

STRESS SAVER® 3522

For higher-stress raised face flanges & lower-stress non-metallic flanges

Description

Garlock's patented STRESS SAVER® 3522 technology is constructed of 100% pure and restructured PTFE, offering universal chemical compatibility, limited leachable contaminants, and easy-to-clean contact surfaces with lowest surface energy which does not support bacterial growth. The STRESS SAVER® 3522 is engineered and designed to work effectively in higher-stress raised face flanges and lower-stress non-metallic flange designs to simplify the selection process and ensure long-term reliability.



Main Segments

» Chemical Processing
» Food and Beverage
» Pharmaceutical
» Water and Waste Water

Key Benefits

» Crush-resistant and ideal for both raised face and flat face flanges
» Easy-to-clean surface finish that does not promote bacterial growth
» Homogeneous construction to avoid permeation, delamination, or leachable contamination

Applications

» High-purity, low-load sealing systems
» Dissimilar flange designs, valve connections, dual laminate piping challenges
» Chemical processing due to 100% pure PTFE construction

Features*

» Temperature: -268 °C to +260 °C
» Pressure: up to 83 bar
» Compressibility (ASTM F36) 20-25%
» 100% pure PTFE (No filler)

* Depending on product and application details.

Certificates/Declarations*

» FDA
» 3A (Sanitary Standard)
» EC1935/2004 incl. EC10/2011
» USP Class VI <88>
» USP <31>, <87>, <281>, <661>
» Phthalate free (declaration)
» Silicone free
» ADI free (EMEA 410/01)



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Bolt Torque Values STRESS SAVER® 3522 for DIN flanges

Nominal Pipe Size DN [mm]	No. of Bolts [A4/A2-70]	Size of Bolts [A4/A2-70]	DIN Item-No.	Preferred Torque Range Steel flanges EN1092-1* (1.4571 / PN16)	Minimum required Torque Range Low load flanges (PVDF/PP/PE/FRP...)	Inner diameter [mm]	Outer diameter [mm]
				[Nm]	[Nm]		
DN 15	4	M12	37350-0010	40	4,4	21	51
DN 20	4	M12	37350-0011	45	6,2	26	61
DN 25	4	M12	37350-0001	50	8,1	33	71
DN 32	4	M16	37350-0012	120	13,4	41	82
DN 40	4	M16	37350-0002	120	16,6	48	92
DN 50	4	M16	37350-0003	120	21,2	59	107
DN 65	8	M16	37350-0009	120	28,0	71	127
DN 80	8	M16	37350-0004	120	16,8	87	142
DN 100	8	M16	37350-0005	120	17,8	111	162
DN 125	8	M16	37350-0013	130	23,3	138	192
DN 150	8	M20	37350-0006	250	32,5	164	218
DN 200	12	M20	37350-0007	250	44,8	213	273
DN 250	12	M20	In preparation				
DN 300	12	M24	In preparation				

*Characteristic values for EN1092-1 flanges calculated with EN1591-1 at 205°C, 16bar, A2-70 bolt & coefficient of friction 0.12

Bolt Torque Values STRESS SAVER® 3522 for ASME flanges

Nominal Pipe Size [in] / [mm]	No. of Bolts [A4/A2-70]	Size of Bolts [A4/A2-70]	DIN Item-No.	Preferred Torque Range Steel flanges EN1092-1* (1.4571 / PN16)	Minimum required Torque Range Low load flanges (PVDF/PP/PE/FRP...)	Inner diameter [in] / [mm]	Outer diameter [in] / [mm]
				[Nm]	[Nm]		
0,5" (15)	4	M12	37350-5190	40	4,4	0,826" (21)	3,500" (89)
0,75" (20)	4	M12	37350-5191	45	6,2	1,037" (26)	3,880" (99)
1" (25)	4	M12	37350-5101	50	8,1	1,284" (33)	4,250" (108)
1,25" (32)	4	M16	37350-5192	120	13,4	1,621" (41)	4,630" (118)
1,5" (40)	4	M16	37350-5193	120	16,6	1,870" (48)	5,000" (127)
2" (50)	4	M16	37350-5102	120	21,2	2,327" (59)	6,000" (152)
2,5" (65)	8	M16	37350-5194	120	28,0	2,798" (71)	7,000" (178)
3" (80)	8	M16	37350-5103	120	16,8	3,408" (87)	7,500" (191)
3,5"	8	M16	37350-5195	130	23,8	3,908" (99)	8,500" (216)
4" (100)	8	M16	37350-5104	120	17,8	4,387" (111)	9,000" (229)
5" (125)	8	M16	37350-5105	130	23,3	5,418" (138)	10,000" (254)
6" (150)	8	M20	37350-5106	250	32,5	6,464" (164)	11,000" (279)
8" (200)	12	M20	37350-5108	250	44,8	8,400" (213)	13,500" (343)
10" (250)	12	M20	In preparation				
12" (300)	12	M24	In preparation				

*Characteristic values for ASME B16.5 at 205°C, 16bar, A2-70 bolt & coefficient of friction 0.12

Note:
Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury. Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing. While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice Garlock is a registered trademark for packings, seals, gaskets, and other products of Garlock.
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