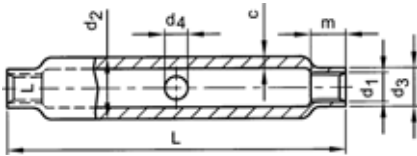


## Turnbuckle made from tubes

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

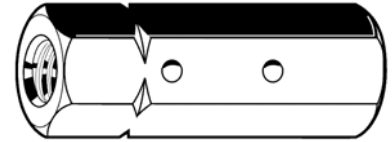
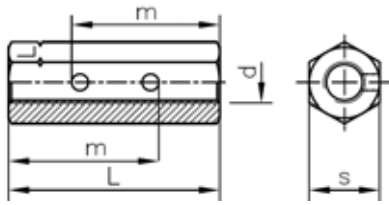
Thread	Metric thread
Material	Steel
Surface treatment	Zinc plated
Packaging	Standard



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

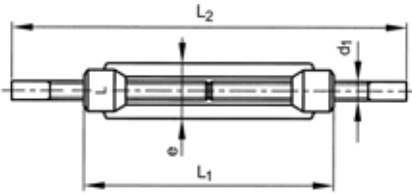


5

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

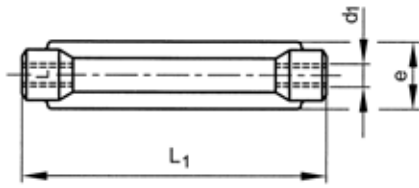
Thread Metric thread  
Material Steel Min.330N/mm<sup>2</sup>  
Packaging Standard



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**

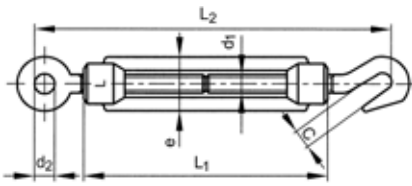
16150 Turnbuckle		F11F
<b>Thread</b>	Metric thread	
<b>Material</b>	Steel Min.330N/mm <sup>2</sup>	
<b>Surface treatment</b>	Zinc plated	
<b>Packaging</b>	Standard	



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



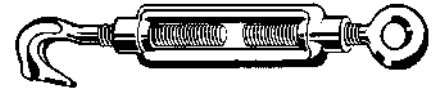
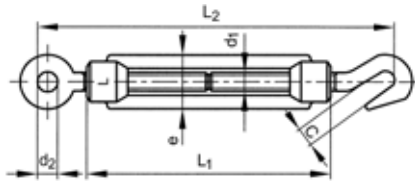
5

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

5

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

R09A

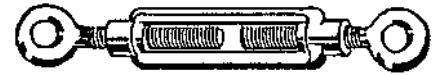
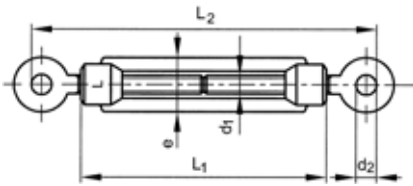
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



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

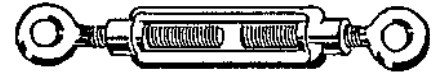
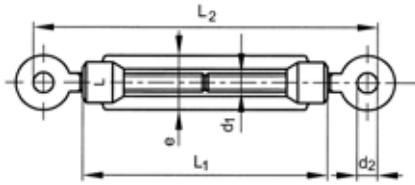


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M5 = 3/16 ZINC	10	<a href="#">16177.050.001</a>	M12 ZINC	5	<a href="#">16177.120.001</a>	M24 HOT D.G.	2	<a href="#">16177.240.001</a>
M6 ZINC	10	<a href="#">16177.060.001</a>	M14 = 9/16 ZINC	5	<a href="#">16177.140.001</a>	M30 HOT D.G.	2	<a href="#">16177.300.001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

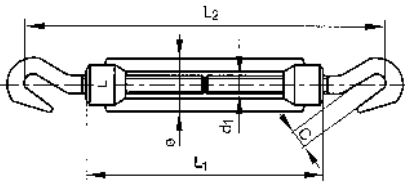


d1	☒	Art.number	d1	☒	Art.number	d1	☒	Art.number
M6	10	<a href="#">51744.060.001</a>	M10	5	<a href="#">51744.100.001</a>	M16	5	<a href="#">51744.160.001</a>
M8	10	<a href="#">51744.080.001</a>	M12	5	<a href="#">51744.120.001</a>	M20	2	<a href="#">51744.200.001</a>



## 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



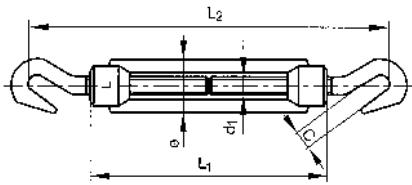
5

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

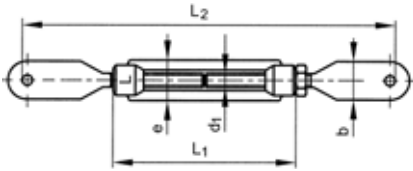
**Thread** Metric thread  
**Material** Stainless steel A2  
**Packaging** Standard



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.