

PRE-SURE™ CAP



FIG. 1 - STAINLESS STEEL
RETAINER & SILICONE
DIAPHRAGM

REMOVAL FEATURE

DON'T UNCLAMP A LIVE LINE

WHY VISUAL PRESSURE VERIFICATION MATTERS

In hygienic processing environments, confirming that a line is fully depressurized before opening is critical to both operator safety and product integrity. Trapped pressure can remain in process lines during CIP, maintenance, or changeover — even when systems appear idle or fully drained.

- Residual pressure during CIP or maintenance creates safety risk
- Lines may appear empty but remain pressurized
- Opening clamps under pressure can cause:
 - Product spray
 - Chemical exposure
 - Operator injury
 - Product contamination events

TYPICAL INSTALLATION POINTS

Designed to replace standard sanitary end caps in locations where residual pressure may be present, including:

- Transfer panels & hose stations
- Valve arrays & routing manifolds
- Tank outlet drops
- Pump service & drain ports
- CIP supply & return headers

Also applicable at PIG stations, hose tees, strainer ports, and line-break locations.



TRANSFER PANEL



TANK OUTLET



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PRE-SURE™ CAP

SPECIFICATIONS

- Diaphragm material temperature rated up to 275°F (135°C)*

- 200 PSI (13.7 Bar) max pressure range

*Not intended for use in continuous steam service

SIZE

- 2" Tri-Clamp®

MATERIAL

- Retainer: 316L 32RA (-7) 0.8 µm; stainless steel conforms to ASTM A240 M-316L
- Diaphragm: Silicone meets USP 87 and USP 88 Class VI standards for biocompatibility, ensuring suitability for food and pharmaceutical applications

APPLICATIONS

- Operators can easily see if pressure is present in the line
- No tools required for easy removal of cap using central handle/knob

WORKING PRINCIPLE

- Button first opens around 5PSI (35kPa) to indicate fluid in the pipe and fully opens around 15PSI (100kPa) to indicate high pressure in the pipe
- Indicator remains sealed in both open and closed positions

BENEFITS

- Easy-to-clean, replaceable diaphragm
- Lot tracked and fully traceable for compliance and safety assurance
- Bright red color for excellent clarity
- Silicone material provides good chemical resistance
- Life of product estimated at 30,000 pressure change cycles or six months from installation, whichever is first

DIAPHRAGM

- Includes stainless steel retainer (Fig. 1) and silicone diaphragm (Fig. 2)




FIG. 2 - SILICONE DIAPHRAGM

INTERNATIONAL PATENTS PENDING - US PATENT APPLICATION NO. 17/044,881

EACH UNIT IS PACKAGED WITH THE FOLLOWING LABEL

Pre-Sure™ Cap	
Name: Pre-Sure Cap 2" Set Silicone	
Description: 2" Stainless Steel Cap and Diaphragm, assembled	
Material: Silicone Class VI, 316L	
Compound No.: 4137	
Item No: 326020	Batch No: 141299
SST#: N 231101	
Conformance: ASTM A240 M-316 L USP 87 USP 88 Class VI	
 9 419277 000575	

MTR'S AVAILABLE UPON REQUEST

MATERIAL TEST REPORT																		
Raw material supplier :WENZHOU PUQING STAINLESS STEEL COMPANY,LTC. 温州蒲青不锈钢有限公司							ZYK STAINLESS STEEL GROUP CO.,LTD											
Factory add: No.2666 longxiang Road Longwan Wen							Add: NO.3839-1 14th Road, 3rd AV., Binhai Zone, Wenzhou, China											
电话 (Tel) : +86-577-86628807 传真 (Fax) : +86-577-86628770							Tel: 0577-86990175											
PO No.:QLC00020477							Fax: 0577-86990176											
							Certificate No.:QLC00021574											
No.	Part No.	Size	Material specification	Material	Heat No.	Chemical Composition(%)										Mechanical Property		
						C	Mn	Si	P	S	Ni	Cr	Mo	N	EL(%)	T. S (MPa)	Y. S (MPa)	Hardness Test
1	Stainless steel caps		ASTM A240	316	QL240423N6	0.026	1.22	0.75	0.04	0.01	10.25	16.33	2.02	0.1	50	499	229	84
Remarks																		
The quality and size of all above products are both comply with relevant standards.																		
Quality Department:														Judge: Stella Zhou				
														Issuing Date:29th, Nov,2024				
																		



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