

Knife gate valve with lever



ISO 9001 : 2008

Certificate 3.1

- Size :** DN 50 to DN 800
- Ends :** Between flanges PN10
- Min Temperature :** -10°C for NBR seat (-15°C for EPDM)
- Max Temperature :** + 90°C for NBR seat (+ 110°C for EPDM)
- Max Pressure :** 10 Bars up to DN 200
- Specifications :** Rising non rotating stem, non rising handwheel
Unidirectional tightness
Weak head loss

Materials : Cast iron or Stainless steel

KNIFE GATE VALVE PN10 S-GATE

SPECIFICATIONS :

- Opened or closed valve
- Rising non rotating stem, non rising handwheel
- Unidirectional tightness (Respect the flow direction indicated by the arrow)
- Weak head loss
- Between flanges PN10
- Full crossing threaded lower holes and blind threaded top holes
- With handwheel
- With lever or chain handwheel (option)
- Possible with bipolar sensor O + C , voltage AC 15-240V 3A, IP66 type XCK M115C
- Deflector (option)
- 50% epoxy 50% polyester painting blue colour RAL 5005
- Other seats on request (FKM, PTFE, SILICONE ...)

USE :

- Water, water treatment, chemical pulp, powders, food industry, chemistry
- Min and max Temperature Ts : - 10°C to + 90°C for cast iron body with NBR seat **Ref.170**
- Min and max Temperature Ts : - 15°C to + 110°C for cast iron body with EPDM seat **Ref.171**
- Min and max Temperature Ts : - 15°C to + 110°C for stainless steel body with EPDM seat **Ref.172**
- Min and max Temperature Ts : - 15°C to + 110°C with **WHITE EPDM** seat(on request)
- Min and max Temperature Ts : - 10°C to + 180°C with **FKM** seat(on request)
- Min and max Temperature Ts : + 0°C to + 180°C with **PTFE** seat (on request)
- Min and max Temperature Ts : - 20°C to + 200°C with **SILICONE** seat (on request)
- When using powders, inverse flow direction

MAX PRESSURE :

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700-800
Ps (Bars)	10	10	10	10	10	10	10	8	6	4	4	3	3	3	2

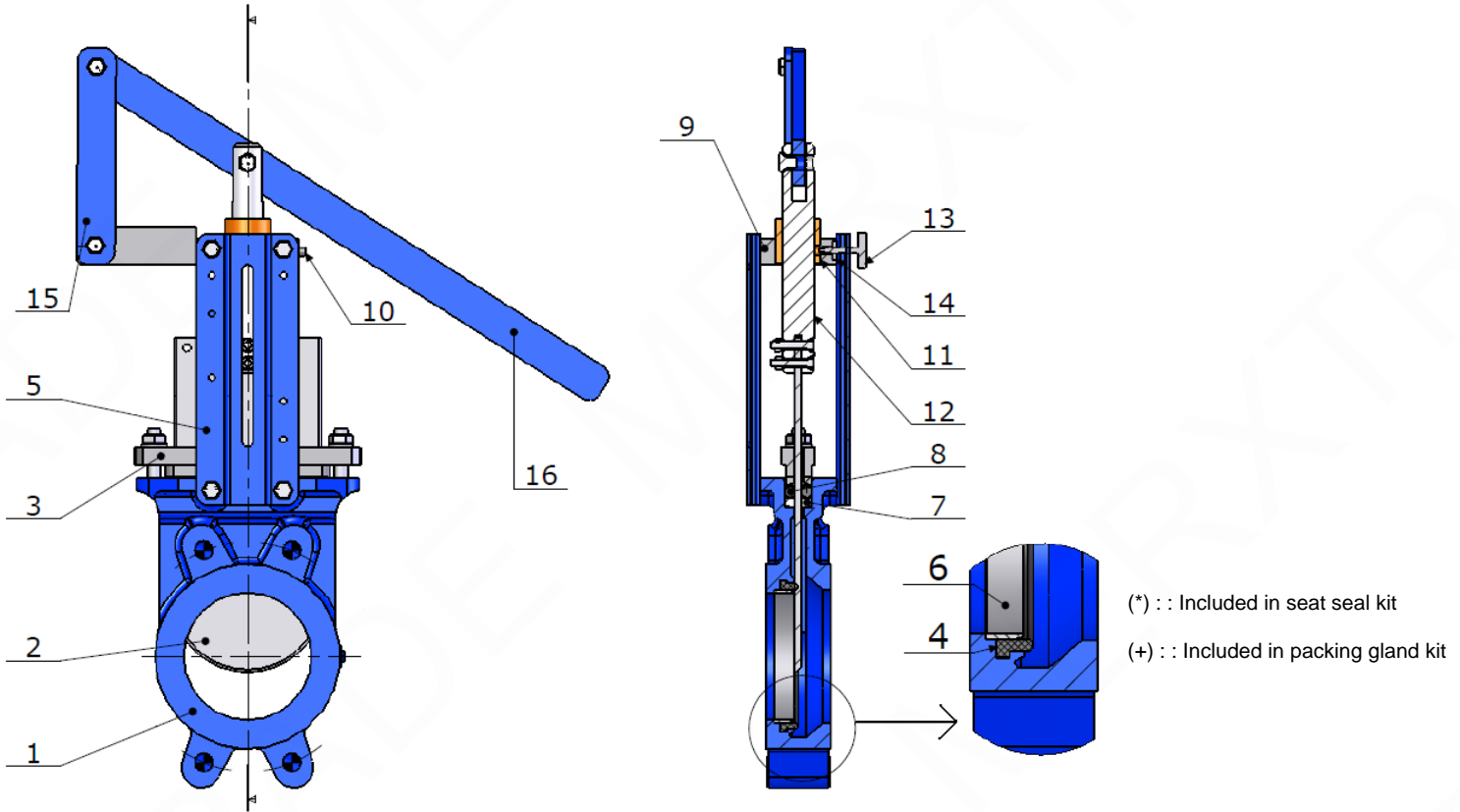
MIN AND MAX SEAT TEMPERATURES WITH REFERENCES :

SEAT	TEMPERATURE	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300
NBR	-10°C à +90°C	9801851	9801852	9801853	9801854	9801855	9801856	9801857	9801858	9801859
EPDM	-15°C à +110°C	9801870	9801871	9801872	9801873	9801874	9801875	9801876	9801877	9801878
WHITE EPDM	-15°C à +110°C	9802170	9802171	9802172	9802173	9802174	9802175	9802176	9802177	9802178
FKM	-10°C à +180°C	9801910	9801911	9801912	9801913	9801914	9801915	9801916	9801917	9801918
PTFE	+0°C à +180°C	9801890	9801891	9801892	9801893	9801894	9801895	9801896	9801897	9801898
SILICONE	-20°C à +200°C	9801930	9801931	9801932	9801933	9801934	9801935	9801936	9801937	9801938

SEAT	TEMPERATURE	DN 350	DN 400	DN 450	DN 500	DN 600	DN 700
NBR	-10°C à +90°C	9801860	9801861	9801862	9801863	9801864	9801865
EPDM	-15°C à +110°C	9801879	9801880	9801881	9801882	9801883	9801884
WHITE EPDM	-15°C à +110°C	9802179	9802180	9802181	9802182	9802183	9802184
FKM	-10°C à +180°C	9801919	9801920	-	-	-	-
PTFE	+0°C à +180°C	9801899	9801900	-	-	-	-
SILICONE	-20°C à +200°C	9801939	9801940	-	-	-	-

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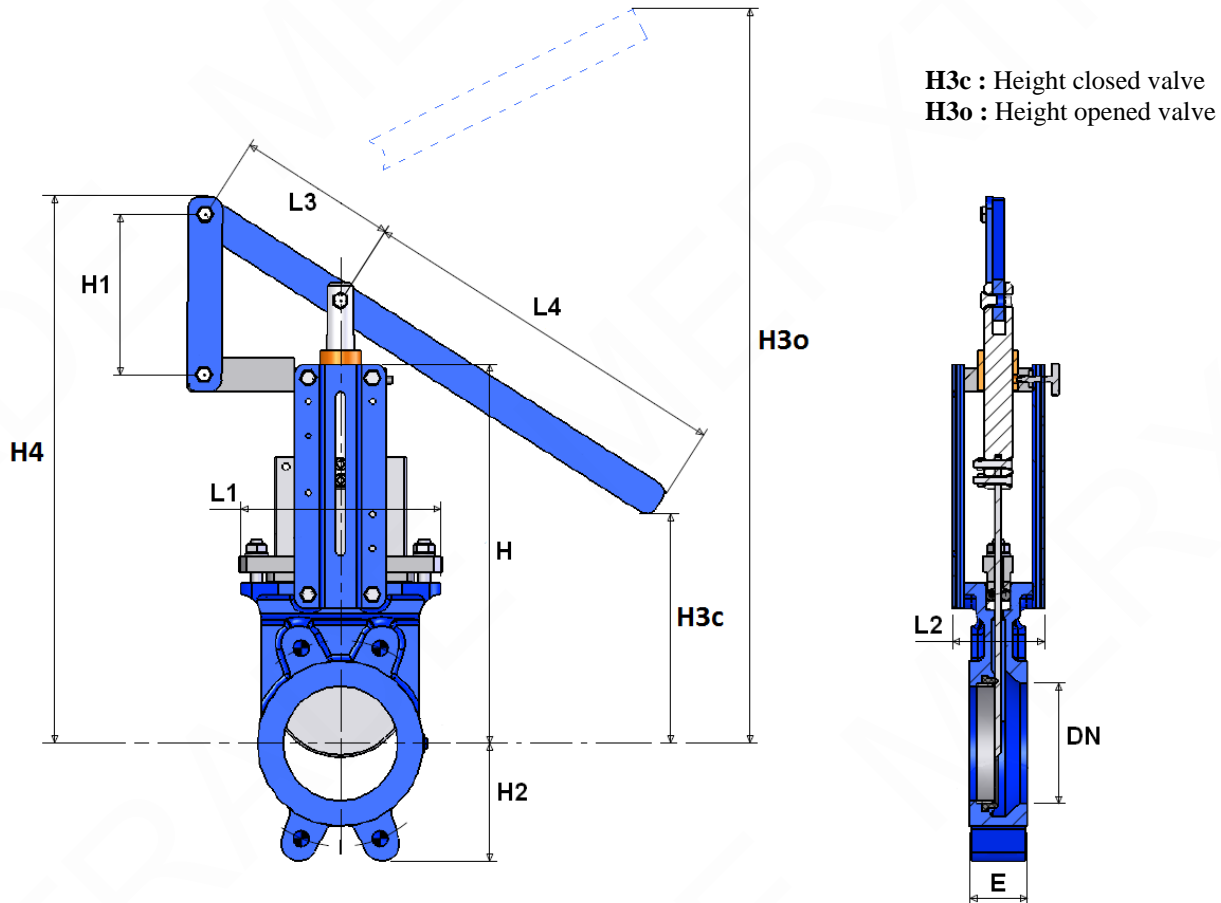
MATERIALS WITH LEVER :



Item	Designation	Materials Ref. 170 + 980178	Materials Ref. 171 + 980178	Materials Ref. 172 + 980178
1	Body	Cast iron EN GJL-250	Cast iron EN GJL-250	ASTM A351 CF8M
2	Gate	AISI 304	AISI 304	AISI 316
3	Packing gland nut	Ductile iron EN GJS-400-15	Ductile iron EN GJS-400-15	ASTM A351 CF8M
4(*)	Seat	NBR	EPDM	EPDM
5	Support	Painted steel	Painted steel	Painted steel
6(*)	Retainer	AISI 304	AISI 304	AISI 316
7(+)	Packing (Tress)	PTFE	PTFE	PTFE
8(+)	Packing (O ring)	NBR	EPDM	EPDM
9	Yoke	Steel	Steel	Steel
10	Oil hole	Steel	Steel	Steel
11	Stem nut	Bronze	Bronze	Bronze
12	Spindle		AISI 304	
13	Fixing screw	Steel	Steel	Steel
14	Wedge	Steel	Steel	Steel
15	Link	Steel	Steel	Steel
16	Lever	Steel	Steel	Steel

KNIFE GATE VALVE PN10 S-GATE

SIZE WITH LEVER REF.170-171-172 + 980178 (in mm) :

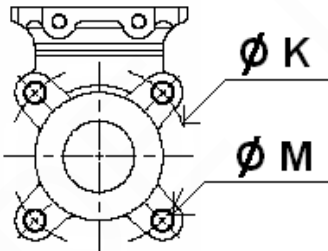


DN	50	65	80	100	125	150	200	250	300
E	40	40	50	50	50	60	60	70	70
H	240	265	290	330	360	412	520	618	718
H1	95	95	95	95	140	140	160	255	255
H2	63	70	92	105	120	130	160	198	234
H3c (closed)	248	263	277	329	301	262	420	315	248
H3o (opened)	452	526	592	704	858	911	1210	1318	1762
H4	343	370	389	436	511	563	690	868	986
L1	124	139	154	174	192	217	270	326	380
L2	92	92	92	92	102	102	120	120	120
L3	140	140	140	140	140	140	230	230	230
L4	330	330	330	330	430	430	630	630	882
Weight Ref.170,171 or 172+ 980178 (Kg)	8.9	9.8	11	13.3	16	18.9	32.9	53.6	67.3

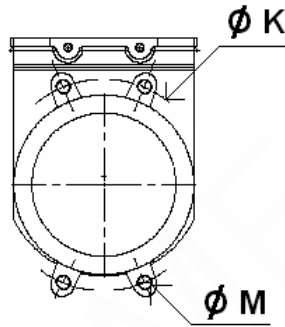
KNIFE GATE VALVE PN10 S-GATE

SIZE FIXING VALVE THREADED HOLES (BETWEEN FLANGES PN10 in mm) :

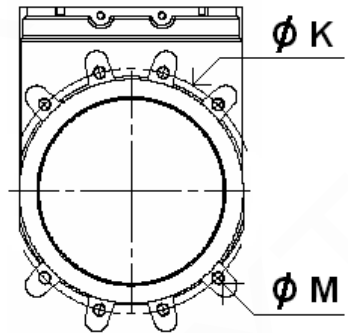
DN 50 – 65



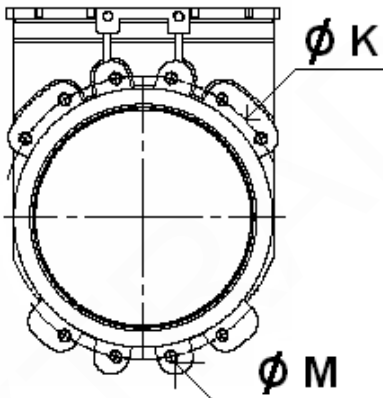
DN 80 – 200



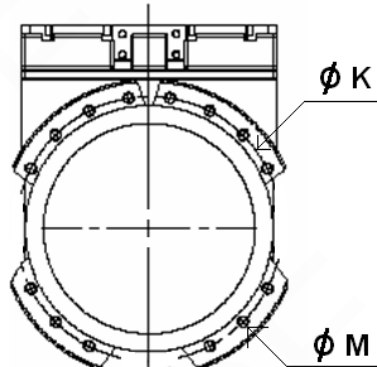
DN 250 - 300



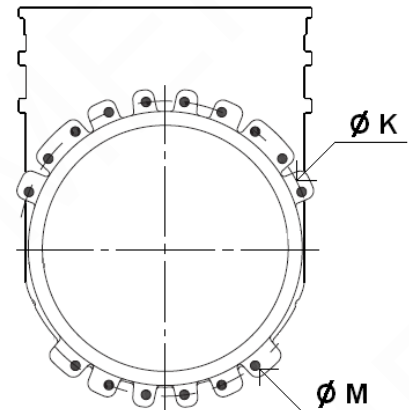
DN 350 – 400



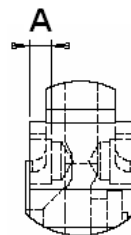
DN 450 – 600



DN 700-800



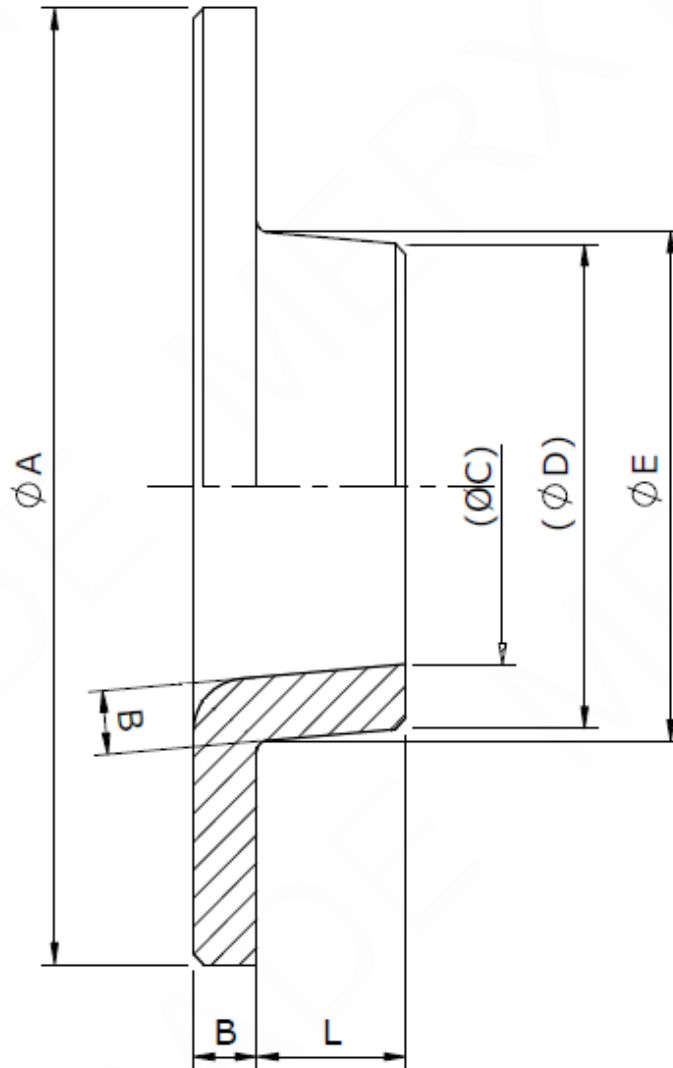
THREADED LENGHT FOR TOP BLIND HOLES :



DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800
Ø K	125	145	160	180	210	240	295	350	400	460	515	565	620	725	840	950
Ø M	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24	M27	M27	M30
Nb threaded hole	4	4	4	4	4	4	4	8	8	10	10	14	14	14	16	16
A	8	8	10	10	10	12	12	15	15	19	20	24	24	22	22	20

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DEFLECTOR SIZE (in mm) :



DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Ø A	90	105	120	145	170	195	250	310	365	420	472	527	582	683
Ø C	32	47.5	59.5	78.5	104.5	127.5	178.5	226.5	278.5	323.5	374	402.7	451.7	552.7
Ø D	44	59.5	73.5	92.5	118.5	141.5	192.5	240.5	292.5	339.5	390	423.4	472.4	573.4
Ø E	48	63	78	98	123	148	198	247	297	347	397	447	497	597
B	6	6	7	7	7	7	7	7	7	8	8	10	10	8
L	14	14	19	19	18.5	23.5	22.5	27	26	39	40	44	46	44

KNIFE GATE VALVE PN10 S-GATE

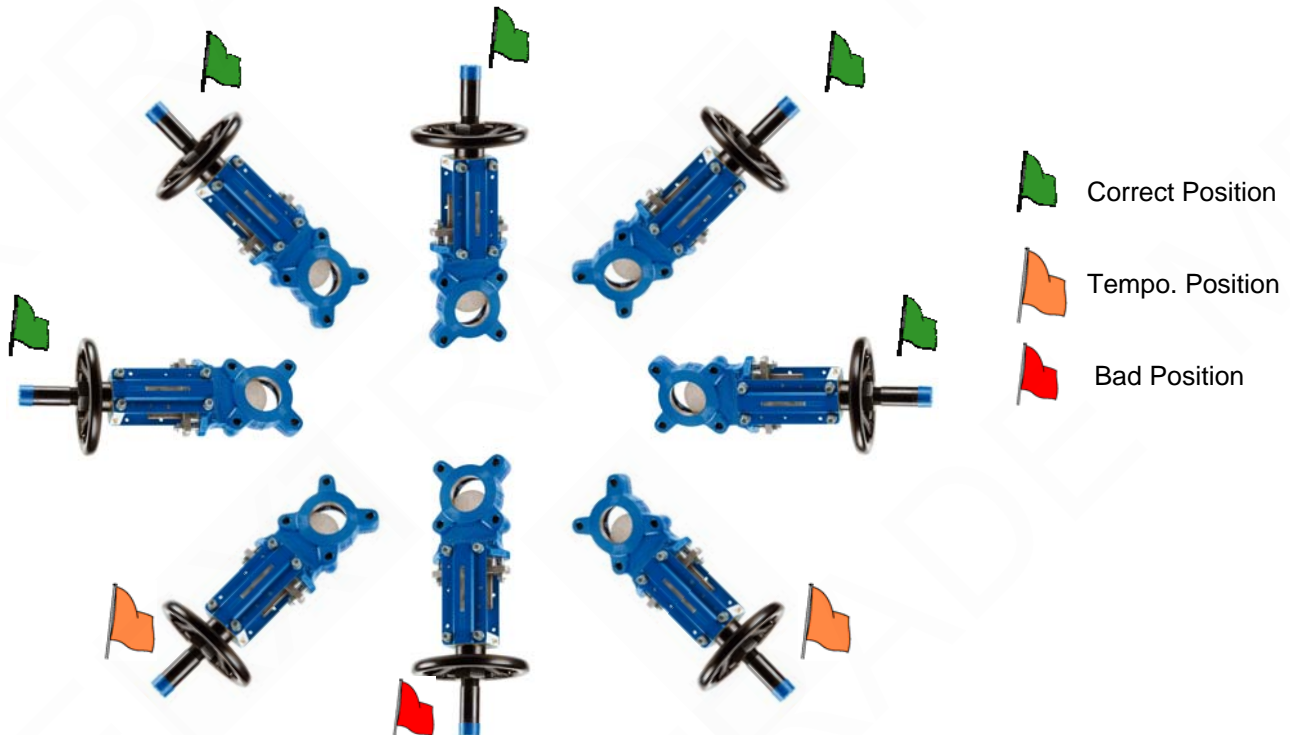
INSTALLATION INSTRUCTIONS :

GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned** (if they're not, the valves may not work correctly).
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- During installation operation, do not carry the valves by the handwheel.
- Valves can be installed in all positions but we recommend the above positions :



KNIFE GATE VALVE PN10 S-GATE

INSTALLATION INSTRUCTIONS (SUITE) :

- If the valve is installed at the end of the pipe, it must be between 2 flanges.
- The knife gate valves are unidirectional, respect the flow direction indicated on the body by the arrow. When using powders, inverse flow direction
- Tighten the bolts in cross. For blind holes, use studs to have a good tightening and tighten them carefully so that they don't touch the gate.
- During cleaning operation, the valves must be opened.
- Tests must be done with cleaned installation and pipe.
- Test must be done with partially opened valve. Test pressure must not exceed valve specification according to ISO 5208.
- Open carefully the valve.
- Tighten the gland packing at the first start of the installation (with a moderate torque) so that there's no leakage and the handwheel is easy to operate. Make sure there's no contact between the gate and the gland.
- Keep greased the stem.
- It's recommended to operate the valve (open and close) 1 time per month