ABOVE-GROUND FIRE HYDRANT type NH2

<Two in one = hydrant + isolating pre-valve>
<Dual reliability = possibility of use (closing from below) even when the regular closing (form above) is malfunctioning>
<high flow rate (Kv = 278 m³/h) = less fire damage>

PROCUREMENT DATA:*1

*Name: Above-ground fire hydrant.
*Made in accordance with the EN14384 standard, type "A".*2 CE
*Nominal sizes DN100, PN16. *Closing wiht the main valve "from above"
*With isolation "pre-valve", closing "from below". *With control valve.
*Possibility of use even when the main valve seal is malfunctioning.
*Activation without additional tools.
*The possibility of blocking unauthorized use.
*Flow (for Di=2x65); Kv=min.270m3//h.
*Activation moment: MOT=max.50Nm.
*Repair of the main valve; the other hydrants remain in operation, without digging up the ground and without dismantling the hydrant body.
*Drainage system "all outside"; repair without dismantling the hydrant.
*Outlets tilted towards the ground by25°.
*Breakage due to force F; without damage pipeline, automatic stop of water discharge. *3
*Breaking moment M= max.7800Nm. *3

*Inlet connection: → Flange EN1092-2 (Du100, PN16) (Du150, PN16) / Particular request, "describe"
*Nominal height Hi: → (1350) (1550) (1850)mm / Particular request, "specify"
*Outlets Di: → (2x65+1x100)mm
*Outlet couplings: → (2xB+1xA) DIN, system "storz" / Specify label and standard
*Drainage system: → (D1) (D2) / Without
*Medium: Water → Technical / Drinking
*Colors of external surface:
- above ground part (without pipe): → red / special request
- underground part: black

***Warranty period: 5 years.**
*Deliver documents:
-"Brochure",
-"Test Report", issued by the "authorized body",
-"Certificate of Conformity", issued by an "authorized body",

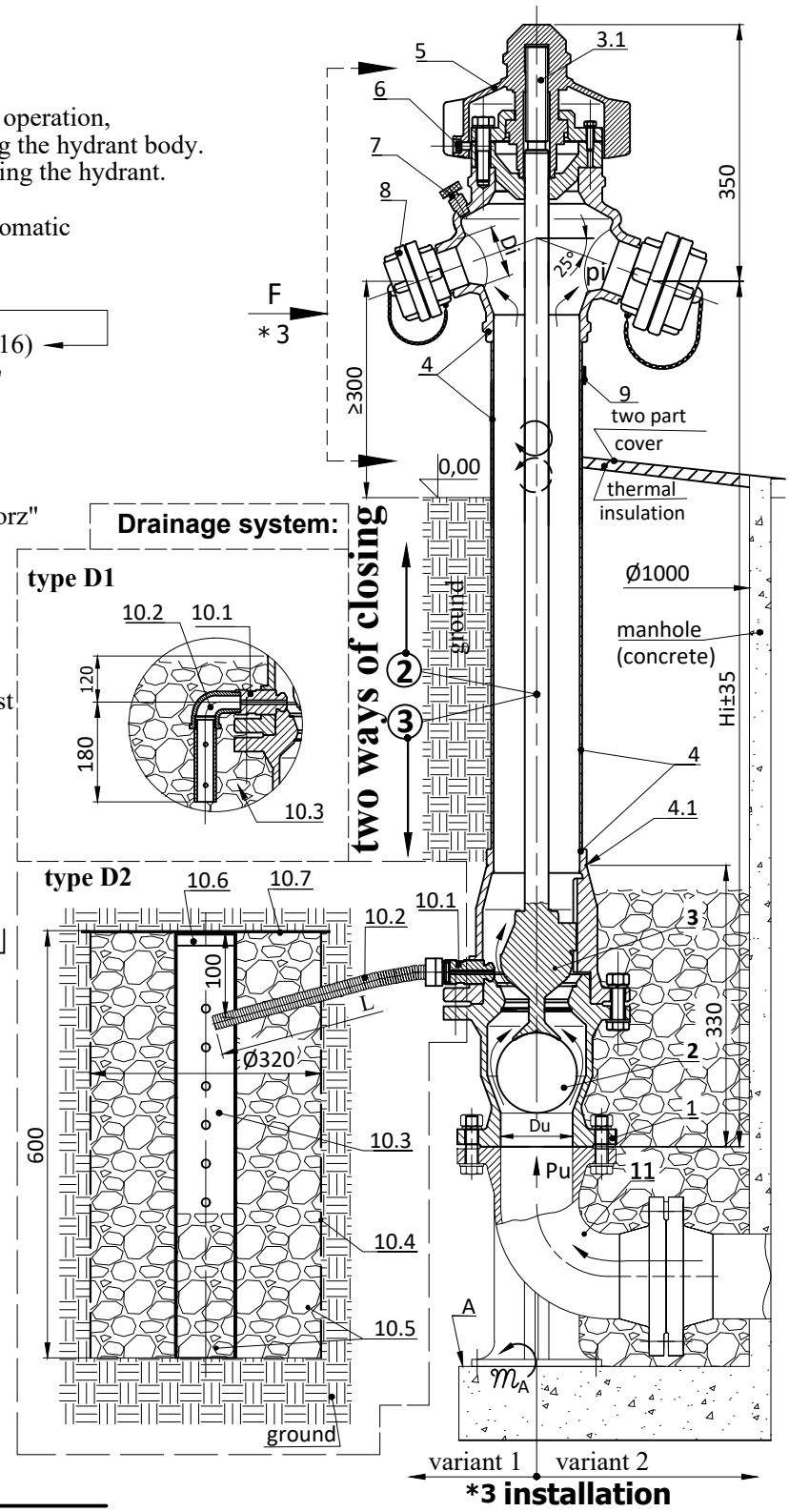
*1 → If necessary, "omit/add"
*2 → The standard determines min. performance = "the least good allowed" hydrant.

Appearance:

1. Inlet flange
2. Isolation **"pre-valve" (closing from below)**.
3. Obturator - **"main valve"(closing from above)**.
3.1 The threaded part of the obturator.
4. Body **4.1 Place of breakage**, Due to the impact of force F. 5. Cap (keyless activation)
6.Blocking of unauthorized use
7. **Control valve** (**safety**; sealing) 8. Outlet couplings
9. Identification plate ("CE", "K_v", ...)
10. **Drainage system:** (not defined by the standard)
type **D1**:
10.1 Drain valve 10.2 Drain pipe
10.3 Stone → (16÷31)mm***4**
type **D2**:
10.1 Drainage valve 10.2 Drain pipe → (L=?) mm
10.3 Distribution pipe 10.4 Wire basket***4**
10.5 Stone → (16÷31) mm***4**
10.6 Cover 10.7 Plastic foil***4**
11. Arch with foot EN545***4**

***4 → Provided by the buyer**

Appearance



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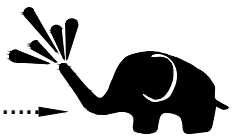
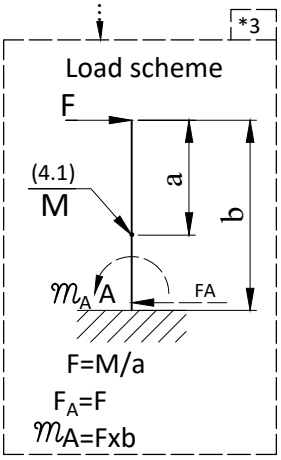
Basic technical characteristics:



***Safe =** compliant with the **requirements of the standard EN 14384 =** CE
***Purpose: Useing water** from underground pipelines **for fire fighting and communal needs**
***See "Procurement Data" P1/2**
***Flow: Kv=278m³/h, for Di = 2x65**
***Moment of activation MOT: max 45Nm, (Class 1)**
***Moment of breakage** (at point 4.1) due to force F..... M=7500 Nm
***Foundation** .....
***Weight** ..... ~ (65÷76) daN for Hi (1350÷1850) mm
***Materials:**
- hydrant body castings ..... nodular cast,
- cap, and output couplings ..... aluminium,
- pipe of body, spindle, and obtutator seat ..... stainless steel,
- sealants ..... polypropylene/elastomers,



Advantages:

*** Two ways of use = dual reliability**
- closing with the **main valve (3)**, from above **(regular work),**
- closing with **a pre-valve (2)**, from below **(extraordinary work),**

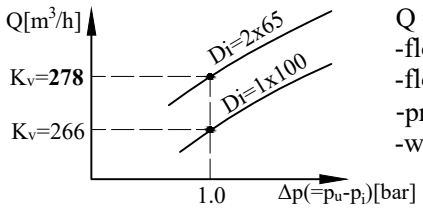
* Isolation **pre-valve (2) inside the hydrant**, automatic, self-blocking, **which enables**:
- **that the other hydrants remain in operation even when the main valve (3) malfunction,**
- **automatic stop of water flow**, in case of breakage (4.1) due to force F,
- **to omit** a separate isolation **valve in front of the hydrant,**
- **lower cost** of construction and maintenance of the **hydrant network**,
- **the use of a hydrant even the main valve (3) is malfunction.**

* Large flow: (Kv=278m³/h, for Di=2x65); less fire damage.
*** Control valve (7) = great safety of the executor, prevention of hydrant freezing.**
*** Prevented damage to the supply pipeline = breakage at point 4.1**, due to force F.
*** Activation without additional tools**, by turning the cap (5).
*** Easy activation: (class 1, MOT < 45 Nm) longer service life**.
*** Possibility of blocking (6) unauthorized use.**
*** High reliability of closing**; impermeability even after 1000 closings.
*** Outlets tilted (25°) down, longer service life** of fire hoses.
*** The main valve seal is conical, self-flushing** = dirt retention prevented = **longer service life.**
*** Very easy hydrant maintenance**:
- **Replacing the main valve seal (3)**; **without digging up the ground and without dismantling the body (4).**
- **The threaded part of the closure (3.1)** is outside the flow of water, **permanently lubricated maintenance-free** throughout it`s working life.
- **Possibility (7) of checking the correctness of the drain and main valve.**
- **Repair of the drainage valve (10.1)**; **from the outside**, partial excavation, **without dismantling the hydrant**.

*** Long warranty period (5 years).**
*** Probably the best, and the most economical hydrant available.**

Documents accompanying the delivery of hydrant:
*Declaration of Performance
*Instruction for safety work (installation, handling, inspection, maintenance, warranty)

Flow of hydrant:



$Q = K_v \times (1000\Delta p / \rho)^{1/2}$
-flow.....Q [m³/h]
-flow coefficient.....K_v [m³/h]
-pressure difference.....Δp [bar]
-water density..... ρ [kg/m³]

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