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

ABOVE-GROUND HYDRANT TYPE 2018 C (BREAKABLE)
AU (single closing) and AUD (double closing)
INSTRUCTIONS FOR SAFE HANDLING

Title: **ABOVE-GROUND HYDRANT TYPE 2018 C (30.03.2023 - rev. 04)**

Highest working – operating pressure:

- PN 16 = 16 bar

1. INSTALLATION OF THE PRODUCT

- **SELECTION OF HYDRANT**

Correct installation of the hydrant is a condition for its uninterrupted operation.
It is particularly the location of the hydrant and the depth of the pipeline which are important in terms of an optimal selection of the hydrant. The location of the pipeline provides data on possible mechanic damage of the hydrant (break), the depth of the provides data on the mounting depth of the hydrant.

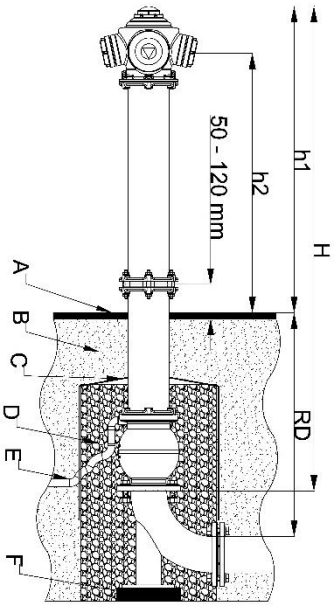
When installing the hydrant, particular attention should be paid to the safety of the worker, therefore, we shall prepare a suitably sized excavation with a levelled area, where the worker can stand. We shall ensure that the valve in front of the hydrant is closed or the pipeline is released from pressure. We fasten a sealing element to a clean connecting flange, set the hydrant and screw together. The position of the hydrant head can be adapted into any direction, regarding to the surroundings. Rotation of the hydrant is enabled by the top rotating flange, located on the head of the hydrant. The procedure is executed by unscrewing all 6 screws pos. 11 mark »A« (two to three rotations) and rotating the hydrant head in the desired direction. After the setting, we equally tighten the screws with T=35–40 Nm.

- **DRAINAGE**

It is also very important to settle the drainage outlet, particularly on heavy clayey areas. Otherwise, the water from the hydrant will not drain which cause the medium to freeze at low temperatures and consequently cause damages on the hydrant. When backfilling the hydrant, particular attention should be paid not to damage it. After the works are completed, we remove the PVC foil.

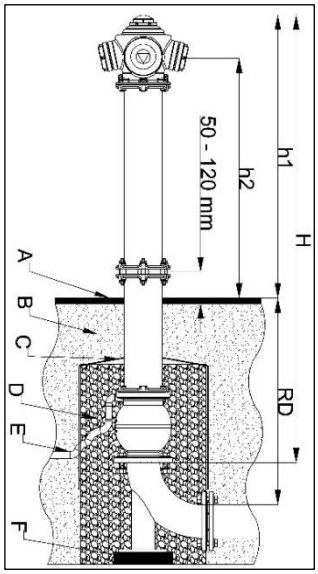
INSTALLATION OF THE HYDRANT INTO THE PIPELINE

DIMENSIONS OF THE ABOVE-GROUND HYDRANT				
DN	**RD (MOUNTING DEPTH)**	**H**	**h1**	**h2**
80	750	1550	995	828
	1000	1800		
	1250	2050		
	1500	2300		
100	750	1550	995	828
	1000	1800		
	1250	2050		
	1500	2300		



A Ground level
B Ensure good consolidation of the ground
C Felt or PE foil is recommended
D Sand of thickness 4–20 mm
E Option: drainage with PE pipe
F Base-plate (recommended from concrete)

- **ALLOWED POSITIONS OF THE INSTALLED PRODUCT**



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

2. MAINTENANCE AND REPAIRS

The above-ground hydrant is of a simple design and does not require special maintenance. In case of leakage or damage of the main sealing element, it is necessary to replace it.

Before any maintenance work on or in the hydrant, close the valve in front of the hydrant! Assure pressure release of the hydrant, for example, unscrew the blind coupling and open the hydrant. All service works on the hydrant can only be performed by a qualified and trained person.

2.1 PROCEDURE OF REPLACEMENT OF THE MAIN SEALING ELEMENT FOR ABOVE-GROUND HYDRANT TYPE 2018 C (BREAKABLE)

(SEE APPENDIX – LIST OF COMPONENTS OF THE HYDRANT TYPE 2018 C)

1. Close the inflow of the water into the hydrant.
2. Open the hydrant to open position and check that it is not under pressure – pressure release of the hydrant.
3. Unscrew the nuts – pos. 43 (»B«) and remove the washers – pos. 42 (»C«).
4. Remove the upper part of the hydrant.
5. Remove the clutch – pos. 39 on the break part.
6. Unscrew the nuts – pos. 40 (»D«) on the flange – pos. 36 (»L«) of the break part.
7. Pull out the whole spindle – pos. 5 with break part – pos. 37 and piston - pos. 4 (»G«).
8. Remove the piston – pos. 4 by removing the screws – pos. 9 (»F«).
9. Replace the piston – pos. 4 (»G«) with a new one and fix it with screws – pos. 9 (»F«). The glue against unscrewing should be used for this process (put the glue on the screws – pos. 9 (»F«) before screwing them).
10. Replace the »O« gasket – pos. 13 (»H«) on the break part – pos. 37 if needed.
11. Grease the external diameter of the rubberized piston.
12. Remove the water from the hydrant valve with use of vacuum pump or scoop. This enables the assembly.
13. Insert the whole spindle – pos. 5 with break part – pos. 37 and piston - pos. 4 (»G«) into the pipe - pos. 3. When the spindle with piston stops, it should be pushed to the end in its position.
14. Check both »O« gaskets – pos. 13 (»I« and »H«) on the break part and replace them in case of damage.
15. Check the safety screws – pos. 41 (»J«) and replace them if needed. This should be done in such way: remove the screws by pushing them upwards and then replace them with new ones.
16. Push the bottom flange – pos. 36 (»L«) upwards and fix it with washers – pos. 42 (»E«) and nuts - pos. 40 (»D«), with torque 35-40 Nm.
17. Set the clutch – pos. 39 onto the break part.
18. Put the upper part of the hydrant onto the break part. Pay attention that the inner spindle – pos. 38 sets properly onto the clutch – pos. 39. The upper outer pipe – pos. 46 should fit completely onto the break part – pos. 37.
19. Set the washers – pos. 42 (»C«) and screw the nuts – pos. 43 (»B«), with torque 25-30 Nm.
20. Check if the hydrant is in closed position.
21. Open the inflow of water to the hydrant and check the functionality of the hydrant by opening and closing.

In case of any complications during the service please contact the service of IMP Armature d.o.o. or replace the whole hydrant.

2.2 APPENDIX – LIST OF COMPONENTS OF THE HYDRANT TYPE 2018 C (BREAKABLE)

Pos.	Pcs	Title
1	1	VALVE
2	1	HEAD
3	1	PIPE
4	1	PISTON
5	1	SPINDLE
6	1	SPINDLE NUT
7	1	LIMITER
8	1	LIMITER
9	2	SCREW M10X25
10	1	FLANGE "B"
11	12	SCREW M10X20
12	12	WASHER BN1217 M10
13	4	GASKET
14	1	FLANGE "R"
15	1	CAP "A"
16	1	COUPLING "A"
17	1	"O" RING Φ118Xϕ3
18	1	GASKET "A"
19	1	OPERATING CAP
20	1	SCREW M8X16
21	1	Al CAP
22	2	LIMITER
23	1	"O" RING Φ26XΦ3
24	1	AIR VALVE
25	1	"O" RING Φ9XΦ2,5
26	1	POM BEARING
27	2	"O" RING Φ18XΦ2,5
28	1	PLUG
29	2	SCREW M10X35
30	1	SEALING RING
31	1	"O" RING Φ80XΦ3,5
32	2	CAP "B"
33	2	COUPLING "B"
34	2	"O" RING Φ144XΦ3
35	2	GASKET "B"
36	2	FLANGE "L"
37	1	BREAK PART
38	1	SPINDLE "Z"
39	1	CLUTCH
40	6	NUT M10
41	6	SAFETY SCREW
42	12	WASHER
43	6	NUT M10
44	1	WASHER
45	2	SCREW M10X16
46	1	PIPE
47	1	"O" RING Φ115XΦ4 (only for AUD)
48	1	"O" RING Φ98XΦ5 (only for AUD)
49	1	"O" RING Φ45XΦ3 (only for AUD)
50	1	FLOAT BODY (only for AUD)
51	1	FLOAT PLUG (only for AUD)