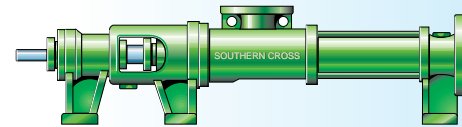
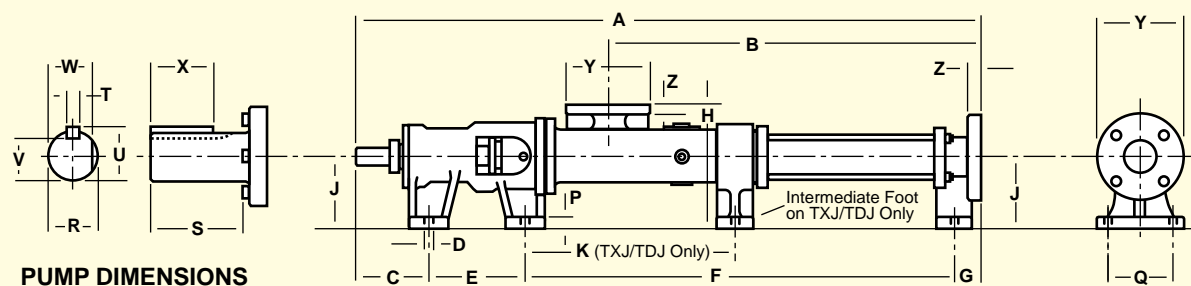


# Southern Cross

## “T” SERIES PEDESTAL MOUNTED HELICAL ROTOR PUMPS



# PROGRESSIVE CAVITY POSITIVE DISPLACEMENT



| PUMP | A    | B    | C   | D  | E   | F    | G  | H   | J   | K | P  | Q   | PUMP MASS |      |       |
|------|------|------|-----|----|-----|------|----|-----|-----|---|----|-----|-----------|------|-------|
| TXD  | 801  | 373  | 122 | 14 | 171 | 464  | 44 | 197 | 114 | - | 14 | 102 | 25kg      |      |       |
| TDD  | 914  | 486  |     |    |     | 576  |    |     |     |   |    |     | 27kg      |      |       |
| TXE  | 842  | 414  |     |    |     | 505  |    |     |     |   |    |     | 28kg      |      |       |
| TDE  | 1250 | 715  | 161 | 14 | 203 | 838  | 48 | 241 | 140 | - | 16 | 140 | 48kg      |      |       |
| TXG  | 1141 | 606  |     |    |     | 729  |    |     |     |   |    |     | 241       | 48kg |       |
| TDG  | 1331 | 796  |     |    |     | 919  |    |     |     |   |    |     | 241       | 54kg |       |
| TXH  | 1304 | 750  |     |    |     | 892  |    |     |     |   |    |     | 254       | 64kg |       |
| TDH  | 1683 | 991  | 235 | 17 | 260 | 1145 | 43 | 292 | 178 | - | 19 | 191 | 102kg     |      |       |
| TXJ  | 1805 | 1056 |     |    |     | 1267 |    |     |     |   |    |     | 311       | 714  | 128kg |
| TDJ  | 2149 | 1401 |     |    |     | 1611 |    |     |     |   |    |     | 311       | 714  | 147kg |

| PUMP         | R  | S   | T  | U  | V  | W  | X  |
|--------------|----|-----|----|----|----|----|----|
| TXD/DD/XE    | 28 | 49  | 8  | 31 | 24 | 27 | 35 |
| TDE/XG/DG/XH | 42 | 80  | 12 | 45 | 37 | 40 | 54 |
| TDH/XJ/DJ    | 55 | 100 | 16 | 59 | 49 | 53 | 70 |

| PUMP      | NOM. SIZE | NO. OF HOLES | BOLT CIRCLE | HOLE DIAM | Y   | Z  |
|-----------|-----------|--------------|-------------|-----------|-----|----|
| TXD/DD/XE | 40 (1.5") | 4            | 98          | 14        | 135 | 16 |
| TDE/XG/DG | 50 (2")   | 4            | 114         | 17        | 151 | 19 |
| TXH/DH    | 80 (3")   | 4            | 146         | 17        | 185 | 19 |
| TXJ/DJ    | 100 (4")  | 8            | 178         | 17        | 216 | 22 |

As Tyco policy is one of constant improvement, we reserve the right to make specification changes without notice and without incurring liability.

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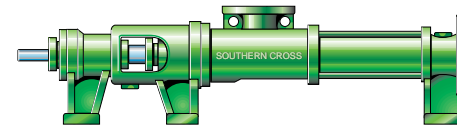
# Southern Cross

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A division of **tyco** Flow Control Pacific Pty Ltd  
A.B.N. 83 000 922 690

# Southern Cross

## “T” SERIES PEDESTAL MOUNTED HELICAL ROTOR PUMPS



# PROGRESSIVE CAVITY POSITIVE DISPLACEMENT

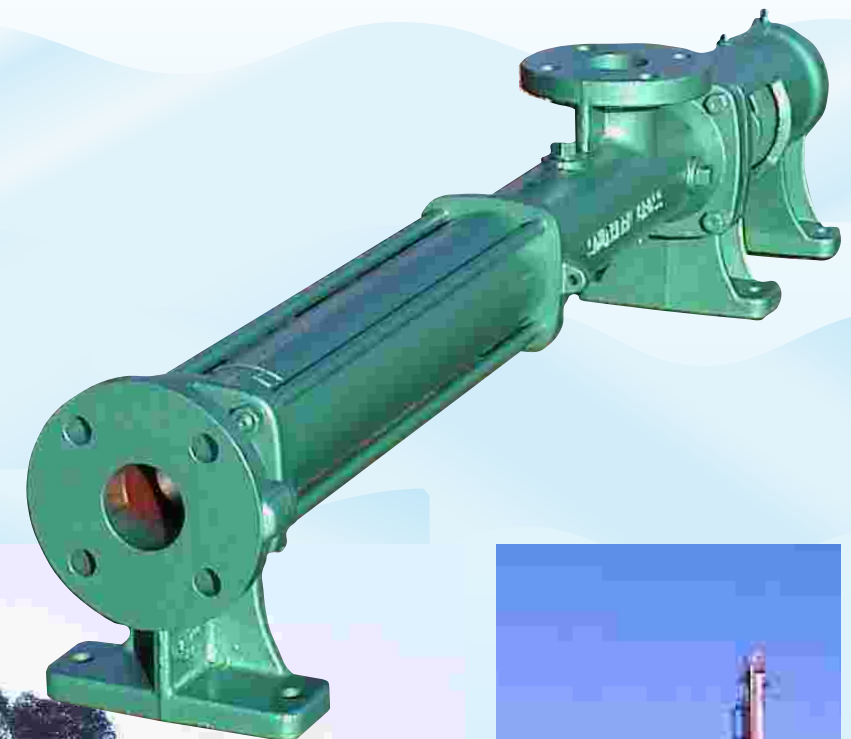
### APPLICATIONS

• Positive displacement helical rotor type pumps for the transfer of a variety of liquids including —

- WATER
- SOFT MACERATED SEWAGE
- SOFT ABATTOIR EFFLUENT
- TALLOW and BLOOD
- ANIMAL and VEGETABLE OILS
- PIGGERY EFFLUENT
- SLURRIES

### FEATURES

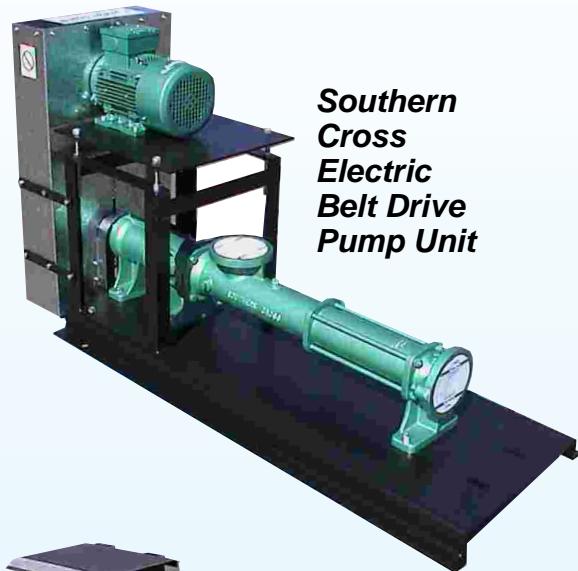
- Pump to high heads or over long distances.
- High efficiency, low maintenance.
- Constant non-pulsating discharge in either direction.
- Low power and running costs.
- Wide operating speed range for variable output.
- Australian designed and manufactured.
- Up to 19 litres per second discharge.
- Heads to 120 metres.
- 40 to 100mm flanged connections.





**Southern Cross**

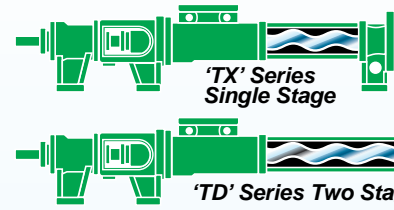
**“T” SERIES PEDESTAL MOUNTED HELICAL ROTOR PUMPS**



**Southern Cross Electric Belt Drive Pump Unit**



**Belt Drive Diesel Pump Unit**



Available as Single Stage for 60m head or Two Stage for 120m head.

**SPECIFICATIONS...**

**PUMP ROTOR:** 300 series stainless steel, hard chrome plated and polished.

**PUMP STATOR:** Standard pumps have moulded natural rubber stators bonded into cast iron bodies. When hydrocarbons, hydraulic fluids and vegetable oils are to be pumped optional nitrile butadiene lined stators are available. The extended rubber lining provides a seal at each end of the stator to insulate the cast iron body from the pumped liquid.

**ROTOR DRIVE SHAFT (WHIPSHAFT):** One piece, type 431 stainless steel shaft which flexes to take the “whip” due to the eccentric rotation of the rotor. This eliminates the need for costly and difficult to replace universal joints.

**HOLLOW DRIVE SHAFT:** Cast stainless steel made hollow to allow movement of the “whipshaft”. Flanged on the input end to accept the stub shaft, the drive shaft runs on grease lubricated taper roller bearings sealed with lip seals.

**ROTOR DRIVE SHAFT SHROUD (Optional):** Prevents solids, which impede the flexing action of the drive shaft, from entering the cavity between the rotor drive shaft and the hollow shaft.

**ACCESS PORTS (Optional):** H and J size pumps can be supplied with ports and cover plates for clearing blockages.

**“T” SERIES PEDESTAL MOUNTED HELICAL ROTOR PUMPS**

**Southern Cross**

**SPECIFICATIONS contd...**

**DIRECTION OF ROTATION:** Rotation in either direction enables pumps to be reversed for back flushing of lines, clearing blockages or for duties requiring reversal of flow between tanks and reservoirs.

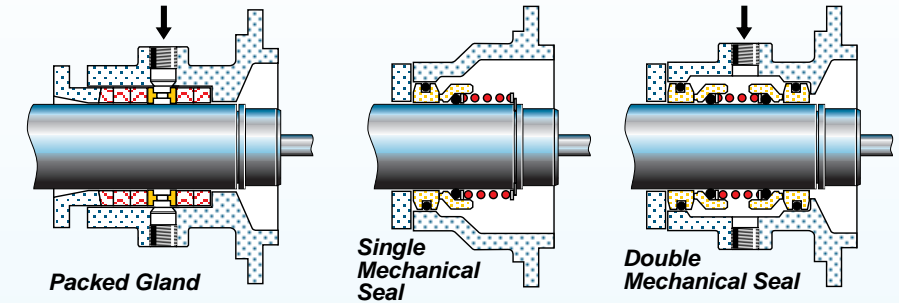
**MOUNTING:** Any angle from horizontal to vertical is acceptable.

**LUBRICATION:** Occasional greasing of the drive shaft bearings. Pumping element is lubricated by the pumped liquid.

**PUMPED LIQUID TEMP. RANGE:** For standard pumps liquid temperature should not exceed 37° C. Refer to Southern Cross for higher temperature operation.

**DRIVE:** Supplied as standard with keyed, bare shafts or can be fitted with pulleys or couplings as required.

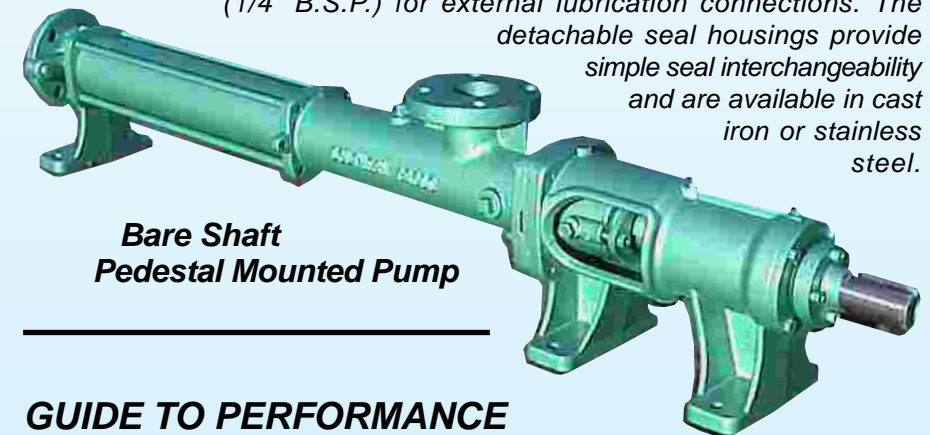
**PUMP CONNECTIONS:** Flanged to B.S.S. Table ‘E’. The end flange is on the centre line of the pump while the centre flange on the pump housing can be rotated through 360° at 90° increments. Both flanges are the same size.



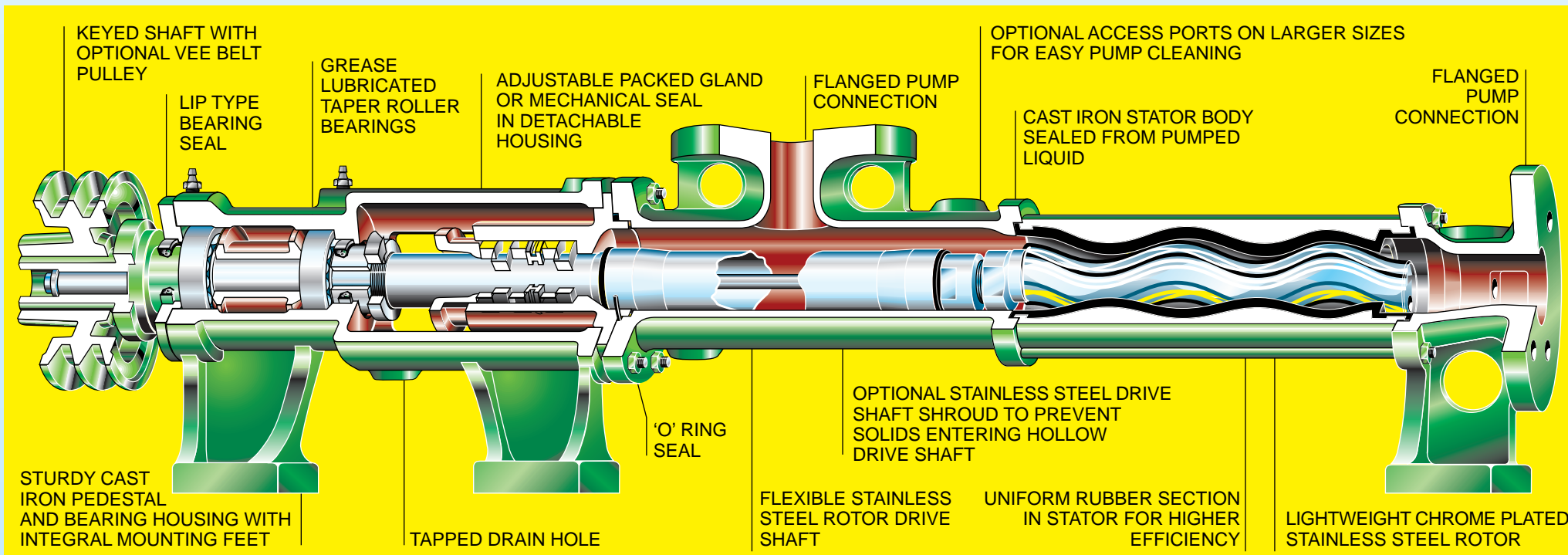
**SHAFT SEAL:** Pumps are supplied as standard with packed gland shaft seals or optionally single or double mechanical seals can be fitted. Packed glands are suitable for operating heads to 120 metres and depending on rotation of the pump can be subjected to either suction or discharge head. When on the discharge side the pumped liquid lubricates the gland. Optional pressure feed fittings provide gland lubrication from the pump discharge when the gland is on the suction side or alternatively clean water from an external supply can be used when pumping abrasive liquids.

Single mechanical seals are available for clean water applications and are suitable for either direction of pump rotation. Double mechanical seals with external water or oil lubrication are available for dirty water applications.

Packed gland and double mechanical seal housings have two tappings (1/4” B.S.P.) for external lubrication connections. The detachable seal housings provide simple seal interchangeability and are available in cast iron or stainless steel.



**Bare Shaft Pedestal Mounted Pump**



**GUIDE TO PERFORMANCE**

