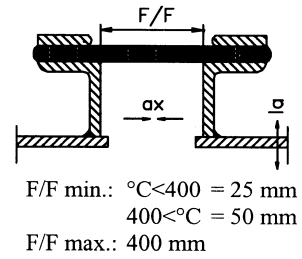
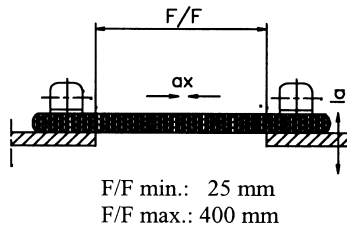
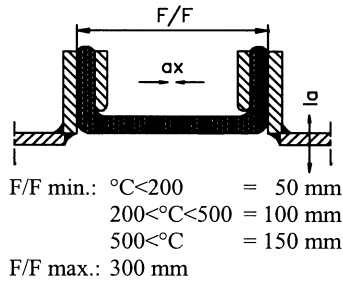




- | | |
|------------------------------|--------|
| 1. LN type products | P. 1~2 |
| 2. MN type products | P. 3~4 |
| 3. RN type products | P. 5~6 |
| 4. HD type products | P. 7~8 |
| 5. GTX type products | P.9~10 |
| 6. Elastomeric type products | P. 11 |



LN types are suitable for medium of air, without contents of chemicals.



Expansion Absorption Chart :

Model / Profile No.		F / F (mm)																
		50		100		150		200		250		300		350		400		
		ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	
LN	200,300	25	10	50	20	75	30	100	40	125	50	150	60	175	70	200	80	
	400	I,IV,V	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60
	500	II,III			30	10	45	15	60	20	75	25	90	30	105	35	120	40
	700	I,IV,V	15	5	30	10	45	15	60	20	75	25	90	30	105	35	120	40
	1000	II,III			25	10	35	15	50	20	65	25	80	30	90	35	110	40

Remarks : ax : axial compression la : lateral movement
 axial extension = 5% of F/F

Pressure Chart :

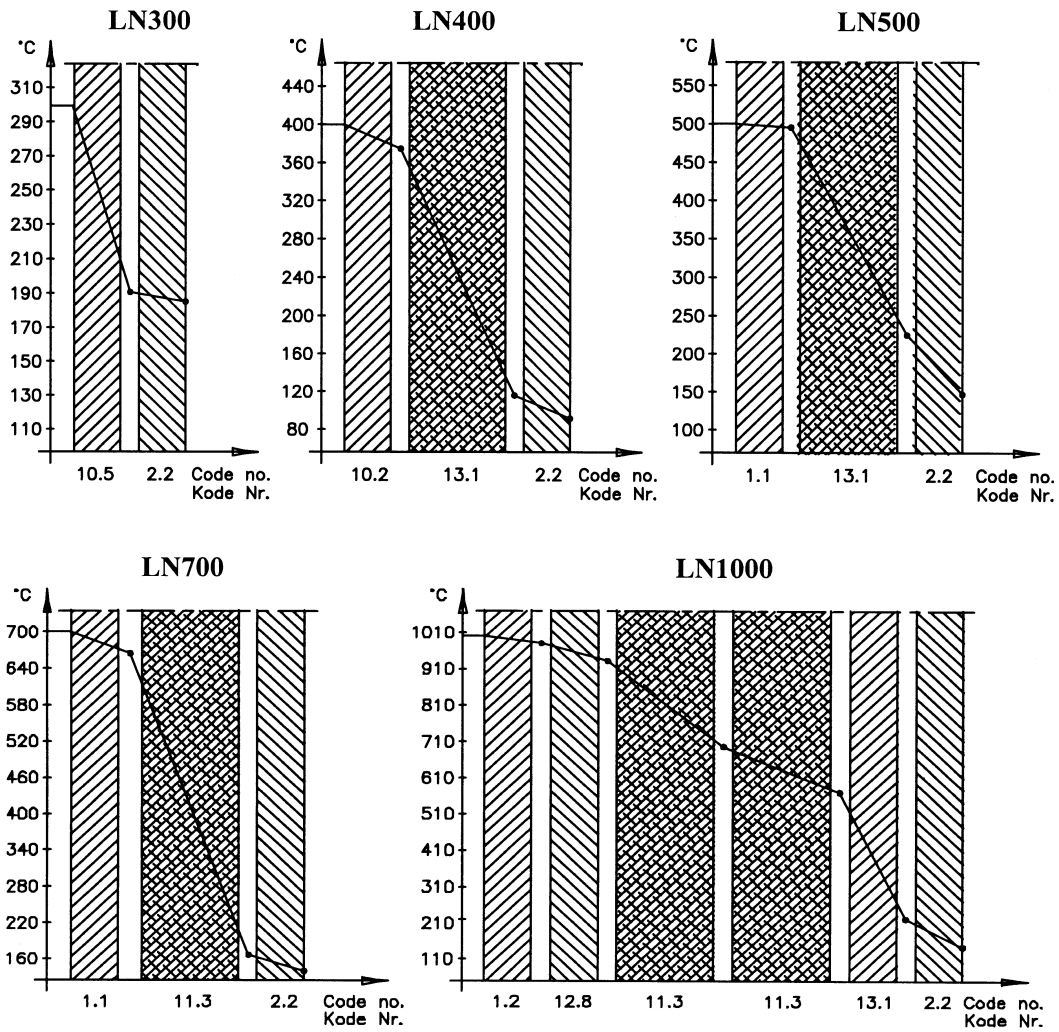
Model	Profile No.	Kpa (-)				Kpa (+)		
		12	8	4	0	4	8	12
LN	200 , 300 , 400							
	200 , 300 , 400							
	500 , 700							
	500 , 700							
	1000							
	1000							

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Standard Composition and Temperature Limited of the Exp. Joint :

Model	Composition of Materials							Max. Temp.	
								°C	°F
LN200	2.2							200	392
LN300	10.5	2.2						300	572
LN400	10.2	13.1	2.2					400	752
LN500	1.1	13.1	2.2					500	932
LN700	1.1	11.3	2.2					700	1292
LN1000	1.2	12.8	11.3	11.3	13.1	2.2		1000	1832

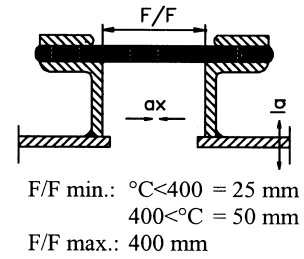
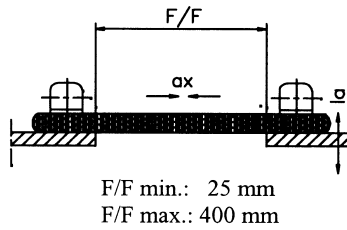
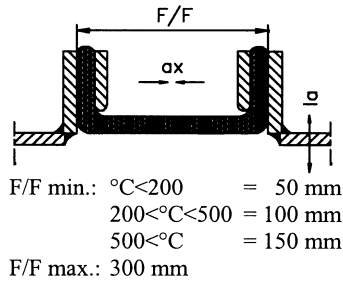
Temperature Gradients :



Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
1.1	Wire mesh, AISI 316, 16x16	1100	0.37
1.2	Wire mesh, Incoloy DS, 12X12	1240	0.45
2.2	Silicone coated glass fabric	1285	0.90
10.2	Glass fabric impregnated with inorganic HT75	1050	1.25
10.5	Glass fabric impregnated with inorganic HT75	680	0.70
11.3	Superwool – 1" 128 kg/m ³	3200	25.00
12.8	Silica fabric, pre-shrunk	1250	1.30
13.1	Needled glass felt	2000	13.00

MN types are suitable for flue-gas with light acid attack.



Expansion Absorption Chart :

Model / Profile No.		F / F (mm)																
		50		100		150		200		250		300		350		400		
		ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	
MN	300	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60	
	400	I,IV,V	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60
	500	II,III			30	10	45	15	60	20	75	25	90	30	105	35	120	40
	700	I,IV,V	10	5	25	10	35	15	50	20	65	25	80	30	90	35	110	40
	1000	II,III					30	10	40	20	50	20	60	25	70	30	80	35

Remarks : ax : axial compression la : lateral movement
 axial extension = 5% of F/F

Pressure Chart :

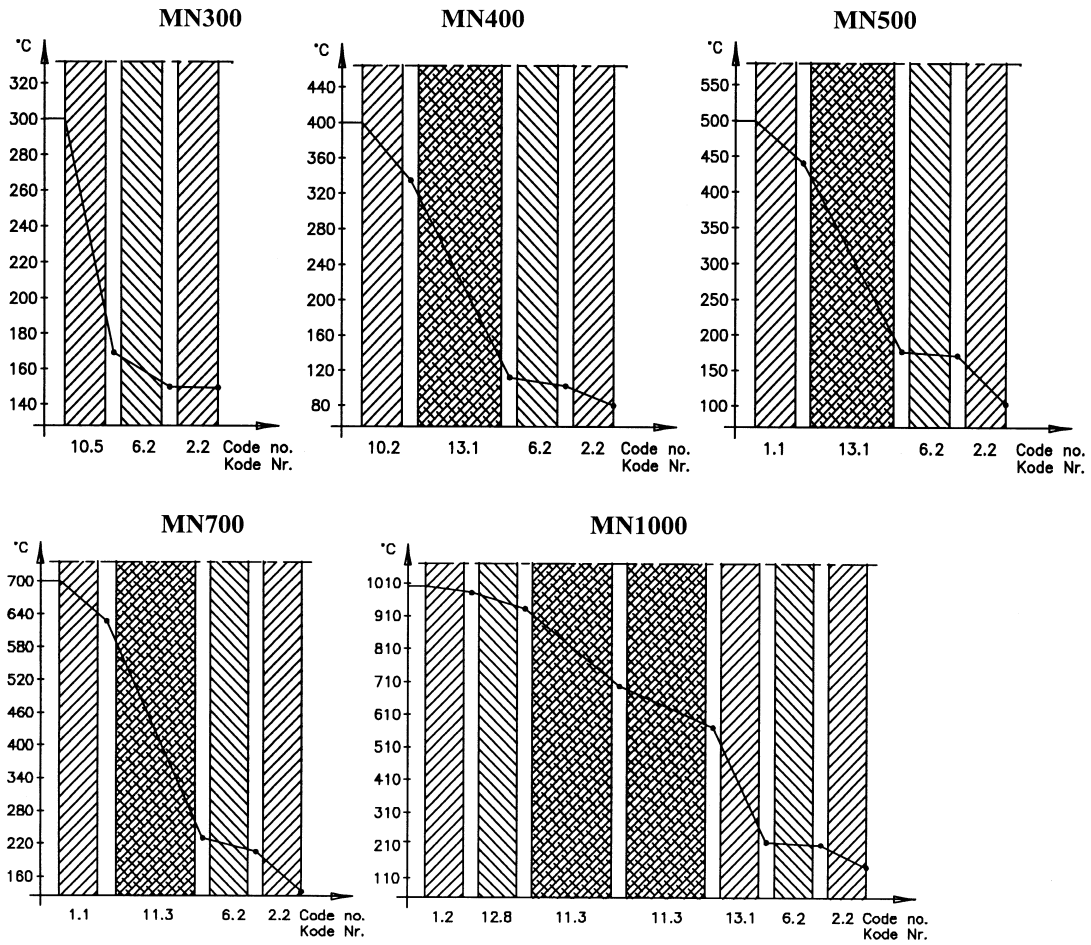
Model	Profile No.	Kpa (-)				Kpa (+)			
		18	12	6	0	6	12	18	
MN	300, 400	I, II, IV	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		
	300, 400	III, V	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		
	500, 700	I, II, IV	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		
	500, 700	III, V	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		
	1000	I, II, IV	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		
	1000	III, V	[Bar chart showing pressure ranges]				[Bar chart showing pressure ranges]		

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Standard Composition and Temperature Limited of the Exp. Joint :

Model	Composition of Materials							Max. Temp.	
								°C	°F
MN300	10.5	6.2	2.2					300	572
MN400	10.2	13.1	6.2	2.2				400	752
MN500	1.1	13.1	6.2	2.2				500	932
MN700	1.1	11.3	6.2	2.2				700	1292
MN1000	1.2	12.8	11.3	11.3	13.1	6.2	2.2	1000	1832

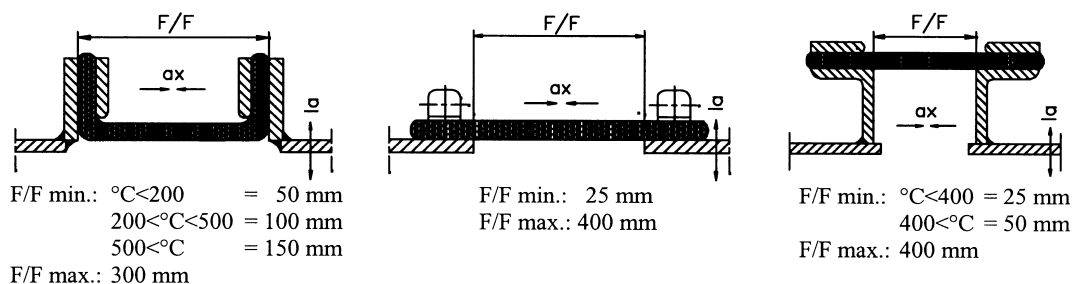
Temperature Gradients :



Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
1.1	Wire mesh, AISI 316, 16x16	1100	0.37
1.2	Wire mesh, Incoloy DS, 12X12	1240	0.45
2.2	Silicone coated glass fabric	1285	0.90
6.2	PTFE foil	440	0.20
10.2	Glass fabric impregnated with inorganic HT75	1050	1.25
10.5	Glass fabric impregnated with inorganic HT75	680	0.70
11.3	Superwool – 1" 128 kg/m ³	3200	25.00
12.8	Silica fabric, pre-shrunk	1250	1.30
13.1	Needled glass felt	2000	13.00

RN types are suitable for medias of flue-gas with heavy acid attack.



Expansion Absorption Chart :

Model / Profile No.		F / F (mm)																
		50		100		150		200		250		300		350		400		
		ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	
RN	300	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60	
	400	I,IV,V	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60
	500	II,III			30	10	45	15	60	20	75	25	90	30	105	35	120	40
	700	I,IV,V	10	5	25	10	35	15	50	20	65	25	75	30	85	35	100	40
	1000	II,III					30	10	40	20	50	20	60	25	70	30	80	35

Remarks : ax : axial compression la : lateral movement
 axial extension = 5% of F/F

Pressure Chart :

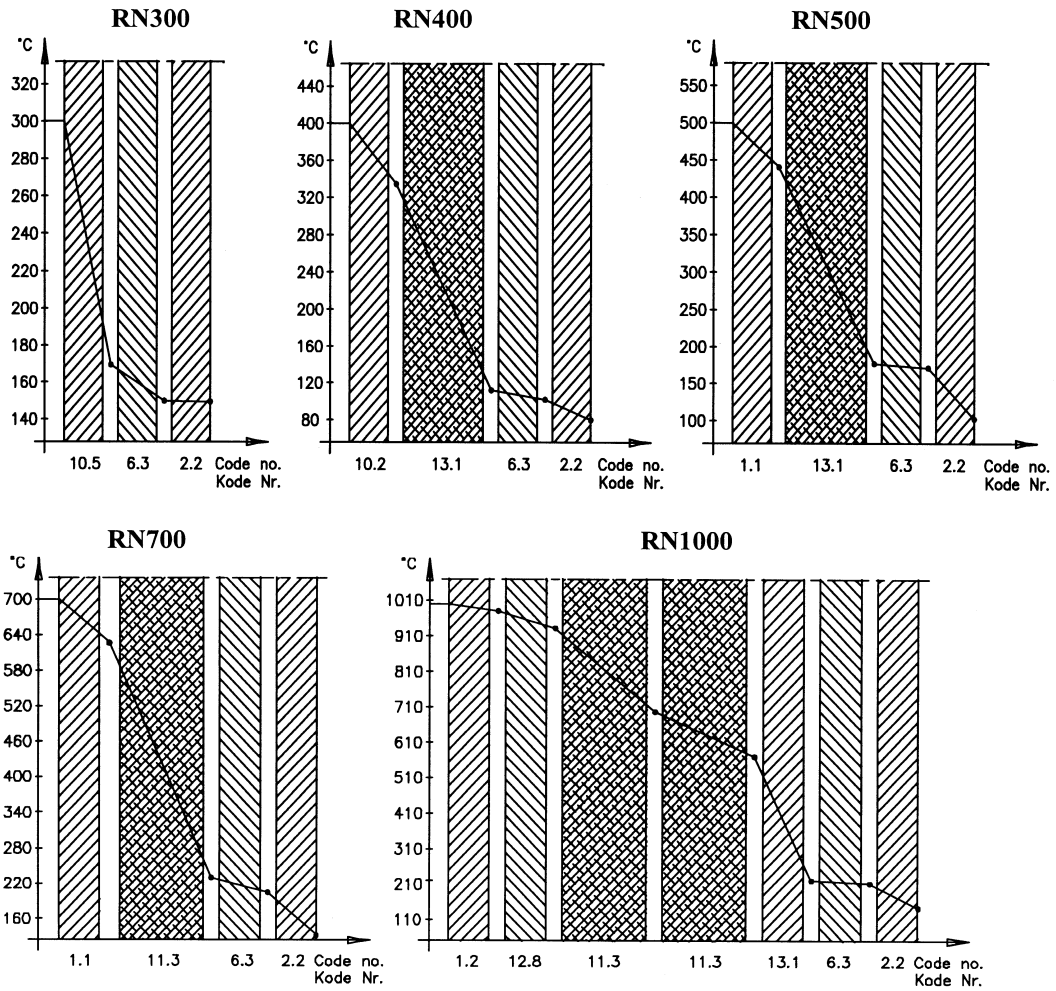
Model	Profile No.	Kpa (-)				Kpa (+)			
		25	15	8	0	8	15	25	
RN	300, 400	I, II, IV	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		
	300, 400	III, V	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		
	500, 700	I, II, IV	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		
	500, 700	III, V	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		
	1000	I, II, IV	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		
	1000	III, V	[Bar chart showing pressure limits]				[Bar chart showing pressure limits]		

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Standard Composition and Temperature Limited of the Exp. Joint :

Model	Composition of Materials							Max. Temp.	
								°C	°F
RN300	10.5	6.3	2.2					300	572
RN400	10.2	13.1	6.3	2.2				400	752
RN500	1.1	13.1	6.3	2.2				500	932
RN700	1.1	11.3	6.3	2.2				700	1292
RN1000	1.2	12.8	11.3	11.3	13.1	6.3	2.2	1000	1832

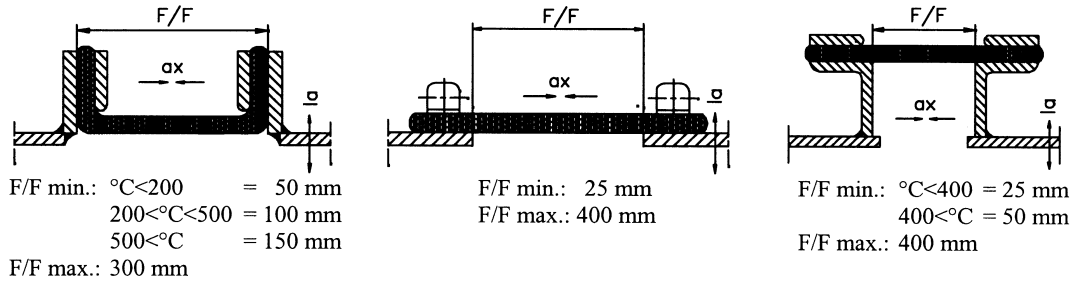
Temperature Gradients :



Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
1.1	Wire mesh, AISI 316, 16x16	1100	0.37
1.2	Wire mesh, Incoloy DS, 12X12	1240	0.45
2.2	Silicone coated glass fabric	1285	0.90
6.3	PTFE coated glass fabric, inside laminated	750	0.42
10.2	Glass fabric impregnated with inorganic HT75	1050	1.25
10.5	Glass fabric impregnated with inorganic HT75	680	0.70
11.3	Superwool – 1" 128 kg/m ³	3200	25.00
12.8	Silica fabric, pre-shrunk	1250	1.30
13.1	Needled glass felt	2000	13.00

HD types are suitable for extreme conditions concerning medium, pressure and temperature.



Expansion Absorption Chart :

Model / Profile No.		F / F (mm)																
		50		100		150		200		250		300		350		400		
		ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	
HD	250,300	10	5	25	10	35	15	55	20	75	25	90	30	105	35	120	40	
	400	I,IV,V	10	5	25	10	35	15	55	20	75	25	90	30	105	35	120	40
	500	II,III			25	10	30	15	50	20	60	25	75	30	85	35	100	40
	700	I,IV,V	10	5	25	10	35	15	50	20	60	25	75	25	80	30	90	35
	1000	II,III					25	10	40	10	50	15	60	15	70	20	80	25

Remarks : ax : axial compression) la : lateral movement
 axial extension = 5% of F/F

Pressure Chart :

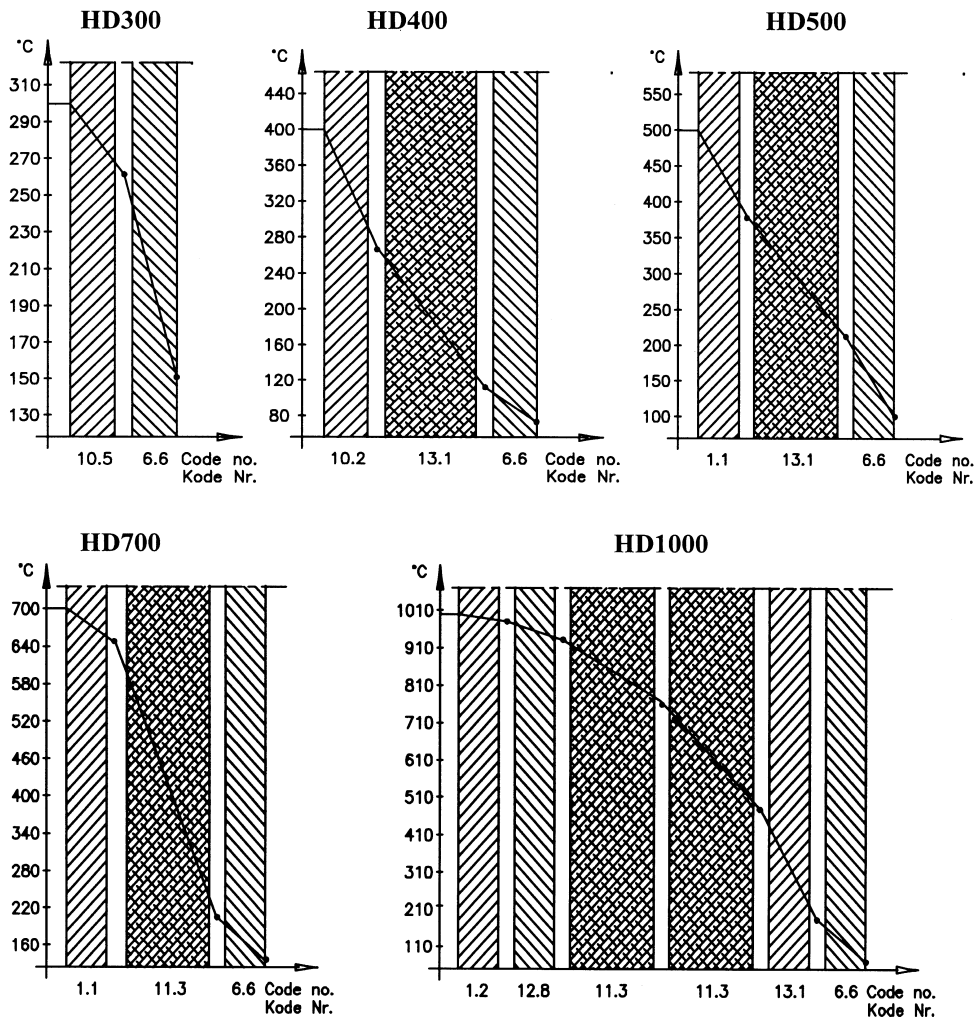
Model	Profile No.	Kpa (-)				Kpa (+)		
		50	30	15	0	15	30	50
HD	250 , 300 , 400	I , II , IV	[Bar chart showing pressure ranges]					
	250 , 300 , 400	III , V	[Bar chart showing pressure ranges]					
	500 , 700	I , II , IV	[Bar chart showing pressure ranges]					
	500 , 700	III , V	[Bar chart showing pressure ranges]					
	1000	I , II , IV	[Bar chart showing pressure ranges]					
	1000	III , V	[Bar chart showing pressure ranges]					

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Standard Composition and Temperature Limited of the Exp. Joint :

Model	Composition of Materials							Max. Temp.	
								°C	°F
HD250	6.6							250	482
HD300	10.5	6.6						300	572
HD400	10.2	13.1	6.6					400	752
HD500	1.1	13.1	6.3					500	932
HD700	1.1	11.3	6.3					700	1292
HD1000	1.2	12.8	11.3	11.3	13.1	6.6		1000	1832

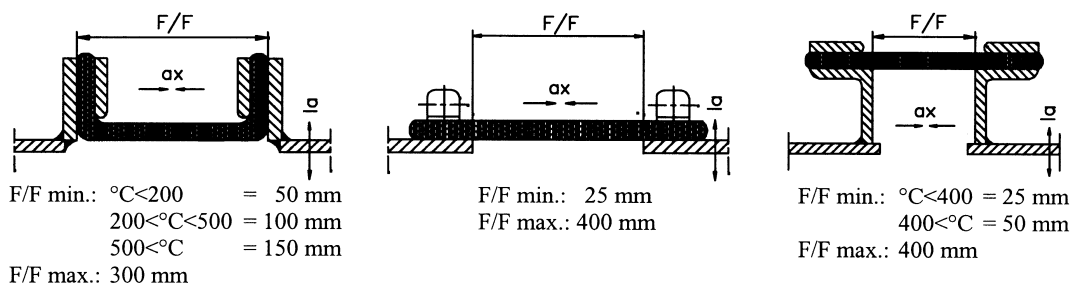
Temperature Gradients :



Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
1.1	Wire mesh, AISI 316, 16x16	1100	0.37
1.2	Wire mesh, Incoloy DS, 12X12	1240	0.45
6.6	PTFE coated glass fabric, inside laminated	2000	1.20
10.2	Glass fabric impregnated with inorganic HT75	1050	1.25
10.5	Glass fabric impregnated with inorganic HT75	680	0.70
11.3	Superwool – 1" 128 kg/m ³	3200	25.00
12.8	Silica fabric, pre-shrunk	1250	1.30
13.1	Needled glass felt	2000	13.00

GTX types have been developed for gas turbine applications. They can be applied to temperatures up to 700°C.



Expansion Absorption Chart :

Model / Profile No.			F / F (mm)															
			50		100		150		200		250		300		350		400	
			ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la
GTX	-A*	IV	10	5	25	10	35	15	50	20	60	25	75	30	85	35	100	40
	-B*	IV	10	5	25	10	35	15	50	20	60	25	75	25	80	30	90	35
	-C*		10	5	25	10	35	15	50	20	60	25	75	25	80	30	90	35

Remarks : ax : axial compression la : lateral movement

* : The max. lateral expansion absorption is approx. 5% of F/F with a wire-mesh sleeve. Axial expansion absorption as GTX-B/-C.

Pressure Chart :

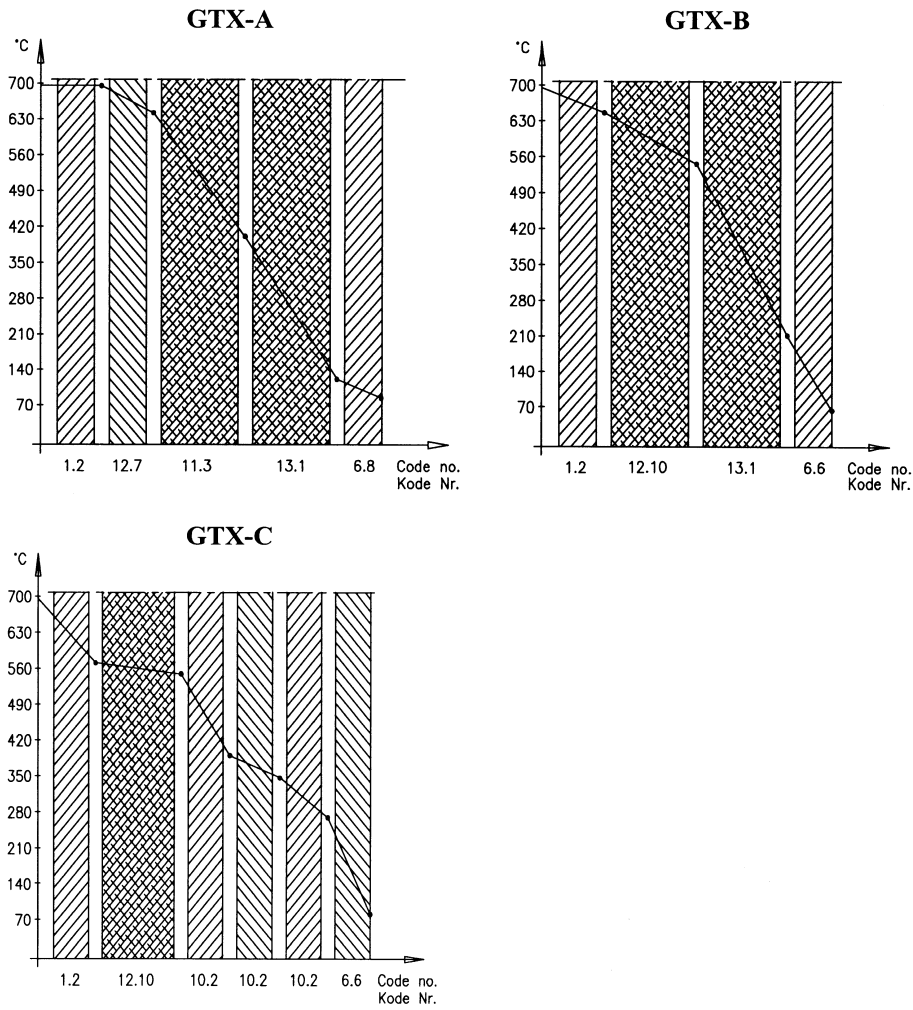
Model		Profile No.	Kpa (-)				Kpa (+)											
			50	30	15	0	15	30	50									
GTX	-A	IV																
	-A	IV																
	-B,-C	IV																
	-B,-C	IV																

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Standard Composition and Temperature Limited of the Exp. Joint :

Model	Composition of Materials							Max. Temp.	
								°C	°F
GTX-A	1.2	12.7	11.3	13.1	6.8			700	1292
GTX-B	1.2	12.1	13.1	6.6				700	1292
GTX-C	1.2	12.1	10.2	10.2	10.2	6.6		700	1292

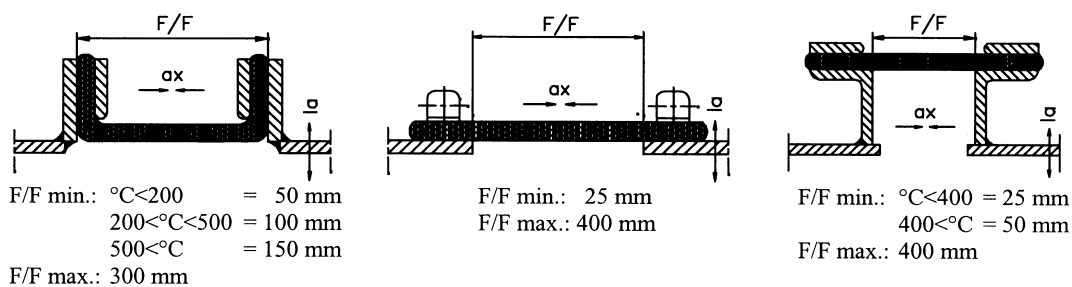
Temperature Gradients :



Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
1.2	Wire mesh, Incoloy DS, 12X12	1240	0.45
6.6	PTFE coated glass fabric, inside laminated	2000	1.20
6.8	PTFE coated glass fabric, inside laminated	1950	1.20
10.2	Glass fabric impregnated with inorganic HT75	1050	1.25
11.3	Superwool – 1" 128 kg/m ³	3200	25.00
12.7	Silica fabric, standard	1250	1.30
12.10	Silica fabric, knitted	2400	12.5
13.1	Needled glass felt	2000	13.00

Elastomeric expansion joints provide an effective and durable solution to the problems of handling hot gases and associated condensates in scrubber and flue-gas system.



Expansion Absorption Chart :

Model / Profile No.	F / F (mm)															
	50		100		150		200		250		300		350		400	
	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la	ax	la
NPG	25	10	50	20	75	30	100	40	125	50	150	60	175	70	200	80
EPDM	20	7	40	15	60	20	80	30	100	40	120	45	140	50	160	60
FKM	15	5	30	10	45	15	60	20	75	25	90	30	105	35	120	40

Remarks : ax : axial compression la : lateral movement
axial extension = 5% of F/F

Pressure Chart :

Model	Material No.	Max. Temp. ($^{\circ}\text{C}$)	Kpa (-)				Kpa (+)		
			50	25	15	0	15	25	50
NPG	3.5	80	[Bar chart showing pressure ranges for NPG]				[Bar chart showing pressure ranges for NPG]		
EPDM	3.7	120	[Bar chart showing pressure ranges for EPDM]				[Bar chart showing pressure ranges for EPDM]		
FKM	3.8	200	[Bar chart showing pressure ranges for FKM]				[Bar chart showing pressure ranges for FKM]		

Remarks : 1kpa = 0.1 N/cm² = 0.01 kg/cm² = 0.1 m-H₂O = 0.01 bar

Material Specification :

No.	Material Description	Weight (g/m ²)	Thickness (mm)
3.5	Neoprene rubber, 1 layer reinforcement.	4350	3.00
3.7	EPDM rubber, 2 layer reinforcements.	4800	4.00
3.8	Viton B, 1 layer reinforcement.	7000	3.45