Garlock
an EnPro Industries family of companies

Garlock Expansion Joint ABRA-LINE™ Style 404EPS

Engineered for Abrasive Applications

The ABRA-LINE™ family of products was developed for highly abrasive applications typically found in the power generation, fertilizer, mining and chemical industries. These may include flue gas desulphurization systems, phosphate mining, dry bulk power transfer systems, tailings and slurry applications. Our proprietary urethane formula was designed to reduce wear and extend service life.

Style 404EPS (Extreme Pressure Service) is a fully customizable abrupt arched expansion joint for rigid piping systems. This expansion joint is to be used in applications where necessary rated pressures exceed those of the Garlock Style 404 & 404HP designs. Style 404 can be constructed as a single or multiple arch design. It can also connect pipe flanges in concentric or eccentric tapers, to join piping of unequal diameters.

DESIGN

» Tube
  - Proprietary urethane formula for abrasive applications
» Body
  - Composite fabric construction with welded, treated metal body rings for dimensional stability
» Cover
  - Wide selection of elastomers available which are resistant to oxidation

OPTIONAL CONFIGURATIONS

» Multiple Arch- For higher movements
» Filled Arch- To eliminate media buildup
» Oversized Arch- For higher movements
» Concentric and Eccentric Tapers- To connect piping of unequal diameter
» Custom Drilling- ANSI, DIN, AWWA, BS, JIS, and special drilling patterns available on request
» Extended Face-to-face
» Offsets, lateral, angular, and torsional

TARGET MARKETS

» Power Generation
» Fertilizer
» Mining

RETAINING RINGS

» Required for all applications; provides metal surface to distribute bolt load evenly, preventing flange damage during bolt tightening
» Standard material: mild steel with corrosion-resistant coating; galvanized or stainless steel also available

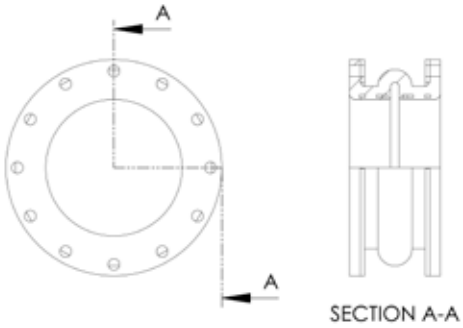
CONTROL UNITS/TIE RODS

» Recommended on most applications to prevent damage due to excessive pipe movements
» Standard material: mild steel, galvanized or stainless steel also available

GARLOCK
an *EnPro* Industries family of companies
Tel: 1-877-GARLOCK / 315.597.4811
Fax: 800.543.0598 / 315.597.3216
www.garlock.com

SPECIAL COVER MATERIALS

- » CSM
- » Nitrile
- » Natural Rubber
- » Fluoroelastomer
- » EPDM
- » Neoprene
- » FDA materials available
- » Chlorobutyl



TEMPERATURE

» Standard Chlorobutyl/Polyester +180ºF (82ºC)

PRODUCT TABLE

Pipe Size I.D.		Movements					
		Compression		Lateral		Elongation	
inches	mm	inches	mm	inches	mm	inches	mm
1 - 1½	25 - 40	1/4	6	1/4	6	1/8	3
2 - 5	50 -150	1/2	13	1/2	12	1/4	6
6 - 18	200 - 450	3/4	19	1/2	12	3/8	9
20 -24	500 - 600	7/8	22	1/2	12	7/16	11
26 - 40	650 - 1000	1	25	1/2	12	1/2	12
42 - 120	1050 - 3000	1⅛	29	1/2	12	1/2	12

PRESSURE TABLE

Pipe Size I.D.		Pressure		Vacuum	
inches	mm	psi	bar	inch Hg	mm Hg
½ - 4	13 - 100	250	17.2	29.9	750
5 -12	125 - 300	250	17.2	29.9	750
14	350	150	10.3	29.9	750
16 - 24	400 - 600	150	10.3	29.9	750
26 - 66	650 - 1,650	100	6.9	29.9	750
68 - 96	1,700 - 2,400	100	6.9	29.9	750
98 - 108	2,400 - 2,700	80	5.5	29.9	750
110 - 120	2,750 - 3,000	80	5.5	29.9	750

EJ 9:33_08.2014

GARLOCK
an *EnPro* Industries family of companies
Tel: 1-877-GARLOCK / 315.597.4811
Fax: 800.543.0598 / 315.597.3216
www.garlock.com

Garlock Sealing Technologies
Garlock Rubber Technologies
GPT
Garlock PTY
Garlock do Brasil

Garlock de Canada, LTD
Garlock China
Garlock Singapore
Garlock Germany
Garlock India Private Limited

Garlock de Mexico, S.A. De C.V.
Garlock New Zealand
Garlock Great Britain Limited
Garlock Middle East