

# **Rubber Bellows Single Component Seal**

Installation Instructions

#### EQUIPMENT PREPARATION



#### CAUTIONS

These instructions are general in nature. It is assumed that the installer is familiar with seals and certainly with the requirements of their plant for the successful use of mechanical seals. If in doubt, get assistance from someone in the plant who is familiar with seals or delay the installation until a seal representative is available. All necessary auxiliary arrangements for successful operation (heating, cooling, flushing) as well as safety devices must be employed. These decisions are to be made by the user. The chemical listing is intended as a **general** reference for this seal **only**. The decision to use this seal or any other Chesterton seal in a particular service is the customer's responsibility.

### INSTALLATION



Prepare RBS and selected Stationary Seal Face.



Spray shaft with layout fluid; scribe the shaft to mark the location of the back cover face (as shown).



Disassemble the pump according to the manufacturer's instructions.



Determine the seal installation length using the Rotary operating length(L3), the stationary operating length from Dimensional Data table provided and the back cover web thickness (measured value from Step 4B). Seal Installation Length = L3 + Stationary Seat Length (S, K, KS or NSeat) + Back Cover Web Thickness (measured value).



Measure \*Back Cover Web Thickness for use in installation length calculation (Step 4A).



Confirm that length from scribed mark to step on shaft is equal to seal installation length (from Step 4).



(Alternate Installation) For non-stepped shafts, measure back from scribed mark to locate and scribe the installation length on the shaft (see step 4).



Position lock collar (supplied by customer) at second scribed mark (installation length from step 6A). Tighten to shaft.



Cover threads and keyway slots with thin tape to prevent cutting/ damaging the rubber bellows.



Lubricate shaft with soapy water. *IMPORTANT: Do not use oil or grease to lubricate shaft.* 



Push rotary bellows on to shaft; seat back of bellows unit against step on shaft (or shaft collar).



## INSTALLATION



Insert Stationary into gland. Slide gland/ stationary assembly on to shaft.



Reinstall back cover; *IMPORTANT: Check centering of housing:* rotate the shaft by hand to ensure that there is no contact between the shaft and the stationary seat.

#### S Seat K Seat KS Seat N Seat - L3 d3 D4 D5 D5 D5 L5 L5 --L6 d1 L4 -

# DIMENSIONAL DATA

All Dimensions are in millimeters	Di	Di	im	en	sic	ns	are	in	n	nil	lin	ne	ter	S
-----------------------------------	----	----	----	----	-----	----	-----	----	---	-----	-----	----	-----	---

d1	d3	D4	D5	L3	L4	L5	L6
h6		H8	H8				
10	22.5	19.2	21	14.5	6.6	6.6	10
12	25	21.6	23	15	5.6	6.6	10
14	28.5	24.6	25	17	5.6	6.6	10
15	28.5	24.6		17	6.6		
16	28.5	28	27	17	7.5	6.6	10
18	32	30	33	19.5	8	7.5	11.5
20	37	35	35	21.5	7.5	7.5	11.5
22	37	35	37	21.5	7.5	7.5	11.5
24	42.5	38	39	22.5	7.5	7.5	11.5
25	42.5	38	40	23	7.5	7.5	11.5
28	49	42	43	26.5	9	7.5	11.5
30	49	45	45	26.5	10.5	7.5	11.5
32	53.5	48	48	27.5	10.5	7.5	11.5
33	53.5	50	48	27.5	11	7.5	11.5
35	57	52	50	28.5	11	7.5	11.5
38	59	55	56	30	10.3	9	14
40	62	58	58	30	10.8	9	14
43	65.5	62	61	30	12	9	14
45	68	64	63	30	11.6	9	14
48	70.5	68.4	66	30.5	11.6	9	14
50	74	69.3	70	30.5	11.6	9.5	15
53	78.5	72.3	73	33	12.3	11	15
55	81	75.4	75	35	13.3	11	15
58	85.5	78.4	78	37	13.3	11	15
60	88.5	80.4	80	38	13.3	11	15



#### **OPERATING PARAMETERS**

Sizes	10 mm – 60 mm						
Pressure	12 barg						
Temperature	-15°C to 200°C						
Speed	10 m/s						
MATERIALS OF CONSTRUCTION							
Determ France	Carbon						
Rolary Faces	Silicon Carbide						
Stationary Faces	Silicon Carbide						

Bellows	FKM			
	EPDM			
O-rings	FKM			
-	EPDM			
Springs	304SS (1.4301)			

Chesterton ISO Certifications available at www.chesterton.com/corporate/iso



860 Salem Street Groveland, MA 01834 USA Telephone: 781-438-7000 Fax: 978-469-6528 www.chesterton.com

© A.W. Chesterton Company, 2011. All rights reserved. ® Registered trademark owned and licensed by

A.W. Chesterton Company in USA and other countries.

DISTRIBUTED BY: