

Swedish industry standard for cable drums

This industry standard complements the Swedish standard for drums SS 842801.

In order for the drums to be included in the cable industry's return system, both the industry standard and the SS 842801 is fulfilled. In addition, the test standard SS 842802 shall be met.

RETURN SYSTEM FOR WOODEN CABLE DRUMS.

The cable manufacturers within Selcable utilizes a return system for returnable drums in wood which means that:

- All stakeholders use the same standard/appearance on " K Drums" which means:
 - Is compliant with actual SIS Standard (current SS 842801)
 - Is following this specification which has been made between Selcable and the Scandinavian manufacturers of cable drums
 - All used sawn timber – wood for flanges and barrel – must follow EU timber regulation and be kiln dried (only HT is not enough)
 - The timber must initially be of Nordic wood or wood from the corresponding plant/climate zone and be of spruce Spruce (*Picea abies*) and/or Pine (*Pinus sylvestris*) in quality VI+
 - The sawn timber must not be treated with any kind of chemicals.

It is of the utmost importance that K-drums meet the agreed specification:

- For drum durability and longevity
- In order to renovate the drums and to minimize the outperformance of drums
- For identification and traceability
- To comply with EU timber regulation and ISPM 15

Specification K5-K10 return system for K drums

K-standard specification K5-K10	Tolerance	K-5	K-6	K-7	K-8	K-9	K-10
Wood species*		R/W	R/W	R/W	R/W	R/W	R/W
Moisture quotient at production	+/- 2%	KD18%	KD18%	KD18%	KD18%	KD18%	KD18%
ISPM 15 marked		Yes	Yes	Yes	Yes	Yes	Yes
Flange diameter (mm)	+/- 5 mm	500	600	700	800	900	1000
Barrel diameter (mm)		200	250	325	375	425	500
Outside width (mm)		364	464	576	576	627	715
Inside width (traverse) (mm)		300	400	500	500	550	600
Centre hole diameter (mm)	See further	77	77	77	77	77	106
Tolerance		+/-2mm	+/-2mm	+/-2mm	+/-2mm	+/-2mm	+/-1mm
Winding hole (mm)	Minimum	40	40	40	40	40	50
C/C centre hole – winding hole	+2 -0 mm	100	100	100	100	100	150
Nr winding holes		1	1	1	1	1	1 or 2
Flange thickness (same thickness both layers). (mm)	See further	32	32	38	38	38	44
Tolerance		+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-2mm
Cable hole diameter (mm)	+5 -0 mm	20	20	30	30	30	40
Cable hole length (mm)	+5 -0 mm	110	110	110	110	110	130
Bolt distance (mm)	+/- 5 mm	150	200	270	325	370	445
Amount bolts and dimension		3/M8	3/M8	3/M8	3/M8	4/M8	4/M10
Washers, round or square diameter	Minimum	40x2	40x2	40x2	40x2	40x2	50x4
Steel bushing, type		-	-	-	-	-	Pressed
Steel bushing diameter internal (mm)		-	-	-	-	-	106
Tolerance	See further						+/-1mm
Metal bush dimension	+/-5 mm	-	-	-	-	-	-
Barrel lags actual thickness (mm)	+2 – 0 mm	13	13	16	16	16	16
Middle support ring thickness	Minimum						
Flange support thickness	Minimum						
Nail dimension (length x width) (mm)	Minimum	40x2,1	40x2,1	45x2,1	45x2,1	45x2,1	50x2,5
Nail rings	Minimum	2	2	2	3	3	3
Weight, approx. (kg)		8,5	11	20	25	32	49
Rec. max load (kg)		200	300	400	500	600	800
Winding volume (dm3)		36	72	119	160	227	281

Specification K11-K20 return system for K drums

K-standard specification K11-K20	Tolerance	K11	K-12	K-14	K-16	K-18	K-20
Wood species*		R/W	R/W	R/W	R/W	R/W	R/W
Moisture quotient at production	+/- 2%	KD18%	KD18%	KD18%	KD18%	KD18%	KD18%
ISPM 15 marked		Yes	Yes	Yes	Yes	Yes	Yes
Flange diameter (mm)	+/- 5 mm	1100	1200	1400	1600	1800	2000
Barrel diameter (mm)		575	675	800	950	1100	1300
Outside width (mm)		765	980	980	1015	1015	1185
Inside width (traverse) (mm)		650	850	850	850	850	1000
Centre hole diameter (mm)	See further	106	106	106	106	132	132
Tolerance		+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-1mm
Winding hole (mm)	Minimum	50	50	50	50	65	65
C/C centre hole – winding hole (mm)	+2 -0 mm	150	300	300	300	500	500
Nr winding holes		1 or 2	2	2	2	2	2
Flange thickness (same thickness both layers). (mm)	See further	44	48	48	58	58	64
Tolerance		+/-2mm	+/-2mm	+/-2mm	+/-2mm	+/-2mm	+/-2mm
Cable hole diameter (mm)	+5 -0 mm	40	50	50	70	80	90
Cable hole length (mm)	+5 -0 mm	130	250	250	400	400	400
Bolt distance (mm)	+/- 5 mm	520	605	730	865	1015	1210
Amount bolts and dimension		4/M10	6/M12	6/M12	6/M16	6/M16	6/M20
Washers, round or square diameter	Minimum	50x4	60x5	60x5	70x6	70x6	80x6
Steel bushing, type		Pressed	Pressed	Pressed	Pressed	Bush 1	Bush 1
Steel bushing diameter internal		106	106	106	106	132	132
Tolerance	See further	+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-1mm	+/-1mm
Metal bush dimension (mm)	+/-5 mm	-	-	-	-	250	250
Barrel lags actual thickness (mm)	+2 – 0 mm	16	22/28*	22/28*	28	28	28
Middle support ring thickness (mm)	Minimum		22	22	28	28	28
Flange support thickness	Minimum						
Nail dimension (length x width) (mm)	Minimum	50x2,5	55x2,5	55x2,5	55x2,5	65x3,4	70x3,4
Nail rings	Minimum	3	3	3	3	3	3
Weight, approx. (kg)		58	90	115	180	220	307
Rec. max load (kg)		850	1500	2000	2500	3000	3500
Winding volume (dm3)		362	504	667	860	1032	1390

*K12/K14 Barrel lags 22 or 28 mm actual thickness; when middle support ring 22 mm is used, without minimum 28 mm actual thickness. R/W means redwood (*Pinus Sylvestris*)/whitewood (*Picea Abies*).

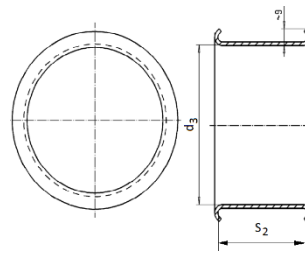
Specification K22-K30 return system for K drums

K-standard specification K22-K30	Tolerance	K-22	K-24	K-26	K-28	K-30
Wood species*		R/W	R/W	R/W	R/W	R/W
Moisture quotient at production	+/- 2%	KD18%	KD18%	KD18%	KD18%	KD18%
ISPM 15 marked		Ja	Ja	Ja	Ja	Ja
Flange diameter (mm)	+/- 5 mm	2200	2400	2600	2800	3000
Barrel diameter (mm)		1400	1400	1500	1500	1500
Outside width (mm)		1185	1185	1448	1650	1800
Inside width (traverse) (mm)		1000	1000	1200	1350	1500
Centre hole diameter (mm)	See further	132	132	134	134	134
Tolerance		+/-1mm	+/-1mm	+/-3mm	+/-3mm	+/-3mm
Winding hole (mm)	Minimum	65	65	65	65	65
C/C centre hole – winding hole (mm)	+2 -0 mm	500	500	500	500	500
Nr winding holes		2	2	2	2	2
Flange thickness (same thickness both layers). (mm)	See further	64	64	96	122	122
Tolerance		+/-2mm	+/-2mm	+/-2mm	+/-2mm	+/-2mm
Cable hole diameter (mm)	+5 -0 mm	110	110	120	120	130
Cable hole length (mm)	+5 -0 mm	500	500	600	600	600
Bolt distance (mm)	+/- 5 mm	1310	1300	1370	1370	1370
Amount bolts and dimension		8/M20	8/M20	8/M20	10/M20	10/M20
Washers, round or square diameter (mm)	Minimum	80x6	80x6	80x6	80x6	80x6
Steel bushing, type		Bush 2	Bush 2	Bush 3	Bush 3	Bush 3
Steel bushing diameter internal (mm)		132	132	134	134	134
Tolerance	See further	+/-1mm	+/-1mm	+/-3mm	+/-3mm	+/-3mm
Metal bush dimension (mm)	+/-5 mm	250	250	300x650	300x650	300x650
Barrel lags actual thickness (mm)	+2 – 0 mm	28	28	45	45	45
Middle support ring thickness (mm)	Minimum	28	28	45+45	45+45	45+45
Flange support thickness (mm)	Minimum			32-50	32-50	32-50
Nail dimension (length x width)	Minimum	70x3,4	70x3,4	105x4,3	135x5,1	135x5,1
Nail rings	Minimum	3	3	4	5	5
Weight, approx. (kg)		362	430	847	1100	1242
Rec. max load (kg)		4500	5000	10000	12000	13000
Winding volume (dm3)		1729	2331	3308	4563	6324

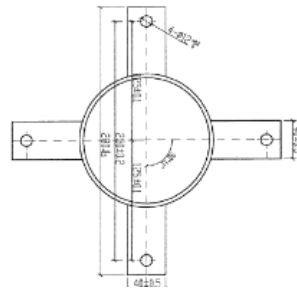
Other notes

- K12/K14 Barrel lags 22 or 28 mm actual thickness; when middle support ring is present 22 mm is used, without middle support ring minimum 28 mm actual thickness.
- Metal bushes (square/rectangular)
 - Bush 1 for K18-K20, Bush 2 for K22-K24, Bush 3 for K26-K30
 - Same bush both sides
- Cable hole starts from left
- K5-K9 L shaped cable hole (no other type allowed)
- Customer specific marking should be easily detachable (e.g. plastic stickers)
- Dimensions given for wood and steel is minimum dimensions
- Wane not affecting stability is allowed

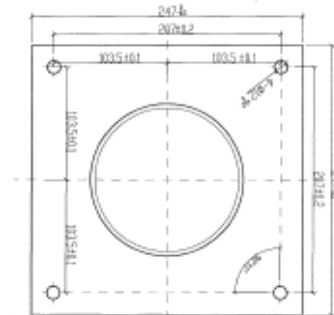
Pressed bushing



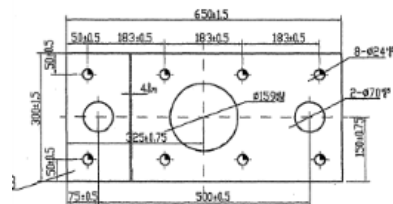
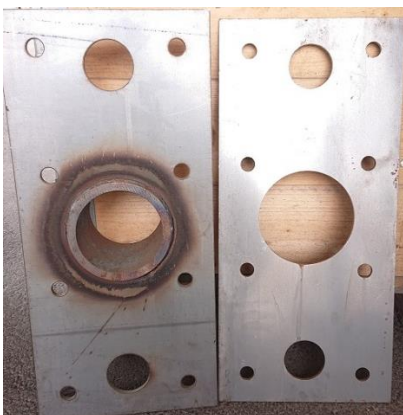
Bushing type 1



Bushing type 2



Bushing type 3 (two plates minimum 6+6 mm, pipe thickness min 8 mm)

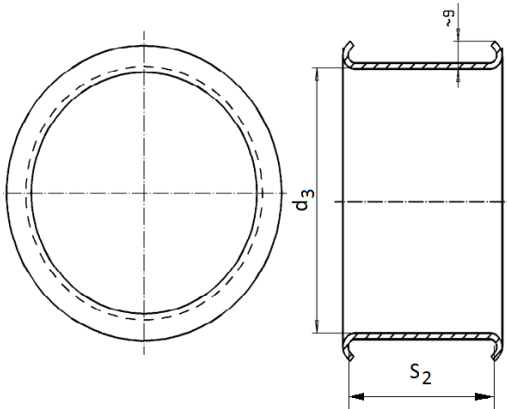


Metal bushings and other specifications to comply with. Dimensions in mm.

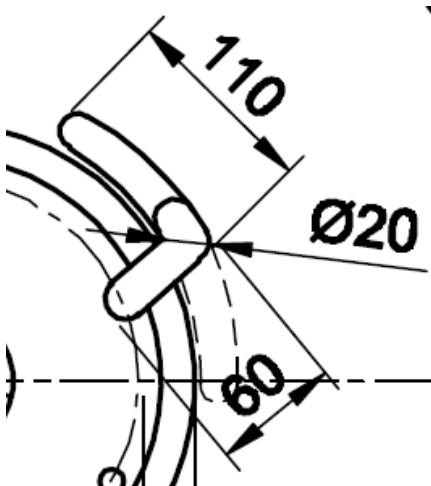
Metal bush, type	Name metal bush	For drum size	Internal diameter	External diameter	Thickness plate 1	Thickness plate 2	Thickness x length pipe	Height pressed bushing	Height plate	Width plate
Pressed	Detalj 60	K10, K11	106	110	2 +/- 0,2	N/A	N/A	62	N/A	N/A
Pressed	Detalj 61	K12, K14	106	110	2 +/- 0,2	N/A	N/A	65	N/A	N/A
Pressed	Detalj 62	K16	106	110	2 +/- 0,2	N/A	N/A	75	N/A	N/A
Bushing 1	Detalj 5	K18	131,7	139,7	4 +/- 0,1	N/A	4x70	N/A	280	280
Bushing 1	Detalj 6	K20	131,7	139,7	4 +/- 0,1	N/A	4x77	N/A	280	280
Bushing 2	Detalj 44	K22, K24	131,7	139,7	4 +/- 0,1	N/A	4x77	N/A	247	247
Bushing 3	Detalj 26	K26	134	152,4	6 +/- 0,1	6 +/- 0,1	8x190	N/A	350	650
Bushing 3	Detalj 30	K28, K30	134	152,4	6 +/- 0,1	6 +/- 0,1	8x190	N/A	350	650

Table 1. Used metal bushes in K drums. For tolerances of each details, contact the drum manufacturer.

Pressed bushing (K10-K16). The steel should be pressed onto the flanges, no other type of pressed bushing is allowed.



L shaped cable hole, K5-K9. K6 as example.



K5-K9, only nut washers

