

# KE/KS KW/KM

AUTOMATIC BAR SCREENS



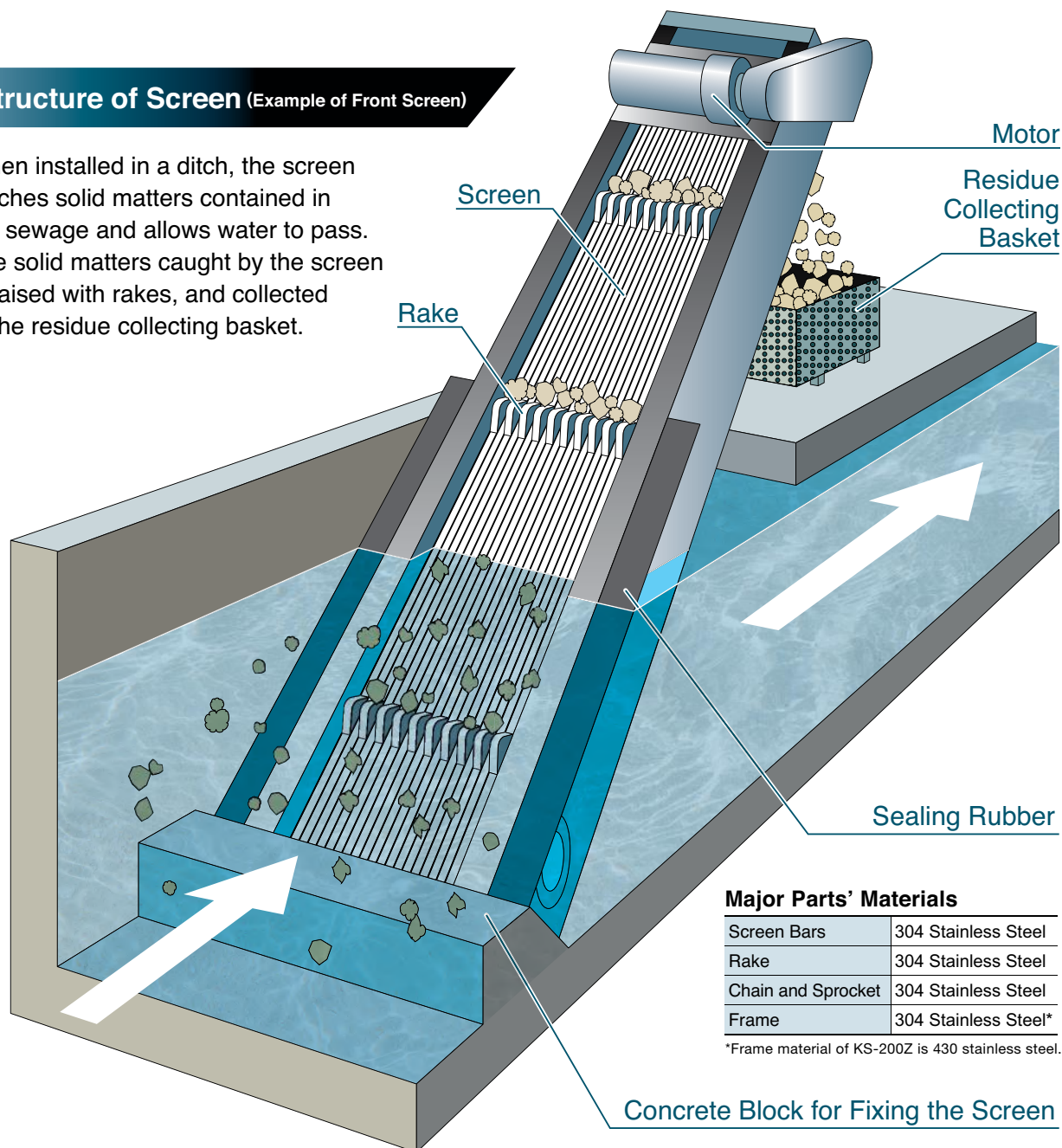
 **TSURUMI PUMP**  
BUILT FOR WORK®

# Main parts made of stainless steel

## Excellent corrosion resistance

### Structure of Screen (Example of Front Screen)

When installed in a ditch, the screen catches solid matters contained in the sewage and allows water to pass. The solid matters caught by the screen is raised with rakes, and collected in the residue collecting basket.

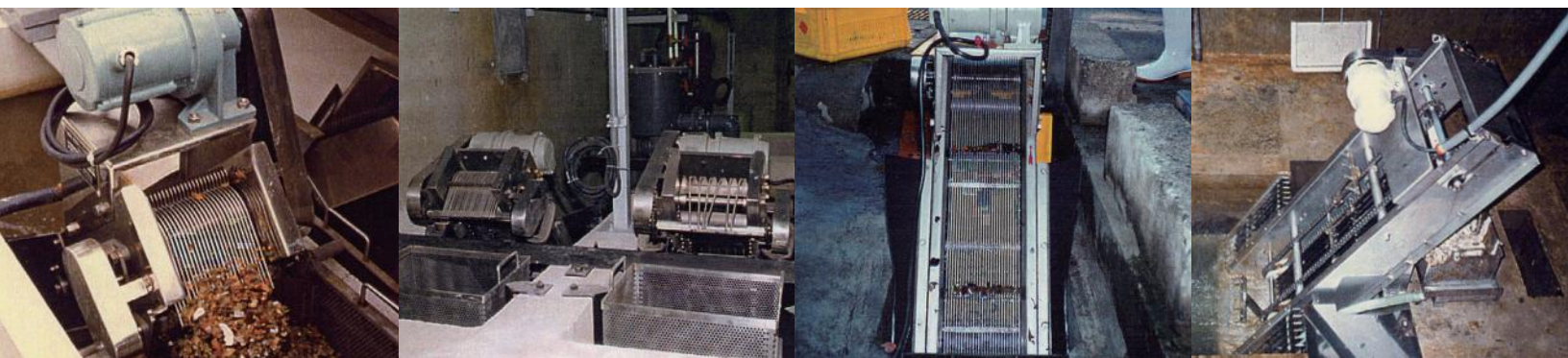


#### Major Parts' Materials

|                    |                      |
|--------------------|----------------------|
| Screen Bars        | 304 Stainless Steel  |
| Rake               | 304 Stainless Steel  |
| Chain and Sprocket | 304 Stainless Steel  |
| Frame              | 304 Stainless Steel* |

\*Frame material of KS-200Z is 430 stainless steel.

Used for combined sewage treatment tank (septic tank) and small-scale sewage treatment facilities, etc.



# Efficient Elimination of Floating Solid Matters in Sewage

Tsurumi bar screens are pre-treatment equipment that enables smooth water treatment in post-processes

Front Screen Type

**KE/KS/KW**

Rear Screen Type

**KM/KMA/KMS**

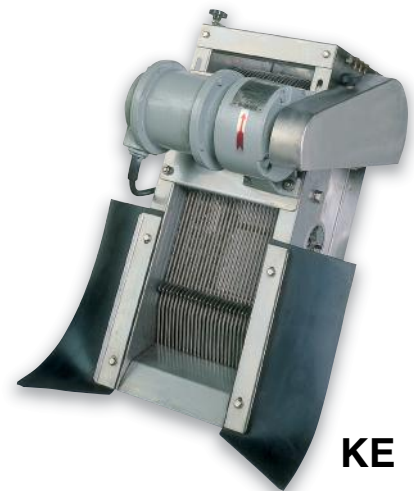
## Applications

- Primary treatment of general industrial wastewater
- Treatment of wastewater from food processing factories
- Treatment of kitchen wastewater from hotels, factories, hospitals, etc.
- Combined sewage treatment tanks (septic tank)
- Village wastewater treatment facilities
- Small-scale sewage treatment facilities

Front Screen Type **KE/KS/KW**

## Application in situations with water level fluctuations

- The bar screen is compact and lightweight, making it easy to install in U-shaped ditches, etc. With sealing rubber attached to the sides of the frame, the screen snugly fits any width of waterway.
- During operation, the rakes always move through the slits of the screen, preventing the screen from being clogged with foreign object.
- The main parts are made of 304 stainless steel, which exhibits excellent durability even in harsh environments, e.g., outdoors, continuously operated day and night, etc.
- Maintenance is easy. Initial and running costs are low.
- The KS-series screens are equipped with an eccentric roll mechanism that prevents retraction and clogging of the screen bar front edge caused by residue.
- The KW-series screens incorporate a safety device that can stop the gear motor immediately in the event of abnormal operation.



**KE**

Rear Screen Type **KM/KMA/KMS**

## Application in situations without water level fluctuations

- The bar screen is compact and lightweight, making it easy to install in U-shaped ditches, etc. With sealing rubber attached to the sides of the frame, the screen snugly fits any width of waterway.
- Since the rake chain (dry chain) is not in contact with liquid, dirt and residue will not adhere to it. Therefore, it needs almost no maintenance.
- The main parts are made of 304 stainless steel, which exhibits excellent durability even in harsh environments, e.g., outdoors, continuously operated day and night, etc.
- The bar screen can be directly installed in a U-shaped ditch to eliminate dirt from the bottom of the ditch. It provides excellent treatment effect, and is advantageous both in terms of initial cost and running costs.



**KM**

# KE/KS/KW –Front Screen–

The KE/KS/KW-series is a front screen type automatic bar screen designed for screening wastewater. It is fully constructed from 304 stainless steel. Two or more rakes travel behind the screen bars located at the front side of the unit. Since every rake tooth moves between the screen bars, it can remove solid matters even though they lodge between the screen bars. In addition, the use of a small output motor enables to save the electricity. The bar screen is suitable for use in a waterway with varying water levels.



## FRONT Fine Screen (Bar Spacing: 1.0 - 5.0mm)

| Model   | Motor Output | Bar Spacing mm |       |       |       | Overall Height | Width of Waterway<br>Min - Max<br>in | Installation Angle | Dry Weight |
|---------|--------------|----------------|-------|-------|-------|----------------|--------------------------------------|--------------------|------------|
|         |              | Capacity GPM   |       |       |       |                |                                      |                    |            |
|         | HP           | 1.0mm          | 2.0mm | 2.5mm | 5.0mm | in             |                                      |                    | lbs        |
| KE-200S | 1/7          | —              | 114   | 181   | 41    | 20 1/16        | 11 13/16 - 15 3/4                    | 60°                | 71         |
| KE-200M | 1/7          | —              | 159   | 203   | 255   | 26 15/16       | 11 13/16 - 15 3/4                    | 60°                | 84         |
| KE-200L | 1/7          | —              | 216   | 273   | 343   | 34 1/16        | 11 13/16 - 15 3/4                    | 60°                | 93         |
| KS-200Z | 1/7          | 70             | 114   | 136   | 181   | 20 1/2         | 13 - 15 3/4                          | 60°                | 73         |
| KS-200Y | 1/7          | 128            | 207   | 247   | 326   | 29 15/16       | 15 3/4 - 19 11/16                    | 60°                | 108        |
| KS-300Y | 1/7          | 189            | 370   | 484   | 110   | 29 15/16       | 19 11/16 - 23 5/8                    | 60°                | 119        |
| KS-200S | 1/7          | 75             | 123   | 136   | 207   | 31 1/2         | 13 - 15 3/4                          | 45°                | 104        |
| KS-200M | 1/7          | 110            | 181   | 211   | 308   | 36 1/4         | 13 - 15 3/4                          | 45°                | 115        |
| KS-200L | 1/7          | 141            | 242   | 277   | 409   | 41 5/16        | 13 - 15 3/4                          | 45°                | 137        |
| KW-4027 | 1/7          | 75             | 128   | 150   | 207   | 20             | up to 15 3/4                         | 60°                | 59         |
| KW-4038 | 1/7          | 119            | 198   | 229   | 321   | 24 9/16        | up to 15 3/4                         | 60°                | 66         |
| KW-4049 | 1/7          | 172            | 291   | 335   | 462   | 29 1/8         | up to 15 3/4                         | 60°                | 75         |
| KW-5027 | 1/7          | 114            | 198   | 229   | 321   | 20             | 15 3/4 - 19 11/16                    | 60°                | 66         |
| KW-5038 | 1/7          | 181            | 304   | 357   | 498   | 24 9/16        | 15 3/4 - 19 11/16                    | 60°                | 75         |
| KW-5049 | 1/7          | 264            | 445   | 515   | 722   | 29 1/8         | 15 3/4 - 19 11/16                    | 60°                | 84         |
| KW-6027 | 1/7          | 159            | 269   | 308   | 431   | 20             | 19 11/16 - 23 5/8                    | 60°                | 73         |
| KW-6038 | 1/7          | 247            | 418   | 480   | 674   | 24 9/16        | 19 11/16 - 23 5/8                    | 60°                | 84         |
| KW-6049 | 1/7          | 357            | 608   | 696   | 982   | 29 1/8         | 19 11/16 - 23 5/8                    | 60°                | 93         |

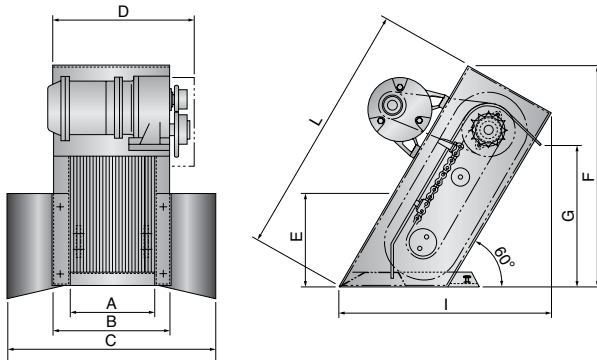
## FRONT Coarse Screen (Bar Spacing: 20 - 50mm)

| Model   | Motor Output | Bar Spacing mm |      |      |      | Overall Height | Width of Waterway<br>Min - Max<br>in | Installation Angle | Dry Weight |
|---------|--------------|----------------|------|------|------|----------------|--------------------------------------|--------------------|------------|
|         |              | Capacity GPM   |      |      |      |                |                                      |                    |            |
|         | HP           | 20mm           | 30mm | 40mm | 50mm | in             |                                      |                    | lbs        |
| KS-200S | 1/7          | 308            | 330  | 352  | 374  | 31 1/2         | 13 - 15 3/4                          | 45°                | 104        |
| KS-200M | 1/7          | 458            | 489  | 524  | 542  | 36 1/4         | 13 - 15 3/4                          | 45°                | 115        |
| KS-200L | 1/7          | 603            | 647  | 691  | 726  | 41 5/16        | 13 - 15 3/4                          | 45°                | 137        |

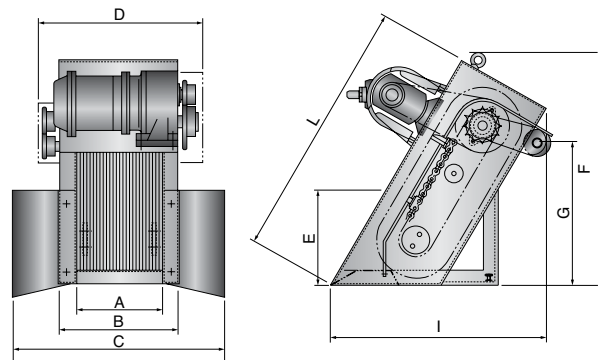
- Powered by three-phase totally-enclosed geared motor.
- Capacity is given as the maximum amount of clean water.
- Consult your dealer if the screen is to be installed in a waterway of a width exceeding that listed on the table.
- When ordering, specify the desired bar spacing together with the model name.

## Dimensions

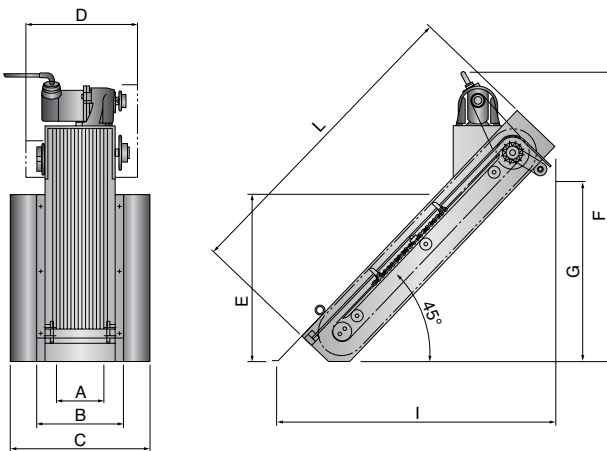
KE-200S  
KE-200M  
KE-200L



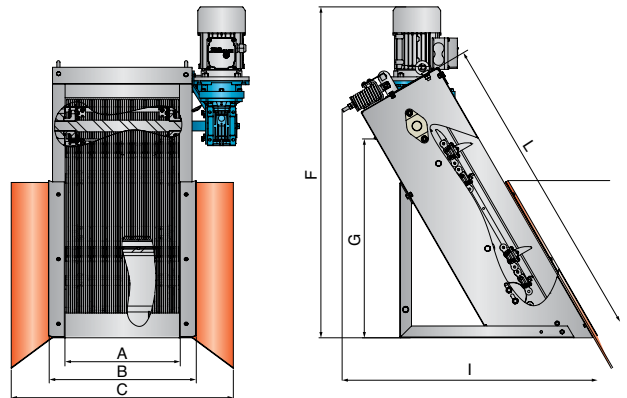
KS-200Z  
KS-200Y  
KS-300Y



KS-200S  
KS-200M  
KS-200L



KW-4027 KW-5027 KW-6027  
KW-4038 KW-5038 KW-6038  
KW-4049 KW-5049 KW-6049



Unit: mm

| Model   | Effective Width<br>A | Width of Frame<br>B | Overall Width<br>C | Max. Width of Upper Part<br>D | Max. Water Level<br>E | Overall Height<br>F | Discharge Level of Solids<br>G | Space<br>I | Overall Length of Frame<br>L |
|---------|----------------------|---------------------|--------------------|-------------------------------|-----------------------|---------------------|--------------------------------|------------|------------------------------|
| KE-200S | 191                  | 254                 | 460                | 330                           | 210                   | 510                 | 300                            | 480        | 577                          |
| KE-200M | 191                  | 254                 | 460                | 330                           | 390                   | 685                 | 500                            | 580        | 787                          |
| KE-200L | 191                  | 254                 | 460                | 330                           | 510                   | 865                 | 680                            | 690        | 992                          |
| KS-200Z | 191                  | 254                 | 460                | 350                           | 210                   | 520                 | 280                            | 490        | 577                          |
| KS-200Y | 191                  | 254                 | 460                | 350                           | 360                   | 760                 | 500                            | 640        | 850                          |
| KS-300Y | 282                  | 345                 | 550                | 500                           | 360                   | 760                 | 500                            | 640        | 850                          |
| KS-200S | 180(187)             | 290(297)            | 500                | 400(410)                      | 270                   | 800                 | 400                            | 800        | 800                          |
| KS-200M | 180(187)             | 290(297)            | 500                | 400(410)                      | 370                   | 920                 | 540                            | 920        | 971                          |
| KS-200L | 180(187)             | 290(297)            | 500                | 400(410)                      | 470                   | 1050                | 650                            | 1040       | 1140                         |
| KW-4027 | 191                  | 276                 | 465                | 410                           | 279                   | 659                 | 323                            | 544        | 584                          |
| KW-4038 | 191                  | 276                 | 465                | 410                           | 395                   | 842                 | 506                            | 650        | 795                          |
| KW-4049 | 191                  | 276                 | 465                | 410                           | 511                   | 1057                | 722                            | 774        | 1044                         |
| KW-5027 | 291                  | 376                 | 565                | 510                           | 279                   | 659                 | 323                            | 544        | 584                          |
| KW-5038 | 291                  | 376                 | 565                | 510                           | 395                   | 842                 | 506                            | 650        | 795                          |
| KW-5049 | 291                  | 376                 | 565                | 510                           | 511                   | 1057                | 722                            | 774        | 1044                         |
| KW-6027 | 391                  | 476                 | 665                | 610                           | 279                   | 659                 | 323                            | 544        | 584                          |
| KW-6038 | 391                  | 476                 | 665                | 610                           | 395                   | 842                 | 506                            | 650        | 795                          |
| KW-6049 | 391                  | 476                 | 665                | 610                           | 511                   | 1057                | 722                            | 774        | 1044                         |

# KM –Rear Screen–

The KM-series is a rear screen type automatic bar screen designed for screening wastewater. It is fully constructed from 304 stainless steel. One or two rakes move on the screen bars that are located at the rear side of the unit. It has an innovative dry chain mechanism by which the chain or sprocket does not get contact with the liquid. In addition, the use of a small output motor enables to save the electricity. It is suitable for use in a waterway where there is little change in the liquid level.



**KM**

## REAR Fine Screen (Bar Spacing: 2.0 - 5.0mm)

| Model    | Motor Output | Bar Spacing mm |       |       | Overall Height | Width of Waterway<br>Min - Max<br>in | Installation Angle | Dry Weight |
|----------|--------------|----------------|-------|-------|----------------|--------------------------------------|--------------------|------------|
|          |              | Capacity GPM   |       |       |                |                                      |                    |            |
|          | HP           | 2.0mm          | 2.5mm | 5.0mm |                |                                      |                    |            |
| KM-200S  | 1/7          | 110            | 123   | 172   | 28 3/8         | 11 13/16 - 15 3/4                    | 55°                | 73         |
| KM-200M  | 1/7          | 110            | 123   | 172   | 35 13/16       | 11 13/16 - 15 3/4                    | 55°                | 82         |
| KM-200L  | 1/7          | 110            | 123   | 172   | 43 11/16       | 11 13/16 - 15 3/4                    | 55°                | 88         |
| KM-250S  | 1/7          | 141            | 167   | 233   | 28 3/8         | 13 3/4 - 17 11/16                    | 55°                | 75         |
| KM-250M  | 1/7          | 141            | 167   | 233   | 35 13/16       | 13 3/4 - 17 11/16                    | 55°                | 84         |
| KM-250L  | 1/7          | 141            | 167   | 233   | 43 11/16       | 13 3/4 - 17 11/16                    | 55°                | 90         |
| KM-300S  | 1/7          | 176            | 203   | 282   | 28 3/8         | 15 3/4 - 19 11/16                    | 55°                | 77         |
| KM-300M  | 1/7          | 176            | 203   | 282   | 35 13/16       | 15 3/4 - 19 11/16                    | 55°                | 86         |
| KM-300L  | 1/7          | 176            | 203   | 282   | 43 11/16       | 15 3/4 - 19 11/16                    | 55°                | 93         |
| KMS-300S | 1/7          | —              | —     | 277   | 34 1/4         | 15 3/4 - 19 11/16                    | 60°                | 93         |
| KMS-300M | 1/7          | —              | —     | 277   | 47 13/16       | 15 3/4 - 19 11/16                    | 60°                | 110        |
| KMS-300L | 1/7          | —              | —     | 277   | 61 7/16        | 15 3/4 - 19 11/16                    | 60°                | 126        |

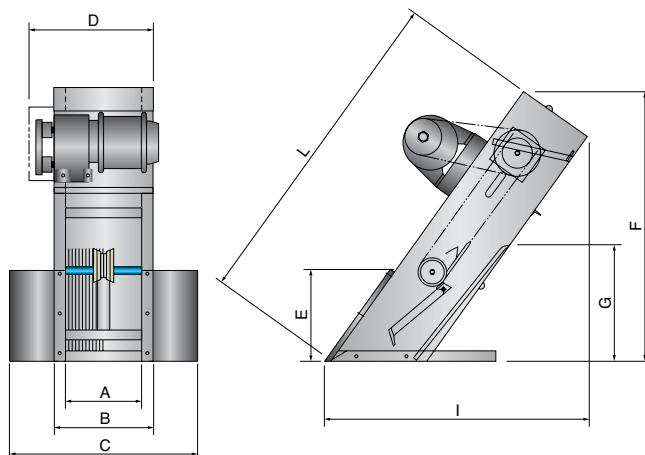
## REAR Coarse Screen (Bar Spacing: 10 - 50mm)

| Model    | Motor Output<br>HP | Bar Spacing mm |      |      |      |     | Overall Height<br>in | Width of Waterway<br>Min - Max<br>in | Installation Angle | Dry Weight<br>lbs |
|----------|--------------------|----------------|------|------|------|-----|----------------------|--------------------------------------|--------------------|-------------------|
|          |                    | Capacity GPM   |      |      |      |     |                      |                                      |                    |                   |
|          | 10mm               | 20mm           | 30mm | 40mm | 50mm |     |                      |                                      |                    |                   |
| KMA-200S | 1/7                | 167            | 198  | 207  | 216  | 220 | 28 3/8               | 11 13/16 - 15 3/4                    | 55°                | 33                |
| KMA-200M | 1/7                | 167            | 198  | 207  | 216  | 220 | 35 13/16             | 11 13/16 - 15 3/4                    | 55°                | 37                |
| KMA-200L | 1/7                | 167            | 198  | 207  | 216  | 220 | 43 11/16             | 11 13/16 - 15 3/4                    | 55°                | 40                |
| KMA-250S | 0.1                | 211            | 247  | 260  | 269  | 62  | 28 3/8               | 13 3/4 - 17 11/16                    | 55°                | 34                |
| KMA-250M | 1/7                | 211            | 247  | 260  | 269  | 62  | 35 13/16             | 13 3/4 - 17 11/16                    | 55°                | 38                |
| KMA-250L | 1/7                | 211            | 247  | 260  | 269  | 62  | 43 11/16             | 13 3/4 - 17 11/16                    | 55°                | 41                |
| KMA-300S | 1/7                | 255            | 295  | 313  | 326  | 348 | 28 3/8               | 15 3/4 - 19 11/16                    | 55°                | 35                |
| KMA-300M | 1/7                | 255            | 295  | 313  | 326  | 348 | 35 13/16             | 15 3/4 - 19 11/16                    | 55°                | 39                |
| KMA-300L | 1/7                | 255            | 295  | 313  | 326  | 348 | 43 11/16             | 15 3/4 - 19 11/16                    | 55°                | 42                |
| KMS-300S | 1/7                | 330            | 392  | 392  | 418  | 440 | 34 1/4               | 15 3/4 - 19 11/16                    | 60°                | 42                |
| KMS-300M | 1/7                | 330            | 392  | 392  | 418  | 440 | 47 13/16             | 15 3/4 - 19 11/16                    | 60°                | 50                |
| KMS-300L | 1/7                | 330            | 392  | 392  | 418  | 440 | 61 7/16              | 15 3/4 - 19 11/16                    | 60°                | 57                |

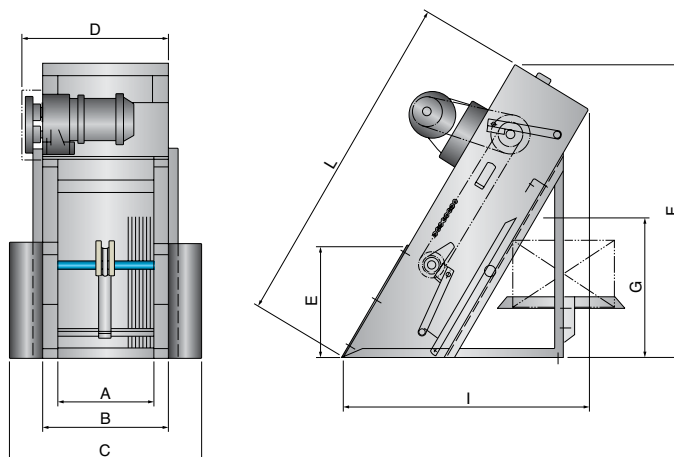
- Powered by three-phase totally-enclosed geared motor.
- Capacity is given as the maximum amount of clean water.
- Consult your dealer if the screen is to be installed in a waterway of a width exceeding that listed on the table.
- When ordering, specify the desired bar spacing together with the model name.

## Dimensions

**KM-200S    KMA-200S**  
**KM-200M    KMA-200M**  
**KM-200L    KMA-200L**  
**KM-250S    KMA-250S**  
**KM-250M    KMA-250M**  
**KM-250L    KMA-250L**  
**KM-300S    KMA-300S**  
**KM-300M    KMA-300M**  
**KM-300L    KMA-300L**



**KMS-300S**  
**KMS-300M**  
**KMS-300L**



Unit: mm

| Model           | Effective Width<br>A | Width of Frame<br>B | Overall Width<br>C | Max. Width of Upper Part<br>D | Max. Water Level<br>E | Overall Height<br>F | Discharge Level of Solids<br>G | Space<br>I | Overall Length of Frame<br>L |
|-----------------|----------------------|---------------------|--------------------|-------------------------------|-----------------------|---------------------|--------------------------------|------------|------------------------------|
| <b>KM-200S</b>  | 200                  | 253                 | 460                | 310                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KM-200M</b>  | 200                  | 253                 | 460                | 310                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KM-200L</b>  | 200                  | 253                 | 460                | 310                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KM-250S</b>  | 250                  | 303                 | 510                | 360                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KM-250M</b>  | 250                  | 303                 | 510                | 360                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KM-250L</b>  | 250                  | 303                 | 510                | 360                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KM-300S</b>  | 300                  | 353                 | 560                | 410                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KM-300M</b>  | 300                  | 353                 | 560                | 410                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KM-300L</b>  | 300                  | 353                 | 560                | 410                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KMA-200S</b> | 200                  | 253                 | 460                | 310                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KMA-200M</b> | 200                  | 253                 | 460                | 310                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KMA-200L</b> | 200                  | 253                 | 460                | 310                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KMA-250S</b> | 250                  | 303                 | 510                | 360                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KMA-250M</b> | 250                  | 303                 | 510                | 360                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KMA-250L</b> | 250                  | 303                 | 510                | 360                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KMA-300S</b> | 300                  | 353                 | 560                | 410                           | 250                   | 720                 | 310                            | 670        | 868                          |
| <b>KMA-300M</b> | 300                  | 353                 | 560                | 410                           | 250                   | 910                 | 475                            | 800        | 1102                         |
| <b>KMA-300L</b> | 300                  | 353                 | 560                | 410                           | 250                   | 1110                | 670                            | 945        | 1352                         |
| <b>KMS-300S</b> | 284                  | 368                 | 570                | 420                           | 200                   | 870                 | 400                            | 830        | 1000                         |
| <b>KMS-300M</b> | 284                  | 368                 | 570                | 420                           | 200                   | 1215                | 730                            | 996        | 1400                         |
| <b>KMS-300L</b> | 284                  | 368                 | 570                | 420                           | 200                   | 1560                | 1040                           | 1150       | 1800                         |

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