

# MAXIMATOR®

## Operating Instructions

Manual ball valves 700 bar, 1000 bar, 1500bar

### 1. Safety instructions:

Operation and installation of components may only be performed by skilled personnel. All statutory regulations of the BG [German Employers' Liability Insurance Associations] and other institutions must be complied with. Please, make sure to thoroughly study and observe these present Operating Instructions.

### 2. Function / Use:

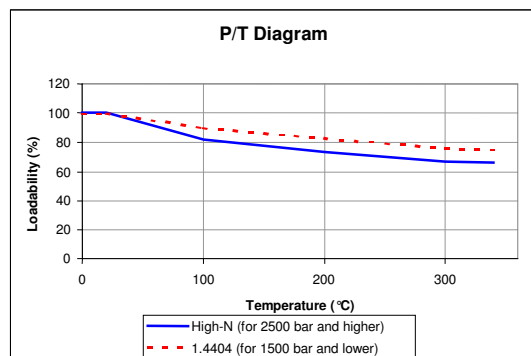
MAXIMATOR® valves are exclusively designed for pressure-sealed shutting off of fluids and gases. Modifications of the valves are not permitted (e.g.: mechanical changes, welding, soldering, etc.).

### 3. Technical parameters:

**Media:** Only media included in our media resistance list may be employed. Any other media must be tested by us for compatibility with valve materials prior to use. Make sure to comply the respective statutory regulations when using inflammable, explosive or toxic media.

**Nature of load:** MAXIMATOR® valves are designed for use under static loads. Use under dynamic loads will reduce the valves' life expectancy.

**Media temperature:** -50°C ..... +150°C Max. pressure decreases with rising temperature. (cf. P/T Diagram)



### 4. Assembly:

Valve (Front-plate installation):

1. Loosen set-screw, draw actuating from spindle.
2. Dismantle cheese head screw and locking plate
3. Now fasten the Manual Ball Valve to the front plate with a cheese head screw. The installation position can be freely chosen (i.e., use a longer cheese head screw for a thicker front plate).
4. Re-slip the actuating handle to the spindle screw and tighten it with set-screw with max. 10 Nm.

**Note:** It is advisable to secure the Manual Valve at the specifically provided fastening borings (excepting front-plate installations), otherwise the bolting may come loose during actuation of the valve.

HP pipe:

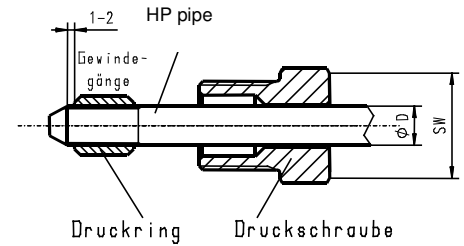
1. Push the pressure screw over the HD pipe.
2. Screw the thrust collar up to the end of thread and reverse one turn (left-handed thread). Make sure that there are 1 to 2 threads free lying between lining cone and thrust collar.
3. Screw the pressure screw into the valve body assembly boring and tighten with the appropriate tightening moment indicated in the below table.

**Note:** If possible, treat all threads and lining cones with an appropriate lubricant (e.g. copper paste) prior to assembly!

Tightening moments for pressure screws:

Pressure socket	Pipe connection dimensions	ØD	Pressure screw Wrench size (SW)	Tightening moment
Bar	Inch	mm	SW in mm	Nm
LP 4	1/4"	6.35	SW 13	30
LP 6	3/8"	9.53	SW 17	40
LP 9	9/16"	14.3	SW 24	75
HP 4	1/4"	6.35	SW 17	35
HP 6	3/8"	9.53	SW 22	70
HP 9	9/16"	14.3	SW 32	150

Threads = Gewindegänge  
 Thrust collar = Druckring  
 Pressure screw = Druckschraube



5. Dismantling:

Dismantling of the valve is performed in reverse order as assembly.

Note: Make sure that the system is depressurised prior to dismantling!

6. Maintenance:

MAXIMATOR® Manual Ball Valves are maintenance-free!

7. Servicing / Repair:

Servicing and repair work may only be performed by properly trained personnel.

Malfunctions:

Malfunction	Possible cause	Remedy
Valve does not close	Spindle and/or ball sealing defective	Replace spindle Replace ball sealing
Medium leaks via relief boring at pressure connections	Wrong assembly of pressure socket Cone surface damaged	Check proper assembly Re-machine cone surface with seat reamer or re-machine pipe
Medium leaks via relief boring at packing	Packing sealing insufficiently pre-tensioned Packing sealing and/or spindle destroyed	Readjust packing pressure screw at ca. 30 Nm. Replace damaged components

Valve type	1500bar			2500bar			4500bar			7000bar
Socket	1/4"	3/8"	9/16"	1/4"	3/8"	9/16"	1/4"	3/8"	9/16"	5/16"
Packing pressure screw	30Nm	30Nm	80Nm	50Nm	50Nm	50Nm	40Nm	40Nm	40Nm	80Nm

All individual components of Manual Ball Valves can be obtained as spare parts from MAXIMATOR. Order Nos. can be gathered from the drawing enclosed to each Manual Ball Valve. Typically there are more than one sealing component worn out, hence we put together several spare part kits. The contents of said spare part kits are indicated in the relevant drawing, as are the order numbers. When ordering spare parts, please, quote the Serial N°, Works N° and valve type as indicated on the Manual Ball Valve body. We also offer valve repairs in our workshop by qualified service technicians.

8. Warranty:

We grant a warranty of twelve (12) months on the material quality and workmanship of all MAXIMATOR® valves, commencing with the valve shipment date. Faults that are caused by inappropriate handling of the valve or use of unauthorised media or by exceeding max. operating pressures are not subject to warranty. Wear parts, such as sealings, are exempted from warranty.

9. Disposal:

Upon completion of their life cycles valves must be disposed of acc. to national regulations.