

### LANDING NIPPLE

The **landing nipple** is connected to the bottom end of the stator.

Its fonctions are:

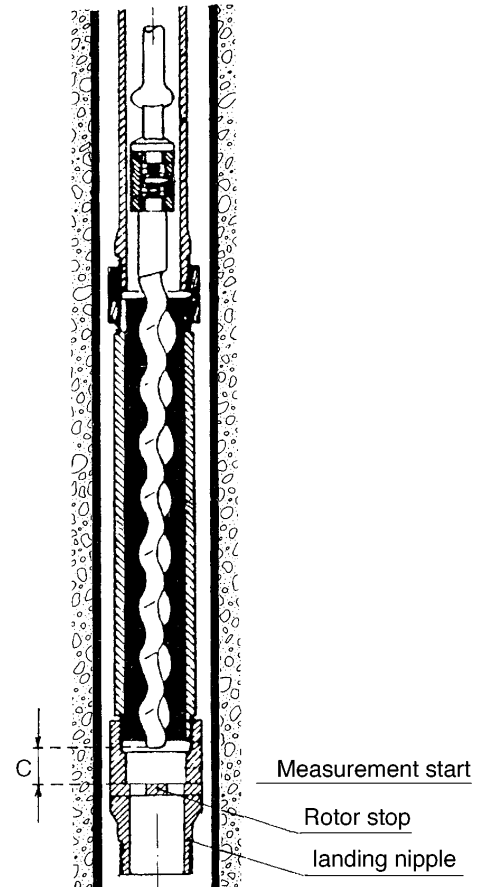
- to serve as a landing spot during the spacing out of the rotor.
- to provide a stand-off length of 30 cm (1 ft) for the possible elongation of the rod string when the pump is running.
- to serve as suction for the pump.



Available sizes:

- 2 3/8" EU box x 2 7/8" EU pin
- 2 7/8" EU box x 2 7/8" EU pin
- 3 1/2" EU box x 3 1/2" EU pin
- 4" NU box x 3 1/2" EU pin
- 5" CSG box x 3 1/2" EU pin

*Other sizes available on request*



### PUP JOINT

The **pup joint's** function is to allow for the eccentric movement of the rotor head and its coupling, when the inside diameter of the tubing is too small: in this case its insertion between stator and tubing is mandatory.

The length of this joint must be sufficient to accommodate the head of the rotor before the start-up of the pump, i.e. before the dynamic elongation of the rod string has taken place.

Common length of pup joints is 4 ft.

Available sizes:

API threads	Lenght	
3" 1/2 EU	4'	8'
4" NU	4'	8'

*Other sizes available on request*



*Courtesy of Alberta Oil Tools*

## TUBING DRAIN

The Tubing Drain provides a simple method for draining the tubing string before tripping out. The Tubing Drain has a shear pinned sleeve and it is activated by inside pressure. The opening pressure can be adjusted by using the required number of shear screws.

Available sizes: 2 7/8", 3 1/2"



*Courtesy of Gris Gun Ltd*

## TUBING COLLAR - CROSS OVER

PCM provides a various range of API threaded tubing collars, cross over to connect stator, stop bushing, tubing anchors, tubing drain...

size	2 3/8" EU	2 7/8" EU	3 1/2" EU	4" NU	5" CSG
2 3/8" EU	On request	Available	Available	Non Available	Non Available
2 7/8" EU		Available	Available	Available	Non Available
3 1/2" EU			Available	Available	Available
4" NU				Available	Non Available
5" CSG					Available