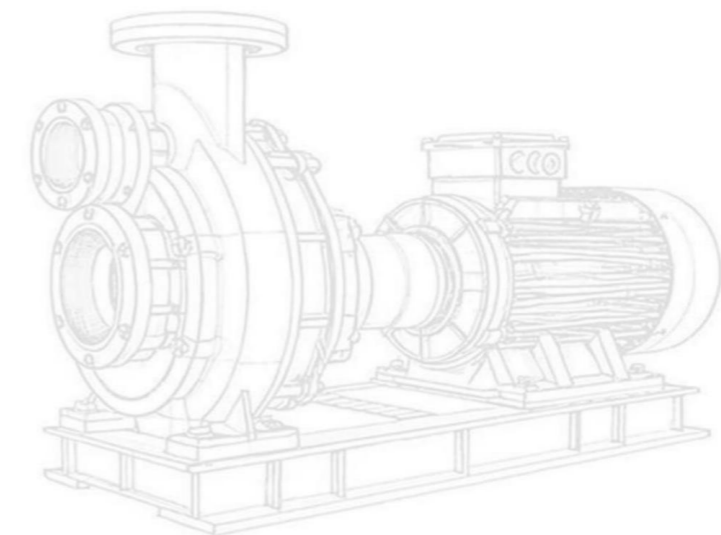




Innovative Fluid Solutions
The Choice of Trust

PRODUCT CATALOG



Anhui Changyu Pump And Valve Manufacturing Co., Ltd.

Anhui Changyu Pump And Valve Manufacturing Co., Ltd.

Contact address: Jingxian Economic Development Zone
,Xuancheng City, Anhui Province

TEL:+86 13651913727

Web: www.changyupump.com

Email: jade@changyupump.com



whatsapp

CORPORATE INTRO

2006

Anhui Changyu Chemical Pump Valve Co., Ltd. was established to start the journey of the chemical pump and valve industry.

2008

Successfully developed the first UHB-ZK type corrosion-resistant and wear-resistant mortar pump independently, and put it into production.

2009

Firstly passed the ISO9001 quality management system certification, laying the foundation for quality.

2011

Independently developed FYH type corrosion-resistant and wear-resistant submersible pump fills the market gap.

2012

Develop and mass-produce CYQ type fluoroplastic magnetic pump, and the capacity has reached a new weight.

2014

Develop large flow, high lift chemical pumps with a caliber of 250 to expand the product application field.

2015

The company renamed to "Anhui Changyu Pump and Valve Manufacturing Co., Ltd." and embarked on the road of brand upgrading. It was honored the title of National High-tech Enterprise and won the title of "Anhui Province Special Small and Medium-sized Enterprises" for the first time.

The products were selected the "Five Hundred" recommendation catalog of the national industrial field energy-saving and environmental protection industry.

2021

Fully activate the Zhibang International ERP system, achieving integrated and digitalized management of sales, production, procurement, quality inspection, warehouse and finance.

2024

Successfully passed the ISO 14001 environmental management system and ISO45001 occupational health and safety management system certification.

20000+ M²

Floor area

40+ YEARS

Industry experience

20000+ UNITS

Annual production capacity

100+ Certificates

Enterprise certificate

EJ/EJZ/EJD Series Self-Priming Sewage Pump

EJ Series Self-Priming Sewage Pumps are redesigned based on European standards for performance and dimensions. These pumps feature self-priming capability, and the pump body includes a service access port for easy maintenance and debris removal. An abrasion-resistant plate is incorporated to extend the pump's service life.

The series is suitable for pumping mixed liquids containing abrasive solid particles, with a maximum liquid viscosity of 50 mm²/s. They are widely used in industrial applications, urban engineering, marine transport, and waste treatment, for conveying various neutral or alkaline, clean or contaminated liquids—such as sand-laden water, slurry, or other suspensions, low-viscosity petroleum products, lime slurry, sodium hydroxide, as well as wastewater generated from cleaning, cooling, circulation, flue gas purification, or medical emergency systems.

The EJZ Series Self-Priming Sewage Pump is a derivative of the E Series, featuring a motor shaft directly inserted into the pump shaft bore for drive transmission. The high coaxiality between the pump and motor shafts, along with excellent dynamic and static balance of the impeller, ensures smooth and stable operation. It uses an IEC standard B34 three-phase motor, and compared to the E Series, the EJZ Series has a significantly shorter axial length, reducing floor space requirements.

The EJD Series Self-Priming Sewage Pump Set connects the pump shaft and motor shaft via a coupling, and employs an IEC standard B3 mounting configuration for the three-phase motor, enabling very convenient maintenance.

Both the EJ and EJZ Series feature simple structure, reliable performance, compact size, and light weight. They offer a maximum self-priming height of up to 7 meters, low energy consumption, and easy operation and maintenance.

Inlet and Outlet Diameter: DN = 40–200 mm

Speed: 1450–3600 rpm; lower speeds available upon special request

Flow Rate: 2–130 L/s

Head: 4–55 m

Temperature Range: -10°C to 80°C

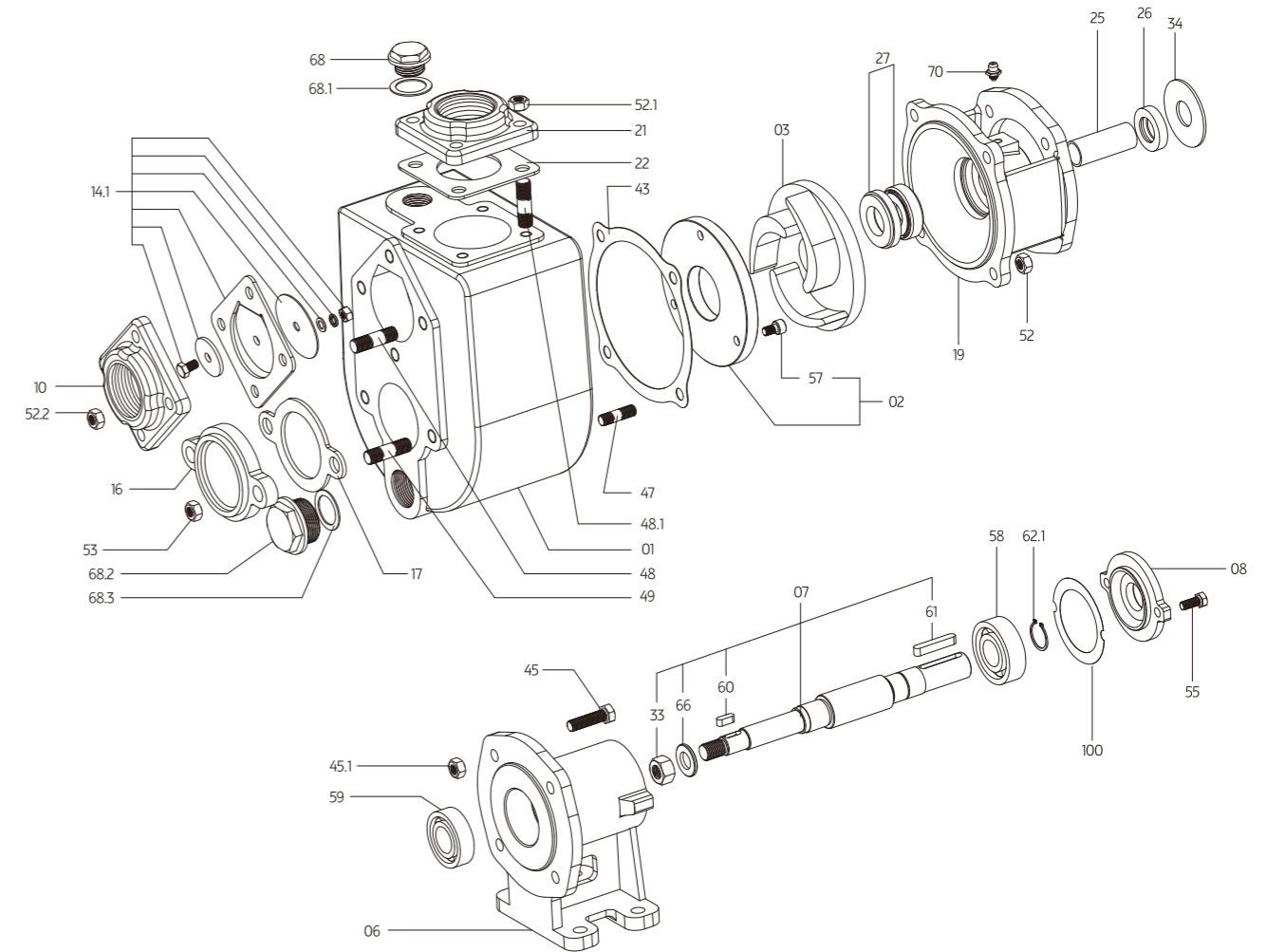
Self-Priming Height: 3–7 m

Operating Pressure: 6 bar

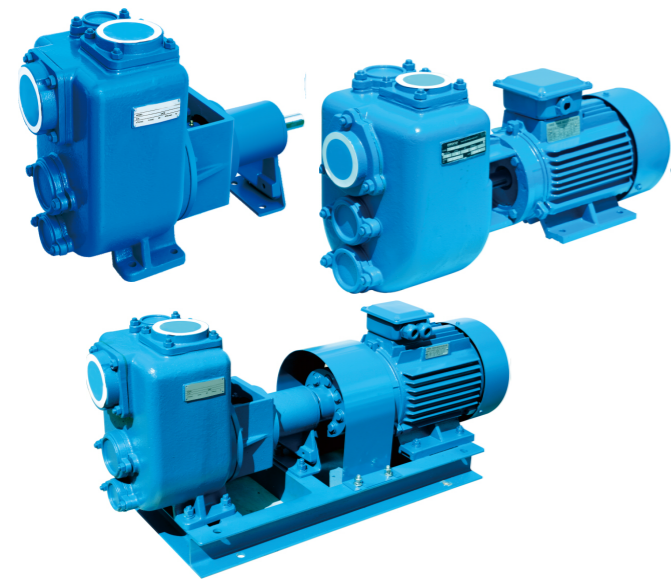
Solid Particle Size: 76 mm

EJ40-110 EJ50-120 EJ80-215 EJ100-160(A)

Explosion diagram of a self-priming sewage pump

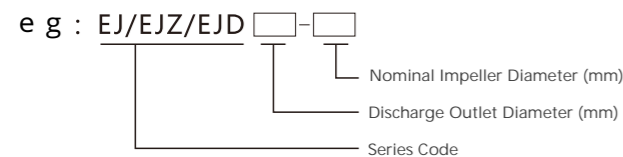


| Number | Name | Number | Name | Number | Name | Number | Name |
|--------|----------------------------|--------|----------------------|--------|----------------------------|--------|-----------------------|
| 1 | Pump body | 14.1 | Elastic washer | 45 | Bolts | 59 | Bearings |
| 2 | Wear-resistant plate | | Nut | 45.1 | Nuts | 60 | Keys |
| 3 | Impeller | 16 | Repair hole cover | 47 | Studs | 61 | Shaft retaining rings |
| 6 | Bracket | 17 | Repair hole gasket | 48 | Studs | 62.1 | Flat washers |
| 7 | Shaft | 19 | Pump cover | 48.1 | Studs | 66 | Plugs |
| 8 | Bearing cover | 21 | Outlet flange | 49 | Studs | 68 | O-rings |
| 10 | Inlet flange | 22 | Outlet flange sleeve | 52 | Nuts | 68.1 | O-rings |
| 14.1 | Check valve elastic gasket | 25 | Shaft sleeve | 52.1 | Nuts | 68.2 | Plugs |
| | Check valve plate | 26 | Skeleton oil seal | 52.2 | Nuts | 68.3 | Plug seals |
| 14.1 | Bolt | 27 | Mechanical seal | 53 | Nuts | 70 | Oil cups |
| | Flat washer | 33 | Anti-loosening nut | 55 | Bolts | 100 | Bearing cap gaskets |
| | | 34 | Water slinger ring | 57 | Hex socket head cap screws | | |
| | | 43 | Pump cover gasket | 58 | Bearings | | |



1. Main technical parameters

Model Designation :



Pump rotation direction: When viewed from the drive end, the pump rotates clockwise; when viewed from the suction inlet, it rotates counterclockwise.

2. Material for main parts

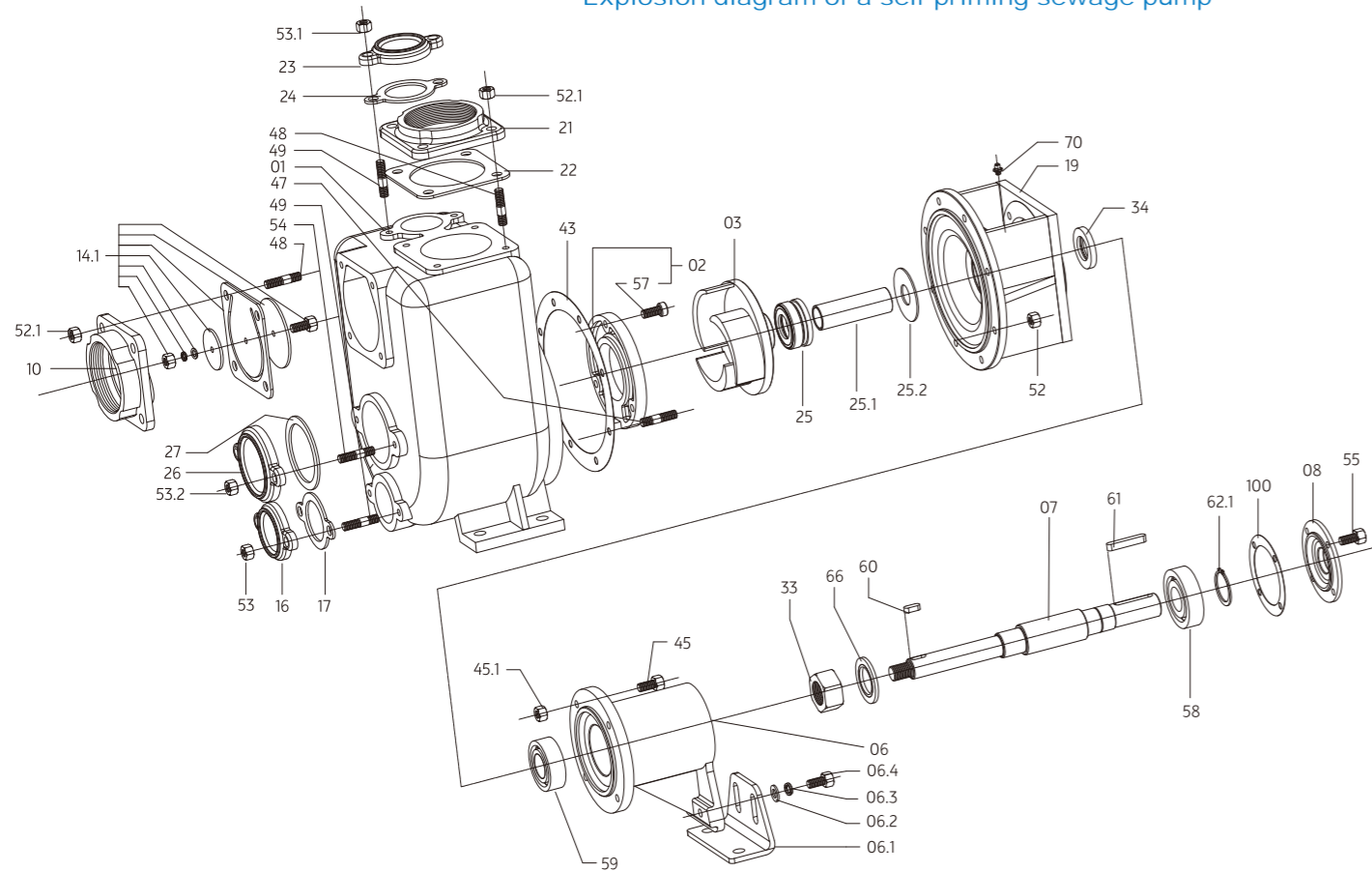
| Part Name | Standard materials | Optional materials |
|--------------|---------------------|------------------------------------|
| Pump body | Gray cast iron | Ductile iron |
| Impeller | Ductile cast iron | Bronze, 304/316 stainless steel |
| Shaft | 45# steel | 2Cr13/40Cr/304/316 stainless steel |
| Shaft sleeve | 304 stainless steel | 316 stainless steel |
| Shaft seal | Mechanical seal | \ |

3. Pump Structural Features

| | |
|-----------------|--|
| Design | Performance and dimensions conform to European standards. |
| Structural Form | Semi-open impeller, pump body with repair hole, and wear-resistant plate; single-stage self-priming centrifugal pump. |
| Flange | For inlet and outlet diameters of 100mm and below, threaded flanges are used; for diameters above 100mm, non-standard flanges are used (the pump comes with its own flange). |
| Shaft Seal | mechanical seal bearings Imported high-quality bearings are selected, and grease lubrication is used. |

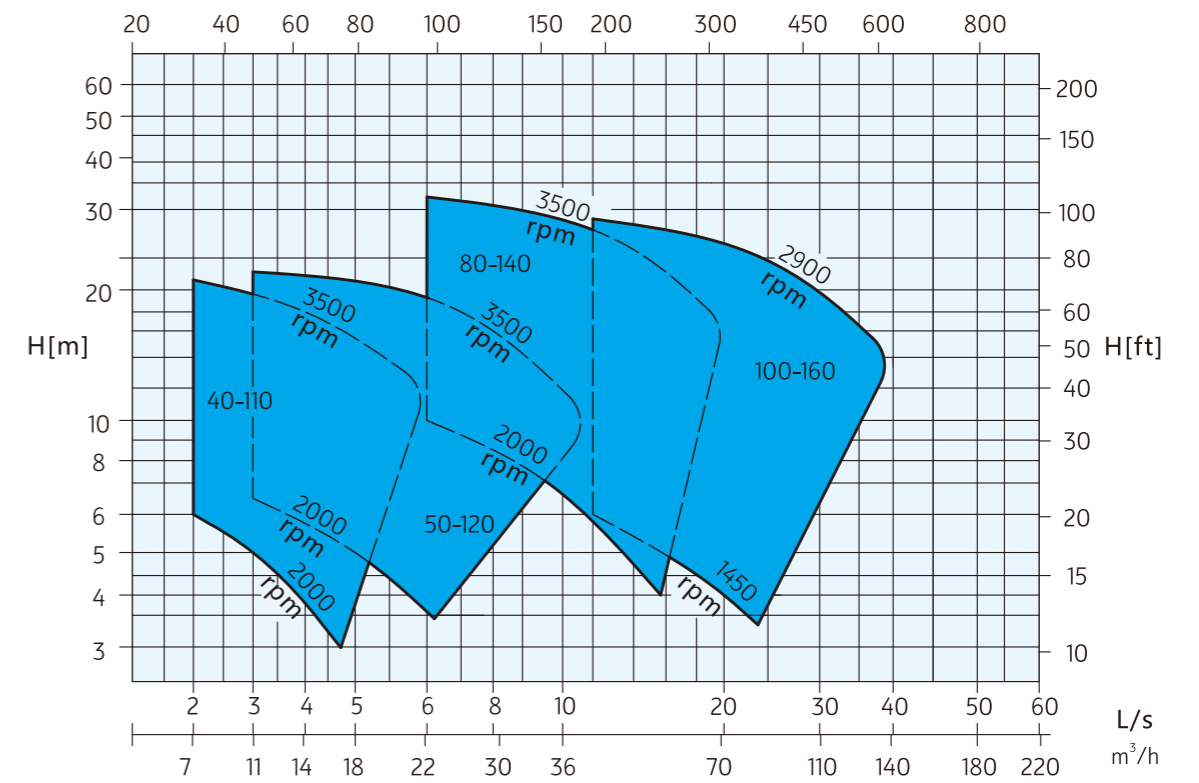
EJ80-140 EJ100-250 EJ150-250 EJ150-400 EJ200-300

Explosion diagram of a self-priming sewage pump

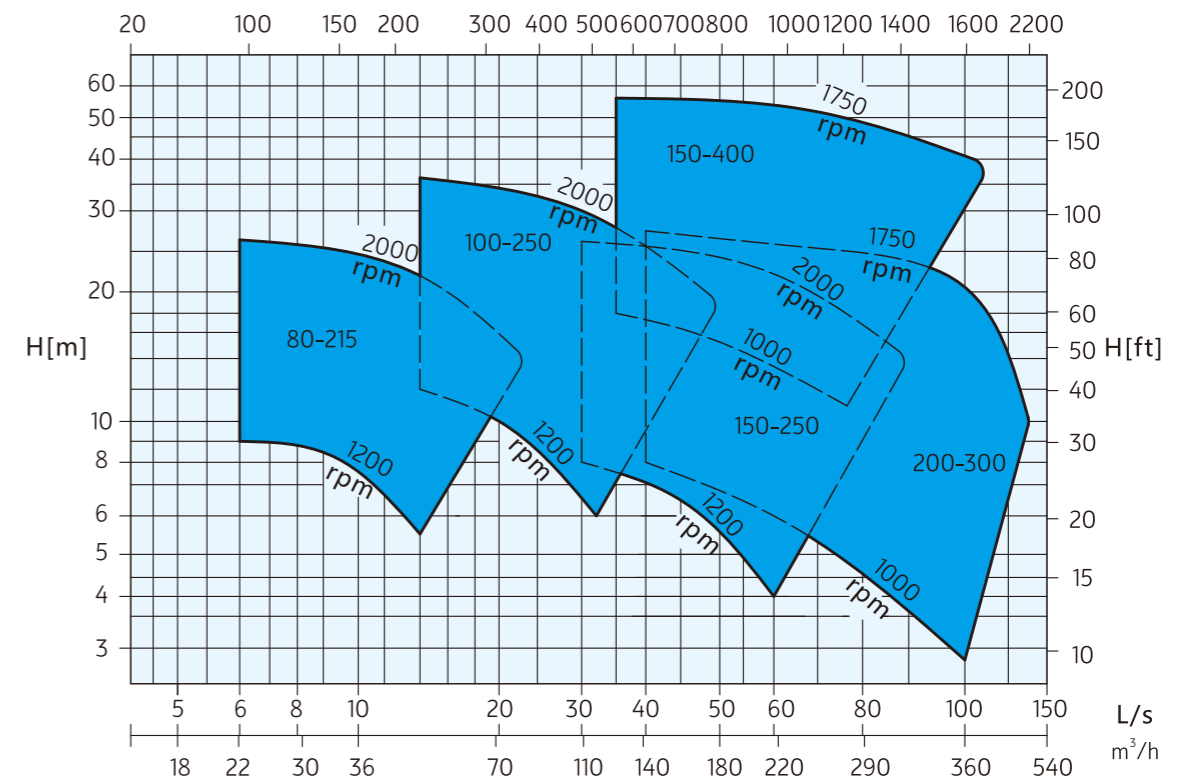


| Number | Name | Number | Name | Number | Name | Number | Name |
|--------|----------------------------|--------|--------------------------------|--------|--------------------------|--------|----------------------------|
| 1 | Pump body | 14.1 | Bolts | 25.1 | Shaft sleeve | 53 | Nuts |
| 2 | Wear-resistant plate | | Flat Washers | 25.2 | Skeleton shaft seal | 53.1 | Nuts |
| 3 | Impeller | | Elastic Washers | 26 | Repair hole cover | 53.2 | Nuts |
| 6 | Bracket | | Nuts | 27 | Repair hole cover gasket | 54 | Studs |
| 6.1 | Pump bracket | 16 | Maintenance Hole Covers | 33 | Anti-loosening nut | 55 | Bolts |
| 6.2 | Flat washer | 17 | Maintenance Hole Cover Gaskets | 34 | Water slinger ring | 57 | Hex socket head cap screws |
| 6.3 | Elastic washer | 19 | Pump Covers | 43 | Pump cover gasket | 58 | Bearings |
| 6.4 | Bolt | 21 | Outlet Flanges | 45 | Bolt | 59 | Bearings |
| 7 | Shaft | 22 | Outlet Flange Gaskets | 45.1 | Nut | 60 | Keys |
| 8 | Bearing cover | 23 | Maintenance Hole Covers | 47 | Stud | 61 | Keys |
| 10 | Inlet flange | 24 | Maintenance Hole Cover Gaskets | 48 | Stud | 62.1 | Shaft retaining rings |
| 14.1 | Check valve elastic gasket | 25 | Mechanical Seals | 49 | Stud | 66 | Flat washers |
| | Check valve plate | | | 52 | Nut | 70 | Oil cups |
| | Check valve plate | | | 52.1 | Nut | 100 | Bearing cap washers |

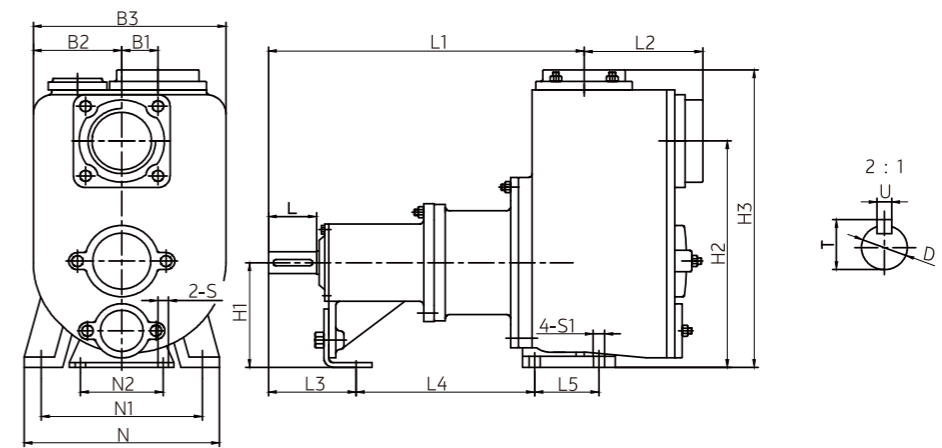
Q(US.G.P.M)



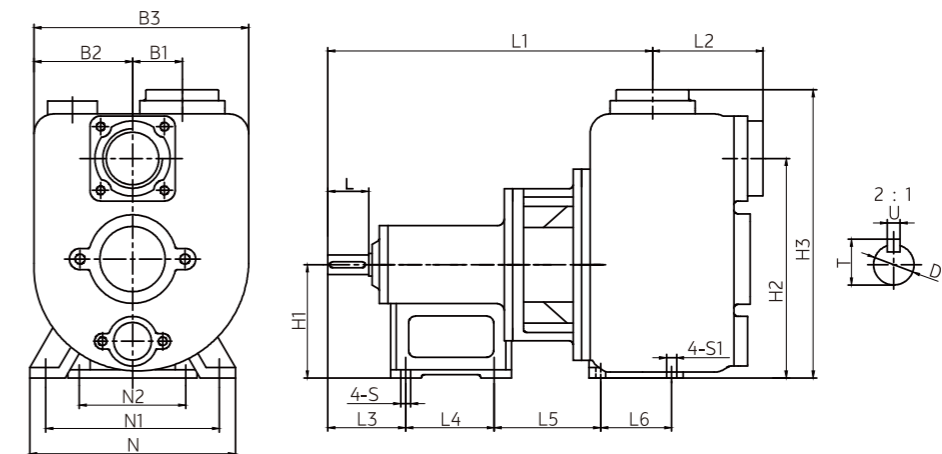
Q(US.G.P.M)



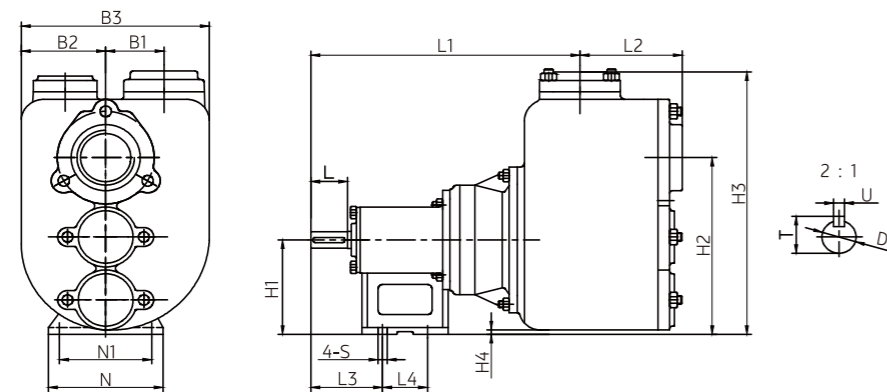
| Model | Inlet/Outlet | | Particle Size | Flow | Head | Speed | Power |
|------------|--------------|--------|---------------|------|------|-------|-------|
| | mm | in | | | | | |
| EJ40-110 | 40 | 1 1/2" | 20 | 7 | 14 | 2900 | 1.1 |
| | | | | 14 | 11 | | |
| | | | | 19 | 8 | | |
| EJ50-120 | 50 | 2" | 25 | 13 | 15 | 2900 | 2.2 |
| | | | | 25 | 11 | | |
| | | | | 34 | 8 | | |
| EJ80-140 | 80 | 3" | 28 | 24 | 21 | 2900 | 5.5 |
| | | | | 43 | 18 | | |
| | | | | 63 | 12 | | |
| EJ80-215 | 80 | 3" | 40 | 25 | 13 | 1450 | 4 |
| | | | | 44 | 11 | | |
| | | | | 60 | 8 | | |
| EJ100-160 | 100 | 4" | 45 | 50 | 27 | 2900 | 15 |
| | | | | 100 | 23 | | |
| | | | | 130 | 18 | | |
| EJ100-160A | 100 | 4" | 45 | 50 | 24.5 | 2900 | 15 |
| | | | | 100 | 20 | | |
| | | | | 130 | 14 | | |
| EJ100-250 | 100 | 4" | 50 | 50 | 18 | 1450 | 7.5 |
| | | | | 100 | 14 | | |
| | | | | 130 | 10 | | |
| EJ150-250 | 150 | 6" | 76 | 95 | 13 | 1450 | 11 |
| | | | | 200 | 10 | | |
| | | | | 230 | 8 | | |
| EJ150-400 | 150 | 6" | 50 | 150 | 37 | 1450 | 45 |
| | | | | 200 | 36 | | |
| | | | | 310 | 30 | | |
| EJ200-300 | 200 | 8" | 60 | 150 | 18.5 | 1450 | 22 |
| | | | | 300 | 14 | | |
| | | | | 380 | 10 | | |



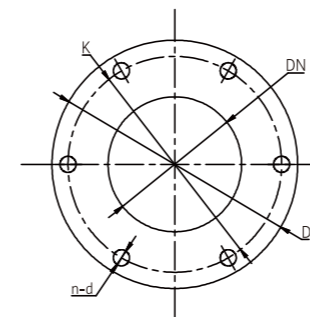
| Model | External dimensions | | | | | | Installation dimensions | | | | | | | | | | | Shaft extension end dimensions | | | Weight |
|-----------|---------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------------------|----|-----|--------|
| | B1 | B2 | B3 | L1 | L2 | H1 | H2 | H3 | N2 | N1 | N | L | L3 | L4 | L5 | s1 | s | T | U | D | |
| EJ80-140 | 45 | 110 | 240 | 392 | 148 | 132 | 289 | 381 | 90 | 200 | 245 | 60 | 109 | 222 | 80 | Φ14 | Φ14 | 31 | 8 | Φ28 | 55 |
| EJ100-250 | 160 | 180 | 420 | 469 | 275 | 200 | 350 | 487 | 110 | 295 | 340 | 80 | 138 | 347 | 95 | Φ14 | Φ15 | 35 | 10 | Φ32 | 148 |
| EJ150-250 | 90 | 220 | 480 | 566 | 292 | 250 | 454 | 590 | 110 | 350 | 410 | 80 | 138 | 322 | 170 | Φ18 | Φ18 | 59 | 16 | Φ55 | 261 |
| EJ150-400 | 280 | 280 | 700 | 700 | 365 | 350 | 645 | 795 | 150 | 450 | 510 | 110 | 180 | 478 | 200 | Φ18 | Φ18 | 59 | 16 | Φ55 | 445 |
| EJ200-300 | 75 | 288 | 575 | 822 | 232 | 315 | 535 | 720 | 150 | 450 | 510 | 110 | 165 | 499 | 200 | Φ18 | Φ18 | 45 | 12 | Φ42 | 395 |



| Model | External dimensions | | | | | | Installation dimensions | | | | | | | | | | | Shaft extension end dimensions | | | Weight | |
|----------|---------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|--------------------------------|----|---|--------|----|
| | B1 | B2 | B3 | L1 | L2 | H1 | H2 | H3 | N2 | N1 | N | L | L3 | L4 | L5 | L6 | s1 | s | T | U | | D |
| EJ80-215 | 70 | 139 | 303 | 458 | 155 | 160 | 310 | 410 | 150 | 245 | 290 | 60 | 110 | 125 | 150 | 100 | Φ14 | Φ14 | 31 | 8 | Φ28 | 75 |



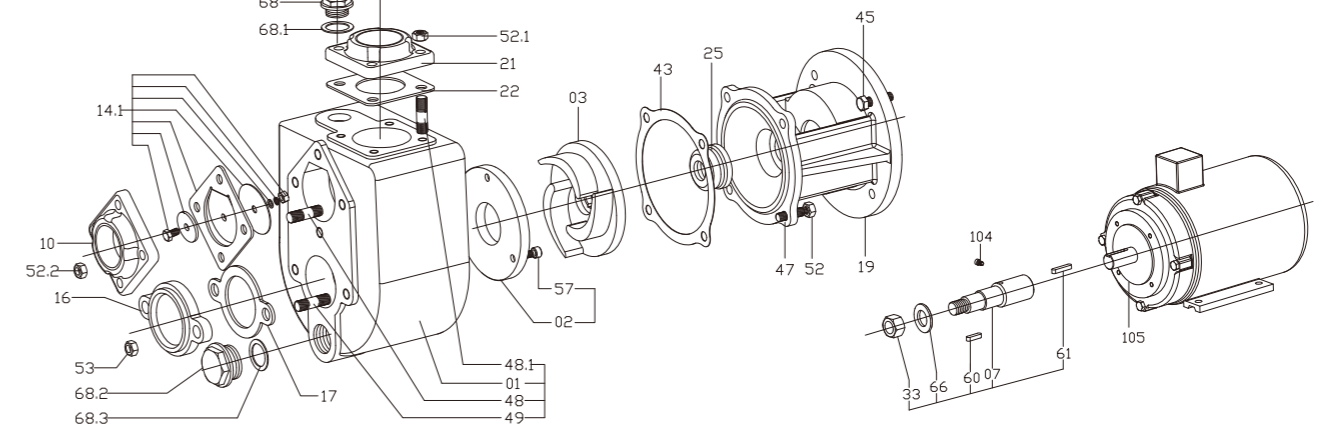
| Model | External dimensions | | | | | | Installation dimensions | | | | | | | | | | | Shaft extension end dimensions | | | Weight |
|-----------|---------------------|-----|-----|-----|-----|-----|-------------------------|-----|----|----|-----|-----|-----|-----|-----|------|---|--------------------------------|-----|--|--------|
| | B1 | B2 | B3 | L1 | L2 | H1 | H2 | H3 | H4 | L | N1 | N | L3 | L4 | s | T | U | D | kg | | |
| EJ40-110 | 30 | 80 | 173 | 263 | 75 | 90 | 163 | 240 | -5 | 40 | 80 | 102 | 70 | 50 | Φ10 | 21.5 | 6 | Φ19 | 19 | | |
| EJ50-120 | 36 | 94 | 210 | 300 | 114 | 110 | 206 | 306 | 5 | 41 | 103 | 128 | 80 | 50 | Φ12 | 21.5 | 6 | Φ19 | 31 | | |
| EJ100-160 | 37 | 150 | 300 | 442 | 180 | 160 | 341 | 462 | 10 | 60 | 150 | 182 | 110 | 125 | Φ14 | 31 | 8 | Φ28 | 130 | | |



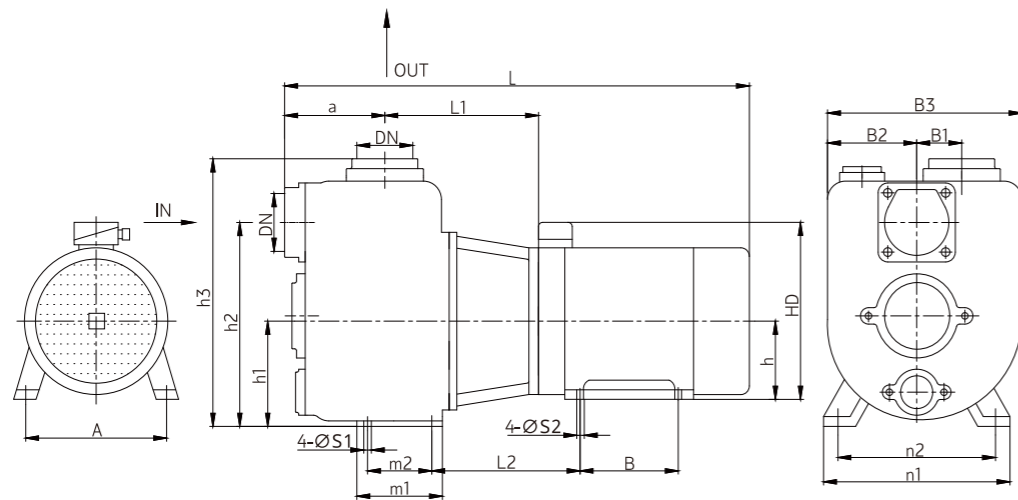
| Model | Imported flange (mm) | | | | Export flange (mm) | | | |
|-----------|----------------------|------|------|-------|--------------------|------|------|-------|
| | DN | D | K | n-d | DN | D | K | n-d |
| EJ40-110 | RP1 1/2 | | | | RP1 1/2 | | | |
| EJ50-120 | RP2 | | | | RP2 | | | |
| EJ80-140 | RP3 | -- | -- | -- | RP3 | -- | -- | -- |
| EJ80-215 | | | | | RP3 | | | |
| EJ100-160 | RP4 | -- | -- | -- | RP4 | -- | -- | -- |
| EJ100-250 | | | | | RP4 | | | |
| EJ150-250 | Φ150 | Φ276 | Φ240 | 6-Φ18 | Φ150 | Φ276 | Φ240 | 6-Φ18 |
| EJ200-300 | Φ200 | Φ320 | Φ280 | 8-Φ18 | Φ200 | Φ320 | Φ280 | 8-Φ18 |

| Model | Inlet/Outlet Particle Size | | Flow mm | Head m ³ /h | Speed m | Speed rpm | Power kw |
|-------------|----------------------------|--------|------------|---------------------------|------------|--------------|-------------|
| | mm | in | | | | | |
| EJZ40-110 | 40 | 1 1/2" | 20 | 7 | 14 | 2900 | 1.1 |
| | | | | 14 | 11 | | |
| | | | | 19 | 8 | | |
| EJZ50-120 | 50 | 2" | 25 | 13 | 15 | 2900 | 2.2 |
| | | | | 25 | 11 | | |
| | | | | 34 | 8 | | |
| EJZ80-140 | 80 | 3" | 28 | 24 | 21 | 2900 | 5.5 |
| | | | | 43 | 18 | | |
| | | | | 63 | 12 | | |
| EJZ80-215 | 80 | 3" | 40 | 25 | 13 | 1450 | 4 |
| | | | | 44 | 11 | | |
| | | | | 60 | 8 | | |
| EJZ100-160 | 100 | 4" | 45 | 50 | 27 | 2900 | 15 |
| | | | | 100 | 23 | | |
| | | | | 130 | 18 | | |
| EJZ100-160A | 100 | 4" | 45 | 50 | 24.5 | 2900 | 15 |
| | | | | 100 | 20 | | |
| | | | | 130 | 14 | | |
| EJZ100-250 | 100 | 4" | 50 | 50 | 18 | 1450 | 7.5 |
| | | | | 100 | 14 | | |
| | | | | 130 | 10 | | |

EJZ40-110 EJZ50-120 EJZ80-140 EJZ80-215 Exploded view of a direct-drive self-priming sewage pump

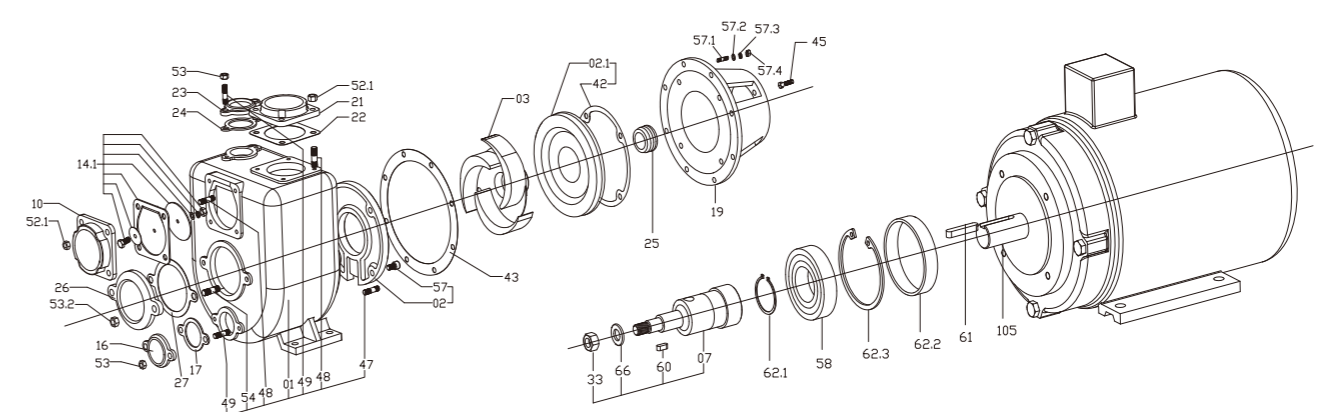


| Number | Name | Number | Name | Number | Name | Number | Name | Number | Name |
|--------|----------------------------|--------|------------------------------|--------|----------------------|--------|------|--------|----------------|
| 1 | Pump body | 14.1 | Bolts | 22 | Outlet flange gasket | 49 | Stud | 66 | Flat washer |
| 2 | Wear-resistant plate | | Flat Washers | 25 | Mechanical seal | 52 | Nut | 68 | Plug |
| 3 | Impeller | | Elastic Washers | 33 | Anti-loosening nut | 52.1 | Nut | 68.1 | O-ring |
| 7 | Shaft | | Nuts | 43 | Pump cover gasket | 52.2 | Nut | 68.2 | Plug |
| 10 | Inlet flange | 16 | Maintenance Hole Caps | 45 | Bolt | 53 | Nut | 68.3 | Plug gasket |
| 14.1 | Check valve elastic gasket | 17 | Maintenance Hole Cap Gaskets | 47 | Stud | 53.2 | Nut | 104 | Hex socket set |
| | Check valve plate | 19 | Direct Connector Brackets | 48 | Stud | 60 | Key | 105 | screw |
| | Check valve plate | 21 | Outlet Flanges | 48.1 | Stud | 61 | Key | | Motor |

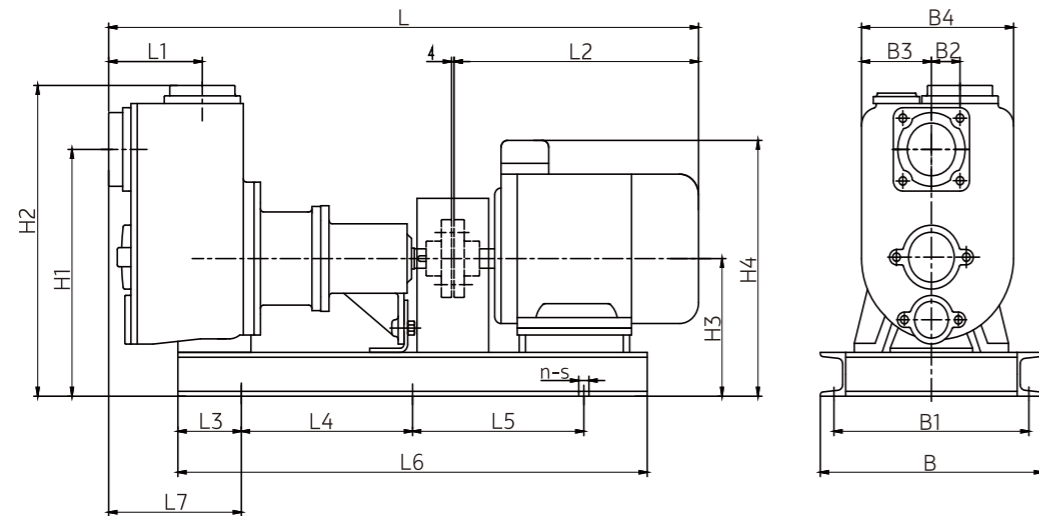


| Number | model | Motor (B34) | | Water pump installation dimensions (mm) | | | | | | | | | | | | | | | | | Weight (kg) | | | | | | |
|--------|------------------|-------------|----------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-----|-----|-----|-----|-------------|-------|-----|-----|--------------------|--------------------------|-----|
| | | model | Power kw | DN | B1 | B2 | B3 | h1 | h2 | h3 | m1 | m2 | n1 | n2 | a | L1 | s1 | s2 | H | HD | A | B | L2 | L | single mot pump or | Total weight of the unit | |
| 1 | EJZ40-110-01102 | MS-802-2 | 1.1 | 1 1/2" | 30 | 80 | 173 | 95 | 168 | 245 | - | - | - | - | 75 | 153.5 | - | 10 | 80 | 215 | 125 | 100 | - | 485 | 17 | 17 | 34 |
| 2 | EJZ50-120-02202 | MS90L-2 | 2.2 | 2" | 36 | 94 | 210 | 105 | 201 | 321 | - | - | - | - | 114 | 185 | - | - | 90 | 235 | 140 | 125 | - | 595 | 27 | 25 | 52 |
| 3 | EJZ80-140-04002 | MS112M-2 | 4 | 3" | 45 | 110 | 240 | 132 | 287 | 380 | 115 | 80 | 245 | 200 | 148 | 202.5 | - | - | 112 | 284 | 190 | - | 211 | 690 | 48 | 42 | 90 |
| 4 | EJZ80-140-05502 | MS132S1-2 | 5.5 | | 45 | 132 | 287 | 380 | 115 | 80 | 245 | 200 | 148 | 225.5 | 14 | 12 | 132 | 324 | 216 | 140 | - | 253 | 763 | 50 | 64 | 114 | |
| 5 | EJZ80-215-04004 | MS112M-4 | 4 | 4" | 70 | 139 | 303 | 160 | 310 | 410 | 133 | 100 | 290 | 245 | 156 | 239 | - | - | 112 | 284 | 190 | - | 226 | 735 | 67 | 46 | 113 |
| 6 | EJZ100-160-15002 | MS160M2-2 | 15 | | 37 | 150 | 300 | 160 | 341 | 462 | - | - | - | - | 180 | 283.5 | - | 15 | 160 | 406 | 254 | 210 | - | 969 | 125 | 107 | 232 |
| 7 | EJZ100-250-07504 | MS132M-4 | 7.5 | 160 | 180 | 420 | 200 | 350 | 487 | 145 | 95 | 340 | 295 | 275 | 226.5 | 14 | 12 | 132 | 324 | 216 | 178 | 331.5 | 932 | 135 | 77 | 212 | |

EJZ80-215 EJZ100-250 Exploded view of a direct-drive self-priming sewage pump



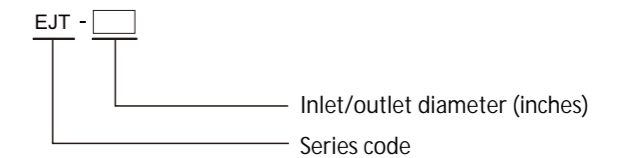
| Number | Name | Number | Name | Number | Name | Number | Name | Number | Name |
|--------|----------------------------|--------|--------------------------------|--------|--------------------------|--------|----------------------------|--------|----------------------|
| 1 | Pump body | 14.1 | Flexible washers | 26 | Repair hole cover | 52.2 | Nuts | 61 | Key |
| 2 | Front wear plate | | Nuts | 27 | Repair hole cover gasket | 53 | Nuts | 62.1 | Shaft retaining ring |
| 2.1 | Rear wear plate | 16 | Maintenance port covers | 33 | Anti-loosening nut | 53.2 | Nuts | | Bore retaining ring |
| 3 | Impeller | 17 | Maintenance port cover gaskets | 43 | Pump cover gasket | 57 | Hex socket head cap screws | 62.2 | Elastic washer |
| 7 | Shaft | 19 | Direct coupling brackets | 45 | Bolt | 57.1 | Studs | 66 | Flat washer |
| 10 | Inlet flange | 21 | Outlet flanges | 47 | Stud | 57.2 | Flat washers | 68 | Screw plug |
| 14.1 | Check valve elastic gasket | 22 | Outlet flange gaskets | 48 | Stud | 57.3 | Flexible washers | 68.1 | O-ring |
| | Check valve plate | 23 | Maintenance port covers | 48.1 | Stud | 57.4 | Nuts | 68.2 | Screw plug |
| | Check valve plate | 24 | Maintenance port cover gaskets | 49 | Stud | 58 | Bearings | 68.3 | Screw plug washer |
| | Bolt | 25 | Mechanical seals | 52.1 | Nut | 60 | Keys | 104 | Hex socket set screw |
| | Flat washer | | | | | | | 105 | Motor |



1. Main Technical Parameters

The ET series non-clogging self-priming sewage pumps are self-priming. A repair hole is designed on the pump inlet pipe joint for easy cleaning and repair; if necessary, the entire pipe joint can be directly disassembled to remove impurities from the pump body. Wear-resistant plates are also included to extend the pump's service life. This series of pumps can be used to pump mixed liquids containing abrasive solid particles, handling liquids with viscosities up to 50 mm²/s. They are widely used in industrial, urban engineering, marine, and waste disposal fields, transporting various neutral and alkaline clean or unclean liquids, such as liquids containing sand, mud, or other suspended particles; low-viscosity petroleum products; lime slurry, sodium hydroxide; and wastewater from various cleaning, cooling, circulation, fume purification, or medical emergency applications.

Model designation method:



2. Performance Range

| | | | |
|---------------------|--------------|---------------|-------------------------|
| Inlet/outlet (mm) | DN=50~250 | Flow(Q) | 7~1000m ³ /h |
| Head (H) | 2~44m | Particle size | 45~76mm |
| Self-priming height | 3~7m | | |
| Speed | 1500~3000Rpm | | |
| Maximum temperature | 85°C | | |

| Number | model | Motor (B3) | | Water pump installation dimensions (mm) | | | | | | | | | | | | | | | | | Weight (kg) | | | | | | | | | | | | | | | |
|--------|-------------------|------------|----------|---|-----|-----|-----|-----|---|-----|-----|------|----|----|----|----|----|----|----|----|-------------|-------------|-------|-------|--|-----|------|-----|-----|-----|-----|-------|-------|-----|-----|-----|
| | | model | Power kw | L1 | B2 | B3 | B4 | L2 | B | B1 | L | L3 | L4 | L5 | L6 | L7 | H1 | H2 | H3 | H4 | n-s | single pump | motor | Total | | | | | | | | | | | | |
| 1 | EJD40-110-01102 | Y2-802-2 | 1.1 | 75 | 30 | 80 | 173 | 295 | | 250 | 210 | 638 | | | | | | | | | 50 | 420 | | | | 520 | 83 | 225 | 300 | 153 | 293 | 4-Φ14 | 19 | 17 | 55 | |
| 2 | EJD50-120-02202 | Y2-90L-2 | 2.2 | 114 | 36 | 94 | 210 | 345 | | | | 763 | | | | | | | | | 50 | 530 | | | | 630 | 89 | 269 | 369 | 173 | 333 | 4-Φ14 | 31 | 25 | 78 | |
| 3 | EJD80-140-05502 | Y2-132S1-2 | 5.5 | 148 | 45 | 110 | 240 | 470 | | | | 1015 | | | | | | | | | 100 | 574 | | | | 774 | | 365 | 457 | 208 | | 4-Φ18 | 55 | 64 | 153 | |
| 4 | EJD80-215-04004 | Y2-112M-4 | 4 | 155 | 70 | 139 | 303 | 400 | | | | 1018 | | | | | | | | | 100 | 640 | | | | 820 | 209 | 383 | 480 | 233 | 421 | 4-Φ18 | 75 | 7 | 167 | |
| 5 | EJD100-160-15002 | Y2-160M2-2 | | | | | | | | | | | | | | | | | | | 100 | | | | | | | | | | | | | 130 | 317 | |
| 6 | EJD100-160A-15002 | Y2-160M2-2 | 15 | 180 | 37 | 150 | 300 | 615 | | | | 1242 | | | | | | | | | 100 | 400 | 400 | | | | 1030 | 162 | 431 | 537 | 250 | 510 | 6-Φ18 | 129 | 107 | 295 |
| 7 | EJD100-250-07504 | Y2-132M-4 | 7.5 | 275 | 160 | 180 | 420 | 510 | | | | 1258 | | | | | | | | | 100 | | | | | | 1000 | 235 | 440 | 574 | 290 | 503 | 6-Φ18 | 148 | 77 | 289 |
| 8 | EJD150-250-11004 | Y2-160M-4 | 11 | 292 | 90 | 220 | 480 | 615 | | | | 1497 | | | | | | | | | 100 | 430 | 430 | | | | 1160 | 333 | 564 | 735 | 360 | 620 | 6-Φ18 | 261 | 106 | 438 |
| 9 | EJD150-400-45004 | Y2-225M-4 | 45 | 365 | 280 | 280 | 700 | 845 | | | | 1944 | | | | | | | | | 150 | 630 | 630 | | | | 1560 | 342 | 760 | 930 | 465 | 800 | 6-Φ18 | 445 | 306 | 904 |
| 10 | EJD200-300-22004 | Y2-180L-4 | 22 | 232 | 75 | 288 | 575 | 740 | | | | 1833 | | | | | | | | | 150 | 600 | 600 | | | | 1500 | 310 | 650 | 840 | 430 | 705 | 6-Φ18 | 395 | 175 | 689 |

3. Scope of Application

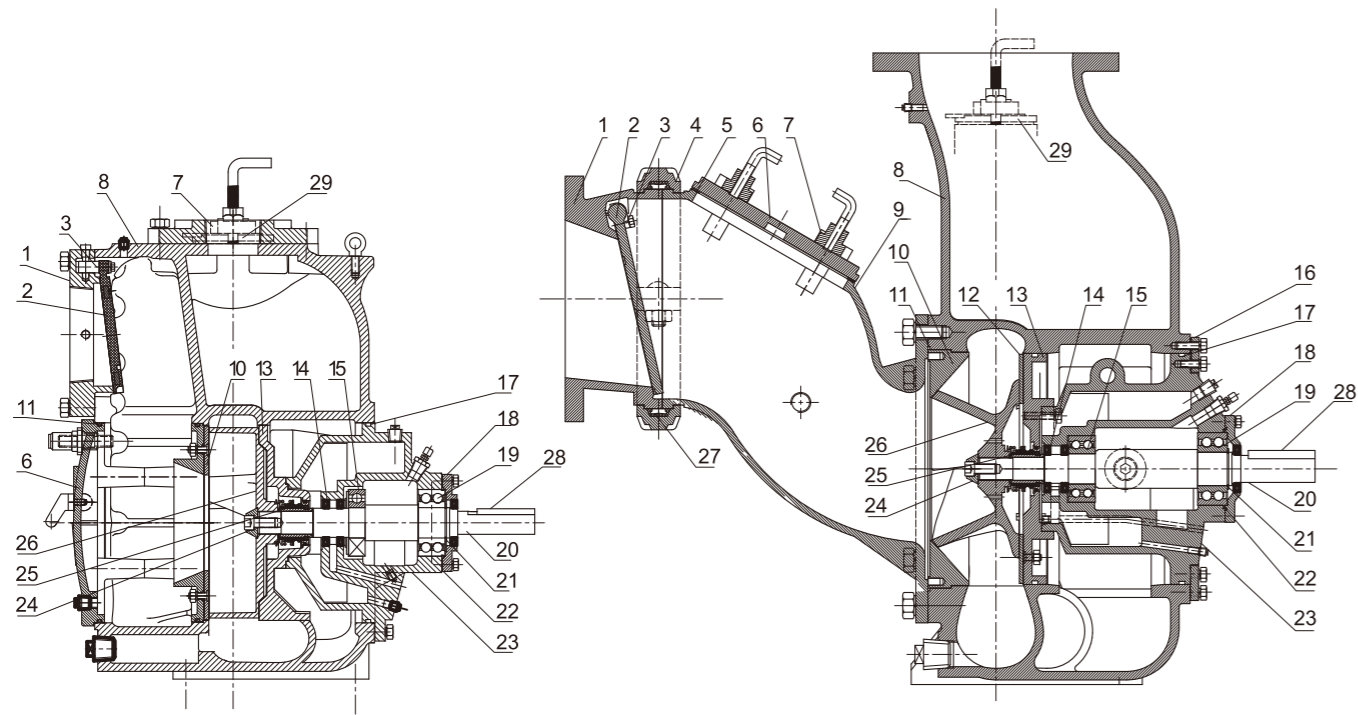
- Used for treating non-flammable and non-explosive liquids;
- Rainwater and general sewage;
- Municipal sewage projects, construction sites, and drainage stations for civil defense systems;
- Industrial wastewater from light industry, papermaking, textiles, food processing, chemicals, power generation, and mining;
- Sewage discharge from residential areas;
- Sewage and sediment from water purification systems;
- Wastewater from the leather industry, slaughterhouses, and aquaculture; brewing and sugar industries;
- Sewage discharge that is not highly corrosive but is severely polluted.

4. Materials of main components

| Part Names | Standard materials | Optional materials |
|------------|----------------------|--|
| Pump body | Gray cast iron | Ductile iron |
| Impeller | Ductile cast iron | Bronze, 304(CF8)/316(CF8M) stainless steel |
| Wear plate | Gray cast iron | Bronze, 304/316 stainless steel |
| Shaft | 1045 stainless steel | 304/316/420 stainless steel |
| Shaft seal | Mechanical seal | / |

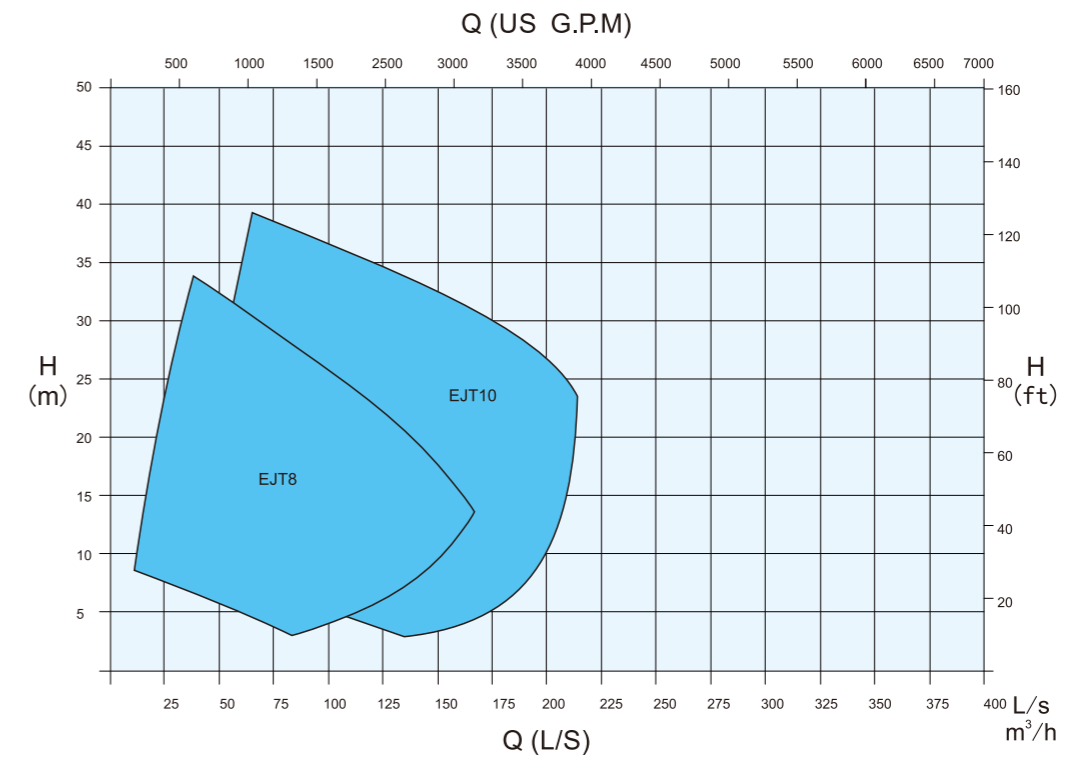
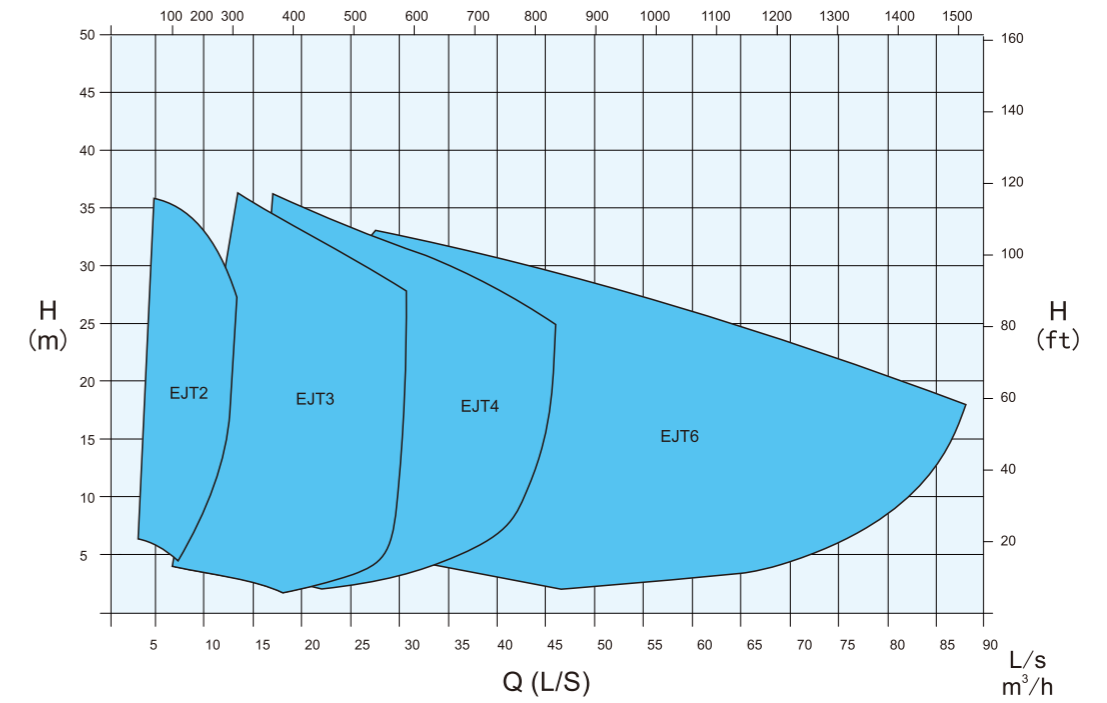
5. Structural features of the pump

| | | |
|-----------------|---|---|
| Design | Performance and dimensions conform to European standards. | |
| Structural form | Open impeller, pump body with repair hole, equipped with wear-resistant plate, single-stage self-priming centrifugal pump | |
| Flange | The inlet check valve seat is a non-standard flange, while the pump body outlet flange is a standard flange. | |
| Shaft seal | mechanical seal | bearings Imported high-quality bearings are selected, and grease lubrication is used. |

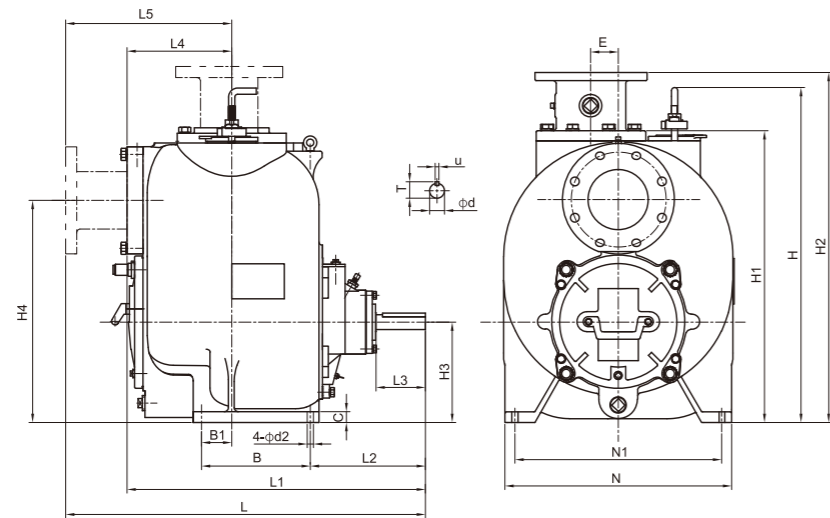


| Number | Name | Number | Name | Number | Name |
|--------|-------------------------------|--------|------------------------|--------|-----------------------------|
| 1 | Check valve seat/inlet flange | 11 | O-ring | 21 | Shaft retaining ring |
| 2 | Check valve disc | 12 | Wear-resistant plate | 22 | O-ring/bearing cover gasket |
| 3 | Locking block | 13 | Bearing cap | 23 | Bracket |
| 4 | Clamp | 14 | Skeleton oil seal | 24 | Impeller retaining ring |
| 5 | Maintenance hole gasket | 15 | Bearing | 25 | Mechanical seal |
| 6 | Maintenance hole cover | 16 | Bracket pressure plate | 26 | Impeller |
| 7 | Locking pressure plate | 17 | O-ring | 27 | Clamp gasket |
| 8 | Pump body | 18 | Bearing cap | 28 | Key |
| 9 | Pipeline joint | 19 | Bearing | 29 | Water inlet cover |
| 10 | Wear-resistant plate | 20 | Shaft | | |

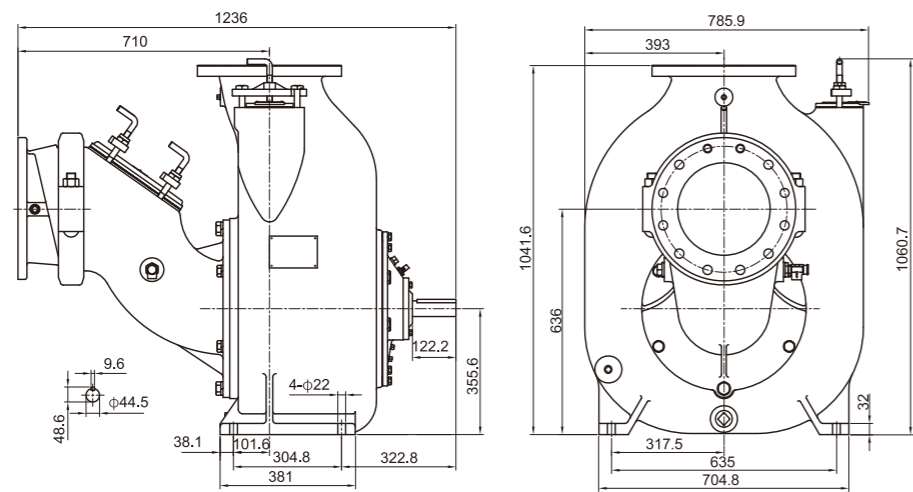
The parts marked in red are easily damaged. Users should consider using spare parts for daily use and maintenance of the water pump.



Performance to ISO9906 Grade 2 for clean cold water only



| model | B | B1 | C | E | H | H1 | H2 | H3 | H4 | L | L1 | L2 | L3 | L4 | L5 | N | N1 | d | u | T | d2 | Weight (kg) |
|-------|-------|-------|------|------|-----|-------|-------|-------|-------|------|-----|-----|-----|-----|-----|-----|-------|------|-----|------|----|-------------|
| EJT2 | 182.6 | 50.8 | 17.5 | 44.4 | 535 | 452.4 | 551.7 | 152.4 | 342.9 | 627 | 521 | 226 | 90 | 163 | 269 | 324 | 295.1 | 28.4 | 6.4 | 31.4 | 14 | 112 |
| EJT3 | 228.6 | 76.2 | 19 | 69.8 | 670 | 564.6 | 686.8 | 190.5 | 431.8 | 732 | 624 | 287 | 102 | 186 | 294 | 432 | 393.7 | 38.1 | 9.6 | 42.1 | 18 | 190 |
| EJT4 | 279.4 | 77.8 | 25.4 | 69.8 | 756 | 654 | 743 | 222.2 | 495.3 | 814 | 723 | 295 | 127 | 228 | 319 | 508 | 457.2 | 38.1 | 9.6 | 42.1 | 18 | 260 |
| EJT6 | 279.4 | 77.8 | 27 | 69.8 | 854 | 759 | 896 | 257 | 568.4 | 901 | 763 | 295 | 127 | 268 | 406 | 578 | 527 | 38.1 | 9.6 | 42.1 | 18 | 405 |
| EJT8 | 304.8 | 101.6 | 32 | 0 | 978 | 960 | 1068 | 330.2 | 723.9 | 1021 | 950 | 410 | 171 | 342 | 413 | 705 | 635 | 44.5 | 9.6 | 48.6 | 22 | 660 |



Flange standard dimensions(ISO7005.2 DIN2501 GB/T17241.6 PN16)

| model | Water inlet flange (mm) | | | | Water outlet flange (mm) | | | |
|-------|-------------------------|-----|-----|--------|--------------------------|-----|-----|--------|
| | DN | D | K | n-d | DN | D | K | n-d |
| EJT2 | DN50 | 165 | 125 | 4-Φ18 | DN50 | 165 | 125 | 4-Φ18 |
| EJT3 | DN80 | 200 | 160 | 8-Φ18 | DN80 | 200 | 160 | 8-Φ18 |
| EJT4 | DN100 | 220 | 180 | 8-Φ18 | DN100 | 220 | 180 | 8-Φ18 |
| EJT6 | DN150 | 285 | 240 | 8-Φ22 | DN150 | 285 | 240 | 8-Φ22 |
| EJT8 | DN200 | 340 | 295 | 12-Φ22 | DN200 | 340 | 295 | 12-Φ22 |
| EJT10 | DN250 | 409 | 355 | 12-Φ26 | DN250 | 409 | 355 | 12-Φ26 |

| model | speed (rpm) | Flow(m³/h) | 10 | 12.5 | 15 | 17.5 | 20 | 25 | 30 | 35 | 40 | 45 |
|-------|-------------|------------|------|------|------|------|------|------|------|------|------|------|
| EJT2 | 1150 | Head (m) | 5.1 | 4.9 | 4.6 | 4.5 | 4.3 | 3.8 | | | | |
| | 1450 | | 8.2 | 8 | 7.7 | 7.4 | 7.2 | 6.6 | 6.2 | 5.9 | | |
| | 1750 | | 12.2 | 11.9 | 11.5 | 11.4 | 11 | 10.4 | 9.8 | 9.2 | 8.4 | |
| | 2050 | | 17.1 | 16.7 | 16.4 | 16.1 | 15.7 | 14.9 | 14.2 | 13.5 | 12.7 | 11.8 |
| | 2350 | | 22.3 | 21.9 | 21.5 | 21.5 | 21.1 | 20.3 | 19.4 | 18.6 | 17.8 | 17 |
| | 2650 | | 29.1 | 28.6 | 28.1 | 27.6 | 26.6 | 25.6 | 24.5 | 23.4 | 22.6 | |
| | 2900 | | | 34.3 | 33.7 | 33.2 | 32.1 | 31 | 29.9 | 29 | 28.2 | |
| model | speed (rpm) | Flow(m³/h) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| EJT3 | 650 | Head (m) | 3.3 | 2.9 | 2.6 | 2.1 | 2.4 | | | | | |
| | 750 | | 4.5 | 4 | 3.5 | 3 | 2.8 | | | | | |
| | 850 | | 5.8 | 5.2 | 4.7 | 4.2 | 3.5 | 2.8 | | | | |
| | 950 | | 7.1 | 6.5 | 6 | 5.4 | 4.8 | 4 | 3.1 | | | |
| | 1050 | | 8.9 | 8.2 | 7.6 | 7 | 6.3 | 5.4 | 4.5 | 3.6 | | |
| | 1150 | | | 10 | 9.4 | 8.6 | 7.8 | 6.9 | 5.9 | 5 | 4.1 | |
| | 1250 | | | 11.8 | 11.1 | 10.3 | 9.5 | 8.7 | 7.8 | 6.8 | 5.8 | |
| | 1350 | | | 14 | 13.2 | 12.4 | 11.6 | 10.6 | 9.5 | 8.4 | 7.4 | |
| | 1450 | | | 16.2 | 15.2 | 14.2 | 13.4 | 12.4 | 11.4 | 10.3 | 9.3 | |
| | 1550 | | | 18.6 | 17.4 | 16.4 | 15.5 | 14.6 | 13.6 | 12.5 | 11.4 | |
| | 1650 | | | 20.9 | 20 | 19.1 | 18.1 | 17 | 15.9 | 14.7 | 13.6 | |
| | 1750 | | | | 22.3 | 21.3 | 20.3 | 19.3 | 18.2 | 17.1 | 15.9 | 14.7 |
| | 1850 | | | | 25.2 | 24 | 23.1 | 22.1 | 21.1 | 19.9 | 18.6 | 17.6 |
| | 1950 | | | | 28.3 | 27.1 | 26 | 24.9 | 23.8 | 22.6 | 21.3 | 20.2 |
| 2050 | | | 31.1 | 30.1 | 29.1 | 28.1 | 27 | 25.8 | 24.6 | 23.4 | | |
| 2150 | | | | 33.2 | 32.1 | 31.1 | 30 | 28.8 | 27.6 | 26.5 | | |
| model | speed (rpm) | Flow(m³/h) | 20 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 |
| EJT4 | 650 | Head (m) | 4.1 | 3.8 | 3.3 | 2.2 | | | | | | |
| | 750 | | 5.5 | 5.1 | 4.6 | 3.8 | 2.7 | | | | | |
| | 850 | | 7.2 | 6.6 | 6.2 | 5.5 | 4.6 | 3.3 | | | | |
| | 950 | | | 8.3 | 7.6 | 7 | 6.4 | 5.4 | 4.1 | | | |
| | 1050 | | | 10.2 | 9.5 | 8.8 | 8.2 | 7.5 | 6.3 | | | |
| | 1150 | | | 12.4 | 11.7 | 10.9 | 10.1 | 9.4 | 8.4 | 7 | | |
| | 1250 | | | 14.9 | 13.9 | 12.9 | 12.1 | 11.4 | 10.5 | 9.2 | 7.8 | |
| | 1350 | | | | 16.5 | 15.4 | 14.5 | 13.6 | 12.7 | 11.6 | 10.3 | |
| | 1450 | | | | 19.3 | 18.1 | 17 | 16.1 | 15.3 | 14.1 | 12.7 | |
| | 1550 | | | | 21.6 | 20.6 | 19.6 | 18.7 | 17.6 | 16.3 | 14.9 | 13.3 |
| | 1650 | | | | 24.8 | 23.6 | 22.6 | 21.6 | 20.6 | 19.4 | 17.8 | 15.7 |
| | 1750 | | | | 28.1 | 26.9 | 25.9 | 24.8 | 23.7 | 22.5 | 21 | 19.2 |
| | 1850 | | | | 31.6 | 30.2 | 29 | 28 | 26.9 | 25.6 | 24.1 | 21.9 |
| | 1950 | | | | 35.4 | 34.1 | 32.8 | 31.5 | 30.3 | 29 | 27.6 | 25.7 |
| model | speed (rpm) | Flow(m³/h) | 50 | 80 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 |
| EJT6 | 650 | Head (m) | 5.7 | 5 | 3.9 | 2.9 | | | | | | |
| | 750 | | 7.8 | 7.1 | 5.9 | 4.9 | 3.5 | | | | | |
| | 850 | | 10.3 | 9.5 | 8.2 | 7.1 | 5.8 | 4.2 | | | | |
| | 950 | | 12.8 | 12 | 10.6 | 9.4 | 8.2 | 6.6 | 4.9 | | | |
| | 1050 | | 15.8 | 14.9 | 13.5 | 12.3 | 10.9 | 9.4 | 7.6 | 5.7 | | |
| | 1150 | | 18.8 | 17.9 | 16.5 | 15.3 | 13.9 | 12.3 | 10.6 | 8.6 | | |
| | 1250 | | 22.4 | 21.5 | 20 | 18.7 | 17.2 | 15.5 | 13.8 | 11.9 | 9.6 | |
| | 1350 | | | 25.2 | 23.3 | 22.2 | 20.6 | 18.8 | 17 | 15.2 | 13.1 | |
| 1450 | | 29.1 | 27.6 | 26.1 | 24.3 | 22.5 | 20.7 | 18.8 | 16.6 | | | |
| 1550 | | | 31.7 | 30.2 | 28.5 | 26.7 | 24.8 | 22.9 | 20.8 | 18.5 | | |
| model | speed (rpm) | Flow(m³/h) | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| EJT8 | 650 | Head (m) | 7.4 | 6.4 | 5.5 | 4.4 | 3.1 | | | | | |
| | 750 | | 10.2 | 9.2 | 8.2 | 7 | 5.6 | 4.1 | | | | |
| | 850 | | 13 | 12 | 10.9 | 9.8 | 8.5 | 7 | 5.1 | | | |
| | 950 | | 16.5 | 15.4 | 14.2 | 12.9 | 11.6 | 10.2 | 8.4 | 6.1 | | |
| | 1050 | | 20.4 | 19.1 | 17.8 | 16.5 | 15 | 13.4 | 11.6 | 9.3 | | |
| | 1150 | | 24.7 | 23.2 | 21.7 | 20.2 | 18.7 | 17.1 | 15.4 | 13.5 | 11.2 | |
| | 1250 | | | 28.2 | 26.5 | 24.8 | 23.1 | 21.2 | 19.3 | 17.3 | 15.1 | 12.3 |
| 1350 | | 33.6 | 31.9 | 30.1 | 28.3 | 26.4 | 24.6 | 22.4 | 20.4 | 17.8 | | |
| model | speed (rpm) | Flow(m³/h) | 200 | 300 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 |
| EJT10 | 650 | Head (m) | 7 | 5.9 | 4.4 | 3.4 | | | | | | |
| | 750 | | 9.8 | 8.7 | 7 | 6.1 | 5.2 | 3.7 | | | | |
| | 850 | | 12.7 | 11.6 | 10.1 | 9.2 | 8.1 | 6.6 | 5.1 | | | |
| | 950 | | 16.2 | 14.8 | 13.2 | 12.2 | 11.2 | 10 | 8.6 | 6.6 | | |
| | 1050 | | 20.2 | 18.7 | 17.2 | 16.2 | 15.1 | 13.9 | 12.5 | 11 | 8.7 | |
| | 1150 | | 24.5 | 23 | 21.3 | 20.2 | 19.3 | 18.4 | 17.2 | 15.4 | 13.3 | |
| | 1250 | | 29.6 | 27.8 | 26 | 25 | 24 | 22.8 | 21.5 | 20.1 | 18.4 | 16.1 |
| | 1350 | | | 32.9 | 31 | 29.9 | 28.6 | 27.3 | 25.8 | 24.2 | 22.6 | 20.2 |
| 1450 | | 38.1 | 36.3 | 35 | 33.7 | 32.4 | 31.1 | 29.5 | 27.9 | 25.7 | | |

Fault Repair Checklist

| Fault | Causes | Solution |
|--|---|--|
| The water pump is not discharging water. | <ul style="list-style-type: none"> Inlet/outlet valves not open; inlet/outlet pipes blocked; impeller blocked; motor running in the wrong direction; motor phase loss; very slow speed. Air leakage in the suction pipe; air in the pump chamber. Insufficient inlet water supply; excessive suction head; foot valve leakage; excessive pipeline resistance; improper pump selection. | <ul style="list-style-type: none"> Inspect and remove blockages Adjust motor direction and tighten motor wiring Tighten all sealing surfaces and purge air Open pump cover or vent valve to release air Stop inspection and adjustment: Reduce pipe bends and select a new pump |
| There is a lot of noise and vibration. | <ul style="list-style-type: none"> Unstable base Bent pump shaft Cavitation Severe bearing wear Debris in the inlet pipe Misalignment between the pump and motor shafts | <ul style="list-style-type: none"> Reinforcement Replacement or correction Adjust working conditions Replacement Remove debris Adjust coaxiality |
| Insufficient water output | <ul style="list-style-type: none"> First, check the cause (step 1). The impeller flow path and suction pipe are blocked, or the valve opening is insufficient. The impeller or wear-resistant disc is severely worn. Insufficient power or too low speed. | <ul style="list-style-type: none"> First, press 1 to clear the blockage. Clear the blockage and readjust the valve opening. Replace the valve. Add sufficient power and adjust to the rated speed. |
| Excessive shaft power consumption | <ul style="list-style-type: none"> Exceeding the rated flow rate Excessive suction head Damaged bearings Bent pump shaft or stuck impeller Blocked or jammed flow channels inside the pump | <ul style="list-style-type: none"> Adjust flow rate, partially close outlet valve Lower mounting surface Replace bearing Replace or calibrate Remove blockage |
| Motor heating | <ul style="list-style-type: none"> Excessive flow rate, overload operation Friction and rubbing Motor bearing damage Insufficient voltage | <ul style="list-style-type: none"> Close the outlet valve slightly Inspect and troubleshoot Replace the bearing Stabilize the pressure |
| Water pump leaking | <ul style="list-style-type: none"> Mechanical seal wear Sand holes or cracks in the pump body Uneven sealing surface Loose mounting bolts | <ul style="list-style-type: none"> Replacement Welding or replacement Repair Tightening |

Pipeline and Pipeline Fittings Loss Estimation

| Pipe diameter (mm) | Flow rate (L/s) | | | | | | | | | | | | | | | | | | | |
|--------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| | 1 | 2 | 4 | 6 | 8 | 10 | | | | | | | | | | | | | | |
| 25 | 3.27 | 13.0 | | | | | | | | | | | | | | | | | | |
| 38 | 2.8 | 11.0 | 55.0 | | | | 15 | 20 | | | | | | | | | | | | |
| 50 | 0.8 | 3.1 | 13.0 | 29.0 | | | | | 25 | 30 | | | | | | | | | | |
| 65 | | 0.8 | 3.2 | 7.1 | 13.0 | 20.0 | | | | | 40 | 50 | | | | | | | | |
| 75 | | 0.4 | 1.6 | 3.3 | 5.9 | 9.6 | 21.6 | | | | | | 60 | 70 | | | | | | |
| 100 | | | 0.4 | 0.8 | 1.3 | 2.1 | 6.8 | 8.6 | 13.0 | 19.4 | | | | | | | | 80 | 90 | |
| 125 | | | | 0.23 | 0.4 | 0.63 | 1.3 | 2.7 | 4.1 | 5.9 | 10.7 | | | | | | | 100 | 110 | |
| 150 | | | | | 0.16 | 0.26 | 0.58 | 1.1 | 1.6 | 2.3 | 4.2 | 6.4 | 9.4 | | | | | | 120 | 130 |
| 175 | | | | | | 0.11 | 0.27 | 0.5 | 0.74 | 1.05 | 1.9 | 2.9 | 4.3 | 5.8 | 7.7 | 9.6 | | | | 140 |
| 200 | | | | | | | 0.13 | 0.26 | 0.37 | 0.53 | 0.93 | 1.5 | 2.1 | 2.9 | 3.7 | 4.7 | 6.1 | 7.2 | 8.5 | 180 |
| 250 | | | | | | | | 0.07 | 0.12 | 0.18 | 0.3 | 0.48 | 0.68 | 0.93 | 1.2 | 1.5 | 1.9 | 2.3 | 2.8 | 3.3 |
| 300 | | | | | | | | | | 0.07 | 0.12 | 0.19 | 0.27 | 0.37 | 0.49 | 0.61 | 0.76 | 0.9 | 1.1 | 1.3 |

A simplified table of straight pipe friction losses (for estimation purposes). The number of meters of straight pipe loss per 100m is based on new cast iron pipes; the number of meters for old pipes is doubled.

Maximum flow limit for a given pipe diameter

| Pipe diameter (mm) | Maximum flow (L/s) | Maximum flow velocity (m/s) | Pipe diameter (mm) | Maximum flow (L/s) | Maximum flow velocity (m/s) |
|--------------------|--------------------|-----------------------------|--------------------|--------------------|-----------------------------|
| 25 | 1.0 | 2.04 | 125 | 30.0 | 2.44 |
| 38 | 2.5 | 2.2 | 150 | 43.0 | 2.45 |
| 50 | 4.17 | 2.12 | 175 | 60.0 | 2.49 |
| 65 | 6.67 | 2.01 | 200 | 83.3 | 2.69 |
| 75 | 10.0 | 2.26 | 250 | 133.3 | 2.72 |
| 100 | 18.4 | 2.33 | 300 | 192.0 | 2.71 |

Each valve and bend is equivalent to the straight pipe length.

| Type | Conversion pipe diameter multiple | Remark |
|-----------------------|-----------------------------------|---------------------------------------|
| Fully open gate valve | 13 | Double the amount if not fully opened |
| Standard bend | 25 | |
| Check valve | 100 | |
| Foot valve | 100 | Partial congestion doubled |

Note: For example, for a 100mm diameter pipe, the foot valve is equivalent to 100 times the diameter, which equals 100 x 100 - 10000mm = 10m of straight pipe length. Assuming a flow rate of 8L/s, referring to the table above, the head loss is 1.3m per 100m of straight pipe. Therefore, the head loss is 0.13m per 10m. That is, when the flow rate of the 100m foot valve is 8L/s, the head loss is 0.13m.