



 **INSUMEX**<sup>®</sup>  
Insumos y Bienes de México S.A. DE C.V.  
*Tuberías, Válvulas y Conexiones*

Un empaque espirometálico es un dispositivo de sellado compuesto principalmente por una espira en forma de "v" con un relleno suave presionados conjuntamente. Cuando el empaque es colocado y comprimido en la brida, el relleno suave de esta es expulsado, llenando las imperfecciones de la brida. La espira metálica sostiene el relleno, dando resistencia mecánica y resistencia al empaque. Esta forma de "v" actúa como un anillo chevron reaccionando a cambios de presión y temperatura. Nuestros empaques espirometálicos son diseñados bajo normas ASME B16.20 o API 601, para usarse en bridas ANSI B16.5 ó ASME / ANSI B16.47.

El empaque tipo **CRI** cuenta con un anillo exterior e interior para una compresión calibrada para uso en casi todos los tamaños de bridas y uniones ANSI. El anillo exterior sirve como una guía de centrado, el anillo interior tiene la función de rellenar el hueco de la brida para prevenir que el fluido entre en ese hueco, además convierte el par de las caras de la brida en una brida acanalada, proveyendo toda la seguridad en una junta sin tener la necesidad de maquinar la brida e incrementar el costo.

Diámetros de fabricación: 1/4"-42"

Para soportar presiones de: 150#, 300#, 600#, 900# y 1500# lbs.

El empaque **CR** cuenta con un anillo exterior que facilita el centrado del empaque, provee una fuerza adicional radial, ayuda a prevenir el estallamiento, y sirve como un punto de referencia para determinar la cantidad de compresión a usarse durante la instalación de los espárragos.

Estos anillos son de acero rolado en frío y de 1/8 de espesor.

# EMPAQUES ESPIROMETÁLICOS

DIÁMETRO NOMINAL	DIÁMETRO EXTERIOR			DIÁMETRO INTERIOR DEL ELEMENTO DE SELLADO							
	1500, 400	300, 600	900, 1500, 2500	150	300	400	600	900	1500	2500	
1/4"	7/8"		1/2"	1/2"	1/2"	1/2"					
1/2"	1 1/4"	1 1/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
3/4"	1 9/16"	1 9/16"	1"	1"	1"	1"	1"	1"	1"	1"	
1"	1 7/8"	1 7/8"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	
1 1/4"	2 3/8"	2 3/8"	1 7/8"	1 7/8"	1 7/8"	1 7/8"	1 7/8"	1 9/16"	1 9/16"	1 9/16"	
1 1/2"	2 3/4"	2 3/4"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	2 1/8"	1 7/8"	1 7/8"	1 7/8"	
2"	3 3/8"	3 3/8"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 5/16"	2 5/16"	2 5/16"	
2 1/2"	3 7/8"	3 7/8"	3 1/4"	3 1/4"	3 1/4"	3 1/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	
3"	4 3/4"	4 3/4"	4"	4"	4"	4"	4"	3 3/4"	3 5/8"	3 5/8"	
3 1/2"	5 1/4"	5 1/4"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/8"	4 1/8"	4 1/8"	4 1/8"	
4"	5 7/8"	5 7/8"	5"	5"	5"	4 3/4"	4 3/4"	4 3/4"	4 5/8"	4 5/8"	
4 1/2"	6 1/2"	6 1/2"	5 1/2"	5 1/2"	5 5/16"	5 5/16"	5 5/16"	5 5/16"	5 5/16"	5 5/16"	
5"	7"	7"	6 1/8"	6 1/8"	5 13/16"	5 13/16"	5 13/16"	5 5/8"	5 5/8"	5 5/8"	
6"	8 1/4"	8 1/4"	7 3/16"	7 3/16"	6 7/8"	6 7/8"	6 7/8"	6 3/4"	6 3/4"	6 3/4"	
8"	10 3/8"	10 1/8"	9 3/16"	9 3/16"	8 7/8"	8 7/8"	8 3/4"	8 1/2"	8 1/2"	8 1/2"	
10"	12 1/2"	12 1/4"	11 5/16"	11 5/16"	10 13/16"	10 13/16"	10 7/8"	10 1/2"	10 5/8"	10 5/8"	
12"	14 3/4"	14 1/2"	13 3/8"	13 3/8"	12 7/8"	12 7/8"	12 3/4"	12 3/4"	12 1/2"	12 1/2"	
14"	16"	15 3/4"	14 5/8"	14 5/8"	14 1/4"	14 1/4"	14"	14 1/4"	14 1/4"	14 1/4"	
16"	18 1/4"	18"	16 5/8"	16 5/8"	16 1/4"	16 1/4"	16 1/4"	16"	16"	16"	
18"	20 3/4"	20 1/2"	18 11/16"	18 11/16"	18 1/2"	18 1/2"	18 1/4"	18 1/4"	18 1/4"	18 1/4"	
20"	22 3/4"	22 1/2"	20 11/16"	20 11/16"	20 1/2"	20 1/2"	20 1/2"	20 1/4"	20 1/4"	20 1/4"	
24"	27"	26 3/4"	24 3/4"	24 3/4"	24 3/4"	24 3/4"	24 3/4"	24 1/4"	24 1/4"	24 1/4"	

DIÁMETRO NOMINAL	DIÁMETRO EXTERIOR DEL ANILLO CENTRADOR							
	150	300	400	600	900	1500	2500	
1/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"				
1/2"	1 7/8"	2 1/8"	2 1/8"	2 1/8"	2 1/2"	2 1/2"	2 3/4"	
3/4"	2 1/4"	2 5/8"	2 5/8"	2 5/8"	2 3/4"	2 3/4"	3"	
1"	2 5/8"	2 7/8"	2 7/8"	2 7/8"	3 1/8"	3 1/8"	3 3/8"	
1 1/4"	3"	3 1/4"	3 1/4"	3 1/4"	3 1/2"	3 1/2"	4 1/8"	
1 1/2"	3 3/8"	3 3/4"	3 3/4"	3 3/4"	3 7/8"	3 7/8"	4 5/8"	
2"	4 1/8"	4 3/8"	4 3/8"	4 3/8"	5 5/8"	5 5/8"	5 3/4"	
2 1/2"	4 7/8"	5 1/8"	5 1/8"	5 1/8"	6 1/2"	6 1/2"	6 5/8"	
3"	5 3/8"	5 7/8"	5 7/8"	5 7/8"	6 5/8"	6 5/8"	7 3/4"	
3 1/2"	6 3/8"	6 1/2"	6 3/8"	6 3/8"	7 1/2"	7 3/8"	7 3/8"	
4"	6 7/8"	7 1/8"	7"	7 5/8"	8 1/8"	8 1/8"	11"	
4 1/2"	7"	7 3/4"	7 5/8"	8 1/4"	9 3/8"	9 1/8"	12 1/2"	
5"	7 3/4"	8 1/2"	8 3/8"	9 1/2"	9 3/4"	10"	15 1/4"	
6"	8 3/4"	9 7/8"	9 3/4"	10 1/2"	11 3/8"	11 1/8"	18 3/4"	
8"	11"	12 1/8"	12"	12 5/8"	14 1/8"	13 7/8"	21 5/8"	
10"	13 3/8"	14 1/4"	14 1/8"	15 3/4"	17 1/8"	17 1/8"	21 1/2"	
12"	16 1/8"	16 5/8"	16 1/2"	18"	19 5/8"	20 1/2"	22 1/2"	
14"	17 3/4"	19 1/8"	19"	19 3/8"	20 1/2"	22 3/4"	22 3/4"	
16"	20 1/4"	21 1/4"	21 1/8"	22 1/4"	22 5/8"	25 1/4"	27 3/4"	
18"	21 5/8"	23 1/2"	23 3/8"	24 1/8"	25 1/8"	27 3/4"	27 3/4"	
20"	23 7/8"	25 3/4"	25 1/2"	26 7/8"	27 1/2"	29 3/4"	29 3/4"	
24"	28 1/4"	30 1/2"	30 1/4"	31 1/8"	33"	35 1/2"	35 1/2"	

DIÁMETRO NOMINAL	DIÁMETRO INTERIOR DEL ANILLO INTERIOR							
	150	300	400	600	900	1500	2500	
1/2"	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"	9/16"	
3/4"	13/16"	13/16"	13/16"	13/16"	13/16"	13/16"	13/16"	
1"	1 1/16"	1 1/16"	1 1/16"	1 1/16"	1 1/16"	1 1/16"	1 1/16"	
1 1/4"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 5/16"	1 5/16"	1 5/16"	
1 1/2"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 5/8"	1 5/8"	1 5/8"	
2"	2 3/16"	2 3/16"	2 3/16"	2 3/16"	2 1/16"	2 1/16"	2 1/16"	
2 1/2"	2 5/8"	2 5/8"	2 5/8"	2 5/8"	2 1/2"	2 1/2"	2 1/2"	
3"	3 3/16"	3 3/16"	3 3/16"	3 3/16"	3 3/16"	3 3/16"	3 3/16"	
4"	4 3/16"	4 3/16"	4 3/16"	4 3/16"	4 3/16"	4 3/16"	4 3/16"	
5"	5 3/16"	5 3/16"	5 3/16"	5 3/16"	5 3/16"	5 3/16"	5 3/16"	
6"	6 3/16"	6 3/16"	6 3/16"	6 3/16"	6 3/16"	6 3/16"	6 3/16"	
8"	8 1/2"	8 1/2"	8 1/4"	8 1/4"	8 1/4"	8 1/8"	7 7/8"	
10"	10 9/16"	10 9/16"	10 1/4"	10 1/4"	10 1/4"	10 5/32"	9 3/4"	
12"	12 1/2"	12 1/2"	12 1/2"	12 1/2"	12 3/8"	12 3/8"	11 1/2"	
14"	13 3/4"	13 3/4"	13 3/4"	13 3/4"	13 3/8"	13 3/8"	13 3/8"	
16"	15 3/4"	15 3/4"	15 3/4"	15 3/4"	15 1/2"	15 1/4"	15 1/4"	
18"	17 11/16"	17 11/16"	17 11/16"	17 11/16"	17 1/2"	17 1/4"	17 1/4"	
20"	19 11/16"	19 11/16"	19 11/16"	19 11/16"	19 1/2"	19 1/4"	19 1/4"	
24"	23 3/4"	23 3/4"	23 3/4"	23 3/4"	23 3/4"	22 3/4"	22 3/4"	

