



**50GY** 3-phase  
1-phase  
50Hz

Sewage pump with cutter mechanism

Open multi-vane channel impeller with cutting mechanism. This construction ensures that fibrous foreign matter is cut up and sewage is transferred without clogging.





## Cutting mechanism

Open multi-vane channel impeller with cutting mechanism, consisting off a stationary cutting ring and a rotating knife. Entrained particles are crushed in a matter of seconds, piping diameters of DN50 are suitable. Minimization of material costs and costs for relocation.

The kind of solids as well as the maximum free-passageneed to be considered carefully when choosing the pump. For support, please contact Tsurumi (Europe) GmbH or your local Tsurumi-dealer

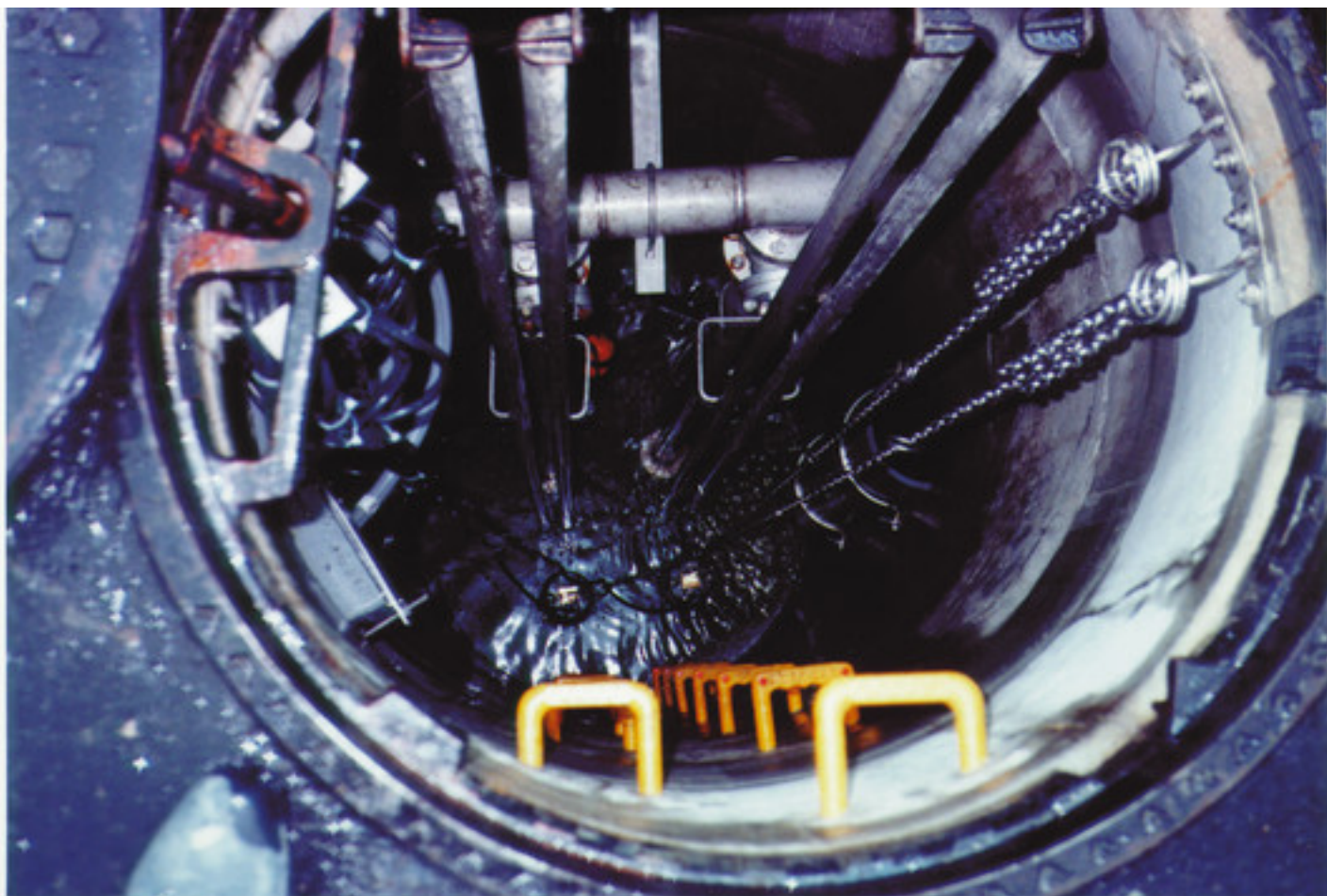
## Optional Accessories:

- duck-foot for guide rails:
  - guide support
  - duck foot
- Bend
- Stand set for free-standing version



## Available options

- Explosion-proof version
- Oilchamber sensor for humidity control (only 6,4kW and 9,5kW)
- Condenser start (230V), direct online (400V, up to 3,1kW), star-delta (400V, from 3,7kW on)
- All pumps can be operated with soft-starter and variable frequency drive.
- Automatic version with float-switch available for models up to 3.1 kW.
- Version with cooling jacket available for models with 6,4kW and 9,5kW

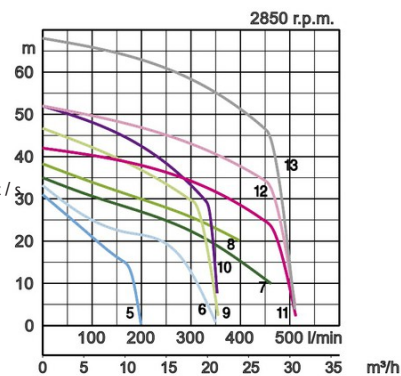
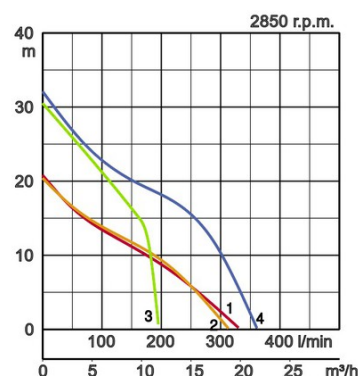


## Specifications:

| Model         |                         | Colour code curve |    | Bore mm | Power output kW | Phases | r.p.m. | Head max. m | Capacity max. l/min | Starting method | Dry weight kg without cable |                         |
|---------------|-------------------------|-------------------|----|---------|-----------------|--------|--------|-------------|---------------------|-----------------|-----------------------------|-------------------------|
| free standing | with guide rail fitting |                   |    |         |                 |        |        |             |                     |                 | free standing               | with guide rail fitting |
| 50GY2.9       | TOS50GY2.9              |                   | 1  | 50      | 0,9             | 3      | 2850   | 20,8        | 330                 | direct          | 32,9                        | 32,9                    |
| 50GY21.1S     | TOS50GY21.1S            |                   | 2  | 50      | 1,1             | 1      | 2850   | 20,4        | 312                 | condensor       | 31,7                        | 31,7                    |
| 50GY21.5S     | TOS50GY21.5S            |                   | 3  | 50      | 1,5             | 1      | 2850   | 30,5        | 195                 | condensor       | 42,3                        | 38,5                    |
| 50GY21.8S     | TOS50GY21.8S            |                   | 4  | 50      | 1,8             | 1      | 2850   | 32,1        | 360                 | condensor       | 42,5                        | 38,6                    |
| 50GY21.6      | TOS50GY21.6             |                   | 5  | 50      | 1,6             | 3      | 2850   | 31,0        | 198                 | direct          | 42,3                        | 38,4                    |
| 50GY21.9      | TOS50GY21.9             |                   | 6  | 50      | 1,9             | 3      | 2850   | 33,2        | 350                 | direct          | 42,4                        | 38,5                    |
| 50GY23.1      | TOS50GY23.1             |                   | 7  | 50      | 3,1             | 3      | 2850   | 35,0        | 460                 | direct          | 49,8                        | 45,9                    |
| 50GY23.1H     | TOS50GY23.1H            |                   | 8  | 50      | 3,1             | 3      | 2850   | 38,3        | 395                 | direct          | 49,8                        | 45,9                    |
| 50GY23.7      | TOS50GY23.7             |                   | 9  | 50      | 3,7             | 3      | 2850   | 46,7        | 355                 | star/delta      | 61,3                        | 57,5                    |
| 50GY24.4      | TOS50GY24.4             |                   | 10 | 50      | 4,4             | 3      | 2850   | 52,0        | 355                 | star/delta      | 61,6                        | 57,8                    |
| 50GYM26.4     | TOS50GYM26.4            |                   | 11 | 50      | 6,4             | 3      | 2850   | 42,0        | 510                 | star/delta      | 107,2                       | 107,4                   |
| 50GYM26.4H    | TOS50GYM26.4H           |                   | 12 | 50      | 6,4             | 3      | 2850   | 52,0        | 510                 | star/delta      | 110,5                       | 107,4                   |
| 50GYM29.5     | TOS50GYM29.5            |                   | 13 | 50      | 9,5             | 3      | 2850   | 68,0        | 510                 | star/delta      | 113,4                       | 110,3                   |

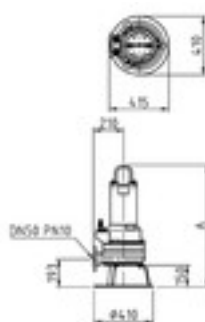


|                            |               |                                                                                      |                                                                                                                      |
|----------------------------|---------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| ø Discharge bore mm        |               |                                                                                      | 50mm                                                                                                                 |
| Pumping Fluid              | Temperature   |                                                                                      | 0-35°C                                                                                                               |
|                            | Type of Fluid |                                                                                      | Municipal sewage                                                                                                     |
| Pump                       | Compo-nents   | Impeller                                                                             | Multi-vane channel impeller with cutting mechanism                                                                   |
|                            |               | Shaft Seal                                                                           | Double mechanical seal                                                                                               |
|                            |               | Bearings                                                                             | Shielded ball bearings                                                                                               |
|                            | Material      | Impeller                                                                             | Grey iron casting EN-GJL-250                                                                                         |
|                            |               | Casing                                                                               | Grey iron casting EN-GJL-250                                                                                         |
|                            |               | Shaft Seal                                                                           | SiC and radial ring in oil bath, SiC, upper in oil bath                                                              |
|                            |               | Cutting device                                                                       | Stainless steel EN-X39CrMo17-1                                                                                       |
|                            | Motor         | Type, Poles                                                                          |                                                                                                                      |
| Lubrication                |               | Turbine oil (ISO VG32)                                                               |                                                                                                                      |
| Motor Protector (built-in) |               | Miniature protector                                                                  |                                                                                                                      |
| Insulation                 |               | Insulation class H                                                                   |                                                                                                                      |
| Phase / Voltage            |               | Single phase 230V / 50Hz, 3-phase / 400V / 50Hz / d.o.l., 3-phase / 400V / 50Hz / d. |                                                                                                                      |
| Material                   |               | Casing                                                                               | Grey iron casting EN-GJL-250                                                                                         |
|                            |               | Shaft                                                                                | Stainless steel EN-X5CrNiMo17-12-2                                                                                   |
|                            |               | Cable                                                                                | Rubber, 10m H07RN8-F                                                                                                 |
| Discharge Connection       |               |                                                                                      | Flange DIN/ANSI DN50 (PN10)                                                                                          |
| Optional Accessories       |               |                                                                                      | Guide rail fitting "TOS" (guide support, duck foot bend, lifting chain) / Bend and stand set for free standing types |

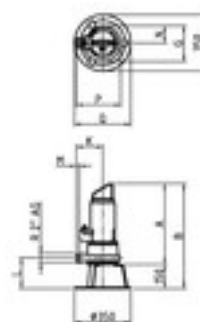


## Dimensions in mm:

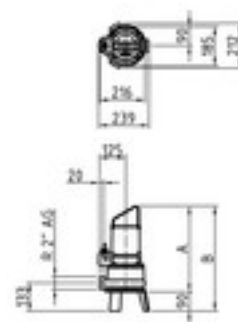
| Model      | A   | B   | G   | K   | L   | M  | N   | P   | Q   |
|------------|-----|-----|-----|-----|-----|----|-----|-----|-----|
| 50GY2.9    | 406 | -   | -   | -   | -   | -  | -   | -   | -   |
| 50GY21.1S  | 406 | 496 | -   | -   | -   | -  | -   | -   | -   |
| 50GY21.5S  | 468 | 618 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY21.8S  | 468 | 618 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY21.6   | 468 | 618 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY21.9   | 468 | 618 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY23.1   | 505 | 655 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY23.1H  | 505 | 655 | 223 | 165 | 191 | 20 | 107 | 277 | 350 |
| 50GY23.7   | 545 | 695 | 250 | 180 | 193 | 25 | 119 | 304 | 355 |
| 50GY24.4   | 545 | 695 | 250 | 180 | 193 | 25 | 119 | 304 | 355 |
| 50GYM26.4  | 771 | 790 | -   | -   | -   | -  | -   | -   | -   |
| 50GYM26.4H | 771 | 790 | -   | -   | -   | -  | -   | -   | -   |
| 50GYM29.5  | 844 | 862 | -   | -   | -   | -  | -   | -   | -   |



W1: lowest running water level  
50GYM26.4, 50GYM26.4H,  
50GYM29.5

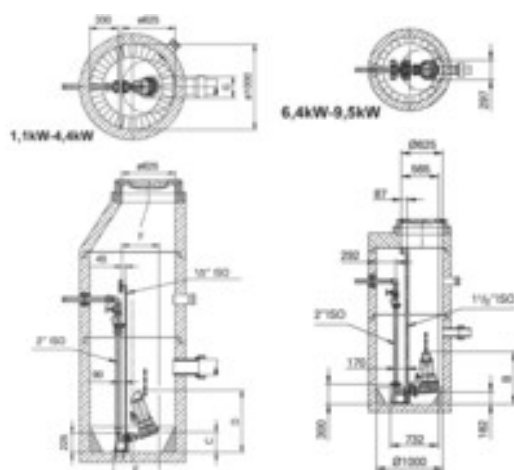


50GY21.5S, 50GY21.8S, 50GY21.1S, 50GY2.9  
50GY21.9, 50GY21.6, 50GY23.1,  
50GY23.7, 50GY24.4, 50GY23.  
1H



## Dimensions - guide rail fitting type in mm:

| Model      | B   | C   | D   | E   | F   | G   |
|------------|-----|-----|-----|-----|-----|-----|
| 50GY2.9    | -   | 172 | 560 | 457 | 360 | 190 |
| 50GY21.1S  | -   | 172 | 560 | 457 | 360 | 190 |
| 50GY21.5S  | -   | 183 | 630 | 504 | 407 | 223 |
| 50GY21.8S  | -   | 183 | 630 | 504 | 407 | 223 |
| 50GY21.6   | -   | 183 | 630 | 504 | 407 | 223 |
| 50GY21.9   | -   | 183 | 630 | 504 | 407 | 223 |
| 50GY23.1   | -   | 183 | 672 | 504 | 407 | 223 |
| 50GY23.1H  | -   | 183 | 672 | 504 | 407 | 223 |
| 50GY23.7   | -   | 187 | 706 | 527 | 429 | 250 |
| 50GY24.4   | -   | 187 | 706 | 527 | 429 | 250 |
| 50GYM26.4  | 790 | -   | -   | -   | -   | -   |
| 50GYM26.4H | 790 | -   | -   | -   | -   | -   |
| 50GYM29.5  | 862 | -   | -   | -   | -   | -   |



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We reserve the right to change specifications and designs herein for improvement without prior notice. Our pumps are for professional use only. In the event that Tsurumi (Europe) GmbH have, in exceptional cases taken over, a manufacturer's warranty, this entitles the enduser to assert remedy free of charge against Tsurumi (Europe) GmbH due to any defect to the product occurring during the guarantee period (see below), also then when the warranty claims against the seller do not or no longer exist. In the event of malfunction, which is attributable to the improper handling by the enduser, no guarantee claim shall arise. Further claims shall not result from the warranty, unless if something to the contrary has explicitly been determined. The decision as to whether remedy is effected by way of replacement or repair shall be at the choice of Tsurumi (Europe) GmbH. The claims shall be time barred after a period of three months after expiry of the guarantee period, however, not before expiry of the warranty period which is valid towards the seller. In the event of doubt, the warranty period shall correspond with the warranty period which is valid between the end-user and his seller.

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