

EJS Self-Priming Centrifugal Pumps

Port Size: 1 1/2" – 8" Power 1.1- 45 Kw

Applications: EJS pumps are used when one or more of the following are required: self-priming, solids handling, resistance to abrasion. EJ pumps can handle liquids up to a viscosity of about 50 mm²/s (cSt).

Industry: transfer of neutral, acid or alkali clean or dirty liquids, liquids containing sand, mud or solids in suspension, low viscosity petroleum products, clean or dirty solvents, milk of lime, caustic soda, washing, cooling, circulation, smoke scrubbing, emergency duty. Civil engineering: sewage pumping, fire fighting.

Marine: loading and unloading, bilge pumping, fire fighting, stripping, sanitary duty, circulation.

Waste treatment: pumping polluted, hot or corrosive wastewater containing sand, mud or solids in suspension, dosing neutralizing liquids, pumping out settled sludge.



* Available in **motor coupled pumps** in the following models: EJM40-110, EJM50-120, EJM80-215, EJM100-250

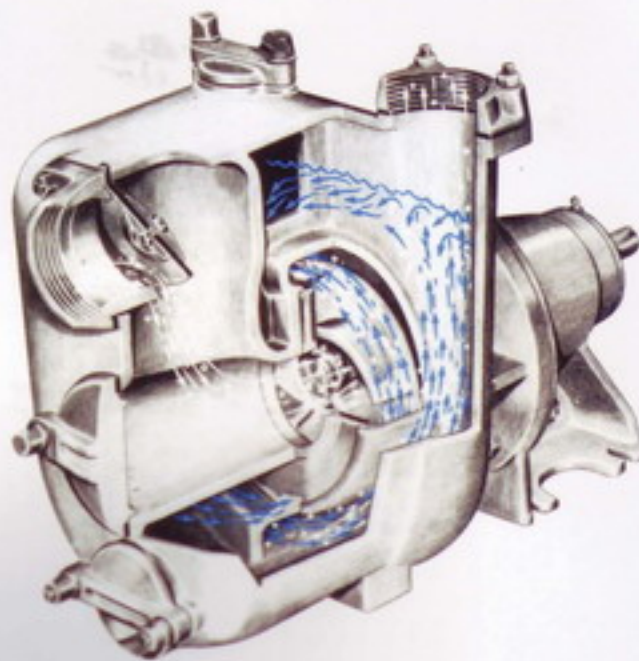
Standard Material

Cast Iron Construction: Complete Cast Iron pump, Ductile Iron Impeller, Cast Iron wear plate (optional with Rubber Plate) and Mild steel shaft with protection sleeve; Nitrite Rubber gaskets, Silicon Carbide Mechanical Seal.

Other options: Stainless steel and Bronze wetted parts. CB, CS, SS, BB

Mechanical Seal: Silicon Carbide Vs Silicon Carbide / Viton . Other options available.

Air (white arrows) is drawn into the pump by the vacuum produced as the impeller rotates and is emulsified with the liquid (blue arrows) contained in the pump casing. The air/liquid mixture is driven into the priming chamber where the air, which is less dense, separates out and vents through the delivery line while the liquid, due to the higher density, falls back and is recirculated. When all the air has been evacuated from the suction line, the pump primes and operates like a normal centrifugal pump. It can also handle a mixture of air and liquid. The check valve mounted in the pump suction port serves two purposes: it prevents the liquid from draining out of the suction line when the pump is not in operation, and if the suction line is drained by accident, enough liquid is retained in the pump casing for the pump to reprime. The delivery line must allow the air drawn from the suction line to vent to atmosphere.

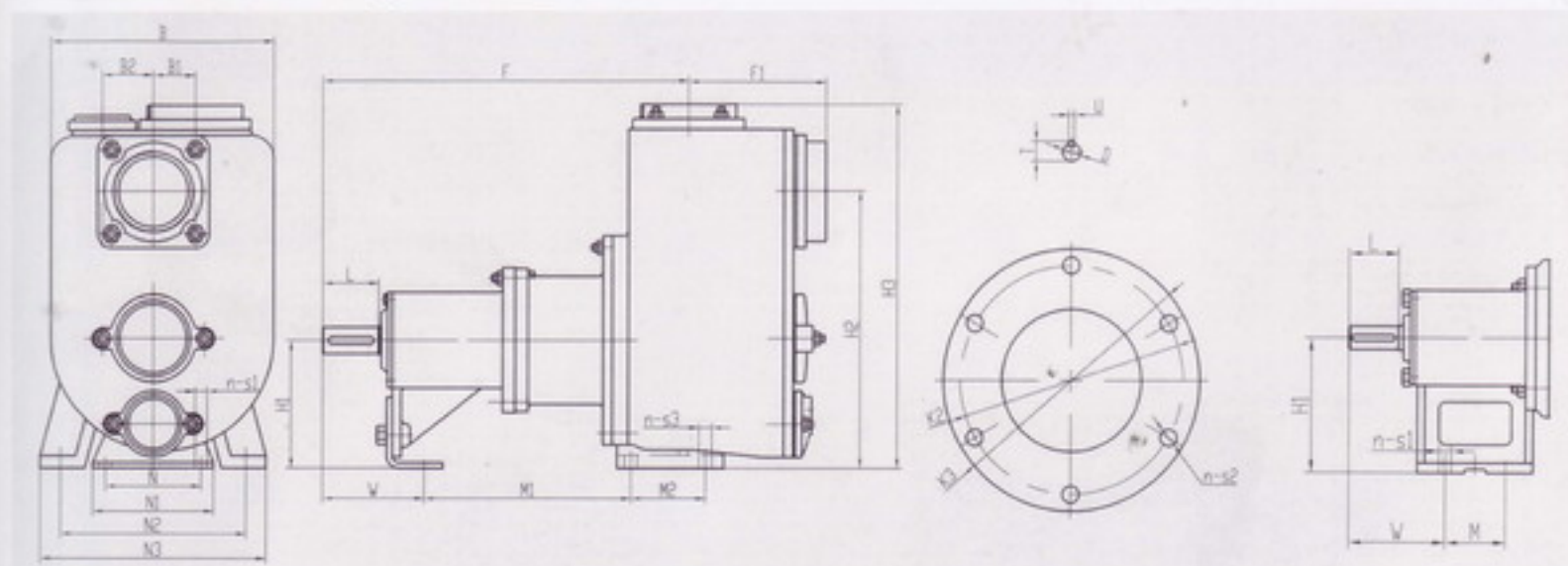


| Pump Model | Orifices Size | | Solid Size | 50HZ | | | | | | | |
|------------|---------------|-----|------------|------------------|-----|-----|-----------|----|----|------|-------------|
| | mm | in | Ømm | Capacity m³/h | | | Head m | | | RPM | Motor kW |
| EJS40-110 | 40 | 1½" | 20 | 22 | 15 | 5 | 5.5 | 11 | 15 | 2900 | 1.1 |
| EJS50-120 | 50 | 2" | 25 | 44 | 30 | 10 | 5 | 12 | 18 | 2900 | 2.2 |
| EJS80-140 | 80 | 3" | 28 | 70 | 40 | 20 | 13 | 18 | 20 | 2900 | 4 |
| EJS80-215 | 80 | 3" | 40 | 80 | 45 | 20 | 7 | 13 | 15 | 1450 | 4 |
| EJS100-250 | 100 | 4" | 50 | 150 | 80 | 40 | 7 | 15 | 18 | 1450 | 7.5 |
| EJS150-250 | 150 | 6" | 76 | 300 | 200 | 80 | 5 | 11 | 15 | 1450 | 11 |
| EJS150-400 | 150 | 6" | 50 | 380 | 200 | 80 | 18 | 36 | 38 | 1450 | 45 |
| EJS200-300 | 200 | 8" | 60 | 480 | 320 | 120 | 8 | 15 | 20 | 1450 | 22 |

Note:

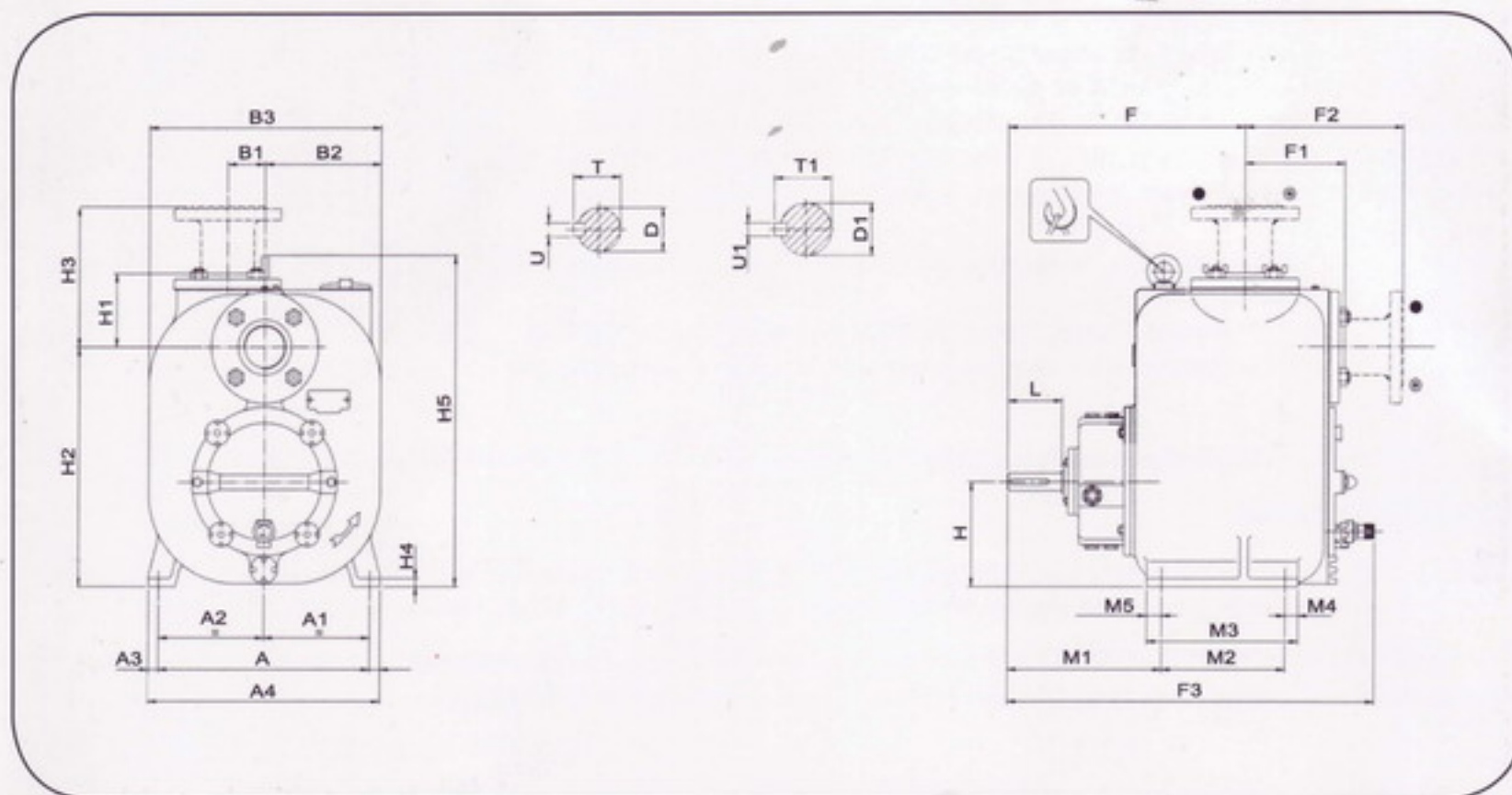
Check with factory for the availability of following model: EJS40-180, EJS 50-180, EJS50-220, EJS80-250, EJS250-300, EJS300-400

Dimensional Drawing



| | \emptyset | B_1 | B_2 | B_3 | H_1 | H_2 | H_3 | N | N_1 | N_2 | N_3 | F | F_1 | L | W | M | M_1 | M_2 | T | U | D | K_2 | K_3 | $n-s1$ | $n-s2$ | $n-s3$ |
|------------|-------------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-----|-----|-------|-------|------|-----|-----|-------|-------|--------|--------|--------|
| EJS40-110 | 40 | 30 | 40 | 165 | 90 | 163 | 237 | 80 | 102 | | | 263 | 75 | 40 | 70 | 50 | | | 21.5 | 6 | 19 | | | 4-Ø10 | | |
| EJS50-120 | 50 | 36 | 45 | 210 | 110 | 206 | 326 | 103 | 128 | | | 300 | 114 | 40 | 80 | 50 | | | 21.5 | 6 | 19 | | | 4-Ø12 | | |
| EJS80-140 | 80 | 43 | 55 | 240 | 135 | 290 | 383 | 90 | 130 | 200 | 243 | 390 | 148 | 60 | 109 | | 222 | 80 | 31 | 8 | 28 | | | 2-Ø14 | | 4-Ø14 |
| EJS80-215 | 80 | 70 | 85 | 302 | 160 | 310 | 410 | 150 | | 245 | | 458 | 155 | 60 | 110 | 125 | 150 | 100 | 31 | 8 | 28 | | | 4-Ø14 | 4-Ø14 | |
| EJS100-250 | 100 | 160 | 85 | 420 | 200 | 355 | 485 | 110 | 160 | 295 | 160 | 470 | 275 | 80 | 130 | | 355 | 95 | 35 | 10 | 32 | | | 2-Ø15 | | 4-Ø14 |
| EJS150-250 | 150 | 90 | 140 | 480 | 250 | 455 | 590 | 110 | 160 | 350 | 410 | 570 | 280 | 80 | 130 | | 330 | 170 | 35 | 10 | 32 | 240 | 276 | 2-Ø15 | 6-Ø18 | 4-Ø18 |
| EJS150-400 | 150 | 280 | 307.5 | 730 | 350 | 645 | 821 | 150 | | 450 | 510 | 698.5 | 374 | 110 | 181 | | 477.5 | 200 | 59 | 16 | 55 | 240 | 276 | 2-Ø17 | 8-Ø19 | 4-Ø18 |
| EJS200-300 | 200 | 75 | 175 | 575 | 315 | 535 | 690 | 150 | 200 | 450 | 510 | 822 | 290 | 110 | 165 | | 496 | 200 | 45 | 12 | 42 | 280 | 320 | 2-Ø18 | 8-Ø18 | 4-Ø18 |

Dimensional Drawing



| | A | A1 | A2 | A3 | A4 | B1 | B2 | B3 | D | D1 | F | F1 | F2 | F3 | H |
|---------|-------|-------|-------|------|-------|-----|-------|-------|------|--------|-------|-----|-------|-------|-------|
| EJT 50 | 295 | 147.5 | 147.5 | 20 | 335 | 45 | 170 | 340 | 28j6 | 28.6j6 | 355.5 | | 163 | 583.5 | 152.5 |
| EJT 80 | 394 | 197 | 197 | 19 | 432 | 70 | 216 | 432 | 32j6 | 38.1j6 | 436.5 | 185 | 293.5 | 677.5 | 190.5 |
| EJT 100 | 457 | 228.5 | 228.5 | 21.5 | 500 | 70 | 251 | 502 | 32j6 | 38.1j6 | 495.5 | 227 | 317.5 | 772.5 | 222 |
| EJT 150 | 527 | 263.5 | 263.5 | 25.5 | 578 | 70 | 289 | 578 | 42j6 | 38.1j6 | 495 | 292 | 429 | 808 | 257 |
| EJT 200 | 635 | 317.5 | 317.5 | 39.5 | 714 | | | | 55j6 | 44.5j6 | 610.5 | | 413 | 978.5 | 330 |
| | H1 | H2 | H3 | H4 | H5 | L | M1 | M2 | M3 | M4 | M5 | T | T1 | U | U1 |
| EJT 50 | | 343 | 112.5 | 18 | 489.5 | 87 | 224 | 182.5 | 220 | 24 | 13.5 | 31 | 31.4 | 8 | 6.4 |
| EJT 80 | 133.5 | 432 | 255.5 | 15 | 599 | 100 | 284 | 228.5 | 280 | 24 | 27.5 | 35 | 42.2 | 10 | 9.5 |
| EJT 100 | 159 | 495 | 248 | 20 | 691 | 127 | 294 | 279.5 | 330 | 25 | 25.5 | 35 | 42.2 | 10 | 9.5 |
| EJT 150 | 191 | 568 | 328 | 25 | 788 | 127 | 293.5 | 279.5 | 330 | 25 | 25.5 | 45 | 42.2 | 12 | 9.5 |
| EJT 200 | | 723.5 | 344.5 | | 964 | 165 | 407 | 305 | 384 | 40.5 | 38.5 | 59 | 49.2 | 16 | 9.5 |