

KEWPUMP®

Keeps Pumping



KS-SC

**BACK PULL-OUT
METAL LINER
CENTRIFUGAL PUMP**



Design

The KS-SC range of pumps are horizontal, single stage centrifugal pumps with back pull out design. The entire pump assembly can be removed from the casing without dismantling the pipework and gives instant access to most parts to enable simple and quick maintenance.

Heavy duty cast iron bearing frame, oil lubricated bearings and oversized shaft provide maximum operating life and stability. The pumps are designed for both direct coupled and V-belts drive.

The casting is of the vertical split type consisting of two halves with integral cast support feet. Volute liner can be easily mounted and dismantled without disruption to the suction piping.

The impeller and volute liner have large passageways and liberal clearances designed for large solids handling capability. These pumps had been specially designed and developed to meet the needs of palm oil industries and similar applications where there is a need to handle activated sludge, crude oil, muddy liquids, thick mash, effluent water, mixture of solids and water and other similar liquids.

Various types of materials for the impeller and the volute liner are available to match the nature of liquid to be handled.

Materials of Construction

All standard pump components in contact with the fluid are made of Stainless Steel 304 (CF-8). 400-series Stainless Steel and High Chrome Iron are also available upon request.

CASING

End suction and tangential top discharge nozzle design. The casing is of the vertical split type consisting of two halves and secured together with bolts and nuts.

IMPELLER

Radial flow impeller threaded on shaft with hydraulically balanced back vanes, to reduce axial thrust and also relieve pressure on the stuffing box almost entirely.

VOLUTE LINER

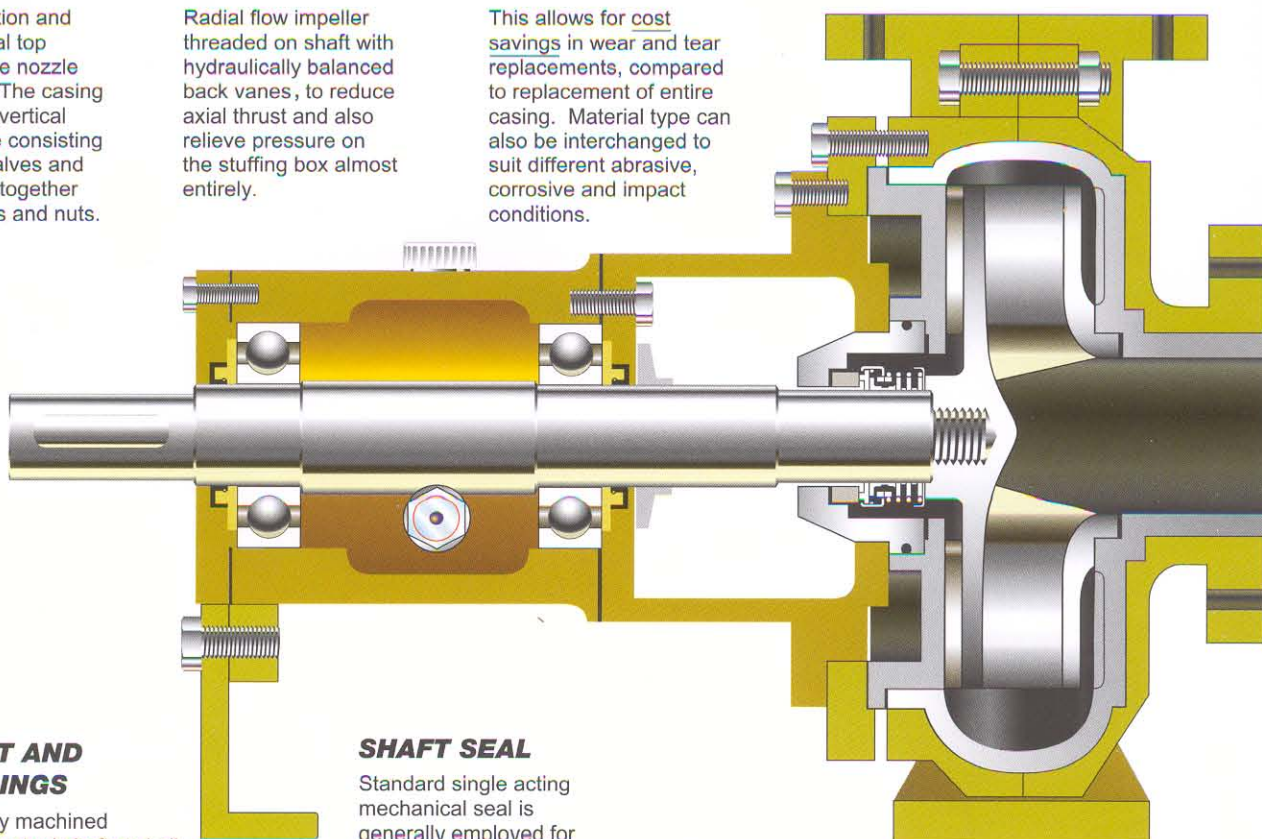
This allows for cost savings in wear and tear replacements, compared to replacement of entire casing. Material type can also be interchanged to suit different abrasive, corrosive and impact conditions.

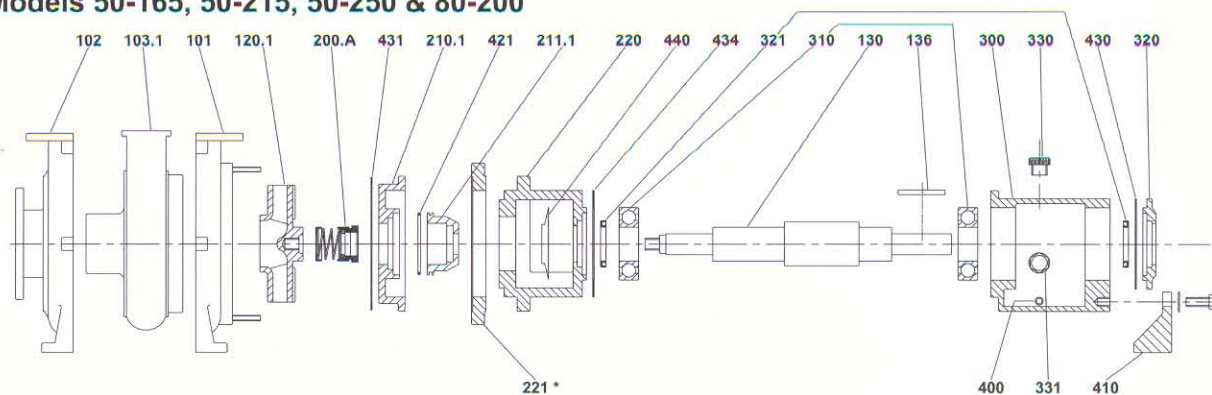
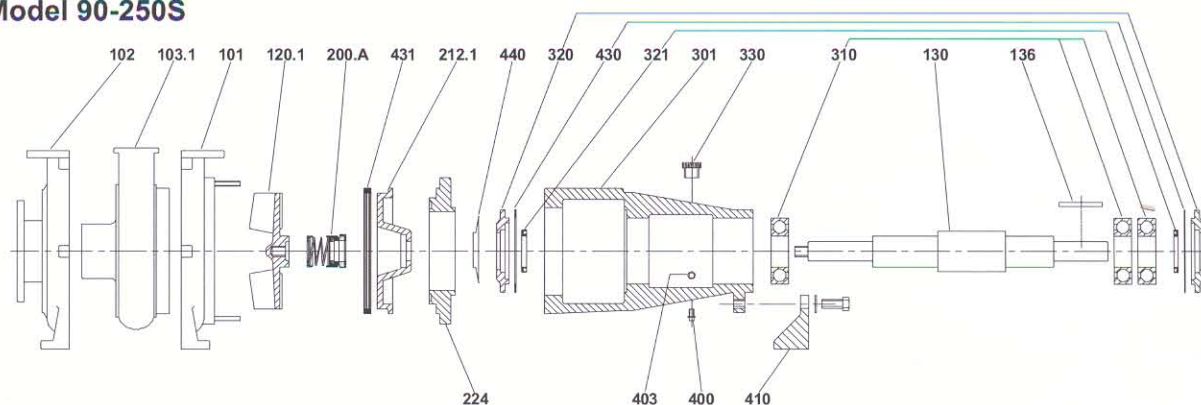
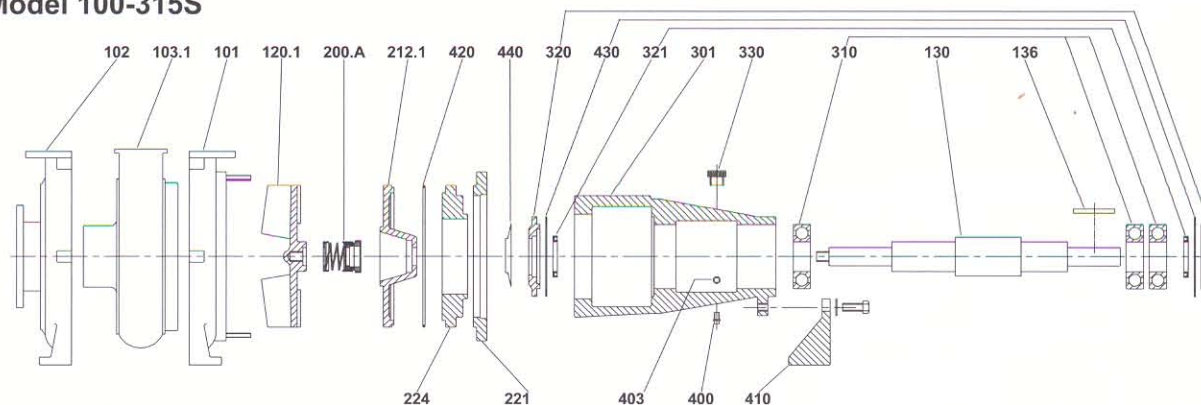
SHAFT AND BEARINGS

Precisely machined stainless steel shaft and oil lubricated deep groove ball bearings permit stable operation over the service life of the pump.

SHAFT SEAL

Standard single acting mechanical seal is generally employed for the shaft sealing. However, gland packing system fitted with shaft sleeve is also available on request.

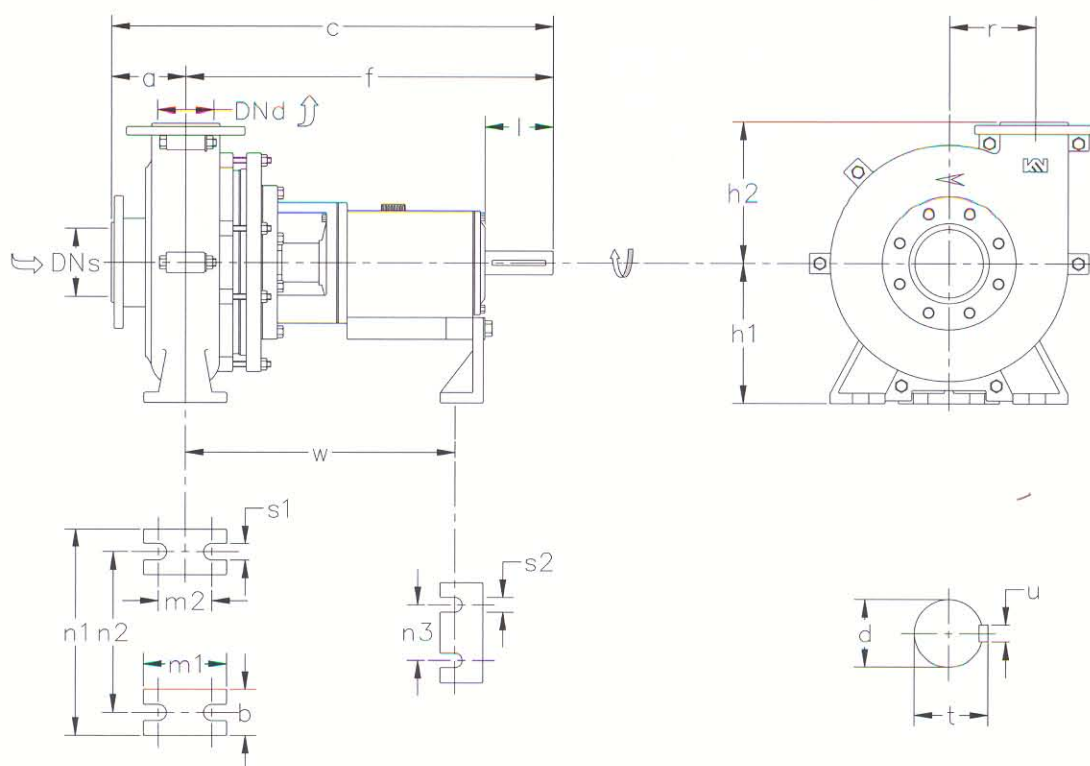


Models 50-165, 50-215, 50-250 & 80-200

Model 90-250S

Model 100-315S


| Part No. | Description | Standard Material |
|----------|----------------------------|---------------------|
| 101 | Back Casing | Cast Iron |
| 102 | Front Casing | Cast Iron |
| 103.1 | Volute Liner | Stainless Steel 304 |
| 120.1 | Impeller | Stainless Steel 304 |
| 130 | Shaft | Stainless Steel 304 |
| 136 | Shaft End Key | Stainless Steel 304 |
| 200.A | Mechanical Seal | Carbon vs. Ceramic |
| 210.1 | Casing Cover | Stainless Steel 304 |
| 211.1 | Sealing Chamber | Stainless Steel 304 |
| 212.1 | Stuffing Box Cover | Stainless Steel 304 |
| 220 | Frame Adaptor | Cast Iron |
| 221 * | Adaptor Extension Ring | Cast Iron |
| 224 | Stuffing Box Cover Adaptor | Cast Iron |
| 300 | Bearing Frame | Cast Iron |
| 301 | Bearing Bracket | Cast Iron |
| 310 | Bearing | Steel |

| Part No. | Description | Standard Material |
|----------|---|-------------------|
| 320 | Bearing Cover | Cast Iron |
| 321 | Oil Seal | Synthetic Rubber |
| 330 | Oil Cover | Aluminium Alloy |
| 331 | Oil Gauge | Plastic Threaded |
| 400 | Bearing Frame Drain Plug / Bearing Bracket Drain Plug | Galvanised Steel |
| 403 | Oil Level Plug | Galvanised Steel |
| 410 | Support Foot | Cast Iron |
| 420 | Stuffing Box Cover 'O' Ring | Synthetic Rubber |
| 421 | Sealing Chamber 'O' Ring | Synthetic Rubber |
| 430 | Bearing Cover Gasket | Asbestos Sheet |
| 431 | Casing Cover Gasket / Stuffing Box Cover Gasket | P.T.F.E. |
| 434 | Frame Adaptor Gasket | Asbestos Sheet |
| 440 | Deflector | Synthetic Rubber |

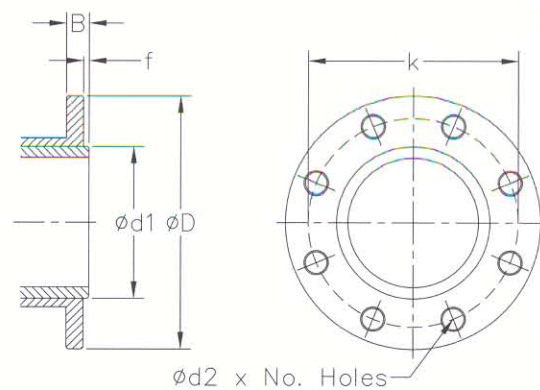
* Not available in model 50-165


Dimensions in mm

| PUMP MODEL | Flanges | | Pump Dimensions | | | | | | Foot Dimensions | | | | | | | | | Shaft End | | | |
|---------------|---------|-----|-----------------|-----|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----|----|----|-----|-----------|-----|------|------|
| | DNd | DNs | a | f | c | h1 | h2 | r | b | m1 | m2 | n1 | n2 | n3 | s1 | s2 | w | d | l | t | u |
| 50-165 | 50 | 65 | 115 | 440 | 555 | 160 | 162 | 100 | 65 | 115 | 70 | 255 | 195 | 110 | 17 | 14 | 310 | 38 | 80 | 42.8 | 9.5 |
| 50-215 | 50 | 65 | 112 | 440 | 552 | 176 | 190 | 115 | 65 | 115 | 70 | 265 | 205 | 110 | 17 | 14 | 315 | 38 | 80 | 42.8 | 9.5 |
| 50-250 | 50 | 65 | 115 | 440 | 555 | 205 | 215 | 150 | 65 | 115 | 70 | 330 | 258 | 110 | 17 | 14 | 315 | 38 | 80 | 42.8 | 9.5 |
| 80-200 | 80 | 90 | 118 | 440 | 565 | 185 | 205 | 112 | 65 | 125 | 85 | 330 | 250 | 110 | 17 | 14 | 315 | 38 | 80 | 42.8 | 9.5 |
| 90-250S | 90 | 100 | 150 | 540 | 690 | 235 | 210 | 145 | 65 | 130 | 100 | 380 | 315 | 180 | 17 | 14 | 380 | 42 | 100 | 48.3 | 12.7 |
| 100-315S | 100 | 125 | 155 | 535 | 690 | 265 | 255 | 175 | 65 | 130 | 100 | 380 | 315 | 180 | 17 | 14 | 375 | 42 | 100 | 48.3 | 12.7 |

Dimensions in mm

| PUMP MODEL | Branch | Flange | | Raised Face | | Drilling | | |
|------------|-----------|--------|----|-------------|---|----------|----------|-----|
| | | D | B | d1 | f | No. | d2 | k |
| 50-165 | Suction | 185 | 22 | 85 | 2 | 4 | 5/8 BSW" | 145 |
| 50-215 | Discharge | 165 | 22 | 85 | 2 | 4 | 5/8 BSW" | 125 |
| 50-250 | Suction | 185 | 22 | 85 | 2 | 4 | 5/8 BSW" | 145 |
| | Discharge | 185 | 22 | 85 | 2 | 4 | 5/8 BSW" | 145 |
| 80-200 | Suction | 220 | 22 | 115 | 2 | 8 | 5/8 BSW" | 180 |
| | Discharge | 200 | 22 | 115 | 2 | 8 | 5/8 BSW" | 160 |
| 90-250S | Suction | 220 | 22 | 120 | 2 | 8 | 5/8 BSW" | 180 |
| | Discharge | 200 | 22 | 136 | 2 | 8 | 5/8 BSW" | 160 |
| 100-315S | Suction | 250 | 26 | 150 | 2 | 8 | 5/8 BSW" | 210 |
| | Discharge | 220 | 22 | 148 | 2 | 8 | 5/8 BSW" | 180 |



Holes equally spaced straddling pump centreline.