MAXIMATOR®

Operating instructions

HP bolted unions (thrust bolt, thrust collar, plug)
1500 bar, 2500 bar, 4500 bar / 1/4“, 3/8“, 9/16“ and 10500 bar / 5/16”

1. Safety advice:

Operation and installation of the component parts may only be performed by trained persons. The statutory provisions of the German Employers' Liability Insurance Association (BG) and other institutions must be complied with. In addition, these Operating Instructions have to be studied thoroughly and fully adhered to.

2. Method of functioning / Use:

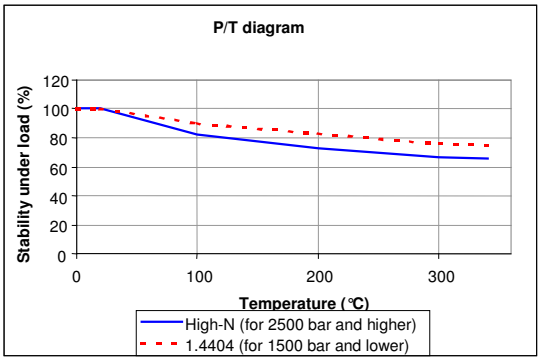
MAXIMATOR® HP bolted unions are exclusively meant for pressure-sealed connection of HP components, plugs for pressure-sealed obturation of HP connections. MAXIMATOR® HP bolted unions may only be used to connect MAXIMATOR® HP components (e.g. pipes). HP bolted unions must not be subjected to any modifications (e.g.: mechanical alterations, welding, soldering, etc.).

3. Technical information:

Media: Only media included in our media endurance list may be used. All other media have to be checked by us for their compatibility with valve materials prior to use. In addition, the respective statutory provisions must be absolutely complied with when inflammable, explosive or toxic substances are used.

Type of load: MAXIMATOR® HP bolted unions are designed for static loads. Life expectancy of the bolted unions is reduced under dynamic load conditions.

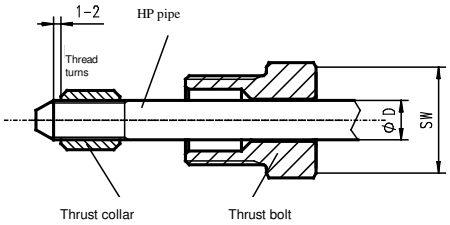
Media temperature: -50 °C ..... +350 °C
Max. pressure drops with rising temperature. (confer P/T diagram)



4. Assembly:

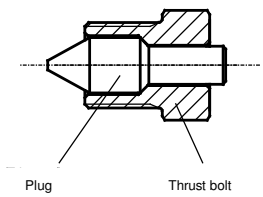
HP pipe:

1. Push thrust bolt over the HP pipe.
2. Screw on thrust collar till to end of thread and turn back by one turn (left-handed thread).
   Make sure that 1-2 threads are free between sealing cone and thrust collar.
3. Screw thrust bolt into the body connecting bore and tighten with tightening moment as indicated in the below table.
4. Caution: Make sure that one relief bore as always kept free!



Plug:

1. Insert plug into the thrust bolt
2. Screw thrust bolt into the valve connecting bore and tighten with tightening moment as indicated in the below table.



MAXIMATOR® GmbH
37449 Zorge, Walkenrieder Str. 15, Tel.: ++49 (0) 5586 803 0, Fax: ++49 (0) 5586 803 40
e-mail: info@maximator.de**, website:** www.maximator.de

Tightening moment for thrust bolts:

Pressure connect-ion	Pipe connection dimensions	∅D	Thrust bolt Width across flats (SW)	Tightening moment
bar	inches	mm	SW in mm	Nm
	1/4“	6.35	SW 13	30
1500	3/8“	9.53	SW 17	40
	9/16“	14.3	SW 24	75
2500 /	1/4“	6.35	SW 17	35
4500	3/8“	9.53	SW 22	70
	9/16“	14.3	SW 32	150
7000 / 10500	5/16	7.94	SW 19	100

Remark: Prior to assembly (and if the medium permits such) all threads and sealing cones should be treated with a suitable lubricant (e.g. copper paste)!

5. Dismantling:

Dismantling is performed in reverse order as assembly.

Remark: Make sure that the system is depressurised before start of dismantling!

6. Maintenance:

MAXIMATOR® HP bolted unions are maintenance-free!

7. Servicing / Repair:

Any servicing work may only be performed by trained persons.

Malfunctions:

Malfunction	Possible cause	Remedy
Medium escapes via relief bore at pressure connections	Faulty assembly of pressure connection	Check for proper assembly
	Cone surface is damaged	Re-machine cone surface with a seat reaming tool

All component parts of HP bolted unions can be obtained from us as spares.

8. Warranty:

We grant for MAXIMATOR® HP bolted unions a warranty of twelve (12) months on material quality and workmanship, commencing with the bolted union shipment date.
Any deficiencies that are due to improper handling, use of inadmissible media or exceeding of maximum operating pressures are not subject to our warranty obligation.

9. Disposal:

HP bolted unions are to be disposed of in compliance with national regulations upon the end of their useful lives.