PILLAR FIRE HYDRANT type NH3

<Two in one = hydrant + isolating pre-valve>

<Double reliability = use even when main valve is defective>

<High flow: K_V = 540 m^3/h>

PROCUREMENT DATA*1

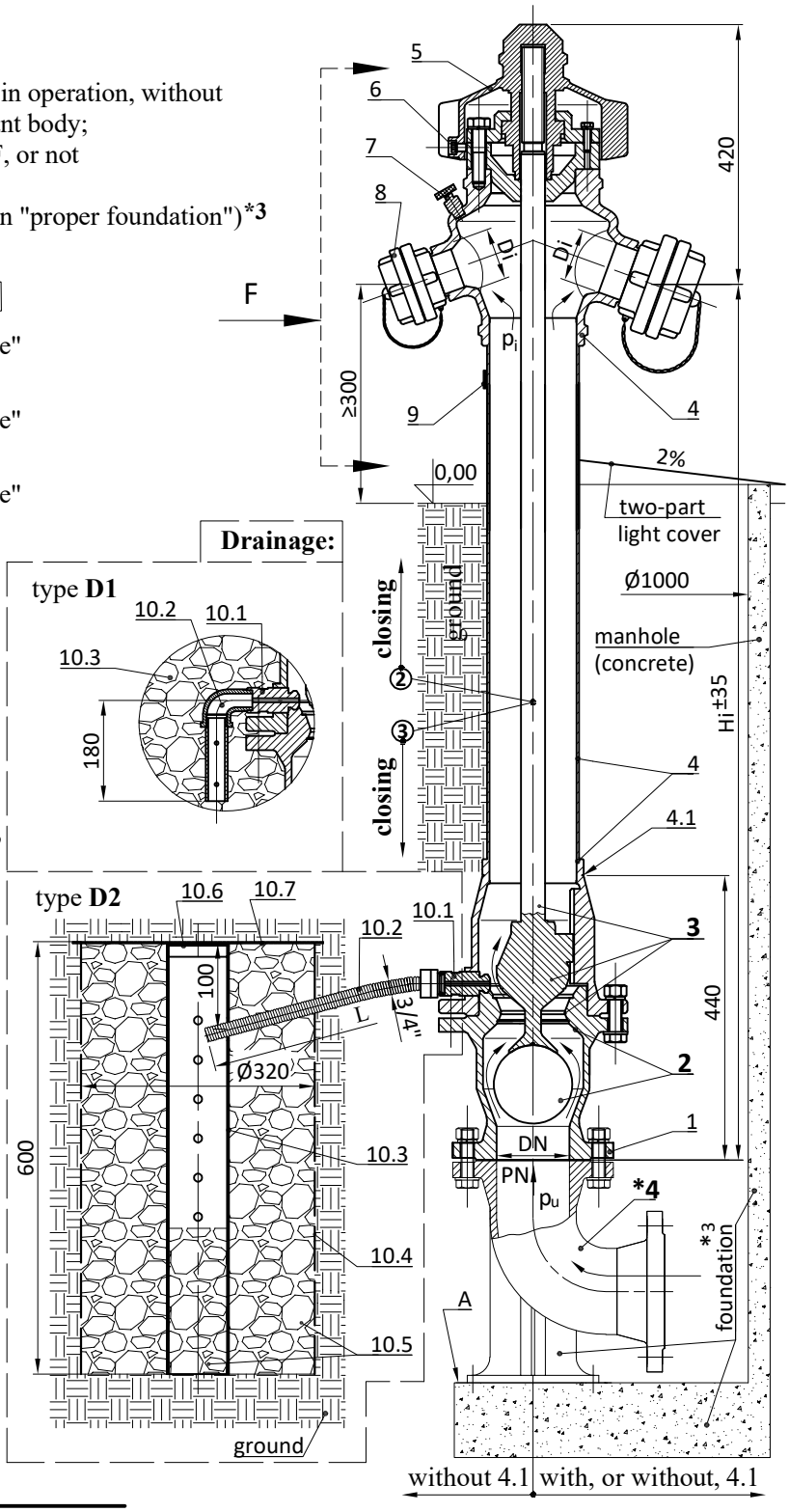
*Name: Overhead fire hydrant
*Made in accordance with the standard EN14384*2 CE
*Nominal sizes: DN100, PN16
*With isolation "pre-valve" *With control valve,
*Possibility of use even when the main valve seal is broken;
*Activation without additional tools,
*With the blocking of unauthorized activation, or not
* Flow Kv [m3/h]:(for Di=2x100) ⟶ min 520
*Activation moment MOT: max. 50Nm (Class 1)
*Repair of the main valve: the other hydrants remain in operation, without digging up the soil and without dismantling the hydrant body;
*With a defined point of breaking (4.1) due to force F, or not
*Break (4.1): without pipeline damage,
automatic stop of water discharge (with the condition "proper foundation")*3
* Moment of breakage: max 14000 Nm

* Input connection: Flange EN1092-2 (DN150, PN16) / Particular request, "describe"
* Nominal height Hi: (1350) (1550) (1850) mm / Particular request, "describe"
* Outlet opening Di: (2x100+1x150) mm / Particular request, "describe"
* Outlet couplings: ⟶ Specify label and standard
* Drainage: With D1 / D2 (particular request) / Without
* Medium: Water (technical) (drinking)

*Submit documents:
-"Prospect";
-"Test Report", issued by"authorized body";
-Valid "Certificate of Conformity",issued by" authorized body";
*1 ⟶ "Omit/Add" as needed
*2 ⟶ **The standard determines min. performance, and recommends the better**

Appearance

Appearance



Drainage:

type **D1**

10.1 Drainage valve 10.2 Drain pipe
10.3 Stone ⟶ (16÷31)mm*4

tip **D2**:

10.1 Drainage valve 10.2 Drainage pipe ⟶ (L=?) mm
10.3 Distribution pipe 10.4 Wire basket
10.5 Stone ⟶ (16÷31) mm
10.6 Cover 10.7 Plastic foil*4

***4 ⟶ Provided by the buyer *4**

Appearance

1. Inlet flange
2. Isolation **"pre-valve"**
3. Obturator - **"main valve"**
4. Body
4.1 Breakage point, due to force F
5. Cap
6. Blocking of unauthorized activation
7. Control valve (safety; sealing)
8. Outlet couplings
9. Identification plate ("CE", "K_v", ...)
10. **Drainage drain:** (not defined by the standard)

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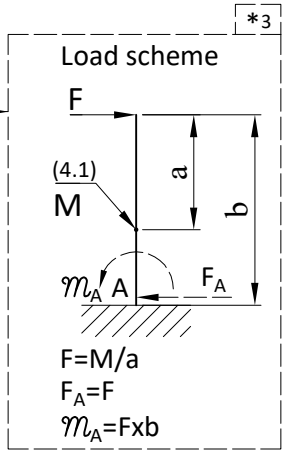
PILLAR FIRE HYDRANT type NH3

<Two in one = hydrant + isolating pre-valve>
<Double reliability = use even when main valve is defective>
<High flow: K_V = 540 m³/h>

Basic technical characteristics:

* **Safe = compliant with** the requirements of the standard **EN 14384** = CE
* **Purpose:** Taking water from underground pipelines **for fire fighting and communal needs**
* **See "Procurement data" L1/2**
* **Flow:Kv=540m³/h,** for Di = 2x100
* **Moment of activation Mot: max 60Nm, (Class 1)**
* **Moment of breakage** (at place 4.1) due to force F ..... M≈12500 Nm
* **foundation** .....
* **weight** ..... ~ (92÷108) daN for Hi (1350÷1850) mm
* **materials**:
  - hydrant body .....nodular cast / stainless steel
  - cap, and outlet couplings.....aluminium
  - spindle and obturator seat .....stainless steel
  - sealants.....polypropylene/elastomers



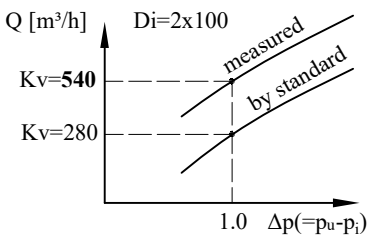
Advantages:

* Isolation **pre-valve** (2) **inside the hydrant**, automatic, self-blocking, **which enables:**
  - **use of the hydrant and in case the main valve** (3) **is broken,**
  - **that the other hydrants remain in operation even when the main valve seal is replaced**
  - **automatic stop of water leakage, 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.**
* **High flow:Kv=540m/h,** for Di = 2x100
* **Replacing the** main valve seal(3)**: without digging up the ground and without disassembling the body,**(4)
* **The threaded part of the obturator is:** outside the flow of water**, permanently lubricated, maintenance-free** throughout its working life**,**
* **Prevented damage to the supply pipeline = breakage at point 4.1,** due to force F,
* **Activation without additional tools, by** turning the cap (5) on top of the hydrant,
* **Possibility of blocking** (6) **unauthorized activation,**
* **The main valve seal is conical, self-flushing =** dirt retention prevented **= longer service life of the seal,**
* **Great strength** of the obturator and the body of the hydrant, MsT > 250 Nm,
* **Easy activation: Class 1, MOT < 60 Nm** (max allowed 195 Nm; Class 3)**,**
* **High reliability of** the drainage system **= two outlet openings, and self-flushing drainage valve**
* **The possibility** (7) **of easy control of the correctness of closing and draining**
* **Obturator tightness even after 1000 activations,**
* **Amount of residual water** in the hydrant body**,** < 135 cm³ (max. allowed 200 cm³),
* **Fast draining, ≤7 min** (permitted max. 10 min/m),
* **Easy replacement of seat,** main valve (3) and pre-valve (2)
* **Drain valve repair** (10.1); from the outside, partial excavation, and **without dismantling the hydrant body.**(4)

Documents with the delivery of hydrant:

* Declaration of Performance,
* Instruction for safety work (installation, handling, inspection, maintenance, guarantee)

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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