Company Address	*KLINGER Kempchen Dichtungstechnik - 46147 Oberhausen - Im Waldteich 21*	according to **DIN EN 13555** 2014-07
Gasket type	***Profile PW21 (1.4571; TFM1600; s=0,75 mm; chem.-corrugated 3 Tlg.)***	
Dimensions e_{GO} [mm]	***Ø 49 / 92 x 3,50 mm (DIN 1514-3)***	
Remarks:	*At higher internal pressures higher initial perssure was selected!*	

required minimum stress to gasket $\mathbf{Q_{min}}$ (at assambly), $\mathbf{Q_{Smin}}$ (after off-loading) for p = 10 bar to 160 bar

L [mg/(s*m)]	$Q_{MIN/L}$ [MPa]				$Q_{SMIN/L}$ [MPa]																															
					Q_A = 20 [MPa]				Q_A = 30 [MPa]				Q_A = 40 [MPa]				Q_A = 60 [MPa]				Q_A = 80 [MPa]				Q_A = 100 [MPa]				Q_A = 120 [MPa]				Q_A = 160 [MPa]			
	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]	p=10 [bar]	p=40 [bar]	p=80 [bar]	p=160 [bar]
10^{-0}	<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5										
10^{-1}	<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5										
10^{-2}	<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5			<5	<5										
10^{-3}	<5	<5			<5	5			<5	6			<5	<5			<5	<5			<5	<5			<5	<5										
10^{-4}	<5	<5			<5	6			<5	8			<5	8			<5	<5			<5	<5			<5	<5										
10^{-5}	<5	7			<5	7			<5	16			<5	7			<5	28			<5	25			7	20										
10^{-6}	7	8			6	9																			61											
10^{-7}	10																																			
10^{-8}																																				

Relaxation ratio $\mathbf{P_{QR}}$ for stiffness C = 500 kN/mm

Flächenpressung	ambient temperature		temperature 1 [100°C]		temperature 2 [200°C]		temperature 3 [300°C]		temperature 4 [400°C]		temperature 5 [500°C]	
	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]	P_{QR}	Δe_{Gc} [mm]
stress level 1 [30 MPa]	0,90	0,027	0,82	0,048	0,75	0,066	0,65	0,090				
stress level 2 [50 MPa]	0,95	0,022	0,76	0,100	0,46	0,231						
stress level 3 [90 MPa]												
stress level 4 [120 MPa]												

Maximal applicable gasket stress $\mathbf{Q_{smax}}$

PQR for Q_{Smax}.	0,95	0,045	0,83	0,120	0,46	0,231	0,65	0,090				
Q_{smax} [MPa]	**100**		**80**		**50**		**30**					

Sekant unloading modulus of the gasket $\mathbf{E_G}$ [Mpa] and gasket thickness $\mathbf{e_G}$ [mm]

Gasket stress [MPa]	ambient temperature		temperature 1 [100°C]		temperature 2 [200°C]		temperature 3 [300°C]		temperature 4 [400°C]		temperature 5 [500°C]	
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]
0		3,4400		3,4400		3,4600		3,5000				
1		3,3205		3,3480		3,3585		3,1920				
20	503	2,2257	514	2,0277	863	1,9984	635	1,9085				
30	883	2,0515	1151	1,9743	995	1,8933	1021	1,7575				
40	1328	1,9726	2056	1,9369	1205	1,7738						
50	2691	1,9346	1889	1,8821	1628	1,6750						
60	2431	1,8959	2402	1,8080								
80	3530	1,8081	2723	1,6407								
100	4701	1,7176										

Note: the contents of gray-stained cells was not detected or is not necessary