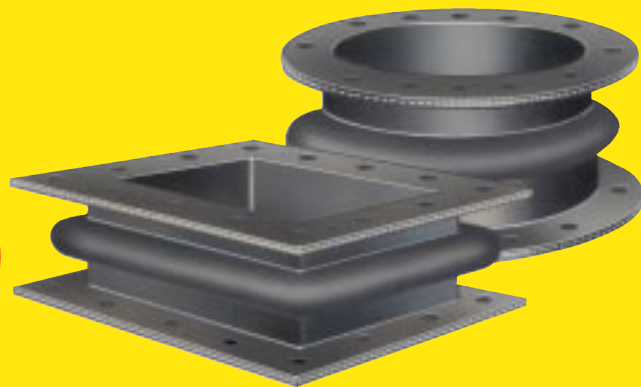


PROCO™

STYLE 530

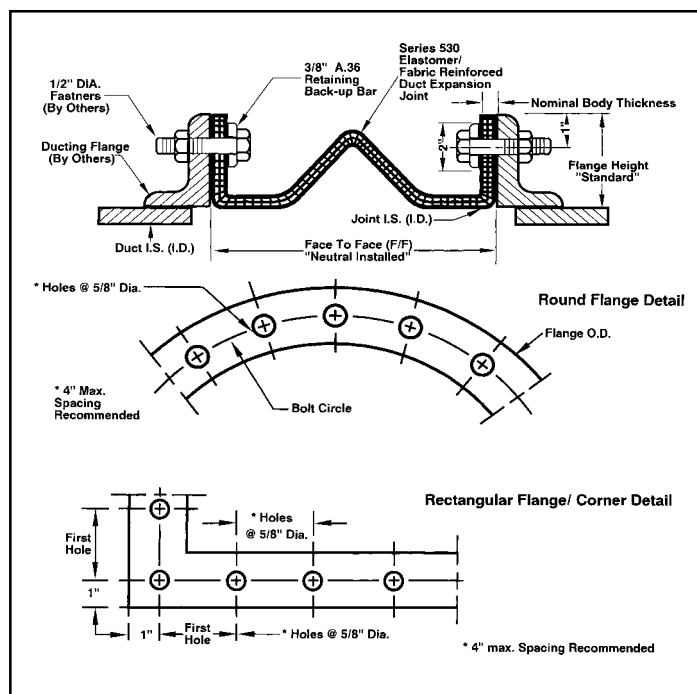


ARCH-DESIGN for ultra high movements

PROCO Style 530 Arch-Type Duct Connectors: The least economical of the integrally flanged designs, the Style 530 is predominately used for applications where movements are large and face-to-face space is a premium. The duct connector is manufactured in an Arch-Design configuration with a minimum of one (1) to two (2) plies of reinforced fabric vulcanized into a homogeneous product that is 3/16", 1/4" or 3/8" thick. The flanges shall be an integral part of the expansion joint. The Style 530 is manufactured with a premolded arch. The arch continues through the corner and straight sections and shall be fully developed when in the neutral installation position. Listed below is information regarding the Style 530 non-metallic duct connectors:

System Design Considerations: In designing the Series 500, Style 530 non-metallic duct connector, several considerations must be taken into account to ensure long lasting service.

- **System Media:** The designer and/or requesting party should define the system media to determine the correct elastomer for each application. Evaluation of the gas/air composition should be made during design of the non-metallic fan/duct connector. Abrasion characteristics and external environment conditions should also be taken into account when specifying the fabric element.
- **System Temperature:** The system operating temperature is of primary importance to the design of a non-metallic fan/duct connector, although the system design is generally specified. It is important to distinguish between operating and design as "design" can include a significant safety factor which may result in an upgraded material or design selection.
- **System Pressure:** Normal operating pressures and maximum pressures (positive and negative) under upset conditions should be specified. Combinations of pressures and temperatures should be specifically identified.
- **Movements:** Movements consist of thermal growth resulting from both operating and upset conditions. Individual movements resulting from both conditions should be specified. Maximum installation misalignment should also be taken into account to determine if the non-metallic fan/duct connector design is capable of reacting to a combination of the total maximum movements.



Style 530 Available Materials						
For Specific Elastomer Recommendations, See: PROCO™ "Chemical To Elastomer Guide"						
Styles	PROCO Material Code	Elastomer	Nominal Body Thickness	No. of Reinforcement Plies	Maximum Operating Temp °F	Maximum Pressure Rating (PSI)
530	BB	Chlorobutyl	3/16"	1	300°	±2
	EE	EPDM			300°	
	HH	Hypalon®	1/4"	2	225°	
	NH	Neoprene/Hypalon®			225°	
	NN	Neoprene	3/8"	2	212°	
	NP	Neoprene/Buna-N			212°	
VV	Viton®	400°				

NOTES: 1. Hypalon and Viton are registered trademarks of DuPont Dow Elastomers
 2. Expansion Joint "Cover" (outside) can be Hypalon painted on special order.
 3. Standard fabric reinforcement is polyester. Other high temperature materials are available upon request.
 4. For vacuum applications, all fabric elements should retain sufficient setback from the duct to ensure that belting does not protrude into the flow stream.

Non-Metallic Fan/Duct Connector Weight (pounds per square foot of periphery)								
Nominal Body Thickness	Elastomers							Retaining Rings/Bars Linear/Foot
	Chloro-butyl	EPDM	Hypalon®	Neoprene/Hypalon®	Neoprene	Neoprene/Buna-N	Viton®	
1/4"	1.6	1.6	1.8	1.8	1.8	1.8	2.5	3.5
3/8"	2.5	2.5	2.6	2.6	2.6	2.6	4.8	

Maximum Movement Capabilities								
6" Face To Face			9" Face To Face			12" Face To Face		
Axial Compression (inches)	Axial Extension (inches)	Lateral Offset (inches)	Axial Compression (inches)	Axial Extension (inches)	Lateral Offset (inches)	Axial Compression (inches)	Axial Extension (inches)	Lateral Offset (inches)
2.25	1.25	1.25	2.75	1.5	1.5	3.5	2.0	2.0

NOTES: 1. Lateral Offsets shown above are based on movements prior to axial compression. Greater lateral offset may be

Design Data Sheet Fan/Duct Connector - Style 530			
Item	Tag No.:		
	Quantity:		
Application	Equipment Adjacent The Connector:		
	Media: Gas or Air (circle one)	G	A
Size	Location of Joint: (Inlet, Discharge, Bypass)		
	Duct I.S. or Diameter:		
Temperature	Face To Face:	IN.	
	Operating:	°F	
Pressure	Design:	°F	
	Operating:	PSI	
Movements	Design:	PSI	
	Axial Compression:	IN.	
	Axial Extension:	IN.	