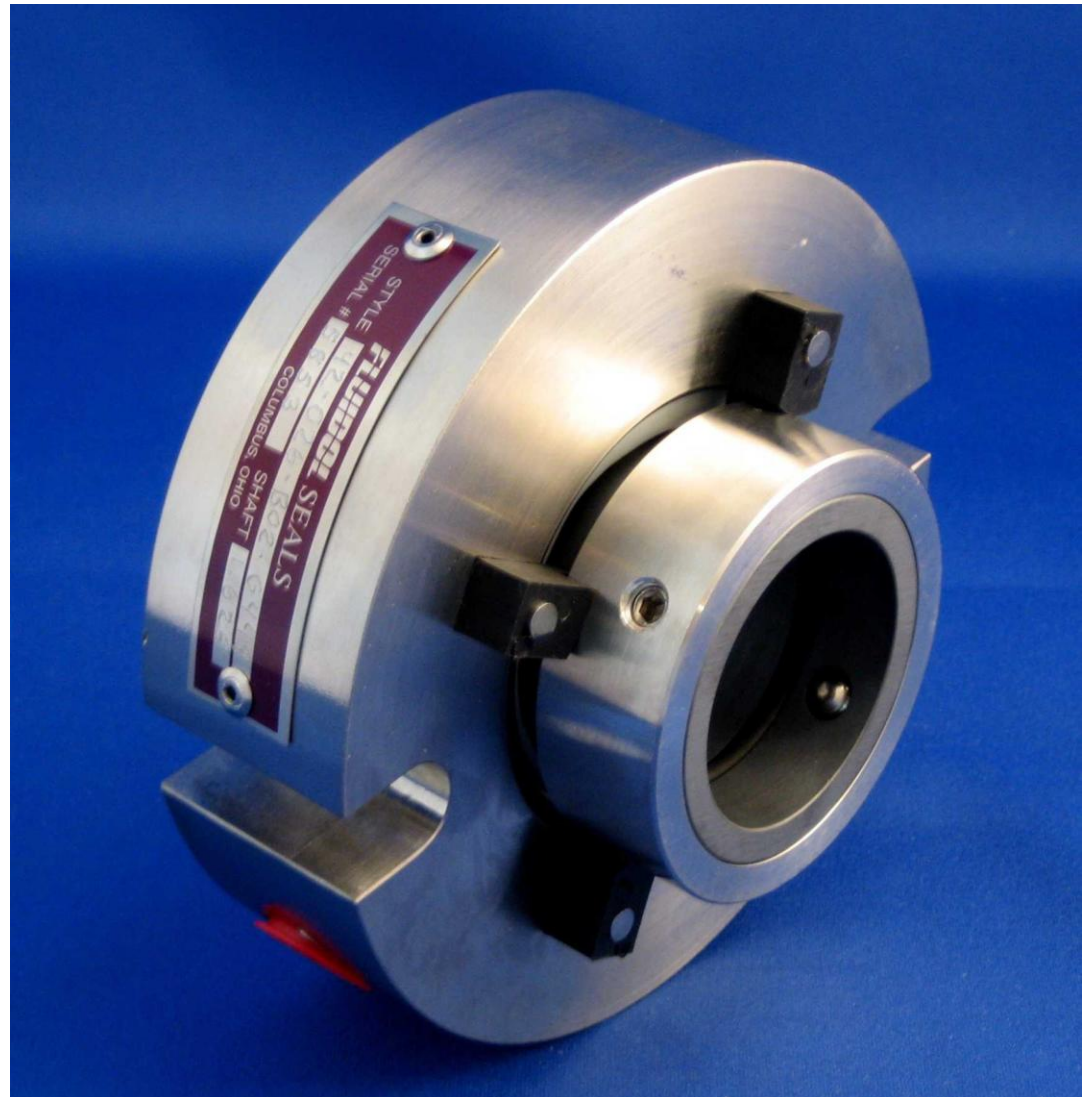


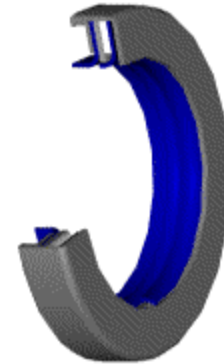
# FLUIDOL<sup>®</sup>

Introducing the  
Style 42  
Multiple  
Element  
Cartridge Seal



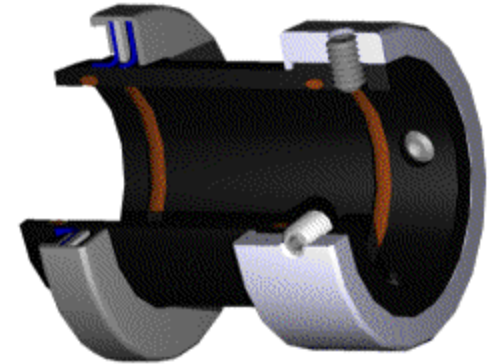
# WC Primary Sealing Element

- Precision Machined Sealing Elements
- Cold formed to maintain element pressure to the sleeve
- Annular Groove design creates multiple sealing points
- Features a SS back up to the primary element for increased pressure
- Dry running capabilities



# Silicon Carbide Sleeve

The Style 42 Multiple Element Cartridge Seal is the only seal to utilize Silicon Carbide sleeve technology for heat dissipation. This feature increases the FPM Speeds, Pressure and Dry Running Capabilities.



- **Solid silicon carbide sleeve**
- **316SS Drive collar for positive drive**
- **Double o-rings for increased sealability and balance of SC sleeve**

# Silicon Carbide Sleeve

- **NEW TECHNOLOGY FROM FLUIDOL**

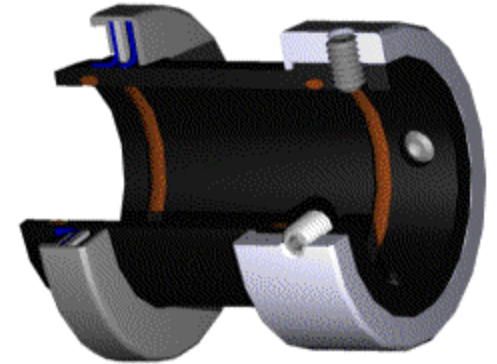
- 
- **In many applications incorporating radial lip seals, shaft grooving and fretting leads to leaks and premature failures. This is true whether the sealing element is elastomeric, polymeric or filled PTFE. In some cases this is due to contaminants becoming trapped between the sealing element and the shaft.**
- **The entrapped material then abrades the shaft. The use of excluders, labyrinths and isolators helps to eliminate this situation.**
- 
- 

- **However, in many applications where contaminants are not the main problem, shaft scoring still prevails. This can be a result of heat build up that hardens the elastomer of the lip seal. This is especially true of Viton lip seals as the Viton shrinks due to “gall jewell effect”. This effect increases the squeeze of the sealing element against the shaft, which in turn creates more heat. As a result, unless the shaft is hardened, grooving results.**
- 
- 

- **The use of our TLS Everseals (Radial Teflon Lip Sals) greatly increases the performance envelope of rotary lip seals. Now pressures up to 750 psi and pressure velocity factors up 250,000 can be achieved with our TLS Everseals. Temperature ranges are greatly increased and surface speeds up to 12,000 fpm are now attainable. The coefficient of friction is also greatly reduced and seal life is far greater than elastomeric lip seals. However, the shafts should be hardened to prevent shaft scoring.**
- 
- 

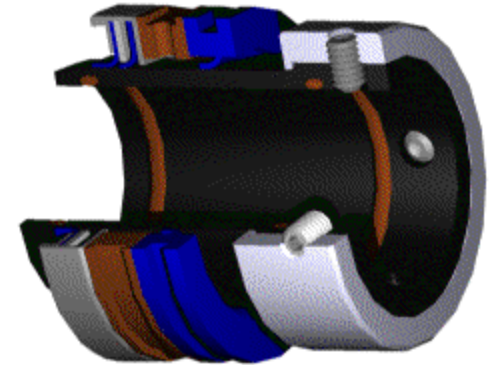
- **Fluidol now has developed new technology to greatly extend the already long seal life of our TLS Everseals and also to prevent shaft scoring. Fluidol now designs and produces Silicon Carbide sleeves that fit over the shaft. Some designers use aluminum oxide coatings (ceramic) on the shaft to provide an extremely hard wear surface. While the coating is hard, it is also an insulator. Teflon by nature is also an insulator. Fluidol chooses to design and engineer specific Silicon Carbide sleeves for the applications. The reasons for using this material as a wear sleeve are simple. The material is so hard that grooving is almost impossible. It is extremely chemically resistant. It is HIGHLY CONDUCTIVE! Fluidol SC Sleeves dissipate heat build up away from the sealing elements to reduce wear and vastly improve seal life. Our sleeves are reusable and servicing a sleeved seal is easier then servicing or repairing a scored shaft.**
- 
- 

- **Contact Fluidol Engineering for your application.**



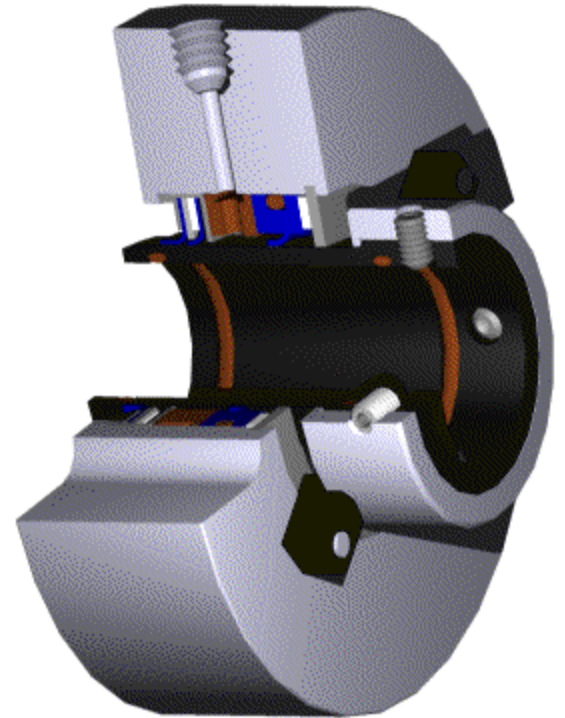
# Lantern Ring Secondary Seal

- Allows control of environment.
- Change Pressure differential
- Change temperatures
- Lubricate seal
- Prevent egress of solids
- Prevent atmosphere from contacting process fluid
- Stop dangerous emissions



# Style 42 With Gland

- Heavy duty 316 SS Gland
- Versatile Gland fits many pump Styles and Models



# Other Features

- The Style 42 Multiple Element Cartridge Seal is the only seal to utilize Silicon Carbide sleeve technology for heat dissipation. This feature **increases** the Speeds, Pressure and Dry Running Capabilities. The Style 42 can seal gases and fumes.
- Multiple Sealing unit arrangements are available for Vacuum and Double Seal

# Performance

- Pressure: To 300 psig (20 bar)
- Vacuum: 26" Hg
- Temperature: To 300°F (150°C) Over 300°F, consult Fluidol
- Surface Speed: to 3000 fpm dry running; To 5000 fpm with environmental control
- Run Out: 0.005" (0.13mm) TIR Standard
- Axial End Play: + - 0.125" (3.2mm)
- This technology has been sealing 180 psig Sour Gas with zero ppm leakage for 12 months running dry.



# Application Data Sheet



<p align="center"><b>MECHANICAL SEAL APPLICATION DATA SHEET</b></p>
---

**Distributor/O.E.M. Information**

Company \_\_\_\_\_

Contact \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Address \_\_\_\_\_

Salesman \_\_\_\_\_

**End User Information**

End User \_\_\_\_\_

Contact \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Address \_\_\_\_\_

**EQUIPMENT INFORMATION**

Type: Centrifugal Pump \_\_\_\_\_

Positive Displacement Pump \_\_\_\_\_

Progressive Cavity Pump \_\_\_\_\_

Mixer/Agitator \_\_\_\_\_

Other \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Model Number: \_\_\_\_\_

Location: \_\_\_\_\_

Casing Material: \_\_\_\_\_

**DIMENSIONAL DATA (See drawings on back)**

A. SHAFT DIA. \_\_\_\_\_ HARDENED Yes No

B. SLEEVE DIA. \_\_\_\_\_

C. BORE DIA. \_\_\_\_\_

D. BORE DEPTH \_\_\_\_\_

E. FIRST OBSTRUCTION \_\_\_\_\_

F. SLEEVE EXTENSION \_\_\_\_\_

G. BOLT DIA \_\_\_\_\_

H. BOLT QUANTITY \_\_\_\_\_

I. BOLT EXTENSION \_\_\_\_\_

J. BOLT CIRCLE \_\_\_\_\_

K. BOLT POSITIONING \_\_\_\_\_

K. REGISTER O.D. \_\_\_\_\_

L. REGISTER LENGTH \_\_\_\_\_

M. GLAND SHAPE & MAX O.D.: \_\_\_\_\_

ROUND  ELLIPTICAL

N. FLUSH PORT \_\_\_\_\_

**PROCESS INFORMATION**

Process/Fluid \_\_\_\_\_

Shaft Speed (RPM) \_\_\_\_\_

Temperature (F) \_\_\_\_\_

Pressure (PSI) \_\_\_\_\_

Suction \_\_\_\_\_

Discharge \_\_\_\_\_

Max. Stuffing Box \_\_\_\_\_

Is Process corrosive or abrasive? \_\_\_\_\_

Viscosity \_\_\_\_\_

Movement of Shaft

Axial \_\_\_\_\_ Max. \_\_\_\_\_

Radial \_\_\_\_\_ Max. \_\_\_\_\_

**ENVIRONMENTAL CONTROLS**

Can process be flushed? \_\_\_\_\_

Flush Media \_\_\_\_\_

Cooling available \_\_\_\_\_

Media \_\_\_\_\_

Barrier fluid available? \_\_\_\_\_

Media \_\_\_\_\_

**PRESENT SEALING DEVICE**

Packing \_\_\_\_\_

Seal Style \_\_\_\_\_

Manufacturer \_\_\_\_\_

**ELASTOMER**

EPR \_\_\_\_\_

Viton \_\_\_\_\_

Chemraz \_\_\_\_\_

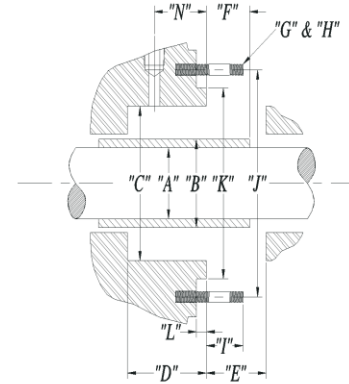
Aflas \_\_\_\_\_

Other \_\_\_\_\_

2125 So. James Rd. • Columbus, Ohio 43232  
 Phone: 614-239-7811 • Fax: 614-239-7850  
 www.fluidol.com • email: fluidol@sps-inc.com

# Application Data Sheet

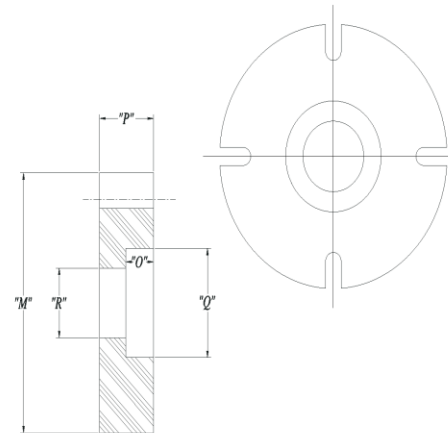
**TYPICAL  
STUFFING BOX  
CONFIGURATION**  
FILL IN DIMENSIONAL  
INFORMATION ON  
FRONT PAGE



Shaft of sleeve **MUST** run true (within .005"). It must be round, smooth, and free of burrs. This is important and **MUST** be adhered to for proper functioning of the seal.

**TYPICAL GLAND  
CONFIGURATION**  
FILL IN DIMENSIONS

M \_\_\_\_\_  
O \_\_\_\_\_  
P \_\_\_\_\_  
Q \_\_\_\_\_  
R \_\_\_\_\_

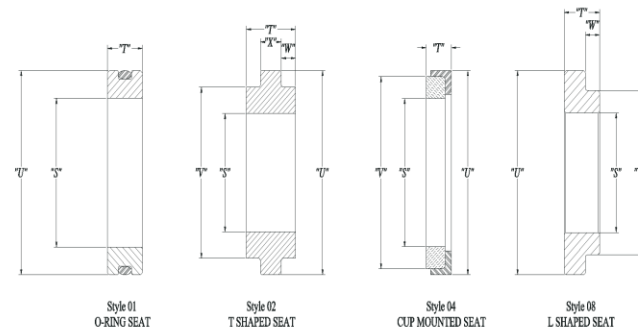


**GLAND DETAIL  
COMPLETE APPLICABLE  
INFORMATION**

- MARK TAP LOCATION(S) FLUSH OR BARRIER
- MARK BOLT LOCATIONS AND INDICATE IF DRILLED OR SLOTTED
- IF ROUND GLAND CANNOT BE USED, PROVIDE ADDITIONAL GLAND DETAILS.

**TYPICAL SEAT  
CONFIGURATIONS**  
FILL IN DIMENSIONS

S \_\_\_\_\_  
T \_\_\_\_\_  
U \_\_\_\_\_  
V \_\_\_\_\_  
W \_\_\_\_\_  
X \_\_\_\_\_



Please attach any additional information you feel may be helpful.