

*Field-proven technology
that enhances the
operating environment
for all mechanical seals
and packing*



SpiralTrac™

Product Ordering Information



- ✓ *Easy Installation Options*
- ✓ *Total Environmental Control*
- ✓ *Reduces Flush 72%-100%*
- ✓ *Improves MTBR*
- ✓ *Extends mechanical seal and packing life*

Used With:

Version

Flush Only (Split)

Type S only available in ESC & GLF.

F ☐

Non Fibrous (Unsplit)

Not available in Type S.

N ☐

Fibrous (Unsplit)

Not available in Type B or Type S.

D ☐

Units of measurement:

☐ Inch

☐ Metric

Shaft size: _____

(Rotating Element - Sleeve, Impeller hub, Seal OD. etc)

Bore size: _____

First obstruction: _____

Distance from throat to back of the seal if less than 0.750" / 19.05mm: _____

Direction of rotation viewed from bearing:^{NOTE 1}

☐ Right 

☐ Left 

Material:

☐ 316SS

☐ 416SS

☐ Titanium

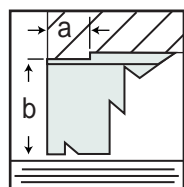
☐ GLF^{NOTE 2}

☐ ESC

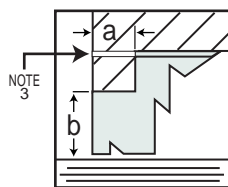
☐ Other: _____

Installation Type:

☐ Type A



Option 1 (Integral Air Vent)



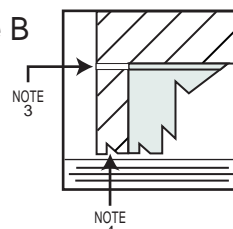
Option 2

Note: If bore minus throat diameter is less than or equal to 0.080" or 2mm use option 1.

a. Throat width: _____

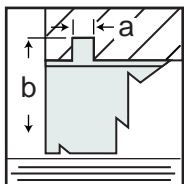
b. Throat diameter: _____

☐ Type B



NOTE 4

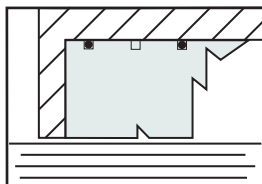
☐ Type E



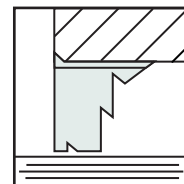
a. Key width: _____

b. Key diameter: _____

☐ Type S



☐ Type I



Notes:

1 Double ended pumps require L and R devices.

2 GLF material available for Version "F" Type "S" only.

3 Recommended: Drill 0.156" (3.96mm) vent hole to release air when flooding.

4 Recommended: Extend exit groove.

Equipment Information:

Flush: ☐ No ☐ Yes Rate: _____

Make: _____

Model: _____

Size: _____

Product: _____

%Solids: _____

Temperature: _____

Distributor Information:

Company: _____

Specialist: _____

P.O.# _____ QTY. EACH: _____

Customer Information:

Company: _____

Customer Name: _____

Signature: _____

EnviroSeal Use Only:

Part no: _____

List Price: _____

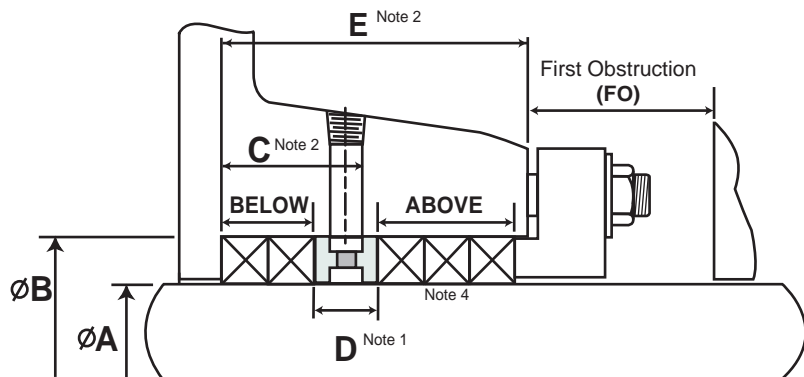
Total Price: _____

Ship Date: _____

W.O.#: _____

US Patents #5,553,868 #5,167,418
Euro. Pat. App. 0 912 848

Fig.1 Regular Stuffing Box



FOR ALL CONFIGURATIONS:

- Sufficient flush pressure to drive a positive flow into the box is required.
- A check valve on the flush line must be utilized.
- Discharge recirculation is not recommended.
- Vertical applications sized the same as horizontal.
- Minimum axial length of SpiralTrac is 1.250".

NOTES:

1. Axial length of lantern ring.
2. If there are less than 3 rings of packing ABOVE, measurements C and E must be provided.
3. If lantern ring / throat bushing is at the bottom of stuffing box, as in Fig 3, dimensions F and G are required.
4. A high quality packing is recommended to sustain a drip rate leakage.

Fig.2 Stuffing Box With Flush Port At Bottom

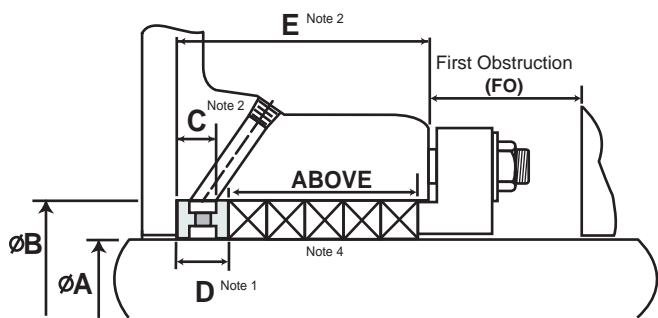
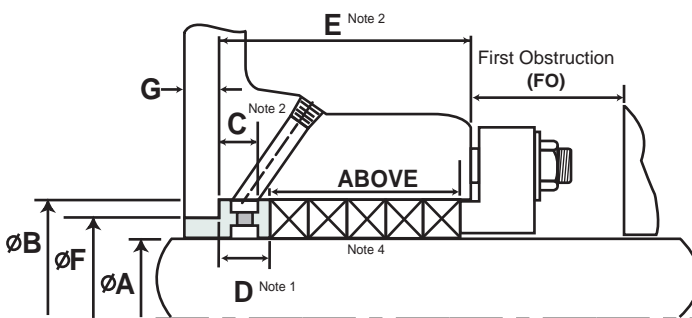


Fig.3 Stuffing Box With Counter Bore



Configuration: ☐ Fig.1 ☐ Fig.2 ☐ Fig.3

Shaft rotation as viewed from the motor end.

☐ **R** CW ☐ **L** CCW

Units of measurement: ☐ Inch ☐ Metric

ØA (Sleeve OD) = _____ ØB (Box ID) = _____ C (To edge of flush port) = _____ D = _____

E (Box Length) = _____ ØF (Counter bore diameter^{Note 3}) = _____ G (Counter bore length^{Note 3}) = _____

Rings of packing BELOW = _____ Rings of packing ABOVE = (3 or more^{Note 2}) _____ FO = _____

Material:

☐ **ESC** (Carbon Graphite PTFE)

☐ **416**

☐ **Split**

☐ **GLF** (Glass Filled PTFE)

☐ **316**

☐ **Solid**

(Note: Radial cross-section must be greater than .500")

Equipment Information:

Flush Rate: _____

Make: _____

Model: _____

Size: _____

Product: _____

%Solids: _____

Temperature: _____

Distributor Information:

Company: _____

Specialist: _____

P.O.# _____ QTY. EACH: _____

Customer Information:

Company: _____

Customer Name: _____

Signature: _____

EnviroSeal Use Only:

Part no: _____

List Price: _____

Total Price: _____

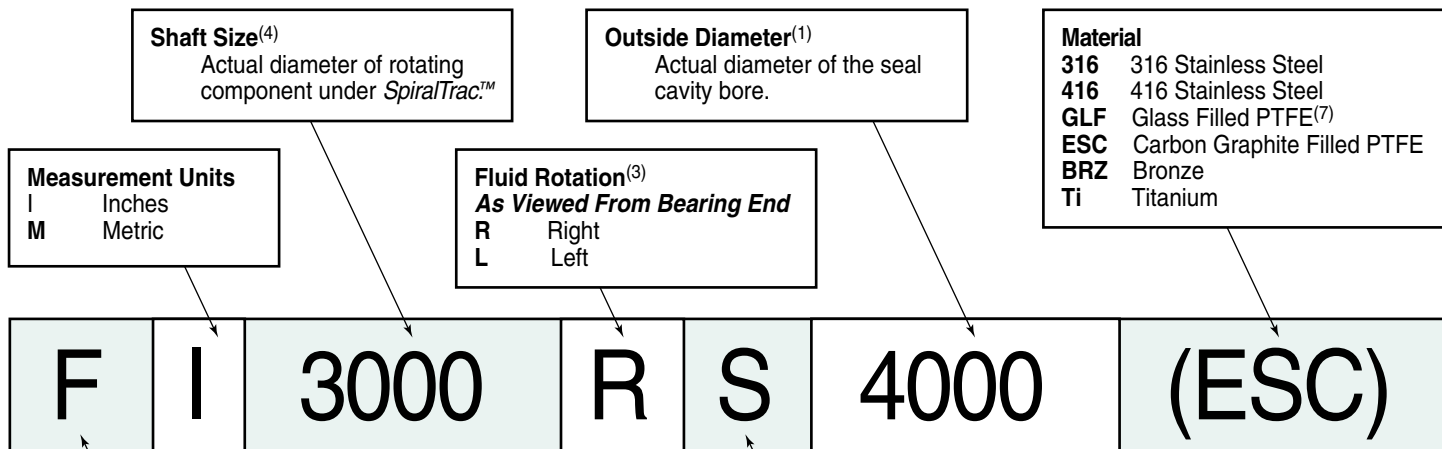
Ship Date: _____

W.O.#: _____

US Patents #5,553,868 #5,167,418
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Example: The following part number identifies a device operating with greatly reduced flush (F), measured in inches (I), to fit over a 3.000" shaft (3000) in a pump with right fluid rotation (R). This is a split (S) SpiralTrac™ for in-place installation with split seals in a pump with a 4.000" seal cavity bore diameter (4000). The device is made of Carbon Graphite Filled PTFE (ESC).

This part number code applies to typical SpiralTrac™ configurations. For special configurations please forward a drawing to EnviroSeal for review.



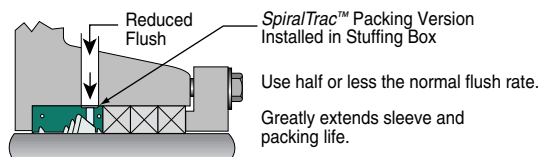
Operating Conditions (SpiralTrac Versions)

F **Greatly reduced flush.**
Installed with split seals while the equipment is still in place (see Type S)

N **Reduced or no flush⁽⁶⁾ in non-fibrous applications.**
More aggressive single spiral groove, deep air vent and exit groove, available in Types A, B, I and E.⁽⁵⁾

D **Reduced or no flush⁽⁶⁾ in fibrous applications.**
Double spiral grooves, deeper air vent and exit groove, available in Types A, I and E.⁽⁵⁾

P **For use with packing only.⁽²⁾**
A combined lantern ring and centrifugal separator, axially split and manufactured with a single spiral groove.

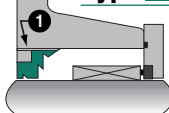


Notes:

- For Type A or Type E SpiralTrac™, dimensions for the counterbore or external key (Horizontal Split Case Pumps) must be provided in addition to the part number. Please contact EnviroSeal for sizing information sheets.
- For Packing Version SpiralTrac™, the width of the lantern ring as well as the size of packing and number of packing rings being replaced by SpiralTrac™ must be provided in addition to the part number. Please contact EnviroSeal for sizing information sheets.
- For Double Ended Pumps both right and left rotation devices are required.
- Depending on the pump, this may be a shaft, sleeve, or impeller hub diameter.
- When air is a problem from process or dry running, the use of flush, quench or double seals is necessary to provide face cooling.
- Elimination of flush is dependent on the type of application. Please contact EnviroSeal to determine your application's suitability for total flush elimination.
- Version P radial cross-section must be greater than .500" when using glass filled PTFE.

Easy Installation Options (SpiralTrac Types)

Type A Counterbore Fit

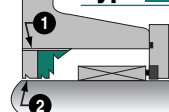


Press into Place using reduced or no Flush⁽⁶⁾:
Drives **Circulation** for face cooling.
Forces fluid **Exchange** for heat removal.
Removes **Particulate**.

Recommended Upgrades

- Drill 5/32" vent hole:
Releases **Air** when flooding.

Type B Bore Fit

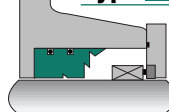


Press into Place using reduced Flush:
Drives **Circulation** for face cooling.
Enhances fluid **Exchange** for heat removal.
Positions **Particulate** so a small flush (5-7 GPH/23-32 LPH) can force it under the throat restriction and out of the cavity.

Recommended Upgrades

- Drill 5/32" vent hole:
Releases **Air** when flooding.
- Extend exit groove:
Forces fluid **Exchange** and removes particulate without flush⁽⁶⁾ while eliminating shaft erosion.

Type S Axially Split Device (Typical for Split Seals)



Press into Place using reduced Flush:
Drives **Circulation** for face cooling.
Enhances fluid **Exchange** for heat removal.
Positions **Particulate** for removal by small flush (5-7 GPH/23-32 LPH).

No Upgrades

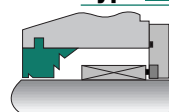
Not practical due to installation while the pump is assembled.

Type I Impeller Side Installation (Typical for Open Bore Cavities)



Press into Place using reduced or no Flush⁽⁶⁾:
Superior **Air** venting.
Drives **Circulation** for face cooling.
Forces fluid **Exchange** for heat removal.
Removes **Particulate**.

Type E Externally Keyed (Typical for Horizontal Split Case Pumps)



Installed using reduced or no Flush⁽⁶⁾:
Superior **Air** release when vent specified.
Drives **Circulation** for face cooling.
Forces fluid **Exchange** for heat removal.
Removes **Particulate**.