

SINGLE AND MULTIPLE  
CLAMPING SYSTEMS



No. 6540

## Chain clamping set

Hook ends and counter catches tempered. Chain made of tempered steel. Please order fixture for T-slots 6541 separately. Consisting of:

- hook end
- protection set for clamp chain
- counter catch
- 4 roller chains
- 87601: 492 mm (2x), 238 mm (1x), 15.9 mm (1x)
- 87627: 991 mm (1x), 229 mm (1x), 483 mm (1x), 25.4 mm (1x)
- 4 locking links with split pins for connecting
- 6 snap-in plastic elements (for workpiece protection)

Order no.	Slot	Screw G	max. permissible torque [Nm]	max. possible clamping force [kN]	Weight [g]
87601	14, 16, 18	M12	45	15	2628
87627	18, 20, 22, 24	M16	90	40	7640

### Application:

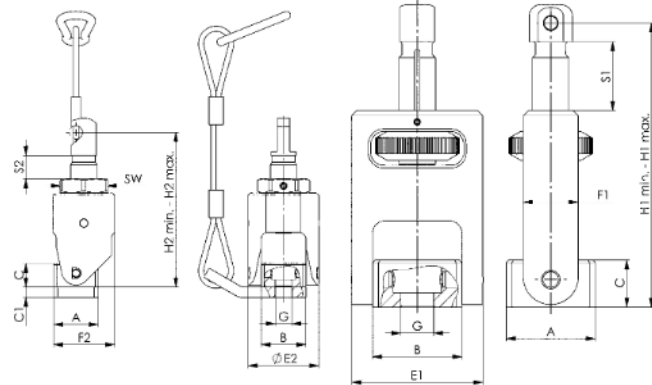
Mainly used for clamping cylindrical parts, such as valve bodies, flanges, pump housings, pistons etc. this device can be used both on machine tables and on clamping pallets. Initial selection of the chain length and setting clamping force is carried out at the take-up unit by turning the knurled nut. Finally, the torque necessary to generate clamping force is applied to the tensioning hook. Plastic pressure pads can be inserted in the chain links to protect the workpiece surface.

### Advantage:

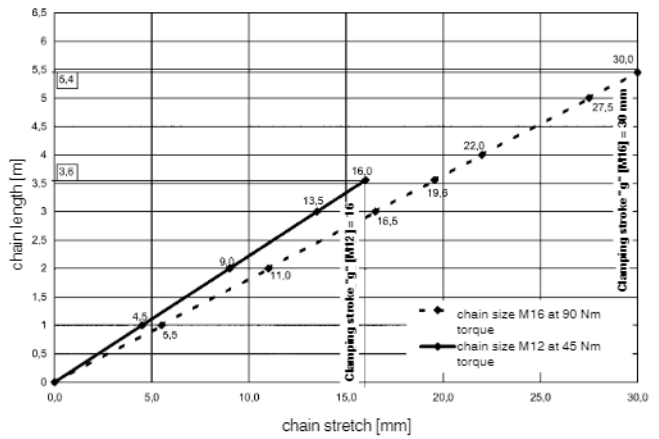
- Uniform pressure distribution reduces workpiece deformation.
- Workpiece can be protected by plastic pressure pads inserted in the chain links.
- Large range of adjustment (tensioning stroke) at take-up unit and tensioning hook.

### Note:

For larger clamping tasks, the clamping hooks, counterholders and clamping chains of size 20 and 24 are used.

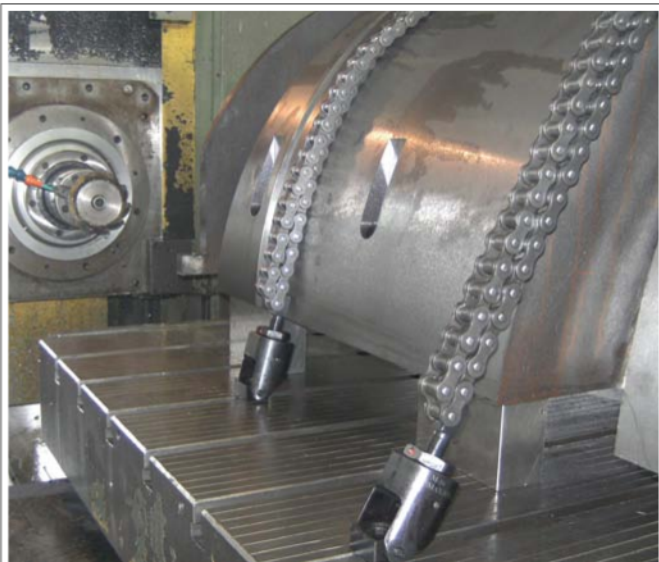


Chain stretch at specified torques



### Dimensions:

Order no.	A	B	C	C1	E1	F1	H1 min.	H1 max.	Clamping stroke S1	E2	F2	H2 min.	H2 max.	Clamping stroke S2	SW
87601	34	34	18	8	50	21	83	108	25	54	46,5	100	118	18	36
87627	37	44	25	10	64	29	110	146	36	70	61,5	122	153	31	46



Subject to technical alterations.

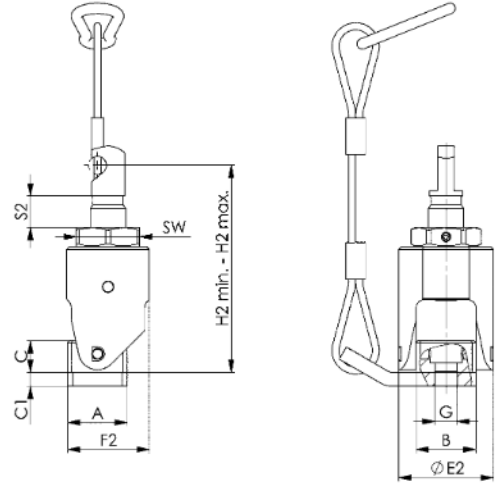
## No. 6540H

### Hook end, mechanical

incl. protection set no. 6540KS



Order no.	Size	Slot	G	max. permissible torque [Nm]	max. possible clamping force [kN]	SW	Weight [g]
374934	12	14, 16, 18	M12	45	15	36	853
374959	16	18, 20, 22, 24	M16	90	40	46	1902
376517	20	22-28	M20	190	75	65	6037
376533	24	28-36	M24	300	120	65	6040



### Dimensions:

Order no.	Size	A	B	C	C1	E2	F2	H2 min.	H2 max.	Clamping stroke S2
374934	12	34	34	18	8	54	47	100	118	18
374959	16	37	44	25	10	70	62	122	153	31
376517	20	58	64	41	10	98	86	195	250	55
376533	24	58	64	41	10	98	86	199	260	61

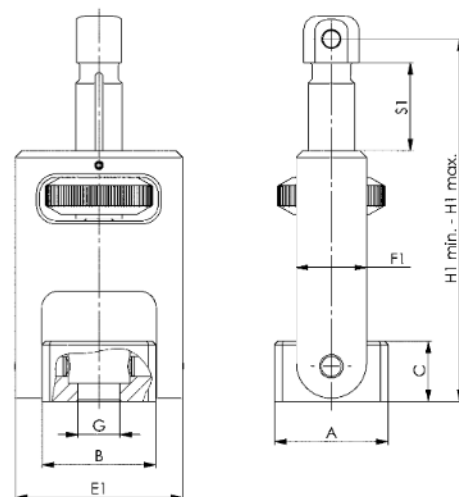


## No. 6540G

### Counter catch



Order no.	Size	Slot	G	S1 Stroke	max. possible clamping force [kN]	Weight [g]
374710	12	14, 16, 18	M12	25,0	15	553
374728	16	18, 20, 22, 24	M16	36,0	40	1235
376657	20	22-28	M20	43,5	75	4088
376632	24	28-36	M24	43,0	120	4145



### Dimensions:

Order no.	Size	A	B	C	E1	F1	H1 min.	H1 max.
374710	12	34	34	18	50	21	83	108,0
374728	16	37	44	25	64	29	110	146,0
376657	20	58	64	41	91	48	162	205,5
376632	24	58	64	41	91	48	166	209,0

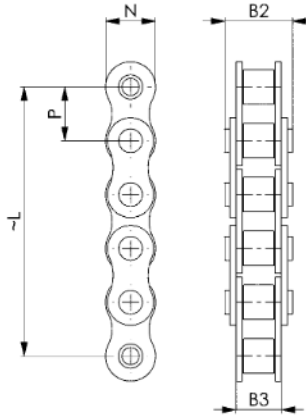
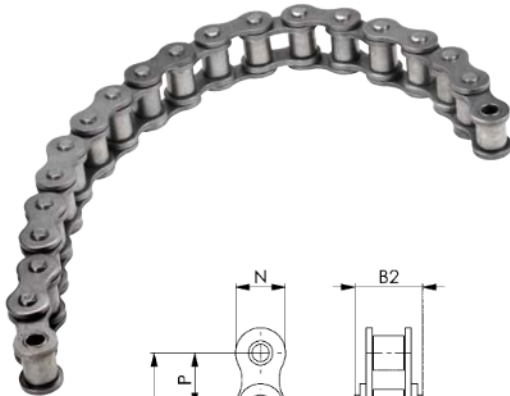


Subject to technical alterations.

## No. 6540K

### Roller chain

Single roller chain DIN 8187, ISO R 606 B, ST 37-2.  
Surface: plain.



Order no.	Size	Nominal size	L	B2	B3	N	P	max. possible clamping force [kN]	Weight [g]
374736	12	125	111	20	13	15	15,875	15	114
374744	12	250	238	20	13	15	15,875	15	228
374751	12	500	492	20	13	15	15,875	15	455
374769	12	1000	1000	20	13	15	15,875	15	910
374777	16	125	127	23	25	21	25,400	40	335
374785	16	250	229	23	25	21	25,400	40	670
374793	16	500	483	23	25	21	25,400	40	1340
374801	16	1000	991	23	25	21	25,400	40	2680
376673	20	1000	984	44	29	26	31,750	75	3720
376699	20	1500	1492	44	29	26	31,750	75	5580
376715	20	2000	2000	44	29	26	31,750	75	7440
376723	24	1000	1028	54	38	33	38,100	120	7050
376749	24	1500	1485	54	38	33	38,100	120	10575
376764	24	2000	2019	54	38	33	38,100	120	14100

#### Application:

The individual chain lengths can be joined as required using the connecting links (No. 6540V). The chain can be shortened to any length as required.

#### Advantage:

- Chain can be extended or shortened to the required length with ease
- both sides usable with counter catches or hook ends
- resistant to temperature influences and soiling
- chains are tensioned to minimise elongation.

#### On request:

Customised lengths available!

## No. 6540KS

### Clamp chain protection set

Completely pre-assembled.



Order no.	Size	Max. clamping force to be secured [kN]	Weight [g]
376111	12	15	280
376129	16	40	350
376491	20	75	1313
376558	24	120	1313

#### Application:

To use the clamp chain safely, the protection set is simply screwed below the hook end or the counterholder. Then, using the supplied connecting link, the protection set is fastened above the hook end or counterholder. This prevents the clamp chain from snapping uncontrolledly if the hook end or counterholder breaks.

#### Advantage:

- Easy mounting of the protection set
- Safe handling of the clamp chain
- Improved work safety.

#### Note:

If the protection set is damaged, the entire set must be replaced.

## No. 6540F

### Spring cotter pin

Packaging unit: 10 pcs.



Order no.	Size	Packaging unit [St]	Weight [g]
374835	12	10	0,5
374843	16	10	1,0
376822	20	10	2,2
376848	24	10	6,5

## No. 6540V

### Connecting links with spring cotter pin



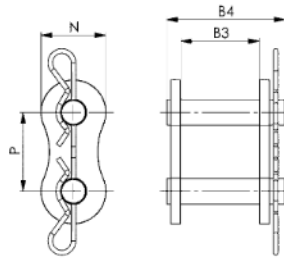
Order no.	Size	B3	B4	N	P	max. possible clamping force [kN]	Weight [g]
374819	12	13	22	14	15,875	15	15
374827	16	25	39	21	25,400	40	67
376780	20	29	44	26	31,750	75	113
376806	24	38	59	33	38,100	120	274

#### Application:

The connecting links are used for joining two chains together.

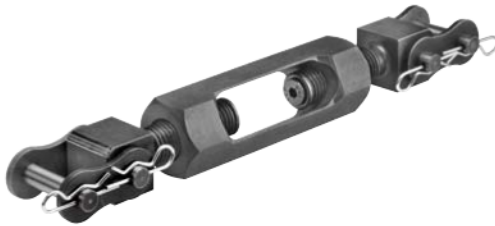
#### Advantage:

Chains simple and quick to combine and replace.



## No. 6540VS

### Turnbuckle



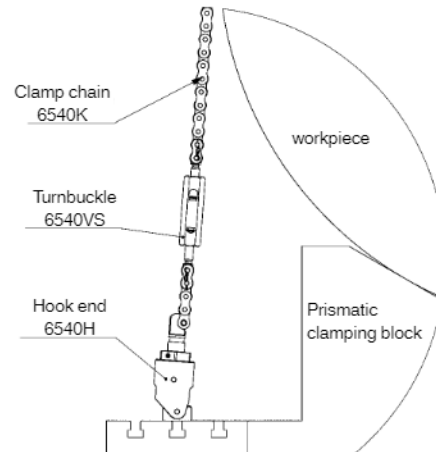
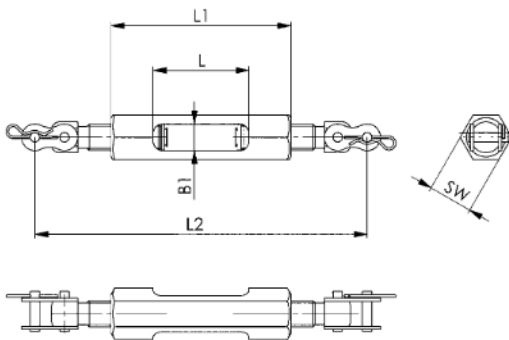
Order no.	Size	L	L1	L2	B1	SW	max. possible clamping force [kN]	Weight [g]
376459	12	52	97	111 - 147	14	24	15	240
376616	16	66	126	151 - 203	20	30	40	720
551514	20	100	180	206 - 270	31	50	75	2222
551515	24	105	180	214 - 284	31	50	120	3517

#### Application:

The turnbuckle is clamped between the chains using two locking links. The chain is pretensioned through turning, and the play (caused by lengthening of the chain) is removed.

#### Advantage:

- Optimal application of pretensioning with use of long clamping chains (3 m or longer)
- Counteracting chain stretching for long chains



## No. 6540S

### Protective elements

for workpiece protection.  
Packaging unit: 6 pcs.



Order no.	Size	Packaging unit [St]	Weight [g]
374850	12	6	3
374868	16	6	5
376574	20	6	10
376590	24	6	16

#### Application:

The protective elements are pushed into the gaps between the chain links.

#### Advantage:

The workpiece surface is protected.

Subject to technical alterations.

## No. 6540P

### Angle block, 120°

Tempered and burnished.



Order no.	Size	2R	B	B2	F1	F2	G	H2	H3	H4	L	L1	L2	L3	L4	dia. S	dia. S1	Weight [g]
375568	12	80	47	20	27	67	M6	80	35	5,5	118	19	59	42	-	13,5	20	3230
375584	16	100	47	20	33	33	M6	100	44	5,5	148	24	74	44	-	17,5	26	3960
35121	20	270	78	20	91	161	M6	250	102	5,5	360	45	100	44	160	22,0	33	32455
35162	24	270	78	20	91	161	M6	250	102	5,5	360	45	100	44	160	26,0	40	31760

#### Advantage:

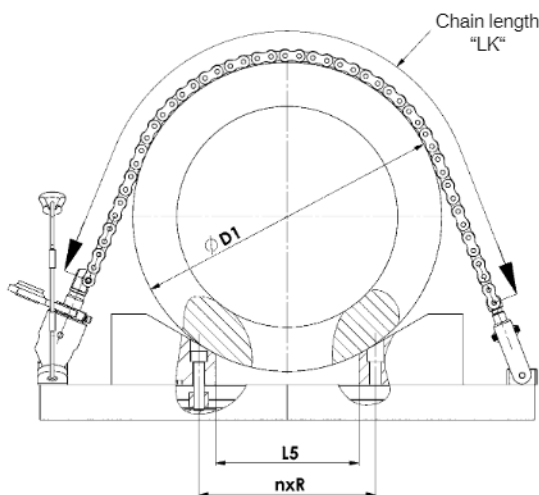
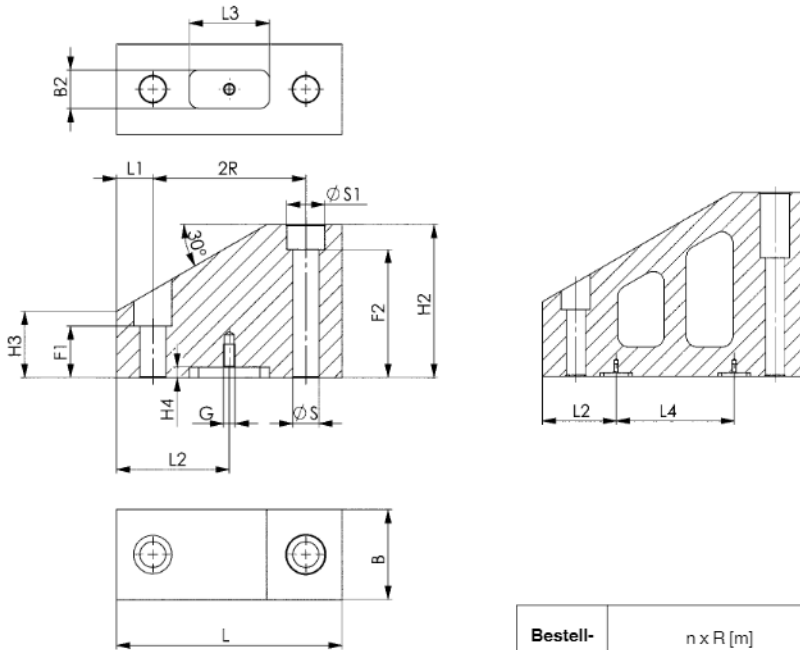
Optimised use of the clamp chain thanks to flexible positioning of the clamping prisms in the machine table groove.

#### Note:

The use of a flat T-nut no. 6322A or no. 6322B enables the clamping prisms to be precisely positioned in the machine table groove.

#### On request:

Special versions are available on request.



Bestell-Nr.	n x R [m] Clearance of angle blocks	Ø D1 [mm]	Chain length LK [mm] (x) = Number of links	L5
375568	1 x 40 = 40	190 - 280	413 (26) - 635 (40)	2
	2 x 40 = 80	250 - 360	540 (34) - 826 (52)	42
	3 x 40 = 120	270 - 440	603 (38) - 1048 (66)	82
	4 x 40 = 160	300 - 520	635 (40) - 1238 (78)	122
	5 x 40 = 200	350 - 600	762 (48) - 1429 (90)	162
	6 x 40 = 240	430 - 680	953 (60) 1619 (102)	202
	7 x 40 = 280	510 - 760	1143 (72) - 1810 (114)	242
	8 x 40 = 320	620 - 840	1397 (88) - 2000 (126)	282
	9 x 40 = 360	760 - 920	1778 (112) - 2191 (138)	322
	10 x 40 = 400	920 - 1000	2191 (138) - 2413 (152)	362
375584	1 x 50 = 50	250 - 370	559 (22) - 864 (34)	2
	2 x 50 = 100	320 - 470	711 (28) - 1118 (44)	52
	3 x 50 = 150	320 - 570	711 (28) - 1372 (54)	102
	4 x 50 = 200	320 - 670	711 (28) - 1575 (62)	152
	5 x 50 = 250	430 - 770	965 (38) - 1829 (72)	202
	6 x 50 = 300	530 - 870	1168 (46) - 2083 (82)	252
	7 x 50 = 350	630 - 970	1422 (56) - 2337 (92)	302
	8 x 50 = 400	760 - 1070	1727 (68) - 2591 (102)	352
	9 x 50 = 450	960 - 1170	2235 (88) - 1794 (110)	402
	10 x 50 = 500	1160 - 1270	2743 (108) - 3048 (120)	452
35121	3 x 135 = 405	1200 - 1550	2889 (91) - 3842 (121)	315
	5 x 135 = 675	1550 - 2100	3683 (116) - 5175 (163)	585
	7 x 135 = 945	2100 - 2500	5017 (158) - 6096 (192)	855
35162	3 x 135 = 405	1200 - 1550	2324 (61) - 3848 (101)	315
	5 x 135 = 675	1550 - 2100	3657 (96) - 5143 (135)	858
	7 x 135 = 945	2100 - 2500	5029 (132) - 6096 (160)	855

Subject to technical alterations.

## No. 6541

### Mounting kit

For attaching the chain clamping set no. 6540 on the subplate, composed of nut for T-nut, resembling DIN 508, and screw complying with ISO 4762, class 8.8.

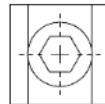
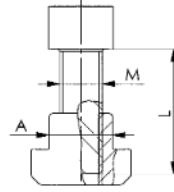


Order no.	A	L	M	Weight [g]
84251	14	25	M12	60
376483	14	35 *	M12	88
84269	16	30	M12	80
376509	16	40 *	M12	114
84277	18	30	M12	105
376525	18	40 *	M12	141
84285	18	30	M16	115
376541	18	45 *	M16	189
84293	20	35	M16	170
376566	20	50 *	M16	248
84343	22	40	M16	240
376582	22	50 *	M16	305
84350	24	45	M16	335
376608	24	55 *	M16	407

\* For use of the protection set no. 6540KS

### Note:

Mounting kit for the sizes 20 and 24 available on request.



## No. 902Md

### Open-ended spanner with torque wrench socket

for clamping nuts. Drive 1/2" square socket with ball-engagement groove. Special steel, hardened and zinc-plated.



Order no.	SW	L	S	SW1 [inch]	T	T1	Weight [g]
52514	36	101	60	1/2	7	16	255
52522	46	108	60	1/2	8	16	340

### Advantage:

Controlled tightening prevents damage to spindle changing tools on a machine.

### Note:

The set value for the torque wrench is dependant on insertion dimension „S“. The operating manual provided with your torque wrench contains the requisite information and calculation formulae.

### On request:

SW 65 fits clip no. 6540H - size M20/M24 available on request.

