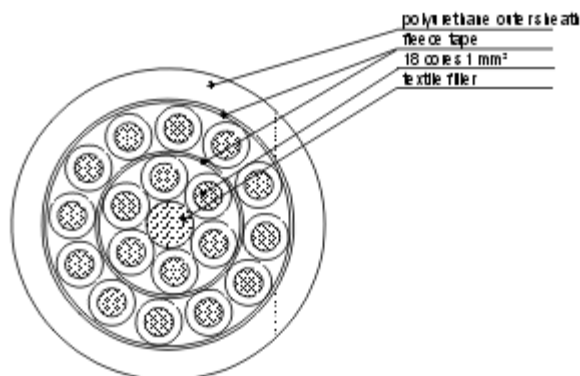


Semoflex® Roboschlepp®

The PUR cable for cable chains

Description



Application

For use in cable chains and continual moving machines and robots. Because of the polyurethane outer sheath the cable outer diameter is very small but still able to withstand high mechanical stresses. It is abrasion-proof, microbe-proof and flame resistant.

Design

Conductor:	plain copper, finest stranding as per VDE 0295 class 6
Insulation:	Semocore®
Core colour:	up to 0,34 mm ² as per Din 47 100 from 0,5 mm ² white cores, numbered from 3 cores with green/yellow protection conductor
Core arrangement:	cores twisted around in concentric layers
Wrapping:	fleece
ISheath:	PUR, adhesion proof
Sheath colour:	grey, preferred RAL 7001
Imprint:	Semoflex® Roboschlepp® core x section

Thermical qualities

Temperature range, flexible:	- 40°C up to + 90°C
Temperature range, fixed:	- 50°C up to + 90°C

Technical datas in case of 20°C

Nominal voltage:	0,14 - 0,34 mm ² 350 V from 0,5 mm ² 300/500 V
Test voltage:	up to 1,5 mm ² 2.000 V 2,5 - 4,0 mm ² 2.500 V from 6 mm ² 3.000 V
Conductor resistance:	as per VDE 0295 class 6
Insulation resistance:	> 20 MOhm x km

Other qualities

Bending radius:	flexible application: 5 x cable diameter
Oil resistance:	according to VDE 0472
Characteristic of combustion:	as per VDE 0472 part 804, test type A, IEC 332-2
Applied standards:	similar to VDE 0250

Semoflex® Roboschlepp®

Section mm²	CU- number kg/km	Outer Ø approx. mm	Weight approx. kg/km
2 x 0,14	2,9	3,3	11
3 x 0,14	4,3	3,5	14
4 x 0,14	5,8	3,7	17
5 x 0,14	7,2	4,0	20
8 x 0,14	11,5	5,0	31
12 x 0,14	17,3	5,7	43
18 x 0,14	25,9	6,4	58
25 x 0,14	36,0	7,9	84
2 x 0,25	4,8	3,8	15
3 x 0,25	7,2	4,0	20
4 x 0,25	9,6	4,3	24
5 x 0,25	12,0	4,6	29
8 x 0,25	19,2	6,1	48
12 x 0,25	28,8	6,9	65
18 x 0,25	43,2	8,1	94
25 x 0,25	60,0	9,4	125
2 x 0,34	6,5	4,0	18
3 x 0,34	9,8	4,2	23
4 x 0,34	13,0	4,5	28
5 x 0,34	16,3	5,1	36

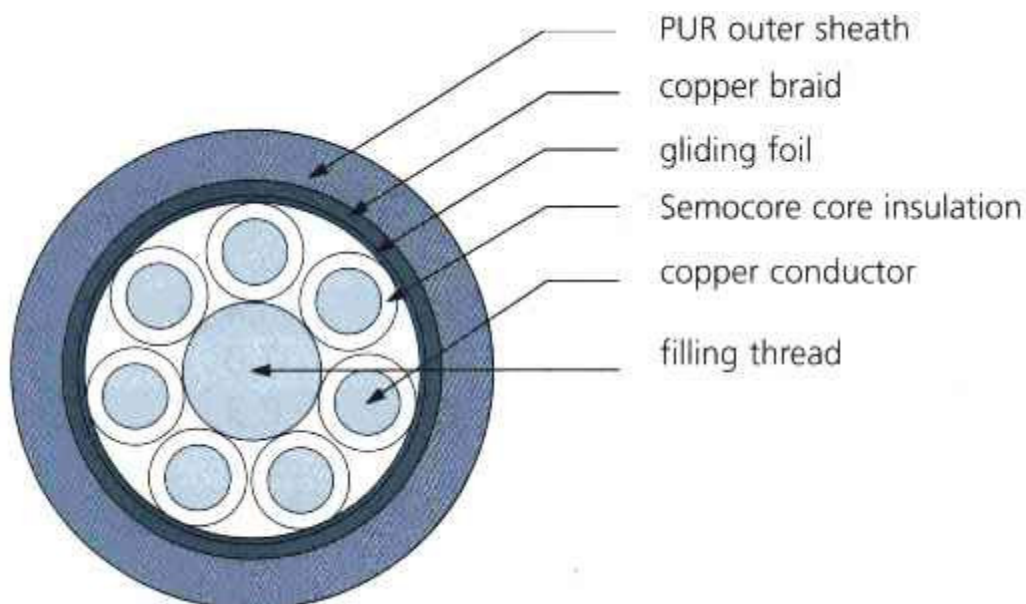
8 x 0,34	26,1	6,9	62
12 x 0,34	39,1	7,3	78
18 x 0,34	58,7	8,6	114
25 x 0,34	81,5	10,0	150
2 x 0,5	9,6	4,5	24
3 x 0,5	14,4	4,7	28
4 x 0,5	19,2	5,3	38
5 x 0,5	24,0	5,9	49
7 x 0,5	33,6	6,9	65
12 x 0,5	57,6	8,5	102
14 x 0,5	67,2	9,1	116
18 x 0,5	86,4	9,8	154
25 x 0,5	120,0	11,5	202
30 x 0,5	144,0	11,9	236
36 x 0,5	172,8	12,3	274
2 x 0,75	14,4	5,3	30
3 x 0,75	21,6	5,5	38
4 x 0,75	28,8	6,0	48
5 x 0,75	36,0	6,5	63
7 x 0,75	50,4	7,6	91
12 x 0,75	86,4	9,3	140
14 x 0,75	100,8	9,8	160
18 x 0,75	129,6	10,8	199
20 x 0,75	144,0	11,3	230
25 x 0,75	180,0	12,7	275
30 x 0,75	216,0	13,1	318
36 x 0,75	259,2	14,6	396
2 x 1,0	19,2	5,7	40
3 x 1,0	28,8	6,0	52
4 x 1,0	38,4	6,4	65
5 x 1,0	48,0	7,0	79
7 x 1,0	67,2	8,3	108
8 x 1,0	76,8	9,3	132
12 x 1,0	115,2	10,2	178
14 x 1,0	134,4	10,6	202
18 x 1,0	172,8	11,8	254
25 x 1,0	240,0	14,0	343
30 x 1,0	288,0	14,6	409
36 x 1,0	345,6	16,0	512
2 x 1,5	28,8	6,1	51
3 x 1,5	43,2	6,4	68
4 x 1,5	57,6	7,0	88
5 x 1,5	72,0	7,6	107
7 x 1,5	100,8	9,4	171
12 x 1,5	172,8	11,0	239

14 x 1,5	201,6	11,5	275
18 x 1,5	259,2	12,8	356
25 x 1,5	360,0	15,2	475
30 x 1,5	432,0	16,1	560
36 x 1,5	518,4	17,7	700
3 x 2,5	72,0	8,3	120
4 x 2,5	96,0	9,1	148
5 x 2,5	120,0	9,9	177
7 x 2,5	168,0	11,7	247
12 x 2,5	288,0	13,9	382
18 x 2,5	432,0	16,7	585
25 x 2,5	600,0	20,5	827
4 x 4,0	153,6	11,5	232
5 x 4,0	192,0	12,6	285
7 x 4,0	268,8	15,0	385
4 x 6,0	230,4	14,7	370
5 x 6,0	288,0	15,2	418
7 x 6,0	403,2	19,1	598
4 x 10,0	384,0	18,1	566
5 x 10,0	480,0	19,9	718
1 x 16,0	153,8	10,0	290
4 x 16,0	614,4	21,9	885
4 x 25,0	960,0	25,8	1.295

Roboschlepp® screened

The PUR cable for drag chains

Description



Application

For use in drag chains and continual moving machines and robots. Due to the outer sheath which is polyurethane, the cable outer diameter is very small but is still able to withstand high-proof mechanical stress. The cable is furthermore abrasion, resistant, microbe-proof as well as flame resistant. The copper screen covers 85-90%.

Design

Conductor:	plain copper, finest stranding as per VDE 0295 class 6
Insulation:	Semocore®
Core colour:	up to 0,34 mm ² as per Din 47 100 from 0,5 mm ² white cores, black numbered from 3 cores with green/yellow protection conductor
Core arrangement:	cores twisted around in concentric layers
Wrapping:	fleece
Screening:	tinned special braid which covers 85-90%
Wrapping:	fleece
ISheath:	PUR, low adhesion
Sheath colour:	grey, preferred RAL 7001
Imprint:	Semoflex® Roboschlepp® -C core x section

Thermal qualities

Temperature range, flexible:	- 40°C up to + 90°C
Temperature range, fixed:	- 50°C up to + 90°C

Technical datas in case of 20°C

Nominal voltage:	0,14 - 0,34 mm ² 350 V from 0,5 mm ² 300/500 V
Test voltage:	up to 1,5 mm ² 2.000 V 2,5 - 4,0 mm ² 2.500 V from 6,0 mm ² 3.000 V
Conductor resistance:	according to VDE 0295 class 6
Insulation resistance:	> 20 MOhm x km

Other qualities

Bending radius:	flexible application: 7,5 x cable diameter
Oil resistance:	according to VDE 0472
Characteristic of combustion:	as per VDE 0472 part 804, test type A, IEC 332-2
Applied standards:	similar to VDE 0250

Semoflex® Roboschlepp® - screened

Section	CU- number	Outer Ø	Weight
mm²	kg/km	approx. mm	approx. kg/km
2 x 0,14	10,0	3,8	19
3 x 0,14	11,0	3,9	21
4 x 0,14	14,0	4,2	25
5 x 0,14	16,0	4,9	33
8 x 0,14	23,0	6,1	50
12 x 0,14	30,0	6,6	61
18 x 0,14	41,0	7,3	80
25 x 0,14	54,0	8,6	106
2 x 0,25	13,0	4,3	24
3 x 0,25	16,0	4,5	29
4 x 0,25	19,0	5,2	38
5 x 0,25	23,0	5,9	49
8 x 0,25	33,0	7,0	69

12 x 0,25	45,0	7,6	85
18 x 0,25	62,0	8,8	118
25 x 0,25	94,0	10,5	168
2 x 0,34	15,0	4,5	27
3 x 0,34	19,0	5,1	37
4 x 0,34	23,0	5,8	48
5 x 0,34	28,0	6,2	56
8 x 0,34	42,0	7,6	82
12 x 0,34	56,0	8,2	103
18 x 0,34	89,0	9,5	149
25 x 0,34	118,0	11,1	198
2 x 0,5	21,0	5,8	53
3 x 0,5	26,0	6,0	55
4 x 0,5	31,0	6,4	59
5 x 0,5	37,0	6,8	69
7 x 0,5	50,0	8,0	94
12 x 0,5	88,0	9,6	145
18x 0,5	123,0	10,9	196
25 x 0,5	164,0	12,8	263
30 x 0,5	190,0	13,4	302
36 x 0,5	223,0	14,3	350
40 x 0,5	249,0	15,9	405
2 x 0,75	26,0	6,2	50
3 x 0,75	34,0	6,4	60
4 x 0,75	42,0	6,9	75
5 x 0,75	51,0	7,4	89
7 x 0,75	69,0	8,7	118
12 x 0,75	120,0	10,4	183
18 x 0,75	170,0	12,1	258
25 x 0,75	230,0	14,2	347
30 x 0,75	267,0	14,6	390
36 x 0,75	316,0	15,9	460
2 x 1,0	32,0	6,6	58
3 x 1,0	42,0	6,9	72
4 x 1,0	54,0	7,4	87
5 x 1,0	65,0	8,1	107
7 x 1,0	98,0	9,6	157
12 x 1,0	153,0	11,3	225
18 x 1,0	218,0	13,1	300
25 x 1,0	296,0	15,7	436
30 x 1,0	345,0	16,1	492
36 x 1,0	409,0	17,5	585
2 x 1,5	43,0	7,0	71
3 x 1,5	58,0	7,3	89
4 x 1,5	74,0	8,0	112

5 x 1,5	91,0	8,7	135
7 x 1,5	135,0	10,5	197
12 x 1,5	215,0	12,3	294
18 x 1,5	310,0	14,3	417
25 x 1,5	421,0	16,9	567
30 x 1,5	496,0	17,6	656
36 x 1,5	588,0	19,1	780
3 x 2,5	101,0	9,2	148
4 x 2,5	129,0	10,1	186
5 x 2,5	162,0	11,0	240
7 x 2,5	213,0	13,0	307
12 x 2,5	343,0	15,6	475
18 x 2,5	498,0	18,2	680
25 x 2,5	706,0	21,8	930
4 x 4,0	194,0	12,0	270
5 x 4,0	237,0	13,0	326
7 x 4,0	325,0	15,8	458
4 x 6,0	281,0	14,4	390
5 x 6,0	344,0	15,8	478
7 x 6,0	473,0	19,2	668
4 x 10,0	452,0	18,6	640
5 x 10,0	556,0	20,8	784
4 x 16,0	722,0	22,1	946
4 x 25,0	1.093,0	26,4	1.440
4 x 35,0	1.496,0	29,7	1.920

**Semoflex® Roboschlepp®
paired screened**

Section mm²	CU- number kg/km	Outer Ø approx. mm	Weight approx. kg/km
6 x (2 X 1)	209,0	18,2	385

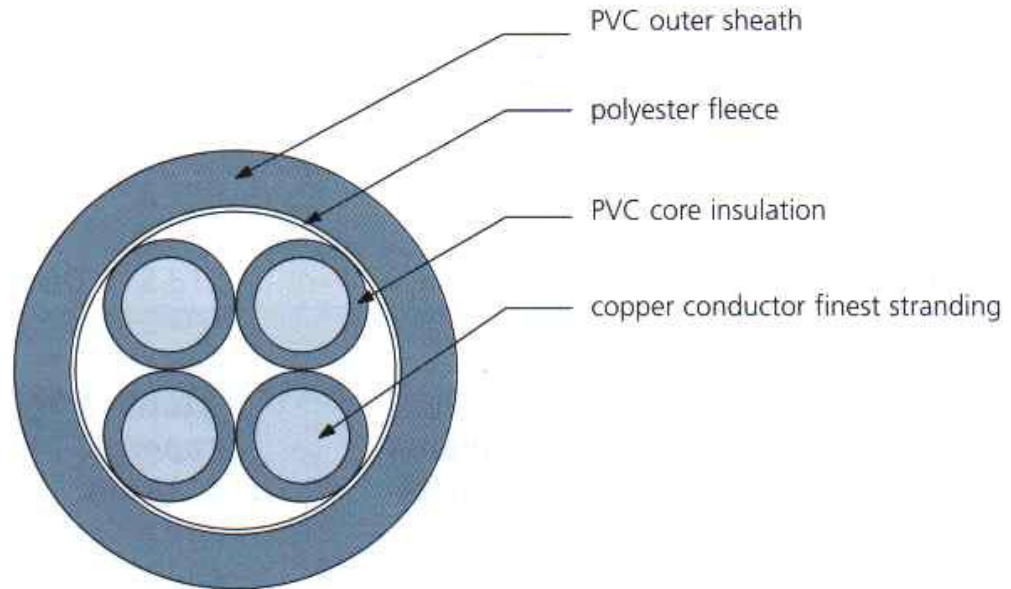
**Semoflex® Roboschlepp® paired stranded
Total screening**

Section mm²	CU- number kg/km	Outer Ø approx. mm	Weight approx. kg/km
8 x 2 x 0,14	49,0	8,3	103
2 x 2 x 0,25	22,0	6,6	44
3 x 2 x 0,25	30,0	7,1	61
4 x 2 x 0,25	35,0	7,8	71
5 x 2 x 0,25	42,0	8,4	85
6 x 2 x 0,25	58,0	9,1	105
8 x 2 x 0,25	70,0	10,3	125
10 x 2 x 0,25	83,0	10,8	148
14 x 2 x 0,25	106,0	11,4	173
2 x 2 x 0,5	36,0	7,8	65
3 x 2 x 0,5	54,0	8,4	94
4 x 2 x 0,5	67,0	8,9	110
5 x 2 x 0,5	82,0	10,2	136
8 x 2 x 0,5	120,0	12,4	206
10 x 2 x 0,5	141,0	12,9	240
12 x 2 x 0,5	163,0	13,7	279

Semoflex® D-PVC

The PVC cable for drag chains

Description



Application

For use in drag chains and continuously moving machines and robots as well as for lifting equipment and conveyor systems. The cable is mechanically strong and generally resistant against petrol, oil and fat.

Design

Conductor:	plain copper, finest stranding as per VDE 0295 class 6
Insulation:	PVC as per VDE 0207 part 4
Core colour:	black cores, numbered from 3 cores upwards with green/yellow protection conductor
Core arrangement:	cores twisted around in concentric layers
Wrapping:	fleece
ISheath:	PVC YM2 as per VDE 0207 part 5, adhesion proof
Sheath colour:	grey, preferred RAL 7001
Imprint:	Semoflex D-PVC

Thermal qualities

Temperature range, flexible:	- 5°C up to + 70°C
Temperature range, fixed:	- 30°C up to + 70°C

Technical datas in case of 20°C

Nominal voltage:	0,50 - 0,75 mm ² 300/300 V from 1,0 mm ² 300/500 V
Test voltage:	core/core up to 0,75 mm ² 2.000 V up to 6,00 mm ² 3.000 V
Conductor resistance:	as per VDE 0295 class 6
Insulation resistance:	> 20 MOhm x km

Other qualities

Bending radius:	flexible application: 12 x cable diameter
Oil resistance:	as per VDE 0472
Characteristic of combustion:	similar to VDE 0207, 0250, 0293, 0295, 0472
Applied standards:	available with customer's imprint.

Semoflex® D - PVC

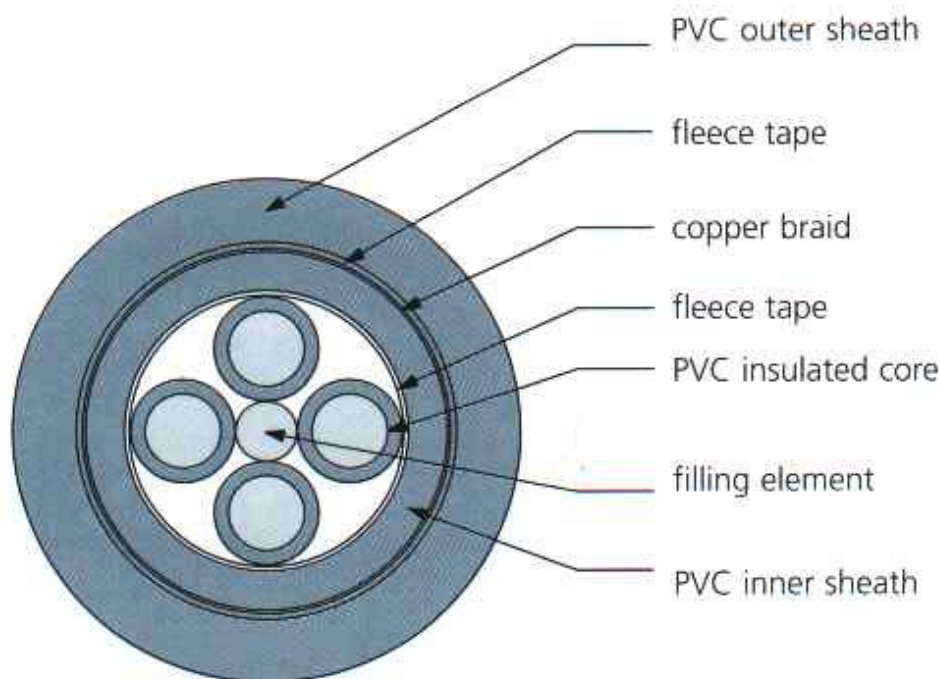
Section mm²	CU- number kg/km	Outer Ø approx. mm	Weight approx. kg/km
2 x 0,5	9,6	5,4	35
3 x 0,5	14,4	5,7	44
4 x 0,5	19,2	6,3	55
5 x 0,5	24,0	6,9	68
7 x 0,5	33,6	8,1	94
12 x 0,5	57,6	9,5	136
18 x 0,5	86,4	11,5	202
25 x 0,5	120,0	13,7	284
2 x 0,75	14,4	5,8	42
3 x 0,75	21,6	6,2	55
5 x 0,75	36,0	7,5	89
7 x 0,75	50,4	9,0	124
12 x 0,75	86,4	10,6	181
14 x 0,75	100,8	11,9	240
18 x 0,75	129,6	12,8	272

25 x 0,75	180,0	15,1	375
34 x 0,75	244,8	18,5	
2 x 1,0	19,2	6,2	50
3 x 1,0	28,8	6,6	66
4 x 1,0	38,4	7,3	83
5 x 1,0	48,0	8,1	104
7 x 1,0	67,2	9,7	150
10 x 1,0	96,0	12,7	
12 x 1,0	115,2	11,4	221
18 x 1,0	172,8	14,0	337
24 x 1,0	230,4	17,7	527
25 x 1,0	240,0	16,3	460
34 x 1,0	326,4	21,3	715
42 x 1,0	403,2	20,7	762
48 x 1,0	460,8	24,0	920
50 x 1,0	480,0	21,8	872
60 x 1,0	576,0	24,0	1046
3 x 1,5	43,2	7,4	87
4 x 1,5	57,6	8,1	110
5 x 1,5	72,0	9,2	142
7 x 1,5	100,8	11,0	204
10 x 1,5	144,0	13,5	265
12 x 1,5	172,8	12,9	299
18 x 1,5	259,2	15,7	453
25 x 1,5	360,0	18,5	625
34 x 1,5	489,6	22,7	890
50 x 1,5	720,0	24,4	1176
3 x 2,5	72,0	9,0	133
4 x 2,5	96,0	10,1	173
5 x 2,5	120,0	11,3	220
7 x 2,5	168,0	13,7	325
12 x 2,5	288,0	16,0	475
18 x 2,5	432,0	19,5	718
25 x 2,5	600,0	24,1	1001
32 x 2,5	768,0	27,0	1365
3 x 4,0	115,2	12,7	230
4 x 4,0	152,0	11,8	250
3 x 6,0	172,8	15,4	352
4 x 6,0	230,4	14,0	367

Semoflex® D-PVC screened

The screened PVC cable for drag chains

Description



Application

For use in drag chains and continuously moving machines and robots as well as for lifting equipment and conveyor systems. The cable is mechanically strong and generally resistant against petrol, oil and fat.

The copper braid covers 85-90% .

Design

Conductor:	plain copper, fine stranding as per VDE 0295 class 6
Insulation:	PVC as per VDE 0207 part 4
Core colour:	black cores, numbered from 3 cores upwards with green/yellow protection conductor
Core arrangement:	cores twisted around in concentric layers
Wrapping:	polyester bandaging
Inner sheath:	PVC YM2 as per VDE 0207 part 5
Screening:	tinned special braid 85-90%
Wrapping:	fleece
Outer sheath:	PVC YM2 as per VDE 0207 part 5
Outer sheath colour:	grey, preferred RAL 7001
Imprint:	Semoflex® D-PVC-C

Thermal qualities

Temperature range, flexible:	- 5°C up to + 70°C
Temperature range, fixed:	- 30°C up to + 70°C

Technical datas in case of 20°C

Nominal voltage:	0,50 - 0,75 mm ² 300/300 V from 1,0 mm ² 300/500 V
Test voltage:	core/core up to 0,75 mm ² 2.000 V up to 6,00 mm ² 3.000 V
Conductor resistance:	according to VDE 0295 class 6
Insulation resistance:	> 20 MOhm x km

Other qualities

Bending radius:	flexible application: 12 x cable diameter
Oil resistance:	according to VDE 0472
Applied standards:	as per VDE 0207, 0250, 0293, 0295, 0472
Speciality:	available with customer's imprint

Semoflex® D - PVC screened

Section mm²	CU- number kg/km	Outer Ø approx. mm	Weight approx. kg/km
2 x 0,5	33,0	7,0	77
3 x 0,5	39,0	7,3	87
4 x 0,5	46,0	7,9	103
7 x 0,5	70,0	9,9	161
12 x 0,5	100,0	11,3	213
18 x 0,5	153,0	13,5	314
20 x 0,5	175,0	14,9	330
25 x 0,5	199,0	15,9	423
34 x 0,5	264,0	18,3	515
50 x 0,5	371,0	20,8	749
60 x 0,5	430,0	22,5	874
2 x 0,75	39,0	7,4	87
3 x 0,75	48,0	7,8	102
4 x 0,75	59,0	8,5	122
7 x 0,75	90,0	10,8	197

12 x 0,75	132,0	12,4	266
25 x 0,75	267,0	17,3	527
2 x 1,0	58,0	9,9	135
3 x 1,0	75,0	10,2	155
4 x 1,0	86,0	10,9	180
5 x 1,0	102,0	11,7	210
7 x 1,0	127,0	13,5	248
12 x 1,0	194,0	15,2	363
18 x 1,0	265,0	17,6	497
25 x 1,0	352,0	20,7	666
34 x 1,0	454,0	23,5	883
2 x 1,5	74,0	10,3	150
3 x 1,5	95,0	10,7	176
4 x 1,5	116,0	11,4	207
5 x 1,5	130,0	12,3	244
7 x 1,5	168,0	14,2	292
12 x 1,5	225,0	16,0	435
18 x 1,5	358,0	20,0	669
25 x 1,5	483,0	22,8	870
3 x 2,5	131,0	12,8	254
4 x 2,5	158,0	13,7	302
5 x 2,5	189,0	14,8	352
7 x 2,5	245,0	17,3	377
12 x 2,5	401,0	20,6	712