



## PROLOAD-STAT LiveLoading for fittings

New Generation encapsulated Disc Spring System with defined compression length

### Advantages

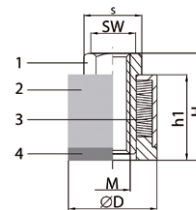
- Disc springs slide on an even machined surface rather on a bolt thread
- Disc springs are encapsulated by outer cylinder against environmental impact
- Disc springs never get over-compressed
- No torque measuring tools necessary
- Relaxation of the springset by volumeloss of the packing stack will show on an inspection gap. Simply tighten the nut until the gap closes
- PROLOAD-STAT Live Loading System acts as a prevention against mechanical destruction of packing
- Extended nut screws on the existing valve bolt and eliminates the need for new longer bolts

### Main application

- Valves
- Sootblowers

### Material of Construction

Pos.	Part	Material specification
1	Nut/Boltextension	1.4571/316Ti
2	Springcup	1.4305/1.4301
3	Spring	1.8159 galCd
4	Springcover	1.4305/1.4301



### Dimension

M in (inch)	Order-type	D in (inch)	H in (inch)	h <sub>1</sub> in (inch)	SW	s in (inch)	Bolt center to stem min (inch)	FE (lbf)	ME (ftlb)
5/16"	L5/16"	0.87	0.80	0.57	1/2	0.58	0.47	1,048	5.2
5/16"	L5/16"HI	0.87	0.80	0.57	1/2	0.58	0.47	2,081	10.3
3/8"	L3/8"	1.02	0.91	0.63	9/16	0.77	0.55	1,062	6.6
3/8"	L3/8"HI	1.02	1.20	0.92	9/16	0.77	0.55	2,122	13
3/8"	L3/8"Rußbläser	1.02	1.20	0.92	9/16	0.77	0.55	1,062	6.6
7/16"	L7/16"	1.26	0.94	0.68	11/16	0.86	0.86	2,101	14.8
7/16"	L7/16"HI	1.26	1.26	0.99	11/16	0.86	0.86	4,097	29.5
1/2"	L1/2"	1.26	0.94	0.68	3/4	0.86	0.86	2,101	14.8
1/2"	L1/2"HI	1.26	1.26	0.99	3/4	0.86	0.86	4,097	29.5
1/2"	L1/2"Rußbläser	1.26	1.26	0.99	3/4	0.86	0.86	2,101	14.8
9/16"	L9/16"	1.50	1.10	0.71	13/16	1.00	0.79	3,654	35
9/16"	L9/16"HI	1.50	1.42	1.02	13/16	1.00	0.79	7,125	71
5/8"	L5/8"	1.50	1.10	0.71	15/16	1.00	0.93	3,654	35
5/8"	L5/8"HI	1.50	1.42	1.02	15/16	1.00	0.93	7,125	71
3/4"	L3/4"	1.77	2.46	1.87	1 1/8	1.36	0.93	9,050	100
3/4"	L3/4"HI	1.77	2.46	1.87	1 1/8	1.36	0.93	11,295	125
7/8"	L7/8"	2.36	2.36	1.56	1 5/16	1.65	1.22	8,662	106
1"	L1"	2.36	2.36	1.56	1 1/2	1.65	1.22	8,662	106

For best functionality and longlasting performance use White Assembly Paste.



All technical information and advice is based on our experience and will be given most conscientiously but without any liability.

Indication and figures are for guidance only and need to be examined by the user. All sizes are subject to manufacturing tolerances. We reserve the right to modify specifications at any time.

Please note that the technical values cannot be used all at the same time in their maximum values.

## PROLOAD-STAT LIVELOADINGSYSTEM

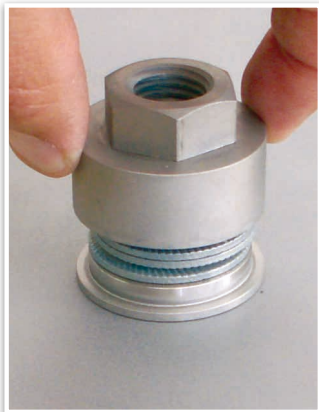
New Generation encapsulated Disc Spring System with defined compression length



### Typical problem

The stack of disc springs is too long for the of the available bolt length.

As a result usually the bolts need to be replaced which is time and cost consuming.



### Solution

The PROLOAD-STAT Live Loading System screws on top of the bolt in a kind of cup form and giving thereby plenty of extra length to accommodate the uncompressed disc spring stack. This incorporates also an equal load of compression for thermal expansion of the valve. The springs cannot be over-compressed as the optimum compression length is set by the PROLOAD-STAT housing dimension.

A sideeffect of the system is that the disc springs slide instead on a thread on a smooth machined surface. Further they are encapsulated and protected against dirt and environmental impact.



### Functional Description

When the packing or gasket settles in operation the springs maintain the gland pressure and the sealing force constant. The settling is shown by a small inspection gap at the bottom of the housing. At a routine inspection the PROLOAD-STAT Live Loading System is simply torqued down till the gap is closed.

The full load and compensation length of the disc springs is now available. No torque measuring tools are needed!

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