

Plenty Mirrlees Pumps

THE HEART OF THE SYSTEM



TRIRO

Range: 0 - 50 Bar
Models: C38-4 to C80-4

Specification

Sleeve in aluminium Alloy as standard, high grade iron option also available.

Screw set, power rotor of carbon steel and idlers of high grade iron.

Mechanical seal fitted as standard.

Easily adjusted relief valve can be fitted to the pump body.

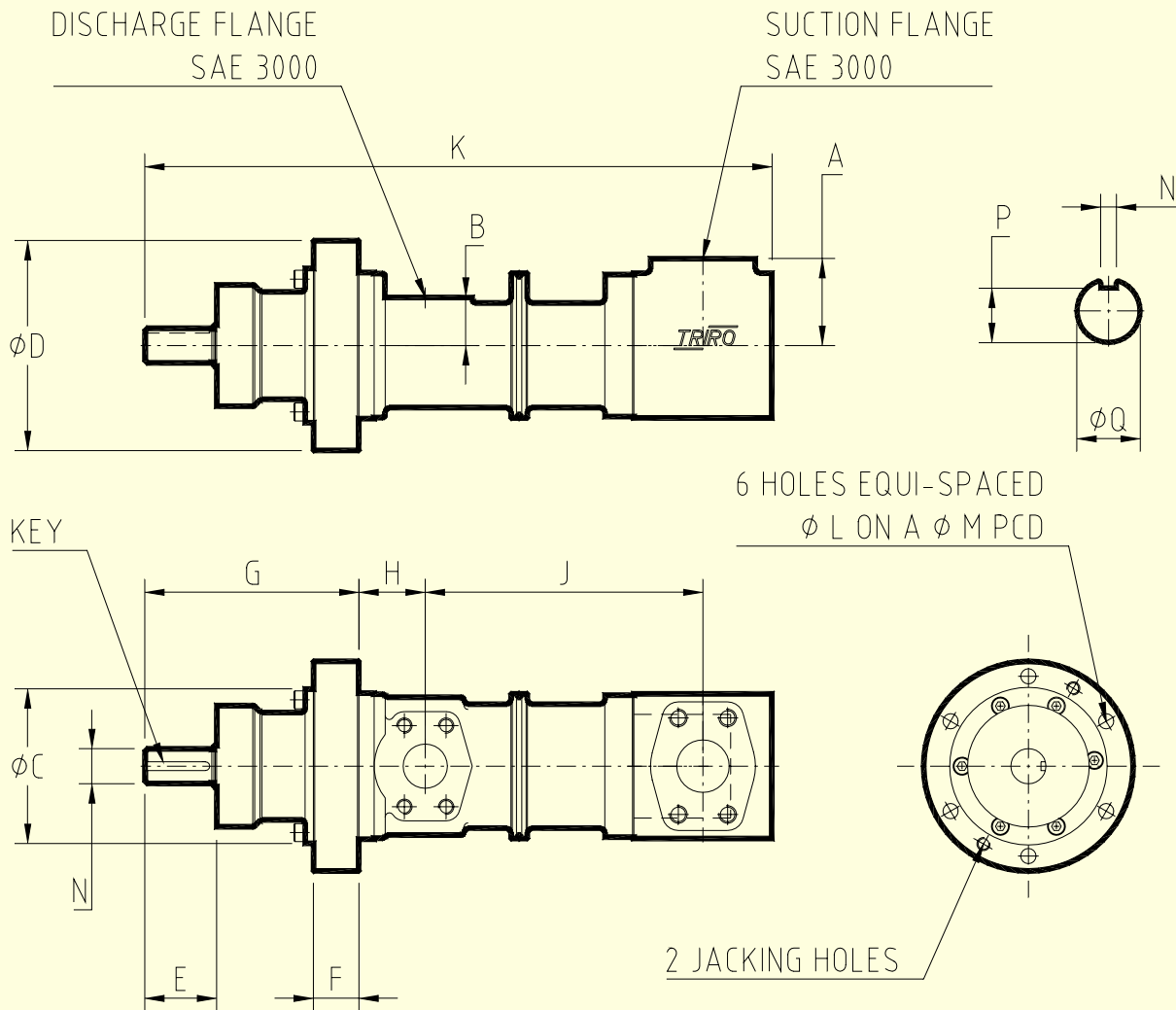
Suction & Discharge flanges to SAE3000.

Most major petroleum specifications catered for i.e. API610, API614, API676 etc.

Principal Characteristics

- | **SILENT**
- | **VIBRATION FREE**
- | **PULSE FREE OPERATION**
- | **GOOD SUCTION**
- | **MECHANICAL SEAL OPTIONS**
- | **VERSATILE INSTALLATION**
- | **PRECISION BUILT**
- | **ULTIMATE RELIABILITY**
- | **ALUMINIUM ALLOY**
- | **HIGH EFFICIENCY**
- | **STAND ALONE CARTRIDGE**
- | **OR FITTED IN IRON/STEEL BODY**
- | **CUSTOMISED TO YOUR SPECIFICATION**

STANDARD INSERT SHOWN WITH SUCTION CHAMBER (CA)



SUCTION PORT CAN BE ROTATED THROUGH 90° INTERVALS WHEN LOOKING ON BACK OF PUMP.

ROTATION: - CLOCKWISE LOOKING ON DRIVE END

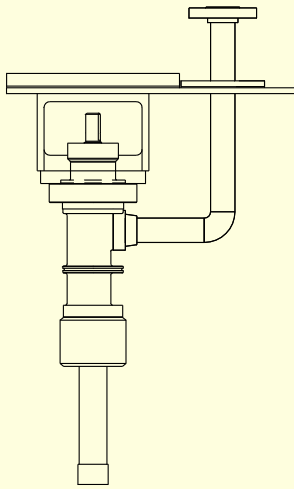
END SUCTION CAN BE PROVIDED AS AN OPTIONAL ALTERNATIVE.

| | FLANGES | | Approximate dimensions (mm). DO NOT use for installation purposes. | | | | | | | | | | | | | SHAFT | | |
|--------|-------------|-------------|--|----|-------------------|-----|-----|----|-----|----|-----|-----|----|-----|----------------|------------------|------------------|--------------------|
| | SUCTION | DISCHARGE | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | KEY |
| C 38-4 | 1 1/2" N.B. | 1 1/4" N.B. | 63 | 35 | 111.91 111.90 | 152 | 52 | 33 | 155 | 48 | 201 | 457 | 11 | 130 | 6.350 6.323 | 21.780 21.650 | 25.410 25.388 | 1/4" SQ. x 47 LG. |
| C 45-4 | 2" N.B. | 1 1/2" N.B. | 67 | 38 | 131.00 130.975 | 182 | 82 | 34 | 187 | 49 | 238 | 532 | 14 | 152 | 6.350 6.310 | 24.970 24.820 | 28.580 28.570 | 1/4" SQ. x 62 LG. |
| C 52-4 | 2 1/2" N.B. | 2" N.B. | 70 | 48 | 150.00 149.97 | 201 | 87 | 34 | 207 | 65 | 259 | 594 | 14 | 175 | 9.525 9.500 | 33.10 33.00 | 38.100 38.088 | 3/8" SQ. x 81 LG. |
| C 60-4 | 3" N.B. | 2" N.B. | 78 | 53 | 153.00 152.975 | 217 | 96 | 35 | 216 | 65 | 315 | 674 | 18 | 180 | 9.525 9.500 | 33.10 33.00 | 38.100 38.088 | 3/8" SQ. x 91 LG. |
| C 70-4 | 3 1/2" N.B. | 2 1/2" N.B. | 92 | 62 | 179.00 178.975 | 243 | 104 | 35 | 234 | 78 | 352 | 753 | 18 | 205 | 12.73 12.70 | 40.46 40.31 | 47.625 47.609 | 1/2" SQ. x 98 LG. |
| C 80-4 | 4" N.B. | 3" N.B. | 97 | 67 | 200.00 199.971 | 270 | 126 | 35 | 264 | 92 | 406 | 861 | 18 | 230 | 12.73 12.70 | 40.46 40.31 | 47.625 47.609 | 1/2" SQ. x 105 LG. |

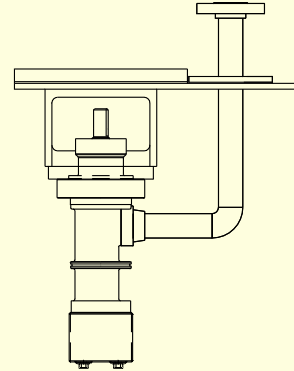
Dimensions are based upon 'Plenty Mirrlees Pumps' standard pump construction and may change in order to meet individual customer specifications.

DO NOT USE FOR FINAL INSTALLATION DIMENSIONS
Certified drawings available upon request..

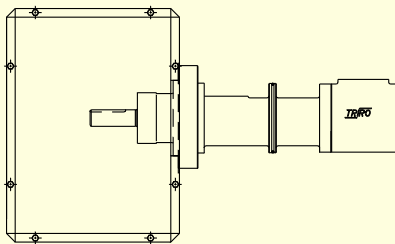
MOUNTING ARRANGEMENT OR CUSTOMISED TO MEET YOUR NEEDS



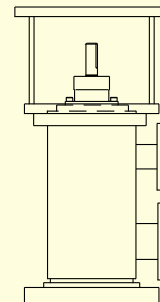
TANK TOP MOUNTED AXIAL SUCTION (KCA)



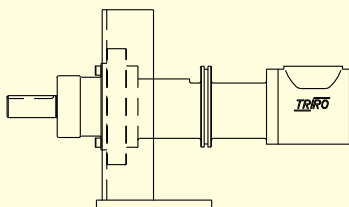
TANK TOP MOUNTED RADIAL SUCTION (KCA)



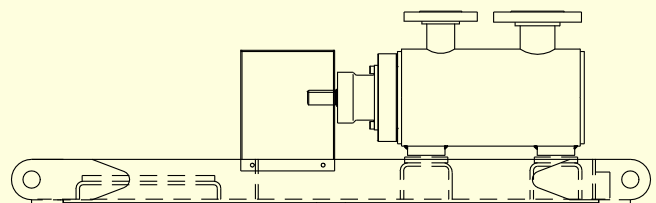
PEDESTAL MOUNTED CARTRIDGE (TCA)



VERTICAL MOUNTED PUMP (LCA)



BRACKET MOUNTED (FCA)



BEDPLATE MOUNTED (HCFA)

PERFORMANCE DATA

| Pump Size | Speed | | Normal Lead | | | | | | | | | Short Lead | | | | | | | | |
|-----------|-------|-------|--|--------|--------|---------|--------|--------|-------------------------|--------|--------|------------|--------|--------|---------|--------|--------|-------------------------|--------|--------|
| | | | 40 cSt | | | 150 cSt | | | 750 cSt | | | 40 cSt | | | 150 cSt | | | 750 cSt | | |
| | | | 6.7 Bar | 21 Bar | 41 Bar | 6.7 Bar | 21 Bar | 41 Bar | 6.7 Bar | 21 Bar | 41 Bar | 6.7 Bar | 21 Bar | 41 Bar | 6.7 Bar | 21 Bar | 41 Bar | 6.7 Bar | 21 Bar | 41 Bar |
| 38-4 | 1450 | L/Min | 60 | 52 | 46 | 65 | 61 | 57 | 68 | 66 | 64 | 47 | 41 | 34 | 52 | 48 | 45 | 54 | 53 | 51 |
| | | kW | 1 | 2.6 | 5.0 | 1.2 | 2.9 | 5.4 | 1.5 | 3.3 | 5.9 | 0.8 | 2.1 | 4.1 | 1.0 | 2.3 | 4.3 | 1.3 | 2.7 | 4.8 |
| | 2900 | L/Min | 130 | 123 | 117 | 135 | 131 | 127 | 138 | 137 | 135 | 104 | 98 | 91 | 108 | 105 | 102 | 111 | 109 | 108 |
| | | kW | 2.2 | 5.5 | 10 | 2.67 | 6.1 | 11.2 | 3.7 | 7.6 | 12.7 | 1.7 | 4.4 | 8.4 | 2.2 | 4.9 | 9.0 | 2.9 | 5.9 | 10.2 |
| 45-4 | 1450 | L/Min | 103 | 92 | 84 | 110 | 104 | 99 | 114 | 115 | 109 | 81 | 72 | 63 | 87 | 83 | 78 | 91 | 89 | 87 |
| | | kW | 1.7 | 4.4 | 8.3 | 1.98 | 4.8 | 8.9 | 2.57 | 5.5 | 9.9 | 1.3 | 3.6 | 6.8 | 1.58 | 3.82 | 6.8 | 2.06 | 4.4 | 7.9 |
| | 2900 | L/Min | 221 | 210 | 202 | 228 | 222 | 217 | 232 | 230 | 227 | 221 | 166 | 157 | 182 | 177 | 172 | 185 | 183 | 181 |
| | | kW | 3.6 | 9.2 | 17 | 4.5 | 10.2 | 18.7 | 6.2 | 12.2 | 21.2 | 3.6 | 7.3 | 14 | 3.6 | 8.1 | 13.8 | 4.9 | 9.7 | 16.9 |
| 52-4 | 1450 | L/Min | 162 | 153 | 137 | 171 | 164 | 156 | 176 | 173 | 170 | 128 | 116 | 104 | 136 | 130 | 124 | 141 | 138 | 135 |
| | | kW | 2.5 | 4.7 | 12.8 | 3.04 | 7.4 | 13.8 | 3.96 | 8.5 | 15.2 | 2.1 | 5.5 | 10.5 | 2.43 | 5.9 | 11 | 3.16 | 6.8 | 12.2 |
| | 2900 | L/Min | 343 | 335 | 318 | 352 | 345 | 338 | 358 | 355 | 351 | 273 | 261 | 249 | 281 | 275 | 269 | 286 | 283 | 280 |
| | | kW | 5.6 | 9.8 | 26 | 6.9 | 15.6 | 28.7 | 9.5 | 18.7 | 32.6 | 4.5 | 11.3 | 21.5 | 5.5 | 12.5 | 23 | 7.6 | 15 | 26.1 |
| 60-4 | 1450 | L/Min | 253 | 233 | 218 | 266 | 256 | 246 | 274 | 269 | 265 | 201 | 184 | 168 | 212 | 203 | 195 | 218 | 215 | 211 |
| | | kW | 3.9 | 10.5 | 19.8 | 4.7 | 11.4 | 21.3 | 6.11 | 13.1 | 23.5 | 3.2 | 8.4 | 16.3 | 3.8 | 9.1 | 17 | 4.9 | 10.5 | 18.8 |
| | 2900 | L/Min | 533 | 513 | 499 | 546 | 536 | 526 | 554 | 549 | 545 | 425 | 408 | 392 | 436 | 428 | 419 | 443 | 439 | 435 |
| | | kW | 8.6 | 21.8 | 40.5 | 10.6 | 24 | 44.4 | 14.6 | 29 | 50 | 6.9 | 17.4 | 33.3 | 8.5 | 19.3 | 35.5 | 11.7 | 23.2 | 40.4 |
| 70-4 | 1450 | L/Min | 408 | 381 | 361 | 426 | 412 | 398 | 436 | 430 | 424 | 324 | 302 | 279 | 340 | 328 | 316 | 349 | 343 | 338 |
| | | kW | 6.0 | 17.0 | 31.5 | 7.5 | 18 | 33.9 | 9.71 | 21 | 37.3 | 5 | 13.4 | 26 | 6.0 | 14.4 | 27.1 | 7.77 | 16.6 | 29.8 |
| | 2900 | L/Min | 853 | 826 | 807 | 871 | 857 | 844 | REFER TO PLENTY LIMITED | | | 681 | 658 | 635 | 696 | 684 | 672 | REFER TO PLENTY LIMITED | | |
| | | kW | 13.7 | 35 | 64.3 | 16.8 | 38.3 | 70.5 | REFER TO PLENTY LIMITED | | | 11 | 27.7 | 53 | 13.5 | 31 | 56 | REFER TO PLENTY LIMITED | | |
| 80-4 | 1450 | L/Min | 611 | 576 | 550 | 634 | 616 | 598 | 648 | 640 | 632 | 486 | 456 | 427 | 506 | 491 | 475 | 518 | 511 | 504 |
| | | kW | 9.4 | 25 | 46.5 | 11.1 | 26.7 | 50.3 | 14.4 | 30.7 | 55.3 | 7.5 | 20 | 38.3 | 8.8 | 21.4 | 38.1 | 11.5 | 24.6 | 44.2 |
| | 2900 | L/Min | Please Refer to Plenty Limited for speeds in excess of 1450 R.P.M. | | | | | | | | | | | | | | | | | |
| | | kW | Please Refer to Plenty Limited for speeds in excess of 1450 R.P.M. | | | | | | | | | | | | | | | | | |

Pumps can also be selected for 60 Hz motor supply.

FULL DATA ON REQUEST

PRESSURE

Maximum Discharge Pressure
Normal Lead 41 Bar
Short Lead 50 Bar

Maximum Suction Pressure
Normal Lead 38 Bar
Short Lead 46 Bar

TEMPERATURE

Standard -20°C to +100°C
High temperature range up to +120°C

ROTATION

Clockwise as standard.
(Anticlockwise available as non-standard)

VISCOSITY

Maximum 3000 cSt

SPEED

Up to 5000 R.P.M.

Pump can be constructed to API 610 / 614 / 676 or individually customised

Operation Three screw pump with one, central, power driven rotor intermeshing with idlers rotors, balanced and machined to effect a seal for the liquid being pumped

Plenty Mirrlees Pumps

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