



RAPPLON[®] Flat Belts

Roller Drive Flat Belts

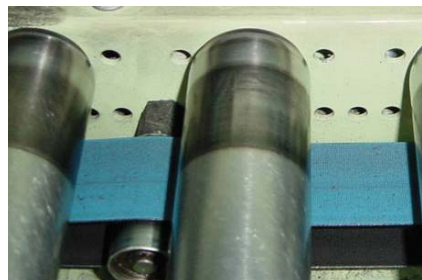
When fast replacement is of the utmost importance

RAPPLON® High Performance Flat Belts offer a wide selection of different solutions to all sorts of accumulation techniques



Ammeraal Beltech is your guarantee for reliability of process and conveyor belts, high performance flat belts and perfect on-site service around the clock.

Logistics and automated production are industries for the future. Optimising workflow and improving process efficiency are important aspects of our development work.



Roller conveyor systems dominate logistics and distribution centres throughout the world. They are frequently installed to link different manufacturing processes. Important tasks are achieved by live rollers drives to guarantee a trouble-free material flow:

Zones

- Distribution
- Accumulation
- Diversion
- Merges
- Singulation
- Transfers
- Accelerations
- Decelerations
- etc.

Various zones with separate operations such as accelerating, diverting or accumulation with zero, low or full pressure can be safely achieved with RAPPLON® Flat Belts.

Product and Customer benefits

RAPPLON® QuickSplice belts with Polyester fabric as tension member

- Exact belt thickness over joint area
- Fast replacement
- No running direction to be observed
- High strength possible also with small pulley diameters
- Failure-free joining system
- Shorter take-ups
- Insensitive to moisture
- Dimensionally stable
- Permanently anti-static

RAPPLON® Classic High Performance Flat Belts with PA-Foil as tension member

- Absorbing high loads and torques
- Permanently anti-static
- No tracking guides required

Belt selection guide

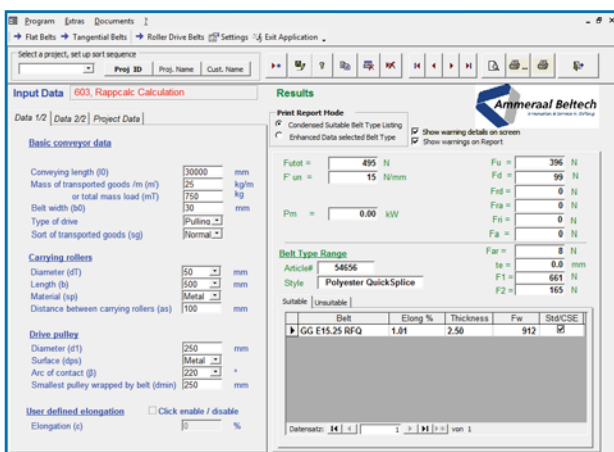
Technical data RAPPLON® Roller Drive Flat Belts

| Belt type | Article number | Belt thickness in mm | Belt factor at 1% in N/mm | Min. Pulley diameter at 20°C in mm | Material Tension member | Friction top/bottom | Endless Joining technology |
|--|----------------|----------------------|---------------------------|------------------------------------|-------------------------|---------------------|----------------------------|
| RAPPLON® Quicksplice Flat Belts | | | | | | | |
| GG E05.14 FFQ | 54607 | 1.40 | 5 | 25 | Polyester fabric | high / high | Quicksplice |
| GG E08.20 RRQ | 54614 | 2.00 | 8 | 25 | Polyester fabric | high / high | Quicksplice |
| GG E15.20 RFQ | 54655 | 2.00 | 15 | 25 | Polyester fabric | high / high | Quicksplice |
| GG E15.25 RFQ | 54656 | 2.50 | 15 | 25 | Polyester fabric | high / high | Quicksplice |
| GG E10.30 RRQ | 54650 | 3.00 | 10 | 30 | Polyester fabric | high / high | Quicksplice |
| GG E15.30 RFQ | 54657 | 3.00 | 15 | 30 | Polyester fabric | high / high | Quicksplice |
| GG E35.30 RRQ | 54627 | 3.00 | 35 | 60 | Polyester fabric | high / high | Quicksplice |
| UU E15.30 RRQ | 54537 | 3.00 | 15 | 30 | Polyester fabric | medium/medium | Quicksplice |

| RAPPLON® Classic Flat Belts | | | | | | | |
|------------------------------------|-------|------|----|-----|----------------|-------------|--------|
| GT S04 RC | 54702 | 1.30 | 4 | 20 | Polyamide foil | low / high | Skived |
| GT S06 RC | 54703 | 1.40 | 6 | 40 | Polyamide foil | low / high | Skived |
| GG S04.17 RFC | 54738 | 1.70 | 4 | 20 | Polyamide foil | high / high | Skived |
| GG S06.18 RFC | 54734 | 1.80 | 6 | 40 | Polyamide foil | high / high | Skived |
| GG S09.22 RFC | 54733 | 2.20 | 9 | 60 | Polyamide foil | high / high | Skived |
| GG S11.26 RFC | 54530 | 2.60 | 11 | 60 | Polyamide foil | high / high | Skived |
| GG S12.28 RRC | 54256 | 2.80 | 12 | 80 | Polyamide foil | high / high | Skived |
| GG S15.31 RRC | 54257 | 3.10 | 15 | 100 | Polyamide foil | high / high | Skived |
| GG S18.34 RRC | 54258 | 3.40 | 18 | 150 | Polyamide foil | high / high | Skived |
| GG S18.39 RRC | 54259 | 3.90 | 18 | 160 | Polyamide foil | high / high | Skived |
| GG S15.40 RRC | 54277 | 4.00 | 15 | 100 | Polyamide foil | high / high | Skived |

RAPPCALC Rapplon Calculation Program

Our RAPPCALC® calculation program 8.2 allows easy and safe dimensioning of your RAPPLON® Flat belt for all your life roller applications.



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| Results Roller Drive Flat Belt Calculations RAPPLON | | | | | |
| Project #602, Rapcalc Calculation, ... | | | | | |
| Parameter | E.Entered | Value | Unit | Description | |
| l0 | E | 30'000 | mm | Total conveying length | |
| b0 | E | 30 | mm | Belt width, entered value | |
| m | E | 25.00 | kg/m | Mass of transported goods / m | |
| mT | E | 750 | kg | Total mass of transported goods on transport length section | |
| sd | E | 1 | | Operation (1= pulling, 2= pushing, 3= reversing) | |
| sg | E | 2 | | Sort of transported goods (1= hard (hard plastic, metal, wood, stone) 2= normal (logskin, hard cardboard) 3= soft (conjugated board, cellular mat., etc)) | |
| d1 | E | 50.0 | mm | Carrying roller diameter | |
| l1 | E | 500 | mm | Carrying roller length | |
| sp | E | 2 | | Carrying roller material (1= Plastic, 2= Metal) | |
| as | E | 100 | mm | Center distance between 2 carrying rollers | |
| mTR | E | 1.18 | kg | Mass of 1 moving carrying roller | |
| mTR | E | 11.94 | kg/m | Mass of moving carrying rollers / m | |
| i | E | 1 | | Pressure roll factor (i= 2: 1 pressure roller/carrying roller, i= 1: 1 pressure roller/2 carrying rollers) | |
| d1 | E | 250 | mm | Diameter drive pulley | |
| dps | E | 1 | | Drive pulley surface (1= metal, 2= lagged) | |
| β | E | 220.0 | ° | Arc of circumference at drive drum | |
| dmin | E | 99.4 | mm | Min. drive pulley diameter | |
| d1 | E | 250 | mm | Smallest pulley wrapped by belt | |
| Frot | E | 495 | N | Total circumferential force | |
| Fu | E | 396 | N | Circumferential force | |
| Fd | E | 99 | N | Start-up resistance | |
| ap | E | 1 | | Accumulation pressure value (1= none or zero, 2= low, 3= full) | |
| m1 | E | 25 | kg | Single piece mass | |
| nrd | E | 0 | | Number of diverter posts | |
| ri | E | 0 | N | Resistance caused by idlers | |
| β | E | 0 | | Incline direction (1= down, 0= horizontal, 1= up) | |
| hT | E | 2'361 | mm | Transport height | |
| mA | E | 2'300 | kg | Mass to be accelerated | |
| ta | E | 0.00 | s | Acceleration time | |
| F1 | E | 661 | N | Force in the tensioned belt portion | |
| F2 | E | 165 | N | Force in the slack belt portion | |
| η | E | 80.00 | % | Efficiency factor of geared motor | |
| vF | E | 15.00 | m/sec | Transport speed | |
| thickness | E | 2.5 | mm | User defined thickness (preselection) | |

Please contact your nearest Ammeraal Beltech agent and complete our questionnaire.

We will supply you the optimal belt for your system.