




















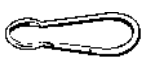






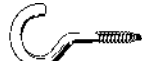
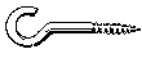




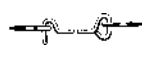

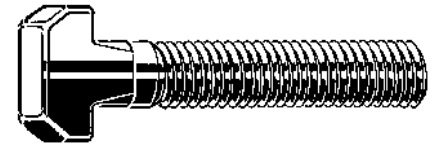
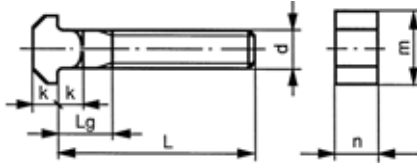


## Hook/eye products<sup>5</sup>

 Page 5-2 DIN 186 B NEN 2309  <b>Metric</b>	 Page 5-4 DIN 444 B NEN 2310 B  <b>Metric</b>	 Page 5-6 DIN 444 LB NEN 2310 B  <b>Fully threaded Metric</b>	 Page 5-7 ISO 3266 DIN 580  <b>Metric CE</b>	 Page 5-9 DIN ≈580 (1957) NEN ≈2347 (1960)  <b>BSW</b>
 Page 5-10 DIN 582 NEN 1928  <b>Metric CE</b>	 Page 5-12 DIN ≈582 (1957) NEN ≈2348 (1960)  <b>BSW</b>	 Page 5-13 DIN 1478  <b>Made from tubes Metric</b>	 Page 5-14 DIN ≈1479  <b>Hexagon Metric</b>	 Page 5-15 DIN 1480  <b>With two welding ends Metric</b>
 Page 5-16 DIN 1480  <b>Metric</b>	 Page 5-17 DIN ≈1480  <b>With hook and eye Metric</b>	 Page 5-18 DIN ≈1480  <b>With hook and eye Stainless steel Metric</b>	 Page 5-19 DIN ≈1480  <b>With two eyes Metric</b>	 Page 5-20 DIN ≈1480  <b>With two eyes stainless steel Metric</b>
 Page 5-21 DIN ≈1480  <b>With two hooks Metric</b>	 Page 5-22 DIN ≈1480  <b>With two hooks stainless steel Metric</b>	 Page 5-23 DIN ≈1480  <b>With two flat eyes Metric</b>	 Page 5-24 DIN ≈82101 A NEN ≈964  <b>Steel</b>	 Page 5-25  <b>Stainless steel</b>
 Page 5-26  <b>Commercial type</b>	 Page 5-27  <b>Steel</b>	 Page 5-28  <b>Stainless steel</b>	 Page 5-29 DIN 741/555 (1987)  <b>Steel</b>	 Page 5-30  <b>Stainless steel</b>
 Page 5-31  <b>Steel/Stainless steel</b>	 Page 5-32  <b>Steel</b>	 Page 5-33  <b>Metric</b>	 Page 5-34  <b>Metric</b>	 Page 5-35  <b>Metric</b>
 Page 5-35  <b>Metric</b>	 Page 5-36  <b>Non Metric</b>	 Page 5-38  <b>Heavy model Non Metric</b>	 Page 5-38  <b>Long model non Metric</b>	 Page 5-39  <b>Non Metric</b>
 Page 5-40  <b>Small hook no Metric</b>	 Page 5-41  <b>Non Metric</b>	 Page 5-42  <b>Heavy model with cross non Metric</b>	 Page 5-42  <b>With point</b>	 Page 5-43  <b>Metric</b>
 Page 5-45  <b>Metric</b>	 Page 5-46  <b>Non Metric</b>	 Page 5-47  <b>Metric</b>	 Page 5-47  <b>For swing hooks</b>	 Page 5-48  <b>Non Metric</b>
 Page 5-48  <b>Steel</b>				

## T-Head bolt with square neck

DIN 186 B  
NEN 2309



### Technical data

d	P	Lg (max.)	k	n	m
M8	1,25	13	5,5	8	18
M10	1,5	16	7	10	21
M12	1,75	19	8	12	26
M16	2	25	10,5	16	30
M20	2,5	31	13	20	36
M24	3	37	15	24	43
M27 (#DIN)	3	40	18	27	48
M30	3,5	43	19	30	54

- For sizes of T-slots, see DIN 649.

## 5

### Article groups

Thread	Material	Class	Packaging	Code	Page
M	St	≥3.6	Standard	16190	5-2
M	St.St. A4		Standard	55782	5-2

#### 16190 T-Head bolt with square neck

F11D

<b>Thread</b>	Metric thread
<b>Material</b>	Steel
<b>Class</b>	≥3.6
<b>Packaging</b>	Standard



d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
M8X30	25	<a href="#">16190.080.030</a>	M16X50	10	<a href="#">16190.160.050</a>	M20X200	5	<a href="#">16190.200.200</a>
M8X40	25	<a href="#">16190.080.040</a>	M16X60	10	<a href="#">16190.160.060</a>	M24X60	5	<a href="#">16190.240.060</a>
M8X50	25	<a href="#">16190.080.050</a>	M16X70	10	<a href="#">16190.160.070</a>	M24X70	5	<a href="#">16190.240.070</a>
M8X60	25	<a href="#">16190.080.060</a>	M16X80	10	<a href="#">16190.160.080</a>	M24X80	5	<a href="#">16190.240.080</a>
M10X30	25	<a href="#">16190.100.030</a>	M16X90	10	<a href="#">16190.160.090</a>	M24X90	5	<a href="#">16190.240.090</a>
M10X40	25	<a href="#">16190.100.040</a>	M16X100	10	<a href="#">16190.160.100</a>	M24X100	5	<a href="#">16190.240.100</a>
M10X50	25	<a href="#">16190.100.050</a>	M16X110	10	<a href="#">16190.160.110</a>	M24X110	5	<a href="#">16190.240.110</a>
M10X60	25	<a href="#">16190.100.060</a>	M16X120	10	<a href="#">16190.160.120</a>	M24X120	5	<a href="#">16190.240.120</a>
M10X70	25	<a href="#">16190.100.070</a>	M16X140	10	<a href="#">16190.160.140</a>	M24X140	5	<a href="#">16190.240.140</a>
M12X40	10	<a href="#">16190.120.040</a>	M16X160	10	<a href="#">16190.160.160</a>	M24X160	5	<a href="#">16190.240.160</a>
M12X50	10	<a href="#">16190.120.050</a>	M16X180	10	<a href="#">16190.160.180</a>	M24X180	5	<a href="#">16190.240.180</a>
M12X60	10	<a href="#">16190.120.060</a>	M16X200	10	<a href="#">16190.160.200</a>	M24X200	5	<a href="#">16190.240.200</a>
M12X70	10	<a href="#">16190.120.070</a>	M20X50	5	<a href="#">16190.200.050</a>	M30X90	3	<a href="#">16190.300.090</a>
M12X80	10	<a href="#">16190.120.080</a>	M20X60	5	<a href="#">16190.200.060</a>	M30X100	3	<a href="#">16190.300.100</a>
M12X90	10	<a href="#">16190.120.090</a>	M20X70	5	<a href="#">16190.200.070</a>	M30X110	3	<a href="#">16190.300.110</a>
M12X100	10	<a href="#">16190.120.100</a>	M20X80	5	<a href="#">16190.200.080</a>	M30X120	3	<a href="#">16190.300.120</a>
M12X110	10	<a href="#">16190.120.110</a>	M20X90	5	<a href="#">16190.200.090</a>	M30X130	3	<a href="#">16190.300.130</a>
M12X120	10	<a href="#">16190.120.120</a>	M20X100	5	<a href="#">16190.200.100</a>	M30X140	3	<a href="#">16190.300.140</a>
M12X140	10	<a href="#">16190.120.140</a>	M20X110	5	<a href="#">16190.200.110</a>	M30X160	3	<a href="#">16190.300.160</a>
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M16X40	10	<a href="#">16190.160.040</a>	M20X140	5	<a href="#">16190.200.140</a>	M30X260	3	<a href="#">16190.300.260</a>
			M20X160	5	<a href="#">16190.200.160</a>			
			M20X180	5	<a href="#">16190.200.180</a>			

#### 55782 T-Head bolt with square neck

R49A

<b>Thread</b>	Metric thread
<b>Material</b>	Stainless steel A4
<b>Packaging</b>	Standard



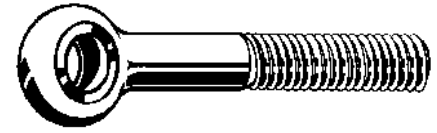
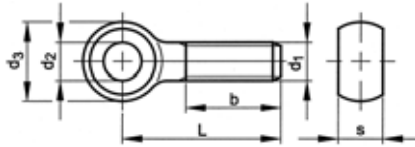
d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
M8X30	10	<a href="#">55782.080.030</a>	M8X60	10	<a href="#">55782.080.060</a>	M10X40	10	<a href="#">55782.100.040</a>
M8X40	10	<a href="#">55782.080.040</a>				M10X50	10	<a href="#">55782.100.050</a>
M8X50	10	<a href="#">55782.080.050</a>	M10X30	10	<a href="#">55782.100.030</a>	M10X70	10	<a href="#">55782.100.070</a>

**55782 T-Head bolt with square neck**

d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
M12X40	5	<a href="#">55782.120.040</a>	M12X100	5	<a href="#">55782.120.100</a>	M16X100	5	<a href="#">55782.160.100</a>
M12X60	5	<a href="#">55782.120.060</a>	M16X50	5	<a href="#">55782.160.050</a>	M20X70	3	<a href="#">55782.200.070</a>
M12X70	5	<a href="#">55782.120.070</a>	M16X70	5	<a href="#">55782.160.070</a>	M20X100	3	<a href="#">55782.200.100</a>
M12X90	5	<a href="#">55782.120.090</a>	M16X80	5	<a href="#">55782.160.080</a>			

## Eye bolt

DIN 444 B  
 NEN 2310 B



### Technical data

d1	P	b (min.): L≤125mm	b (min.): 125mm<L≤200mm	b (min.): L>200mm	d <sub>2</sub> (H9)	d <sub>3</sub> (max.)	s (max.)
M6	1	18	-	-	6	14	7
M8	1,25	22	28	-	8	18	9
M10	1,5	26	32	-	10	20	12
M12	1,75	30	36	49	12	25	14
M16	2	38	44	57	16	32	17
M20	2,5	46	52	65	18	40	22
M24	3	54	60	73	22	45	25
M27	3	60	66	79	25	50	27
M30	3,5	66	72	85	28	55	30

## 5

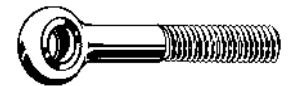
### Article groups

Thread	Material	Class	Packaging	Code	Page
M	St	4.6	Standard	16180	5-4
M	St.St. A2		Standard	51790	5-5
M	St.St. A4		Standard	55790	5-5

### 16180 Eye bolt

F11D

**Thread** Metric thread  
**Material** Steel  
**Class** 4.6  
**Packaging** Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M6X30	25	<a href="#">16180.060.030</a>	M12X60	10	<a href="#">16180.120.060</a>	M20X140	5	<a href="#">16180.200.140</a>
M6X40	25	<a href="#">16180.060.040</a>	M12X70	10	<a href="#">16180.120.070</a>	M20X150	5	<a href="#">16180.200.150</a>
M6X50	25	<a href="#">16180.060.050</a>	M12X80	10	<a href="#">16180.120.080</a>	M20X160	5	<a href="#">16180.200.160</a>
M6X60	25	<a href="#">16180.060.060</a>	M12X90	10	<a href="#">16180.120.090</a>	M20X180	5	<a href="#">16180.200.180</a>
M6X70	25	<a href="#">16180.060.070</a>	M12X100	10	<a href="#">16180.120.100</a>	M20X200	5	<a href="#">16180.200.200</a>
M6X80	25	<a href="#">16180.060.080</a>	M12X110	10	<a href="#">16180.120.110</a>	M24X80	5	<a href="#">16180.240.080</a>
M8X40	25	<a href="#">16180.080.040</a>	M12X120	10	<a href="#">16180.120.120</a>	M24X100	5	<a href="#">16180.240.100</a>
M8X45	25	<a href="#">16180.080.045</a>	M12X130	10	<a href="#">16180.120.130</a>	M24X110	5	<a href="#">16180.240.110</a>
M8X50	25	<a href="#">16180.080.050</a>	M12X140	10	<a href="#">16180.120.140</a>	M24X120	5	<a href="#">16180.240.120</a>
M8X60	25	<a href="#">16180.080.060</a>	M12X150	10	<a href="#">16180.120.150</a>	M24X130	5	<a href="#">16180.240.130</a>
M8X70	25	<a href="#">16180.080.070</a>	M16X60	10	<a href="#">16180.160.060</a>	M24X140	5	<a href="#">16180.240.140</a>
M8X80	25	<a href="#">16180.080.080</a>	M16X70	10	<a href="#">16180.160.070</a>	M24X150	5	<a href="#">16180.240.150</a>
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M8X100	25	<a href="#">16180.080.100</a>	M16X90	10	<a href="#">16180.160.090</a>	M24X180	5	<a href="#">16180.240.180</a>
M8X110	25	<a href="#">16180.080.110</a>	M16X100	10	<a href="#">16180.160.100</a>	M24X200	5	<a href="#">16180.240.200</a>
M8X120	25	<a href="#">16180.080.120</a>	M16X110	10	<a href="#">16180.160.110</a>	M24X220	5	<a href="#">16180.240.220</a>
M8X130	25	<a href="#">16180.080.130</a>	M16X120	10	<a href="#">16180.160.120</a>	M27X120	5	<a href="#">16180.270.120</a>
M8X140	25	<a href="#">16180.080.140</a>	M16X130	10	<a href="#">16180.160.130</a>	M27X140	5	<a href="#">16180.270.140</a>
M10X40	25	<a href="#">16180.100.040</a>	M16X140	10	<a href="#">16180.160.140</a>	M27X160	5	<a href="#">16180.270.160</a>
M10X50	25	<a href="#">16180.100.050</a>	M16X150	10	<a href="#">16180.160.150</a>	M27X180	5	<a href="#">16180.270.180</a>
M10X60	25	<a href="#">16180.100.060</a>	M16X160	10	<a href="#">16180.160.160</a>	M27X200	5	<a href="#">16180.270.200</a>
M10X65	25	<a href="#">16180.100.065</a>	M16X180	10	<a href="#">16180.160.180</a>	M30X120	3	<a href="#">16180.300.120</a>
M10X70	25	<a href="#">16180.100.070</a>	M16X200	10	<a href="#">16180.160.200</a>	M30X140	3	<a href="#">16180.300.140</a>
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M10X90	25	<a href="#">16180.100.090</a>	M20X80	5	<a href="#">16180.200.080</a>	M30X180	3	<a href="#">16180.300.180</a>
M10X100	25	<a href="#">16180.100.100</a>	M20X100	5	<a href="#">16180.200.100</a>	M30X200	3	<a href="#">16180.300.200</a>
M10X110	25	<a href="#">16180.100.110</a>	M20X110	5	<a href="#">16180.200.110</a>			
M10X120	25	<a href="#">16180.100.120</a>	M20X120	5	<a href="#">16180.200.120</a>			
M10X130	25	<a href="#">16180.100.130</a>	M20X130	5	<a href="#">16180.200.130</a>			
M10X140	25	<a href="#">16180.100.140</a>						

<b>51790 Eye bolt</b>		<b>R09A</b>	
<b>Thread</b>	Metric thread		
<b>Material</b>	Stainless steel A2		
<b>Packaging</b>	Standard		



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M6X30	10	<a href="#">51790.060.030</a>	M10X90	10	<a href="#">51790.100.090</a>	M16X180	3	<a href="#">51790.160.180</a>
M6X35	10	<a href="#">51790.060.035</a>	M10X100	10	<a href="#">51790.100.100</a>	M16X200	3	<a href="#">51790.160.200</a>
M6X40	10	<a href="#">51790.060.040</a>	M10X110	5	<a href="#">51790.100.110</a>			
M6X45	10	<a href="#">51790.060.045</a>	M10X120	5	<a href="#">51790.100.120</a>	M20X70 *	10	<a href="#">51790.200.070</a>
M6X50	10	<a href="#">51790.060.050</a>	M10X130	5	<a href="#">51790.100.130</a>	M20X75	2	<a href="#">51790.200.075</a>
M6X55	10	<a href="#">51790.060.055</a>	M10X140	5	<a href="#">51790.100.140</a>	M20X80	2	<a href="#">51790.200.080</a>
M6X60	10	<a href="#">51790.060.060</a>				M20X90	2	<a href="#">51790.200.090</a>
M6X70	10	<a href="#">51790.060.070</a>	M12X50	5	<a href="#">51790.120.050</a>	M20X100	2	<a href="#">51790.200.100</a>
M6X80	10	<a href="#">51790.060.080</a>	M12X55	5	<a href="#">51790.120.055</a>	M20X110	2	<a href="#">51790.200.110</a>
			M12X60	5	<a href="#">51790.120.060</a>	M20X120	2	<a href="#">51790.200.120</a>
M8X30	10	<a href="#">51790.080.030</a>	M12X65	5	<a href="#">51790.120.065</a>	M20X130	2	<a href="#">51790.200.130</a>
M8X35	10	<a href="#">51790.080.035</a>	M12X70	5	<a href="#">51790.120.070</a>	M20X140	2	<a href="#">51790.200.140</a>
M8X40	10	<a href="#">51790.080.040</a>	M12X75	5	<a href="#">51790.120.075</a>	M20X150	1	<a href="#">51790.200.150</a>
M8X45	10	<a href="#">51790.080.045</a>	M12X80	5	<a href="#">51790.120.080</a>	M20X160	1	<a href="#">51790.200.160</a>
M8X50	10	<a href="#">51790.080.050</a>	M12X90	5	<a href="#">51790.120.090</a>	M20X180	1	<a href="#">51790.200.180</a>
M8X55	10	<a href="#">51790.080.055</a>	M12X100	5	<a href="#">51790.120.100</a>	M20X200	1	<a href="#">51790.200.200</a>
M8X60	10	<a href="#">51790.080.060</a>	M12X110	3	<a href="#">51790.120.110</a>			
M8X70	10	<a href="#">51790.080.070</a>	M12X120	3	<a href="#">51790.120.120</a>	M24X80	3	<a href="#">51790.240.080</a>
M8X75	10	<a href="#">51790.080.075</a>	M12X130	3	<a href="#">51790.120.130</a>	M24X90	3	<a href="#">51790.240.090</a>
M8X80	10	<a href="#">51790.080.080</a>	M12X140	3	<a href="#">51790.120.140</a>	M24X110	3	<a href="#">51790.240.110</a>
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			M16X75 *	25	<a href="#">51790.160.075</a>	M24X200	3	<a href="#">51790.240.200</a>
M10X40	10	<a href="#">51790.100.040</a>	M16X80	5	<a href="#">51790.160.080</a>	M24X220	3	<a href="#">51790.240.220</a>
M10X45	10	<a href="#">51790.100.045</a>	M16X90	5	<a href="#">51790.160.090</a>			
M10X50	10	<a href="#">51790.100.050</a>	M16X100	5	<a href="#">51790.160.100</a>	M27X120	3	<a href="#">51790.270.120</a>
M10X55	10	<a href="#">51790.100.055</a>	M16X110	5	<a href="#">51790.160.110</a>	M27X160	3	<a href="#">51790.270.160</a>
M10X60	10	<a href="#">51790.100.060</a>	M16X120	3	<a href="#">51790.160.120</a>	M27X180	3	<a href="#">51790.270.180</a>
M10X65	10	<a href="#">51790.100.065</a>	M16X130	3	<a href="#">51790.160.130</a>	M27X200	3	<a href="#">51790.270.200</a>
M10X70	10	<a href="#">51790.100.070</a>	M16X140	3	<a href="#">51790.160.140</a>			
M10X75	10	<a href="#">51790.100.075</a>	M16X150	3	<a href="#">51790.160.150</a>			
M10X80	10	<a href="#">51790.100.080</a>	M16X160	3	<a href="#">51790.160.160</a>			

5

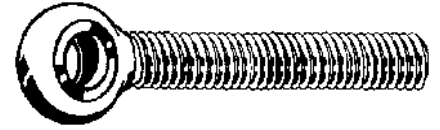
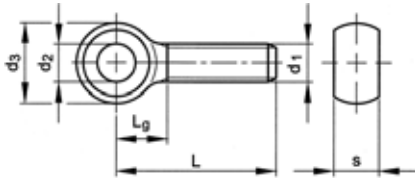
<b>55790 Eye bolt</b>		<b>R49A</b>	
<b>Thread</b>	Metric thread		
<b>Material</b>	Stainless steel A4		
<b>Packaging</b>	Standard		



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M6X30	10	<a href="#">55790.060.030</a>	M10X65 *	25	<a href="#">55790.100.065</a>	M16X70	5	<a href="#">55790.160.070</a>
M6X35 *	50	<a href="#">55790.060.035</a>	M10X70	10	<a href="#">55790.100.070</a>	M16X75 *	25	<a href="#">55790.160.075</a>
M6X40	10	<a href="#">55790.060.040</a>	M10X75 *	25	<a href="#">55790.100.075</a>	M16X80	5	<a href="#">55790.160.080</a>
M6X45 *	50	<a href="#">55790.060.045</a>	M10X80	10	<a href="#">55790.100.080</a>	M16X90	5	<a href="#">55790.160.090</a>
M6X50	10	<a href="#">55790.060.050</a>	M10X90	10	<a href="#">55790.100.090</a>	M16X100	5	<a href="#">55790.160.100</a>
M6X55 *	50	<a href="#">55790.060.055</a>	M10X100	10	<a href="#">55790.100.100</a>	M16X110 *	25	<a href="#">55790.160.110</a>
M6X60 *	50	<a href="#">55790.060.060</a>	M10X110 *	25	<a href="#">55790.100.110</a>	M16X120	3	<a href="#">55790.160.120</a>
			M10X120 *	25	<a href="#">55790.100.120</a>	M16X130	3	<a href="#">55790.160.130</a>
M8X30	10	<a href="#">55790.080.030</a>						
M8X35 *	50	<a href="#">55790.080.035</a>	M12X50	5	<a href="#">55790.120.050</a>	M20X70 *	10	<a href="#">55790.200.070</a>
M8X40	10	<a href="#">55790.080.040</a>	M12X55 *	25	<a href="#">55790.120.055</a>	M20X75 *	10	<a href="#">55790.200.075</a>
M8X45 *	50	<a href="#">55790.080.045</a>	M12X60	5	<a href="#">55790.120.060</a>	M20X80	2	<a href="#">55790.200.080</a>
M8X50	10	<a href="#">55790.080.050</a>	M12X65 *	25	<a href="#">55790.120.065</a>	M20X90	2	<a href="#">55790.200.090</a>
M8X60	10	<a href="#">55790.080.060</a>	M12X70	5	<a href="#">55790.120.070</a>	M20X100	2	<a href="#">55790.200.100</a>
M8X65 *	50	<a href="#">55790.080.065</a>	M12X75 *	25	<a href="#">55790.120.075</a>	M20X120	2	<a href="#">55790.200.120</a>
M8X70	10	<a href="#">55790.080.070</a>	M12X80	5	<a href="#">55790.120.080</a>			
M8X80	10	<a href="#">55790.080.080</a>	M12X90	5	<a href="#">55790.120.090</a>	M24X80 *	10	<a href="#">55790.240.080</a>
M8X90	10	<a href="#">55790.080.090</a>	M12X100	5	<a href="#">55790.120.100</a>	M24X90 *	10	<a href="#">55790.240.090</a>
M8X100	10	<a href="#">55790.080.100</a>	M12X110 *	25	<a href="#">55790.120.110</a>	M24X100	3	<a href="#">55790.240.100</a>
			M12X120	3	<a href="#">55790.120.120</a>	M24X110 *	10	<a href="#">55790.240.110</a>
M10X40	10	<a href="#">55790.100.040</a>	M12X130 *	25	<a href="#">55790.120.130</a>	M24X120	3	<a href="#">55790.240.120</a>
M10X45 *	25	<a href="#">55790.100.045</a>	M12X150 *	10	<a href="#">55790.120.150</a>	M24X130 *	10	<a href="#">55790.240.130</a>
M10X50	10	<a href="#">55790.100.050</a>				M24X140	3	<a href="#">55790.240.140</a>
M10X55 *	25	<a href="#">55790.100.055</a>	M16X60 *	25	<a href="#">55790.160.060</a>	M24X150 *	10	<a href="#">55790.240.150</a>
M10X60	10	<a href="#">55790.100.060</a>	M16X65 *	25	<a href="#">55790.160.065</a>			

## Eye bolt fully threaded

DIN 444 LB  
NEN 2310 B



### Technical data

d1	P	Lg (max.)	d2 (H9)	d3 (max.)	s (max.)
M5	0,8	11	5	12	6
M6	1	14	6	14	7
M8	1,25	16	8	18	9
M10	1,5	18	10	20	12
M12	1,75	23	12	25	14
M16	2	27	16	32	17
M20	2,5	32	18	40	22

### 16182 Eye bolt fully threaded

F11D

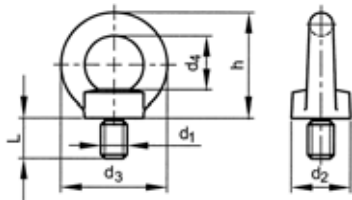
**Thread** Metric thread  
**Material** Steel  
**Class** 4.6  
**Surface treatment** Zinc plated  
**Packaging** Standard



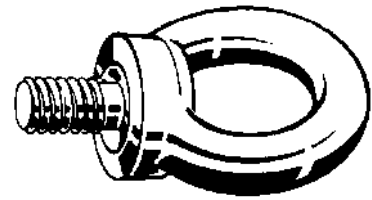
5

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M5X25	50	<a href="#">16182.050.025</a>	M10X80	25	<a href="#">16182.100.080</a>	M16X110	10	<a href="#">16182.160.110</a>
M5X35	50	<a href="#">16182.050.035</a>	M10X100	25	<a href="#">16182.100.100</a>	M16X120	10	<a href="#">16182.160.120</a>
M6X30	25	<a href="#">16182.060.030</a>	M10X120	25	<a href="#">16182.100.120</a>	M16X140	10	<a href="#">16182.160.140</a>
M6X40	25	<a href="#">16182.060.040</a>	M10X140	25	<a href="#">16182.100.140</a>	M16X160	10	<a href="#">16182.160.160</a>
M6X50	25	<a href="#">16182.060.050</a>	M12X60	10	<a href="#">16182.120.060</a>	M16X180	10	<a href="#">16182.160.180</a>
M8X40	25	<a href="#">16182.080.040</a>	M12X70	10	<a href="#">16182.120.070</a>	M16X200	10	<a href="#">16182.160.200</a>
M8X50	25	<a href="#">16182.080.050</a>	M12X80	10	<a href="#">16182.120.080</a>	M20X100	5	<a href="#">16182.200.100</a>
M8X60	25	<a href="#">16182.080.060</a>	M12X100	10	<a href="#">16182.120.100</a>	M20X120	5	<a href="#">16182.200.120</a>
M8X80	25	<a href="#">16182.080.080</a>	M12X110	10	<a href="#">16182.120.110</a>	M20X140	5	<a href="#">16182.200.140</a>
M10X40	25	<a href="#">16182.100.040</a>	M12X120	10	<a href="#">16182.120.120</a>	M20X150	5	<a href="#">16182.200.150</a>
M10X50	25	<a href="#">16182.100.050</a>	M12X140	10	<a href="#">16182.120.140</a>	M20X160	5	<a href="#">16182.200.160</a>
M10X60	25	<a href="#">16182.100.060</a>	M16X70	10	<a href="#">16182.160.070</a>	M20X180	5	<a href="#">16182.200.180</a>
M10X70	25	<a href="#">16182.100.070</a>	M16X80	10	<a href="#">16182.160.080</a>	M20X200	5	<a href="#">16182.200.200</a>
M10X75	25	<a href="#">16182.100.075</a>	M16X90	10	<a href="#">16182.160.090</a>			
			M16X100	10	<a href="#">16182.160.100</a>			

## Lifting eye bolt with CE marking



ISO 3266  
**DIN 580**  
 NEN 1927  
 BS 4278

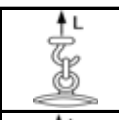
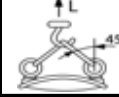


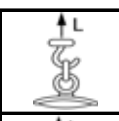
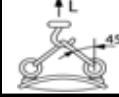
### Technical data

d1	P	d2	d3	d4	h	L
M6 (#DIN)	1	20	36	20	36	13
M8	1,25	20	36	20	36	13
M10	1,5	25	45	25	45	17
M12	1,75	30	54	30	53	20,5
M14 (#DIN)	2	30	54	30	53	20,5
M16	2	35	63	35	62	27
M18 (#DIN)	2,5	35	63	35	62	27
M20	2,5	40	72	40	71	30
M22 (#DIN)	2,5	40	72	40	71	30
M24	3	50	90	50	90	36
M27 (#DIN)	3	50	90	50	90	36
M30	3,5	65	108	60	109	45
M33 (#DIN)	3,5	65	108	60	109	45
M36	4	75	126	70	128	54
M39 (#DIN)	4	75	126	70	128	54
M42	4,5	85	144	80	147	63
M45 (#DIN)	4,5	85	144	80	147	63
M48	5	100	166	90	168	68
M52 (#DIN)	5	110	184	100	187	78
M56	5,5	110	184	100	187	78
M64	6	120	206	110	208	90
M72x6	6	150	260	140	260	100

- If lifting eye bolts form part of lifting equipment, CE marking is necessary.
- Lifting eye bolt do not require CE marking if not used for lifting (as towing eyes for example) or is only used once for lifting (such as for moving machines).

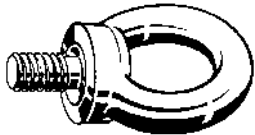
### Maximum load L (N)

		M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
1 x bolt		900	1400	2300	3400	5000	7000	9300	12000	15000	18000	25000
2 x bolt		600	1000	1700	2400	3500	5000	6500	8600	10500	12900	18300

		M30	M33	M36	M39	M42	M45	M48	M52	M56	M64	M72x6
1 x bolt		32000	42000	46000	60000	63000	78000	86000	99000	115000	160000	200000
2 x bolt		23000	30500	33000	44000	45000	55000	61000	71000	82000	110000	140000

### Article groups

Thread	Material	Surface treatment	Packaging	Code	Page
M	St C15E		Standard	16000	5-8
M	St C15E	Zipl	Standard	16010	5-8
M	St.St. A2		Standard	51940	5-8
M	St.St. A4		Standard	55940	5-8

16000 Lifting eye bolt with CE marking		F11E
<b>Thread</b>	Metric thread	 
<b>Material</b>	Steel C15E	
<b>Packaging</b>	Standard	

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	25	<a href="#">16000.060.001</a>	M20	10	<a href="#">16000.200.001</a>	M39	1	<a href="#">16000.390.001</a>
M8	25	<a href="#">16000.080.001</a>	M22	5	<a href="#">16000.220.001</a>	M42	1	<a href="#">16000.420.001</a>
M10	25	<a href="#">16000.100.001</a>	M24	5	<a href="#">16000.240.001</a>	M48	1	<a href="#">16000.480.001</a>
M12	25	<a href="#">16000.120.001</a>	M27	5	<a href="#">16000.270.001</a>	M56	1	<a href="#">16000.560.001</a>
M14	10	<a href="#">16000.140.001</a>	M30	1	<a href="#">16000.300.001</a>	M64	1	<a href="#">16000.640.001</a>
M16	10	<a href="#">16000.160.001</a>	M33	1	<a href="#">16000.330.001</a>	M72X6,00	1	<a href="#">16000.720.001</a>
M18	10	<a href="#">16000.180.001</a>	M36	1	<a href="#">16000.360.001</a>			

16010 Lifting eye bolt with CE marking		F11E
<b>Thread</b>	Metric thread	 
<b>Material</b>	Steel C15E	
<b>Surface treatment</b>	Zinc plated	
<b>Packaging</b>	Standard	

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	25	<a href="#">16010.060.001</a>	M20	10	<a href="#">16010.200.001</a>	M42	1	<a href="#">16010.420.001</a>
M8	25	<a href="#">16010.080.001</a>	M24	5	<a href="#">16010.240.001</a>	M45	1	<a href="#">16010.450.001</a>
M10	25	<a href="#">16010.100.001</a>	M27	5	<a href="#">16010.270.001</a>	M48	1	<a href="#">16010.480.001</a>
M12	25	<a href="#">16010.120.001</a>	M30	1	<a href="#">16010.300.001</a>	M52	1	<a href="#">16010.520.001</a>
M14	10	<a href="#">16010.140.001</a>	M33	1	<a href="#">16010.330.001</a>	M56	1	<a href="#">16010.560.001</a>
M16	10	<a href="#">16010.160.001</a>	M36	1	<a href="#">16010.360.001</a>	M64	1	<a href="#">16010.640.001</a>
M18	10	<a href="#">16010.180.001</a>	M39	1	<a href="#">16010.390.001</a>			

51940 Lifting eye bolt with CE marking		R09A
<b>Thread</b>	Metric thread	 
<b>Material</b>	Stainless steel A2	
<b>Packaging</b>	Standard	
	ISO ≈3266	
	DIN ≈580	
	NEN ≈1927	
	BS ≈4278	

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51940.060.001</a>	M12	10	<a href="#">51940.120.001</a>	M24	3	<a href="#">51940.240.001</a>
M8	10	<a href="#">51940.080.001</a>	M16	5	<a href="#">51940.160.001</a>	M27	3	<a href="#">51940.270.001</a>
M10	10	<a href="#">51940.100.001</a>	M20	5	<a href="#">51940.200.001</a>	M30	1	<a href="#">51940.300.001</a>

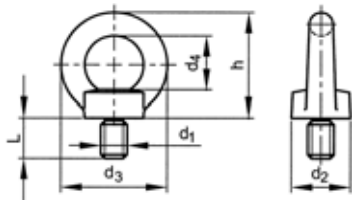
55940 Lifting eye bolt with CE marking		R49A
<b>Thread</b>	Metric thread	 
<b>Material</b>	Stainless steel A4	
<b>Packaging</b>	Standard	
	ISO ≈3266	
	DIN ≈580	
	NEN ≈1927	
	BS ≈4278	

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">55940.060.001</a>	M12	10	<a href="#">55940.120.001</a>	M24	3	<a href="#">55940.240.001</a>
M8	10	<a href="#">55940.080.001</a>	M16	5	<a href="#">55940.160.001</a>	M27	3	<a href="#">55940.270.001</a>
M10	10	<a href="#">55940.100.001</a>	M20	5	<a href="#">55940.200.001</a>			

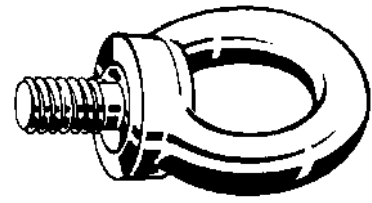
5



**Lifting eye bolt non-metric**



DIN ≈580 (1957)  
NEN ≈2347 (1960)



**Technical data**

d1	Threads per inch	d2	d3	d4	h	L
5/16	18	20	36	20	36	13
3/8	16	25	45	25	45	17
1/2	12	30	54	30	53	22
5/8	11	35	63	35	62	27
3/4	10	40	72	40	71	30
7/8	9	45	81	45	81	35
1.IN.	8	50	90	50	90	36
1.1/4	7	65	108	60	109	45
1.1/2	6	75	126	70	128	55
1.3/4	5	100	166	90	168	70
2.IN.	4,5	100	166	90	168	70

- Whitworth thread (BSW) is not internationally recommended. It is advised to use metric (M).
- C15 material has been standardised and has a minimum impact strength of 80 Joule (ISO-testpiece) resp. 90 Joule (DIN-testpiece).

5

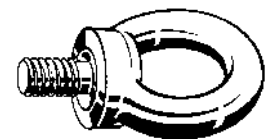
**Maximum load L (N)**

		5/16	3/8	1/2	5/8	3/4	7/8	1.IN.	1.1/4	1.1/2	1.3/4	2.IN.
1 x bolt		1400	2300	3400	7000	12000	18000	18000	46000	63000	86000	115000
2 x bolt		1000	1700	2400	5000	8600	12900	12900	33000	45000	61000	82000

**16040 Lifting eye bolt non-metric**

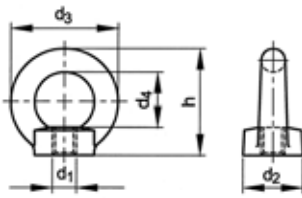
X08A

**Thread** British Standard Whitworth  
**Material** Steel C15  
**Packaging** Standard

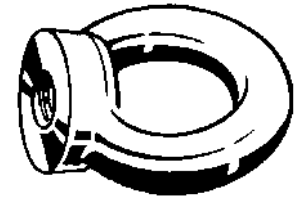


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5/16	25	<a href="#">16040.079.001</a>	3/4	10	<a href="#">16040.191.001</a>	1.1/2	1	<a href="#">16040.381.001</a>
3/8	25	<a href="#">16040.096.001</a>	7/8	5	<a href="#">16040.222.001</a>	1.3/4	1	<a href="#">16040.444.001</a>
1/2	25	<a href="#">16040.127.001</a>	1.IN.	5	<a href="#">16040.254.001</a>	2.IN.	1	<a href="#">16040.508.001</a>
5/8	10	<a href="#">16040.158.001</a>	1.1/4	1	<a href="#">16040.317.001</a>			

## Lifting eye nut with CE marking



DIN 582  
NEN 1928


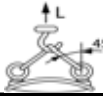


### Technical data

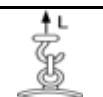
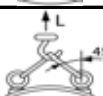
d1	P	d2	d3	d4	h
M6 (#DIN)	1	20	36	20	36
M8	1,25	20	36	20	36
M10	1,5	25	45	25	45
M12	1,75	30	54	30	53
M14 (#DIN)	2	30	54	30	53
M16	2	35	63	35	62
M18 (#DIN)	2,5	35	63	35	62
M20	2,5	40	72	40	71
M22 (#DIN)	2,5	40	72	40	71
M24	3	50	90	50	90
M27 (#DIN)	3	65	108	60	109
M30	3,5	65	108	60	109
M33 (#DIN)	3,5	65	108	60	109
M36	4	75	126	70	128
M39 (#DIN)	4	75	126	70	128
M42	4,5	85	144	80	147
M48	5	100	166	90	168
M56	5,5	110	184	100	187
M64	6	120	206	110	208
M72x6	6	150	260	140	260

- If lifting eye nuts form part of lifting equipment, CE marking is necessary.
- Lifting eye nuts do not require CE marking if not used for lifting (as towing eyes for example).

### Maximum load L (N)

		M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
1 x nut		900	1400	2300	3400	5000	7000	9300	12000	15000	18000	25000
2 x nut		600	1000	1700	2400	3500	5000	6500	8600	10500	12900	18300

		M30	M33	M36	M39	M42	M45	M48	M52	M56	M64	M72x6
1 x nut		32000	42000	46000	60000	63000	78000	86000	99000	115000	160000	200000
2 x nut		23000	30500	33000	44000	45000	55000	61000	71000	82000	110000	140000

### Article groups


Thread	Material	Surface treatment	Packaging	Code	Page
M	St C15E		Standard	16100	5-11
M	St C15E	Zipl	Standard	16110	5-11
M	St.St. A2		Standard	51950	5-11
M	St.St. A4		Standard	55950	5-11

16100 Lifting eye nut with CE marking		F11E	
<b>Thread</b>	Metric thread		
<b>Material</b>	Steel C15E		
<b>Packaging</b>	Standard		

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	25	<a href="#">16100.060.001</a>	M20	10	<a href="#">16100.200.001</a>	M39	1	<a href="#">16100.390.001</a>
M8	25	<a href="#">16100.080.001</a>	M22	5	<a href="#">16100.220.001</a>	M42	1	<a href="#">16100.420.001</a>
M10	25	<a href="#">16100.100.001</a>	M24	5	<a href="#">16100.240.001</a>	M48	1	<a href="#">16100.480.001</a>
M12	25	<a href="#">16100.120.001</a>	M27	5	<a href="#">16100.270.001</a>	M56	1	<a href="#">16100.560.001</a>
M14	10	<a href="#">16100.140.001</a>	M30	1	<a href="#">16100.300.001</a>	M64	1	<a href="#">16100.640.001</a>
M16	10	<a href="#">16100.160.001</a>	M33	1	<a href="#">16100.330.001</a>	M72X6,00	1	<a href="#">16100.720.001</a>
M18	10	<a href="#">16100.180.001</a>	M36	1	<a href="#">16100.360.001</a>			

16110 Lifting eye nut with CE marking		F11E	
<b>Thread</b>	Metric thread		
<b>Material</b>	Steel C15E		
<b>Surface treatment</b>	Zinc plated		
<b>Packaging</b>	Standard		

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	25	<a href="#">16110.060.001</a>	M18	10	<a href="#">16110.180.001</a>	M36	1	<a href="#">16110.360.001</a>
M8	25	<a href="#">16110.080.001</a>	M20	10	<a href="#">16110.200.001</a>	M39	1	<a href="#">16110.390.001</a>
M10	25	<a href="#">16110.100.001</a>	M24	5	<a href="#">16110.240.001</a>	M42	1	<a href="#">16110.420.001</a>
M12	25	<a href="#">16110.120.001</a>	M27	5	<a href="#">16110.270.001</a>	M48	1	<a href="#">16110.480.001</a>
M14	10	<a href="#">16110.140.001</a>	M30	1	<a href="#">16110.300.001</a>	M56	1	<a href="#">16110.560.001</a>
M16	10	<a href="#">16110.160.001</a>	M33	1	<a href="#">16110.330.001</a>	M64	1	<a href="#">16110.640.001</a>

51950 Lifting eye nut with CE marking		R09A	
<b>Thread</b>	Metric thread		
<b>Material</b>	Stainless steel A2		
<b>Packaging</b>	Standard DIN ≈582 NEN ≈1928		

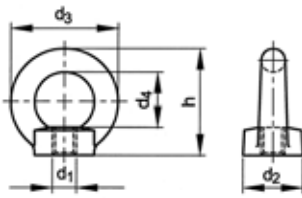
d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51950.060.001</a>	M12	10	<a href="#">51950.120.001</a>	M24	3	<a href="#">51950.240.001</a>
M8	10	<a href="#">51950.080.001</a>	M16	5	<a href="#">51950.160.001</a>			
M10	10	<a href="#">51950.100.001</a>	M20	5	<a href="#">51950.200.001</a>			

55950 Lifting eye nut with CE marking		R49A	
<b>Thread</b>	Metric thread		
<b>Material</b>	Stainless steel A4		
<b>Packaging</b>	Standard DIN ≈582 NEN ≈1928		

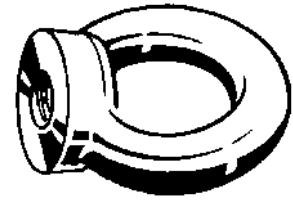
d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M8	10	<a href="#">55950.080.001</a>	M12	10	<a href="#">55950.120.001</a>	M20	5	<a href="#">55950.200.001</a>
M10	10	<a href="#">55950.100.001</a>	M16	5	<a href="#">55950.160.001</a>	M24	3	<a href="#">55950.240.001</a>

5

## Lifting eye nut



DIN ≈582 (1957)  
 NEN ≈2348 (1960)



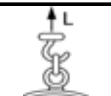
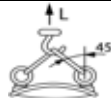
### Technical data

d1	Threads per inch	d2	d3	d4	h
5/16	18	20	36	20	36
3/8	16	25	45	25	45
1/2	12	30	54	30	53
5/8	11	35	63	35	62
3/4	10	40	72	40	71
7/8	9	45	81	45	81
1.IN.	8	50	90	50	90
1.1/4	7	65	108	60	109
1.1/2	6	75	126	70	128
1.3/4	5	85	144	80	147
2.IN.	4,5	100	166	90	168

5

- Whitworth thread (BSW) is not internationally recommended.
- It is advised to use metric (M).

### Maximum load L (N)

		5/16	3/8	1/2	5/8	3/4	7/8	1.IN.	1.1/4	1.1/2	1.3/4	2.IN.
1 x nut		1400	2300	3400	7000	12000	18000	18000	46000	63000	86000	115000
2 x nut		1000	1700	2400	5000	8600	12900	12900	33000	45000	61000	82000

### 16140 Lifting eye nut

X08A

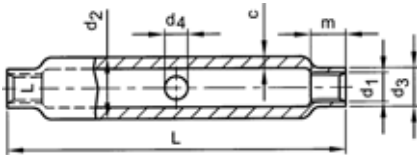
**Thread** British Standard Whitworth  
**Material** Steel C15  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5/16	25	<a href="#">16140.079.001</a>	5/8	10	<a href="#">16140.158.001</a>	1.IN.	5	<a href="#">16140.254.001</a>
3/8	25	<a href="#">16140.096.001</a>	3/4	10	<a href="#">16140.191.001</a>	1.1/4	1	<a href="#">16140.317.001</a>
1/2	25	<a href="#">16140.127.001</a>	7/8	5	<a href="#">16140.222.001</a>	1.1/2	1	<a href="#">16140.381.001</a>

## Turnbuckle made from tubes

DIN 1478



### Technical data

d1	M6	M8	M10	M12	M16	M20	M24
P	1	1,25	1,5	1,75	2	2,5	3
d <sub>2</sub> (min.)	17,2	17,2	21,3	25	30	33,7	42,4
d <sub>3</sub>	9	12	15	18	24	30	33
d <sub>4</sub>	6	8	8	10	10	12	12
c	2,9	3,6	4	4	4,5	5	5,6
L	110	110	125	125	170	200	255
m	7,5	10	12	15	20	24	29
<b>Assembly data</b>							
Adjustable	90	85	95	90	120	140	180

### 16151 Turnbuckle made from tubes

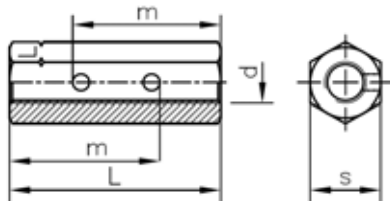
F11F

Thread	Metric thread
Material	Steel
Surface treatment	Zinc plated
Packaging	Standard

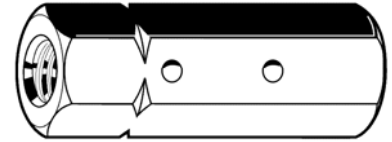


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">16151.060.001</a>	M12	5	<a href="#">16151.120.001</a>	M24	2	<a href="#">16151.240.001</a>
M8	10	<a href="#">16151.080.001</a>	M16	5	<a href="#">16151.160.001</a>			
M10	5	<a href="#">16151.100.001</a>	M20	2	<a href="#">16151.200.001</a>			

## Hexagon turnbuckle



DIN ≈1479



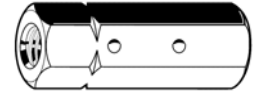
### Technical data

d	M6	M8	M10	M12	M16	M20	M24
P	1	1,25	1,5	1,75	2	2,5	3
L	30	35	45	55	75	95	115
m	22,5	25	33	40	55	24	29
s	10	13	16	18	24	30	36
<b>Assembly data</b>							
Adjustable	15	15	21	25	35	47	57

### 16153 Hexagon turnbuckle

F11F

<b>Thread</b>	Metric thread
<b>Material</b>	Steel Min.330N/mm <sup>2</sup>
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard

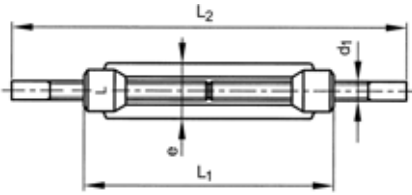


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d	☒	Art.number	d	☒	Art.number	d	☒	Art.number
M6	10	<a href="#">16153.060.001</a>	M12	5	<a href="#">16153.120.001</a>	M24	2	<a href="#">16153.240.001</a>
M8	10	<a href="#">16153.080.001</a>	M16	5	<a href="#">16153.160.001</a>			
M10	5	<a href="#">16153.100.001</a>	M20	2	<a href="#">16153.200.001</a>			

## Turnbuckle

DIN 1480



### Technical data

d1	P	L <sub>1</sub>	L <sub>2</sub> (min.)	L <sub>2</sub> (max.)	e	Allowable load in N
M6	1	110	240	338	19	2250
M8	1,25	110	240	338	23	4100
M10	1,5	125	300	407	30	6500
M12	1,75	125	300	407	34	9300
M16	2	170	400	543	42	17700
M20	2,5	200	440	606	52	27000
M24	3	255	520	736	60	39200
M30	3,5	255	520	736	74	62500
M36	4	295	600	840	86	91000
M42	4,5	330	700	967	104	125000
M48	5	355	760	1037	135	165000
M56	5,5	355	820	1097	135	230000

5

16160 Turnbuckle with two studs for welding made from weldable steel class 3.6

F11F

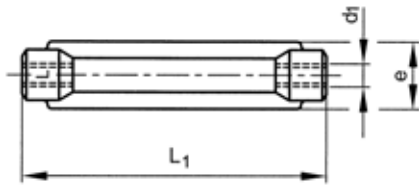
**Thread** Metric thread  
**Material** Steel Min.330N/mm<sup>2</sup>  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">16160.060.001</a>	M16	5	<a href="#">16160.160.001</a>	M36	1	<a href="#">16160.360.001</a>
M8	10	<a href="#">16160.080.001</a>	M20	2	<a href="#">16160.200.001</a>	M42	1	<a href="#">16160.420.001</a>
M10	5	<a href="#">16160.100.001</a>	M24	2	<a href="#">16160.240.001</a>	M48	1	<a href="#">16160.480.001</a>
M12	5	<a href="#">16160.120.001</a>	M30	2	<a href="#">16160.300.001</a>	M56	1	<a href="#">16160.560.001</a>

## Turnbuckle

DIN 1480



### Technical data

d1	P	L <sub>1</sub>	e
M6	1	110	19
M8	1,25	110	23
M10	1,5	125	30
M12	1,75	125	34
M16	2	170	42
M20	2,5	200	52
M24	3	255	60
M30	3,5	255	74

- The steel (min. tensile strength 330 N/mm<sup>2</sup>) turnbuckles are zinc plated or hot dip galvanized with ISO-metric mating thread, depending on availability this may deviate. Hooks and eyes are class 3.6 and always zinc plated.

**5**

16150 Turnbuckle		F11F
<b>Thread</b>	Metric thread	
<b>Material</b>	Steel Min.330N/mm <sup>2</sup>	
<b>Surface treatment</b>	Zinc plated	
<b>Packaging</b>	Standard	

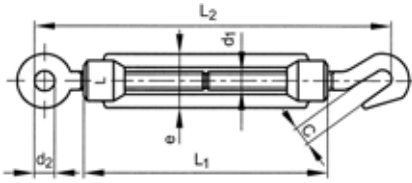


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6 ZINC	10	<a href="#">16150.060.001</a>	M12 ZINC	5	<a href="#">16150.120.001</a>	M24 HOT D.G.	2	<a href="#">16150.240.001</a>
M8 ZINC	10	<a href="#">16150.080.001</a>	M16 HOT D.G.	5	<a href="#">16150.160.001</a>	M30 HOT D.G.	2	<a href="#">16150.300.001</a>
M10 ZINC	5	<a href="#">16150.100.001</a>	M20 HOT D.G.	2	<a href="#">16150.200.001</a>			



## Turnbuckle with hook and eye

DIN ≈1480



### Technical data

d1	M6	M8	M10	M12	M16	M20	M24	M30
P	1	1,25	1,5	1,75	2	2,5	3	3,5
L <sub>1</sub>	110	110	125	125	170	200	255	255
L <sub>2</sub> (min.)	150	161	188	208	299	341	394	441
L <sub>2</sub> (max.)	234	245	285	305	433	495	594	635
e	19	23	30	34	42	52	60	74
d <sub>2</sub>	10	11	14	17	23	25	34	38
c	8	10	13	17	16,5	17	23	29
Allowable load in N	750	1650	2350	3200	5300	7300	15500	22400

### 16170 Turnbuckle with hook and eye

F11F

Thread	Metric thread
Material	Steel Min.330N/mm <sup>2</sup>
Surface treatment	Zinc plated
Packaging	Standard



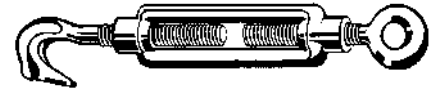
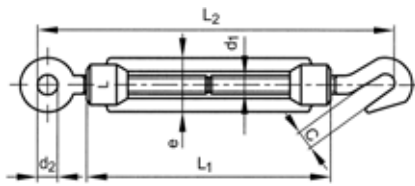
5

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6 ZINC	10	<a href="#">16170.060.001</a>	M12 ZINC	5	<a href="#">16170.120.001</a>	M24 HOT D.G.	2	<a href="#">16170.240.001</a>
M8 ZINC	10	<a href="#">16170.080.001</a>	M16 HOT D.G.	5	<a href="#">16170.160.001</a>	M30 HOT D.G.	2	<a href="#">16170.300.001</a>
M10 ZINC	5	<a href="#">16170.100.001</a>	M20 HOT D.G.	2	<a href="#">16170.200.001</a>			

- The steel (min. tensile strength 330 N/mm<sup>2</sup>) turnbuckles are zinc plated or hot dip galvanized with ISO-metric mating thread, depending on availability this may deviate. Hooks and eyes are class 3.6 and always zinc plated.

**Turnbuckle with hook and eye St.st.**

DIN ≈1480



**Technical data**

d1	M6	M8	M10	M12	M16	M20
P	1	1,25	1,5	1,75	2	2,5
L <sub>1</sub>	90	120	150	200	250	300
L <sub>2</sub> (min.)	140	180	230	280	370	420
L <sub>2</sub> (max.)	220	280	360	460	590	650
e	18	21	25	31	40	49
d <sub>2</sub>	10	14	16	18	26	30
c	10	11	12	14	16	18
Allowable load in N	750	1650	2350	3200	5300	7300

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**51742 Turnbuckle with hook and eye St.st.**

R09A

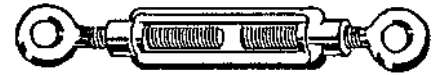
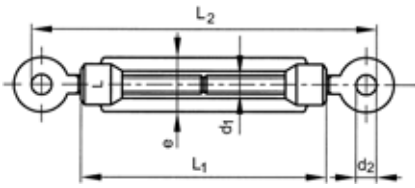
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51742.060.001</a>	M10	5	<a href="#">51742.100.001</a>	M16	5	<a href="#">51742.160.001</a>
M8	10	<a href="#">51742.080.001</a>	M12	5	<a href="#">51742.120.001</a>	M20	2	<a href="#">51742.200.001</a>

## Turnbuckle with two eyes

DIN ≈1480



### Technical data

d1	P	L <sub>1</sub>	L <sub>2</sub> (min.)	L <sub>2</sub> (max.)	e	d <sub>2</sub>	Allowable load in N
M5 (#DIN)	0,8	78,5	119	179	16,6	8	1400
M6	1	110	150	234	19	10	2250
M8	1,25	110	156	240	23	10	4100
M10	1,5	125	186	282	30	14	6500
M12	1,75	125	196	293	34	17	9300
M14 (#DIN)	2	140	234	344	38	17,6	13200
M16	2	170	294	428	42	23	17700
M20	2,5	200	352	506	52	25	27000
M24	3	235	391	589	60	34	39200
M30	3,5	255	441	636	74	38	62500

### 16177 Turnbuckle with two eyes

F11F

<b>Thread</b>	Metric thread
<b>Material</b>	Steel Min.330N/mm <sup>2</sup>
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard

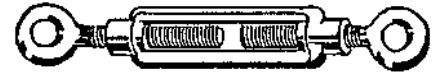
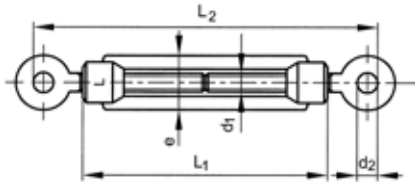


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M5 = 3/16 ZINC	10	<a href="#">16177.050.001</a>	M12 ZINC	5	<a href="#">16177.120.001</a>	M24 HOT D.G.	2	<a href="#">16177.240.001</a>
M6 ZINC	10	<a href="#">16177.060.001</a>	M14 = 9/16 ZINC	5	<a href="#">16177.140.001</a>	M30 HOT D.G.	2	<a href="#">16177.300.001</a>
M8 ZINC	10	<a href="#">16177.080.001</a>	M16 HOT D.G.	5	<a href="#">16177.160.001</a>			
M10 ZINC	5	<a href="#">16177.100.001</a>	M20 HOT D.G.	2	<a href="#">16177.200.001</a>			

- The steel (min. tensile strength 330 N/mm<sup>2</sup>) turnbuckles are zinc plated or hot dip galvanized with ISO-metric mating thread, depending on availability this may deviate. Hooks and eyes are class 3.6 and always zinc plated.

**Turnbuckle with two eyes St.st.**

DIN ≈1480



**Technical data**

d1	M6	M8	M10	M12	M16	M20
P	1	1,25	1,5	1,75	2	2,5
L <sub>1</sub>	90	120	150	200	250	300
L <sub>2</sub> (min.)	140	180	230	280	370	420
L <sub>2</sub> (max.)	220	280	360	460	590	650
e	18	21	25	31	40	49
d <sub>2</sub>	10	14	16	18	26	30
Allowable load in N	2250	4100	6500	9300	17700	27000

**51744 Turnbuckle with two eyes St.st.**

R09A

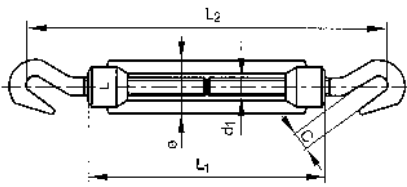
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51744.060.001</a>	M10	5	<a href="#">51744.100.001</a>	M16	5	<a href="#">51744.160.001</a>
M8	10	<a href="#">51744.080.001</a>	M12	5	<a href="#">51744.120.001</a>	M20	2	<a href="#">51744.200.001</a>

## Turnbuckle with two hooks

DIN ≈1480



### Technical data

d1	M5 (#DIN)	M6	M8	M10	M12	M16
P	0,8	1	1,25	1,5	1,75	2
L <sub>1</sub>	70	110	110	125	125	170
L <sub>2</sub> (min.)	107	150	166	189	220	304
L <sub>2</sub> (max.)	157	234	250	289	317	438
e	16,5	19	23	30	34	42
c	7	8	10	13	17	16,5
Allowable load in N	500	750	1650	2350	3200	5300

### 16178 Turnbuckle with two hooks

F11F

Thread	Metric thread
Material	Steel Min.330N/mm <sup>2</sup>
Surface treatment	Zinc plated
Packaging	Standard



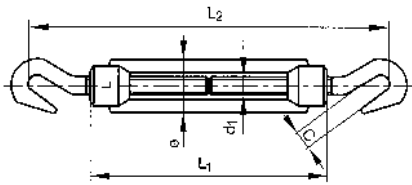
5

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M5 = 3/16	10	<a href="#">16178.050.001</a>	M8	10	<a href="#">16178.080.001</a>	M12	5	<a href="#">16178.120.001</a>
M6	10	<a href="#">16178.060.001</a>	M10	5	<a href="#">16178.100.001</a>	M16 = 5/8	5	<a href="#">16178.160.001</a>

- The steel (min. tensile strength 330 N/mm<sup>2</sup>) turnbuckles are zinc plated or hot dip galvanized with ISO-metric mating thread, depending on availability this may deviate. Hooks and eyes are class 3.6 and always zinc plated.

**Turnbuckle with two hooks St.st.**

DIN ≈1480



**Technical data**

d1	M6	M8	M10	M12	M16	M20
P	1	1,25	1,5	1,75	2	2,5
L <sub>1</sub>	90	120	150	200	250	300
L <sub>2</sub> (min.)	140	180	230	280	370	420
L <sub>2</sub> (max.)	220	280	360	460	590	650
e	18	21	25	31	40	49
c	10	11	12	14	16	18
Allowable load in N	750	1650	2350	3200	5300	7300

**51743 Turnbuckle with two hooks St.st.**

R09A

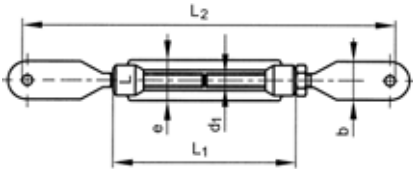
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51743.060.001</a>	M10	5	<a href="#">51743.100.001</a>	M16	5	<a href="#">51743.160.001</a>
M8	10	<a href="#">51743.080.001</a>	M12	5	<a href="#">51743.120.001</a>	M20	2	<a href="#">51743.200.001</a>

## Turnbuckle with two flat eyes

DIN ≈1480



### Technical data

d1	M12	M16	M20
P	1,5	1,75	2
L <sub>1</sub>	125	170	200
L <sub>2</sub> (min.)	325	472	463
L <sub>2</sub> (max.)	430	615	630
e	34	42	52
b	30	40	50
Thickness flat eyes	4	4	5
Allowable load in N	9300	17700	27000

### 16172 Turnbuckle with two flat eyes

F11F

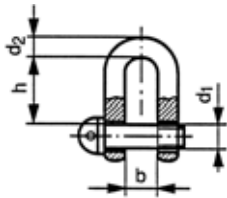
Thread	Metric thread
Material	Steel Min.330N/mm <sup>2</sup>
Surface treatment	Zinc plated
Packaging	Standard



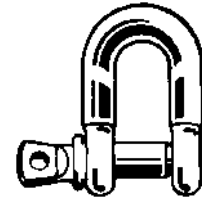
d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M12	5	<a href="#">16172.120.001</a>	M16	5	<a href="#">16172.160.001</a>	M20	2	<a href="#">16172.200.001</a>

- The steel (min. tensile strength 330 N/mm<sup>2</sup>) turnbuckles are zinc plated or hot dip galvanized with ISO-metric mating thread, depending on availability this may deviate. Hooks and eyes are class 3.6 and always zinc plated.

## D (chain) shackle



DIN ≈82101 A  
 NEN ≈964



### Technical data

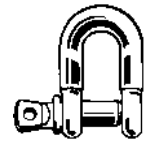
d1	d2	b	h	Allowable load in kN
5	4/5	7	15,5	1
6	5/6	8	18	1,6
8	7/8	11	24	2,5
10	9/10	14	30	4
11 (#DIN)	11	22	44	-
12	10/12	17	36	6,3
14 (#DIN)	14	28	53	-
16	13/15	21	49	10
19 (#DIN)	19	38	74	-
20	17/19	27	61	16
22	19/21	30	67	20
24	21/23	33	73	25
25 (#DIN)	25	51	100	-
28 (#DIN)	28	57	115	-
32 (#DIN)	32	64	127	-
38 (#DIN)	37	76	152	-

- The D (chain) shackles are zinc plated or hot dip galvanized, depending on availability this may deviate.
- Depending on availability the dimensions may deviate.
- Sizes not DIN standardised: not to be used for lifting applications.

### 16813 D (chain) shackle

F11H

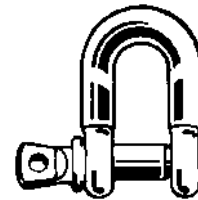
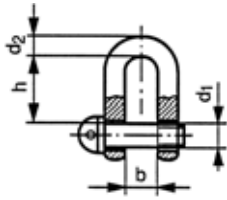
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5MM ZINC	25	<a href="#">16813.050.001</a>	14MM ZINC	25	<a href="#">16813.140.001</a>	25MM HOT D.G.	3	<a href="#">16813.250.001</a>
6MM ZINC	25	<a href="#">16813.060.001</a>	16MM HOT D.G.	10	<a href="#">16813.160.001</a>	28MM HOT D.G.	1	<a href="#">16813.280.001</a>
8MM ZINC	25	<a href="#">16813.080.001</a>	19MM HOT D.G.	10	<a href="#">16813.190.001</a>	32MM HOT D.G.	1	<a href="#">16813.320.001</a>
10MM ZINC	25	<a href="#">16813.100.001</a>	20MM HOT D.G.	5	<a href="#">16813.200.001</a>	38MM HOT D.G.	1	<a href="#">16813.380.001</a>
11MM ZINC	25	<a href="#">16813.110.001</a>	22MM HOT D.G.	5	<a href="#">16813.220.001</a>			
12MM ZINC	25	<a href="#">16813.120.001</a>	24MM HOT D.G.	5	<a href="#">16813.240.001</a>			



## D (chain) shackle St.st.



### Technical data

d1	d2	b	h	d1	d2	b	h	d1	d2	b	h
4	4	8	16	8	8	16	32	16	16	32	64/56
5	5	10	20	10	10	20	40	19	19	38	76
6	6	12	24	12	12	24	48	24	18	32	80

- Not to be used for lifting applications.

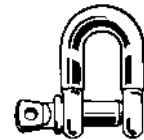
### Article groups

Material	Packaging	Code	Page
St.St. A2	Standard	16711	5-25
St.St. A4	Standard	16713	5-25

5

#### 16711 D (chain) shackle St.st. R09A

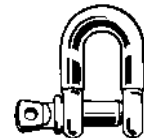
**Material** Stainless steel A2  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5MM	10	<a href="#">16711.050.001</a>	10MM	10	<a href="#">16711.100.001</a>	19MM	2	<a href="#">16711.190.001</a>
6MM	10	<a href="#">16711.060.001</a>	12MM	10	<a href="#">16711.120.001</a>			
8MM	10	<a href="#">16711.080.001</a>	16MM	5	<a href="#">16711.160.001</a>			

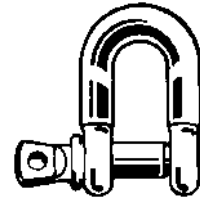
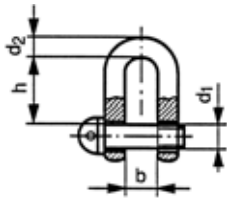
#### 16713 D (chain) shackle St.st. R49A

**Material** Stainless steel A4  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
4MM	10	<a href="#">16713.040.001</a>	8MM	10	<a href="#">16713.080.001</a>	16MM	5	<a href="#">16713.160.001</a>
5MM	10	<a href="#">16713.050.001</a>	10MM	10	<a href="#">16713.100.001</a>	19MM	2	<a href="#">16713.190.001</a>
6MM	10	<a href="#">16713.060.001</a>	12MM	10	<a href="#">16713.120.001</a>			

**D (chain) shackle, commercial type**



**Technical data**

d1	d2	b	h
5	5	10	20
6	6	12	24
8	8	16	32
10	10	20	40
11	11	22	44

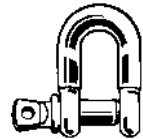
d1	d2	b	h
12	12	25	50
14	14	28	53
16	16	32	64
19	19	38	74
22	19/21	44	88

d1	d2	b	h
25	25	51	100
28	28	57	115
32	32	64	127
38	38	76	152

**16812 D (chain) shackle, commercial type**

F11H

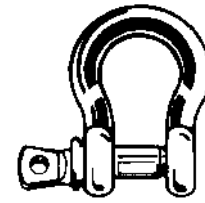
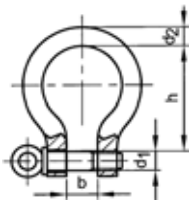
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



5

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5MM	25	<a href="#">16812.050.001</a>	12MM	25	<a href="#">16812.120.001</a>	25MM	3	<a href="#">16812.250.001</a>
6MM	25	<a href="#">16812.060.001</a>	14MM	25	<a href="#">16812.140.001</a>	28MM	1	<a href="#">16812.280.001</a>
8MM	25	<a href="#">16812.080.001</a>	16MM	10	<a href="#">16812.160.001</a>	32MM	1	<a href="#">16812.320.001</a>
10MM	25	<a href="#">16812.100.001</a>	19MM	10	<a href="#">16812.190.001</a>	38MM	1	<a href="#">16812.380.001</a>
11MM	25	<a href="#">16812.110.001</a>	22MM	5	<a href="#">16812.220.001</a>			

**Bow (anchor) shackle with screw collar pin**



**Technical data**

d1	d2	b	h
5	5	10	19
6	6	13	25
8	8	16	32
10	10	19	38
11	11	22	46

d1	d2	b	h
12	12	25	51
14	14	28	58
16	16	32	64
19	19	38	76
22	22	44	89

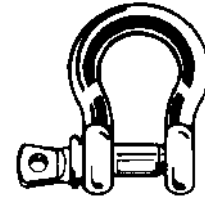
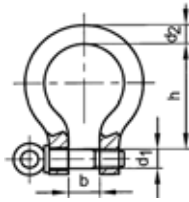
d1	d2	b	h
25	25	51	100
28	28	57	115
32	32	64	127
38	38	76	152

• Depending on availability the dimensions may deviate.

16817 Bow (anchor) shackle with screw collar pin		F11H
<b>Material</b>	Steel	
<b>Surface treatment</b>	Zinc plated	
<b>Packaging</b>	Standard	

d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5MM	25	<a href="#">16817.050.001</a>	12MM	25	<a href="#">16817.120.001</a>	25MM	5	<a href="#">16817.250.001</a>
6MM	25	<a href="#">16817.060.001</a>	14MM	10	<a href="#">16817.140.001</a>	28MM = 1.1/8	3	<a href="#">16817.280.001</a>
8MM	25	<a href="#">16817.080.001</a>	16MM	10	<a href="#">16817.160.001</a>	32MM = 1.1/4	1	<a href="#">16817.320.001</a>
10MM	25	<a href="#">16817.100.001</a>	19MM	5	<a href="#">16817.190.001</a>	38MM = 1.1/2	1	<a href="#">16817.380.001</a>
11MM	25	<a href="#">16817.110.001</a>	22MM	5	<a href="#">16817.220.001</a>			

## Bow (anchor) shackle with screw collar pin St.st.



### Technical data

d1	d2	b	h
4	4	8	16
5	5	10	20
6	6	12	24
8	8	16	32
10	10	20	40
12	12	24	48
16	16	32	64

- Not to be used for lifting applications.
- Depending on availability the dimensions may deviate.

## 5

### Article groups

Material	Packaging	Code	Page
St.St. A2	Standard	16715	5-28
St.St. A4	Standard	16717	5-28

#### 16715 Bow (anchor) shackle with screw collar pin St.st.

R09A

**Material** Stainless steel A2  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
5MM	10	<a href="#">16715.050.001</a>	8MM	10	<a href="#">16715.080.001</a>	12MM	10	<a href="#">16715.120.001</a>
6MM	10	<a href="#">16715.060.001</a>	10MM	10	<a href="#">16715.100.001</a>	16MM	5	<a href="#">16715.160.001</a>

#### 16717 Bow (anchor) shackle with screw collar pin St.st.

R49A

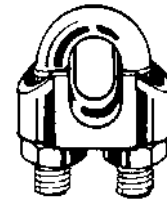
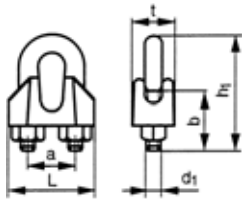
**Material** Stainless steel A4  
**Packaging** Standard



d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
4MM	10	<a href="#">16717.040.001</a>	8MM	10	<a href="#">16717.080.001</a>	16MM	5	<a href="#">16717.160.001</a>
5MM	10	<a href="#">16717.050.001</a>	10MM	10	<a href="#">16717.100.001</a>			
6MM	10	<a href="#">16717.060.001</a>	12MM	10	<a href="#">16717.120.001</a>			

## Wire rope clip

DIN 741/555 (1987)

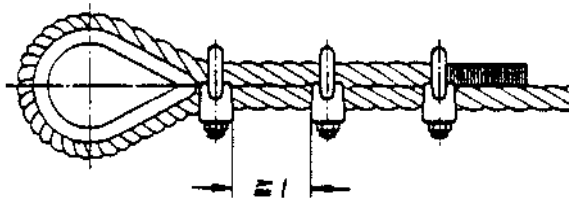


### Technical data

For cable diam.	d <sub>1</sub>	a	b	h <sub>1</sub>	L	t	Min. amount of clips
3	M4	9	12	20	21	10	3
5	M5	11	13	24	23	11	3
6,5	M5	13	15	28	26	12	3
8	M6	16	19	34	30	14	5
10	M8	19	22	42	34	18	5
11	M8	20	22	44	36	19	5
12 (#DIN)	M10	24	26	56	42	23	5
13	M10	24	30	55	42	23	5
14	M10	25	30	57	44	23	5
16	M12	29	33	63	50	26	6
19	M12	32	38	75	54	29	6
22	M14	37	44	85	61	33	7
25 (#DIN)	M14	39	48	95	65	34	7
26	M14	41	45	95	65	35	8
30	M16	48	50	110	74	37	8
34	M16	52	55	120	80	42	8
40	M16	58	60	140	88	45	8

- The corresponding hexagon nuts have a property class  $\geq$  I4I.

### Assembly data

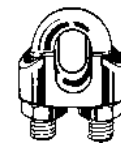


Distance between wire rope clips  $\geq$  t of the wire rope clip, see assembly drawing

### 16829 Wire rope clip

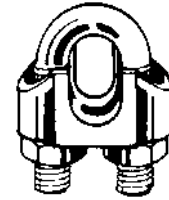
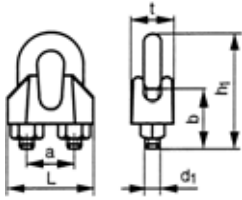
F11M

Material: Steel  
Surface treatment: Zinc plated  
Packaging: Standard



For cable diam.	☒	Art.number	For cable diam.	☒	Art.number	For cable diam.	☒	Art.number
3MM	100	<a href="#">16829.030.001</a>	12MM = 1/2	25	<a href="#">16829.120.001</a>	26MM	10	<a href="#">16829.260.001</a>
5MM	100	<a href="#">16829.050.001</a>	13MM	25	<a href="#">16829.130.001</a>	30MM	5	<a href="#">16829.300.001</a>
6,5MM	100	<a href="#">16829.065.001</a>	14MM	25	<a href="#">16829.140.001</a>	34MM	5	<a href="#">16829.340.001</a>
8MM	100	<a href="#">16829.080.001</a>	16MM	25	<a href="#">16829.160.001</a>	40MM	5	<a href="#">16829.400.001</a>
10MM	50	<a href="#">16829.100.001</a>	19MM	10	<a href="#">16829.190.001</a>			
11MM	50	<a href="#">16829.110.001</a>	22MM	10	<a href="#">16829.220.001</a>			

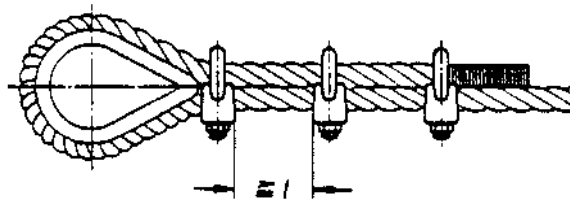
**Wire rope clip A4**



**Technical data**

For cable diam.	3	5	6	8	10	12	16
d <sub>1</sub>	M4	M5	M6	M6	M8	M10	M10
a	9	11	14	16	18	23	28
b	12	15	18	20	22	30	30
h <sub>1</sub>	22	24	33	35	43	54	65
L	22	24	30	33	37	45	53
t	14	16	18	20	22	25	30
Min. amount of clips	3	3	3	5	5	5	5

**Assembly data**



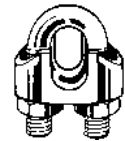
Distance between wire rope clips  $\geq t$  of the wire rope clip, see assembly drawing

5

**16728 Wire rope clip A4**

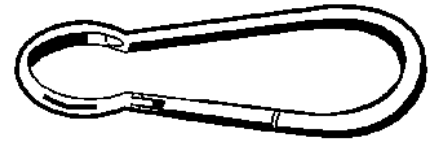
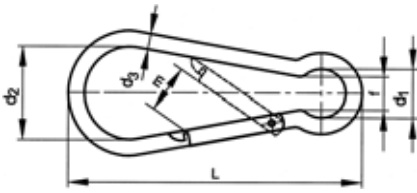
**R49A**

**Thread** Metric thread  
**Material** Stainless steel A4  
**Packaging** Standard



For cable diam.	☒	Art.number	For cable diam.	☒	Art.number	For cable diam.	☒	Art.number
3MM	10	<a href="#">16728.030.001</a>	8MM	5	<a href="#">16728.080.001</a>	16MM	5	<a href="#">16728.160.001</a>
5MM	10	<a href="#">16728.050.001</a>	10MM	5	<a href="#">16728.100.001</a>			
6MM	5	<a href="#">16728.060.001</a>	12MM	5	<a href="#">16728.120.001</a>			

## Snap hook (carabine hook)



### Technical data

d3 x L x f	d <sub>1</sub>	d <sub>2</sub> (min.)	m	f	Min. breaking load kN
5x50x7	7	15	6	5	1,0
6x60x7	8	17	7	6	1,2
7x70x9	10	20	8	7	1,8
8x80x11	12	24	10	9	2,3
10x100x12	15	30	11	11	3,5
11x120x14	16	39	17	12	4,5

- Not to be used for lifting applications.

### Article groups

Material	Surface treatment	Packaging	Code	Page
St.St. A4		Standard	16733	5-31
St	Zipl	Standard	16833	5-31

5

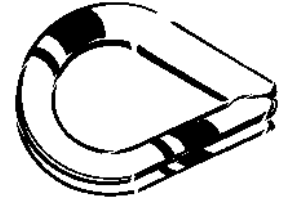
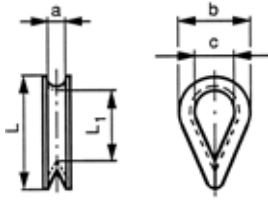
16733 Snap hook (carabine hook)		R49A
<b>Material</b>	Stainless steel A4	
<b>Packaging</b>	Standard	

d3 x L	☒	Art.number	d3 x L	☒	Art.number	d3 x L	☒	Art.number
5X50MM	10	<a href="#">16733.050.050</a>	7X70MM	10	<a href="#">16733.070.070</a>	10X100MM	10	<a href="#">16733.100.100</a>
6X60MM	10	<a href="#">16733.060.060</a>	8X80MM	10	<a href="#">16733.080.080</a>	11X120MM	10	<a href="#">16733.110.120</a>

16833 Snap hook (carabine hook)		F11N
<b>Material</b>	Steel	
<b>Surface treatment</b>	Zinc plated	
<b>Packaging</b>	Standard	

d3 x L	☒	Art.number	d3 x L	☒	Art.number	d3 x L	☒	Art.number
5X50MM	10	<a href="#">16833.050.050</a>	8X80MM	10	<a href="#">16833.080.080</a>			
6X60MM	10	<a href="#">16833.060.060</a>	10X100MM	10	<a href="#">16833.100.100</a>			

## Thimble



### Technical data

For cable diam.	a	b	c	L	L <sub>1</sub>
3	3	20	12	28	19
4	4	19	11	25	16
5	5	22	16	31	22
6	6	29	19	37	26
8	8	38	24	51	34
10	10	44	32	64	42
12	12	57	38	76	51
14	14	60	40	82	57
16	16	64	42	89	60
18	18	69	45	102	67
20	20	79	51	115	76
22	22	89	54	127	83
24	24	102	64	140	88

5

### 16831 Thimble

F11M

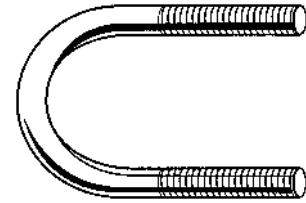
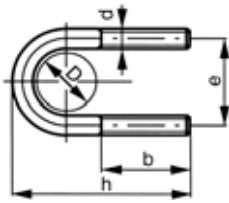
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



For cable diam.	☒	Art.number	For cable diam.	☒	Art.number	For cable diam.	☒	Art.number
3MM	100	<a href="#">16831.030.001</a>	10MM	50	<a href="#">16831.100.001</a>	20MM	5	<a href="#">16831.200.001</a>
4MM	100	<a href="#">16831.040.001</a>	12MM	50	<a href="#">16831.120.001</a>	22MM	2	<a href="#">16831.220.001</a>
5MM	100	<a href="#">16831.050.001</a>	14MM	10	<a href="#">16831.140.001</a>	24MM	2	<a href="#">16831.240.001</a>
6MM	100	<a href="#">16831.060.001</a>	16MM	10	<a href="#">16831.160.001</a>			
8MM	100	<a href="#">16831.080.001</a>	18MM	10	<a href="#">16831.180.001</a>			



## U-Bolt



### Technical data

d x h	e	b	D (nom. mm)	D (nom. inch)
M6x42	29	20	22	1/2
M6x53	34	25	27	3/4
M6x61	41	30	34	1.IN.
M8x61	44	30	34	1.IN.
M8x65	48	25	35	1.IN.
M8x71	36	30	27	3/4
M8x74	52	35	42	1.1/4
M8x85	57	40	48	1.1/2
M8x99	71	40	60	2.IN.
M10x85	59	40	48	1.1/2
M10x99	73	40	60	2.IN.
M10x112	89	40	76	2.1/2
M12x124	102	50	89	3.IN.
M12x155	126	50	117	4.IN.
M16x184	160	60	140	5.IN.
M16x209	186	60	168	6.IN.
M16x266	240	60	216	8.IN.

5

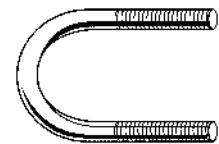
### Article groups

Thread	Material	Surface treatment	Packaging	Code	Page
M	St	Zipl	Standard	17243	5-33
M	St.St. A2		Standard	17567	5-33

#### 17243 U-Bolt article 40G

F11B

<b>Thread</b>	Metric thread
<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard

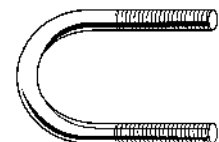


d x h x e x b	☒	Art.number	d x h x e x b	☒	Art.number	d x h x e x b	☒	Art.number
M6X42X29X20	50	<a href="#">17243.060.029</a>	M8X85X57X40	50	<a href="#">17243.080.057</a>	M12X155X126X50	10	<a href="#">17243.120.126</a>
M6X53X34X25	50	<a href="#">17243.060.034</a>	M10X85X59X40	25	<a href="#">17243.100.059</a>	M16X184X160X60	3	<a href="#">17243.160.160</a>
M6X61X41X30	50	<a href="#">17243.060.041</a>	M10X99X73X40	25	<a href="#">17243.100.073</a>	M16X209X186X60	3	<a href="#">17243.160.186</a>
M8X71X36X30	50	<a href="#">17243.080.036</a>	M10X112X89X40	25	<a href="#">17243.100.089</a>	M16X266X240X60	2	<a href="#">17243.160.240</a>
M8X61X44X30	50	<a href="#">17243.080.044</a>	M12X124X102X50	10	<a href="#">17243.120.102</a>			
M8X74X52X35	50	<a href="#">17243.080.052</a>						

#### 17567 U-Bolt article 40R

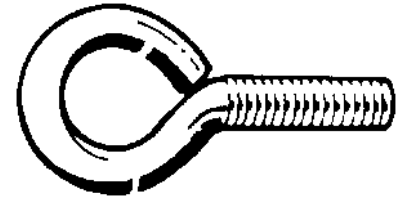
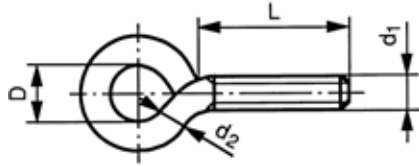
F11C

<b>Thread</b>	Metric thread
<b>Material</b>	Stainless steel A2
<b>Packaging</b>	Standard



d x h x e x b	☒	Art.number	d x h x e x b	☒	Art.number	d x h x e x b	☒	Art.number
M6X42X29X20	25	<a href="#">17567.060.029</a>	M8X61X44X30	25	<a href="#">17567.080.044</a>	M8X99X71X40	25	<a href="#">17567.080.073</a>
M6X53X34X25	25	<a href="#">17567.060.034</a>	M8X74X52X35	25	<a href="#">17567.080.052</a>			
			M8X85X57X40	25	<a href="#">17567.080.057</a>			

## Screw eye metric



### Technical data

d1	P	d2
M3	0,5	2,65
M4	0,7	3,45
M5	0,8	4,4
M6	1	5,25
M8	1,25	7,05
M10	1,5	8,85

### Article groups

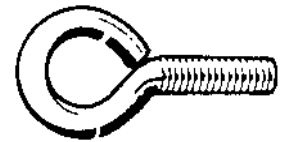
Thread	Material	Surface treatment	Packaging	Code	Page
M	St	Zipl	Standard	17420	5-34
M	St.St. A2		Standard	17690	5-34

5

#### 17420 Screw eye article 111G

F11B

<b>Thread</b>	Metric thread
<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard

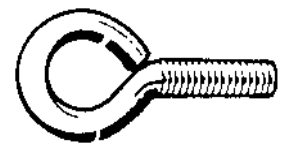


d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number
M3X10X6	100	<a href="#">17420.031.006</a>	M5X50X8	100	<a href="#">17420.055.008</a>	M8X40X10	100	<a href="#">17420.084.010</a>
M3X20X6	100	<a href="#">17420.032.006</a>	M5X60X8	100	<a href="#">17420.056.008</a>	M8X50X10	100	<a href="#">17420.085.010</a>
M4X15X6	100	<a href="#">17420.041.506</a>	M6X20X10	100	<a href="#">17420.062.010</a>	M8X60X10	100	<a href="#">17420.086.010</a>
M4X20X6	100	<a href="#">17420.042.006</a>	M6X25X10	100	<a href="#">17420.062.510</a>	M8X80X10	50	<a href="#">17420.088.010</a>
M4X25X6	100	<a href="#">17420.042.506</a>	M6X30X10	100	<a href="#">17420.063.010</a>	M8X100X10	50	<a href="#">17420.089.610</a>
M4X30X6	100	<a href="#">17420.043.006</a>	M6X40X10	100	<a href="#">17420.064.010</a>	M10X40X15	50	<a href="#">17420.104.014</a>
M4X40X6	100	<a href="#">17420.044.006</a>	M6X50X10	100	<a href="#">17420.065.010</a>	M10X50X15	50	<a href="#">17420.105.014</a>
M5X15X8	100	<a href="#">17420.051.508</a>	M6X60X10	100	<a href="#">17420.066.010</a>	M10X60X15	50	<a href="#">17420.106.014</a>
M5X20X8	100	<a href="#">17420.052.008</a>	M6X80X10	100	<a href="#">17420.068.010</a>	M10X80X15	50	<a href="#">17420.108.014</a>
M5X25X8	100	<a href="#">17420.052.508</a>	M6X100X10	100	<a href="#">17420.069.610</a>	M10X90X18	50	<a href="#">17420.109.017</a>
M5X30X8	100	<a href="#">17420.053.008</a>	M8X20X10	100	<a href="#">17420.082.010</a>	M10X100X15	50	<a href="#">17420.109.417</a>
M5X40X8	100	<a href="#">17420.054.008</a>	M8X30X10	100	<a href="#">17420.083.010</a>	M10X120X15	50	<a href="#">17420.109.515</a>

#### 17690 Screw eye article 111R

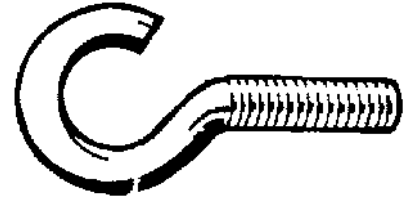
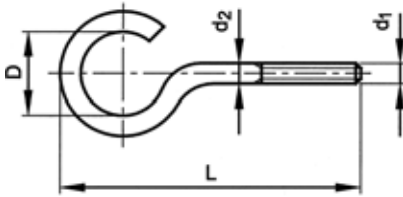
F11C

<b>Thread</b>	Metric thread
<b>Material</b>	Stainless steel A2
<b>Packaging</b>	Standard



d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number
M5X15X8	100	<a href="#">17690.051.508</a>	M6X30X10	100	<a href="#">17690.063.010</a>	M8X80X10	50	<a href="#">17690.088.010</a>
M5X30X8	100	<a href="#">17690.053.008</a>	M6X40X10	100	<a href="#">17690.064.010</a>	M10X70X15	50	<a href="#">17690.107.014</a>
M5X50X8	100	<a href="#">17690.055.008</a>	M6X60X10	100	<a href="#">17690.066.010</a>			
M6X20X10	100	<a href="#">17690.062.010</a>	M8X60X10	100	<a href="#">17690.086.010</a>			

## Cup hook metric



### Technical data

d1	P	d2	D
M4	0,7	3,45	12
M5	0,8	4,4	15
M6	1	5,25	16
M8	1,25	7,05	16

### 17203 Cup hook article 26

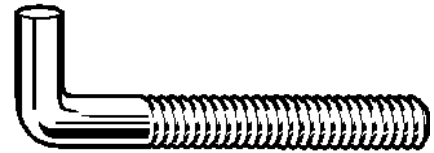
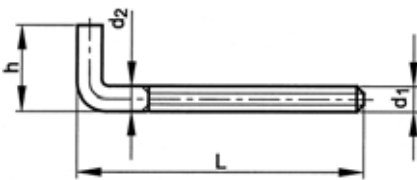
F11A

**Thread** Metric thread  
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M4X50	100	<a href="#">17203.040.050</a>	M6X60	100	<a href="#">17203.060.060</a>			
M5X50	100	<a href="#">17203.050.050</a>	M8X60	100	<a href="#">17203.080.060</a>			

## Square hook metric



### Technical data

d1	P	d2	h
M4	0,7	3,45	12
M5	0,8	4,4	15
M6	1	5,25	17
M8	1,25	7,05	25

### 17123 Square hook article 27

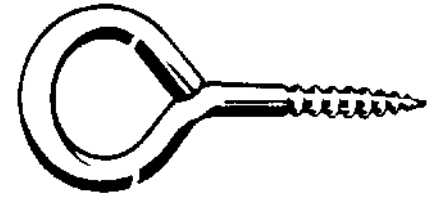
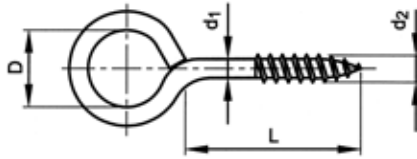
F11A

**Thread** Metric thread  
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M4X40	100	<a href="#">17123.040.040</a>	M6X60	100	<a href="#">17123.060.060</a>			
M5X50	100	<a href="#">17123.050.050</a>	M8X60	100	<a href="#">17123.080.060</a>			

## Screw eye



### Technical data

d1	d2	d1	d2	d1	d2
1,92	1,92	3	3,8	4,75 (d <sub>2</sub> =5,8)	5,8
2	2,4	3,2	4	5	-
2,15	2,7	3,45	4,3	5,25	5,3
2,4	3	4	4,6	6	6
2,5	2,5	4,4	5		
2,65	3,4	4,5	5		
2,75	3,5	4,75 (d <sub>2</sub> =5)	5		

### Article groups

Material	Surface treatment	Packaging	Code	Page
St	Zipl	Standard	17020	5-36
St.St. A2		Standard	17545	5-36
Br		Standard	17620	5-37

5

#### 17020 Screw eye article 1G

F11B

<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard



d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number
1,85X6X3	100	<a href="#">17020.060.003</a>	3,0X20X8	100	<a href="#">17020.200.008</a>	4,00X40X14MM	100	<a href="#">17020.400.014</a>
2,2X8X4	100	<a href="#">17020.080.004</a>	3,5X20X10	100	<a href="#">17020.200.010</a>	4,9X40X15	100	<a href="#">17020.400.015</a>
2,2X10X4	100	<a href="#">17020.100.004</a>	4,00X20X12MM	100	<a href="#">17020.200.012</a>	4,3X40X16	100	<a href="#">17020.400.016</a>
			3,45X25X10MM	100	<a href="#">17020.250.010</a>	4,75X40X18MM (d2=5)	100	<a href="#">17020.400.018</a>
2,5X12X5	100	<a href="#">17020.100.005</a>	4,00X25X12MM	100	<a href="#">17020.250.012</a>	5,2X37X20	100	<a href="#">17020.400.020</a>
2,5X10X6	100	<a href="#">17020.100.006</a>	3X20X8	100	<a href="#">17020.300.008</a>	4,85X50X15	100	<a href="#">17020.500.015</a>
2,2X12X4	100	<a href="#">17020.120.004</a>	3,45X30X10MM	100	<a href="#">17020.300.010</a>	6,00X50X16MM	100	<a href="#">17020.500.016</a>
2,7X13X6	100	<a href="#">17020.120.006</a>	4X29X12	100	<a href="#">17020.300.012</a>	4,75X50X18MM (d2=5)	100	<a href="#">17020.500.018</a>
3,3X12X8	100	<a href="#">17020.120.008</a>	4,00X30X14MM	100	<a href="#">17020.300.014</a>	5,20X50X20	100	<a href="#">17020.500.020</a>
2,7X16X6	100	<a href="#">17020.160.006</a>				6X47X25	100	<a href="#">17020.500.025</a>
3,0X16X8	100	<a href="#">17020.160.008</a>	4,4X29X16	100	<a href="#">17020.300.016</a>	5,20X60X20	100	<a href="#">17020.600.020</a>
3,5X16X10	100	<a href="#">17020.160.010</a>	4,75X30X18MM (d2=5)	100	<a href="#">17020.300.018</a>	6,00X60X25MM	100	<a href="#">17020.600.025</a>

#### 17545 Screw eye article 1R

F11C

<b>Material</b>	Stainless steel A2
<b>Packaging</b>	Standard

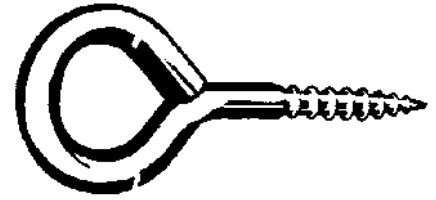
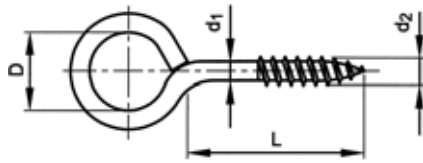


d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number
3,45X20X10MM	100	<a href="#">17545.200.010</a>	5,25X30X10MM	100	<a href="#">17545.300.010</a>	4,40X40X16MM	100	<a href="#">17545.400.016</a>
4,00X25X12MM	100	<a href="#">17545.250.012</a>	4,75X30X8MM (d2=5,8)	100	<a href="#">17545.301.008</a>			
4,00X30X8MM	100	<a href="#">17545.300.008</a>						

<b>17620</b>	<b>Screw eye article 1M</b>	<b>F11B</b>
<b>Material</b>	Brass	
<b>Packaging</b>	Standard	

d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number	d1 x L x D	☒	Art.number
2,65X12X6MM	100	<a href="#">17620.120.006</a>	3,45X20X10MM	100	<a href="#">17620.200.010</a>	4,50X40X16MM	100	<a href="#">17620.400.016</a>
2,75X16X6MM	100	<a href="#">17620.160.006</a>	4,00X25X12MM	100	<a href="#">17620.250.012</a>			
3,00X20X8MM	100	<a href="#">17620.200.008</a>	4,00X30X14MM	100	<a href="#">17620.300.014</a>			

## Screw eye heavy type



### Technical data

No.	d <sub>1</sub>	d <sub>2</sub>	L	D
8	4	5,1	20	8
10	4,40	5,7	25	8
15	6	7,6	35	10
17	7	8,9	40	10
18	7,80	9,5	45	14

### 17023 Screw eye heavy type article 3

F11A

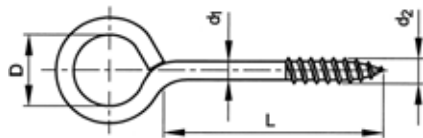
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



5

No.	☒	Art.number	No.	☒	Art.number	No.	☒	Art.number
No.8	100	<a href="#">17023.000.008</a>	No.15	100	<a href="#">17023.000.015</a>	No.18	100	<a href="#">17023.000.018</a>
No.10	100	<a href="#">17023.000.010</a>	No.17	100	<a href="#">17023.000.017</a>			

## Screw eye long type



### 17022 Screw eye long type article 2

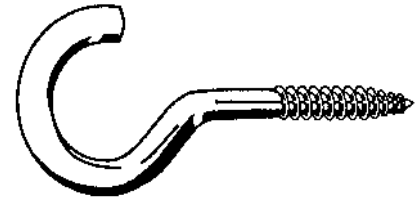
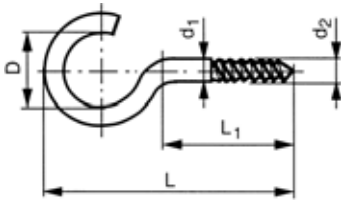
F11A

**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1 x d2 x L x D	☒	Art.number	d1 x d2 x L x D	☒	Art.number	d1 x d2 x L x D	☒	Art.number
7,05X7X60X20MM	100	<a href="#">17022.000.060</a>						
7,05X7X100X20MM	100	<a href="#">17022.000.100</a>						
7,05X7X140X20MM	100	<a href="#">17022.000.140</a>						

## Cup hook



### Technical data

d1 x L1/L	d <sub>2</sub>	D	d1 x L1/L	d <sub>2</sub>	D	d1 x L1/L	d <sub>2</sub>	D
2,00x11/25	2,5	7	4,00x27/55	5,2	18	5,20x82/120	6,4	25
2,20x10/20	2,7	7	4,30x32/60	5,5	18	6,00x45/80	7,7	25
2,35x12/25	3	9	4,30x50/80	5,5	20	6,00x62/100	7,7	25
2,40x15/30	3	9	4,40x25/50	5,6	16	6,00x82/120	7,7	25
3,30x13/30	4,1	9	4,75x32/60	6,1	18	7,00x100/140	9,2	25
3,30x20/40	4,1	12	5,00x47/85	6,2	25	7,00x120/160	9,2	25
3,45x30/50	4,3	14	5,00x50/80	6,2	25			

### Article groups

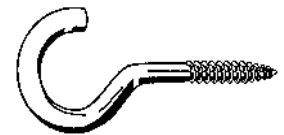
Material	Surface treatment		Packaging	Code	Page
St	Zipl	11	Standard	17200	5-39
St	W.Epox	11W	Standard	17199	5-39
St	Zipl	15	Standard	17220	5-39

5

#### 17200 Cup hook article 11

F11B

<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard

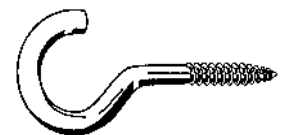


d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number
2,20X10/20MM	100	<a href="#">17200.000.020</a>	4,30X32/60MM	100	<a href="#">17200.000.060</a>	3,30X13/30MM	100	<a href="#">17200.030.030</a>
2,00X11/25MM	100	<a href="#">17200.000.025</a>	4,30X50/80MM	100	<a href="#">17200.000.080</a>	4,00X27/55MM	100	<a href="#">17200.040.055</a>
2,40X15/30MM	100	<a href="#">17200.000.030</a>	5,00X47/85MM	100	<a href="#">17200.000.085</a>	5,00X50/80MM	100	<a href="#">17200.050.085</a>
3,30X20/40MM	100	<a href="#">17200.000.040</a>	5,20X82/120MM	100	<a href="#">17200.000.120</a>			
3,45X30/50MM	100	<a href="#">17200.000.050</a>	2,35X12/25MM	100	<a href="#">17200.025.025</a>			

#### 17199 Cup hook article 11W

F11B

<b>Material</b>	Steel
<b>Surface treatment</b>	White epox
<b>Packaging</b>	Standard



d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number
2,20X10/20MM	100	<a href="#">17199.000.020</a>	2,40X15/30MM	100	<a href="#">17199.000.030</a>	3,45X30/50MM	100	<a href="#">17199.000.050</a>
2,00X11/25MM	100	<a href="#">17199.000.025</a>	3,30X20/40MM	100	<a href="#">17199.000.040</a>	4,30X32/60MM	100	<a href="#">17199.000.060</a>

- Steel zinc plated, white epox (coating 60-80 µm), for extra surface protection and decoration.

#### 17220 Cup hook heavy type article 15

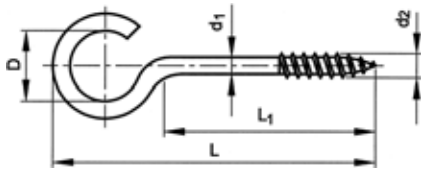
F11A

<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard



d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number
4,40X25/50MM	100	<a href="#">17220.044.050</a>	6,00X62/100MM	100	<a href="#">17220.060.100</a>	7,00X100/140MM	100	<a href="#">17220.069.140</a>
4,75X32/60MM	100	<a href="#">17220.047.060</a>	6,00X82/120MM	100	<a href="#">17220.062.120</a>	7,00X120/160MM	100	<a href="#">17220.069.160</a>
6,00X45/80MM	100	<a href="#">17220.060.080</a>						

**Cup hook small**



**Technical data**

d1	d2	D
3,2	4,1	8
4	5,1	14
4,4	5,6	16

**17210 Cup hook small type article 13**

F11A

**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard

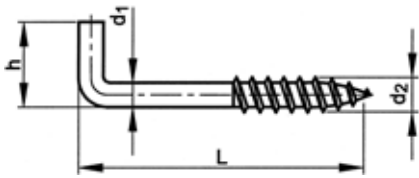


5

d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number	d1 x L1/L	☒	Art.number
3,20X26/40MM	100	<a href="#">17210.000.040</a>	4,40X75/100MM	100	<a href="#">17210.000.100</a>	4,40X95/120MM	100	<a href="#">17210.000.120</a>
4,00X37/60MM	100	<a href="#">17210.000.060</a>						
4,00X58/80MM	100	<a href="#">17210.000.080</a>						



## Square hook



### Technical data

d1 x L	d <sub>2</sub>	h	d1 x L	d <sub>2</sub>	h	d1 x L	d <sub>2</sub>	h
2,15x20	2,7	10	3,50x40	4,3	16	5,00x50	6	22
2,40x25	3	11	4,00x40	4,6	18	5,00x60	5,25	22
2,65x30	4	14	4,00x45	4,6	48	5,00x70	5,25	22
3,00x25	4	16	4,00x50	4,6	18	5,25x100	5,5	24
3,20x40	4	16	4,00x60	4,6	20			
3,45x50	4,3	18	4,40x60	5	20			
3,50x30	4	14	4,40x80	5	23			

### Article groups

Material	Surface treatment	Packaging	Code	Page
St	Zipl	Standard	17120	5-41
St	W.Epox	Standard	17119	5-41

5

#### 17120 Square hook article 7

F11B

<b>Material</b>	Steel
<b>Surface treatment</b>	Zinc plated
<b>Packaging</b>	Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2,15X20MM	100	<a href="#">17120.000.020</a>	4,40X80MM	100	<a href="#">17120.000.080</a>	4,40X60MM	100	<a href="#">17120.045.060</a>
2,40X25MM	100	<a href="#">17120.000.025</a>	5,25X100MM	100	<a href="#">17120.000.100</a>	5,00X50MM	100	<a href="#">17120.050.050</a>
2,65X30MM	100	<a href="#">17120.000.030</a>	3,45X40MM	100	<a href="#">17120.035.040</a>	5,00X60MM	100	<a href="#">17120.050.060</a>
3,20X40MM	100	<a href="#">17120.000.040</a>	4,00X40MM	100	<a href="#">17120.040.040</a>	5,00X70MM	100	<a href="#">17120.050.070</a>
3,45X50MM	100	<a href="#">17120.000.050</a>	4,00X50MM	100	<a href="#">17120.040.050</a>			
4,00X60MM	100	<a href="#">17120.000.060</a>						

#### 17119 Square hook article 7W

F11B

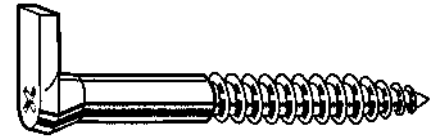
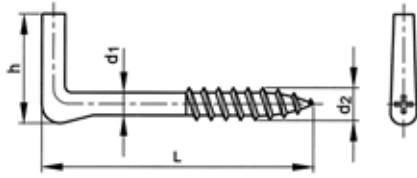
<b>Material</b>	Steel
<b>Surface treatment</b>	White epox
<b>Packaging</b>	Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
2,40X25MM	100	<a href="#">17119.000.025</a>	3,20X40MM	100	<a href="#">17119.000.040</a>	4,00X60MM	100	<a href="#">17119.000.060</a>
2,65X30MM	100	<a href="#">17119.000.030</a>	3,45X50MM	100	<a href="#">17119.000.050</a>			

- Steel zinc plated, white epox (coating 60-80 µm), for extra surface protection and decoration.

## Cross recessed heavy square hook



### Technical data

d1	5,25	6
d2	5,5	6
h	16	18

#### 17140 Cross recessed heavy square hook article 9G

F11B

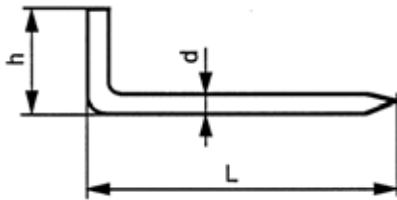
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



5

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
5,25X40MM	100	<a href="#">17140.052.040</a>	6,00X65MM	100	<a href="#">17140.060.065</a>			
5,25X50MM	100	<a href="#">17140.052.050</a>	6,00X80MM	100	<a href="#">17140.060.080</a>			

## Square hook pin



### Technical data

d x L	h
2,40x20	10
2,40x25	11
3,20x30	14
3,45x40	16
4,00x50	18
4,00x60	20
5,00x80	23
5,00x100	24

#### 17080 Square hook pin article 4

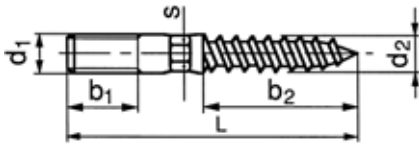
F11B

**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
2,40X20MM	100	<a href="#">17080.000.020</a>	3,20X30MM	100	<a href="#">17080.000.030</a>	4,00X60MM	100	<a href="#">17080.000.060</a>
2,40X25MM	100	<a href="#">17080.000.025</a>	3,45X40MM	100	<a href="#">17080.000.040</a>	5,00X80MM	100	<a href="#">17080.000.080</a>
			4,00X50MM	100	<a href="#">17080.000.050</a>			

## Dowel screw



### Technical data

d1 x L	P	d2	b1	b2	s
M4x20	0,7	4,4	10	10	-
M4x25	0,7	4,4	10	10	-
M4x30	0,7	4,4	10	15	-
M4x35	0,7	4,4	15	15	-
M4x40	0,7	4,4	17	20	-
M5x25	0,8	5,5	10	15	-
M5x40	0,8	5,5	15	20	-
M5x50	0,8	5,5	20	20	-
M6x40	1	6,3	17	23	-
M6x50	1	6,3	20	25	-
M6x60	1	6,3	20	30	-
M6x70	1	6,3	20	30	-
M6x80	1	6,3	20	30	-
M6x90	1	6,3	30	30	-
M6x120	1	6,3	45	30	-
M6x150	1	6,3	75	30	-
M8x50	1,25	7,3	15	30	6
M8x60	1,25	7,3	20	30	6
M8x70	1,25	7,3	25	30	6
M8x80	1,25	7,3	30	40	6
M8x90	1,25	7,3	30	40	6
M8x100	1,25	7,3	40	40	6
M8x120	1,25	7,3	50	50	6
M8x140	1,25	7,3	50	50	6
M8x150	1,25	7,3	50	50	6
M8x160	1,25	7,3	50	50	6
M10x60	1,5	9	20	40	8
M10x70	1,5	9	30	30	8
M10x80	1,5	9	30	40	8
M10x90	1,5	9	30	50	8
M10x100	1,5	9	30	60	8
M10x110	1,5	9	40	60	8
M10x120	1,5	9	50	60	8
M10x130	1,5	9	50	60	8
M10x140	1,5	9	50	60	8
M12x100	1,75	10,7	30	55	10
M12x120	1,75	10,7	30	55	10
M12x145	1,75	10,7	40	55	10
M12x165	1,75	10,7	40	55	10

5

### Article groups

Thread	Material	Surface treatment		Packaging	Code	Page
M	St	Zipl	73A	Standard	17320	5-43
M	St	Zipl	69G	Standard	17310	5-44
M	St	Zipl	69	Standard	17315	5-44

#### 17320 Dowel screw without flat surface for wrenche article 73

F11B

Thread	Metric thread
Material	Steel
Surface treatment	Zinc plated
Packaging	Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M4X20	100	<a href="#">17320.040.020</a>	M4X35	100	<a href="#">17320.040.035</a>	M5X25	100	<a href="#">17320.050.025</a>
M4X25	100	<a href="#">17320.040.025</a>	M4X40	100	<a href="#">17320.040.040</a>	M5X40	100	<a href="#">17320.050.040</a>
M4X30	100	<a href="#">17320.040.030</a>				M5X50	100	<a href="#">17320.050.050</a>

**17320 Dowel screw without flat surface for wrenche article 73**

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M6X40	100	<a href="#">17320.060.040</a>	M6X70	100	<a href="#">17320.060.070</a>	M6X150	100	<a href="#">17320.060.150</a>
M6X50	100	<a href="#">17320.060.050</a>	M6X80	100	<a href="#">17320.060.080</a>			
M6X60	100	<a href="#">17320.060.060</a>	M6X90	100	<a href="#">17320.060.090</a>			
			M6X120	100	<a href="#">17320.060.120</a>			

**17310 Dowel screw with hexagon for jaw, hexalobular, article 69**
**F11B**

**Thread** Metric thread  
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M8X50	100	<a href="#">17310.080.050</a>	M8X140	100	<a href="#">17310.080.140</a>	M10X90	50	<a href="#">17310.100.090</a>
M8X60	100	<a href="#">17310.080.060</a>	M8X150	100	<a href="#">17310.080.150</a>	M10X100	50	<a href="#">17310.100.100</a>
M8X70	100	<a href="#">17310.080.070</a>	M8X160	100	<a href="#">17310.080.160</a>	M10X110	50	<a href="#">17310.100.110</a>
M8X80	100	<a href="#">17310.080.080</a>				M10X120	50	<a href="#">17310.100.120</a>
M8X90	100	<a href="#">17310.080.090</a>	M10X60	100	<a href="#">17310.100.060</a>	M10X130	50	<a href="#">17310.100.130</a>
M8X100	100	<a href="#">17310.080.100</a>	M10X70	100	<a href="#">17310.100.070</a>	M10X140	50	<a href="#">17310.100.140</a>
M8X120	100	<a href="#">17310.080.120</a>	M10X80	100	<a href="#">17310.100.080</a>			

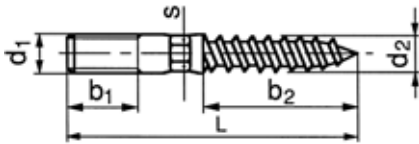
**5**
**17315 Dowel screw with hexagon for jaw, hexalobular, article 71**
**F11B**

**Thread** Metric thread  
**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M12X100	50	<a href="#">17315.120.100</a>	M12X140	50	<a href="#">17315.120.145</a>	M12X160	50	<a href="#">17315.120.165</a>
M12X120	50	<a href="#">17315.120.120</a>						

## Dowel screw A2



### Technical data

d1 x L	P	d2	b1	b2	s
M8x80	1,25	7,3	30	40	6
M8x100	1,25	7,3	40	40	6
M8x120	1,25	7,3	50	50	6
M10x80	1,50	9,0	30	40	8
M10x90	1,5	9,0	30	50	8
M10x100	1,50	9,0	30	60	8
M10x120	1,50	9,0	50	60	8
M10x140	1,50	9,0	50	60	8

### 17576 Dowel screw with hexagon for jaw, article 71

F11C

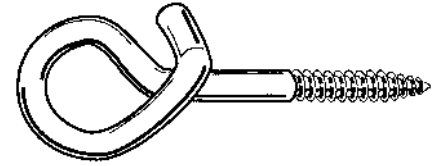
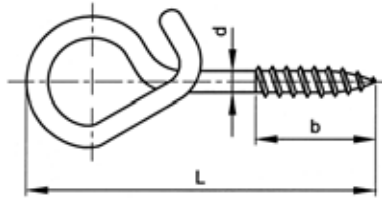
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



5

d1 x L	☒	Art.number	d1 x L	☒	Art.number	d1 x L	☒	Art.number
M8X80	100	<a href="#">17576.080.080</a>	M10X80	100	<a href="#">17576.100.080</a>	M10X140	50	<a href="#">17576.100.140</a>
M8X100	50	<a href="#">17576.080.100</a>	M10X100	50	<a href="#">17576.100.100</a>			
M8X120	50	<a href="#">17576.080.120</a>	M10X120	50	<a href="#">17576.100.120</a>			

## Safety swing hook

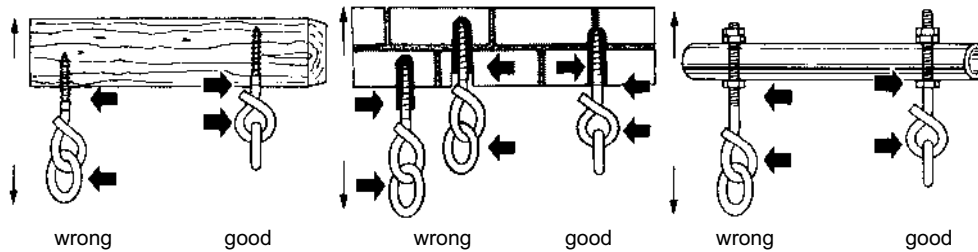


### Technical data

d	b
8,8	50
10	45
12	55

### Assembly data

5



- safety swing hook must be turned in sufficiently so that the threaded shank is completely **invisible**
- safety swing hook must be **transversely** assembled to the swingdirection (this causes the ring to roll and not to slide, consequently reducing wear to minimum)
- safety swing hook and ring must be greased regularly!
- extensive assembly data in each packaging of these safety swing hooks

### 17443 Safety swing hook article 117G

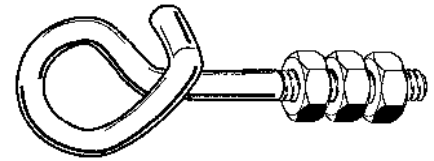
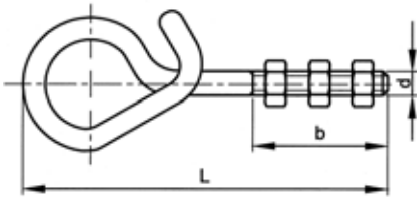
F11B

**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



d x L	☒	Art.number	d x L	☒	Art.number	d x L	☒	Art.number
10X125MM	10	<a href="#">17443.100.125</a>	12X140MM	10	<a href="#">17443.120.140</a>	12X160MM	10	<a href="#">17443.120.160</a>
10X140MM	10	<a href="#">17443.100.140</a>						
10X160MM	10	<a href="#">17443.100.160</a>						

## Safety swing hook metric



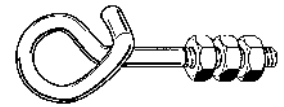
### Technical data

d	M12
P	1,75

#### 17445 Safety swing hook article 118G

F11B

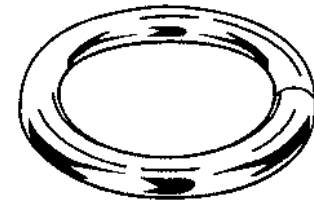
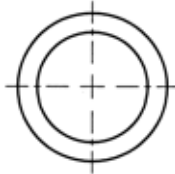
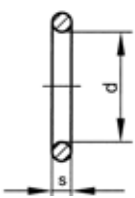
Thread	Metric thread
Material	Steel
Surface treatment	Zinc plated
Packaging	Standard



d x L/b	☒	Art.number	d x L/b	☒	Art.number	d x L/b	☒	Art.number
M12X140X60	10	<a href="#">17445.120.140</a>	M12X180X80	10	<a href="#">17445.120.180</a>	M12X250X160	10	<a href="#">17445.120.250</a>
M12X160X80	10	<a href="#">17445.120.160</a>						

5

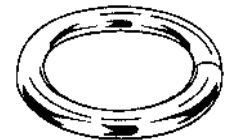
## Ring for safety swing hooks welded



#### 17447 Ring for safety swing hooks welded article 119G

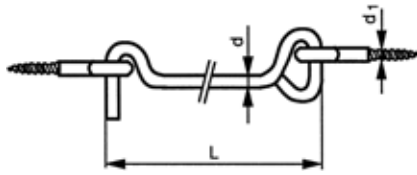
F11B

Material	Steel
Surface treatment	Zinc plated
Packaging	Standard



s x d	☒	Art.number	s x d	☒	Art.number	s x d	☒	Art.number
9X45MM	10	<a href="#">17447.090.045</a>						

## Gate hook with 2 screw eyes



### Technical data

L	d	d <sub>1</sub>
100	4,4	4
160	5,25	4,75
200	5,25	4,75
250	6	5,25

17571 Gate hook with 2 screw eyes article 63R

F11C

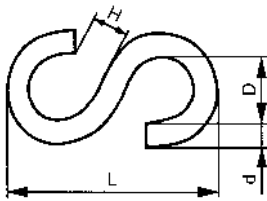
**Material** Stainless steel A2  
**Packaging** Standard



5

L	☒	Art.number	L	☒	Art.number	L	☒	Art.number
100MM	50	<a href="#">17571.040.100</a>	200MM	25	<a href="#">17571.052.200</a>			
160MM	25	<a href="#">17571.052.160</a>	250MM	25	<a href="#">17571.060.250</a>			

## S-Hook



### Technical data

No.	d	D	H	No.	d	D	H	No.	d	D	H
30	3	7	3,5	45	4,4	12	5	60	6	16	7
35	3,45	9	4	50	5	14	5,5	70	7	20	7,5
40	4	11	5	55	6	15	6	80	8,4	23	8,5

17380 S-Hook article 105G

F11B

**Material** Steel  
**Surface treatment** Zinc plated  
**Packaging** Standard



No.(L)	☒	Art.number	No.(L)	☒	Art.number	No.(L)	☒	Art.number
No.30 (25MM)	100	<a href="#">17380.000.030</a>	No.45 (40MM)	100	<a href="#">17380.000.045</a>	No.60 (55MM)	100	<a href="#">17380.000.060</a>
No.35 (30MM)	100	<a href="#">17380.000.035</a>	No.50 (45MM)	100	<a href="#">17380.000.050</a>	No.70 (65MM)	50	<a href="#">17380.000.070</a>
No.40 (35MM)	100	<a href="#">17380.000.040</a>	No.55 (50MM)	100	<a href="#">17380.000.055</a>	No.80 (75MM)	50	<a href="#">17380.000.080</a>