

DeltaV-Seal 304L

Gasket Data



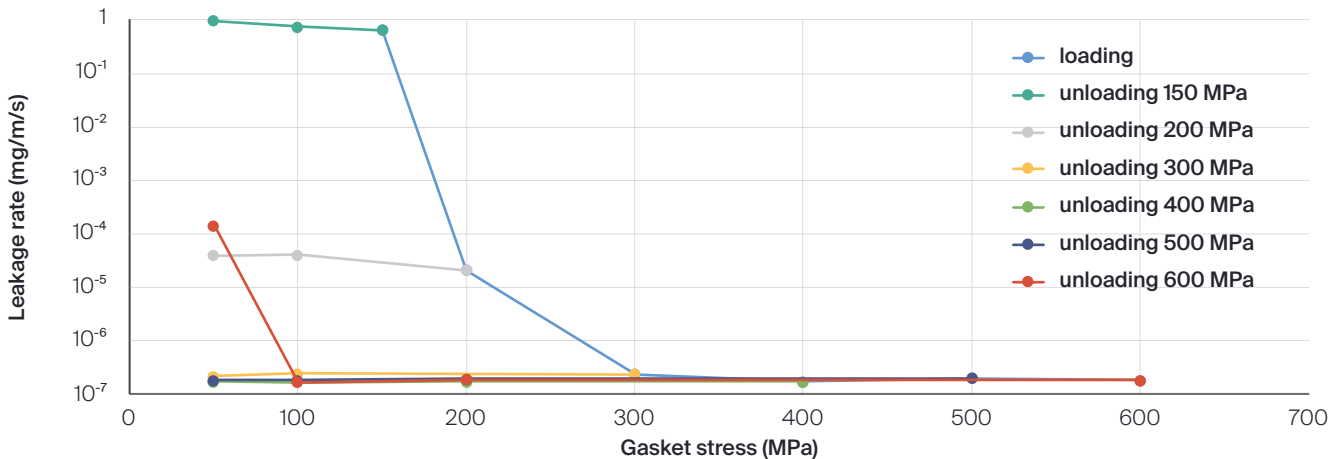
Revision No.: 1	Creation date of this data sheet: 09.06.2023	Page 1 / 6
Manufacturer address	Pipeotech AS, Molandsveien 10, 4994 Akland, Norway	According to DIN EN 13555:2021
Product name	DeltaV-Seal 304L	
Product dimensions	78 x 75 x 3.8 mm (DIN EN 1514-2:2014)	

Leakage Data

40 Bar

Minimum stress to seal Q_{min} (L) (at assembly), Q_{smin} (L) (after off-loading) for P = 40 bar (T = 20°C)								
L (mg/s/m)	Q_{min} (L) (MPa)	Q_{smin} (L) (MPa) for effective gasket stress						
		$Q_A = 100$ MPa	$Q_A = 150$ MPa	$Q_A = 200$ MPa	$Q_A = 300$ MPa	$Q_A = 400$ MPa	$Q_A = 500$ MPa	$Q_A = 600$ MPa
1.00E+00	147			50	50	50	50	50
1.00E-01	158			50	50	50	50	50
1.00E-02	169			50	50	50	50	50
1.00E-03	180			50	50	50	50	50
1.00E-04	192			50	50	50	50	54
1.00E-05	212				50	50	50	62
1.00E-06	264				50	50	50	77
1.00E-07								
1.00E-08								

Leakage curves 20°C, 40 bar



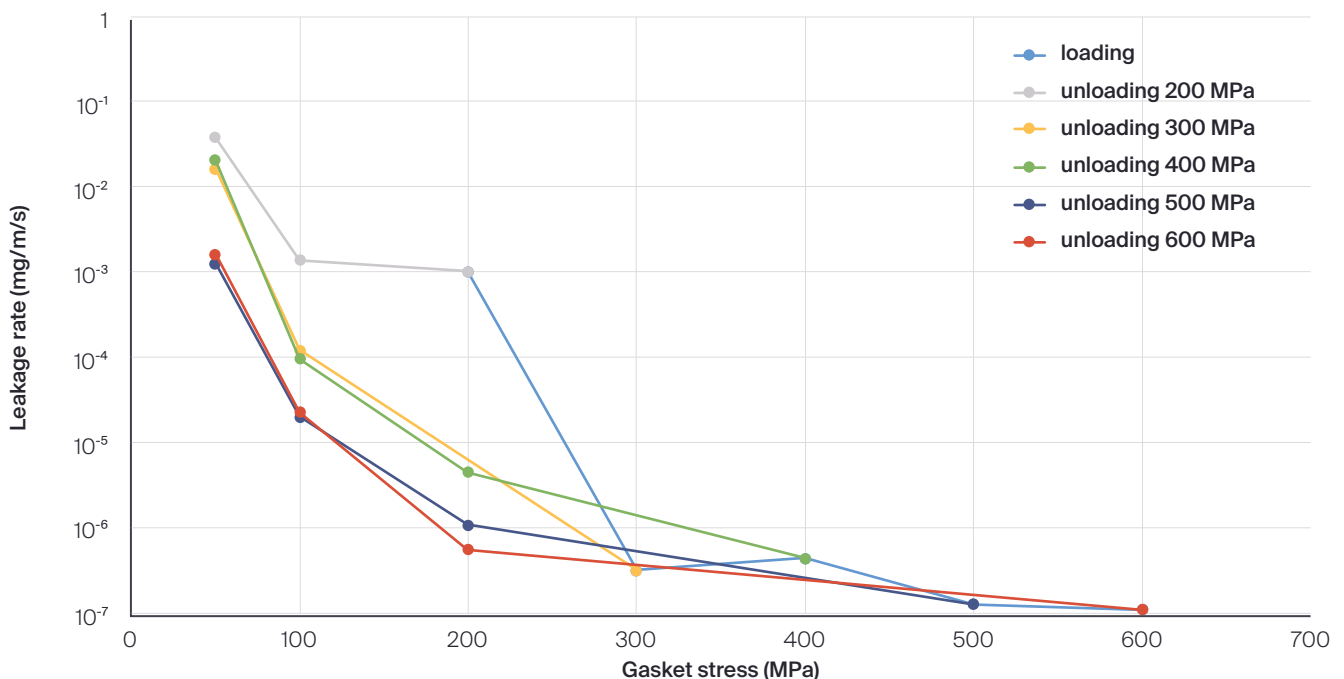
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Leakage Data

40 Bar

Minimum stress to seal Q_{min} (L) (at assembly), Q_{smin} (L) (after off-loading) for P = 40 bar (T = 200°C)								
L (mg/s/m)	Q_{min} (L) (MPa)	Q_{smin} (L) (MPa) for effective gasket stress						
		$Q_A = 100$ MPa	$Q_A = 150$ MPa	$Q_A = 200$ MPa	$Q_A = 300$ MPa	$Q_A = 400$ MPa	$Q_A = 500$ MPa	$Q_A = 600$ MPa
1.E+00	200				50	50	50	50
1.E-01	200				50	50	50	50
1.E-02	200				55	56	50	50
1.E-03	200				76	73	54	57
1.E-04	228				106	102	79	77
1.E-05	257				177	165	122	115
1.E-06	285					268	220	179
1.E-07								
1.E-08								

Leakage curves 200°C, 40 bar



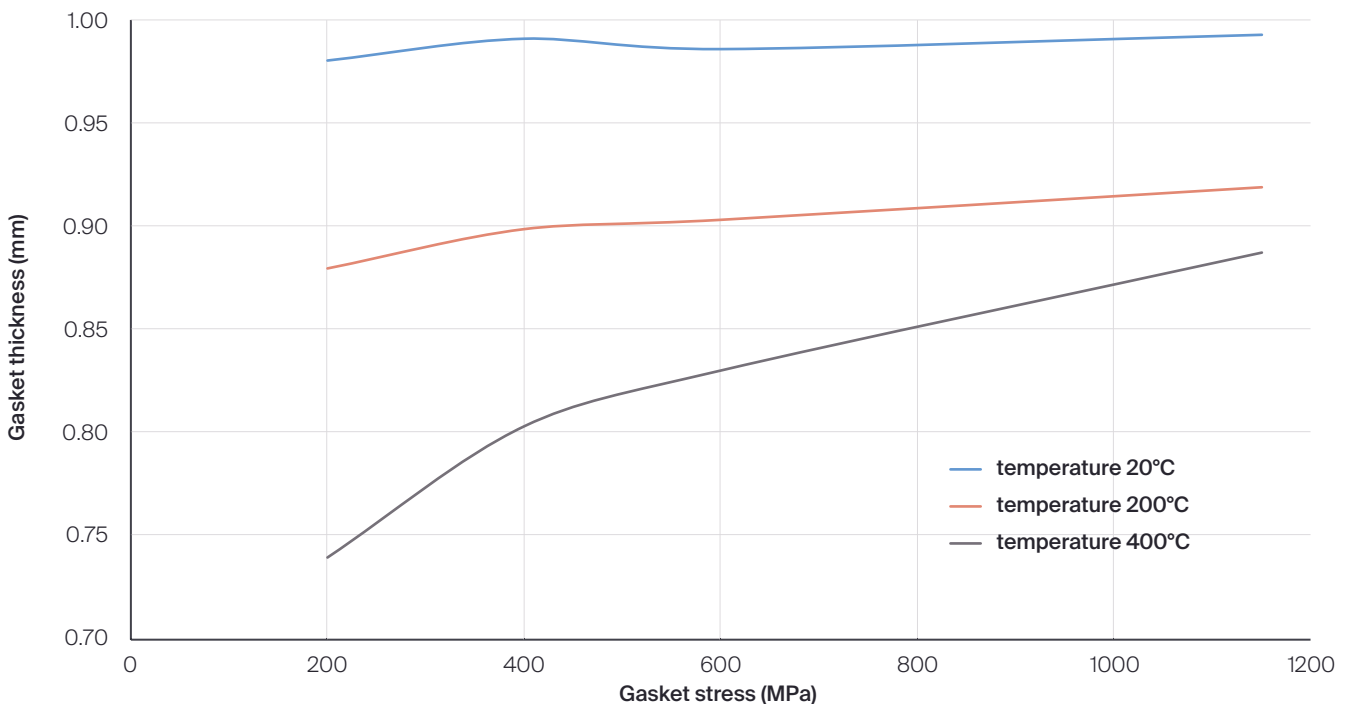
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Relaxation Values

Relaxation Ratio PQR for stiffness C = 500 kN/mm						
Gasket Stress	Temperature 20°C		Temperature 200°C		Temperature 400°C	
	P _{QR}	Δe _{GC} (μm)	PQR	Δe _{GC} (μm)	P _{QR}	Δe _{GC} (μm)
Stress level 1 (200 MPa)	0.98	3	0.88	17	0.74	38
Stress level 1 (400 MPa)	0.99	3	0.90	29	0.80	56
Stress level 1 (600 MPa)	0.99	6	0.90	42	0.83	73
Stress level 1 (1150 MPa)	0.99	9	0.92	75	0.89	122

P _{QR} and Δe _{GC} at maximum gasket stress to be applied Q _{smax}						
P _{QR} at Q _{smax}	0.99	9	0.92	75	0.89	122
Q _{smax}	1150 MPa		1150 MPa		1150 MPa	

P_{QR} over initial gasket stress grouped by temperature



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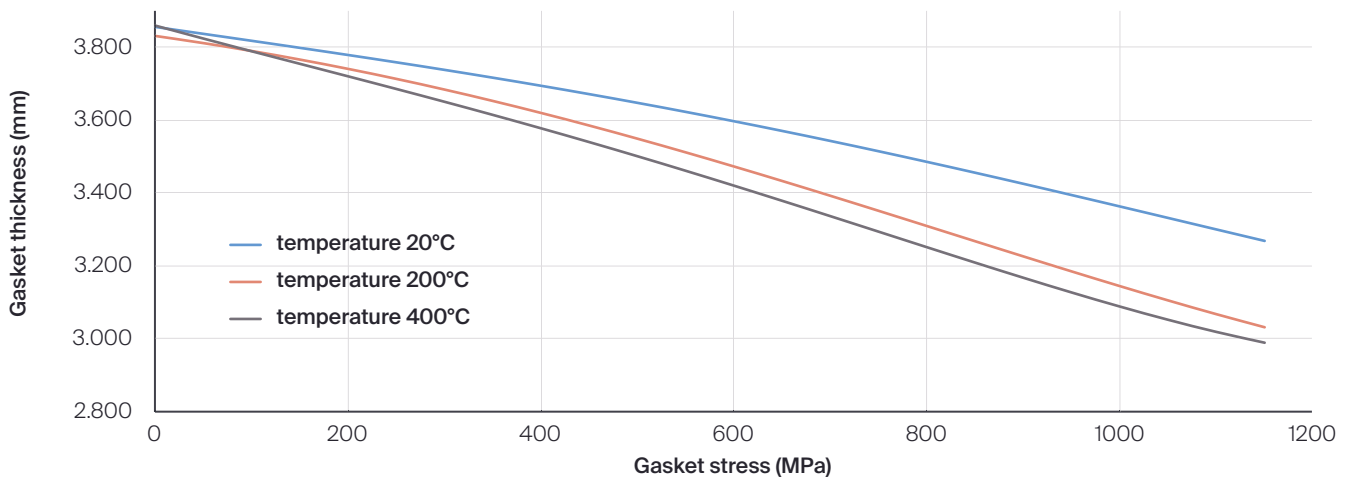
Modulus of Elasticity

Secant unloading modulus of the gasket E_g (MPa) and gasket thickness e_g (mm)						
Gasket Stress	Temperature 20°C		Temperature 200°C		Temperature 400°C	
	E_g (MPa)	e_g (mm)	E_g (MPa)	e_g (mm)	E_g (MPa)	e_g (mm)
0		3.854		3.832		3.859
1		3.853		3.831		3.858
50	60708	3.835	92701	3.812	30514	3.823
100	93671	3.816	120001	3.790	68821	3.789
150	119237	3.796	141822	3.767	98475	3.754
200	138826	3.777	159331	3.741	121032	3.720
250	153721	3.757	173584	3.713	137921	3.685
300	165068	3.736	185521	3.684	150440	3.650
350	173876	3.715	195970	3.653	159760	3.614
400	181015	3.693	205647	3.620	166924	3.577
450	187219	3.670	215153	3.585	172845	3.539
500	193085	3.646	224977	3.549	178309	3.500
550	199072	3.621	235493	3.511	183972	3.460
600	205500	3.596	246963	3.473	190363	3.419
650	212554	3.569	259537	3.433	197881	3.378
700	220282	3.542	273249	3.392	206798	3.335
750	228592	3.513	288021	3.351	217257	3.293
800	237257	3.484	303663	3.309	229271	3.250
850	245911	3.455	319870	3.267	242727	3.208
900	254052	3.424	336225	3.226	257381	3.166
950	261039	3.394	352196	3.184	272863	3.126
1000	266096	3.362	367141	3.144	288673	3.087
1050	268307	3.331	380300	3.105	304182	3.051
1100	266620	3.300	390804	3.067	318634	3.017
1150	259847	3.268	397670	3.031	331144	2.988

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Modulus of Elasticity

Gasket thickness e_g (mm)



Secant unloading modulus of the gasket E_g (MPa)

