

DTR/DTRT

Sewage
Grinder




DTR 150-300 DTRT 400-1000 DTRT 400-1000/P

Drainage and waste water pumps equipped with open impeller and grinder system able to shred sewage with suspended solids and prevent the pump from clogging. Best for emptying of septic tanks and residential sumps as well as for rain water systems and for draining of flooded areas where seamless operation is required. The quick coupling feet DN50 and DN65 is available for flanged pumps.



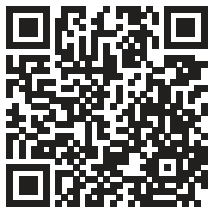
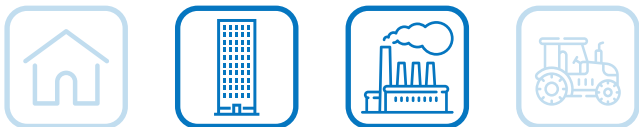
 Grey water

 Black water

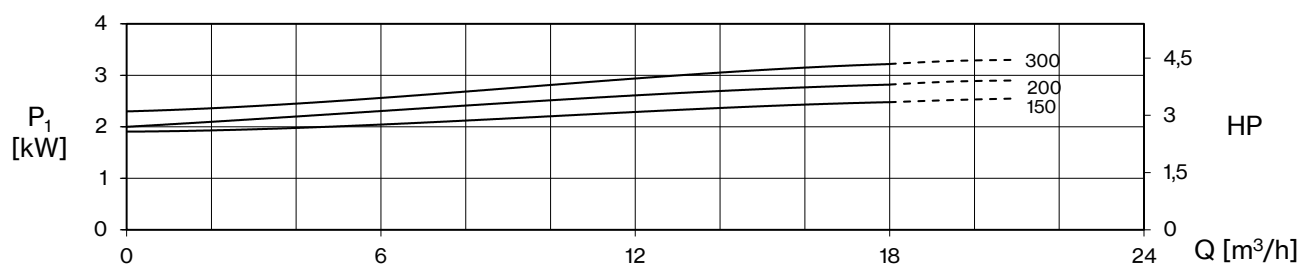
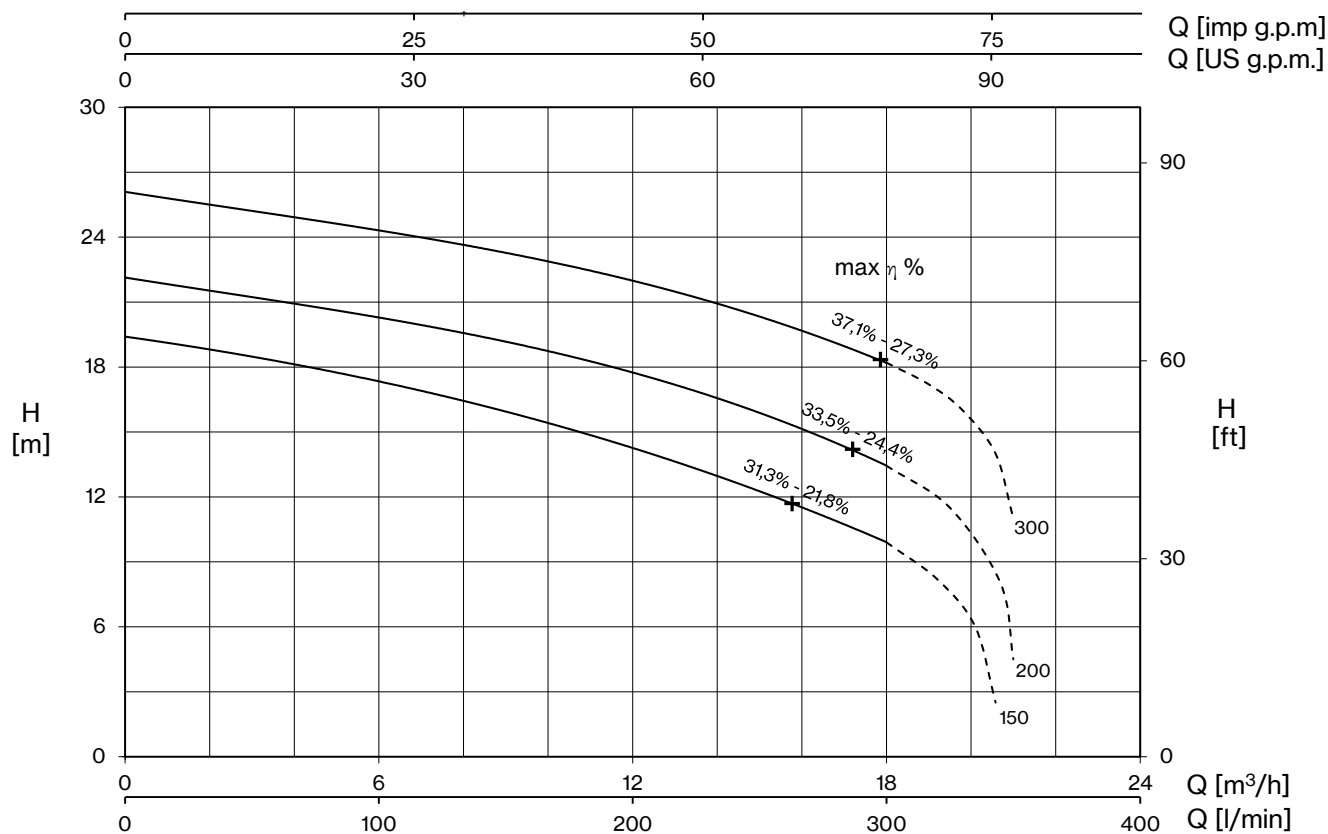
| Construction features | |
|---|--|
| Pump body | cast iron |
| Impeller | cast iron |
| Mechanical seal | double seal with oil barrier: silicon carbide on pump side, ceramic-graphite on motor side |
| Motor shaft | stainless steel AISI 304 |
| Max submergence | 20 m |
| Liquid temperature | 0 - 40 °C |
|  | Grinder treated stainless steel |
| | Bolts A2 stainless steel |
| | Foot support galvanized iron |
| | Gaskets NBR rubber |

| Motor | |
|--------------------------------|--|
| 2 Poles induction motor | 3~ 230V-50Hz |
| | 3~ 400V-50Hz |
| | 3~ 230/400V-50Hz |
| | 3~ 400/690V-50Hz |
| | 1~ 230V-50Hz required run capacitor (35µF for 1,5HP models, 50µF for 2HP model) + start capacitor (80µF with disjuntor) |
| Insulation class | F |
| Protection degree | IPX8 |

| TYPE | LOTS | | | |
|---------------|-------------|----------|-------------|----------|
| | TRUCK | | CONTAINER | |
| | PALLET (cm) | N° pumps | PALLET (cm) | N° pumps |
| DTRT 150-300 | 85×110×145 | 18 | 85×110×190 | 27 |
| DTRT 400-550 | 85×110×170 | 12 | 85×110×170 | 12 |
| DTRT 750-1000 | 100×120×190 | 12 | 100×120×190 | 12 |



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| TYPE | | AMPERE | | | | |
|---------|----------|----------------|----------------------|------------------|--|--|
| 1~ | 3~ | 230 V 50 Hz | 3x230 V 50 Hz (*) | 3x400 V 50 Hz | 230/400 V 50 Hz λ / Δ (*) | 400/690 V 50 Hz λ / Δ |
| DTR 200 | DTRT 200 | 13,6 | 8,8 | 5,1 | - | - |
| - | DTRT 300 | - | 10 | 5,8 | - | - |

+ max η %

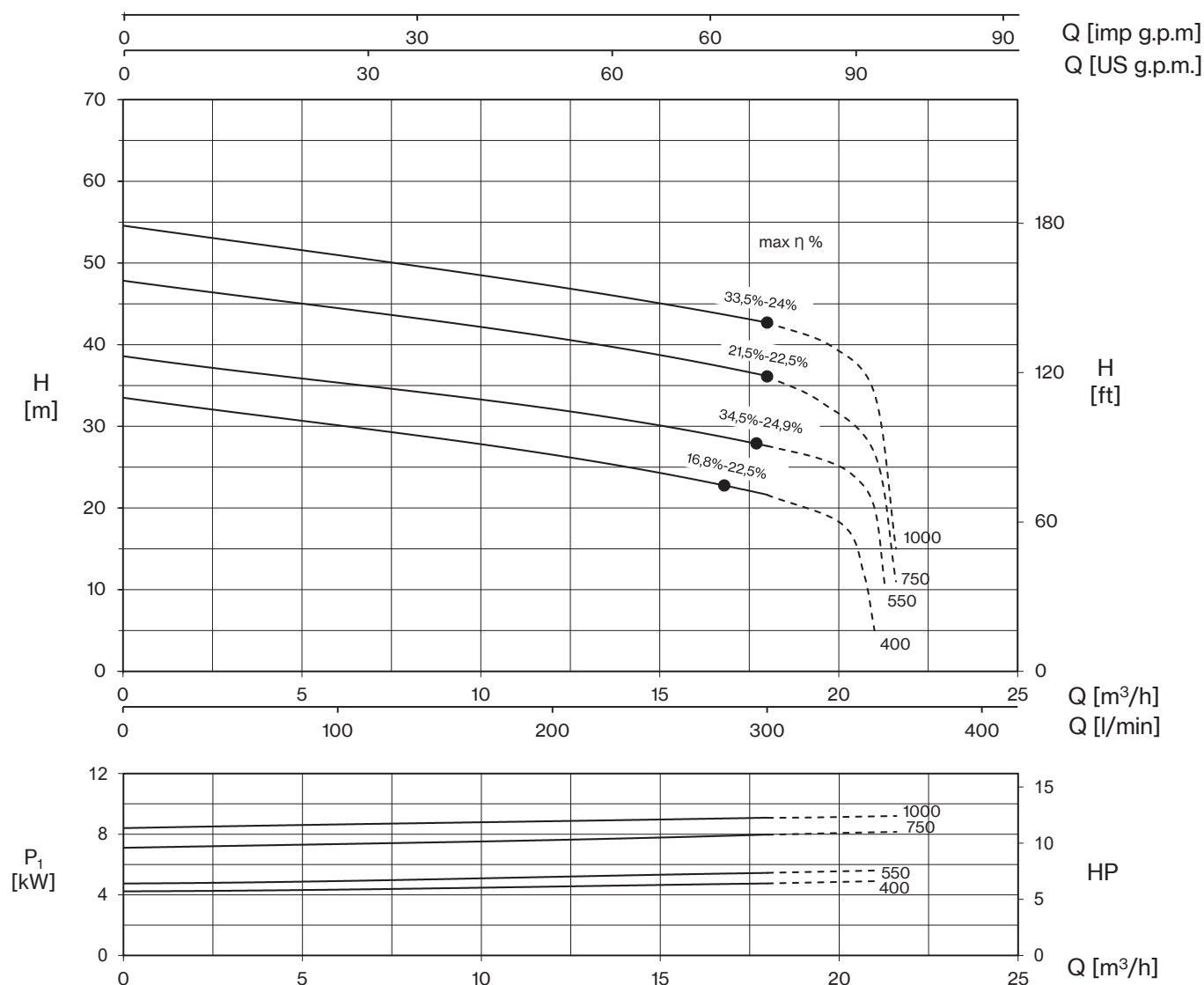
max hydraulic efficiency and respective total efficiency

(*) no standard execution

| TYPE | | P2 | | P1 (kW) | | Q (m³/h - l/min) | | | | | | | |
|---------|----------|-----|-----|------------|-----|------------------|------|------|------|------|------|------|------|
| 1~ | 3~ | | | | | 0 | 3 | 6 | 9 | 12 | 13,2 | 15 | 18 |
| | | HP | kW | 1~ | 3~ | 0 | 50 | 100 | 150 | 200 | 220 | 250 | 300 |
| H (m) | | | | | | | | | | | | | |
| DTR 150 | DTRT 150 | 1,5 | 1,1 | 2,6 | 2,5 | 19,4 | 18,5 | 17,3 | 16,0 | 14,2 | 13,5 | 12,3 | 9,9 |
| DTR 200 | DTRT 200 | 2 | 1,1 | 3 | 2,8 | 22,1 | 21,3 | 20,3 | 19,1 | 17,7 | 17,1 | 16 | 13,4 |
| - | DTRT 300 | 3 | 2,2 | - | 3,2 | 26,1 | 25,2 | 24,3 | 23,3 | 22 | 21,4 | 20,3 | 18,2 |



DTR/DTRT



| TYPE | AMPERE | | | |
|-----------|----------------------|------------------|---------------------------------|-----------------------------|
| 3~ | 3x230 V 50 Hz (*) | 3x400 V 50 Hz | 230/400 V 50 Hz λ / Δ (*) | 400/690 V 50 Hz λ / Δ |
| DTRT 400 | 13,0 | 7,5 | - | - |
| DTRT 550 | 15,9 | 9,2 | - | - |
| DTRT 750 | - | 13,9 | 24 | 13,9 |
| DTRT 1000 | - | 15,5 | 26,8 | 15,5 |

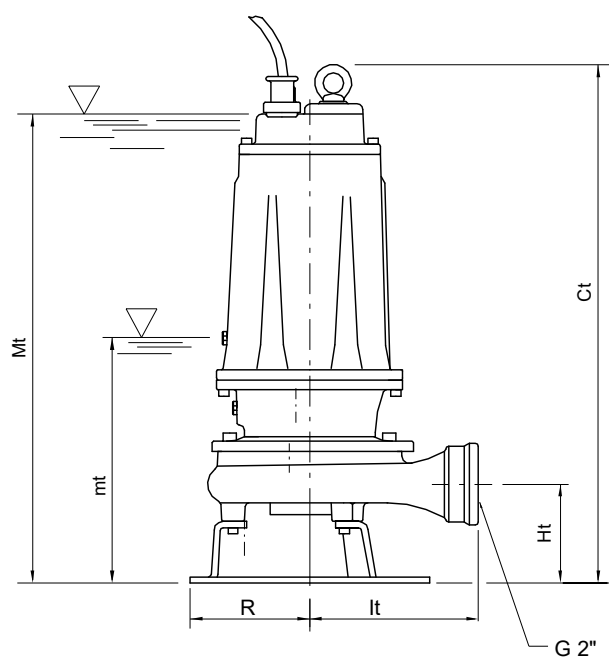
(*) no standard execution

+ max η %

max hydraulic efficiency and respective total efficiency

| TYPE | P2 | | P1 (kW) | Q (m³/h - l/min) | | | | | | |
|-----------|-----|-----|------------|------------------|------|------|------|------|------|------|
| 3~ | | | | 0 | 3 | 6 | 9 | 12 | 15 | 18 |
| | | | | 0 | 50 | 100 | 150 | 200 | 250 | 300 |
| | HP | kW | 3~ | H (m) | | | | | | |
| DTRT 400 | 4 | 3 | 4,5 | 33,5 | 31,8 | 30,1 | 28,5 | 26,4 | 24,4 | 21,6 |
| DTRT 550 | 5,5 | 4 | 5,3 | 38,6 | 36,9 | 35,3 | 33,9 | 32,1 | 30,1 | 27,6 |
| DTRT 750 | 7,5 | 5,5 | 8,0 | 47,8 | 46,2 | 44,5 | 42,7 | 40,8 | 38,9 | 36,1 |
| DTRT 1000 | 10 | 7,5 | 9,1 | 54,6 | 52,7 | 51,0 | 49,2 | 47,1 | 45,1 | 42,7 |





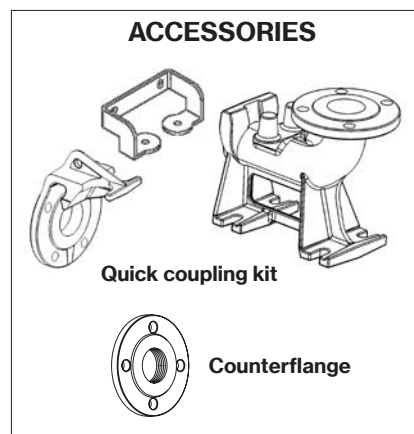
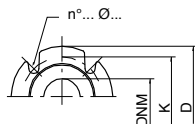
mt: minimum working level
Mt: minimum submersion level for continuous duty

| TYPE | DIMENSIONS (mm) | | | | | | | Kg |
|-------------------------|-----------------|-----|-----|-----|-----|-----|-----|------|
| | Ct | Ht | R | Lt | mt | Mt | DNM | |
| DTR 150-DTRT 150 | 513 | 102 | 117 | 174 | 205 | 475 | 2"G | 38 |
| DTR 200-DTRT 200 | 513 | 102 | 117 | 174 | 205 | 475 | 2"G | 38,5 |
| DTRT 300 | 513 | 102 | 117 | 174 | 205 | 475 | 2"G | 38 |

| TYPE | PROTECTION | | 1 PUMP CONTROL PANEL | | | 2 PUMPS CONTROL PANEL | | |
|------------------|---------------|---------------------|----------------------|-----------|-------------|--------------------------|-----------|-------------|
| | 1 x 230 V | 3 x 400 V | 1 x 230 V | 3 x 400 V | 400 / 690 V | 1 x 230 V | 3 x 400 V | 400 / 690 V |
| DTR 150 | PMLD 15/35-13 | PT 20-30-40/4.3-6.8 | EQSM + 35µF + 80µF* | EQSMT 10 | | EQ2SM + 2×35µF + 2×80µF* | EQ2SMT 10 | |
| DTR 200 | PMLD 20/50-15 | PT 20-30-40/4.3-6.8 | EQSM + 50µF + 80µF* | EQSMT 10 | | EQ2SM + 2×50µF + 2×80µF* | EQ2SMT 10 | |
| DTRT 300 | | PT 20-30-40/4.3-6.8 | | EQSMT 10 | | | EQ2SMT 10 | |
| DTRT 400 | | PT 40-50/5.7-9.1 | | EQSMT 10 | | | EQ2SMT 10 | |
| DTRT 550 | | PT 55-75/8.6-13.5 | | EQSMT 10 | | | EQ2SMT 10 | |
| DTRT 750 | | PT 100/12.5-16.5 | | EQSMT 10 | QST 7 | | EQ2SMT 10 | Q2ST 7 |
| DTRT 1000 | | PT 125-150/16-21 | | EQSMT 10 | QST 10 | | EQ2SMT 10 | Q2ST 10 |


*start capacitor with disjuntor

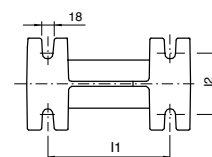
DTR/DTRT



mt: minimum working level

Mt: minimum submengine level for continuos duty

| TYPE | DIMENSIONS (mm) | | | | | | |  |
|-----------|-----------------|-----|-----|-----|-----|-----|-----|---|
| | Ct | Ht | R | lt | mt | Mt | DNM | |
| DTRT 400 | 595 | 112 | 160 | 190 | 265 | 550 | 50 | 62,5 |
| DTRT 550 | 595 | 112 | 160 | 190 | 265 | 550 | 50 | 65,5 |
| DTRT 750 | 680 | 160 | 180 | 250 | 280 | 630 | 65 | 91,5 |
| DTRT 1000 | 680 | 160 | 180 | 250 | 280 | 630 | 65 | 94,5 |



mf: minimum working level

Mf: minimum submengence level for
continuos duty

| TYPE | DIMENSIONS (mm) | | | | | | | | | | | | | | | | | |
|-------------|-----------------|-----|-----|-----|-----|-----|-----|-------|-----|----|-----|-----|-----|----|-----|-----|-----|-----|
| | Af | Bf | Cf | Cp | Df1 | Df2 | Dp2 | DNt | Ef | Gf | Hf | I1 | I2 | Is | Ls | mf | Mf | DNM |
| DTRT 400/P | 300 | 145 | 614 | 260 | 237 | 654 | 538 | 1" 1¼ | 269 | 55 | 130 | 200 | 100 | 95 | 140 | 290 | 566 | 50 |
| DTRT 550/P | 300 | 145 | 614 | 260 | 237 | 654 | 538 | 1" ¼ | 269 | 55 | 130 | 200 | 100 | 95 | 140 | 290 | 566 | 50 |
| DTRT 750/P | 331 | 145 | 656 | 260 | 279 | 710 | 569 | 1" ¼ | 297 | 55 | 130 | 200 | 100 | 95 | 140 | 290 | 600 | 65 |
| DTRT 1000/P | 331 | 145 | 656 | 260 | 279 | 710 | 569 | 1" ¼ | 297 | 55 | 130 | 250 | 100 | 95 | 140 | 290 | 600 | 65 |

| Flange UNI PN 10 (mm) | | | |
|-----------------------|-----|-----|------------|
| DNM | K | D | n°... ø... |
| 50 | 125 | 165 | 4... 18... |
| 65 | 145 | 185 | 4... 18... |

