Technical Information

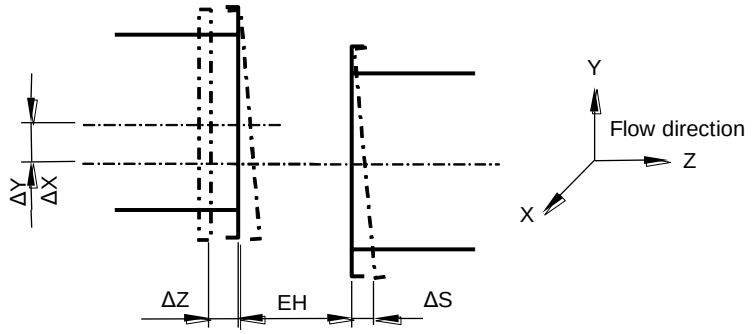
Tolerances for connection flanges and installation dimensions for fabric expansion joints
Imperial Units

RAL-GZ 719

TI-013

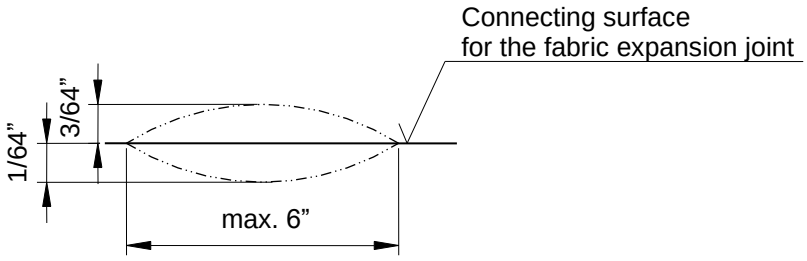
Rev. 0

1. Max. allowable tolerances for the connection flanges of fabric expansion joints



Installation length [EH]	ΔZ = -3/8”, + 3/16”
Lateral offset both directions	ΔX, ΔY = ±3/8”
Misalignment of flanges	ΔS = ±1/4”
Accumulated tolerances	$\sum = \sqrt{\text{max. } (\Delta X^2; \Delta Y^2) + \Delta S^2} + \Delta Z \leq 3/8”$

2. Max. allowable tolerances for the connecting surface of fabric expansion joints



Between measured distance of max. 6” may be either a smooth deepening of 1/64” or a smooth superelevation of 3/64” compared with the theoretical shape.

Waviness of the duct flange max. ±3/64” over a distance of 40”.

Max. Roughness of flanges R_t = 6000 µin.

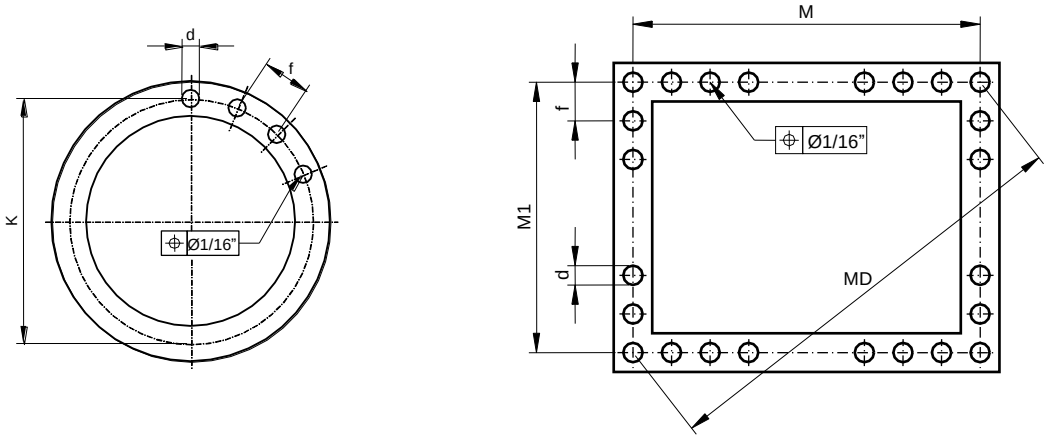
Offset is not allowed at the splicing part of the flange area.

The connecting surface must be free of ridge, groove, notch, weld spatter.

Edited by the Quality Committee of the Quality Association for Fabric Expansion Joints

3. Max. allowable tolerances for the hole pattern of fabric expansion joints

Based on ANSI/ASTM B4.3, similar to ISO 2768 and EN 22768.



Pitch circle diameter <157-5/8” (<4000 mm)	K = ANSI/ASTM B4.3 tolerance class m
Pitch circle diameter <157-5/8” (<4000 mm)	K = ANSI/ASTM B4.3 tolerance class c
Centre distance <157-5/8” (<4000 mm)	M, M1 = ANSI/ASTM B4.3 tolerance class m
Centre distance <157-5/8” (>4000 mm)	M, M1 = ANSI/ASTM B4.3 tolerance class c
Diagonal distance <157-5/8” (<4000 mm)	MD = ANSI/ASTM B4.3 tolerance class m
Diagonal distance <157-5/8” (>4000 mm)	MD = ANSI/ASTM B4.3 tolerance class c
Pitch	f = ANSI/ASTM B4.3 tolerance class c
Hole diameter	d = EN 20273-1 tolerance class g

All holes in the connecting flanges must be deburred on both sides.

4. General tolerances

Tolerances for length dimensions (based on ANSI/ASTM B4.3)

Tolerance	>1/4”	>1”	>5”	>16”	>40”	>80”	>13’	>26’	>40’	>52’
class	<1”	<5”	<16”	<40”	<80”	<13’	<26’	<40’	<52’	<65’
m	±1/128”	±1/64”	±3/128”	±1/32”	±1/16”	±3/32”	±1/8”	±5/32”	±3/16”	±1/4”
c	±3/128”	±1/32”	±1/16”	±3/32”	±1/8”	±5/32”	±3/16”	±1/4”	±9/32”	±5/16”

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