X12MM	200	51430.060.012
1,5X5MM	200	51430.015.005	3X26MM	200	51430.030.026	6X14MM	200	51430.060.014
1,5X8MM	200	51430.015.008	3X28MM	200	51430.030.028	6X16MM	200	51430.060.016
1,5X10MM	200	51430.015.010	3X30MM	200	51430.030.030	6X18MM	100	51430.060.018
1,5X12MM	200	51430.015.012				6X20MM	100	51430.060.020
1,5X14MM	200	51430.015.014	4X8MM	200	51430.040.008	6X22MM	100	51430.060.022
1,5X16MM	200	51430.015.016	4X10MM	200	51430.040.010	6X24MM	100	51430.060.024
			4X12MM	200	51430.040.012	6X26MM	100	51430.060.026
2X6MM	200	51430.020.006	4X14MM	200	51430.040.014	6X28MM	100	51430.060.028
2X8MM	200	51430.020.008	4X16MM	200	51430.040.016	6X30MM	100	51430.060.030
2X10MM	200	51430.020.010	4X18MM	200	51430.040.018	6X32MM	100	51430.060.032
2X12MM	200	51430.020.012	4X20MM	200	51430.040.020	6X35MM	100	51430.060.035
2X14MM	200	51430.020.014	4X22MM	200	51430.040.022	6X40MM	100	51430.060.040
2X16MM	200	51430.020.016	4X24MM	200	51430.040.024	6X45MM	100	51430.060.045
2X18MM	200	51430.020.018	4X26MM	200	51430.040.026	6X50MM	100	51430.060.050
2X20MM	200	51430.020.020	4X28MM	200	51430.040.028			
			4X30MM	200	51430.040.030	8X16MM	100	51430.080.016
2,5X8MM	200	51430.025.008	4X35MM	100	51430.040.035	8X20MM	100	51430.080.020
2,5X10MM	200	51430.025.010	4X40MM	100	51430.040.040	8X24MM	100	51430.080.024
2,5X12MM	200	51430.025.012				8X26MM	50	51430.080.026
2,5X14MM	200	51430.025.014	5X12MM	200	51430.050.012	8X28MM	50	51430.080.028
2,5X16MM	200	51430.025.016	5X14MM	200	51430.050.014	8X30MM	50	51430.080.030
2,5X18MM	200	51430.025.018	5X16MM	200	51430.050.016	8X32MM	50	51430.080.032
2,5X20MM	200	51430.025.020	5X18MM	100	51430.050.018	8X35MM	50	51430.080.035
2,5X24MM	200	51430.025.024	5X20MM	100	51430.050.020	8X40MM	50	51430.080.040
			5X24MM	100	51430.050.024	8X45MM	50	51430.080.045
3X8MM	200	51430.030.008	5X26MM	100	51430.050.026	8X50MM	50	51430.080.050
3X10MM	200	51430.030.010	5X28MM	100	51430.050.028			

Spring-type straight pin (spiral pin) coiled, heavy duty



ISO 8748
DIN 7344
NEN 2554



Technical data

d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂	a ≈	V
1,5	1,61	1,71	1,4	0,5	1,9
2	2,11	2,21	1,9	0,7	3,5
2,5	2,62	2,73	2,4	0,7	5,5
3	3,12	3,25	2,9	0,9	7,6
4	4,15	4,3	3,9	1,1	13,5
5	5,15	5,35	4,85	1,3	20
6	6,18	6,4	5,85	1,5	30

- V = Shear strength double min. in kN.
- Special features of spring-type straight pins (spiral pins):
- Are used for the dismantable connection (positioning) of two or more parts and can also be applied as shafts and hinge-, stop- or carrierpins.
- Due to the spiral shaped cross section (approx. 2. 1/4 coils) the spring-type straight pins (spiral pins) are very flexible and suitable to be used more times for dynamic loads. Equal stress distribution throughout its cross section against the hole wall produces a good press fit, which can.
- Absorb shear forces unaffected by the direction.
- Swaged chamfer at both ends, so they can easily be inserted and installed automatically.
- For the hole diameter d (nom.) the tolerance H12 is recommended except for d (nom.)1mm, the tolerance H10 is recommended.

39150 Spring-type straight pin (spiral pin) coiled, heavy duty

L09A

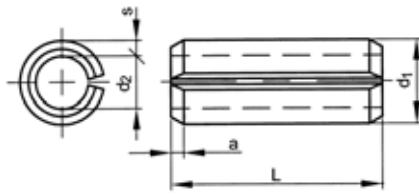
Material Spring steel 420-560 HV30
Packaging Standard



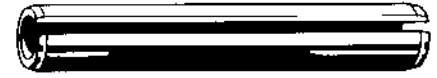
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,5X4MM	200	39150.015.004	3X10MM	200	39150.030.010	5X16MM	200	39150.050.016
1,5X5MM	200	39150.015.005	3X12MM	200	39150.030.012	5X18MM	100	39150.050.018
1,5X6MM	200	39150.015.006	3X14MM	200	39150.030.014	5X20MM	100	39150.050.020
1,5X8MM	200	39150.015.008	3X16MM	200	39150.030.016	5X22MM	100	39150.050.022
1,5X10MM	200	39150.015.010	3X20MM	200	39150.030.020	5X24MM	100	39150.050.024
1,5X12MM	200	39150.015.012	3X22MM	200	39150.030.022	5X26MM	100	39150.050.026
1,5X14MM	200	39150.015.014	3X24MM	200	39150.030.024	5X28MM	100	39150.050.028
1,5X16MM	200	39150.015.016	3X28MM	200	39150.030.028	5X30MM	100	39150.050.030
			3X30MM	200	39150.030.030	5X32MM	100	39150.050.032
2X6MM	200	39150.020.006				5X35MM	100	39150.050.035
2X8MM	200	39150.020.008	4X10MM	200	39150.040.010	5X40MM	100	39150.050.040
2X10MM	200	39150.020.010	4X12MM	200	39150.040.012	5X45MM	100	39150.050.045
2X12MM	200	39150.020.012	4X14MM	200	39150.040.014			
2X14MM	200	39150.020.014	4X16MM	200	39150.040.016	6X14MM	100	39150.060.014
2X16MM	200	39150.020.016	4X18MM	200	39150.040.018	6X16MM	100	39150.060.016
2X20MM	200	39150.020.020	4X20MM	200	39150.040.020	6X18MM	100	39150.060.018
			4X22MM	200	39150.040.022	6X20MM	100	39150.060.020
2,5X10MM	200	39150.025.010	4X24MM	200	39150.040.024	6X22MM	100	39150.060.022
2,5X12MM	200	39150.025.012	4X26MM	200	39150.040.026	6X24MM	100	39150.060.024
2,5X14MM	200	39150.025.014	4X28MM	200	39150.040.028	6X26MM	100	39150.060.026
2,5X16MM	200	39150.025.016	4X30MM	200	39150.040.030	6X28MM	100	39150.060.028
2,5X18MM	200	39150.025.018	4X32MM	100	39150.040.032	6X30MM	100	39150.060.030
2,5X20MM	200	39150.025.020	4X35MM	100	39150.040.035	6X32MM	100	39150.060.032
2,5X22MM	200	39150.025.022	4X40MM	100	39150.040.040	6X35MM	100	39150.060.035
2,5X24MM	200	39150.025.024				6X40MM	100	39150.060.040
			5X12MM	200	39150.050.012	6X50MM	100	39150.060.050
3X8MM	200	39150.030.008	5X14MM	200	39150.050.014			

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring-type straight pin slotted, heavy duty



ISO 8752
 DIN 1481
 NEN 2458
 BS 7060



Technical data

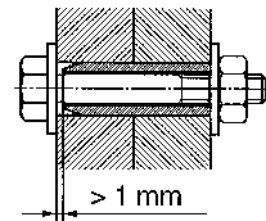
d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂ ≈	s	a (min.)	V
1,5	1,7	1,8	1,1	0,3	0,25	1,58
2	2,3	2,4	1,5	0,4	0,35	2,82
2,5	2,8	2,9	1,8	0,5	0,4	4,38
3	3,3	3,5	2,1	0,6	0,5	6,32
3,5	3,8	4	2,3	0,75	0,6	9,06
4	4,4	4,6	2,8	0,8	0,65	11,24
4,5	4,9	5,1	2,9	1	0,8	15,36
5	5,4	5,6	3,4	1	0,9	17,54
6	6,4	6,7	3,9	1,25	1,2	26,04
7 (#DIN)	7,5	7,8	4,5	1,5	2	31,4
8	8,5	8,8	5,5	1,5	1,6	42,76
9 (#DIN)	9,5	9,8	5,5	2	2	60,66
10	10,5	10,8	6,5	2	2	70,16
12	12,5	12,8	7,5	2,5	2	104,1
13	13,5	13,8	8,5	2,5	2	115,1
14	14,4	14,8	8,5	3	2	144,7
16	16,5	16,8	10,5	3	2	171
18	18,5	18,9	11,5	3,5	2	222,5
20	20,5	20,9	12,5	4	3	280,6

- V = Shear strength double min. in kN.
- For the hole diameter d(nom.) with tolerance field H12 is recommended.

Special features spring-type straight pins:

- are used to connect two or more construction elements to each other
- highly suitable to absorb shear forces
- to avoid movements in light bolt connections spring-type straight pins can be used accordingly to information stated below:

d (nom.) spring-type straight pin	6	8	10	12	16	18
intended for bolt size	M3	M4	M5	M6	M8	M10
associated washers acc. to DIN 7349	3,2	4,3	5,3	6,4	8,4	10,5



39100 Spring-type straight pin slotted, heavy duty

L09A

Material Spring steel 420-560 HV30
Packaging Standard



9

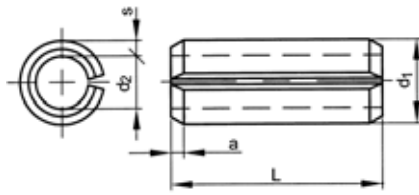
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,5X6MM	200	39100.015.006	2,5X8MM	200	39100.025.008	3X14MM	200	39100.030.014
1,5X8MM	200	39100.015.008	2,5X10MM	200	39100.025.010	3X16MM	200	39100.030.016
1,5X10MM	200	39100.015.010	2,5X12MM	200	39100.025.012	3X18MM	200	39100.030.018
1,5X12MM	200	39100.015.012	2,5X16MM	200	39100.025.016	3X20MM	200	39100.030.020
1,5X16MM	200	39100.015.016	2,5X18MM	200	39100.025.018	3X22MM	200	39100.030.022
1,5X20MM	200	39100.015.020	2,5X20MM	200	39100.025.020	3X24MM	200	39100.030.024
2X4MM	200	39100.020.004	2,5X24MM	200	39100.025.024	3X26MM	200	39100.030.026
2X8MM	200	39100.020.008	2,5X26MM	200	39100.025.026	3X28MM	200	39100.030.028
2X10MM	200	39100.020.010	2,5X28MM	200	39100.025.028	3X30MM	200	39100.030.030
2X12MM	200	39100.020.012	2,5X30MM	200	39100.025.030	3X32MM	200	39100.030.032
2X14MM	200	39100.020.014	2,5X35MM	200	39100.025.035	3X35MM	200	39100.030.035
2X16MM	200	39100.020.016	2,5X40MM	200	39100.025.040	3X40MM	200	39100.030.040
2X20MM	200	39100.020.020				3X45MM	200	39100.030.045
2X24MM	200	39100.020.024	3X6MM	200	39100.030.006	3X50MM	200	39100.030.050
2X26MM	200	39100.020.026	3X8MM	200	39100.030.008	3,5X10MM	200	39100.035.010
2X30MM	200	39100.020.030	3X10MM	200	39100.030.010	3,5X12MM	200	39100.035.012
2X40MM	200	39100.020.040	3X12MM	200	39100.030.012	3,5X16MM	200	39100.035.016

39100 Spring-type straight pin slotted, heavy duty

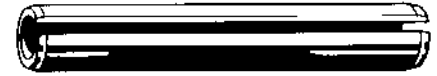
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
3,5X18MM	200	39100.035.018	5X32MM	100	39100.050.032	10X24MM	50	39100.100.024
3,5X20MM	200	39100.035.020	5X35MM	100	39100.050.035	10X26MM	50	39100.100.026
3,5X22MM	200	39100.035.022	5X40MM	100	39100.050.040	10X30MM	50	39100.100.030
3,5X26MM	200	39100.035.026	5X45MM	100	39100.050.045	10X35MM	50	39100.100.035
3,5X30MM	200	39100.035.030	5X50MM	100	39100.050.050	10X40MM	25	39100.100.040
3,5X32MM	200	39100.035.032	5X55MM	100	39100.050.055	10X45MM	25	39100.100.045
3,5X35MM	200	39100.035.035	5X60MM	100	39100.050.060	10X50MM	25	39100.100.050
3,5X40MM	200	39100.035.040	5X70MM	50	39100.050.070	10X55MM	25	39100.100.055
3,5X45MM	200	39100.035.045	5X80MM	50	39100.050.080	10X60MM	25	39100.100.060
3,5X50MM	200	39100.035.050				10X70MM	25	39100.100.070
			6X12MM	200	39100.060.012	10X75MM	25	39100.100.075
4X8MM	200	39100.040.008	6X16MM	100	39100.060.016	10X80MM	10	39100.100.080
4X10MM	200	39100.040.010	6X18MM	100	39100.060.018	10X90MM	10	39100.100.090
4X12MM	200	39100.040.012	6X20MM	100	39100.060.020	10X100MM	10	39100.100.100
4X14MM	200	39100.040.014	6X22MM	100	39100.060.022			
4X16MM	200	39100.040.016	6X24MM	100	39100.060.024	12X24MM	25	39100.120.024
4X18MM	200	39100.040.018	6X26MM	100	39100.060.026	12X30MM	25	39100.120.030
4X20MM	200	39100.040.020	6X28MM	100	39100.060.028	12X36MM	25	39100.120.036
4X22MM	200	39100.040.022	6X30MM	100	39100.060.030	12X40MM	25	39100.120.040
4X24MM	200	39100.040.024	6X32MM	100	39100.060.032	12X45MM	100	39100.120.045
4X26MM	200	39100.040.026	6X35MM	100	39100.060.035	12X50MM	10	39100.120.050
4X28MM	200	39100.040.028	6X40MM	100	39100.060.040	12X60MM	10	39100.120.060
4X30MM	200	39100.040.030	6X45MM	50	39100.060.045	12X65MM	10	39100.120.065
4X32MM	100	39100.040.032	6X50MM	50	39100.060.050	12X70MM	10	39100.120.070
4X35MM	100	39100.040.035	6X55MM	50	39100.060.055	12X80MM	10	39100.120.080
4X40MM	100	39100.040.040	6X60MM	50	39100.060.060	12X90MM	10	39100.120.090
4X45MM	100	39100.040.045	6X65MM	50	39100.060.065	12X100MM	10	39100.120.100
4X50MM	100	39100.040.050	6X70MM	50	39100.060.070			
4X60MM	100	39100.040.060	6X80MM	50	39100.060.080	16X36MM	5	39100.160.036
			6X90MM	50	39100.060.090	16X40MM	5	39100.160.040
4,5X10MM	200	39100.045.010	6X100MM	50	39100.060.100	16X50MM	5	39100.160.050
4,5X12MM	200	39100.045.012				16X60MM	5	39100.160.060
4,5X14MM	200	39100.045.014	8X16MM	500	39100.080.016	16X70MM	5	39100.160.070
4,5X16MM	200	39100.045.016	8X20MM	50	39100.080.020	16X75MM	5	39100.160.075
4,5X20MM	200	39100.045.020	8X24MM	50	39100.080.024	16X80MM	5	39100.160.080
4,5X30MM	100	39100.045.030	8X26MM	50	39100.080.026	16X90MM	5	39100.160.090
4,5X40MM	100	39100.045.040	8X30MM	50	39100.080.030	16X100MM	5	39100.160.100
4,5X45MM	100	39100.045.045	8X32MM	50	39100.080.032	16X120MM	5	39100.160.120
4,5X50MM	200	39100.045.050	8X35MM	50	39100.080.035			
4,5X60MM	200	39100.045.060	8X40MM	50	39100.080.040	20X60MM	5	39100.200.060
			8X45MM	50	39100.080.045	20X70MM	5	39100.200.070
5X10MM	200	39100.050.010	8X50MM	50	39100.080.050	20X80MM	5	39100.200.080
5X12MM	200	39100.050.012	8X55MM	50	39100.080.055	20X85MM	5	39100.200.085
5X16MM	100	39100.050.016	8X60MM	50	39100.080.060	20X90MM	5	39100.200.090
5X18MM	100	39100.050.018	8X70MM	25	39100.080.070	20X95MM	5	39100.200.095
5X20MM	100	39100.050.020	8X80MM	25	39100.080.080	20X100MM	5	39100.200.100
5X24MM	100	39100.050.024	8X100MM	10	39100.080.100	20X120MM	5	39100.200.120
5X26MM	100	39100.050.026						
5X28MM	100	39100.050.028	10X20MM	50	39100.100.020			
5X30MM	100	39100.050.030	10X22MM	50	39100.100.022			

• Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring-type straight pin slotted, light duty



ISO 13337
 DIN 7346
 NEN 2459



Technical data

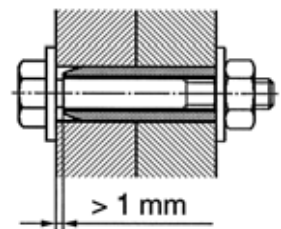
d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂ ≈	s	a	V
2	2,3	2,4	1,9	0,2	0,2	1,5
2,5	2,8	2,9	2,3	0,25	0,25	2,4
3	3,3	3,5	2,7	0,3	0,25	3,5
4	4,4	4,6	3,4	0,5	0,5	8
5	5,4	5,6	4,4	0,5	0,5	10,4
6	6,4	6,7	4,9	0,75	0,7	18
8	8,5	8,8	7	0,75	1,5	24
10	10,5	10,8	8,5	1	2	40
13	13,5	13,8	11	1,25	2	66

- V = Shear strength double min. in kN.
- For the hole diameter d(nom.) with tolerance field H12 is recommended.
- a: pins over 10mm have a single bevelled edge.

Special features spring type straight pins:

- are used to connect two or more construction elements to each other
- highly suitable to absorb shear forces
- to avoid movements in light bolt connections spring type straight pins can be used acc. to information below

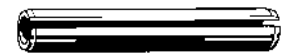
d (nom.) spring type straight pin slotted	6	7	8	11	13	16	18
intended for bolt size	M4	M5	M6	M8	M10	M12	M14
associated washers acc. to DIN 125-1A	4,3	5,3	6,4	8,4	10,5	13	15



39060 Spring-type straight pin slotted, light duty

L09A

Material Spring steel 420-560 HV30
Packaging Standard

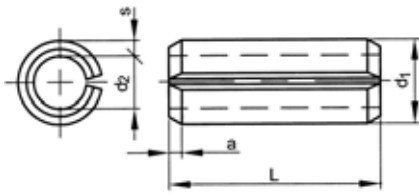


d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
2X8MM	200	39060.020.008	4X10MM	200	39060.040.010	6X20MM	100	39060.060.020
2X10MM	200	39060.020.010	4X12MM	200	39060.040.012	6X24MM	100	39060.060.024
2X12MM	200	39060.020.012	4X14MM	200	39060.040.014	6X28MM	100	39060.060.028
2X14MM	200	39060.020.014	4X16MM	200	39060.040.016	6X30MM	100	39060.060.030
2X16MM	200	39060.020.016	4X18MM	200	39060.040.018	6X32MM	100	39060.060.032
2X18MM	200	39060.020.018	4X20MM	200	39060.040.020	6X36MM	100	39060.060.036
2X20MM	200	39060.020.020	4X22MM	200	39060.040.022	6X40MM	100	39060.060.040
2X24MM	200	39060.020.024	4X24MM	200	39060.040.024	6X50MM	50	39060.060.050
2X28MM	200	39060.020.028	4X28MM	200	39060.040.028			
			4X30MM	200	39060.040.030	8X10MM	100	39060.080.010
2,5X6MM	200	39060.025.006	4X36MM	100	39060.040.036	8X12MM	100	39060.080.012
2,5X8MM	200	39060.025.008	4X40MM	100	39060.040.040	8X16MM	100	39060.080.016
2,5X10MM	200	39060.025.010	4X45MM	100	39060.040.045	8X20MM	100	39060.080.020
2,5X12MM	200	39060.025.012	4X50MM	100	39060.040.050	8X22MM	100	39060.080.022
2,5X14MM	200	39060.025.014				8X24MM	100	39060.080.024
2,5X16MM	200	39060.025.016	5X6MM	200	39060.050.006	8X26MM	100	39060.080.026
2,5X20MM	200	39060.025.020	5X8MM	200	39060.050.008	8X30MM	50	39060.080.030
2,5X24MM	200	39060.025.024	5X10MM	200	39060.050.010	8X32MM	50	39060.080.032
2,5X30MM	200	39060.025.030	5X12MM	200	39060.050.012	8X36MM	50	39060.080.036
			5X16MM	200	39060.050.016	8X40MM	50	39060.080.040
3X8MM	200	39060.030.008	5X20MM	100	39060.050.020	8X45MM	50	39060.080.045
3X10MM	200	39060.030.010	5X28MM	100	39060.050.028	8X50MM	50	39060.080.050
3X12MM	200	39060.030.012	5X30MM	100	39060.050.030			
3X16MM	200	39060.030.016	5X36MM	100	39060.050.036	10X12MM	50	39060.100.012
3X20MM	200	39060.030.020	5X40MM	100	39060.050.040	10X16MM	50	39060.100.016
3X22MM	200	39060.030.022				10X20MM	50	39060.100.020
3X24MM	200	39060.030.024	6X10MM	200	39060.060.010	10X24MM	50	39060.100.024
3X30MM	200	39060.030.030	6X12MM	200	39060.060.012	10X30MM	50	39060.100.030
3X36MM	200	39060.030.036	6X16MM	200	39060.060.016	10X40MM	25	39060.100.040
3X40MM	200	39060.030.040				10X50MM	25	39060.100.050

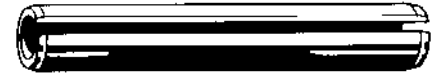
39060 Spring-type straight pin slotted, light duty			
d (nom.) x L	Art.number	d (nom.) x L	Art.number
10X60MM	25	39060.100.060	

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring-type straight pin heavy type A2



ISO ≈8752
 DIN ≈1481
 NEN ≈2458
 BS ≈7060



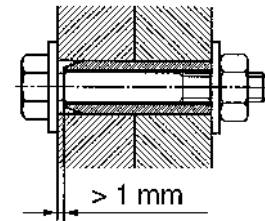
Technical data

d (nom.)	d ₁ (min.)	d ₁ (max.)	d ₂ ≈	s	a	V-1	V-2
1	1,2	1,3	0,8	0,2	0,15	0,22	0,44
1,5	1,7	1,8	1,1	0,3	0,25	0,49	0,98
2	2,3	2,4	1,5	0,4	0,35	0,9	1,8
2,5	2,8	2,9	1,8	0,5	0,4	1,42	2,84
3	3,3	3,5	2,1	0,6	0,5	2,03	4,06
4	4,4	4,6	2,8	0,8	0,65	3,62	7,24
5	5,4	5,6	3,4	1	0,9	5,37	10,74
6	6,4	6,7	3,9	1,25	1,2	8,08	16,16
8	8,5	8,8	5,5	1,5	2	13,23	26,46
10	10,5	10,8	6,5	2	2	21,07	42,14

- V-1 = Shear strength single min. in kN.
- V-2 = Shear strength double min. in kN.
- The austenetic steel type is at the manufacturer's discretion, and can vary from the steel types stated in DIN 267-11.
- For the hole diameter d(nom.) with tolerance field H12 is recommended.
- a: Bevelled edges of 30° on both sides for sizes up to and including 6mm, pins over 6mm have a single bevelled edge of 15°.

Special features spring-type straight pins:

- are used to connect two or more construction elements to each other
- highly suitable to absorb shear forces
- to avoid movements in light bolt connections, spring-type straight pins can be used according to information stated below:

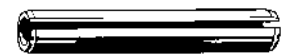


d (nom.) spring-type straight pin slotted	6	8	10	12	16	18
intended for bolt size	M3	M4	M5	M6	M8	M10
associated washers acc. to DIN 7349	3,2	4,3	5,3	6,4	8,4	10,5

51428 Spring-type straight pin heavy type A2

R09A

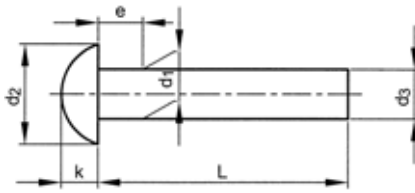
Material Stainless steel A2
Packaging Standard



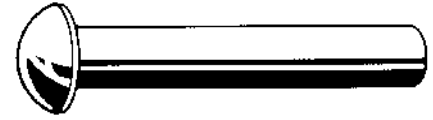
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,5X6MM	200	51428.015.006	3X12MM	200	51428.030.012	5X26MM	100	51428.050.026
1,5X8MM	200	51428.015.008	3X14MM	200	51428.030.014	5X28MM	100	51428.050.028
1,5X10MM	200	51428.015.010	3X16MM	200	51428.030.016	5X30MM	100	51428.050.030
1,5X12MM	200	51428.015.012	3X18MM	200	51428.030.018	5X35MM	100	51428.050.035
1,5X16MM	200	51428.015.016	3X20MM	200	51428.030.020	5X40MM	100	51428.050.040
1,5X20MM	200	51428.015.020	3X24MM	200	51428.030.024	5X45MM	100	51428.050.045
			3X30MM	200	51428.030.030	5X50MM	100	51428.050.050
2X6MM	200	51428.020.006	3X32MM	200	51428.030.032	5X60MM	100	51428.050.060
2X8MM	200	51428.020.008	3X35MM	200	51428.030.035	5X70MM	100	51428.050.070
2X10MM	200	51428.020.010	3X40MM	200	51428.030.040			
2X12MM	200	51428.020.012				6X12MM	100	51428.060.012
2X16MM	200	51428.020.016	4X12MM	200	51428.040.012	6X16MM	100	51428.060.016
2X20MM	200	51428.020.020	4X14MM	200	51428.040.014	6X20MM	500	51428.060.020
2X24MM	200	51428.020.024	4X16MM	200	51428.040.016	6X24MM	100	51428.060.024
2X30MM	200	51428.020.030	4X20MM	200	51428.040.020	6X26MM	100	51428.060.026
			4X24MM	200	51428.040.024	6X30MM	100	51428.060.030
2,5X12MM	200	51428.025.012	4X26MM	200	51428.040.026	6X32MM	100	51428.060.032
2,5X14MM	200	51428.025.014	4X30MM	200	51428.040.030	6X35MM	50	51428.060.035
2,5X16MM	200	51428.025.016	4X32MM	100	51428.040.032	6X40MM	100	51428.060.040
2,5X20MM	200	51428.025.020	4X35MM	50	51428.040.035	6X50MM	50	51428.060.050
2,5X24MM	200	51428.025.024	4X40MM	100	51428.040.040	6X60MM	50	51428.060.060
2,5X26MM	200	51428.025.026	4X50MM	100	51428.040.050	6X70MM	50	51428.060.070
2,5X30MM	200	51428.025.030				6X80MM	50	51428.060.080
			5X16MM	100	51428.050.016			
3X8MM	200	51428.030.008	5X20MM	100	51428.050.020	8X30MM	50	51428.080.030
3X10MM	200	51428.030.010	5X24MM	100	51428.050.024	8X35MM	50	51428.080.035

51428 Spring-type straight pin heavy type A2								
d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
8X40MM	50	51428.080.040	10X20MM	50	51428.100.020	10X80MM	10	51428.100.080
8X50MM	50	51428.080.050	10X30MM	50	51428.100.030	10X100MM	10	51428.100.100
8X60MM	50	51428.080.060	10X35MM	25	51428.100.035			
8X70MM	50	51428.080.070	10X40MM	25	51428.100.040			
8X80MM	50	51428.080.080	10X50MM	25	51428.100.050			
8X100MM	50	51428.080.100	10X60MM	25	51428.100.060			
			10X70MM	25	51428.100.070			

Round head rivet



ISO 1051
 DIN 660/124
 BS 4620



Technical data

d1	d2	d3 (min.)	e (max.)	k (js14)
2	3,5	1,87	1	1,2
2,5	4,4	2,37	1,25	1,5
3	5,2	2,87	1,5	1,8
4	7	3,87	2	2,4
5	8,8	4,82	2,5	3
6	10,5	5,82	3	3,6
8	14	7,76	4	4,8
10 (DIN124)	16	9,4	5	6,5

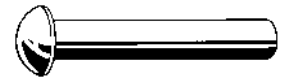
Article groups

Material	Packaging	Code	Page
St DIN1654-2	Standard	39400	9-30
St.St. A2	Standard	51490	9-30
Al 99,5 DIN1790-1	Standard	50670	9-31
Cu	Standard	50370	9-31

39400 Round head rivet

L11C

Material Steel DIN1654-2
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X6MM	1000	39400.020.006	4X30MM	500	39400.040.030	6X60MM	100	39400.060.060
2X8MM	1000	39400.020.008	4X40MM	250	39400.040.040			
2X10MM	1000	39400.020.010				8X10MM	250	39400.080.010
2X12MM	1000	39400.020.012	5X8MM	1000	39400.050.008	8X12MM	250	39400.080.012
2X16MM	1000	39400.020.016	5X10MM	1000	39400.050.010	8X16MM	250	39400.080.016
			5X12MM	1000	39400.050.012	8X20MM	250	39400.080.020
3X6MM	1000	39400.030.006	5X16MM	1000	39400.050.016	8X25MM	250	39400.080.025
3X8MM	1000	39400.030.008	5X20MM	500	39400.050.020	8X30MM	250	39400.080.030
3X10MM	1000	39400.030.010	5X25MM	500	39400.050.025	8X35MM	100	39400.080.035
3X12MM	1000	39400.030.012	5X30MM	500	39400.050.030	8X40MM	100	39400.080.040
3X16MM	1000	39400.030.016	5X40MM	250	39400.050.040	8X50MM	100	39400.080.050
3X20MM	1000	39400.030.020	5X50MM	250	39400.050.050	8X60MM	100	39400.080.060
3X25MM	1000	39400.030.025						
3X30MM	1000	39400.030.030	6X10MM	500	39400.060.010	10X20MM	100	39400.100.020
			6X12MM	500	39400.060.012	10X25MM	100	39400.100.025
4X6MM	1000	39400.040.006	6X16MM	500	39400.060.016	10X30MM	100	39400.100.030
4X8MM	1000	39400.040.008	6X20MM	500	39400.060.020	10X35MM	100	39400.100.035
4X10MM	1000	39400.040.010	6X25MM	250	39400.060.025	10X40MM	100	39400.100.040
4X12MM	1000	39400.040.012	6X30MM	250	39400.060.030	10X50MM	100	39400.100.050
4X16MM	1000	39400.040.016	6X35MM	250	39400.060.035			
4X20MM	1000	39400.040.020	6X40MM	250	39400.060.040			
4X25MM	500	39400.040.025	6X50MM	250	39400.060.050			

51490 Round head rivet

R09A

Material Stainless steel A2
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
3X6MM	200	51490.030.006	3X20MM	200	51490.030.020	4X16MM	100	51490.040.016
3X8MM	200	51490.030.008				4X20MM	100	51490.040.020
3X10MM	200	51490.030.010	4X8MM	200	51490.040.008	4X25MM	100	51490.040.025
3X12MM	200	51490.030.012	4X10MM	200	51490.040.010	4X30MM	100	51490.040.030
3X16MM	200	51490.030.016	4X12MM	200	51490.040.012	4X40MM	100	51490.040.040

51490 Round head rivet

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
4X50MM	100	51490.040.050	5X20MM	100	51490.050.020	6X20MM	100	51490.060.020
4X60MM	100	51490.040.060	5X25MM	100	51490.050.025	6X25MM	100	51490.060.025
			5X30MM	100	51490.050.030	6X30MM	100	51490.060.030
5X8MM	100	51490.050.008				6X35MM	100	51490.060.035
5X10MM	100	51490.050.010	6X10MM	100	51490.060.010			
5X12MM	100	51490.050.012	6X12MM	100	51490.060.012			
5X16MM	100	51490.050.016	6X16MM	100	51490.060.016			

50670 Round head rivet W01A

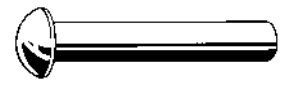
Material Aluminium 99,5 DIN1790-1
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X4MM	1000	50670.020.004	4X8MM	1000	50670.040.008	6X12MM	500	50670.060.012
2X6MM	1000	50670.020.006	4X10MM	1000	50670.040.010	6X16MM	500	50670.060.016
2X8MM	1000	50670.020.008	4X12MM	1000	50670.040.012	6X20MM	500	50670.060.020
2X10MM	1000	50670.020.010	4X16MM	1000	50670.040.016	6X25MM	250	50670.060.025
2X12MM	1000	50670.020.012	4X20MM	1000	50670.040.020	6X30MM	250	50670.060.030
2X16MM	1000	50670.020.016	4X25MM	500	50670.040.025	6X35MM	250	50670.060.035
			4X30MM	500	50670.040.030	6X40MM	250	50670.060.040
3X4MM	1000	50670.030.004	4X40MM	250	50670.040.040	6X50MM	250	50670.060.050
3X6MM	1000	50670.030.006						
3X7MM	1000	50670.030.007	5X8MM	1000	50670.050.008	8X16MM	250	50670.080.016
3X8MM	1000	50670.030.008	5X10MM	1000	50670.050.010	8X20MM	250	50670.080.020
3X10MM	1000	50670.030.010	5X12MM	1000	50670.050.012	8X25MM	250	50670.080.025
3X12MM	1000	50670.030.012	5X16MM	1000	50670.050.016	8X30MM	250	50670.080.030
3X16MM	1000	50670.030.016	5X20MM	500	50670.050.020	8X35MM	100	50670.080.035
3X20MM	1000	50670.030.020	5X25MM	500	50670.050.025	8X40MM	100	50670.080.040
3X25MM	1000	50670.030.025	5X30MM	500	50670.050.030			
3X30MM	1000	50670.030.030	5X40MM	250	50670.050.040			
4X6MM	1000	50670.040.006	6X10MM	500	50670.060.010			

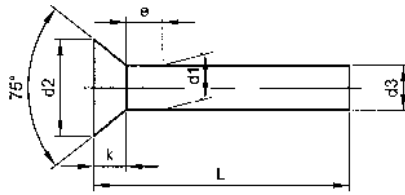
50370 Round head rivet M11F

Material Copper
Packaging Standard

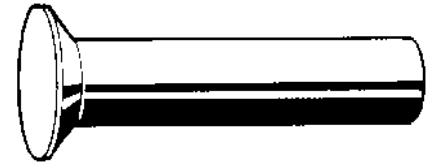


d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X4MM	1000	50370.020.004	4X6MM	1000	50370.040.006	6X12MM	500	50370.060.012
2X6MM	1000	50370.020.006	4X8MM	1000	50370.040.008	6X16MM	500	50370.060.016
2X8MM	1000	50370.020.008	4X10MM	1000	50370.040.010	6X20MM	500	50370.060.020
2X10MM	1000	50370.020.010	4X12MM	1000	50370.040.012	6X25MM	250	50370.060.025
2X12MM	1000	50370.020.012	4X16MM	1000	50370.040.016	6X30MM	250	50370.060.030
2X16MM	1000	50370.020.016	4X20MM	1000	50370.040.020	6X35MM	250	50370.060.035
			4X25MM	500	50370.040.025	6X40MM	250	50370.060.040
2,5X6MM	1000	50370.025.006	4X30MM	500	50370.040.030	6X50MM	250	50370.060.050
2,5X8MM	1000	50370.025.008	4X40MM	250	50370.040.040			
2,5X10MM	1000	50370.025.010						
3X4MM	1000	50370.030.004	5X8MM	1000	50370.050.008	8X16MM	250	50370.080.016
3X6MM	1000	50370.030.006	5X10MM	1000	50370.050.010	8X20MM	250	50370.080.020
3X8MM	1000	50370.030.008	5X12MM	1000	50370.050.012	8X25MM	250	50370.080.025
3X10MM	1000	50370.030.010	5X16MM	1000	50370.050.016	8X30MM	250	50370.080.030
3X12MM	1000	50370.030.012	5X20MM	500	50370.050.020	8X40MM	100	50370.080.040
3X16MM	1000	50370.030.016	5X25MM	500	50370.050.025	8X50MM	100	50370.080.050
3X20MM	1000	50370.030.020	5X30MM	500	50370.050.030			
3X25MM	1000	50370.030.025	5X40MM	250	50370.050.040	10X30MM	100	50370.100.030
3X30MM	1000	50370.030.030	5X50MM	250	50370.050.050	10X40MM	100	50370.100.040
			6X10MM	500	50370.060.010	10X50MM	100	50370.100.050

Countersunk head rivet



ISO 1051
 DIN 661
 BS 4620



Technical data

d1	d2	d3 (min.)	e (max.)	k ≈
2	3,5	1,87	1	1
2,5	4,4	2,37	1,25	1,2
3	5,2	2,87	1,5	1,4
4	7	3,87	2	2
5	8,8	4,82	2,5	2,5
6	10,5	5,82	3	3
8	14	7,76	4	4
10 (DIN302)	14,5	9,4	5	3

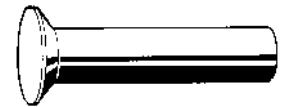
Article groups

Material	Packaging	Code	Page
St DIN1654-2	Standard	39410	9-32
St.St. A2	Standard	51480	9-32
Al 99,5 DIN1790-1	Standard	50680	9-33
Cu	Standard	50380	9-33

39410 Countersunk head rivet

L11C

Material Steel DIN1654-2
Packaging Standard



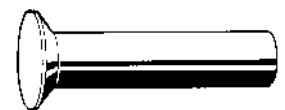
d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X6MM	1000	39410.020.006	4X16MM	1000	39410.040.016	6X25MM	250	39410.060.025
2X8MM	1000	39410.020.008	4X20MM	1000	39410.040.020	6X30MM	250	39410.060.030
2X10MM	1000	39410.020.010	4X25MM	500	39410.040.025	6X35MM	250	39410.060.035
2X12MM	1000	39410.020.012	4X30MM	500	39410.040.030	6X40MM	250	39410.060.040
2X16MM	1000	39410.020.016				6X50MM	250	39410.060.050
			5X8MM	1000	39410.050.008			
3X6MM	1000	39410.030.006	5X10MM	1000	39410.050.010	8X16MM	250	39410.080.016
3X8MM	1000	39410.030.008	5X12MM	1000	39410.050.012	8X20MM	250	39410.080.020
3X10MM	1000	39410.030.010	5X16MM	1000	39410.050.016	8X25MM	250	39410.080.025
3X12MM	1000	39410.030.012	5X20MM	500	39410.050.020	8X30MM	250	39410.080.030
3X16MM	1000	39410.030.016	5X25MM	500	39410.050.025	8X35MM	100	39410.080.035
3X20MM	1000	39410.030.020	5X30MM	500	39410.050.030	8X40MM	100	39410.080.040
3X25MM	1000	39410.030.025	5X40MM	250	39410.050.040	8X50MM	100	39410.080.050
3X30MM	1000	39410.030.030	5X50MM	250	39410.050.050	8X60MM	100	39410.080.060
4X6MM	1000	39410.040.006	6X10MM	500	39410.060.010	10X30MM	100	39410.100.030
4X8MM	1000	39410.040.008	6X12MM	500	39410.060.012	10X40MM	100	39410.100.040
4X10MM	1000	39410.040.010	6X16MM	500	39410.060.016	10X50MM	100	39410.100.050
4X12MM	1000	39410.040.012	6X20MM	500	39410.060.020			

9

51480 Countersunk head rivet

R09A

Material Stainless steel A2
Packaging Standard



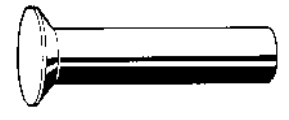
d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
3X6MM	200	51480.030.006	4X10MM	200	51480.040.010	5X8MM	100	51480.050.008
3X8MM	200	51480.030.008	4X12MM	200	51480.040.012	5X10MM	100	51480.050.010
3X10MM	200	51480.030.010	4X16MM	100	51480.040.016	5X12MM	100	51480.050.012
3X12MM	200	51480.030.012	4X20MM	100	51480.040.020	5X16MM	100	51480.050.016
3X16MM	200	51480.030.016	4X25MM	100	51480.040.025	5X20MM	100	51480.050.020
			4X30MM	100	51480.040.030	5X25MM	100	51480.050.025
						5X30MM	100	51480.050.030

51480 Countersunk head rivet ←

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
6X10MM	100	51480.060.010	6X16MM	100	51480.060.016	6X30MM	100	51480.060.030
6X12MM	100	51480.060.012	6X20MM	100	51480.060.020			
			6X25MM	100	51480.060.025			

50680 Countersunk head rivet W01A

Material Aluminium 99,5 DIN1790-1
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X6MM	1000	50680.020.006	4X10MM	1000	50680.040.010	6X12MM	500	50680.060.012
2X8MM	1000	50680.020.008	4X12MM	1000	50680.040.012	6X16MM	500	50680.060.016
2X10MM	1000	50680.020.010	4X16MM	1000	50680.040.016	6X20MM	500	50680.060.020
2X12MM	1000	50680.020.012	4X20MM	1000	50680.040.020	6X25MM	250	50680.060.025
2X16MM	1000	50680.020.016	4X25MM	500	50680.040.025	6X30MM	250	50680.060.030
			4X30MM	500	50680.040.030	6X35MM	250	50680.060.035
3X6MM	1000	50680.030.006				6X40MM	250	50680.060.040
3X8MM	1000	50680.030.008	5X8MM	1000	50680.050.008	6X50MM	250	50680.060.050
3X10MM	1000	50680.030.010	5X10MM	1000	50680.050.010			
3X12MM	1000	50680.030.012	5X12MM	1000	50680.050.012	8X16MM	250	50680.080.016
3X16MM	1000	50680.030.016	5X16MM	1000	50680.050.016	8X20MM	250	50680.080.020
3X20MM	1000	50680.030.020	5X20MM	500	50680.050.020	8X25MM	250	50680.080.025
3X25MM	1000	50680.030.025	5X25MM	500	50680.050.025	8X30MM	250	50680.080.030
3X30MM	1000	50680.030.030	5X30MM	500	50680.050.030	8X35MM	100	50680.080.035
			5X40MM	250	50680.050.040	8X40MM	100	50680.080.040
4X6MM	1000	50680.040.006				8X50MM	100	50680.080.050
4X8MM	1000	50680.040.008	6X10MM	500	50680.060.010			

50380 Countersunk head rivet M11F

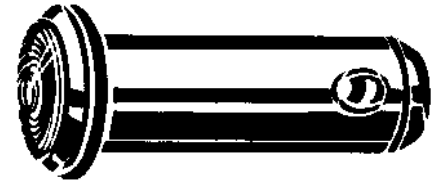
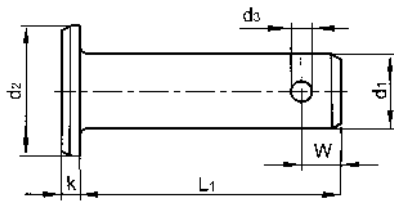
Material Copper
Packaging Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2X6MM	1000	50380.020.006	4X16MM	1000	50380.040.016	6X16MM	500	50380.060.016
2X8MM	1000	50380.020.008	4X20MM	1000	50380.040.020	6X20MM	500	50380.060.020
2X10MM	1000	50380.020.010	4X25MM	500	50380.040.025	6X25MM	250	50380.060.025
			4X30MM	500	50380.040.030	6X30MM	250	50380.060.030
3X6MM	1000	50380.030.006				6X40MM	250	50380.060.040
3X8MM	1000	50380.030.008	5X10MM	1000	50380.050.010	6X50MM	250	50380.060.050
3X10MM	1000	50380.030.010	5X12MM	1000	50380.050.012			
3X12MM	1000	50380.030.012	5X16MM	1000	50380.050.016	8X16MM	250	50380.080.016
3X16MM	1000	50380.030.016	5X20MM	500	50380.050.020	8X20MM	250	50380.080.020
3X20MM	1000	50380.030.020	5X25MM	500	50380.050.025	8X25MM	250	50380.080.025
3X25MM	1000	50380.030.025	5X30MM	500	50380.050.030	8X30MM	250	50380.080.030
			5X40MM	250	50380.050.040	8X40MM	100	50380.080.040
4X8MM	1000	50380.040.008	5X50MM	250	50380.050.050			
4X10MM	1000	50380.040.010						
4X12MM	1000	50380.040.012	6X10MM	500	50380.060.010			

Clevis pin with head and split pin hole

DIN 1434



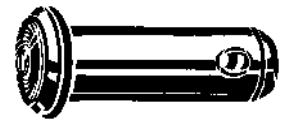
Technical data

d1 (h11)	d2 (h14)	d3 (H14)	k (js14)	W (min.)
4	6	1	1	1,8
5	8	1,6	1,5	2
6	9	1,6	1,5	2,5
8	12	2	2	3
10	14	3,2	2	4
12	17	4	3	5
14	19	4	3	5
16	21	4	3	5

39797 Clevis pin with head and split pin hole

L11F

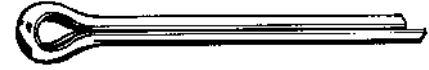
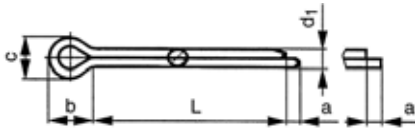
Material Steel
Surface treatment Zinc plated
Packaging Standard



d1 x L1	☒	Art.number	d1 x L1	☒	Art.number	d1 x L1	☒	Art.number
4X12MM	100	39797.040.012	8X22MM	100	39797.080.022	14X40MM	25	39797.140.040
5X14MM	100	39797.050.014	10X28MM	50	39797.100.028	16X45MM	10	39797.160.045
6X18MM	100	39797.060.018	12X35MM	25	39797.120.035			

Split pin (cotter pin)

ISO 1234
DIN 94
 NEN 182
 NF E25-774

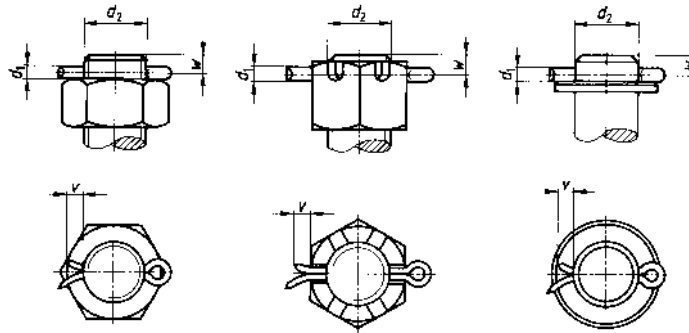


Technical data

d (nom.)	d ₁ (max.)	d ₁ (min.)	a (max.)	b ≈	c (min.)	c (max.)
1	0,9	0,8	1,6	3	1,6	1,8
1,2	1	0,9	2,5	3	1,7	2
1,6	1,4	1,3	2,5	3,2	2,4	2,8
2	1,8	1,7	2,5	4	3,2	3,6
2,5	2,3	2,1	2,5	5	4	4,6
3,2	2,9	2,7	3,2	6,4	5,1	5,8
3,5 (#DIN)	3,2	3	3,5	7	6,1	6,8
4	3,7	3,5	4	8	6,5	7,4
4,5 (#DIN)	4,2	4	4	8,5	7,6	8,2
5	4,6	4,4	4	10	8	9,2
6,3	5,9	5,7	4	12,6	10,3	11,8
7 (#DIN)	6,5	6,7	4,7	12,3	12,45	12,5
8	7,5	7,3	4	16	13,1	15
10	9,5	9,3	6,3	20	16,6	19
13	12,4	12,1	6,3	26	21,7	24,8

- For the split pin hole, tolerance H13 is recommended for d (nom.) ≤ 1,2 mm and tolerance H14 for d (nom.) ≥ 1,6 mm and above.
- Shape of the split pin ends at the manufacturer's discretion.
- The nominal length (L) is with tolerance js17.

Table-choice of split pins



d (nom.)		1	1,6	2	2,5	3,2	4	5	6,3	8	10	13	
d2	parts with thread*	above	3,5	5,5	7	9	11	14	20	27	39	56	80
		up to incl.	4,5	7	9	11	14	20	27	39	56	80	120
	parts without thread**	above	3	5	6	8	9	12	17	23	29	44	69
		up to incl.	4	6	8	9	12	17	23	29	44	69	110
v	min.	4	5	6	6	8	8	10	12	14	16	20	

* For application in parts with external thread the major diameter of the thread or the diameter of the plain part has to be used.

** For railways and constructions subjected to alternating transverse forces, it is recommended to use the following larger split pin size.


The hole distance W depends on the construction part in which the split pin is inserted. If necessary see the standard of that particular part.

Article groups

Material	Surface treatment	Packaging	Code	Page
St		Standard	39310	9-36
St	Zipl	Standard	39350	9-36
St	Zipl yell.p.	Standard	39360	9-37
St.St. A2		Standard	51700	9-37
St.St. A4		Standard	55700	9-37
Br		Standard	50210	9-38
Cu		Standard	50390	9-38

39310 Split pin (cotter pin) L09B

Material	Steel
Packaging	Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1X12MM	250	39310.010.012	3,2X32MM	250	39310.032.032	6,3X40MM	100	39310.063.040
1X16MM	250	39310.010.016	3,2X40MM	250	39310.032.040	6,3X50MM	100	39310.063.050
1X20MM	250	39310.010.020	3,2X50MM	250	39310.032.050	6,3X63MM	100	39310.063.063
1X25MM	250	39310.010.025	3,2X63MM	250	39310.032.063	6,3X71MM	100	39310.063.071
1X32MM	250	39310.010.032				6,3X80MM	100	39310.063.080
			3,5X25MM	250	39310.035.025	6,3X100MM	100	39310.063.100
1,6X10MM	250	39310.016.010	3,5X30MM	250	39310.035.030			
1,6X12MM	250	39310.016.012	3,5X35MM	250	39310.035.035	7X63MM	100	39310.070.063
1,6X16MM	250	39310.016.016	3,5X40MM	250	39310.035.040	7X80MM	100	39310.070.080
1,6X20MM	250	39310.016.020	3,5X50MM	250	39310.035.050			
1,6X25MM	250	39310.016.025	3,5X60MM	250	39310.035.060	8X40MM	100	39310.080.040
1,6X32MM	250	39310.016.032	3,5X70MM	250	39310.035.070	8X45MM	100	39310.080.045
1,6X40MM	250	39310.016.040	3,5X80MM	250	39310.035.080	8X50MM	100	39310.080.050
1,6X50MM	250	39310.016.050				8X63MM	50	39310.080.063
			4X20MM	250	39310.040.020	8X80MM	50	39310.080.080
2X16MM	250	39310.020.016	4X25MM	250	39310.040.025	8X90MM	50	39310.080.090
2X20MM	250	39310.020.020	4X28MM	250	39310.040.028	8X100MM	50	39310.080.100
2X25MM	250	39310.020.025	4X32MM	250	39310.040.032	8X125MM	50	39310.080.125
2X32MM	250	39310.020.032	4X40MM	250	39310.040.040			
2X40MM	250	39310.020.040	4X50MM	200	39310.040.050	10X63MM	50	39310.100.063
2X50MM	250	39310.020.050	4X63MM	200	39310.040.063	10X71MM	50	39310.100.071
2X63MM	250	39310.020.063	4X80MM	200	39310.040.080	10X80MM	50	39310.100.080
						10X90MM	25	39310.100.090
2,5X16MM	250	39310.025.016	5X25MM	200	39310.050.025	10X100MM	25	39310.100.100
2,5X20MM	250	39310.025.020	5X32MM	200	39310.050.032	10X125MM	25	39310.100.125
2,5X25MM	250	39310.025.025	5X36MM	200	39310.050.036	10X160MM	25	39310.100.160
2,5X32MM	250	39310.025.032	5X40MM	200	39310.050.040			
2,5X40MM	250	39310.025.040	5X50MM	200	39310.050.050	13X63MM	25	39310.130.063
2,5X50MM	250	39310.025.050	5X63MM	100	39310.050.063	13X80MM	25	39310.130.080
2,5X63MM	250	39310.025.063	5X80MM	100	39310.050.080	13X100MM	25	39310.130.100
			5X100MM	100	39310.050.100	13X125MM	25	39310.130.125
3,2X16MM	250	39310.032.016				13X140MM	25	39310.130.140
3,2X20MM	250	39310.032.020	6,3X25MM	100	39310.063.025	13X160MM	25	39310.130.160
3,2X25MM	250	39310.032.025	6,3X32MM	100	39310.063.032			

39350 Split pin (cotter pin) L09B

Material	Steel
Surface treatment	Zinc plated
Packaging	Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,6X10MM	250	39350.016.010	3,2X36MM	250	39350.032.036	5X32MM	200	39350.050.032
1,6X12MM	250	39350.016.012	3,2X40MM	250	39350.032.040	5X36MM	200	39350.050.036
1,6X16MM	250	39350.016.016	3,2X45MM	250	39350.032.045	5X40MM	200	39350.050.040
1,6X20MM	250	39350.016.020	3,2X50MM	250	39350.032.050	5X45MM	200	39350.050.045
1,6X25MM	250	39350.016.025	3,2X63MM	250	39350.032.063	5X50MM	200	39350.050.050
1,6X32MM	250	39350.016.032				5X56MM	200	39350.050.056
1,6X40MM	250	39350.016.040	3,5X20MM	250	39350.035.020	5X63MM	100	39350.050.063
1,6X50MM	250	39350.016.050	3,5X25MM	250	39350.035.025	5X71MM	100	39350.050.071
			3,5X30MM	250	39350.035.030	5X80MM	100	39350.050.080
2X16MM	250	39350.020.016	3,5X35MM	250	39350.035.035	5X90MM	100	39350.050.090
2X18MM	250	39350.020.018	3,5X40MM	250	39350.035.040	5X100MM	100	39350.050.100
2X20MM	250	39350.020.020	3,5X50MM	250	39350.035.050			
2X25MM	250	39350.020.025	3,5X60MM	250	39350.035.060	6,3X32MM	100	39350.063.032
2X32MM	250	39350.020.032	3,5X70MM	250	39350.035.070	6,3X36MM	100	39350.063.036
2X36MM	250	39350.020.036	3,5X80MM	250	39350.035.080	6,3X40MM	100	39350.063.040
2X40MM	250	39350.020.040				6,3X45MM	100	39350.063.045
2X50MM	250	39350.020.050	4X20MM	250	39350.040.020	6,3X50MM	100	39350.063.050
2X63MM	250	39350.020.063	4X25MM	250	39350.040.025	6,3X56MM	100	39350.063.056
			4X28MM	250	39350.040.028	6,3X63MM	100	39350.063.063
2,5X16MM	250	39350.025.016	4X32MM	250	39350.040.032	6,3X71MM	100	39350.063.071
2,5X20MM	250	39350.025.020	4X36MM	250	39350.040.036	6,3X80MM	100	39350.063.080
2,5X25MM	250	39350.025.025	4X40MM	250	39350.040.040	6,3X90MM	100	39350.063.090
2,5X32MM	250	39350.025.032	4X50MM	200	39350.040.050	6,3X100MM	100	39350.063.100
2,5X40MM	250	39350.025.040	4X63MM	200	39350.040.063			
2,5X50MM	250	39350.025.050	4X71MM	200	39350.040.071	8X40MM	100	39350.080.040
2,5X63MM	250	39350.025.063	4X80MM	200	39350.040.080	8X45MM	100	39350.080.045
						8X50MM	100	39350.080.050
3,2X16MM	250	39350.032.016	4,5X50MM	200	39350.045.050	8X63MM	50	39350.080.063
3,2X20MM	250	39350.032.020	4,5X63MM	200	39350.045.063	8X71MM	50	39350.080.071
3,2X25MM	250	39350.032.025				8X80MM	50	39350.080.080
3,2X32MM	250	39350.032.032	5X25MM	200	39350.050.025	8X90MM	50	39350.080.090

39350 Split pin (cotter pin)

d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
8X100MM	50	39350.080.100	10X90MM	25	39350.100.090	13X100MM	25	39350.130.100
8X112MM	50	39350.080.112	10X100MM	25	39350.100.100	13X112MM	25	39350.130.112
8X125MM	50	39350.080.125	10X112MM	25	39350.100.112	13X125MM	25	39350.130.125
10X56MM	100	39350.100.056	10X125MM	25	39350.100.125	13X140MM	25	39350.130.140
10X63MM	50	39350.100.063	10X140MM	25	39350.100.140			
10X71MM	50	39350.100.071	10X160MM	25	39350.100.160			
10X80MM	50	39350.100.080	13X71MM	25	39350.130.071			

39360 Split pin (cotter pin) **L09B**

Material Steel
Surface treatment Zinc plated yellow passivated
Packaging Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
2X16MM	250	39360.020.016	3,2X32MM	250	39360.032.032	4X50MM	250	39360.040.050
2X20MM	250	39360.020.020	3,2X40MM	250	39360.032.040	5X32MM	200	39360.050.032
2X25MM	250	39360.020.025	4X20MM	250	39360.040.020	5X40MM	200	39360.050.040
2X32MM	250	39360.020.032	4X25MM	250	39360.040.025	5X50MM	200	39360.050.050
3,2X20MM	250	39360.032.020	4X32MM	250	39360.040.032			
3,2X25MM	250	39360.032.025	4X40MM	250	39360.040.040			

51700 Split pin (cotter pin) **R09A**

Material Stainless steel A2
Packaging Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1X10MM	250	51700.010.010	2,5X25MM	100	51700.025.025	5X40MM	50	51700.050.040
1X12MM	250	51700.010.012	2,5X32MM	100	51700.025.032	5X50MM	50	51700.050.050
1X16MM	250	51700.010.016	2,5X40MM	100	51700.025.040	5X63MM	50	51700.050.063
1X20MM	250	51700.010.020	2,5X50MM	100	51700.025.050	5X80MM	50	51700.050.080
1X25MM	250	51700.010.025				5X100MM	50	51700.050.100
1X32MM	250	51700.010.032	3,2X16MM	100	51700.032.016	6,3X25MM	50	51700.063.025
1X40MM	250	51700.010.040	3,2X20MM	100	51700.032.020	6,3X32MM	50	51700.063.032
1,6X10MM	250	51700.016.010	3,2X25MM	100	51700.032.025	6,3X40MM	50	51700.063.040
1,6X12MM	250	51700.016.012	3,2X32MM	100	51700.032.032	6,3X50MM	50	51700.063.050
1,6X16MM	250	51700.016.016	3,2X36MM	100	51700.032.036	6,3X63MM	50	51700.063.063
1,6X20MM	250	51700.016.020	3,2X40MM	100	51700.032.040	6,3X71MM	50	51700.063.071
1,6X25MM	250	51700.016.025	3,2X45MM	100	51700.032.045	6,3X80MM	50	51700.063.080
1,6X32MM	250	51700.016.032	3,2X50MM	100	51700.032.050	6,3X100MM	50	51700.063.100
1,6X40MM	250	51700.016.040	3,2X63MM	100	51700.032.063			
2X10MM	250	51700.020.010	4X20MM	100	51700.040.020	8X40MM	25	51700.080.040
2X16MM	250	51700.020.016	4X25MM	100	51700.040.025	8X50MM	25	51700.080.050
2X18MM	250	51700.020.018	4X32MM	100	51700.040.032	8X63MM	25	51700.080.063
2X20MM	250	51700.020.020	4X36MM	100	51700.040.036	8X80MM	25	51700.080.080
2X25MM	250	51700.020.025	4X40MM	100	51700.040.040	8X100MM	25	51700.080.100
2X32MM	250	51700.020.032	4X45MM	100	51700.040.045			
2X40MM	250	51700.020.040	4X50MM	100	51700.040.050	10X63MM	25	51700.100.063
2X50MM	250	51700.020.050	4X63MM	100	51700.040.063	10X80MM	25	51700.100.080
2,5X10MM	100	51700.025.010	4X80MM	100	51700.040.080	10X100MM	25	51700.100.100
2,5X16MM	100	51700.025.016	5X25MM	50	51700.050.025	10X125MM	25	51700.100.125
2,5X20MM	100	51700.025.020	5X32MM	50	51700.050.032			
			5X35MM	50	51700.050.035			

• The austenetic steel type is at the manufacturer's discretion, and can vary from the steel types stated in DIN 267-11.

55700 Split pin (cotter pin) **R49A**

Material Stainless steel A4
Packaging Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1X10MM	250	55700.010.010	1,2X8MM *	1000	55700.012.008	1,6X8MM *	1000	55700.016.008
1X12MM	250	55700.010.012	1,2X10MM *	1000	55700.012.010	1,6X10MM	250	55700.016.010
1X16MM	250	55700.010.016	1,2X16MM *	1000	55700.012.016	1,6X12MM	250	55700.016.012
1X18MM *	1000	55700.010.018	1,2X20MM *	1000	55700.012.020	1,6X16MM	250	55700.016.016
1X20MM	250	55700.010.020	1,2X32MM *	1000	55700.012.032	1,6X18MM *	1000	55700.016.018
1X25MM	250	55700.010.025						

55700 Split pin (cotter pin) ←

d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,6X20MM	250	55700.016.020	3,2X22MM *	500	55700.032.022	5X80MM	50	55700.050.080
1,6X25MM	250	55700.016.025	3,2X25MM	100	55700.032.025	5X90MM *	250	55700.050.090
1,6X32MM	250	55700.016.032	3,2X32MM	100	55700.032.032	5X100MM	50	55700.050.100
2X10MM	250	55700.020.010	3,2X36MM *	500	55700.032.036	6,3X25MM	50	55700.063.025
2X12MM *	1000	55700.020.012	3,2X40MM	100	55700.032.040	6,3X32MM	50	55700.063.032
2X16MM	250	55700.020.016	3,2X45MM *	500	55700.032.045	6,3X40MM	50	55700.063.040
2X18MM	250	55700.020.018	3,2X50MM	100	55700.032.050	6,3X50MM	50	55700.063.050
2X20MM	250	55700.020.020	3,2X56MM *	500	55700.032.056	6,3X56MM *	250	55700.063.056
2X22MM *	1000	55700.020.022	3,2X63MM	100	55700.032.063	6,3X63MM	50	55700.063.063
2X25MM	250	55700.020.025	4X16MM *	500	55700.040.016	6,3X71MM *	250	55700.063.071
2X28MM *	1000	55700.020.028	4X20MM	100	55700.040.020	6,3X80MM	50	55700.063.080
2X32MM	250	55700.020.032	4X25MM	100	55700.040.025	6,3X90MM *	250	55700.063.090
2X36MM *	1000	55700.020.036	4X28MM *	500	55700.040.028	6,3X100MM	50	55700.063.100
2X40MM	250	55700.020.040	4X32MM	100	55700.040.032	8X32MM *	100	55700.080.032
2X50MM	250	55700.020.050	4X40MM	100	55700.040.040	8X40MM	25	55700.080.040
2,5X10MM	100	55700.025.010	4X45MM *	500	55700.040.045	8X45MM *	100	55700.080.045
2,5X12MM *	1000	55700.025.012	4X50MM	100	55700.040.050	8X50MM	25	55700.080.050
2,5X16MM	100	55700.025.016	4X56MM *	500	55700.040.056	8X56MM *	100	55700.080.056
2,5X18MM *	1000	55700.025.018	4X63MM	100	55700.040.063	8X63MM	25	55700.080.063
2,5X20MM	100	55700.025.020	4X71MM *	500	55700.040.071	8X71MM *	100	55700.080.071
2,5X22MM *	1000	55700.025.022	4X80MM	100	55700.040.080	8X80MM	25	55700.080.080
2,5X25MM	100	55700.025.025	5X20MM *	250	55700.050.020	8X90MM *	100	55700.080.090
2,5X28MM *	1000	55700.025.028	5X25MM	50	55700.050.025	8X100MM	25	55700.080.100
2,5X32MM	100	55700.025.032	5X28MM *	250	55700.050.028	10X63MM	25	55700.100.063
2,5X36MM *	1000	55700.025.036	5X32MM	50	55700.050.032	10X71MM *	100	55700.100.071
2,5X40MM	100	55700.025.040	5X36MM *	250	55700.050.036	10X80MM	25	55700.100.080
2,5X45MM *	1000	55700.025.045	5X40MM	50	55700.050.040	10X90MM *	100	55700.100.090
2,5X50MM	100	55700.025.050	5X45MM *	250	55700.050.045	10X100MM	25	55700.100.100
			5X50MM	50	55700.050.050	10X125MM	25	55700.100.125
3,2X16MM	100	55700.032.016	5X56MM *	250	55700.050.056			
3,2X18MM *	500	55700.032.018	5X63MM	50	55700.050.063			
3,2X20MM	100	55700.032.020	5X71MM *	250	55700.050.071			

• The austenetic steel type is at the manufacturer's discretion, and can vary from the steel types stated in DIN 267-11.

50210 Split pin (cotter pin) M11F

Material	Brass
Packaging	Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,6X20MM	500	50210.016.020	2,5X50MM	500	50210.025.050	4X63MM	250	50210.040.063
1,6X25MM	500	50210.016.025	2,5X63MM	500	50210.025.063	4X80MM	250	50210.040.080
1,6X32MM	500	50210.016.032						
1,6X40MM	500	50210.016.040	3,2X25MM	250	50210.032.025	5X40MM	100	50210.050.040
2X25MM	500	50210.020.025	3,2X32MM	250	50210.032.032	5X50MM	100	50210.050.050
2X32MM	500	50210.020.032	3,2X40MM	250	50210.032.040	5X63MM	100	50210.050.063
2X40MM	500	50210.020.040	3,2X50MM	250	50210.032.050	5X80MM	100	50210.050.080
2X50MM	500	50210.020.050	3,2X63MM	250	50210.032.063			
			4X25MM	250	50210.040.025	6,3X63MM	100	50210.063.063
2,5X25MM	500	50210.025.025	4X32MM	250	50210.040.032	6,3X80MM	100	50210.063.080
2,5X32MM	500	50210.025.032	4X40MM	250	50210.040.040	6,3X100MM	100	50210.063.100
2,5X40MM	500	50210.025.040	4X50MM	250	50210.040.050			

50390 Split pin (cotter pin) M11F

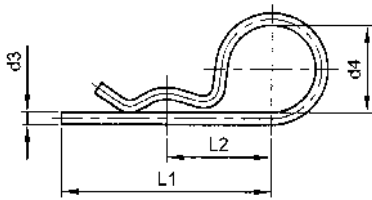
Material	Copper
Packaging	Standard



d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number	d (nom.) x L	☒	Art.number
1,6X20MM	500	50390.016.020	3,2X50MM	250	50390.032.050	5X63MM	100	50390.050.063
1,6X32MM	500	50390.016.032	3,2X63MM	250	50390.032.063	5X80MM	100	50390.050.080
2X32MM	500	50390.020.032	4X32MM	250	50390.040.032	6,3X63MM	100	50390.063.063
2X40MM	500	50390.020.040	4X40MM	250	50390.040.040	6,3X80MM	100	50390.063.080
			4X50MM	250	50390.040.050	6,3X100MM	100	50390.063.100
2,5X32MM	500	50390.025.032	4X63MM	250	50390.040.063			
2,5X40MM	500	50390.025.040	4X80MM	250	50390.040.080			
3,2X32MM	250	50390.032.032	5X40MM	100	50390.050.040			
3,2X40MM	250	50390.032.040	5X50MM	100	50390.050.050			

Spring cotter of a bolt, single

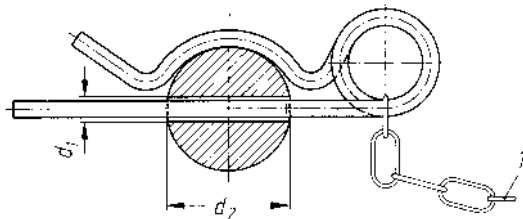
DIN ≈11024



Technical data

d1 (nom.) = hole \varnothing	2,5	3,5	4,5	6	7	8	9
d ₃	2	3	4	5	6	7	8
L ₁	50	60	60	85	105	105	110
L ₂	25	28	30	40	50	50	55
d ₄	10	18	20	24	30	30	28
Assembly data							
For shaft $\varnothing d_2 >$	9	10	16	20	28	28	30
For shaft $\varnothing d_2 \leq$	14	16	20	28	40	45	45

Assembly data



For the hole diameter, d1 (nom.) with tolerance field H13 is recommended.

It is also recommended to connect the spring cotter of a bolt with the unit to be locked so that it cannot be lost.

39610 Spring cotter of a bolt, single

L11E

Material	Spring steel
Surface treatment	Zinc plated yellow passivated
Packaging	Standard

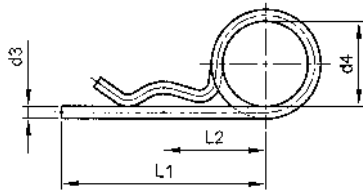


d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number
2,5 (=2 MM)	50	39610.020.001	6 (=5 MM)	25	39610.050.001	9 (=8 MM)	10	39610.080.001
3,5 (=3 MM)	50	39610.030.001	7 (=6 MM)	25	39610.060.001			
4,5 (=4 MM)	25	39610.040.001	8 (=7 MM)	10	39610.070.001			

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring cotter of a bolt, double

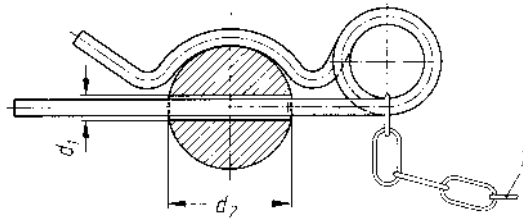
DIN ≈11024



Technical data

d1 (nom.) = hole \varnothing	3,5	4,5	5,5	6,5	8	9
d ₃	3	4	5	6	7	8
L ₁	62	78	92	120	130	130
L ₂	32	44	50	70	72	76
d ₄	16	23	26	30	30	30
Assembly data						
For shaft $\varnothing d_2 >$	14	17	18	24	26	24
For shaft $\varnothing d_2 \leq$	20	24	30	36	40	40

Assembly data



For the hole diameter, d1 (nom.) with tolerance field H13 is recommended.

It is also recommended to connect the spring cotter of a bolt with the unit to be locked so that it cannot be lost.

39630 Spring cotter of a bolt, double

L11E

Material	Spring steel
Surface treatment	Zinc plated yellow passivated
Packaging	Standard

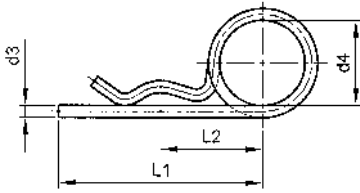


d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number
3,5 (=3 MM)	50	39630.030.001	5,5 (=5 MM)	25	39630.050.001	8 (=7 MM)	10	39630.070.001
4,5 (=4 MM)	25	39630.040.001	6,5 (=6 MM)	25	39630.060.001	9 (=8MM)	10	39630.080.001

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Spring cotter of a bolt, double, A4

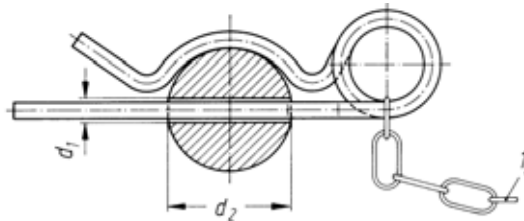
DIN 11024



Technical data

d1 (nom.) = hole \varnothing	3,2	4	5	7	8
d ₃	2,8	3,6	4,5	6,3	7
L ₁	48	64	80	125	150
L ₂	26	32	39	56	63
d ₄	20	20	25	30	30
Assembly data					
For shaft $\varnothing d_2 >$	11,2	14	20	34	45
For shaft $\varnothing d_2 \leq$	14	20	26	45	56

Assembly data



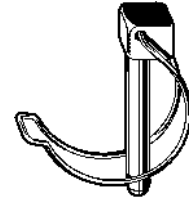
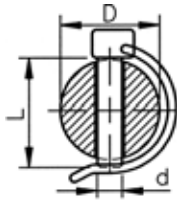
For the hole diameter, d1 (nom.) with tolerance field H13 is recommended.
It is also recommended to connect the spring cotter of a bolt with the unit to be locked so that it cannot be lost.

55970	Spring cotter of a bolt, double, A4	R09A
Material	Stainless steel A4	
Packaging	Standard	



d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number	d1 (=d3)	☒	Art.number
3,2 (=2,8MM)	50	55970.032.001	5 (=4,5MM)	50	55970.050.001	8 (=7MM)	10	55970.080.001
4 (=3,6MM)	50	55970.040.001	7 (=6,3MM)	10	55970.070.001			

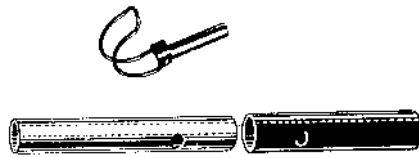
Pipe pin



Technical data

d x L	6x40	6x45	8x40	8x45	8x50	10x40	10x50	10x60
Assembly data								
For nom. size D mm	36	40	36	40	45	36	45	55
For nom. size D inch	1.13/32	1.9/16	1.13/32	1.9/16	1.3/4	1.13/32	1.3/4	2.11/64

Assembly data



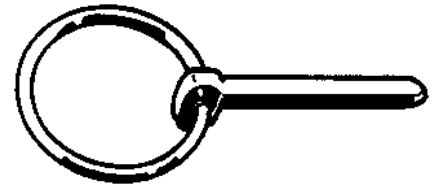
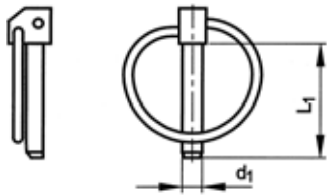
39680 Pipe pin		L11G	
Material	Spring steel		
Surface treatment	Zinc plated yellow passivated		
Packaging	Standard		



d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
6X40MM	25	39680.060.040	8X45MM	25	39680.080.045	10X50MM	10	39680.100.050
6X45MM	25	39680.060.045	8X50MM	25	39680.080.050	10X60MM	10	39680.100.060
8X40MM	25	39680.080.040	10X40MM	10	39680.100.040			

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Linch pin

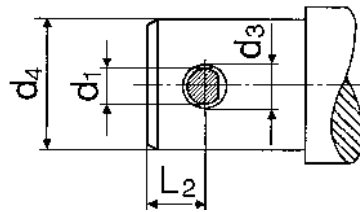


Technical data

d1	4,5	6	7	8	9,5	10	11
Assembly data							
d ₃ (H11)	5	6,2	8	8,5	10	10,5	12
d ₄ (max.)	25	32	32	32	32	32	32
L ₂	8	10	12	12	14	14	14
Form of shaft	a	a	b	b	b	b	b

- Form of shaft a = round, b = flattened on one side.

Assembly data



39660	Linch pin	L11E
Material	Spring steel	
Surface treatment	Zinc plated yellow passivated	
Packaging	Standard	

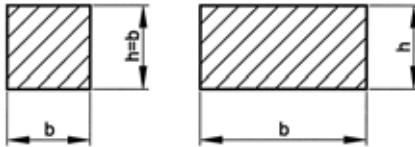


d1 x L1	☒	Art.number	d1 x L1	☒	Art.number	d1 x L1	☒	Art.number
4,5x40MM	25	39660.045.001	8x40MM	25	39660.080.001	11x40MM	10	39660.110.001
6x40MM	25	39660.060.001	9,5x40MM	25	39660.095.001			
7x40MM	25	39660.070.001	10x40MM	10	39660.100.001			

- Warning: electro-galvanizing of these products may cause hydrogen embrittlement.

Bright key steel length 1 meter

DIN 6880



- Bright key steel is cold drawn with a rather smooth and bright surface and corresponding to a high accuracy of dimensions. Usable for the manufacturing of parallel keys and taper keys with gip head.
- For b is the tolerance h9 and for h tolerance h11 (except the size 12 x 8 and square key steel having for b as well as h tolerance h9).

Article groups

Material	Packaging	Code	Page
St C45K	Standard	39270	9-44
St.St. A4	Standard	55512	9-44

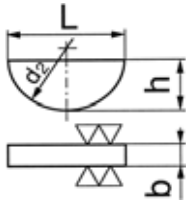
39270 Bright key steel length 1 meter		L11B
Material	Steel C45K	
Packaging	Standard	

b x h	☒	Art.number	b x h	☒	Art.number	b x h	☒	Art.number
3X3MM	2	39270.033.001	12X8MM	2	39270.128.001	20X20MM	1	39270.220.001
4X4MM	2	39270.044.001	12X12MM	2	39270.132.001	22X14MM	1	39270.234.001
5X5MM	2	39270.055.001	14X9MM	1	39270.149.001	22X22MM	1	39270.242.001
6X6MM	2	39270.066.001	14X14MM	1	39270.154.001	25X14MM	1	39270.264.001
7X7MM	2	39270.077.001	16X10MM	1	39270.170.001	28X16MM	1	39270.296.001
8X7MM	2	39270.087.001	16X16MM	1	39270.176.001	32X18MM	1	39270.338.001
8X8MM	2	39270.088.001	18X11MM	1	39270.191.001	36X20MM	1	39270.380.001
10X8MM	2	39270.108.001	18X18MM	1	39270.198.001	40X22MM	1	39270.422.001
10X10MM	2	39270.110.001	20X12MM	1	39270.212.001	45X25MM	1	39270.475.001

55512 Bright key steel length 1 meter		R49A
Material	Stainless steel A4	
Packaging	Standard	
	DIN ≈6880	

b x h	☒	Art.number	b x h	☒	Art.number	b x h	☒	Art.number
4X4MM	2	55512.044.001	12X8MM	2	55512.128.001	22X14MM	1	55512.234.001
5X5MM	2	55512.055.001	14X9MM	1	55512.149.001	25X14MM	1	55512.264.001
6X6MM	2	55512.066.001	16X10MM	1	55512.170.001	28X16MM	1	55512.296.001
8X7MM	2	55512.087.001	18X11MM	1	55512.191.001			
10X8MM	2	55512.108.001	20X12MM	1	55512.212.001			

Woodruff key



ISO 3912
 DIN 6888
 BS 4235-2



Technical data

b (h9) x h (h12)	L ≈	d ₂	For shaft (1.) ø >	For shaft (1.) ø ≤	For shaft (2.) ø >	For shaft (2.) ø ≤
2x2,6	6,76	7	6	8	10	12
2x3,7	9,66	10	6	8	10	12
2x5 (#DIN)	12,65	-	8	10	12	17
2,5x3,7	9,66	10	8	10	12	17
3x3,7	9,66	10	8	10	12	17
3x5	12,65	13	8	10	12	17
3x6,5	15,72	16	-	-	12	17
3x7,5 (#DIN)	18,57	-	10	12	17	22
4x5	12,65	13	10	12	17	22
4x6,5 (#DIN)	15,72	16	10	12	17	22
4x7,5	15,72	16	10	12	17	22
4x9	15,72	16	12	17	22	30
5x6,5	15,72	16	12	17	22	30
5x7,5	18,57	19	12	17	22	30
5x9	21,63	22	-	-	22	30
6x9	21,63	22	17	22	30	38
6x11	27,35	28	-	-	30	38
6x13 (#DIN)	31,43	-	22	30	38	-
6x15 (#DIN)	37,14	-	-	-	-	-
8x11	27,35	28	22	30	38	-
8x13	31,43	32	-	-	38	-
10x13	31,43	32	30	38	38	-

- (1.) Application is valid for keys, which are used as a fitting key transmitting the whole turning moment.
- (2.) Application is valid for keys, which are used only for the positioning of the driving element, while for the transmission of the turning moment other articles e.g. parallel keys or taper pins are used.

Article groups

Material	Class	Packaging	Code	Page
St DIN6882	60	Standard	39200	9-45
St.St. A4		Standard	55516	9-46

39200 Woodruff key

L11B

Material Steel DIN6882
 Class 60
 Packaging Standard



b x h	☒	Art.number	b x h	☒	Art.number	b x h	☒	Art.number
2X2,6MM	100	39200.020.002	4X5MM	50	39200.040.005	6X11MM	25	39200.060.011
2X3,7MM	100	39200.020.003	4X6,5MM	50	39200.040.006	6X13MM	25	39200.060.013
2X5MM	100	39200.020.005	4X7,5MM	50	39200.040.007	6X15MM	25	39200.060.015
2,5X3,7MM	100	39200.025.003	4X9MM	50	39200.040.009	8X11MM	10	39200.080.011
3X3,7MM	100	39200.030.003	5X6,5MM	50	39200.050.006	8X13MM	10	39200.080.013
3X5MM	100	39200.030.005	5X7,5MM	50	39200.050.007	10X13MM	10	39200.100.013
3X6,5MM	100	39200.030.006	5X9MM	50	39200.050.009			
3X7,5MM	50	39200.030.007	6X9MM	50	39200.060.009			