

Model **DL**
Manual

Model **DLA**
Automatic

Model **DLJ**
Parallel
Alternating

Features

Non-clog operation

Non-clog semi-open impeller prevents clogging by fibrous matter.

Large range of models

Models up to 300mm discharge size and 45 kW available.

Robust construction

Rugged cast iron construction, all fasteners of stainless steel and a 4 pole motor.

Double mechanical seal in oil chamber

An oil lubricated double mechanical seal with lower faces of hard silicon carbide provides strong and reliable shaft sealing

In built motor protection

Quick acting dual response overloads provides protection against overload, lock or open phase for sizes up to 7.5 kW. Models 11 kW and above have miniature thermal protectors.

Automatic operation

All models up to 1.5 kW are available as automatic (A' type) or parallel alternating (J' type) pumps with inbuilt controls and float switches. No need for separate control panels, simply connect to power source.

Applications

Sewage
Waste water
Storm water drainage

Ebara Submersible Sewage Pumps

Model **DL**

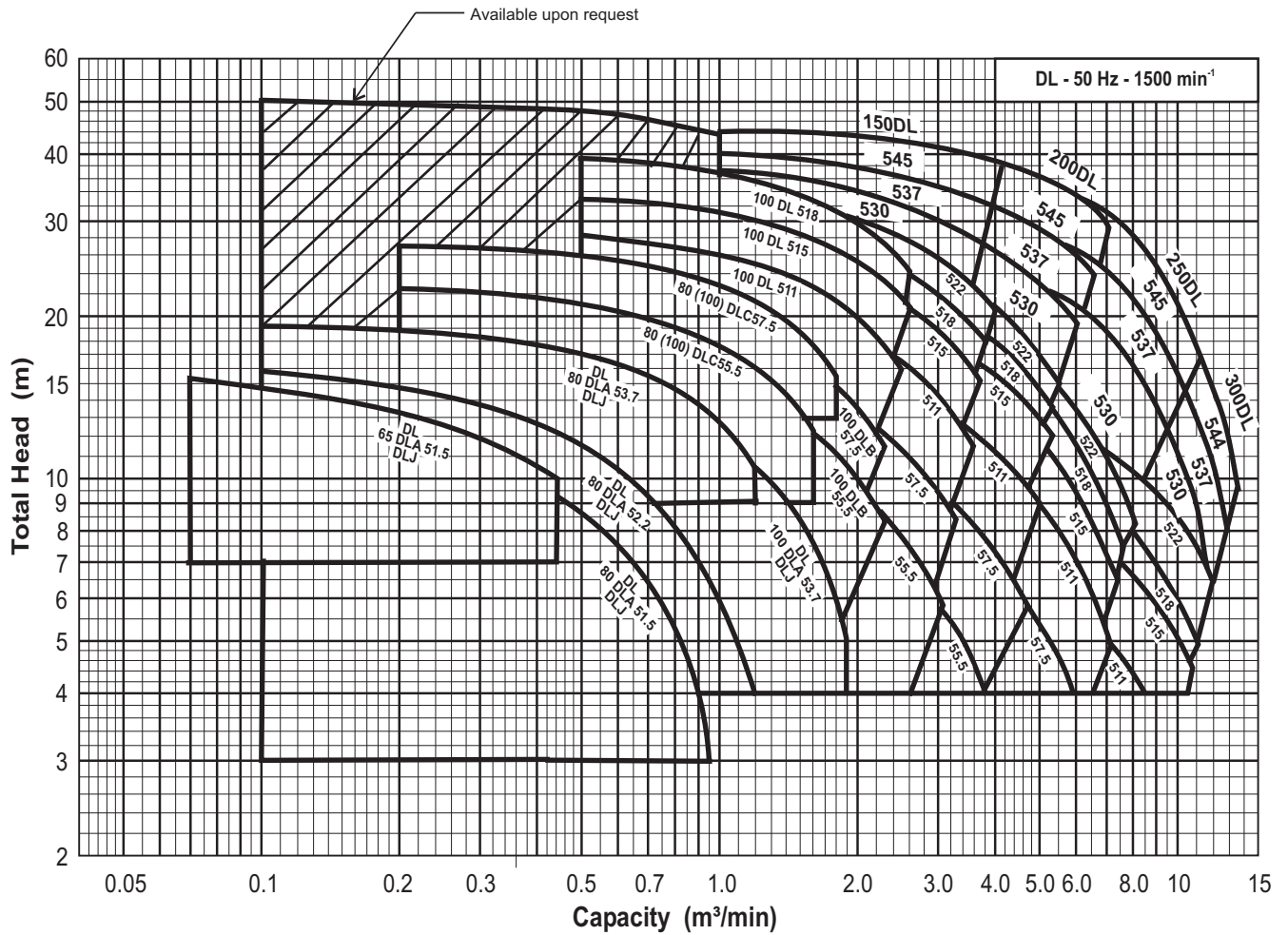
Specifications

50Hz

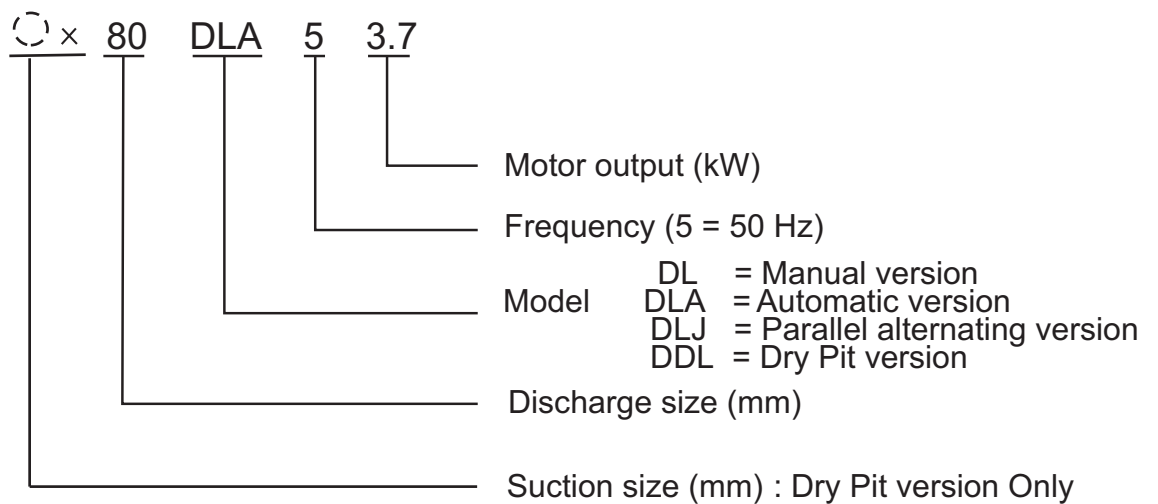
| | | Standard | Optional |
|--------------|---------------------|---|---------------------------------|
| Scope | Discharge | 65 – 300 mm | |
| | Motor Power | 1.5 – 45 kW (3phase) | |
| | Performance | Capacity : 0.07 – 12 m ³ /min Head : 3 – 52 m. | |
| Liquid | Type | Sewage | |
| | Maximum temperature | 40° C (Manual and A Type) 32° C (J' Type) | |
| | Max. solids | refer to table below | |
| Submergence | Maximum | 8 m | |
| | Minimum | Refer to low water level (L.W.L.) in dimensions. | |
| Construction | Impeller | Non-clog semi-open | |
| | Mechanical Seal | Oil lubricated, double mechanical seal (single spring 3.7 kW) (tandem spring 5.5 to 45 kW) | |
| Materials | Casing | Cast Iron | |
| | Impeller | Cast Iron | |
| | Suction Cover | Cast Iron | |
| | Shaft | 403 Stainless Steel | |
| | Motor Frame | Cast Iron | |
| | Fasteners | 304 Stainless Steel | |
| | Mechanical Seal | Upper Faces : Carbon / Ceramic Lower Faces : Silicon Carbide / Silicon Carbide Lubricating Oil: Turbine Oil VG32 (SAE10W/20W) | |
| Motor | Type | Air filled dry submersible, IP68, Class F insulation | |
| | Nominal Speed | 4 pole 1450 rpm | |
| | Applicable Voltages | 380/400/415 volts 3 phase 50 Hz | |
| | Starting | DOL (up to 7.5 kW) Star-Delta (11 to 45 kW) | |
| | Protection | In built overload protection (up to 7.5 kW) Miniature thermal protector (11 to 45 kW) | |
| | Bearings | Pre lubricated sealed ball bearings | |
| Cable | Length | 10m | |
| Accessories | Flange | Discharge elbow | |
| | | | Quick Discharge Connector (QDC) |

| Solids Handling | | | | | | | | | |
|-------------------------|-------------|-------|-------|-------|--------|---------|---------|-----------|-----------|
| Model | - discharge | 65 Ø | 80 Ø | 100 Ø | 100 Ø | 150 Ø | 200 Ø | 250 Ø | 300 Ø |
| | - motor kW | 1.5 | 1.5 | DLC's | DL,DLB | All | All | All | All |
| Max. Diameter of Solids | | 40mm | 46mm | 46mm | 57mm | 68/76mm | 75~76mm | 76 ~ 79mm | 76 ~ 88mm |
| Max. Length of Fibers | | 195mm | 240mm | 240mm | 300mm | 400mm | 500mm | 550 mm | 600mm |

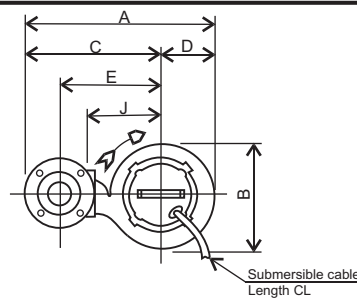
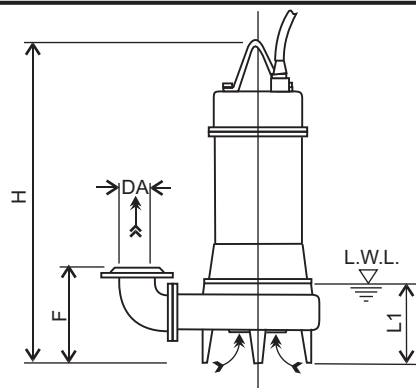
Performance Chart



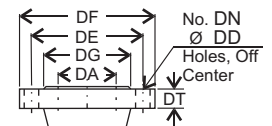
Model code



Dimensions - Manual Models - DL (WET PIT MODEL)



Discharge Flange Dimensions
(JIS 10kgf/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|-----|-----|-----|-----|----|----|----|
| 65 | 150 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 4 | 15 |
| 100 | 175 | 210 | 151 | 20 | 8 | 15 |
| 150 | 240 | 280 | 212 | 22 | 8 | 19 |
| 200 | 290 | 330 | 262 | 26 | 12 | 23 |
| 250 | 355 | 400 | 324 | 30 | 12 | 25 |
| 300 | 400 | 445 | 368 | 32 | 16 | 25 |

- Note:
- 1/. L.W.L. (Low Water Level) Is limited to 10 minutes operation at low water level.
 - 2/. Is limited to 30 minutes operation with water level below top of motor.

| Size DA | Model | Output kW | A | B | C | D | E | F | H | J | L1 | CL | Weight | |
|-------------|--------------|-------------|------|-----|-----|-----|-----|-----|------|-----|------|--------|--------|--------|
| 65 | 65 DL 51.5 | 1.5 | 497 | 291 | 353 | 144 | 265 | 200 | 576 | 200 | 140 | 10 m | 52 kg | |
| | 80 | 80 DL 51.5 | 1.5 | 524 | 292 | 378 | 146 | 285 | 220 | 597 | 210 | 165 | 10 m | 55 kg |
| | | 80 DL 52.2 | 2.2 | 542 | 308 | 388 | 154 | 295 | 220 | 654 | 220 | 165 | 10 m | 67 kg |
| | | 80 DL 53.7 | 3.7 | 567 | 328 | 403 | 164 | 310 | 220 | 687 | 235 | 165 | 10 m | 75 kg |
| | | 80 DLC 55.5 | 5.5 | 618 | 379 | 428 | 190 | 335 | 307 | 753 | 260 | 205 | 10 m | 134 kg |
| 80 DLC 57.5 | | 7.5 | 648 | 399 | 448 | 200 | 355 | 305 | 751 | 280 | 205 | 10 m | 148 kg | |
| 100 | 100 DL 53.7 | 3.7 | 614 | 335 | 445 | 169 | 340 | 250 | 706 | 235 | 185 | 10 m | 79 kg | |
| | 100 DLB 55.5 | 5.5 | 646 | 369 | 460 | 186 | 355 | 323 | 768 | 250 | 205 | 10 m | 123 kg | |
| | 100 DLC 55.5 | 5.5 | 660 | 379 | 470 | 190 | 365 | 322 | 753 | 260 | 205 | 10 m | 134 kg | |
| | 100 DLB 57.5 | 7.5 | 673 | 385 | 480 | 193 | 375 | 323 | 760 | 270 | 205 | 10 m | 141 kg | |
| | 100 DLC 57.5 | 7.5 | 690 | 399 | 490 | 200 | 385 | 320 | 751 | 280 | 205 | 10 m | 148 kg | |
| | 100 DL 511 | 11 | 701 | 402 | 500 | 201 | 395 | 323 | 859 | 290 | 205 | 10 m | 180 kg | |
| | 100 DL 515 | 15 | 741 | 441 | 520 | 221 | 415 | 330 | 954 | 310 | 205 | 10 m | 230 kg | |
| 100 DL 518 | 18.5 | 741 | 441 | 520 | 221 | 415 | 330 | 958 | 310 | 205 | 10 m | 285 kg | | |
| 150 | 150 DL 55.5 | 5.5 | 750 | 398 | 550 | 200 | 410 | 381 | 799 | 280 | 245 | 10 m | 146 kg | |
| | 150 DL 57.5 | 7.5 | 780 | 418 | 570 | 210 | 430 | 377 | 784 | 300 | 245 | 10 m | 158 kg | |
| | 150 DL 511 | 11 | 810 | 438 | 590 | 220 | 450 | 377 | 883 | 320 | 245 | 10 m | 199 kg | |
| | 150 DL 515 | 15 | 810 | 438 | 590 | 220 | 450 | 377 | 972 | 320 | 245 | 10 m | 237 kg | |
| | 150 DL 518 | 18.5 | 848 | 476 | 610 | 238 | 470 | 381 | 979 | 340 | 245 | 10 m | 300 kg | |
| | 150 DL 522 | 22 | 848 | 476 | 610 | 238 | 470 | 381 | 979 | 340 | 245 | 10 m | 325 kg | |
| | 150 DL 530 | 30 | 912 | 520 | 650 | 262 | 510 | 468 | 1284 | 360 | 1080 | 10 m | 350kg | |
| | 150 DL 537 | 37 | 912 | 520 | 650 | 262 | 510 | 468 | 1404 | 360 | 1135 | 10 m | 350 kg | |
| | 150 DL 545 | 45 | 912 | 520 | 650 | 262 | 510 | 468 | 1404 | 360 | 1135 | 10 m | 350 kg | |
| 200 | 200 DL 55.5 | 5.5 | 832 | 430 | 615 | 217 | 450 | 414 | 826 | 300 | 285 | 10 m | 160 kg | |
| | 200 DL 57.5 | 7.5 | 863 | 453 | 635 | 228 | 470 | 410 | 809 | 320 | 285 | 10 m | 176 kg | |
| | 200 DL 511 | 11 | 863 | 453 | 635 | 228 | 470 | 410 | 908 | 320 | 285 | 10 m | 212 kg | |
| | 200 DL 515 | 15 | 896 | 479 | 655 | 241 | 490 | 411 | 995 | 340 | 285 | 10 m | 260 kg | |
| | 200 DL 518 | 18.5 | 932 | 512 | 675 | 257 | 510 | 415 | 1001 | 360 | 285 | 10 m | 305 kg | |
| | 200 DL 522 | 22 | 932 | 512 | 675 | 257 | 510 | 415 | 1001 | 360 | 285 | 10 m | 330 kg | |
| | 200 DL 530 | 30 | 937 | 520 | 675 | 262 | 510 | 483 | 1284 | 360 | 1080 | 10 m | 350kg | |
| | 200 DL 537 | 37 | 937 | 520 | 675 | 262 | 510 | 483 | 1404 | 360 | 1135 | 10 m | 370 kg | |
| | 200 DL 545 | 45 | 937 | 520 | 675 | 262 | 510 | 483 | 1404 | 360 | 1135 | 10 m | 370 kg | |
| | 200 DL 57.5 | 7.5 | 969 | 525 | 700 | 269 | 500 | 622 | 904 | 370 | 400 | 10 m | 260 kg | |
| 250 | 250 DL 511 | 11 | 993 | 541 | 720 | 273 | 520 | 634 | 1000 | 390 | 400 | 10 m | 320 kg | |
| | 250 DL 515 | 15 | 1007 | 549 | 730 | 277 | 530 | 646 | 1086 | 400 | 400 | 10 m | 380 kg | |
| | 250 DL 518 | 18.5 | 1007 | 549 | 730 | 277 | 530 | 646 | 1089 | 400 | 400 | 10 m | 420 kg | |
| | 250 DL 522 | 22 | 1007 | 549 | 730 | 277 | 530 | 646 | 1089 | 400 | 400 | 10 m | 440 kg | |
| | 250 DL 530 | 30 | 1125 | 660 | 790 | 335 | 590 | 706 | 1336 | 460 | 1132 | 10 m | 458kg | |
| | 250 DL 537 | 37 | 1125 | 660 | 790 | 335 | 590 | 706 | 1475 | 460 | 1206 | 10 m | 522kg | |
| | 250 DL 545 | 45 | 1125 | 660 | 790 | 335 | 590 | 706 | 1475 | 460 | 1206 | 10 m | 540kg | |
| 300 | 300 DL 511 | 11 | 1100 | 588 | 798 | 302 | 575 | 671 | 1050 | 420 | 450 | 10 m | 365 kg | |
| | 300 DL 515 | 15 | 1100 | 588 | 798 | 302 | 575 | 671 | 1131 | 420 | 450 | 10 m | 395 kg | |
| | 300 DL 518 | 18.5 | 1135 | 618 | 818 | 317 | 595 | 668 | 1131 | 440 | 450 | 10 m | 440 kg | |
| | 300 DL 522 | 22 | 1135 | 618 | 818 | 317 | 595 | 668 | 1131 | 440 | 450 | 10 m | 465 kg | |
| | 300 DL 530 | 30 | 1172 | 660 | 838 | 335 | 615 | 726 | 1336 | 460 | 1132 | 10 m | 458kg | |
| | 300 DL 537 | 37 | 1172 | 660 | 838 | 335 | 615 | 726 | 1475 | 460 | 1206 | 10 m | 522kg | |
| | 300 DL 545 | 45 | 1172 | 660 | 838 | 335 | 615 | 726 | 1475 | 460 | 1206 | 10 m | 540kg | |

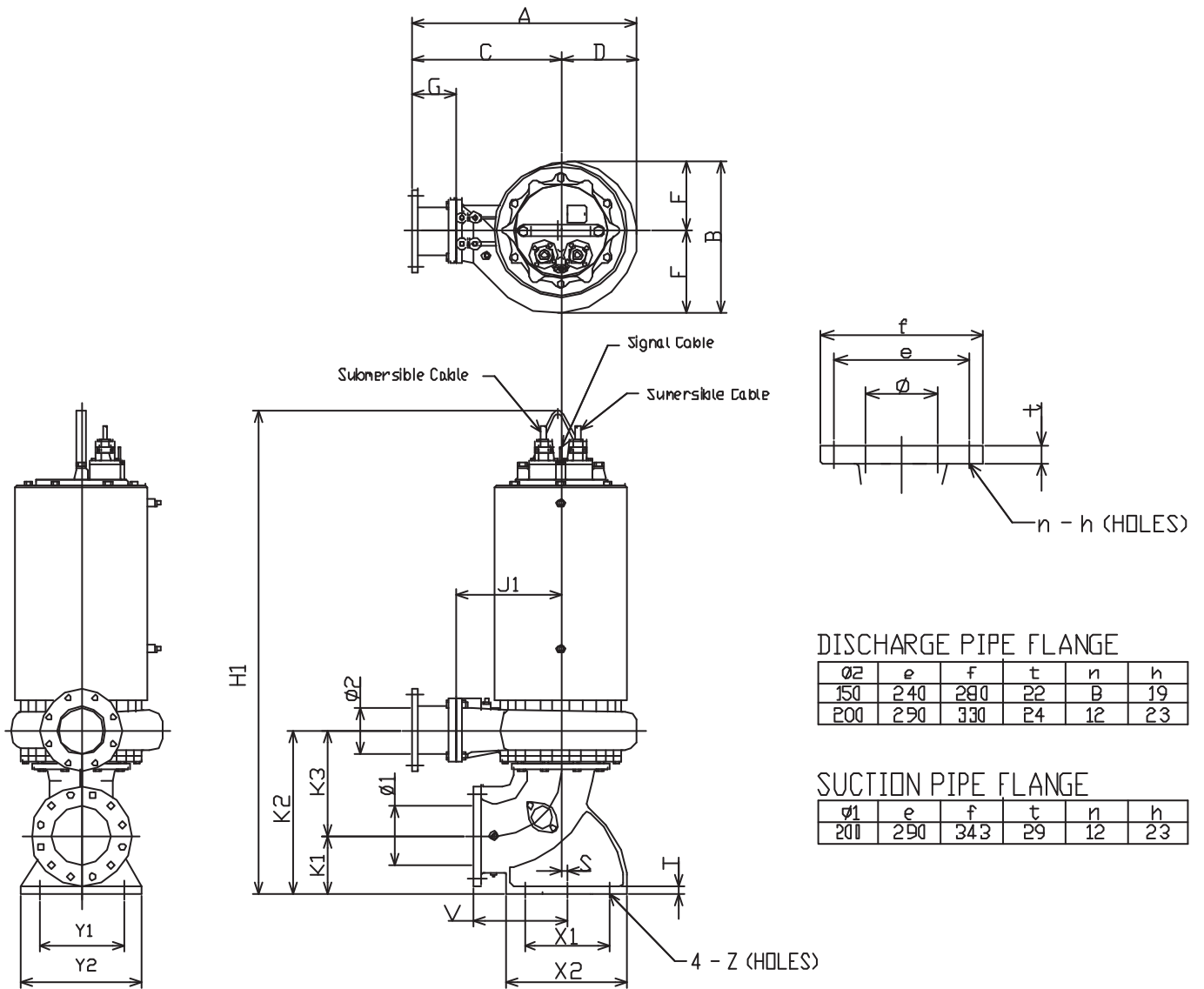
Units: mm unless otherwise specified

Ebara Submersible Sewage Pumps

Model **DL**

Dimensions - Manual Models - 150, 200DL 30-45kW (DRY PIT)

50Hz



| PHASE | Hz | SIZE ØA | | MODEL | OUTPUT kW | PUMP & MOTOR DIMENSIONS | | | | | | | | | | | | | | | | | | |
|-------|----|---------|-----|----------------|-----------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|------|
| | | Ø1 | Ø2 | | | A | B | C | D | E | F | G | K1 | K2 | K3 | X1 | X2 | Y1 | Y2 | S | T | V | J1 | H1 |
| THREE | 50 | 200 | 150 | 200 x 150DL530 | 30 | 772 | 520 | 510 | 262 | 283 | 238 | 150 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1536 |
| | | | | 200 x 150DL537 | 37 | 772 | 520 | 510 | 262 | 283 | 238 | 150 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1656 |
| | | | | 200 x 150DL545 | 45 | 772 | 520 | 510 | 262 | 283 | 238 | 150 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1656 |
| | | | 200 | 200 x 200DL530 | 30 | 847 | 520 | 585 | 262 | 283 | 238 | 225 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1536 |
| | | | | 200 x 200DL537 | 37 | 847 | 520 | 585 | 262 | 283 | 238 | 225 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1656 |
| | | | | 200 x 200DL545 | 45 | 847 | 520 | 585 | 262 | 283 | 238 | 225 | 200 | 560 | 360 | 290 | 410 | 290 | 410 | 20 | 28 | 320 | 300 | 1656 |

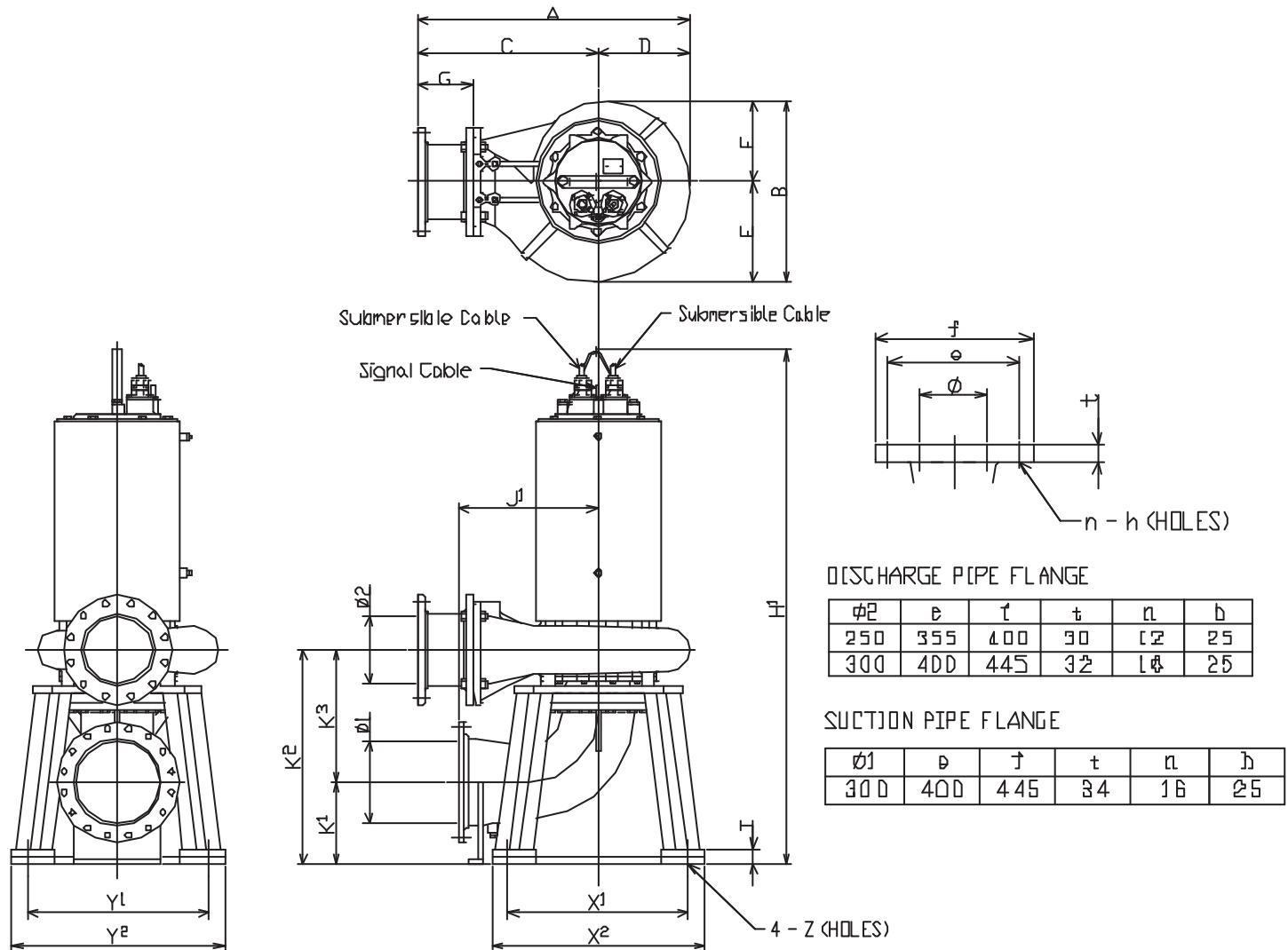
Units: mm unless otherwise specified

Ebara Submersible Sewage Pumps

Model **DL**

Dimensions - Manual Models - 250, 300DL 30-45kW (DRY PIT)

50Hz



| PHASE | Hz | SIZE DIA | | MODEL | OUTPUT kW | PUMP & MOTOR DIMENSIONS | | | | | | | | | | | | | | | | |
|-------|----|----------|-----|------------------|-----------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|------|
| | | φ1 | φ2 | | | A | B | C | D | E | F | G | K1 | K2 | K3 | X1 | X2 | Y1 | Y2 | T | J1 | H1 |
| THREE | 50 | 300 | 250 | 300 x 250DDL 530 | 30 | 995 | 660 | 660 | 335 | 368 | 293 | 200 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1745 |
| | | | | 300 x 250DDL 537 | 37 | 995 | 660 | 660 | 335 | 368 | 293 | 200 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1884 |
| | | | | 300 x 250DDL 545 | 45 | 995 | 660 | 660 | 335 | 368 | 293 | 200 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1884 |
| | | | 300 | 300 x 300DDL 530 | 30 | 1105 | 660 | 770 | 335 | 368 | 293 | 310 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1745 |
| | | | | 300 x 300DDL 537 | 37 | 1105 | 660 | 770 | 335 | 368 | 293 | 310 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1884 |
| | | | | 300 x 300DDL 545 | 45 | 1105 | 660 | 770 | 335 | 368 | 293 | 310 | 304 | 785 | 481 | 665 | 780 | 665 | 780 | 56 | 514 | 1884 |

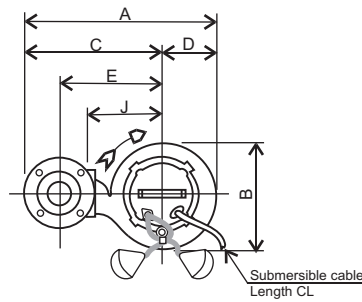
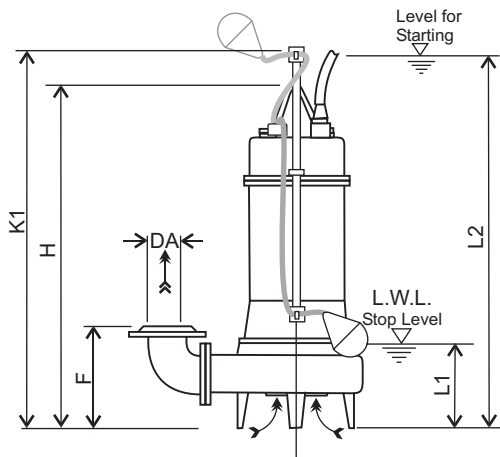
Units: mm unless otherwise specified

Ebara Submersible Sewage Pumps

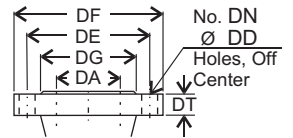
Model **DL**

Dimensions - Automatic Models - DLA

50Hz



Discharge Flange Dimensions
(JIS 10kgf/cm²)



- Note:
- 1/. L.W.L (Low Water Level) Is limited to 10 minutes operation at low water level.
 - 2/. Is limited to 30 minutes operation with water level below top of motor.

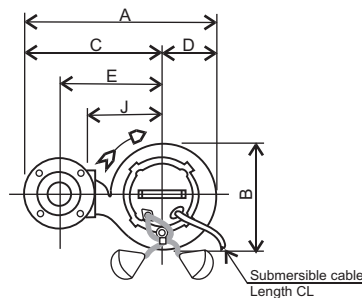
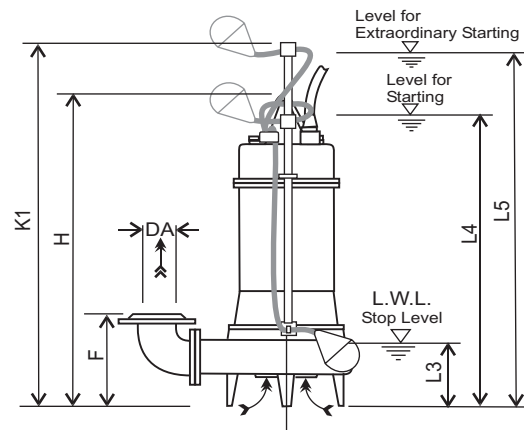
| DA | DE | DF | DG | DT | DN | DD |
|----|-----|-----|-----|----|----|----|
| 65 | 150 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |

| Size DA | Model | Output KW | A | B | C | D | E | F | H | J | K1 | L1 | L2 | CL | Weight |
|---------|-------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|
| 65 | 65 DLA 51.5 | 1.5 | 497 | 291 | 353 | 144 | 265 | 200 | 662 | 200 | 840 | 320 | 860 | 10 m | 55 kg |
| 80 | 80 DLA 51.5 | 1.5 | 524 | 292 | 378 | 146 | 285 | 220 | 683 | 210 | 840 | 320 | 860 | 10 m | 58 kg |

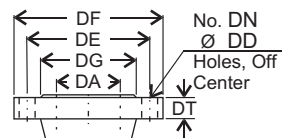
Units: mm unless otherwise specified

Dimensions - Parallel Alternating Models - DLJ

50Hz



Discharge Flange Dimensions
(JIS 10kgf/cm²)



- Note:
- 1/. L.W.L (Low Water Level) Is limited to 10 minutes operation at low water level.
 - 2/. Is limited to 30 minutes operation with water level below top of motor.

| DA | DE | DF | DG | DT | DN | DD |
|----|-----|-----|-----|----|----|----|
| 65 | 150 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |

| Size DA | Model | Output KW | A | B | C | D | E | F | H | J | K1 | L3 | L4 | L5 | CL | Weight |
|---------|-------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------|
| 65 | 65 DLJ 51.5 | 1.5 | 497 | 291 | 353 | 144 | 265 | 200 | 662 | 200 | 950 | 290 | 780 | 970 | 10 m | 55 kg |
| 80 | 80 DLJ 51.5 | 1.5 | 524 | 292 | 378 | 146 | 285 | 220 | 683 | 210 | 950 | 290 | 780 | 970 | 10 m | 58 kg |

Units: mm unless otherwise specified

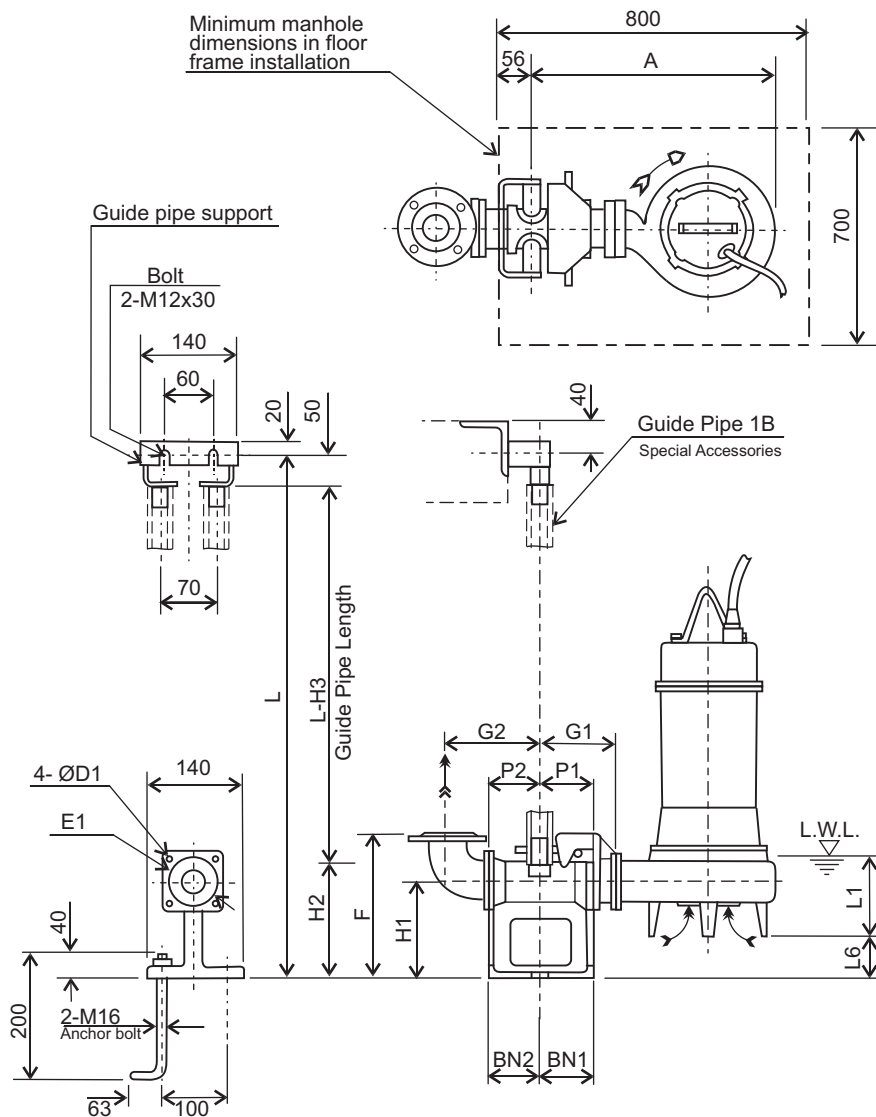
Ebara Submersible Sewage Pumps

Model **DL**

Dimensions with QDC

Pump **DL** QDC **LM**

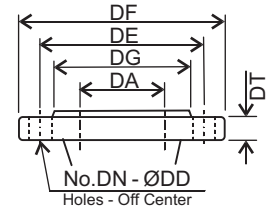
Applicable Models - 65 & 80 DL



Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide
 - Adaptor Flange
 Guide Pipe is not supplied.

Discharge Flange (JIS 10kgf/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|----|-----|-----|-----|----|----|----|
| 65 | 140 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |

| Pump Model | A | P1 | P2 | G1 | G2 | F | H1 | H2 | H3 | L1 | L6 | BN1 | BN2 | D1 | E1 | QDC Model | Weight |
|------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|-----------|--------|
| 65 DL 51.5 | 464 | 75 | 95 | 120 | 160 | 250 | 145 | 190 | 240 | 140 | 50 | 75 | 95 | 12 | 140 | LM65 | 14 kg |
| 80 DL 51.5 | 481 | 75 | 90 | 125 | 165 | 285 | 175 | 230 | 280 | 165 | 65 | 75 | 90 | 15 | 155 | LM80 | 17 kg |
| 80 DL 52.2 | 499 | 75 | 90 | 125 | 165 | 285 | 175 | 230 | 280 | 165 | 65 | 75 | 90 | 15 | 155 | LM80 | 17 kg |
| 80 DL 53.7 | 524 | 75 | 90 | 125 | 165 | 285 | 175 | 230 | 280 | 165 | 65 | 75 | 90 | 15 | 155 | LM80 | 17 kg |

Units: mm unless otherwise specified

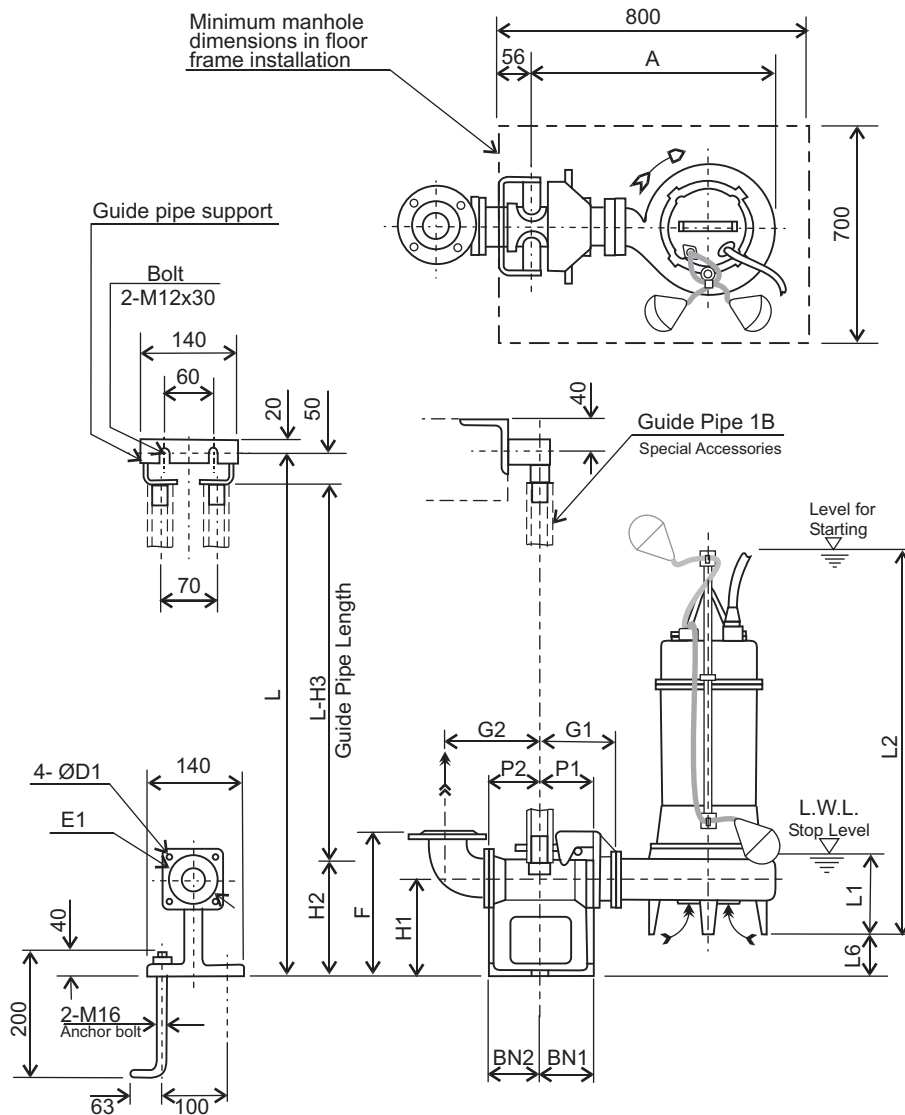
Ebara Submersible Sewage Pumps

Model **DL**

Dimensions with QDC

Pump **DLA** QDC **LM**

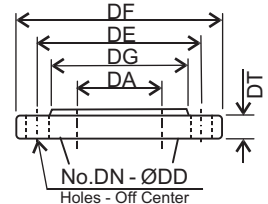
Applicable Models - 65 & 80 DLA



Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide
 - Adaptor Flange
 Guide Pipe is not supplied.

Discharge Flange
(JIS 10kgf/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|----|-----|-----|-----|----|----|----|
| 65 | 140 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |

| Pump Model | A | P1 | P2 | G1 | G2 | F | H1 | H2 | H3 | L1 | L2 | L6 | BN1 | BN2 | D1 | E1 | QDC Model | Weight |
|-------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|-----------|--------|
| 65 DLA 51.5 | 464 | 75 | 95 | 120 | 160 | 250 | 145 | 190 | 240 | 320 | 860 | 50 | 75 | 95 | 12 | 140 | LM65 | 14 kg |
| 80 DLA 51.5 | 481 | 75 | 90 | 125 | 165 | 285 | 175 | 230 | 280 | 320 | 860 | 65 | 75 | 90 | 15 | 155 | LM80 | 17 kg |

Units: mm unless otherwise specified

Ebara Submersible Sewage Pumps

Model **DL**

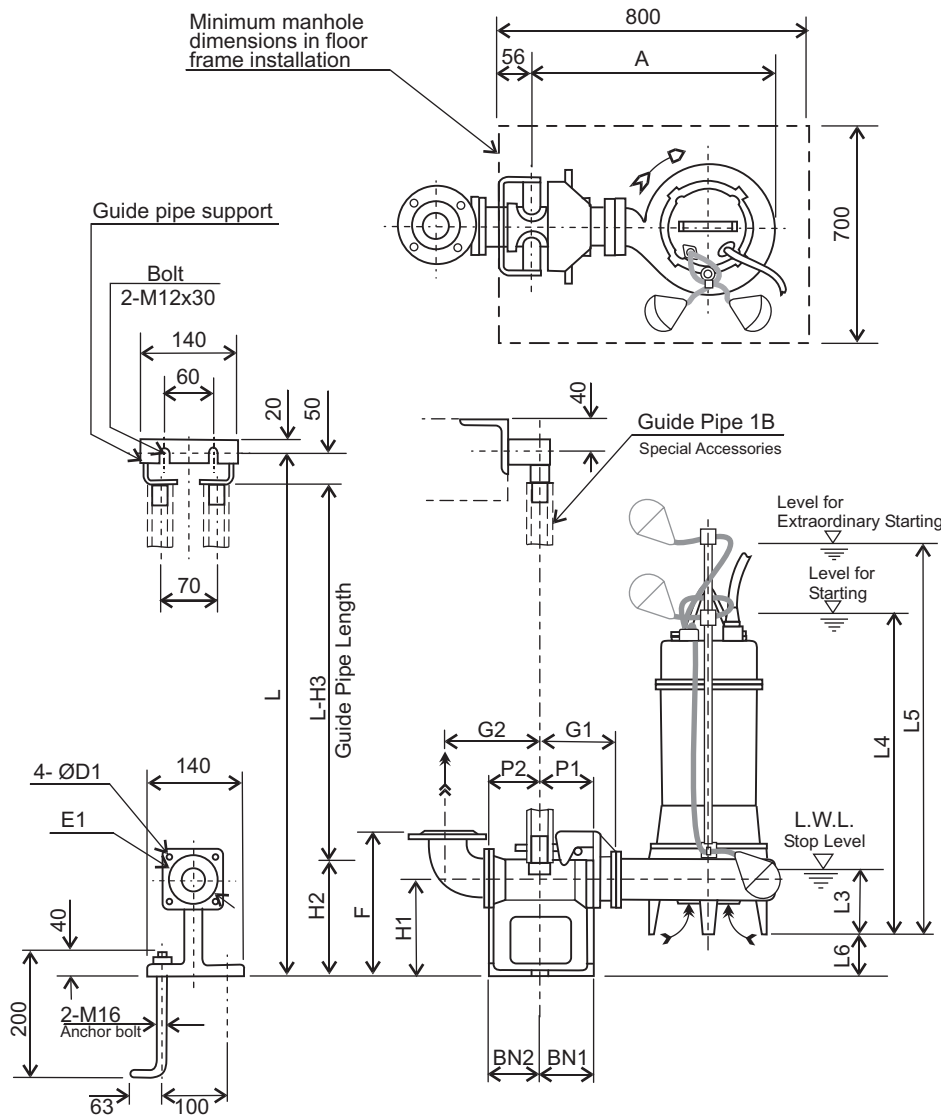
Dimensions with QDC

Pump **DLJ** QDC **LM**

Applicable Models - 65 & 80 DLJ

Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide
 - Adaptor Flange
 Guide Pipe is not supplied.



Discharge Flange
(JIS 10kgf/cm²)

| DA | DE | DF | DG | DT | DN | DD |
|----|-----|-----|-----|----|----|----|
| 65 | 140 | 175 | 116 | 18 | 4 | 15 |
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |

| Pump Model | A | P1 | P2 | G1 | G2 | F | H1 | H2 | H3 | L3 | L4 | L5 | L6 | BN1 | BN2 | D1 | E1 | QDC Model | Weight |
|-------------|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|----|-----|-----------|--------|
| 65 DLJ 51.5 | 464 | 75 | 95 | 120 | 160 | 250 | 145 | 190 | 240 | 290 | 780 | 970 | 50 | 75 | 95 | 12 | 140 | LM65 | 14 kg |
| 80 DLJ 51.5 | 481 | 75 | 90 | 125 | 165 | 285 | 175 | 230 | 280 | 290 | 780 | 970 | 65 | 75 | 90 | 15 | 155 | LM80 | 17 kg |

Units: mm unless otherwise specified

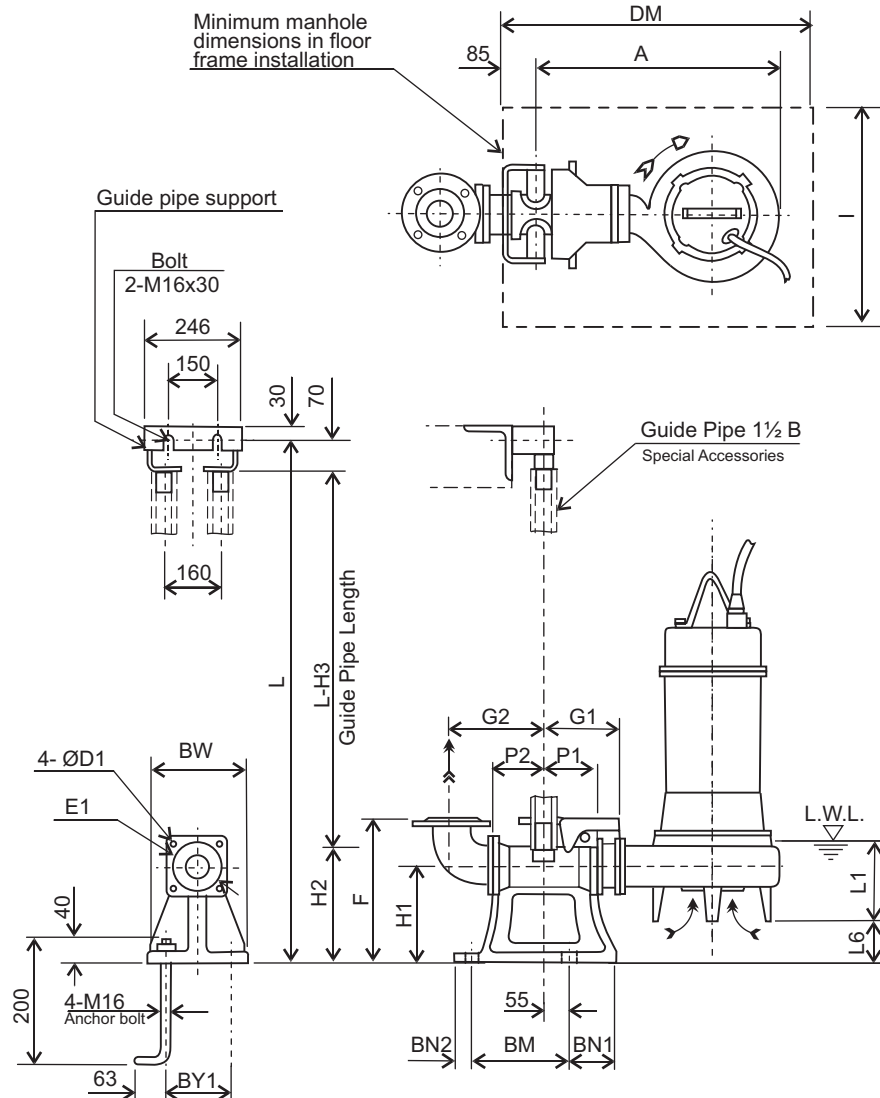
Ebara Submersible Sewage Pumps

Model **DL**

Dimensions with QDC

Pump **DL** QDC **LL**

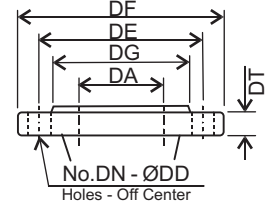
Applicable Models - 80 DL (5.5 & 7.5 kW), 100 DL



Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide
 - Adaptor Flange
 Guide Pipe is not supplied.

Discharge Flange
(JIS 10kgf/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|-----|-----|-----|-----|----|----|----|
| 80 | 150 | 185 | 126 | 18 | 8 | 15 |
| 100 | 175 | 210 | 151 | 20 | 8 | 15 |

| Pump Model | A | P1 | P2 | G1 | G2 | F | H1 | H2 | H3 | L1 | L6 | BN1 | BN2 | BM | BY1 | BW | DM | I | D1 | E1 | QDC Model | Weight |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|----|-----|-----------|--------|
| 80 DLC 55.5 | 635 | 105 | 120 | 185 | 195 | 350 | 240 | 255 | 325 | 205 | 43 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 15 | 155 | LL80 | 44 kg |
| 80 DLC 57.5 | 665 | 105 | 120 | 185 | 195 | 350 | 240 | 255 | 325 | 205 | 45 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 15 | 155 | LL80 | 44 kg |
| 100 DL 53.7 | 589 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 185 | 115 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 19 | 175 | LL100 | 46 kg |
| 100 DLB 55.5 | 621 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 205 | 42 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 19 | 175 | LL100 | 46 kg |
| 100 DLC 55.5 | 635 | 105 | 120 | 185 | 225 | 365 | 240 | 255 | 325 | 205 | 43 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 15 | 155 | LL80 | 44 kg |
| 100 DLB 57.5 | 648 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 205 | 42 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 19 | 175 | LL100 | 46 kg |
| 100 DLC 57.5 | 665 | 105 | 120 | 185 | 225 | 365 | 240 | 255 | 325 | 205 | 45 | 100 | 40 | 220 | 180 | 230 | 800 | 700 | 15 | 155 | LL80 | 44 kg |
| 100 DL 511 | 676 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 205 | 42 | 100 | 40 | 220 | 180 | 230 | 1000 | 700 | 19 | 175 | LL100 | 46 kg |
| 100 DL 515 | 716 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 205 | 35 | 100 | 40 | 220 | 180 | 230 | 1000 | 700 | 19 | 175 | LL100 | 46 kg |
| 100 DL 518 | 716 | 105 | 105 | 185 | 210 | 365 | 240 | 265 | 335 | 205 | 35 | 100 | 40 | 220 | 180 | 230 | 1000 | 700 | 19 | 175 | LL100 | 46 kg |

Units: mm unless otherwise specified

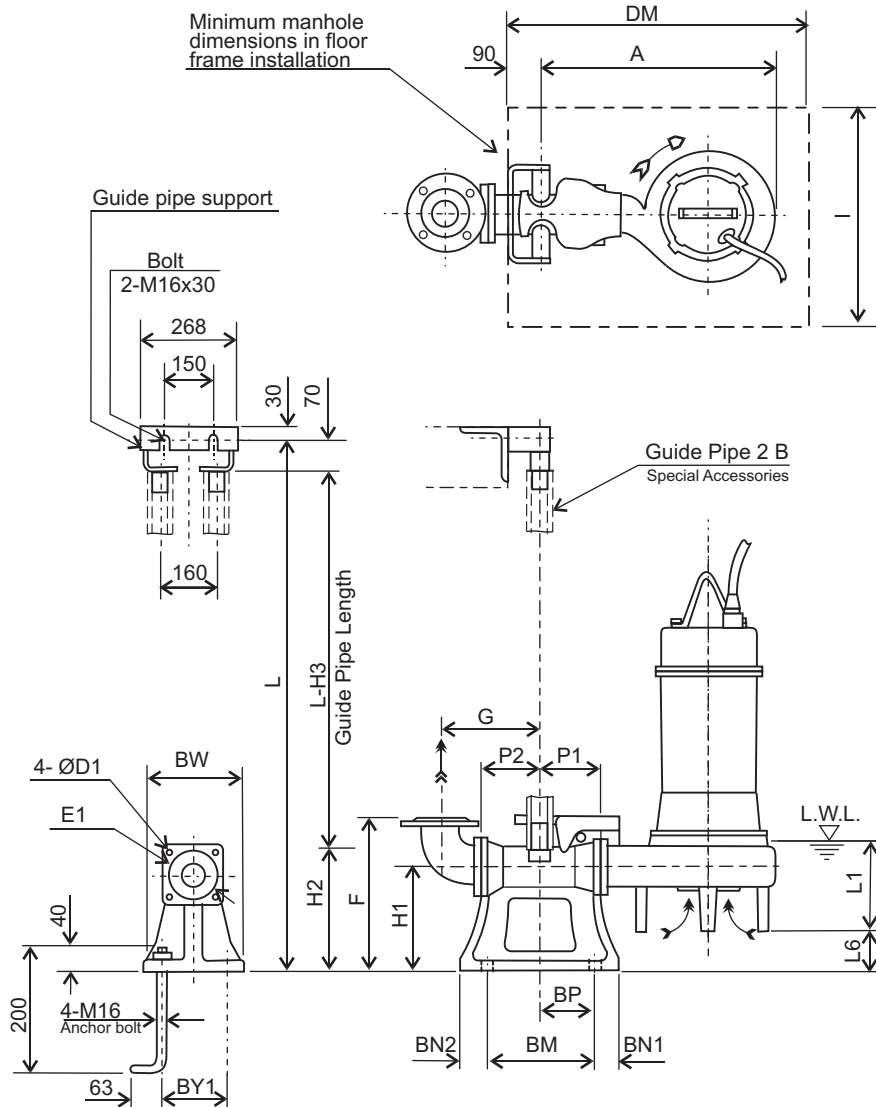
Ebara Submersible Sewage Pumps

Model **DL**

Dimensions with QDC

Pump **DL** QDC **LL**

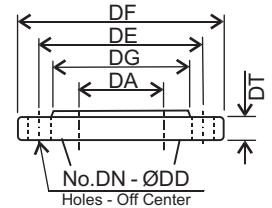
Applicable Models - 150 & 200 DL



Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide
 Guide Pipe is not supplied.

Discharge Flange
(JIS 10kg/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|-----|-----|-----|-----|----|----|----|
| 150 | 240 | 280 | 212 | 22 | 8 | 19 |
| 200 | 290 | 330 | 262 | 26 | 12 | 23 |

| Pump Model | A | P1 | P2 | G | F | H1 | H2 | H3 | L1 | L6 | BN1 | BN2 | BM | BP | BY1 | BW | DM | I | D1 | E1 | QDC Model | Weight |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|----|-----|-----------|--------|
| 150 DL 55.5 | 635 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 69 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 57.5 | 665 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 73 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 511 | 695 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 73 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 515 | 695 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 73 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 518 | 733 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 69 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 522 | 733 | 155 | 195 | 325 | 450 | 290 | 362 | 432 | 245 | 69 | 60 | 60 | 370 | 165 | 280 | 330 | 1000 | 700 | 16 | 210 | LL125 | 65 kg |
| 150 DL 530 | 777 | 155 | 205 | 355 | 480 | 320 | 405 | 475 | 288 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LI150 | 80 kg |
| 150 DL 537 | 777 | 155 | 205 | 355 | 480 | 320 | 405 | 475 | 296 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LI150 | 80 kg |
| 150 DL 545 | 777 | 155 | 205 | 355 | 480 | 320 | 405 | 475 | 296 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LI150 | 80 kg |
| 200 DL 55.5 | 672 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 81 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 57.5 | 703 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 85 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 511 | 703 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 85 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 515 | 736 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 84 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 518 | 772 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 80 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 522 | 772 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 285 | 80 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 530 | 777 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 288 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 537 | 777 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 296 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |
| 200 DL 545 | 777 | 155 | 205 | 355 | 495 | 320 | 405 | 475 | 296 | 210 | 60 | 60 | 390 | 170 | 300 | 350 | 1100 | 800 | 16 | 250 | LL150 | 80 kg |

Units: mm unless otherwise specified

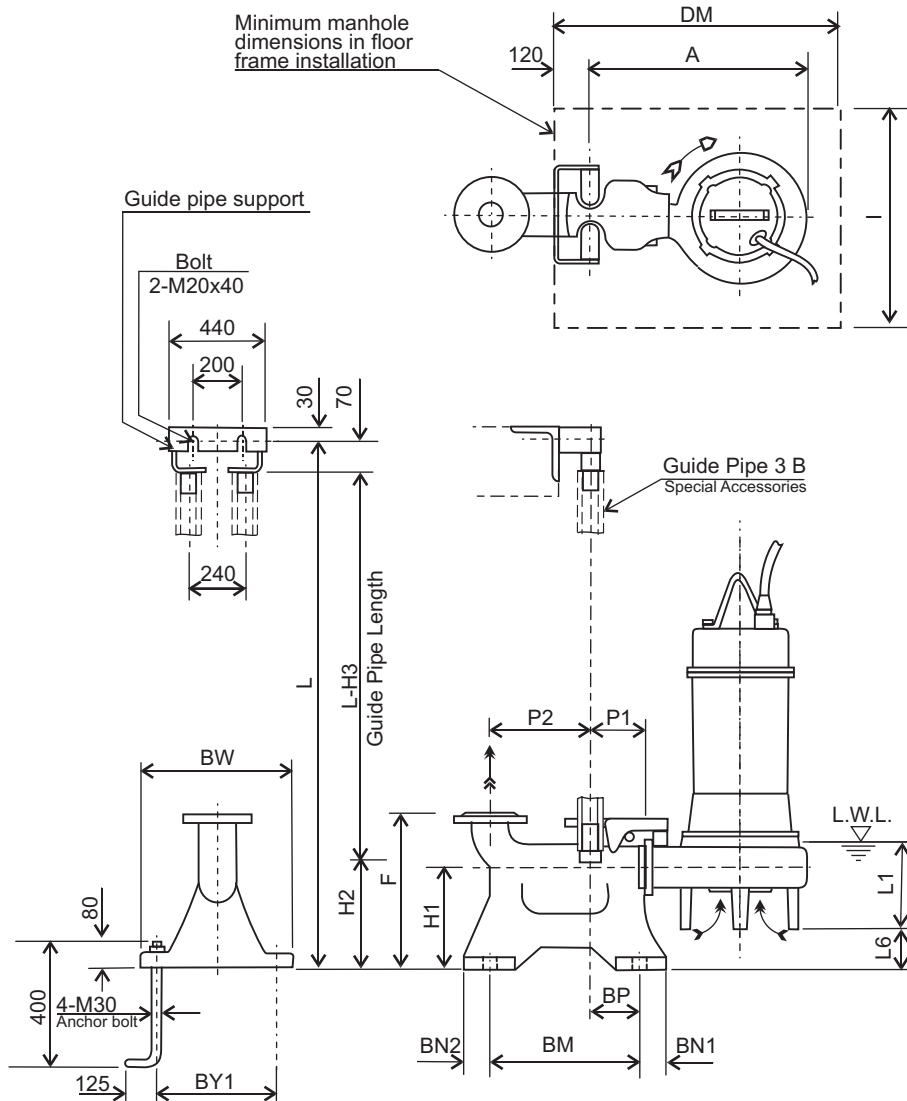
Ebara Submersible Sewage Pumps

Model **DL**

Dimensions with QDC

Pump **DL** QDC **LL**

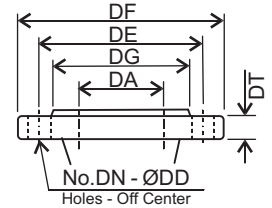
Applicable Models - 250 & 300 DL



Note:

- 1/. L.W.L. (Low Water Level) is limited to 10 minutes operation at low water level.
- 2/. Is limited to 30 minutes operation with water level below top of motor.
- 3/. For detailed dimensions of the pumps, refer to separate dimension data sheets.
- 4/. The discharge bend and companion flange supplied with the pump are used with the QDC.
- 5/. The weight in dimension tables refers only to the weight of the QDC.
- 6/. Standard accessories supplied with QDC include:-
 - Connector body with foundation bolts.
 - Guide pipe support
 - Sliding Glide

Discharge Flange
(JIS 10kg/cm²)



| DA | DE | DF | DG | DT | DN | DD |
|-----|-----|-----|-----|----|----|----|
| 250 | 355 | 400 | 324 | 30 | 12 | 25 |
| 300 | 400 | 445 | 368 | 32 | 16 | 25 |

| Pump Model | A | P1 | P2 | F | H1 | H2 | H3 | L1 | L6 | BN1 | BN2 | BM | BP | BY1 | BW | DM | I | QDC Model | Weight |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----------|--------|
| 250 DL 57.5 | 834 | 195 | 435 | 700 | 350 | 440 | 510 | 400 | 58 | 70 | 70 | 650 | 215 | 500 | 560 | 1200 | 900 | LL250 | 150 kg |
| 250 DL 511 | 858 | 195 | 435 | 700 | 350 | 440 | 510 | 400 | 46 | 70 | 70 | 650 | 215 | 500 | 560 | 1200 | 900 | LL250 | 150 kg |
| 250 DL 515 | 872 | 195 | 435 | 700 | 350 | 440 | 510 | 400 | 34 | 70 | 70 | 650 | 215 | 500 | 560 | 1200 | 900 | LL250 | 150 kg |
| 250 DL 518 | 872 | 195 | 435 | 700 | 350 | 440 | 510 | 400 | 34 | 70 | 70 | 650 | 215 | 500 | 560 | 1200 | 900 | LL250 | 150 kg |
| 250 DL 522 | 872 | 195 | 435 | 700 | 350 | 440 | 510 | 400 | 34 | 70 | 70 | 650 | 215 | 500 | 560 | 1200 | 900 | LL250 | 150 kg |
| 250 DL 530 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 292 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 250 DL 537 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 319 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 250 DL 545 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 319 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 511 | 917 | 195 | 465 | 800 | 430 | 550 | 620 | 450 | 109 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 515 | 917 | 195 | 465 | 800 | 430 | 550 | 620 | 450 | 109 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 518 | 952 | 195 | 465 | 800 | 430 | 550 | 620 | 450 | 112 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 522 | 952 | 195 | 465 | 800 | 430 | 550 | 620 | 450 | 112 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 530 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 292 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 537 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 319 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |
| 300 DL 545 | 990 | 195 | 465 | 970 | 430 | 550 | 620 | 319 | 300 | 70 | 70 | 680 | 215 | 580 | 640 | 1200 | 900 | LL300 | 200 kg |

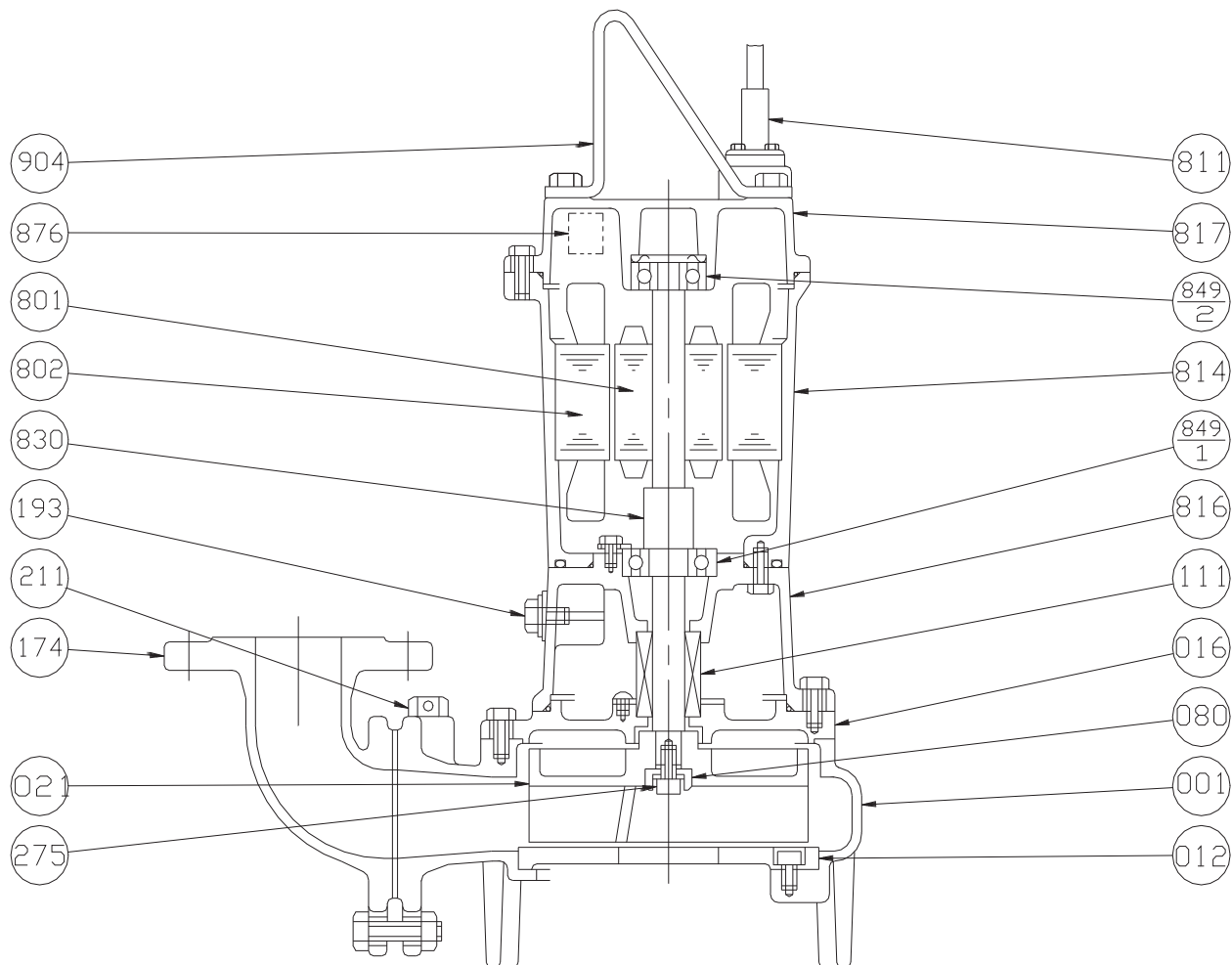
Units: mm unless otherwise specified

Ebara Submersible Sewage Pumps

Model **DL**

Sectional View - 65 DL 51.5, 80DL 51.5~53.7, 100DL 53.7

50Hz



| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 080 | Bushing | SS Steel | 1 |
| 111 | Mechanical Seal | | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 211 | Airvent Valve | C3604 Brass | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

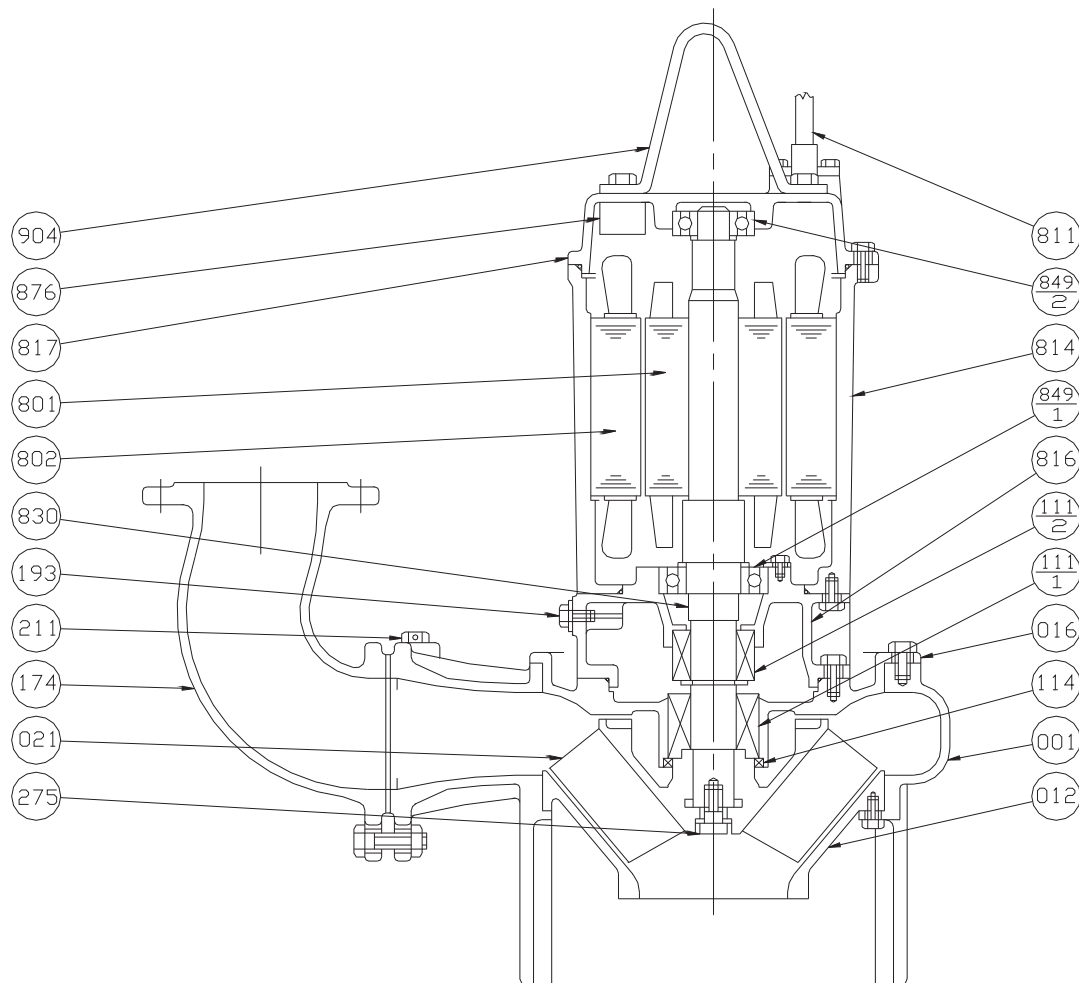
| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Protector | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |

Ebara Submersible Sewage Pumps

Model **DL**

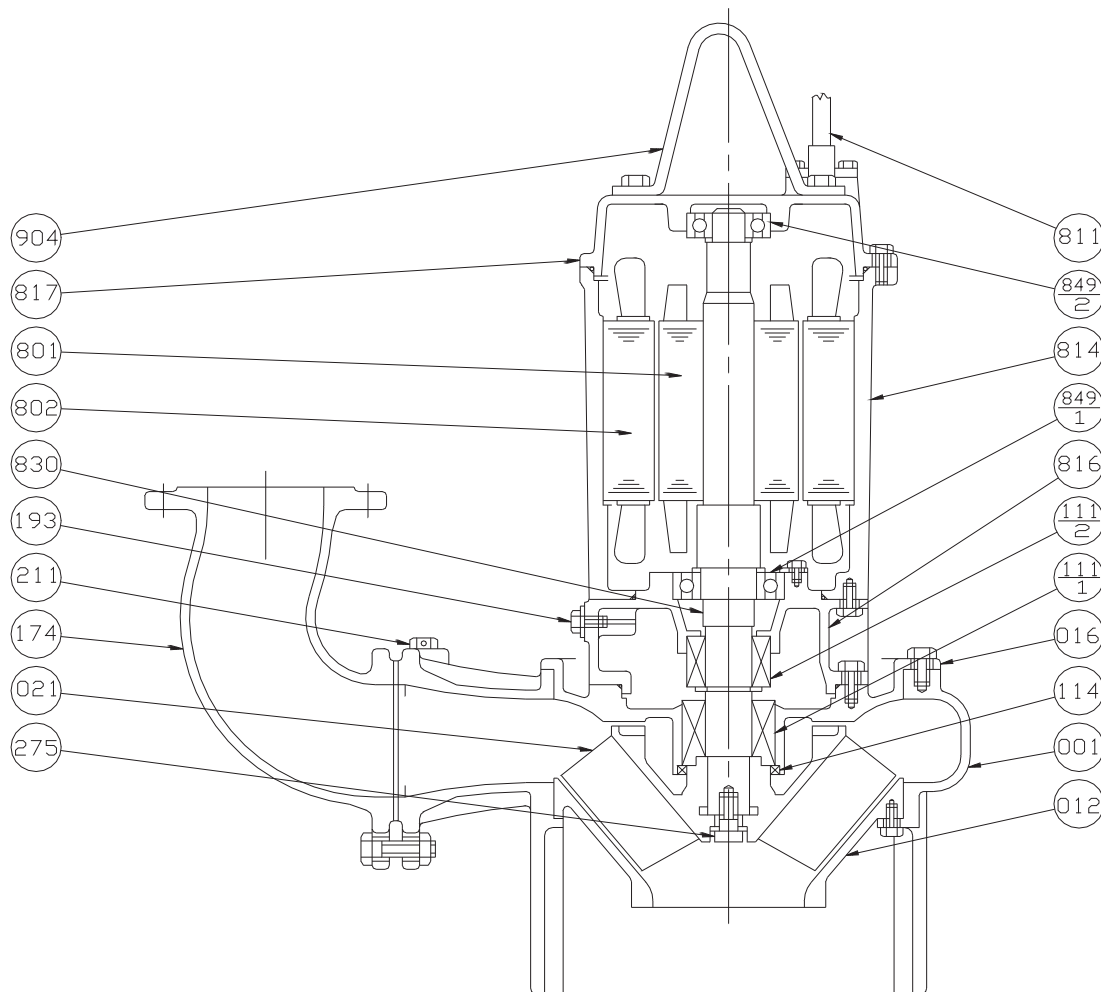
**Sectional View - 80 DLC 55.5, 57.5 100 DL 55.5, 57.5
150 DL 55.5, 57.5 200 DL 55.5, 57.5**

50Hz



| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 111-1 | Mechanical Seal | | 1 |
| 111-2 | Mechanical Seal | | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 211 | Airvent Valve | C3604 Brass | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Protector | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |



| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 111-1 | Mechanical Seal | | 1 |
| 111-2 | Mechanical Seal | | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 211 | Airvent Valve | C3604 Brass | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

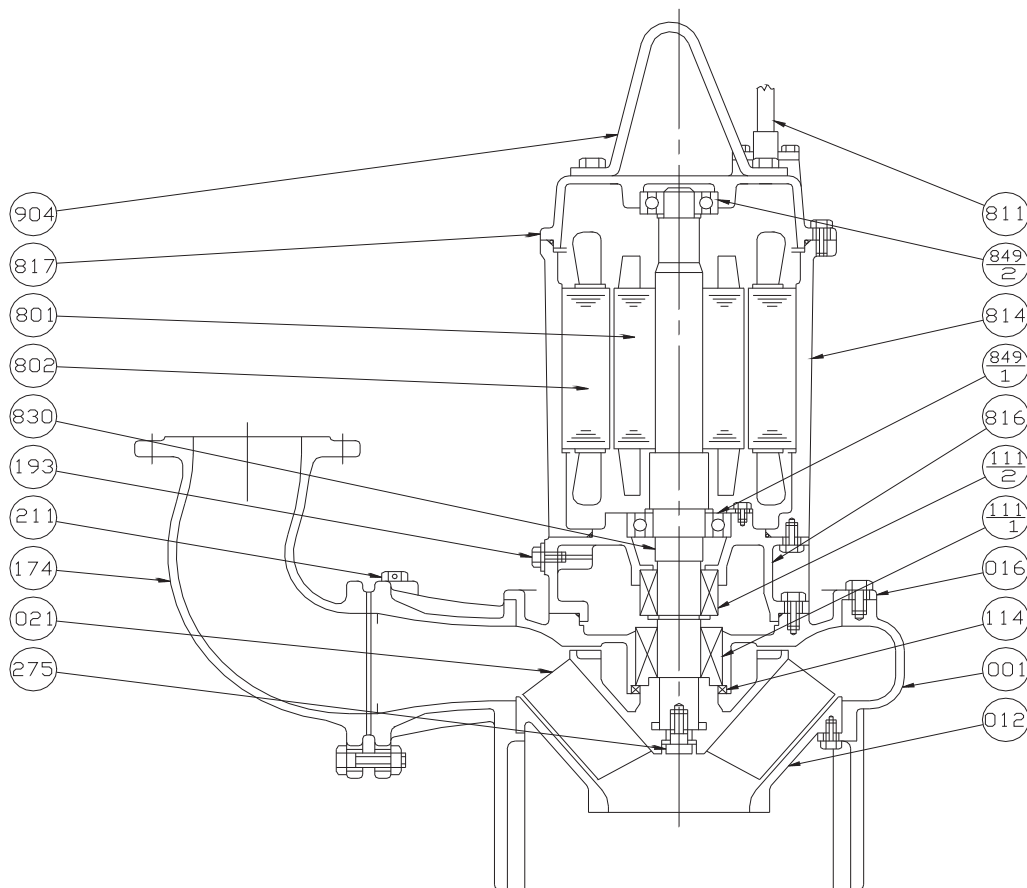
| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |

Ebara Submersible Sewage Pumps

Model **DL**

Sectional View - 100 DL 511~518 150 DL 518, 522
200 DL 518, 522

50Hz

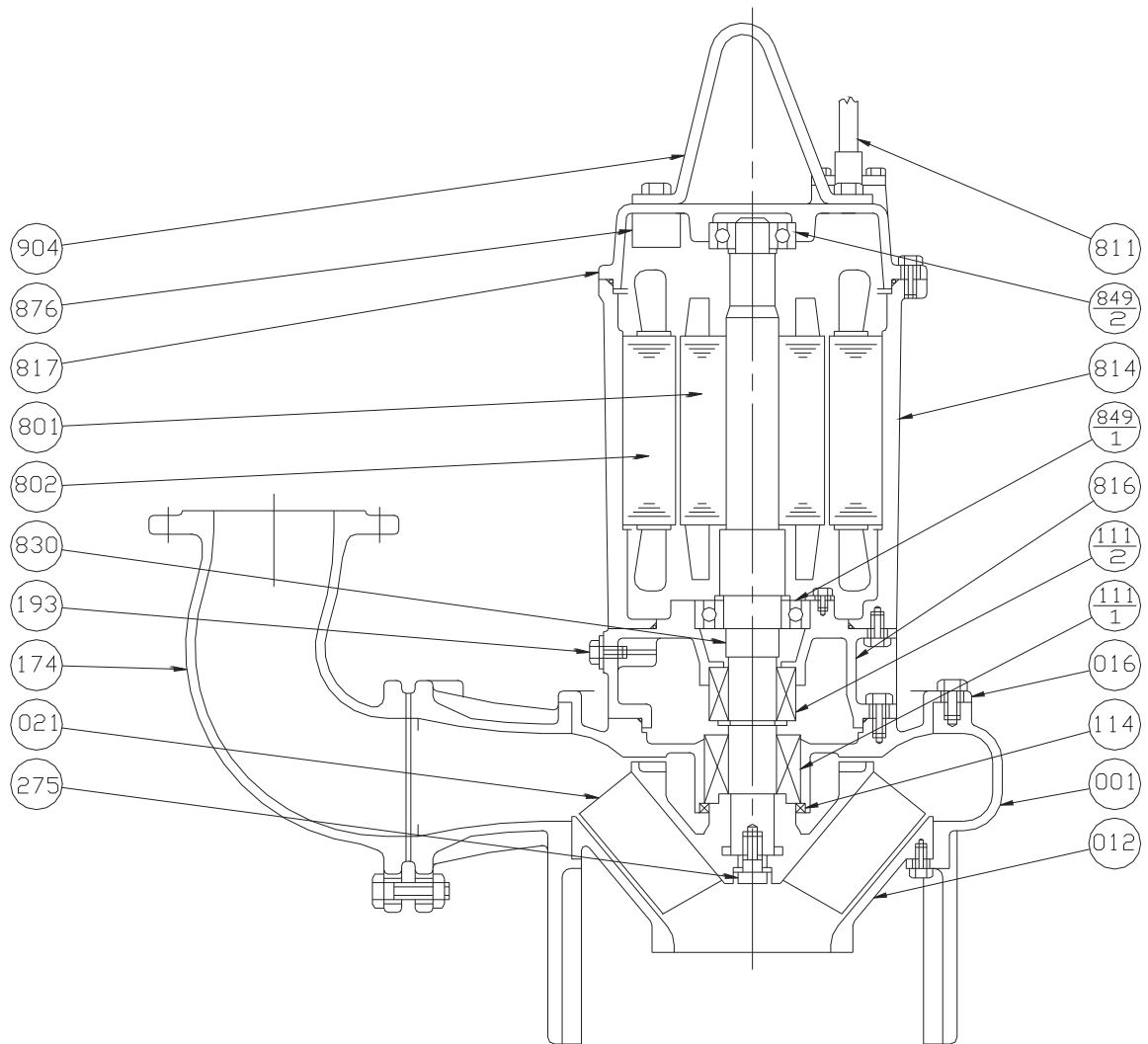


| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 111-1 | Mechanical Seal | | 1 |
| 111-2 | Mechanical Seal | | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 211 | Airvent Valve | C3604 Brass | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |

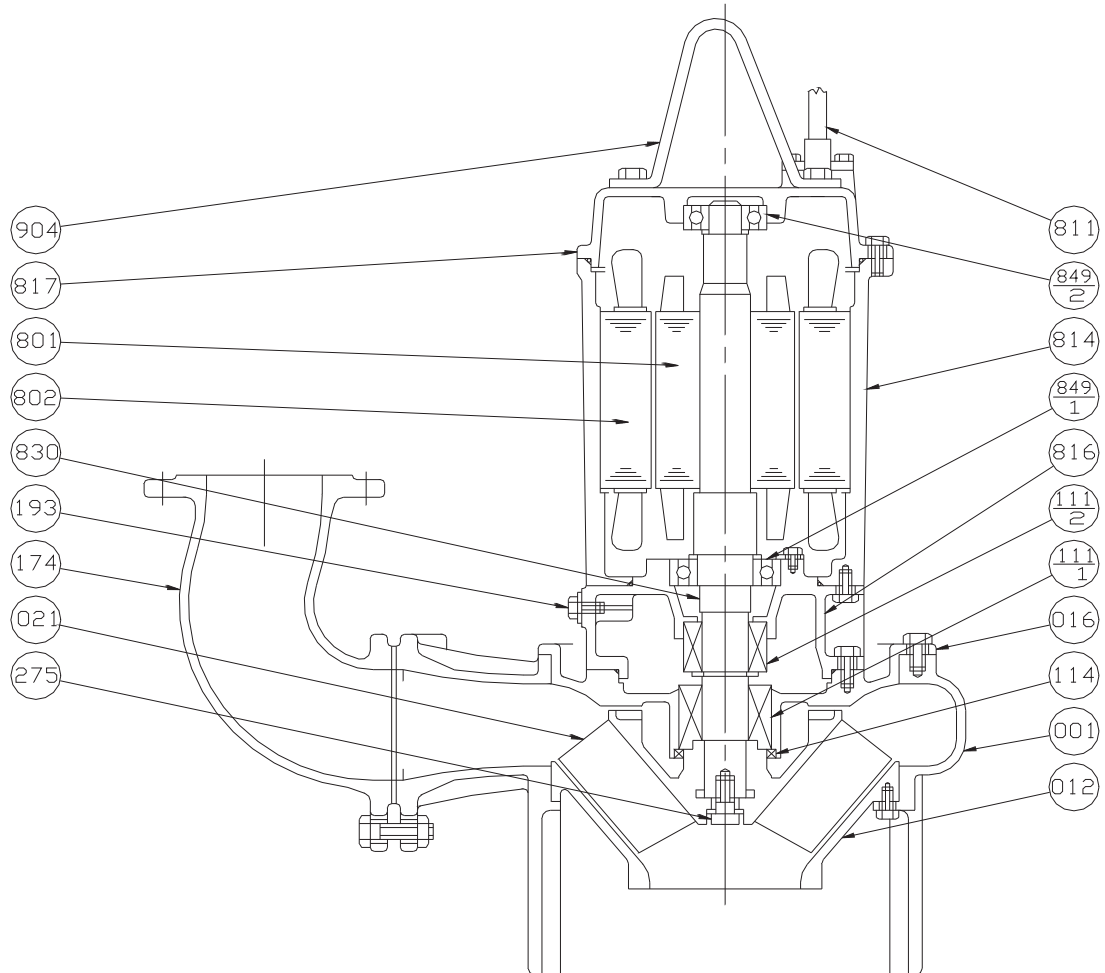
Sectional View - 250 DL 57.5

50Hz



| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 111-1 | Mechanical Seal | | 1 |
| 111-2 | Mechanical Seal | | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Protector Installed | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |

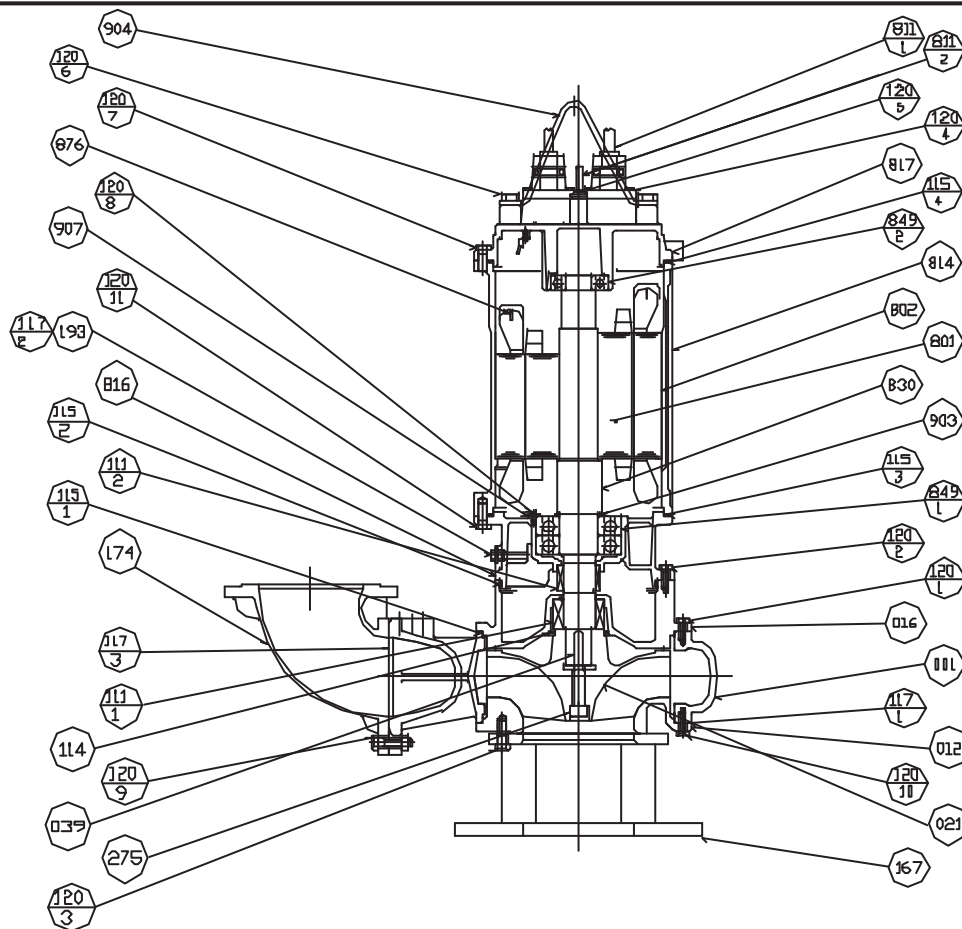


| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|--|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FC200 Cast iron | 1 |
| 111-1 | Mechanical Seal | | 1 |
| 111-2 | Mechanical Seal | | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 174 | Discharge Bend | FC200 Cast iron | 1 |
| 193 | Oil Plug | C3604 or SUS304 Brass or 304 Stainless Steel | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |

| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|------------------------|-------------------|
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811 | Submersible Cable | | 1 |
| 814 | Motor Frame | FC150 Cast Iron | 1 |
| 816 | Power Side Bracket | FC150 Cast Iron | 1 |
| 817 | Opposite Side Bracket | FC150 Cast Iron | 1 |
| 830 | Shaft | SUS403 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 904 | Lifting Hanger | SS Steel | 1 |

Sectional View - 150, 200 DL 30 - 45kW (WET PIT MODEL)

50Hz

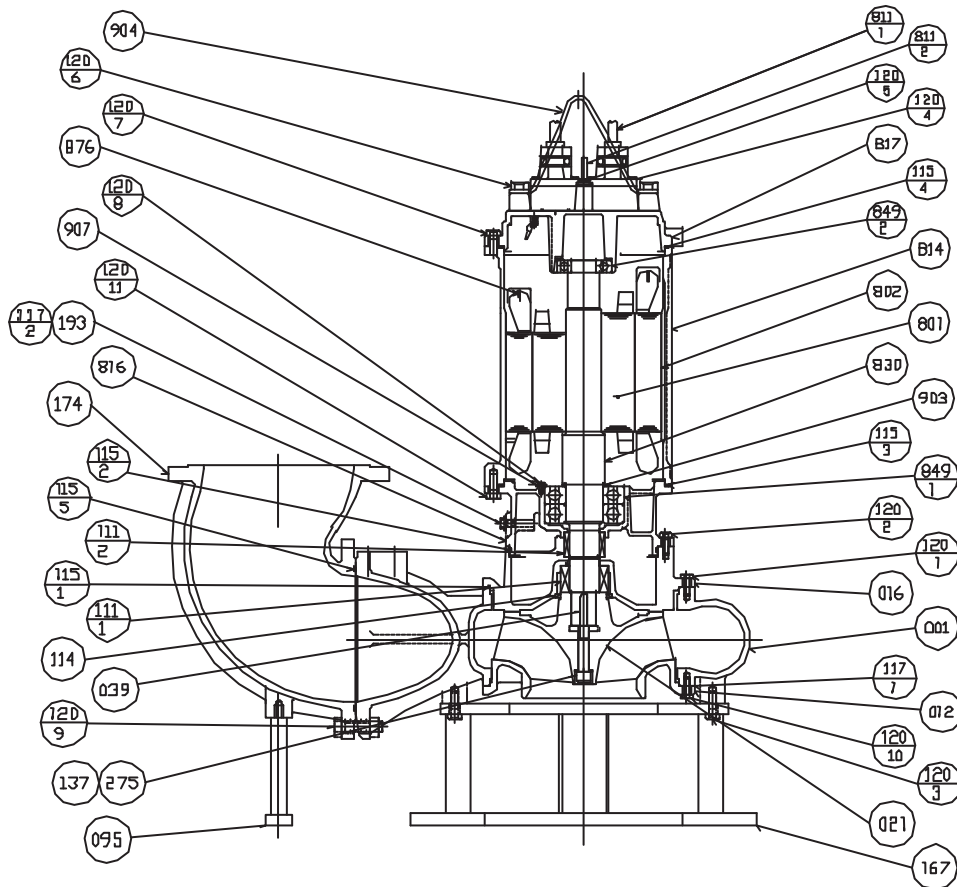


| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|---------------------------|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FCD 400 Ductile Cast iron | 1 |
| 039 | Key | SUS 420J2 Stainless Steel | 1 |
| 111-1 | Mechanical Seal | SiC/SiC | 1 |
| 111-2 | Mechanical Seal | Ceramics/Carbon | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 115-1 | O-Ring | NBR Rubber | 1 |
| 115-2 | O-Ring | NBR Rubber | 1 |
| 115-3 | O-Ring | NBR Rubber | 1 |
| 115-4 | O-Ring | NBR Rubber | 1 |
| 117-1 | Sheet Gasket | Joint Sheet | - |
| 117-2 | Plug Gasket | Joint Sheet | 2 |
| 117-3 | Flange Gasket | Joint Sheet | 1 |
| 120-1 | Bolt | SUS304 Stainless Steel | 12 |
| 120-2 | Bolt | SUS304 Stainless Steel | 4 |
| 120-3 | Bolt | SUS304 Stainless Steel | 8 |
| 120-4 | Bolt | SUS304 Stainless Steel | 8 |
| 120-5 | Bolt | SUS304 Stainless Steel | 2 |
| 120-6 | Bolt | SUS304 Stainless Steel | 2 |
| 120-7 | Bolt | SUS304 Stainless Steel | 6 |

| Item Number | Description | Material | Quantity per unit |
|-------------|----------------------------|---------------------------|-------------------|
| 120-8 | Bolt | SUS304 Stainless Steel | 4 |
| 120-9 | Bolt | SUS304 Stainless Steel | 4 |
| 120-10 | Bolt | SUS304 Stainless Steel | 12 |
| 120-11 | Bolt | SUS304 Stainless Steel | 6 |
| 167 | Pedestal | SS 400 Steel | 1 |
| 174 | Discharge Elbow | FC200 Cast iron | 1 |
| 193 | Oil Plug | SUS304 Stainless Steel | 2 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811-1 | Submersible Cable (Power) | | 1 |
| 811-2 | Submersible Cable (Signal) | | 1 |
| 814 | Motor Frame | FC200 Cast iron | 1 |
| 816 | Lower Bracket | FC200 Cast iron | 1 |
| 817 | Motor Cover | FC200 Cast iron | 1 |
| 830 | Shaft | SUS 420J2 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Thermal Protector | | 2 |
| 903 | Distance Piece | | 1 |
| 904 | Lifting Hanger | SS 400 Steel | 1 |
| 907 | Bearing Cover | SSPC Steel | 4 |

Sectional View - 250, 300 DL 30 - 45kW (WET PIT MODEL)

50Hz

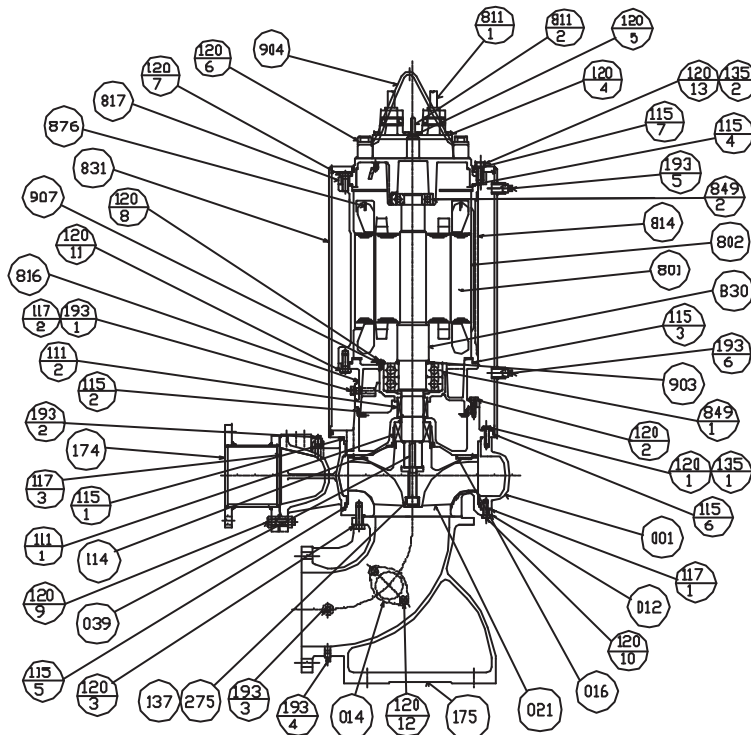


| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|---------------------------|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FCD 400 Ductile Cast iron | 1 |
| 039 | Key | SUS 420J2 Stainless Steel | 1 |
| 095 | Stay | SUS 304 Stainless Steel | 1 |
| 111-1 | Mechanical Seal | SiC/SiC | 1 |
| 111-2 | Mechanical Seal | Ceramics/Carbon | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 115-1 | O-Ring | NBR Rubber | 1 |
| 115-2 | O-Ring | NBR Rubber | 1 |
| 115-3 | O-Ring | NBR Rubber | 1 |
| 115-4 | O-Ring | NBR Rubber | 1 |
| 115-5 | O-Ring | NBR Rubber | 1 |
| 117-1 | Sheet Gasket | Joint Sheet | - |
| 117-2 | Plug Gasket | Joint Sheet | 2 |
| 120-1 | Bolt | SUS304 Stainless Steel | 12 |
| 120-2 | Bolt | SUS304 Stainless Steel | 4 |
| 120-3 | Bolt | SUS304 Stainless Steel | 8 |
| 120-4 | Bolt | SUS304 Stainless Steel | 8 |
| 120-5 | Bolt | SUS304 Stainless Steel | 2 |
| 120-6 | Bolt | SUS304 Stainless Steel | 2 |
| 120-7 | Bolt | SUS304 Stainless Steel | 6 |

| Item Number | Description | Material | Quantity per unit |
|-------------|----------------------------|---------------------------|-------------------|
| 120-8 | Bolt | SUS304 Stainless Steel | 4 |
| 120-9 | Bolt | SUS304 Stainless Steel | 4 |
| 120-10 | Bolt | SUS304 Stainless Steel | 12 |
| 120-11 | Bolt | SUS304 Stainless Steel | 6 |
| 137 | Washer | SUS304 Stainless Steel | 1 |
| 167 | Pedestal | SS 400 Steel | 1 |
| 174 | Discharge Elbow | FC200 Cast iron | 1 |
| 193 | Oil Plug | SUS304 Stainless Steel | 2 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811-1 | Submersible Cable (Power) | | 1 |
| 811-2 | Submersible Cable (Signal) | | 1 |
| 814 | Motor Frame | FC200 Cast iron | 1 |
| 816 | Lower Bracket | FC200 Cast iron | 1 |
| 817 | Motor Cover | FC200 Cast iron | 1 |
| 830 | Shaft | SUS 420J2 Stainless Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Thermal Protector | | 2 |
| 903 | Distance Piece | | 1 |
| 904 | Lifting Hanger | SS 400 Steel | 1 |
| 907 | Bearing Cover | SPPC Steel | 4 |

Sectional View - 150,200 DL 30 - 45kW (DRY PIT MODEL)

50Hz

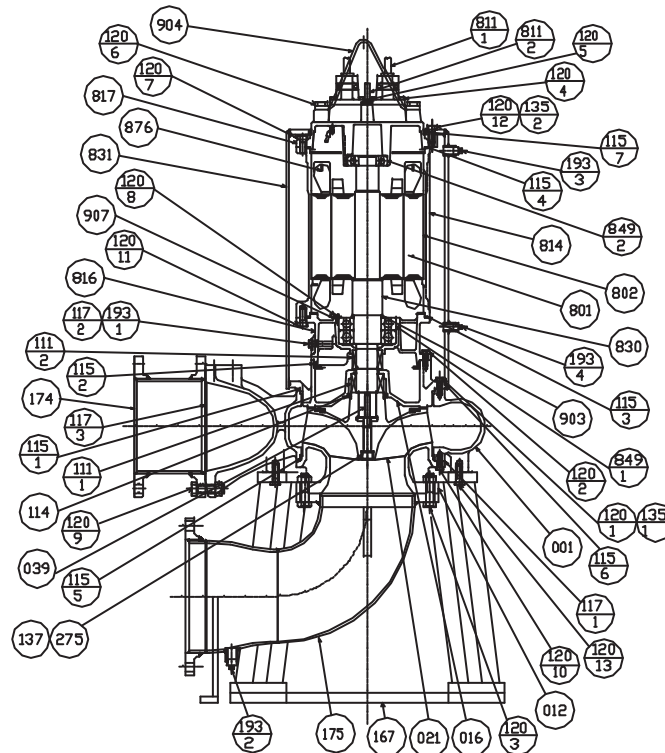


| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|---------------------------|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | FC200 Cast Iron | 1 |
| 014 | Drain Cover | FC200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FCD 400 Ductile Cast iron | 1 |
| 039 | Key | SUS 420J2 Stainless Steel | 1 |
| 111-1 | Mechanical Seal | SiC/SiC | 1 |
| 111-2 | Mechanical Seal | Ceramics/Carbon | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 115-1 | O-Ring | NBR Rubber | 1 |
| 115-2 | O-Ring | NBR Rubber | 1 |
| 115-3 | O-Ring | NBR Rubber | 1 |
| 115-4 | O-Ring | NBR Rubber | 1 |
| 115-5 | O-Ring | NBR Rubber | 1 |
| 115-6 | O-Ring | NBR Rubber | 1 |
| 115-7 | O-Ring | NBR Rubber | 1 |
| 117-1 | Sheet Gasket | Joint Sheet | - |
| 117-2 | Plug Gasket | Joint Sheet | 2 |
| 117-3 | Flange Gasket | Joint Sheet | 1 |
| 120-1 | Bolt | SUS304 Stainless Steel | 12 |
| 120-2 | Bolt | SUS304 Stainless Steel | 4 |
| 120-3 | Bolt | SUS304 Stainless Steel | 8 |
| 120-4 | Bolt | SUS304 Stainless Steel | 8 |
| 120-5 | Bolt | SUS304 Stainless Steel | 2 |
| 120-6 | Bolt | SUS304 Stainless Steel | 2 |
| 120-7 | Bolt | SUS304 Stainless Steel | 6 |
| 120-8 | Bolt | SUS304 Stainless Steel | 4 |
| 120-9 | Bolt | SUS304 Stainless Steel | 4 |
| 120-10 | Bolt | SUS304 Stainless Steel | 12 |
| 120-11 | Bolt | SUS304 Stainless Steel | 6 |

| Item Number | Description | Material | Quantity per unit |
|-------------|----------------------------|---------------------------|-------------------|
| 120-12 | Bolt | SUS304 Stainless Steel | 2 |
| 120-13 | Bolt | SUS304 Stainless Steel | 6 |
| 135-1 | Seal Washer | SUS304 Stainless Steel | 12 |
| 135-2 | Seal Washer | SUS304/NBR | 6 |
| 137 | Washer | SUS304/NBR | 1 |
| 174 | Discharge Elbow | FC200 Cast iron | 1 |
| 175 | Suction Elbow | FC200 Cast iron | 1 |
| 193-1 | Oil Plug | SUS304 Stainless Steel | 2 |
| 193-2 | Plug | SUS304 Stainless Steel | 1 |
| 193-3 | Plug | SUS304 Stainless Steel | 1 |
| 193-4 | Plug | SUS304 Stainless Steel | 1 |
| 193-5 | Plug | SUS304 Stainless Steel | 1 |
| 193-6 | Plug | SUS304 Stainless Steel | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811-1 | Submersible Cable (Power) | | 1 |
| 811-2 | Submersible Cable (Signal) | | 1 |
| 814 | Motor Frame | FC200 Cast iron | 1 |
| 816 | Lower Bracket | FC200 Cast iron | 1 |
| 817 | Motor Cover | FC200 Cast iron | 1 |
| 830 | Shaft | SUS 420J2 Stainless Steel | 1 |
| 831 | Water Jacket | Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Thermal Protector | | 2 |
| 903 | Distance Piece | | 1 |
| 904 | Lifting Hanger | SS 400 Steel | 1 |
| 907 | Bearing Cover | SSPC Steel | 4 |

Sectional View - 250,300 DL 30 - 45kW (DRY PIT MODEL)

50Hz



| Item Number | Description | Material | Quantity per unit |
|-------------|-----------------------|---------------------------|-------------------|
| 001 | Pump Casing | FC200 Cast iron | 1 |
| 012 | Suction Cover | Fc200 Cast Iron | 1 |
| 016 | Mechanical Seal Cover | FC200 Cast iron | 1 |
| 021 | Impeller | FCD 400 Ductile Cast iron | 1 |
| 039 | Key | SUS 420J2 Stainless Steel | 1 |
| 095 | Stay | SUS 304 Stainless Steel | 1 |
| 111-1 | Mechanical Seal | SiC/SiC | 1 |
| 111-2 | Mechanical Seal | Ceramics/Carbon | 1 |
| 114 | Oil Seal | NBR Rubber | 1 |
| 115-1 | O-Ring | NBR Rubber | 1 |
| 115-2 | O-Ring | NBR Rubber | 1 |
| 115-3 | O-Ring | NBR Rubber | 1 |
| 115-4 | O-Ring | NBR Rubber | 1 |
| 115-5 | O-Ring | NBR Rubber | 1 |
| 115-6 | O-Ring | NBR Rubber | 1 |
| 115-7 | O-Ring | NBR Rubber | 1 |
| 117-1 | Sheet Gasket | Joint Sheet | - |
| 117-2 | Plug Gasket | Joint Sheet | 2 |
| 117-3 | Flange Gasket | Joint Sheet | 1 |
| 120-1 | Bolt | SUS304 Stainless Steel | 12 |
| 120-2 | Bolt | SUS304 Stainless Steel | 4 |
| 120-3 | Bolt | SUS304 Stainless Steel | 8 |
| 120-4 | Bolt | SUS304 Stainless Steel | 8 |
| 120-5 | Bolt | SUS304 Stainless Steel | 2 |
| 120-6 | Bolt | SUS304 Stainless Steel | 2 |
| 120-7 | Bolt | SUS304 Stainless Steel | 6 |
| 120-8 | Bolt | SUS304 Stainless Steel | 4 |
| 120-9 | Bolt | SUS304 Stainless Steel | 4 |
| 120-10 | Bolt | SUS304 Stainless Steel | 12 |
| 120-11 | Bolt | SUS304 Stainless Steel | 6 |

| Item Number | Description | Material | Quantity per unit |
|-------------|----------------------------|---------------------------|-------------------|
| 120-12 | Bolt | SUS304 Stainless Steel | 2 |
| 120-13 | Bolt | SUS304 Stainless Steel | 6 |
| 135-1 | Seal Washer | SUS304 Stainless Steel | 12 |
| 135-2 | Seal Washer | SUS304/NBR | 6 |
| 137 | Washer | SUS304/NBR | 1 |
| 167 | Pedestal | SS 400 Steel | 1 |
| 174 | Discharge Elbow | FC200 Cast iron | 1 |
| 175 | Suction Elbow | FC200 Cast iron | 1 |
| 193-1 | Oil Plug | SUS304 Stainless Steel | 2 |
| 193-2 | Plug | SUS304 Stainless Steel | 1 |
| 193-3 | Plug | SUS304 Stainless Steel | 1 |
| 193-4 | Plug | SUS304 Stainless Steel | 1 |
| 275 | Impeller Bolt | SUS304 Stainless Steel | 1 |
| 801 | Rotor | | 1 |
| 802 | Stator | | 1 |
| 811-1 | Submersible Cable (Power) | | 1 |
| 811-2 | Submersible Cable (Signal) | | 1 |
| 814 | Motor Frame | FC200 Cast iron | 1 |
| 816 | Lower Bracket | FC200 Cast iron | 1 |
| 817 | Motor Cover | FC200 Cast iron | 1 |
| 830 | Shaft | SUS 420J2 Stainless Steel | 1 |
| 831 | Water Jacket | Steel | 1 |
| 849-1 | Ball Bearing | | 1 |
| 849-2 | Ball Bearing | | 1 |
| 876 | Thermal Protector | | 2 |
| 903 | Distance Piece | | 1 |
| 904 | Lifting Hanger | SS 400 Steel | 1 |
| 907 | Bearing Cover | SSPC Steel | 4 |