



Van der Graaf
Power Transmission Equipment



TM138-25

Drummotor

Product information

www.vandergraafpte.nl

Selection table TM138-25

| TYPE | Power (kW) | Beltspeed at 50 Hz (m/s) Beltpull (N) | | | | | | | | Min. L (mm) Design A / B | | Full load curr. at 400 V/50 Hz (A) | Weight L=350 (kg) |
|-----------|------------|--|---------------|---------------|---------------|--------------|--------------|--------------|--|-----------------------------|-----|---|-------------------------|
| | | 2,80 375 | 2,20 475 | 1,80 580 | 1,40 745 | 1,10 950 | 0,85 1230 | | | | | | |
| 215 Z | 1,10 | 2,80 375 | 2,20 475 | 1,80 580 | 1,40 745 | 1,10 950 | 0,85 1230 | | | 300 | 325 | 2,2 | 22 |
| 215 PL2 | | 0,65 1555 | 0,50 2025 | 0,45 2245 | 0,35 2890 | | | | | 350 | 375 | | |
| 415 Z | 1,10 | 1,40 745 | 1,10 950 | 0,90 1160 | | | | | | 325 | 350 | 2,8 | 23 |
| 210 Z | 0,75 | 2,80 255 | 2,20 325 | 1,80 395 | | | | | | 300 | 325 | 1,4 | 22 |
| 210 PL2 | | 0,45 1530 | | | | | | | | 350 | 375 | | |
| 410 Z | 0,75 | 1,40 510 | 1,10 650 | 0,90 790 | 0,70 1015 | 0,55 1295 | | | | 300 | 325 | 1,9 | 22 |
| 410 PL2 | | 0,32 2155 | 0,26 2655 | 0,22 3135 | 0,17 3800 | | | | | 350 | 375 | | |
| 275 Z | 0,55 | 2,80 185 | 2,20 240 | 1,80 290 | | | | | | 275 | 300 | 1,1 | 20 |
| 475 Z | 0,55 | 1,40 375 | 1,10 475 | 0,90 580 | 0,70 745 | 0,55 950 | 0,45 1160 | | | 275 | 300 | 1,4 | 20 |
| 475 PL2 | | 0,32 1580 | 0,26 1945 | 0,22 2300 | 0,17 2975 | | | | | 325 | 350 | | |
| 405 Z | 0,37 | 1,40 250 | 1,10 320 | 0,90 390 | 0,70 500 | 0,55 640 | 0,45 780 | 0,35 1005 | | 275 | 300 | 1,0 | 19 |
| 405 PL2 | | 0,22 1545 | 0,17 2000 | | | | | | | 325 | 350 | | |
| 605 Z | 0,37 | 0,27 1300 | | | | | | | | 275 | 300 | 1,1 | 20 |
| 605 PL2 | | 0,15 2270 | 0,12 2835 | | | | | | | 325 | 350 | | |
| 434 Z | 0,25 | 1,40 170 | 1,10 215 | 0,90 265 | 0,70 340 | 0,55 430 | 0,45 530 | 0,35 680 | | 250 | 275 | 0,7 | 18 |
| 434 ST3-Z | | 0,27 860 | 0,22 1055 | 0,17 1370 | | | | | | 275 | 300 | | |
| 434 PL3 | | 0,050 3800 | 0,039 3800 | 0,034 3800 | 0,026 3800 | | | | | 375 | 400 | | |
| 634 ST3-Z | 0,25 | 0,19 1225 | | | | | | | | 300 | 325 | 0,8 | 20 |
| 634 PL2 | | 0,15 1535 | 0,12 1915 | | | | | | | 325 | 350 | | |
| 634 PL3 | | 0,022 3800 | 0,017 3800 | | | | | | | 375 | 400 | | |

Available standard facewidth's: 250 - 275 - 300 - 325 - 350 - 375 - 400 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm.

Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 2,5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 75 mm

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

Beltpull/-torque max.: 3800 N / 260 Nm (Imax upon request)

Selection table TM138-25 Dahlander

| TYPE | Power (kW) | Beltspeed at 50 Hz (m/s) Beltpull (N) | | | | | | | | Min. L (mm) Design A / B | | Full load curr. at 400 V/50 Hz (A) | Weight L=350 (kg) |
|---------------|---------------|--|------------------------|------------------------|------------------------|----------------------|-----------------------|------------------|--|-----------------------------|-----|---|-------------------------|
| | | 1,40/2,80 375/255 | 1,10/2,20 475/325 | 0,90/1,80 580/395 | 0,70/1,40 745/510 | 0,55/1,10 950/650 | 0,45/0,90 1160/790 | | | | | | |
| 475/210 Z | 0,55/ 0,75 | 1,40/2,80 375/255 | 1,10/2,20 475/325 | 0,90/1,80 580/395 | 0,70/1,40 745/510 | 0,55/1,10 950/650 | 0,45/0,90 1160/790 | | | 300 | 325 | 1,4/ 1,7 | 22 |
| 475/210 PL2 | | 0,32/0,64 1580/1080 | 0,26/0,52 1945/1325 | 0,22/0,44 2300/1570 | 0,17/0,34 2975/2030 | | | | | 350 | 375 | | |
| 437/275 Z | 0,27/ 0,55 | 1,40/2,80 180 | 1,10/2,20 240 | 0,90/1,80 290 | 0,70/1,40 375 | 0,55/1,10 475 | 0,45/0,90 580 | 0,35/0,70 745 | | 275 | 300 | 0,9/ 1,3 | 20 |
| 437/275 ST3-Z | | 0,27/0,54 950 | 0,22/0,44 1165 | 0,17/0,34 1370 | | | | | | 300 | 325 | | |

Available standard facewidth's: 275 - 300 - 325 - 350 - 375 - 400 - 450 - 500 - 550 - 600 - 650 - 700 - 750 - 800 - 850 - 900 - 950 - 1000 mm.






Minimum facewidth can deviate, see cable exit options.

The total weight of a drummotor grows approx. 2,5 kg per 100 mm.

When an electro-mechanical brake is fitted, the minimum facewidth is increased by 75 mm.

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

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 polyamide |
| | Cable | | Shielded or non-shielded |
| | Sealing mild steel | RB | RBS, HD-1 |
| | Sealing stainless steel | CR | FS, HD-1, HD-2 |
|  SHELL | Crowned | • | |
| | Cylindrical | | • |
| | Balanced | | • |
| | Lagging, cold vulcanised | | • |
| | Lagging, hot vulcanised | | • |
| | Lagging, FDA approved | | • |
| | Profiled for modular belts | | • |
| | Sprockets | | • |
|  ELECTRO MOTOR | Three-phase asynchronous | • | Other voltages and frequencies on request |
| | Power supply | 230/400 V - 50 Hz | |
| | Two speed (Dahlander) | | • |
| | Insulation class | F | • |
| | 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 | | • |
| | Special shaft dimensions | | • |
| | Encoder or sensorbearing in drum motor | | • |
| | Encoder or sensorbearing in tail drum | | • |
|  CERTIFICATES | CE | • | |
| | UL | | • |
| | CSA | | • |
| | ATEX zone 22, dust | | • |
| | IP69K | | • |

Our drummotors, an overview

| Drummotor type | Drum diameter (mm) | Shaft diameter (mm) | Power (kW) | Speed (m/s) | Max. Beltpull (N) |
|----------------|--------------------|---------------------|--------------|--------------|-------------------|
| TM80B20 | 80 | 20 | 0,07 - 0,12 | 0,11 - 1,15 | 598 |
| TM100B25 | 100 | 25 | 0,08 - 0,37 | 0,007 - 3,60 | 1300 |
| TM113B25 | 113 | 25 | 0,12 - 0,55 | 0,008 - 4,40 | 1150 |
| TM127-25 | 127 | 25 | 0,25 - 1,10 | 0,016 - 2,60 | 4100 |
| TM138-25 | 138 | 25 | 0,25 - 1,10 | 0,017 - 2,80 | 3800 |
| TM160-25 | 160 | 25 | 0,25 - 0,75 | 0,31 - 3,30 | 1135 |
| TM160-30 | 160 | 30 | 0,25 - 2,20 | 0,11 - 4,00 | 3000 |
| TM215-30 | 215 | 30 | 0,25 - 2,20 | 0,27 - 5,30 | 1900 |
| TM215-40 | 215 | 40 | 0,75 - 5,5 | 0,17 - 4,70 | 5115 |
| TM215B50 | 215 | 50 | 1,5 - 7,0 | 0,18 - 0,62 | 11500 |
| TM273-40 | 273 | 40 | 0,75 - 5,50 | 0,21 - 5,00 | 4355 |
| TM315-40 | 315 | 40 | 0,75 - 5,50 | 0,40 - 5,20 | 4020 |
| TM315-50 | 315 | 50 | 2,2 - 11,0 | 0,34 - 4,40 | 7125 |
| TM315-60 | 315 | 60 | 3,0 - 11,0 | 0,22 - 1,40 | 12790 |
| TM400-50 | 400 | 50 | 2,2 - 11,0 | 0,40 - 4,80 | 5700 |
| TM400-60 | 400 | 60 | 3,0 - 22,0 | 0,45 - 4,20 | 10960 |
| TM500-60 | 500 | 60 | 3,0 - 22,0 | 0,55 - 4,40 | 8905 |
| TM500A75 | 500 | 75 | 15,0 - 30,0 | 1,00 - 3,20 | 14250 |
| TM500A100 | 500 | 100 | 15,0 - 30,0 | 0,55 - 1,25 | 25300 |
| TM620A75 | 620 | 75 | 15,0 - 30,0 | 1,25 - 3,90 | 11400 |
| TM630A100 | 630 | 100 | 37,0 - 55,0 | 1,60 - 4,00 | 21970 |
| TM800A100 | 800 | 100 | 37,0 - 55,0 | 2,00 - 5,10 | 17575 |
| TM800A130 | 800 | 130 | 55,0 - 132,0 | 2,00 - 4,50 | 35625 |

Contact us

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