IMP ARMATURE D.O.O.
Ljubljanska cesta 43
1295 Ivančna Gorica
Slovenija EU
t +386 (0)1 7887 300
f +386 (0)1 7887 328
e info@imp-ta.si
w imp-ta.si

UNDERGROUND HYDRANT TYPE TBB

INSTRUCTIONS FOR SAFE HANDLING

Naziv: **FREE-FLOWING UNDERGROUND HYDRANT TYPE TBB**

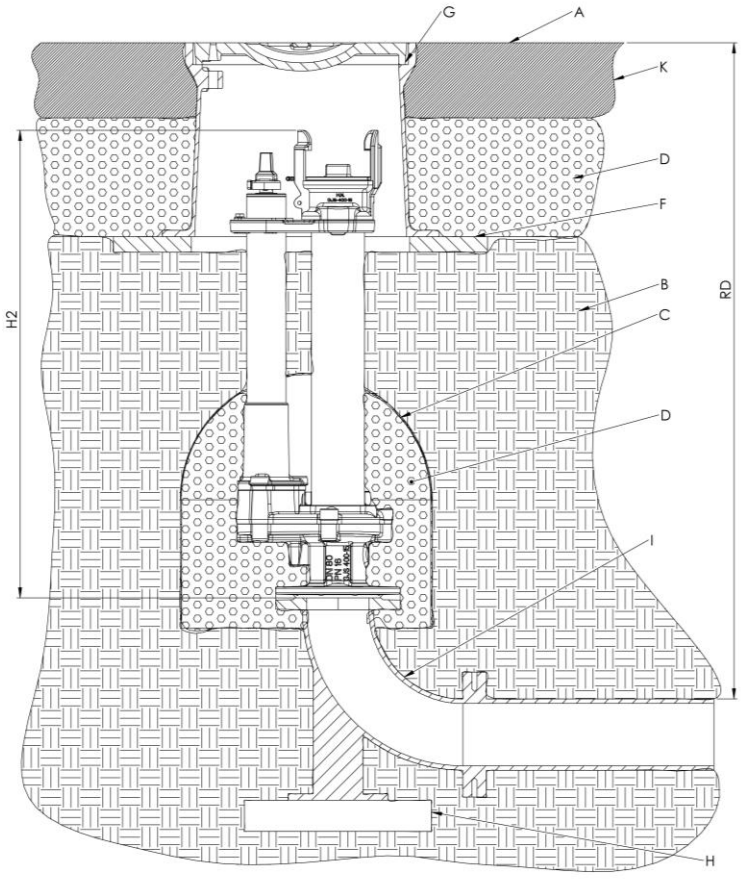
Highest working –operating pressure
- PN 16 = 16 bar

1. PRODUCT INSTALLATION

Correct installation of the hydrant is a condition for its uninterrupted operation.
For optimal choice of the hydrant is particularly important the depth of the water distribution system, which defines the mounting depth of the hydrant. When installing the hydrant, particular attention should be paid to the safety of the staff undertaking these operations; therefore, a suitably sized excavation with a levelled area shall be arranged, where the staff can stand. It should be checked that no sand or dirt is present in the pipe, which could damage the hydrant's sealing element. A sealing element shall be fastened onto a clean connecting flange, afterwards the hydrant shall be set and uniformly tightened with screws. The design of the drainage at the outlet is very important, particularly on heavy clayey areas. Otherwise, the water from the hydrant will not drain, which may result at low temperatures in freezing of the medium and damage on the hydrant. When filling up the hydrant, particular attention should be paid not to damage it. Prior to the installation of the hydrant, the through-flow must be blocked, i.e., the water distribution system should be empty.

INSTALLATION OF THE HYDRANT INTO PIPELINE

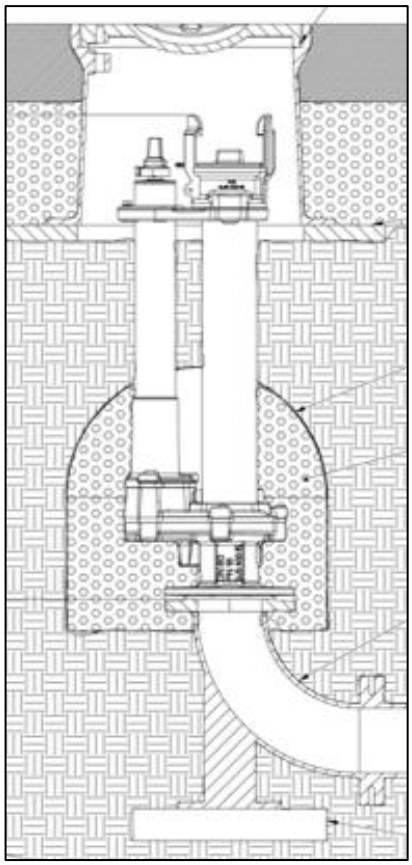
HYDRANT DIMENSIONS		
DN	**MOUNTING DEPTH (Rd)**	**H2**
80	750	510
	1000	750
	1250	1000
	1500	1250
	1750	1500
	2000	1750
	2250	2000
	2500	2250
	2750	2500
	3000	2750



A - Ground level
B - Well-established ground
C - Recommended PE foil
D - Sand of size 4-20mm
F - Concrete base
G - Surface box DIN 4055
K – Asphalt or lawn
H - Concrete base
I – N- pcs

NOTE – hydrant is suitable for use with potable water, however it is required to flush the hydrant before use due to the presence of solid particles.

- **ALLOWED POSITIONS OF THE INSTALLED PRODUCT**



This is the only possible correct installation position for the product to function optimally.

2. USE

TBB hydrant is suitable for fire water supply and for flushing pipelines. Before rinsing the pipeline, it is necessary to install a hydrant nozzle at the outlet, place a pipe on the nozzle and direct it to the place where you want to direct the flow, and secure the handle properly.

	**An unsecured exhaust pipe handle can lead to serious injuries. Therefore, we always make sure that opening the hydrant is safe.**

Slowly open the hydrant for about 4 seconds per turn. We always open the hydrant to the end point. Failure to open the hydrant completely may result in foreign matter jamming and damage to the hydrant when closing. After rinsing, close the hydrant and check if it is empty. Emptying is an indication that the openings have not become clogged with foreign bodies. Install a protective cover on the exit and cover the opening with a road cap.

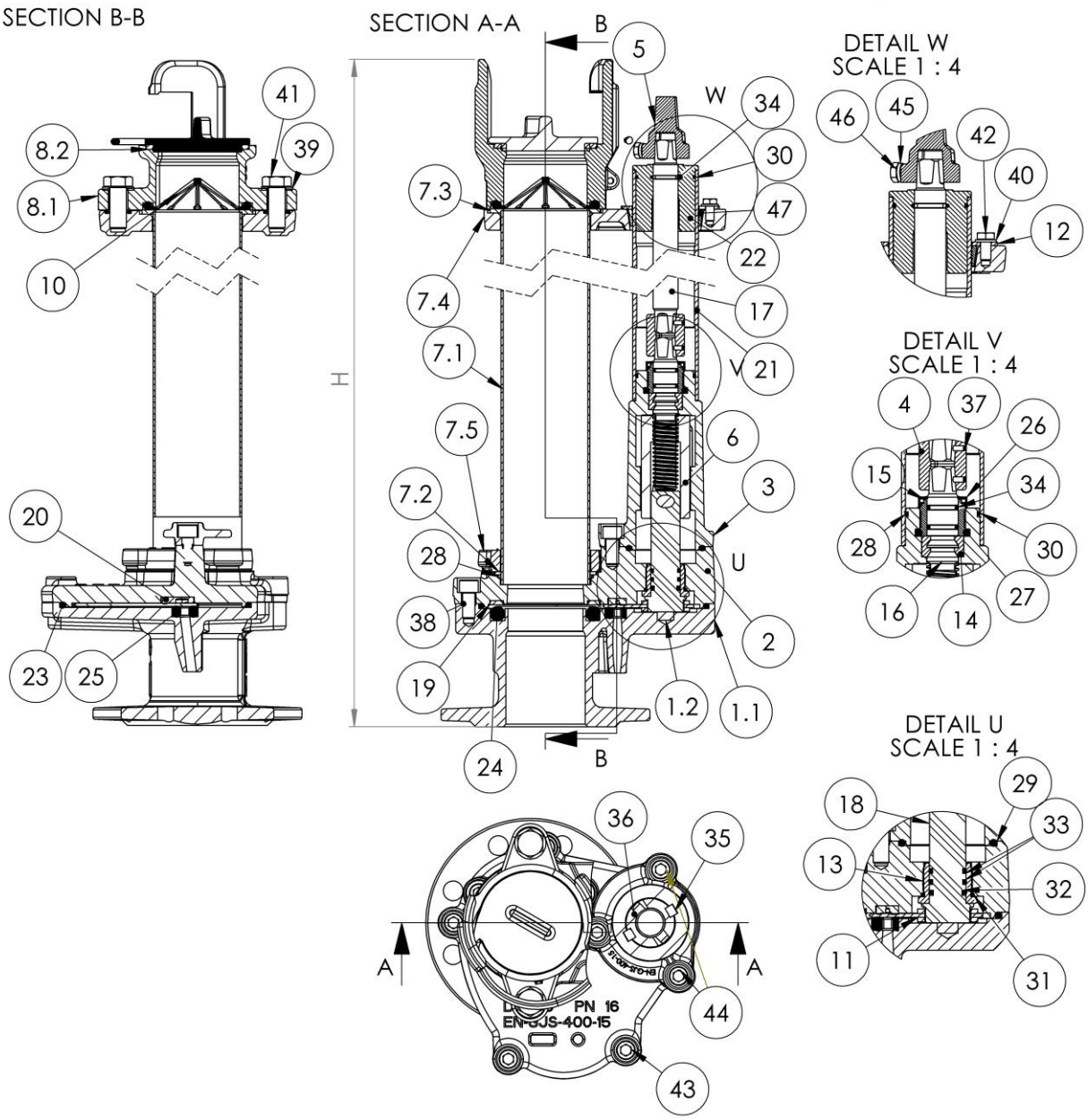
3. MAINTENANCE AND REPAIRS

Underground hydrant is of a simple design and does not require special maintenance. Two annual inspections are advised to assure that rainwater has not left any deposits in the surface box, which could hinder the use of the hydrant. It is particularly important that after the use the hydrant is closed with a rubber cover. This prevents the entry of dirt (ants and other organisms in soil) into the hydrant.

Before any maintenance work on or in the hydrant, the valve in front of the hydrant must be closed! Pressure relief of the hydrant must be assured, for example, unscrew the blind coupling. All service work on the hydrant can only be performed by a qualified and trained person.

Procedure of replacement of the outlet (4):
Close the inflow of water into the hydrant, open the hydrant to open position and check that it is not under pressure. Unscrew the bolts pos. 41, by which the outlet pos. 8 is fixed. Remove the damaged outlet, membrane pos. 10. Place the new gaskets and outlet in and screw the bolts pos. 41 with torque 90 Nm.

POZ/ ITEM	KOS / PCS.	NAZIV IN MERE / NAME AND DIMENSIONS	MATERIAL	POZ/ ITEM	KOS / PCS.	NAZIV IN MERE / NAME AND DIMENSIONS	MATERIAL
1	1	OHIŠJE SPODNJI DEL / BOTTOM BODY	/	21	1	PE CEV / PE - PIPE	PE
1,1	1	OHIŠJE SPODNJI DEL / BOTTOM BODY	EN-GJS-400-15	22	1	PE POKROV / PE COVER	PE
1,2	1	ZATIČ / PIN n16x8	W. No 1.4021	23	1	TESNILO OHIŠJA / BODY GASKET	EPDM 70` ShA
2	1	OHIŠJE ZGORNJI DEL / TOP BODY	EN-GJS-400-15	24	1	GLAVNO TESNILO / MAIN GASKET	EPDM 70` ShA
3	1	OHIŠJE REDUKTOR / TRANSFORMER BODY	EN-GJS-400-15	25	1	TESNILO IZSTOKA / PRESSURE REIEASE GASKET	SS /EPDM 70` ShA
4	1	SKLOPKA / CLUTCH	EN-GJS-400-15	26	1	SEKUNDARNO TESNILO / SEK. GASKET	EPDM 70` ShA
5	1	KLJUČ / OPERATING CAP	EN-GJS-400-15	27	1	TESNILO MATICE / NUT GASKET	EPDM 70` ShA
6	1	MEHANIZEM / TRANSFORMER	EN-GJS-400-15	28	1	"O" RING n85 x n3,5	EPDM 70` ShA
7	1	SESTAV CEV / ASSEMBLY PIPE	/	29	1	"O" RING n65 x n4,5	NBR
7,1	1	CEV / PIPE	W. No 1.4404	30	2	"O" RING n53 x n3	NBR
7,2	1	PRIROBNICA / FLANGE	W. No 1.4404	31	1	"O" RING n35 x n3	EPDM 70` ShA
7,3	1	PRIROBNICA / FLANGE	W. No 1.4404	32	1	"O" RING n21 x n3,5	EPDM 70` ShA
7,4	1	PRIROBNICA / FLANGE	EN-GJS-400-15	33	2	"O" RING n22 x n3	NBR
7,5	1	PRIROBNICA / FLANGE	EN-GJS-400-15	34	3	"O" RING n19 x n2,5	NBR
8	1	IZHOD / OUTLET	/	35	2	MOZNIK / KEYWAY 10x8x70	A2
8,1	1	IZHOD / OUTLET	EN-GJS-400-15	36	1	ZATIČ / PIN n12x45	A2
8,2	1	MS OBROČ / MS RING	CW 614 N (RG5)	37	2	PROŽNOSTNI ZATIČ / PIN n4 x 36	A2
9	1	POKROV IZHODA / CAP	**PEHD / *EPDM	38	12	PODLOŽKA / WASHER BN1217 M12	PA
10	1	MEMBRANA / MEMBRANE	EPDM 70`5ShA	39	2	PODLOŽKA / WASHER A16	A2
11	1	ZAPORNA PLOŠČA / PLATE	W.NO 1.4301	40	3	PODLOŽKA / WASHER A8	A2
12	1	PRIROBNICA / FLANGE	W. No 1.4301	41	2	VIJAK / SCREW M16 x 40	A2 -70
13	1	MATICA VENTILA / BEARING NUT	CW 614 N	42	3	VIJAK / SCREW M8x20	A2 - 70
14	1	LIMITER	CW 614 N	43	8	VIJAK / SCREW M12 x 25	A2 - 70
15	1	MATICA POKROVA / COVER NUT	CW 614 N	44	2	VIJAK / SCREW M12 x 80	A2 - 70
16	1	VRETENO VENTILA / SPINDLE	W. No 1.4021	45	1	PODLOŽKA / WASHER A8	**PA6/*A2
17	1	GRED PODALJŠKA / SHAFT	W. No 1.4021	46	1	VIJAK / SCREW **M8 x 16 /*M8 x 20	A2 -70
18	1	GRED / SHAFT	W. No 1.4021	47	1	SMREČICA DN63	POM
19	1	POM DRSNIK / POM SLIDER	POM W				
20	1	DRSNIK / SLIDER	POM W				


SECTION B-B
SECTION A-A
B
B
A
A
H
DETAIL W
SCALE 1 : 4
DETAIL V
SCALE 1 : 4
DETAIL U
SCALE 1 : 4
PN 16
EN-GJS-400-15
5
W
34
30
47
22
17
V
21
6
3
U
2
1.1
1.2
24
7.3
7.4
7.1
7.5
7.2
28
38
19
41
39
8.2
8.1
10
20
23
25
36
35
44
43
46
45
42
40
12
4
37
26
15
34
28
30
16
14
27
29
18
33
13
32
11
31