

Trommelmotoren / *Drummotors*

TM 215-30



KRAUTER®

ELEKTROMASCHINEN

TYPE TM 215.30	Power kW	Beltspeed m/s at 50 Hz								Min. L mm Design A	Min. L mm Design B	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=500
		Beltpull N											
230 230 ZV	2,20	5,30 395 1,90 1100	4,50 460 1,70 1230	3,70 565 1,60 1305	3,40 615 1,50 1395	2,80 745 1,40 1495	2,30 905 1,20 1745			400	450	4,6	48
220 220 Z	1,50	5,30 270 1,90 750	4,50 315 1,70 840	3,70 385 1,60 890	3,40 420 1,50 950	2,80 510 1,40 1020	2,30 620 1,20 1190	1,10 1295		350	400	3,1	47
420 420 Z 420 ZV	1,50	3,30 430 1,10 1295 0,90 1585	2,80 510 1,00 1425 0,85 1675	2,40 595 0,80 1780	2,10 680 0,70 2035	1,70 840	1,50 950			400	450	3,7	48
415 415 Z 415 ZV	1,10	2,70 385 0,90 1160 0,65 1610	2,30 455 0,85 1230 0,60 1725	1,90 550 0,80 1305 0,55 1900	1,70 615 0,75 1395	1,40 745	1,20 870			350	400	2,8	47
410 410 Z 410 ZV 410 PL2	0,75	2,70 265 0,85 840 0,45 1585 0,36 1915	2,30 310 0,80 890 0,30 2300	1,90 375 0,75 950	1,70 420 0,65 1095	1,40 510 0,60 1190	1,20 595 0,55 1295	1,00 715 0,90 790		350 350 350 400	400 400 400 425	1,9	46
475 475 Z 475 PL2	0,55	2,70 195 0,85 615 0,24 2110	2,30 225 0,65 805 0,60 870	1,90 275 0,60 870	1,70 305 0,55 950	1,40 375 0,45 1160	1,20 435 0,40 1305	1,00 525 0,90 580 0,70 745		350 350 400	400 400 425	1,6	45
675 675 Z 675 ZV	0,55	1,25 420 0,50 1045 0,30 1740	0,75 695 0,38 1375 0,36 1450	0,36						350	400	1,6	47
605 605 Z 605 PL2	0,37	1,80 195 0,45 780 0,24 1420	1,50 235 0,40 880 0,20 1700	1,25 280 0,38 925 0,16 2130	1,20 295 0,36 975	0,90 390 0,30 1170	0,75 470 0,27 1300	0,65 540 0,60 585		350 350 400	400 400 425	1,4	46
634 634 Z	0,25	1,80 130 0,38 625	1,50 160 0,36 660	1,25 190 0,30 790	1,20 200 0,27 880	0,90 265	0,75 315	0,65 365	0,60 395	0,45 530	0,40 595	0,9	45
834 834 Z 834 PL2	0,25	1,40 170 0,22 1080 0,18 1280	0,85 280 0,20 1190 0,16 1440	0,70 340 0,12 1915	0,55 430	0,50 475				350 350 400	400 400 425	1,0	47
825 825 Z	0,18	1,40 120 0,26 660	1,20 145 0,22 775	0,90 190 0,20 855	0,85 200	0,70 245	0,55 310	0,50 340	0,45 380	0,34 505	0,30 570	0,9	46
818 818 Z	0,13	1,40 90 0,26 475	1,20 105 0,22 560	0,90 135 0,20 620	0,85 145	0,70 175	0,55 225	0,50 245	0,45 275	0,34 365	0,30 410	0,6	45

Selection table Dahlander motors

1218		0,60 205	0,18 685								350	400			
1218 Z	0,13	0,17 725	0,15 825	0,13 950							350	400	0,9	47	
1218 PL2		0,12 995	0,09 1330	0,08 1495							400	425			
1213		0,85 110	0,70 135	0,60 160	0,55 175	0,45 210	0,36 265	0,32 300	0,29 330	0,22 430	0,18 530	350	400	0,8	46
1213 Z	0,10	0,17 560	0,15 635	0,13 730											

Available standard facewidth's: 350 - 400 - 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

The total weight of a Drummotor grows approx. 4,5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

Dahlander motors

TYPE	Power	Beltspeed m/s at 50 Hz								Min. L	Min. L	Full load	Weight
TM	kW	Beltpull N								mm	mm	curr.	kg
215.30										Design	Design	400 V -	L=500
										A	B	50 Hz	
												I = ... A	
410/220		2,70/5,40 265	2,30/4,60 310	1,90/3,80 375	1,70/3,40 420	1,40/2,80 510	1,20/2,40 595	1,00/2,00 715	0,90/1,80 790				
410/220 Z	0,75/1,50	0,85/1,70 840	0,80/1,60 890	0,75/1,50 950	0,65/1,30 1095	0,60/1,20 1190	0,55/1,00 1295	0,50/1,00 1425		400	450	2,3/3,3	48
410/220 ZV		0,45/0,90 1585											
475/215		2,70/5,40 195	2,30/4,60 225	1,90/3,80 275	1,70/3,40 305	1,40/2,80 375	1,20/2,40 435	1,00/2,00 525	0,90/1,80 580				
475/215 Z	0,55/1,10	0,85/1,70 615	0,80/1,60 655	0,75/1,50 695	0,65/1,30 805	0,60/1,20 870	0,55/1,10 950	0,50/1,00 1045	0,45/0,90 1160	350	400	1,6/2,5	47
		0,40/0,80 1305											
405/210		2,70/5,40 130	2,30/4,60 155	1,90/3,80 190	1,70/3,40 210	1,40/2,80 255	1,20/2,40 295	1,00/2,00 355	0,90/1,80 395				
405/210 ZV	0,37/0,75	0,85/1,70 420	0,80/1,60 445	0,75/1,50 475	0,65/1,30 550	0,60/1,20 595	0,55/1,10 650	0,50/1,00 715	0,45/0,90 790	350	400	1,0/1,8	45
		0,40/0,80 890											
837/475		1,35/2,70 195	1,15/2,30 225	0,95/1,90 275	0,85/1,70 305	0,70/1,40 375	0,60/1,20 435	0,50/1,00 525	0,45/0,90 580				
837/475 Z	0,27/0,55	0,35/0,70 745	0,30/0,60 870							350	400	1,5/1,3	47
837/475 PL2		0,25/0,50 1045	0,23/0,45 1160	0,20/0,40 1305						350	400		
		0,18/0,35 1445	0,15/0,30 1685	0,12/0,24 2110						400	425		
825/405		1,35/2,70 130	1,15/2,30 155	0,95/1,90 185	0,85/1,70 205	0,70/1,40 250	0,60/1,20 295	0,50/1,00 350	0,45/0,90 390				
825/405 Z	0,18/0,37	0,35/0,70 500	0,30/0,60 585							350	400	1,2/1,0	46
825/405 PL2		0,25/0,50 705	0,23/0,45 780	0,20/0,40 880						350	400		
		0,18/0,35 975	0,15/0,30 1135	0,12/0,24 1420						400	425		

Available standard facewidth's: 350 - 400 - 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

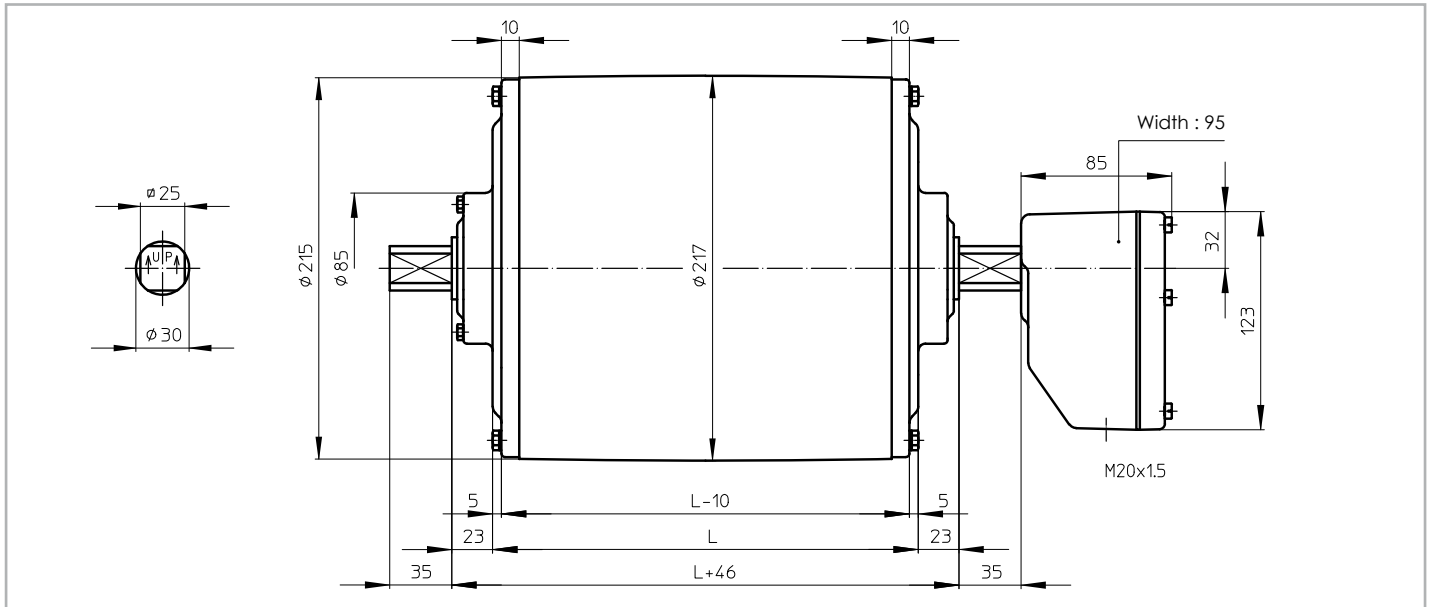
When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

The total weight of a Drummotor grows approx. 4,5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

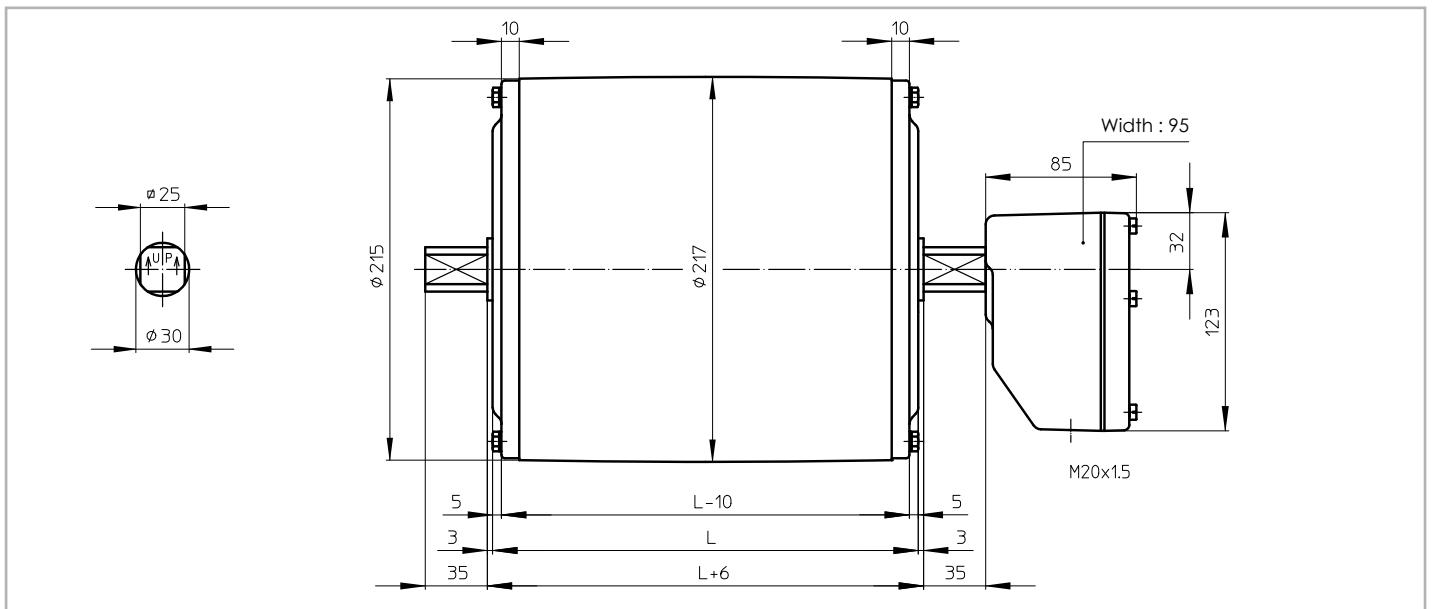
TM 215A30 CR

TM 215A30 CR, stainless steel Drummotor with polyamide junctionbox and CR sealing



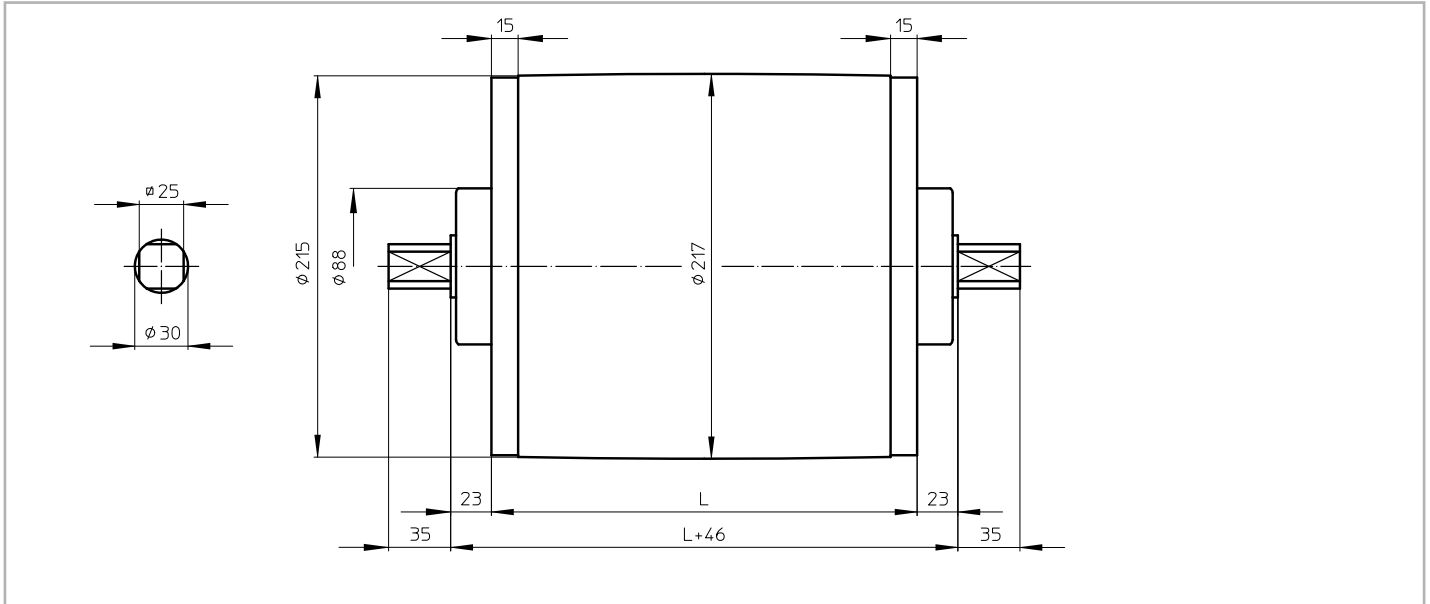
TM 215B30 CR

TM 215B30 CR, stainless steel Drummotor with polyamide junctionbox and CR sealing



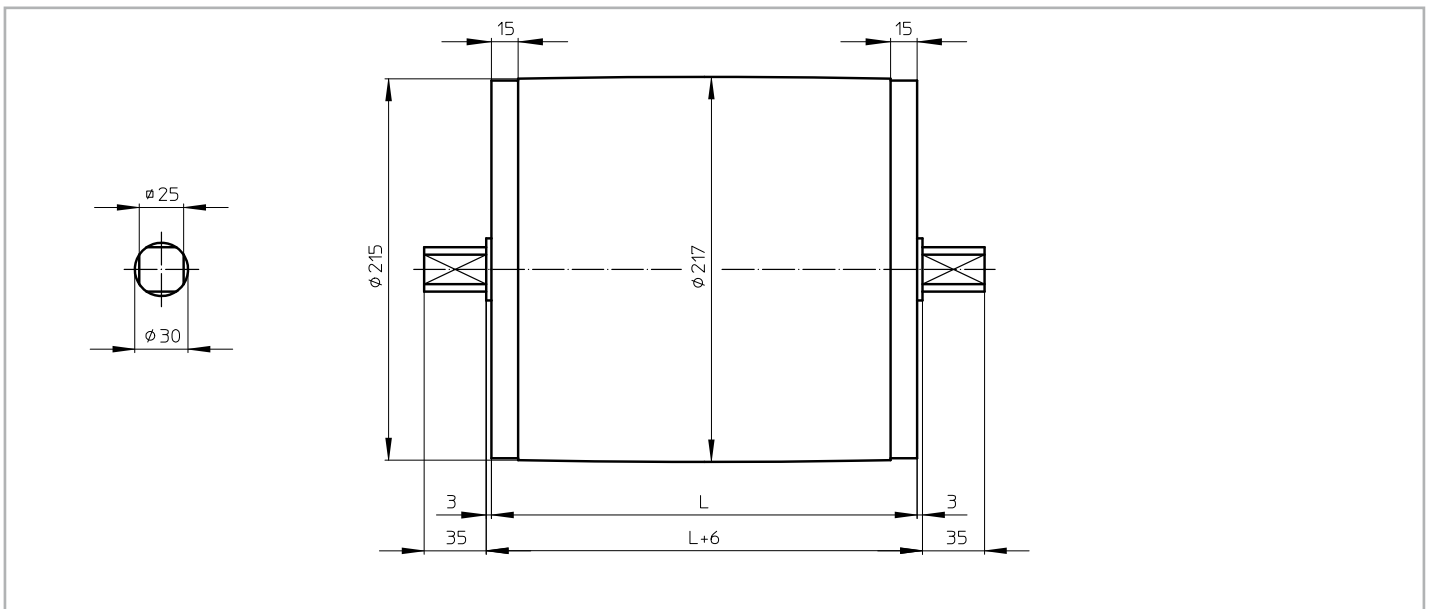
KT 215A30

KT 215A30, mild steel Taildrum



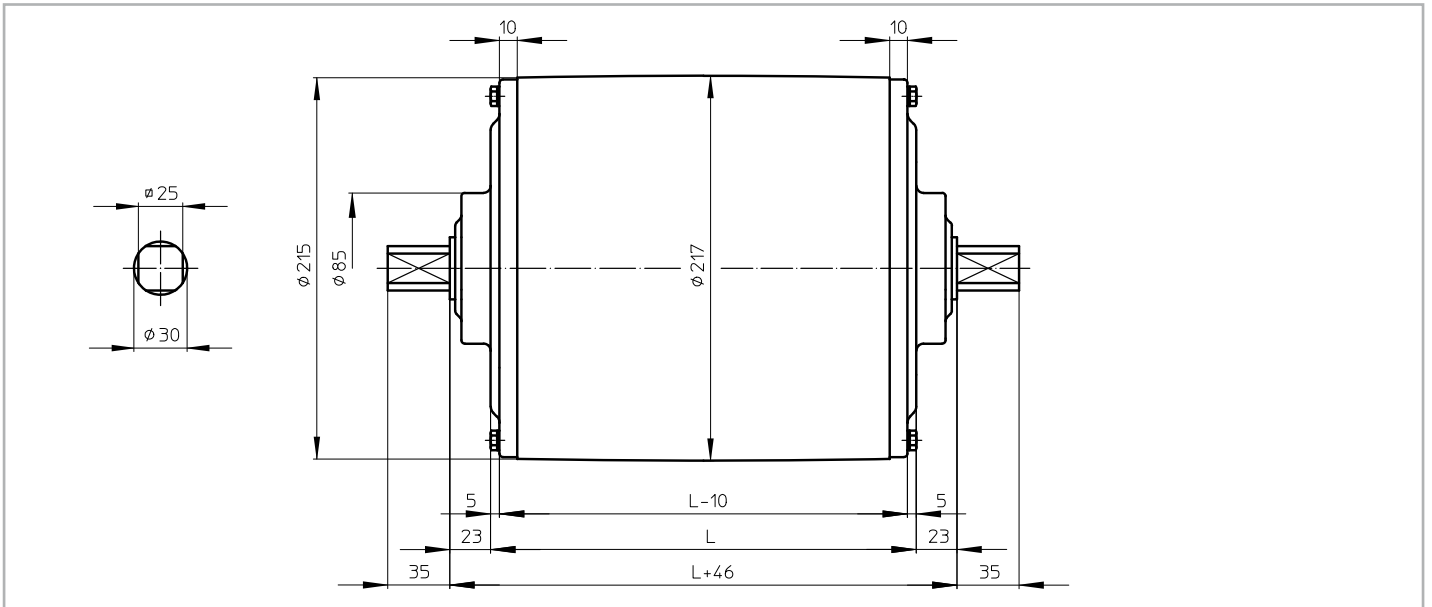
KT 215B30

KT 215B30, mild steel Taildrum



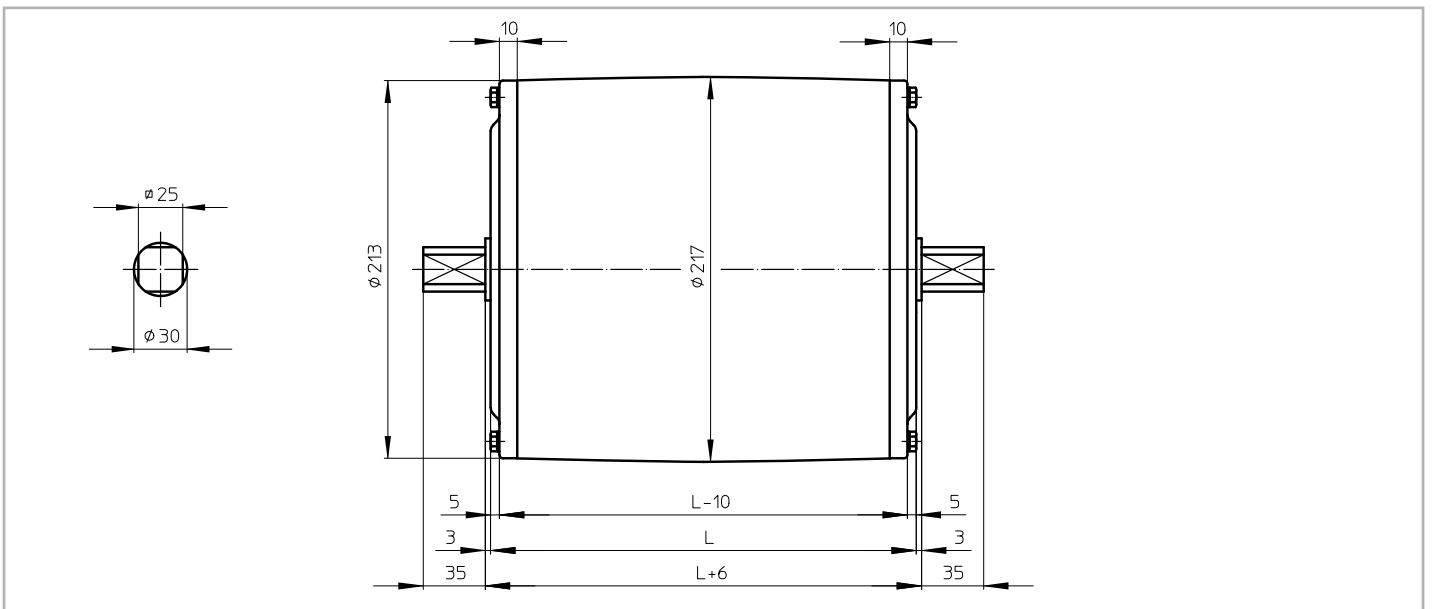
KT 215A30 CR

KT 215A30 CR, stainless steel Taildrum with CR sealing



KT 215B30 CR

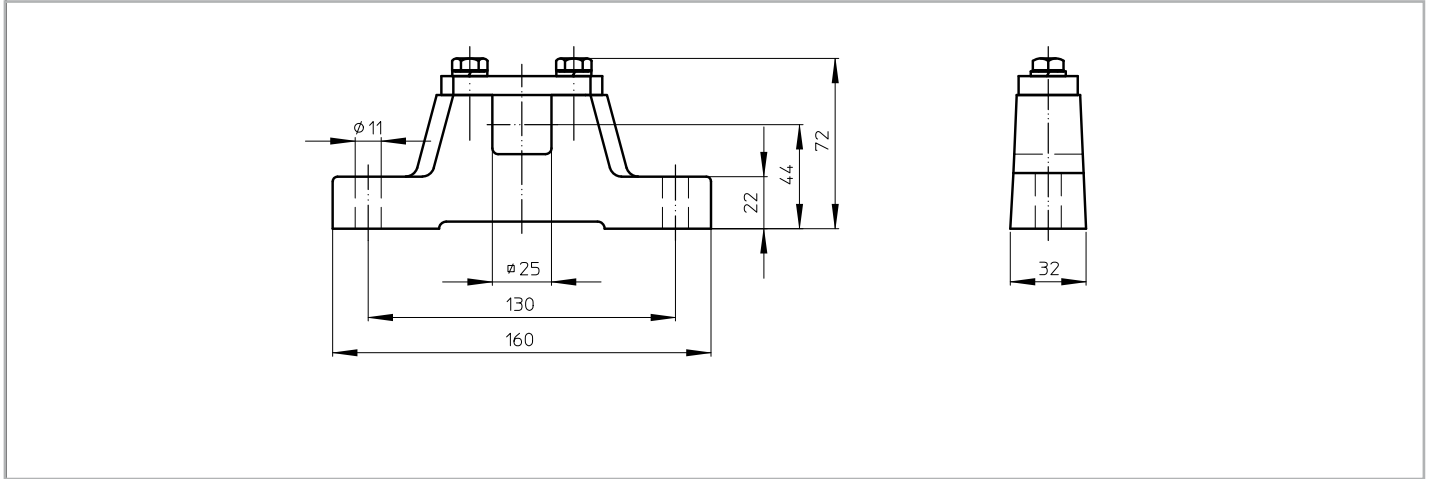
KT 215B30 CR, stainless steel Taildrum with CR sealing



AB 30

AB 30, cast iron or stainless steel bracket

Weight: 2,4 kg per pair

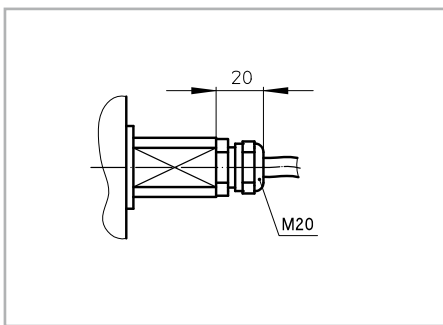


Standard design of a TM 215-30 is with a cast iron junctionbox. For stainless steel design, this can be either a polyamide or stainless steel junctionbox.

On request a Drummotor can be fitted with a cable. In this case it is important to know the available voltage (preferably 1 voltage), the length of the cable, whether the cable is shielded or not and the type of cable exit. An overview of available cable exits is shown below.

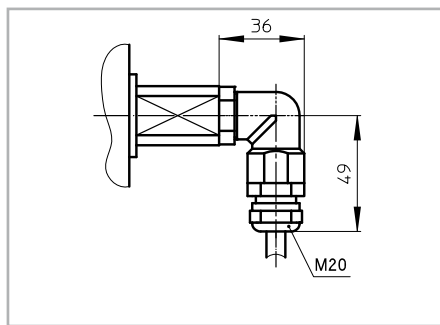
Option 1

Straight cable exit with cable gland



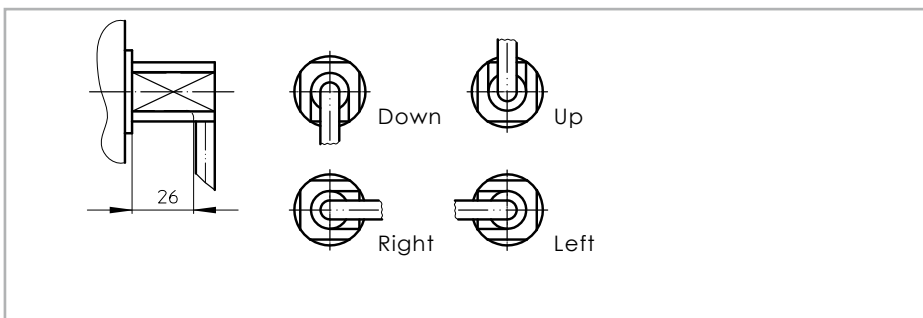
Option 3

Elbow cable exit with cable gland
(minimum facewidth increases with 25 mm)



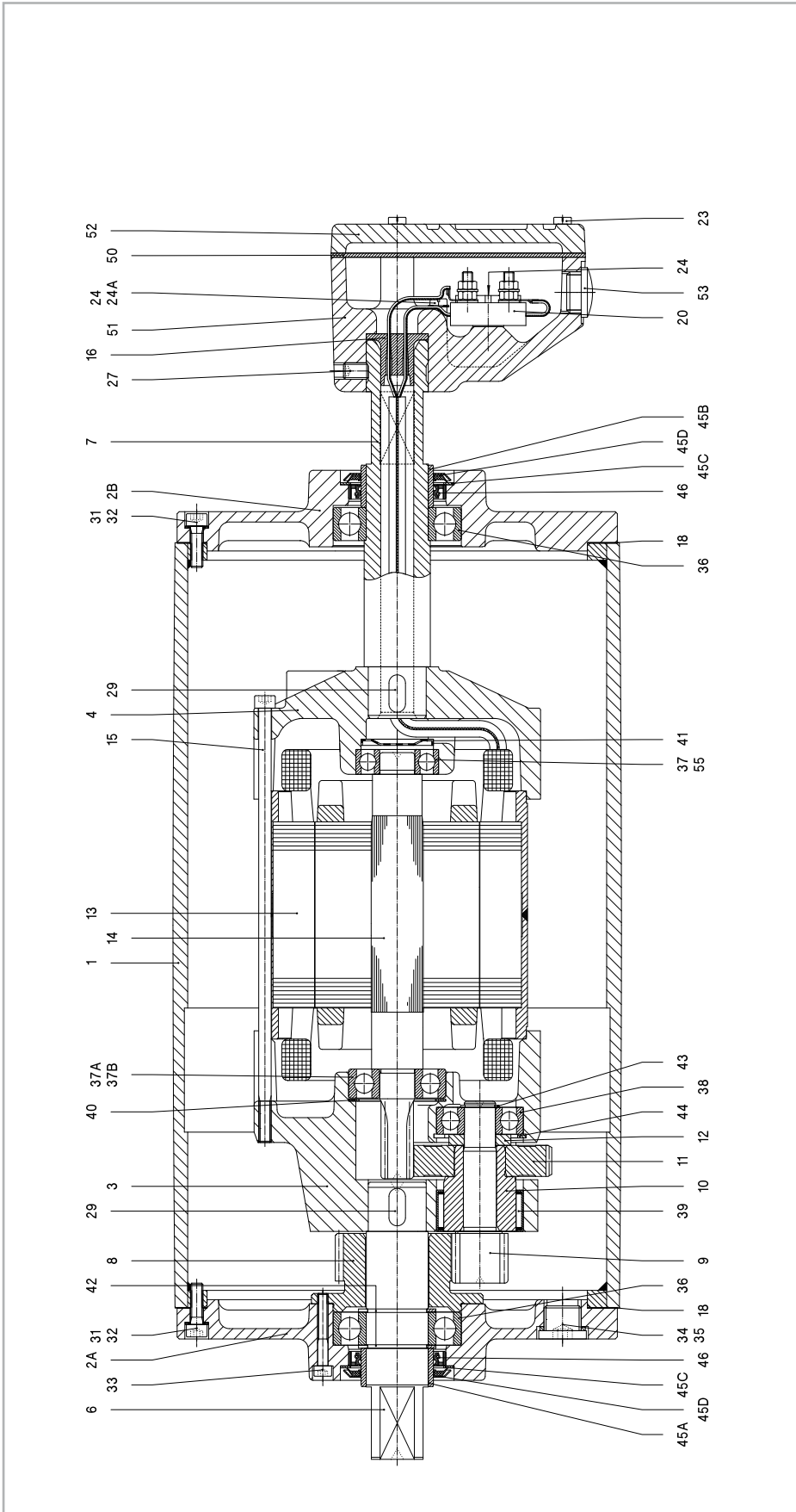
Option 4

Open cable exit (minimum facewidth increases with 25 mm)



TM 215A30

Legenda

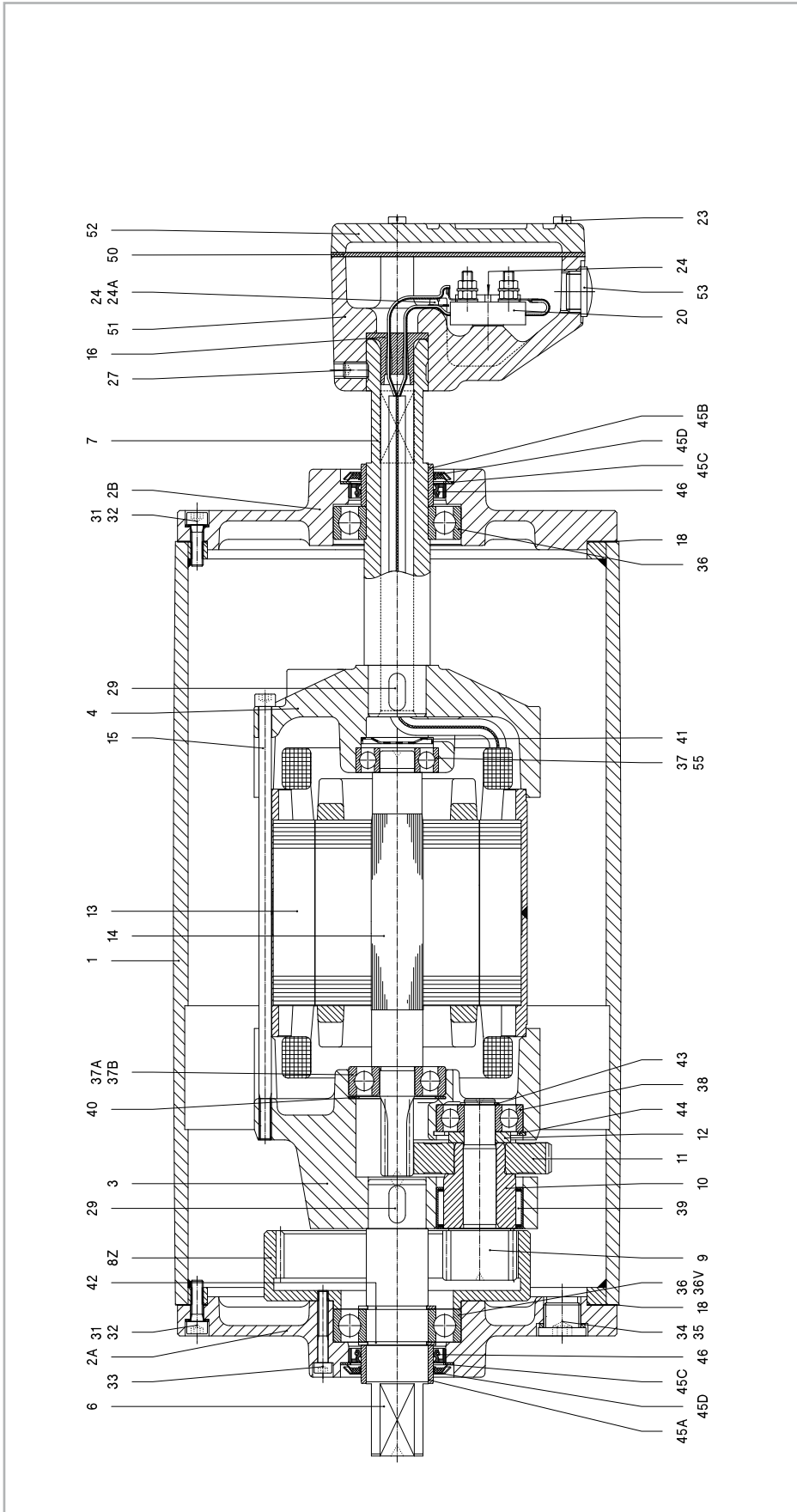


Remark: Drummotor also available in B-design (TM215B30)

1	Shell	12	Distance ring	27	Setscrew	38	Ballbearing	45D	Gammaring
2A	Endflang	13	Stator	29	Key	39	Needlebearing	46	Oilseal
2B	Endflang	14	Rotor	31	Int. hex screw	40	Shim	50	Seal
3	Gearhousing	15	Int. hex screw	32	Washer	41	Disc	51	Junctionbox
4	Motorflang	16	Cable passage	33	Int. hex screw	42	Circlip	52	Junctionbox cover
6	Shaftend	18	Gasket	34	Fillerplug	43	Circlip	53	Stopping plug
7	Hollow shaft	20	Terminalboard	35	Washer	44	Circlip	55	Ballbearing incl. backstop
8	External gear	23	Cyl. head screw	36	Ballbearing	45A	Bearing race	57	Dataplate
9/10	Pinion with bush	24	Cyl. head screw	37	Ballbearing	45B	Bearing race		
11	Gear	24A	Toothed lock washer	37A/B	Ballbearing	45C	Shim plated		

TM 215A30 Z

Legende

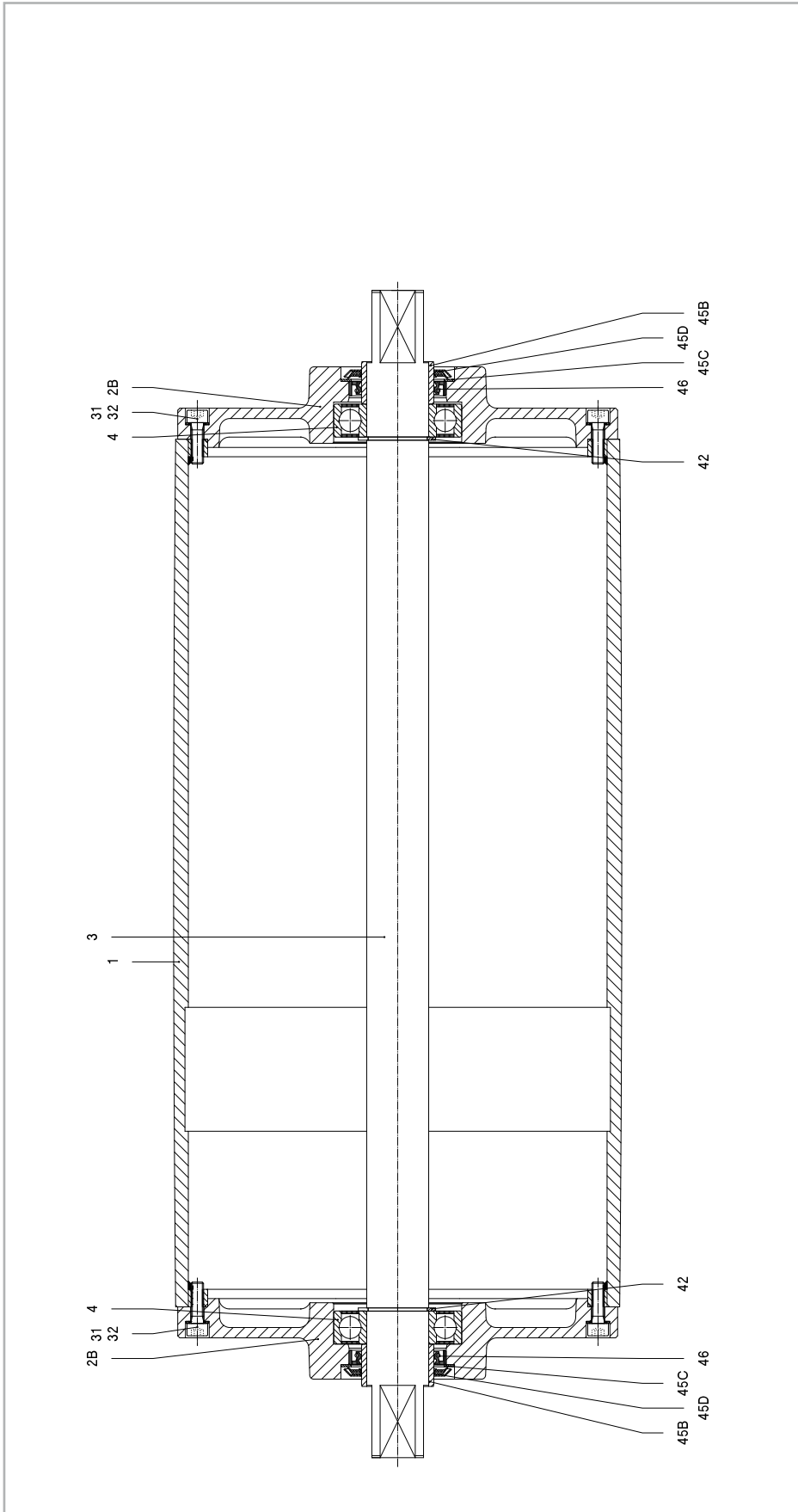


Remark: Drummotor also available in B-design (TM215B30 Z)

1	Shell	12	Distance ring	27	Set screw	37A/B	Ball bearing	45C	Shim plated
2A	Endflang	13	Stator	29	Key	38	Ball bearing	45D	Gammaring
2B	Endflang	14	Rotor	31	Int. hex screw	39	Needle bearing	46	Oil seal
3	Gearhousing	15	Int. hex screw	32	Washer	40	Shim	50	Seal
4	Motoflang	16	Cable passage	33	Int. hex screw	41	Disc	51	Junction box
6	Shaftend	18	Gasket	34	Filler plug	42	Circlip	52	Junction box cover
7	Hollow shaft	20	Terminal board	35	Washer	43	Circlip	53	Stopping plug
8Z	Internal gear	23	Cyl. head screw	36	Ball bearing	44	Circlip	55	Ball bearing incl. backstop
9/10	Pinion with bush	24	Cyl. head screw	36V	Cyl. roller bearing	45A	Bearing race	57	Dataplate
11	Gear	24A	Toothed lock washer	37	Ball bearing	45B	Bearing race		
		29							
		3							
		42							
		8Z							
		29							
		3							
		40							
		37A							
		37B							
		1							
		13							
		14							
		4							
		29							
		15							
		4							
		31							
		32							
		2B							
		7							
		16							
		27							
		24							
		24A							
		51							
		50							
		52							
		20							
		53							
		23							
		18							
		46							
		45C							
		45B							
		36							
		37							
		41							
		55							
		43							
		44							
		45A							
		45B							
		36V							
		37							

KT 215A30

Legende



Remark: Talidrum also available in B-design (KT215B30)

- | | | | |
|----|----------------|-----|--------------|
| 1 | Shell | 42 | Circlip |
| 2B | Endflang | 45B | Bearing race |
| 3 | Shaft | 45C | Shim plated |
| 4 | Ballbearing | 45D | Gammaring |
| 31 | Int. hex screw | 46 | Olised |
| 32 | Washer | | |

Trommelmotoren *Drummotors*

TM 215-40



KRAUTER®

ELEKTROMASCHINEN

Selection table

TYPE TM 215.40	Power kW	Beltspeed m/s at 50 Hz						Min. L mm Design A	Min. L mm Design B	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=500				
		Beltpull N													
275 275 ZV	5,50	4,70 1100 2,00 2610	3,90 1340 1,70 3075	3,50 1495 1,50 3485	2,80 1865 1,40 3730	2,50 2090 1,30 4020	1,10 4750	500	550	11,0	79				
255 255 Z 255 ZV	4,00	4,70 810 2,00 1900 1,50 2535	3,90 975 1,70 2235 1,40 2715	3,50 1085 1,30 2925	2,80 1355 1,10 3455	2,50 1520 1,00 3800	0,90 4220	500	550	8,0	76				
440 440 ZV	3,00	2,90 985 1,00 2850	2,40 1190 0,85 3355	2,00 1425 0,75 3800	1,80 1585 0,70 4070	1,40 2035 0,65 4385	1,25 2280	500	550	6,6	76				
430 430 ZV	2,20	2,90 720 0,85 2460	2,40 870 0,70 2985	2,10 995 0,65 3215	1,70 1230 0,60 3485	1,40 1495 0,55 3800	1,25 1670 0,50 4180	1,00 2090 0,45 4645	0,90 2320	425	500	4,7	73		
420 420 ZV	1,50	2,90 490 0,60 2375	2,40 595 0,55 2590	2,10 680 0,50 2850	1,70 840 0,45 3165	1,40 1020 0,40 3565	1,25 1140	1,00 1425	0,90 1585	0,80 1780	0,70 2035	425	500	3,6	71
620 620 ZV	1,50	1,60 890 0,36 3960	0,85 1675 0,34 4190	0,31 4595	0,28 5090			500	550	3,7	76				
415 415 Z 415 ZV	1,10	2,90 360 0,60 1740 0,55 1900 0,40 2615	2,40 435 0,50 2090	2,10 500 0,45 2320	1,80 580	1,40 745	1,25 835	1,00 1045	0,90 1160	0,80 1305	0,70 1495	425	500	2,9	69
615 ZV	1,10	0,36 2950	0,34 3075	0,31 3370	0,28 3730	0,26 4020		425	500	2,9	73				
610 610 Z 610 ZV	0,75	1,40 510 0,36 1980 0,28 2545	1,20 595 0,34 2095 0,26 2740	0,90 790 0,31 2300	0,85 840	0,65 1095	0,60 1190	0,50 1425	0,45 1585	0,40 1780		425	500	2,5	71
810 ZV	0,75	0,23 3100	0,21 3395	0,19 3750				425	500	2,7	73				
675 675 Z	0,55	1,40 375 0,36 1450	1,20 435 0,34 1535	0,90 580 0,31 1685	0,85 615 0,28 1865	0,65 805 0,26 2010	0,60 870	0,50 1045	0,45 1160	0,40 1305		425	500	1,9	69
875 Z 875 ZV	0,55	0,23 2270 0,21 2490	0,19 2750					425	500	2,2	71				
1275 ZV	0,55	0,17 3075	0,15 3485	0,12 4355				500	550	2,6	76				
805 805 Z	0,37	1,10 320 0,28 1255	0,85 415 0,25 1405	0,70 500 0,23 1530	0,65 540 0,21 1675	0,50 705 0,19 1850	0,45 780	0,40 880	0,35 1005	0,30 1170		425	500	1,8	69
1205 1205 Z 1205 ZV	0,37	0,55 640 0,17 2070 0,12 2930	0,15 2345					425	500	2,0	73				

Available standard facewidth's: 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

The total weight of a Drummotor grows approx. 4,5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

Selection table Dahlander motors

TYPE TM 215.40	Power kW	Beltspeed m/s at 50 Hz								Min. L mm Design A	Min. L mm Design B	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=500
		Beltpull N											
430/240 430/240 ZV	2,20/3,00	2,40/4,80 870/595 0,85/1,70 2460/1675	2,10/4,20 995/680 0,70/1,40 2985/2035	1,70/3,40 1230/840 0,65/1,30 3215/2190	1,40/2,80 1495/1020 0,60/1,20 3485/2375	1,25/2,50 1670/1140 0,55/1,10 3800/2590	1,00/2,00 2090/1425 0,50/1,00 4180/2850	0,45/0,90 4645/3165		500	550	5,0/6,9	76
418/230 418/230 ZV	1,30/2,20	2,40/4,80 515/435 0,70/1,40 1765/1495 0,55/1,10 2245/1900	2,10/4,20 590/500 0,60/1,20 2060/1740 0,50/1,00 2470/2090	1,70/3,40 725/615 0,45/0,90 2745/2320	1,40/2,80 880/745 0,40/0,80 3090/2615	1,25/2,50 990/835	1,00/2,00 1235/1045	0,90/1,80 1370/1160	0,80/1,60 1545/1305	425	500	3,1/4,6	73
816/430 ZV	1,20/2,20	0,35/0,70 3255/2985	0,33/0,66 3455/3165	0,30/0,60 3800/3485	0,27/0,54 4220/3870	0,25/0,50 4560/4180	0,23/0,46 4955/4545			500	550	3,8/4,3	76
810/420 810/420 ZV	0,75/1,50	1,40/2,80 510 0,40/0,80 1780	1,20/2,40 595 0,35/0,70 2035	1,10/2,20 650	0,85/1,70 840	0,70/1,40 1020	0,60/1,20 1190	0,50/1,00 1425	0,45/0,90 1585	500	550	3,3/4,6	76
875/415 875/415 Z 875/415 ZV	0,55/1,10	1,10/2,20 475 0,30/0,60 1740 0,27/0,54 1935	0,85/1,70 615 0,25/0,50 2090	0,70/1,40 745 0,23/0,46 2270	0,60/1,20 870	0,50/1,00 1045	0,45/0,90 1160	0,40/0,80 1305	0,35/0,70 1495	425	500	2,4/2,5	73
805/410 805/410 Z	0,37/0,75	1,10/2,20 325 0,30/0,60 1190 0,27/0,54 1320	0,85/1,70 420	0,70/1,40 510	0,60/1,20 595	0,50/1,00 715	0,45/0,90 790	0,40/0,80 890	0,35/0,70 1020	425	500	1,8/1,5	71

Available standard facewidth's: 425 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

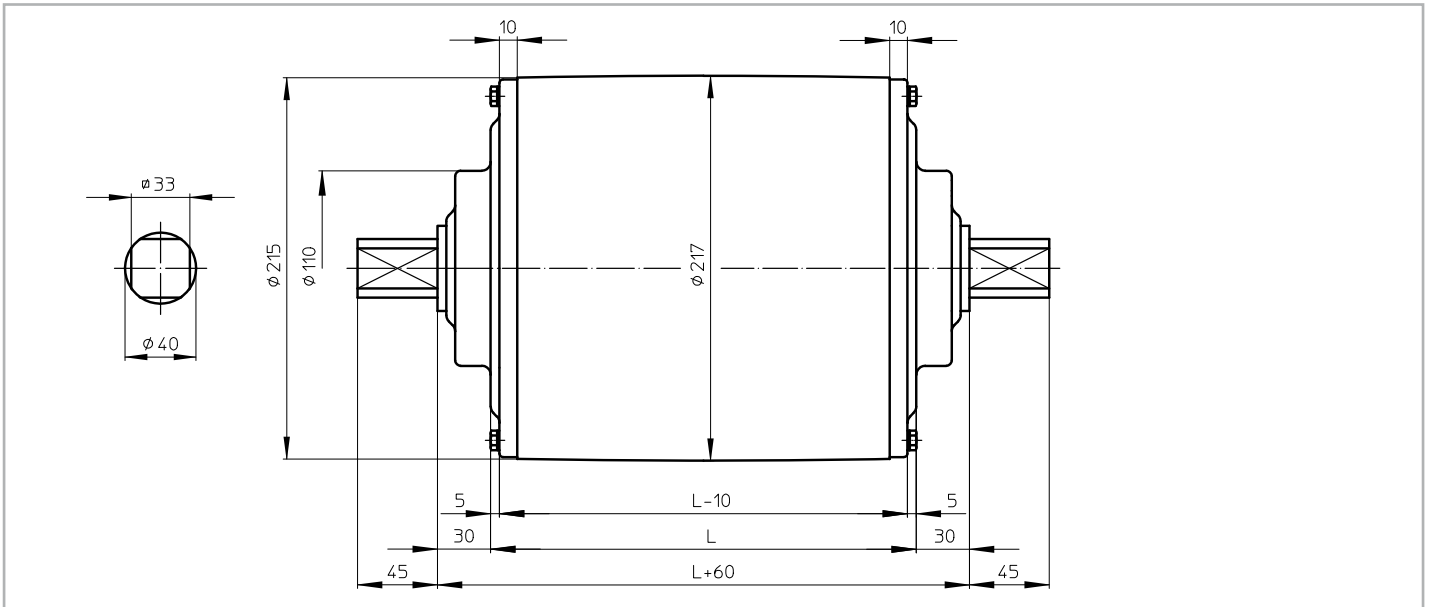
The total weight of a Drummotor grows approx. 4,5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

Dimensions Taildrums stainless steel

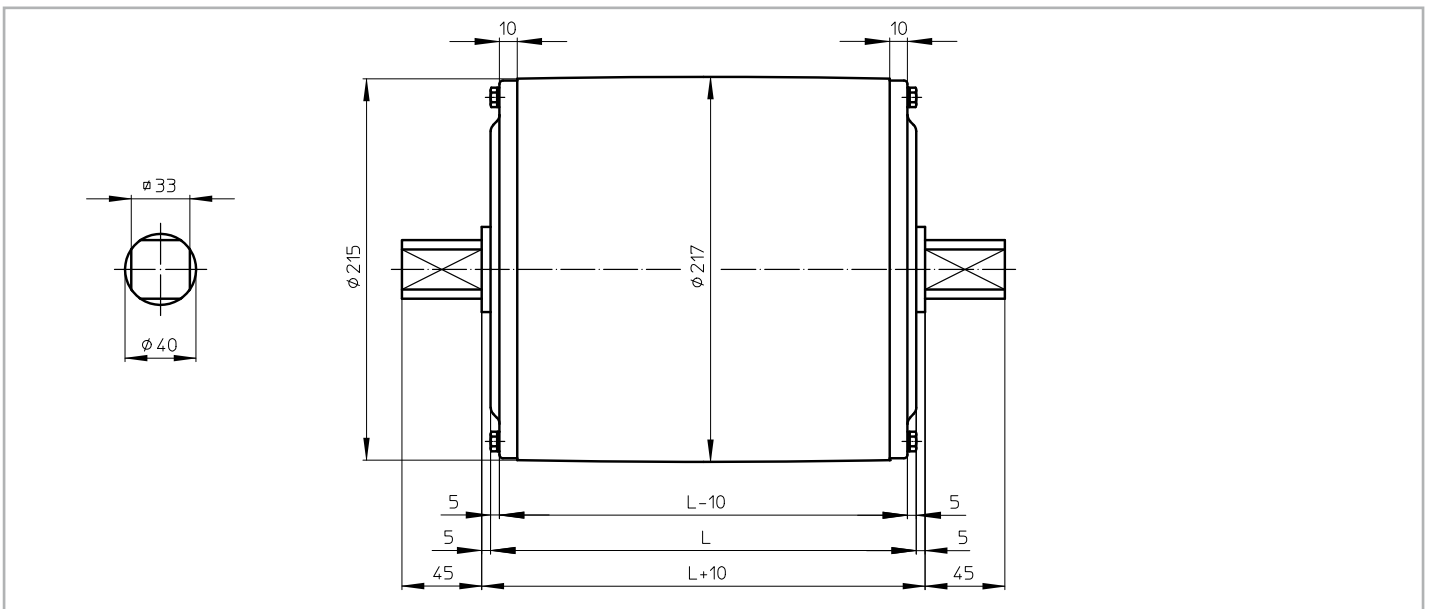
KT 215A40 CR

KT 215A40 CR, stainless steel Taildrum with CR sealing



KT 215B40 CR

KT 215B40 CR, stainless steel Taildrum with CR sealing

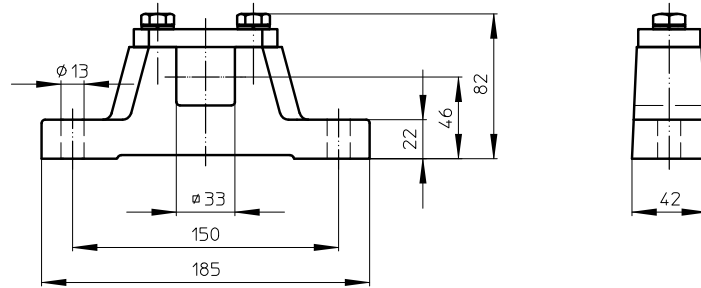


Dimensions bracket

AB 40

AB 40, cast iron or stainless steel bracket

Weight: 4,2 kg per pair



Cable exit

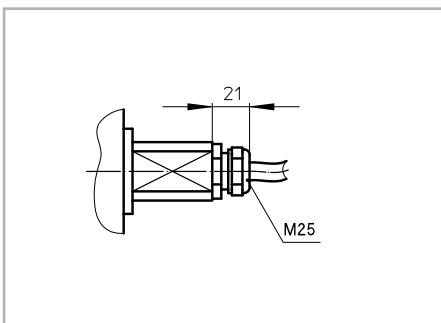
Standard design of a TM 215-40 is with a cast iron junctionbox. For stainless steel design, this can be either a polyamide or stainless steel junctionbox.

On request a Drummotor can be fitted with a cable. In this case it is important to know the available voltage (preferably 1 voltage), the length of the cable, whether the cable is shielded or not and the type of cable exit.

An overview of available cable exits is shown below.

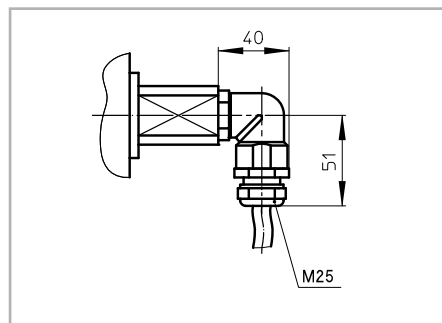
Option 1

Straight cable exit with cable gland



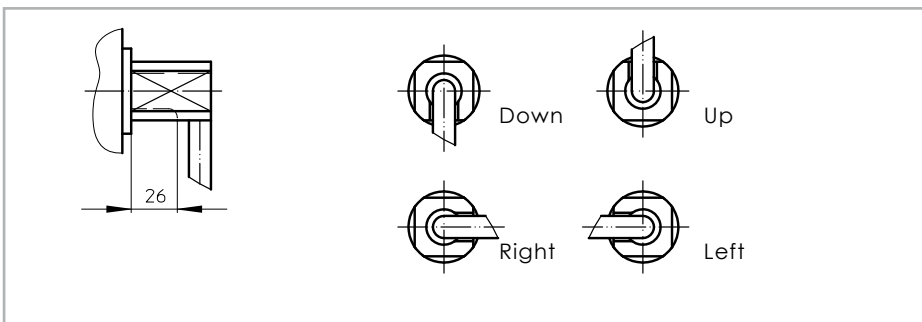
Option 3

Elbow cable exit with cable gland
(minimum facewidth increases with 50 mm)



Option 4

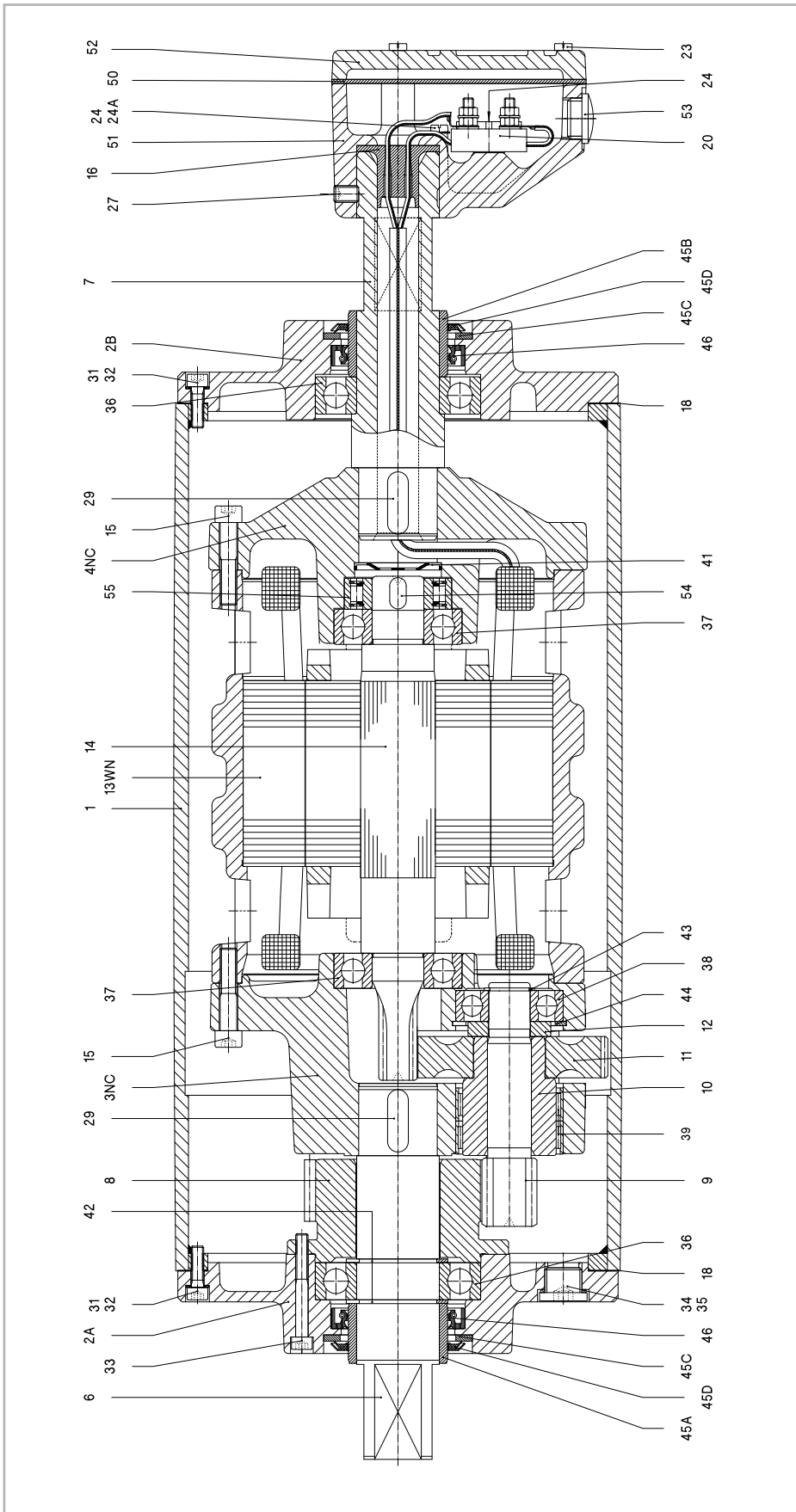
Open cable exit (minimum facewidth increases with 50 mm)



Cross sectional / parts description

TM 215A40

Legenda



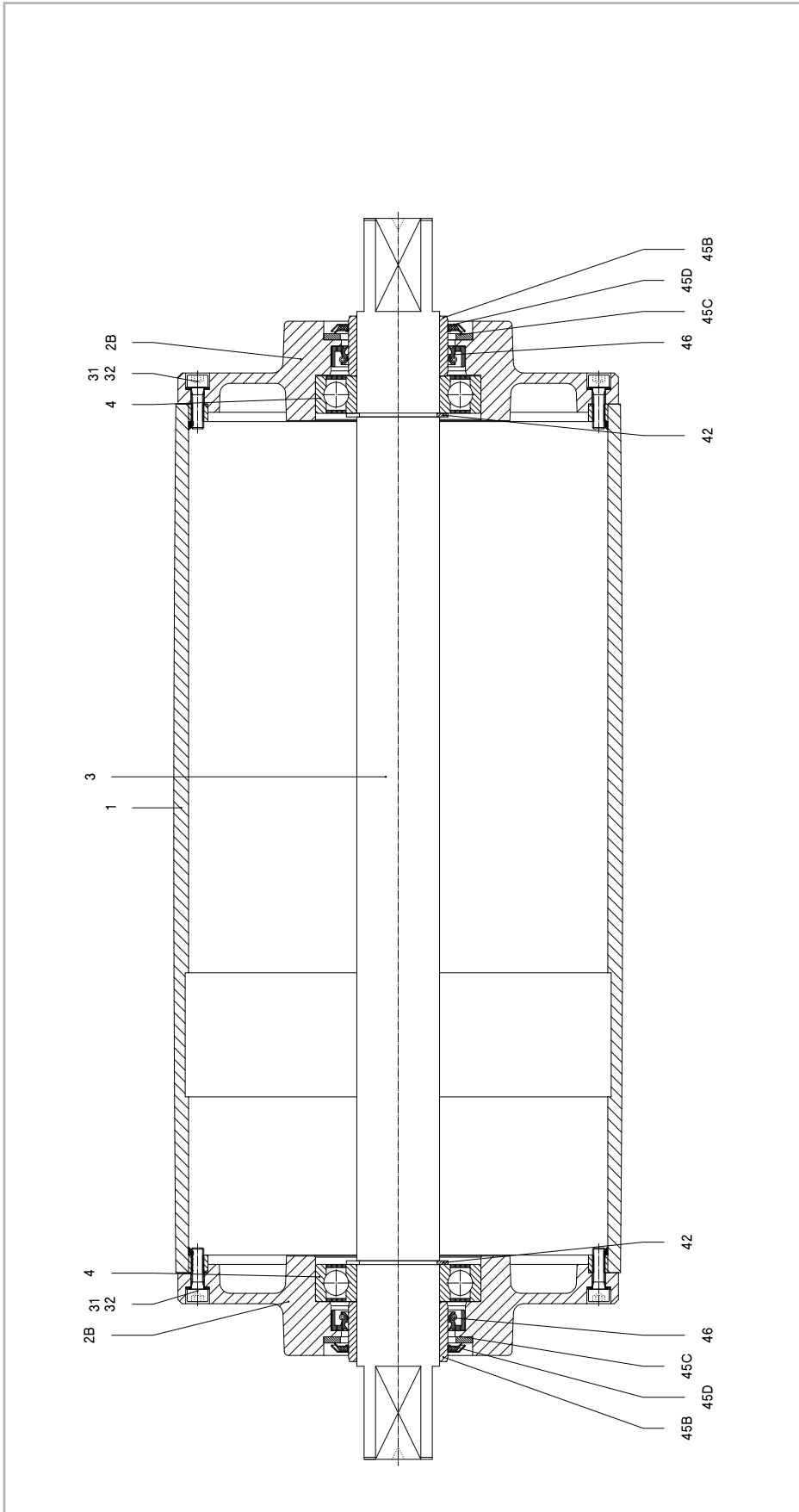
Remark: Drummotor also available in B-design (TM215B40)

1	Shell	39	Needlebearing	50	Seal
2A	Endflange	41	Disc	51	Junctionbox
2B	Endflange	42	Circlip	52	Junctionbox cover
3NC	Gearhousing	43	Circlip	53	Stopping plug
4NC	Motoflange	44	Circlip	54	Key
6	Shaftend	45A	Bearing race	55	Backstop
7	Hollow shaft	45B	Bearing race	57	Dataplate
8	External gear	45C	Shim plated		
9/10	Pinion with bush	45D	Gammaring		
11	Gear	46	Olised		
12	Distance ring	27	Set screw		
13WN	Stator	29	Key		
14	Rotor	31	Int. hex screw		
15	Int. hex screw	32	Washer		
16	Cable passage	33	Int. hex screw		
18	Gasket	34	Fillerplug		
20	Terminalboard	35	Washer		
23	Cyl. head screw	36	Ballbearing		
24	Cyl. head screw	37	Ballbearing		
24A	Toothed lock washer	38	Ballbearing		
27	Seal	39	Needlebearing		
29	Key	41	Disc		
31	Int. hex screw	42	Circlip		
32	Washer	43	Circlip		
33	Int. hex screw	44	Circlip		
34	Fillerplug	45A	Bearing race		
35	Washer	45B	Bearing race		
36	Ballbearing	45C	Shim plated		
37	Ballbearing	45D	Gammaring		
38	Ballbearing	46	Olised		

Cross sectional / parts descriptio

KT 215A40

Legenda



Remark: Talidrum also available in B-design (KT215B40)

1	Shell	42	Circlip
2B	Endflange	45B	Bearing race
3	Shaft	45C	Shim plated
4	Ballbearing	45D	Gammaring
31	Int. hex screw	46	Oilseal
32	Washer		

Option

Material

The external parts of the Drummotor are made from mild steel and cast iron. Depending on the application it is also possible to manufacture in stainless steel (complete or part). You can choose between stainless steel 304 (general food industry) and stainless steel 316 (salt water applications).

Backstop - Brake

If an inclined belt conveyor is stopped fully loaded, it could run backwards.

To prevent this we can install a backstop. One of the bearings in the Drummotor is replaced by a one way bearing. The way this bearing is installed determines the direction of rotation of the drum. TBRH indicates a cw rotation and TBLH ccw.

In situations where a Drummotor needs to be able to drive in both directions it is not possible to use a backstop. In this case we use a brake. When an declined belt or a horizontal belt needs to be stopped quickly to pick or place items a brake is the best solution.

Inclined position

Sometimes a Drummotor needs to be installed on an inclined or even vertical position. This is possible, but we need to make adjustments to the oil level in the drum as the oil will flow to the lower side of the Drummotor causing the top bearing to run without lubrication. To prevent problems we will need to know the installation angle so we can fill the drum with extra oil and fit a double sealed bearing on the upper side.

Thermal protection

A Krauter Drummotor can be fitted with thermal protection. This consists of either a thermistor (PTC) or bi-metal (klixon). We install these on each phase of the electric motor.

Encoder - Sensor bearing

In certain applications it is required to measure the speed or position of a conveyor belt. For this type of application we can install an encoder or sensor bearing to accurately measure rotational speed of the Drummotor.

The accuracy needed will determine the type of encoder or sensor used.

Lagging

The power produced by the Drummotor has to be transferred to the belt and lagging is used to give more friction between the Drummotor and the conveyor belt. Krauter can fit your Drummotor with different kinds of lagging.

There is a difference between cold and hot vulcanised lagging. Cold vulcanised means the lagging is glued to the Drummotor usually in sheet form and the join 'welded' together. Hot vulcanising is a process where the shell is wrapped around with thin layers of rubber. The shell with the rubber is then baked in an autoclave fusing the layers together creating a seamless finish.

It is possible to cut grooves (e.g chevron or diamond) in the lagging.

Sprockets

Do you wish to use a Drummotor to drive modular belts? Krauter can help you! Fitting sprockets suitable for various types of modular belts is a simple solution. The Drummotor is manufactured with a cylindrical shell and machined with a patented 'keying' system. The sprockets are simply 'slid' on and locked securely into position.

Options

Sealings for mild steel Drummotors

RB sealing - IP 66



This is Krauter's standard sealing. This type of sealing will work in most conditions.

RBS sealing - IP 66



This sealing is specifically designed for those applications where high water pressure is used for cleaning.

HD sealing - IP 66



This sealing is designed for abrasive applications, like sand, gravel and soil.

Sealings for stainless steel Drummotors

CR sealing - IP 66



This is our standard sealing for stainless steel Drummotors, a very effective, multi labyrinth sealing.

UW sealing - IP 68



This sealing is suitable for under water applications. The maximum depth is approx 2,5 m.

Options

Specification	Standard	Optional
Construction		
Shafts and bolts	Mild steel	Stainless steel
Endflanges	Cast iron	Stainless steel
Shell	Mild steel	Stainless steel
Junctionbox	Cast iron	Stainless steel or polyimide
Cable		Shielded or non-shielded
Sealing mild steel	RB	RBS, HD
Sealing stainless steel	CR	UW
Shell		
Crowned	•	
Cylindrical		•
Balanced		•
Lagging, cold vulcanised		•
Lagging, hot vulcanised		•
Lagging, FDA approved		•
Fitted with grooves, patterns		•
Sprockets		•
Electro motor		
Three-phase asynchronous	•	
Power supply ($P \leq 3$ kW)	230/400 V - 50 Hz	Other voltages and frequencies on request
Power supply ($P > 3$ kW)	400/690 V - 50 Hz	Other voltages and frequencies on request
Two speed (Dahlander)		•
Twin drive (double power)		•
Insulation class	F	H
Thermal protection		Bi-metal or thermistor
Run by frequency inverter	•	
Other options		
Food grade oil		•
Backstop, mechanical		•
Brake, electro mechanical		•
Clutch brake, electro mechanical		•
Inclined or vertical position		•
Other facewidth's		•
Different shaft designs		•
Encoder or sensor bearing in Drummotor		•
Encoder or sensor bearing in Taildrum		•
Certificates		
CE	•	
UL		•
CSA		•
ATEX zone 22, dust		•
UW Under water application (IP68)		•

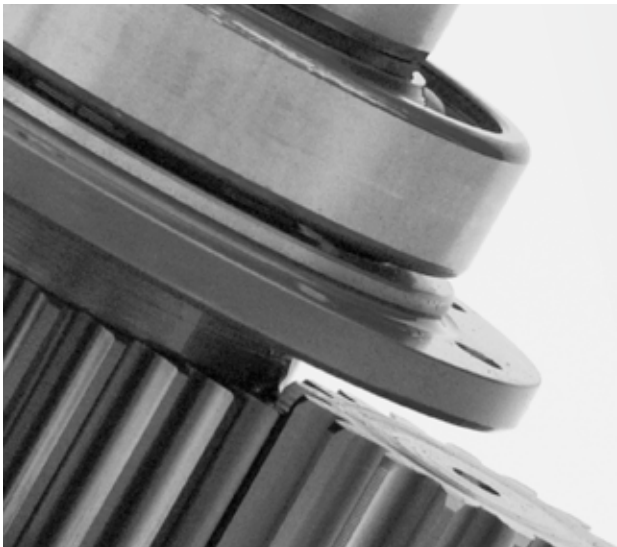
Product range

Our products, an overview

Drum motor type	TM 100B25	TM 113B25	TM 127.25	TM 138.25	TM 160.25	TM 160.30	TM 215.30	TM 215.40
Drum diameter (mm)	100	113	127	138	160	160	215	215
Shaft diameter (mm)	25	25	25	25	25	30	30	40
Power (kW)	0.05-0.37	0.04-0.55	0.10-1.1	0.10-1.1	0.10-0.75	0.10-2.2	0.10-2.2	0.37-5.5
Speed (m/s)	0.007-3.60	0.008-4.40	0.008-2.60	0.009-2.80	0.13-3.30	0.06-4.00	0.08-5.30	0.12-4.70

Drum motor type	TM 215B50	TM 273.40	TM 315.40	TM 315.50	TM 400A50	TM 400.60	TM 500A60	TM 500A75
Drum diameter (mm)	215	273	315	315	400	400	500	500
Shaft diameter (mm)	50	40	40	50	50	60	60	75
Power (kW)	1.5-4.0	0.37-5.5	0.37-5.5	1.1-11	1.1-11	1.5-22	1.5-22	11-30
Speed (m/s)	0.18-0.31	0.17-5.00	0.18-5.20	0.16-4.40	0.20-4.80	0.20-4.60	0.25-4.70	0.80-3.20

Drum motor type	TM 620A75	TM 630A100	TM 800A100	TM 800A130
Drum diameter (mm)	620	630	800	800
Shaft diameter (mm)	75	100	100	130
Power (kW)	11-30	22-55	22-55	55-132
Speed (m/s)	1.00-3.90	1.00-4.00	1.25-5.10	1.60-4.50



Design benefits

- Robust, industrial design
- Fully enclosed
- Oil filled
- Well-sized gears and bearings

Installation advantages

- Easy to install
- Compact and reliable
- Easy to clean
- Virtually maintenance free
- Low Life Cycle Costs



Trommelmotor *Drummotors*

TM 215B50



KRAUTER®

ELEKTROMASCHINEN

Selection table

TYPE TM 215B50	Power kW	Beltspeed m/s at 50 Hz		Min. L mm Design B	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=500
		0,31 11870	0,28 13140			
455 PL2	4,00	0,31 11870	0,28 13140	600	8,8	117
440 PL2	3,00	0,31 8900	0,28 9855	600	6,6	117
630 PL2	2,20	0,20 10120	0,18 11240	600	5,5	117
620 PL2	1,50	0,20 6900	0,18 7665	600	3,7	117

Available standard facewidth's: 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

The total weight of a Drummotor grows approx. 5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

Selection table Dahlander motors

TYPE TM 215B50	Power kW	Beltspeed m/s at 50 Hz		Min. L mm Design B	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=600
		Beltpull N				
430/240 PL2	2,20/3,00	0,31/0,62 6530/4450	0,28/0,56 7230/4930	600	5,0/6,9	117
816/430 PL2	1,20/2,20	0,15/0,30 7360/6745	0,14/0,28 7885/7230	600	3,8/4,3	117
810/420 PL2	0,75/1,50	0,15/0,30 4600	0,14/0,28 4930	600	3,3/4,6	117

Available standard facewidth's: 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 100 mm

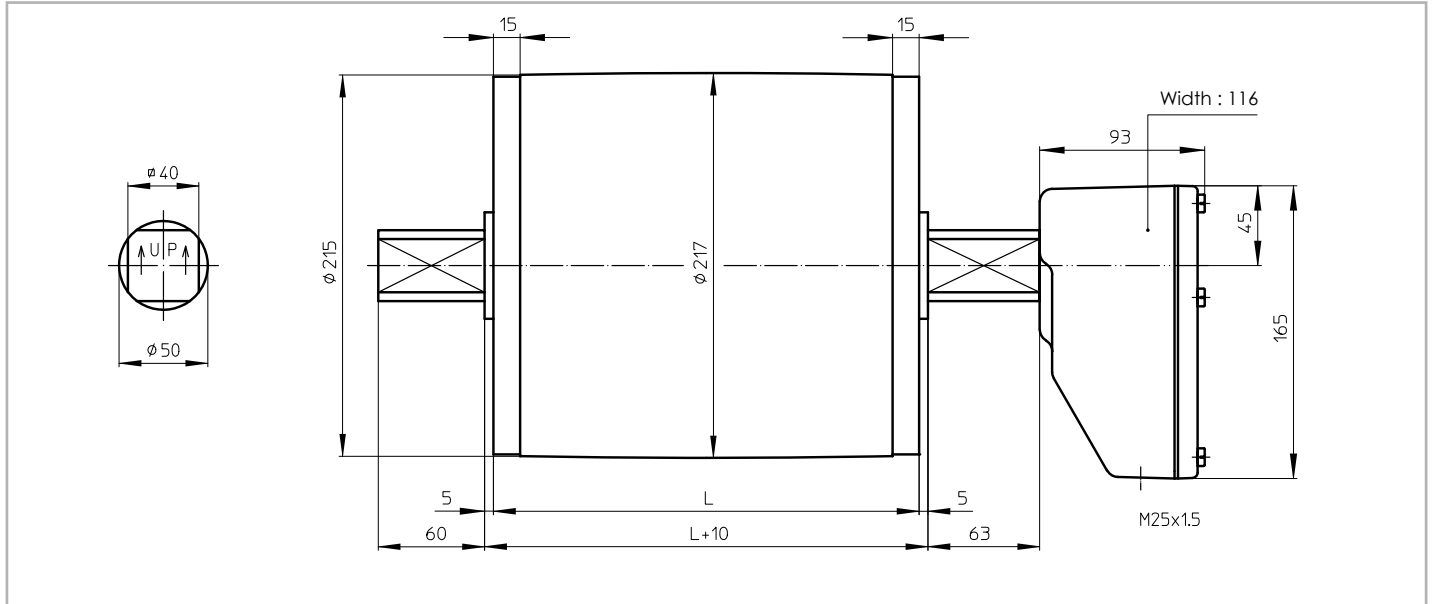
The total weight of a Drummotor grows approx. 5 kg per 100 mm

Available torque: (Beltpull N x drum diameter m) / 2 Nm

Dimensions

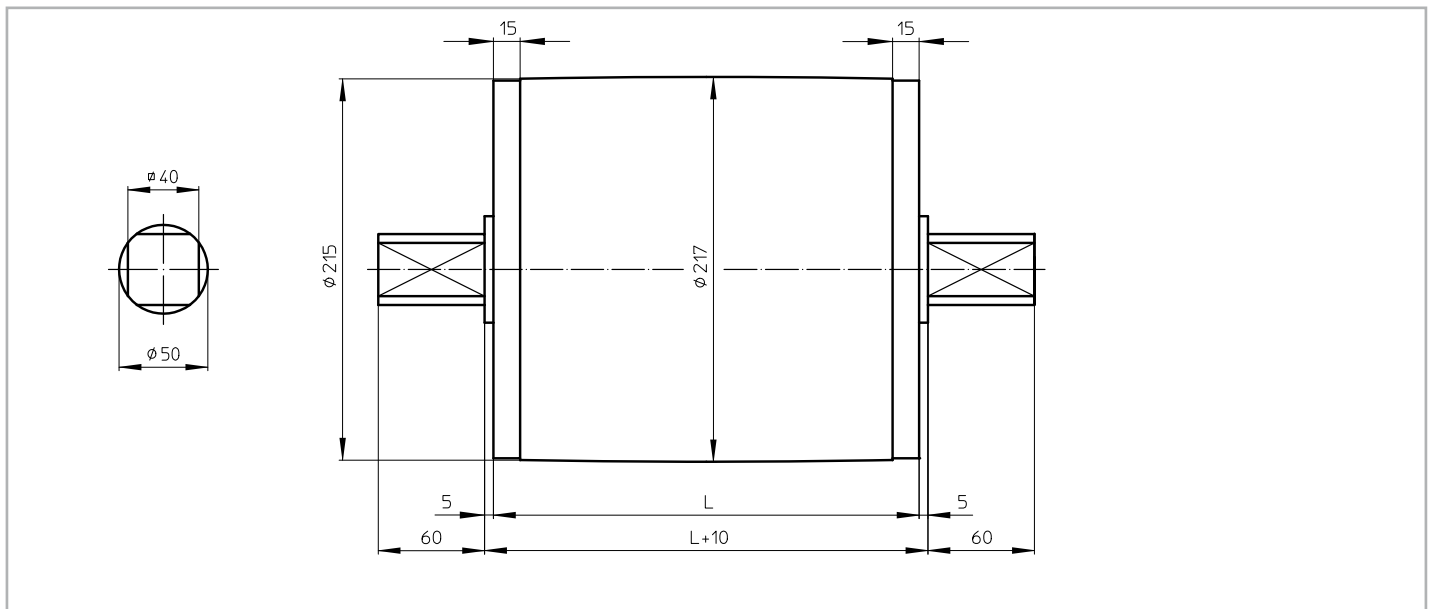
TM 215B50

TM 215B50, mild steel Drummotor with cast iron junctionbox



KT 215B50

KT 215B50, mild steel Taildrum

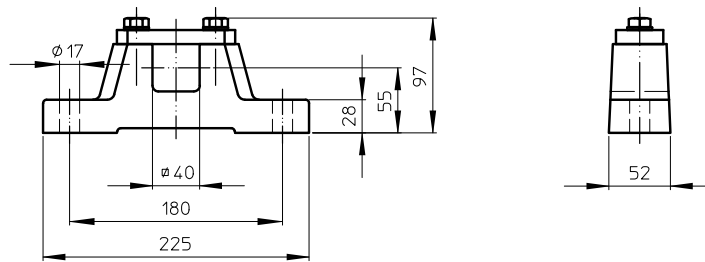


Dimensions bracket

AB 50

AB 50, cast iron or stainless steel bracket

Weight: 7,2 kg per pair



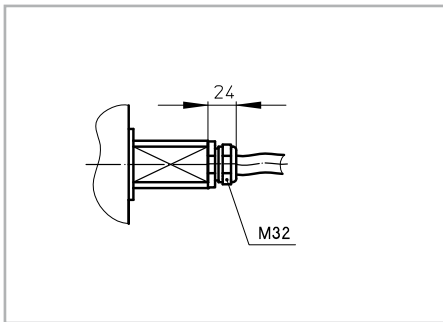
Cable exit

Standard design of a TM 215B50 is with a cast iron junctionbox. For stainless steel design, this can be either a polyamide or stainless steel junctionbox.

On request a Drummotor can be fitted with a cable. In this case it is important to know the available voltage (preferably 1 voltage), the length of the cable, whether the cable is shielded or not and the type of cable exit. An overview of available cable exits is shown below.

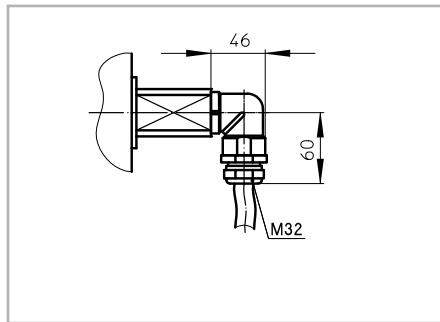
Option 1

Straight cable exit with cable gland



Option 3

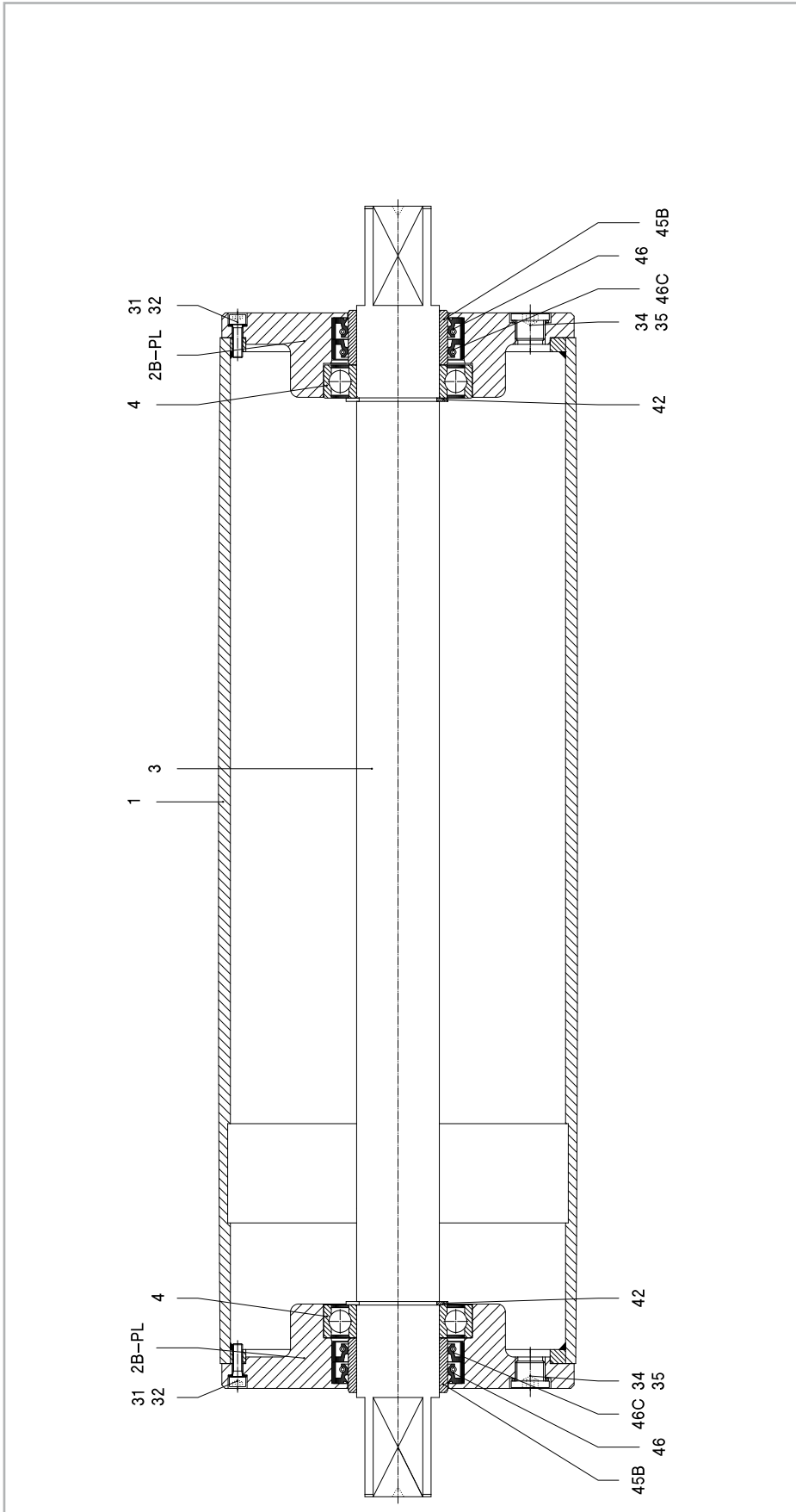
Elbow cable exit with cable gland
(minimum facewidth increases with 50 mm)



Cross sectional / parts description

KT 215B50

Legenda



- | | | | |
|-------|----------------|-----|--------------|
| 1 | Shell | 34 | Fillerplug |
| 2B-PL | Endflange | 35 | Washer |
| 3 | Shaft | 42 | Circlip |
| 4 | Ballbearing | 45B | Bearing race |
| 31 | Int. hex screw | 46 | Olised |
| 32 | Washer | 46C | Olised |

Options

Material

The external parts of the Drummotor are made from mild steel and cast iron. Depending on the application it is also possible to manufacture in stainless steel (complete or part). You can choose between stainless steel 304 (general food industry) and stainless steel 316 (salt water applications).

Backstop - Brake

If an inclined belt conveyor is stopped fully loaded, it could run backwards.

To prevent this we can install a backstop. One of the bearings in the Drummotor is replaced by a one way bearing. The way this bearing is installed determines the direction of rotation of the drum. TBRH indicates a cw rotation and TBLH ccw.

In situations where a Drummotor needs to be able to drive in both directions it is not possible to use a backstop. In this case we use a brake. When an declined belt or a horizontal belt needs to be stopped quickly to pick or place items a brake is the best solution.

Inclined position

Sometimes a Drummotor needs to be installed on an inclined or even vertical position. This is possible, but we need to make adjustments to the oil level in the drum as the oil will flow to the lower side of the Drummotor causing the top bearing to run without lubrication. To prevent problems we will need to know the installation angle so we can fill the drum with extra oil and fit a double sealed bearing on the upper side.

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Encoder - Sensor bearing

In certain applications it is required to measure the speed or position of a conveyor belt. For this type of application we can install an encoder or sensor bearing to accurately measure rotational speed of the Drummotor.

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Lagging

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It is possible to cut grooves (e.g chevron or diamond) in the lagging.

Sprockets

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Options

Sealings for mild steel Drummotors

RBS sealing - IP 66



This sealing is specifically designed for those applications where high water pressure is used for cleaning.

HD sealing - IP 66



This sealing is designed for abrasive applications, like sand, gravel and soil.

Sealings for stainless steel Drummotors

CR sealing - IP 66



This is our standard sealing for stainless steel Drummotors, a very effective, multi labyrinth sealing.

Options

Specification	Standard	Optional
Construction		
Shafts and bolts	Mild steel	Stainless steel
Endflanges	Cast iron	Stainless steel
Shell	Mild steel	Stainless steel
Junctionbox	Cast iron	PU coated cast iron or stainless steel
Cable		Shielded or non-shielded
Sealing mild steel		RBS, HD
Sealing stainless steel	CR	
Shell		
Crowned	•	
Cylindrical		•
Balanced		•
Lagging, cold vulcanised		•
Lagging, hot vulcanised		•
Lagging, FDA approved		•
Fitted with grooves, patterns		•
Sprockets		•
Electro motor		
Three-phase asynchronous	•	
Power supply ($P \leq 3$ kW)	230/400 V - 50 Hz	Other voltages and frequencies on request
Power supply ($P > 3$ kW)	400/690 V - 50 Hz	Other voltages and frequencies on request
Two speed (Dahlander)		•
Insulation class	F	H
Thermal protection		Bi-metal or thermistor
Run by frequency inverter	•	
Other options		
Food grade oil		•
Backstop, mechanical		•
Brake, electro mechanical		•
Inclined or vertical position		•
Other facewidth's		•
Different shaft designs		•
Encoder or sensor bearing in Drummotor		•
Encoder or sensor bearing in Taildrum		•
Certificates		
CE	•	
UL		•
CSA		•
ATEX zone 22, dust		•

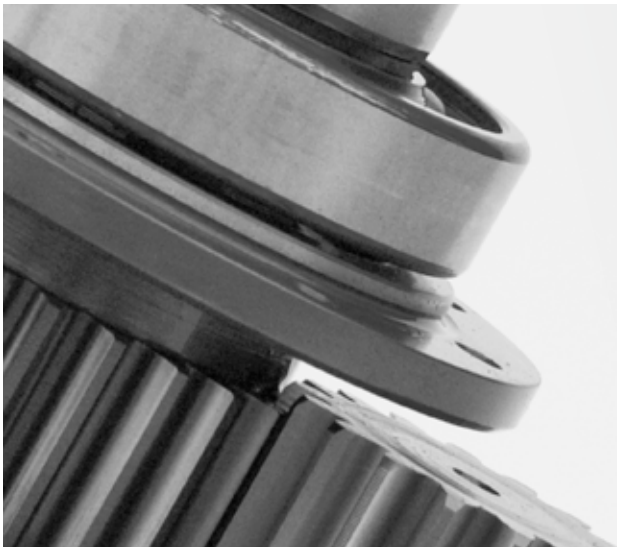
Product range

Our products, an overview

Drum motor type	TM 100B25	TM 113B25	TM 127.25	TM 138.25	TM 160.25	TM 160.30	TM 215.30	TM 215.40
Drum diameter (mm)	100	113	127	138	160	160	215	215
Shaft diameter (mm)	25	25	25	25	25	30	30	40
Power (kW)	0.05-0.37	0.04-0.55	0.10-1.1	0.10-1.1	0.10-0.75	0.10-2.2	0.10-2.2	0.37-5.5
Speed (m/s)	0.007-3.60	0.008-4.40	0.008-2.60	0.009-2.80	0.13-3.30	0.06-4.00	0.08-5.30	0.12-4.70

Drum motor type	TM 215B50	TM 273.40	TM 315.40	TM 315.50	TM 400A50	TM 400.60	TM 500A60	TM 500A75
Drum diameter (mm)	215	273	315	315	400	400	500	500
Shaft diameter (mm)	50	40	40	50	50	60	60	75
Power (kW)	1.5-4.0	0.37-5.5	0.37-5.5	1.1-11	1.1-11	1.5-22	1.5-22	11-30
Speed (m/s)	0.18-0.31	0.17-5.00	0.18-5.20	0.16-4.40	0.20-4.80	0.20-4.60	0.25-4.70	0.80-3.20

Drum motor type	TM 620A75	TM 630A100	TM 800A100	TM 800A130
Drum diameter (mm)	620	630	800	800
Shaft diameter (mm)	75	100	100	130
Power (kW)	11-30	22-55	22-55	55-132
Speed (m/s)	1.00-3.90	1.00-4.00	1.25-5.10	1.60-4.50



Design benefits

- Robust, industrial design
- Fully enclosed
- Oil filled
- Well-sized gears and bearings

Installation advantages

- Easy to install
- Compact and reliable
- Easy to clean
- Virtually maintenance free
- Low Life Cycle Costs

