PILLAR FIRE HYDRANT type NH1

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

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

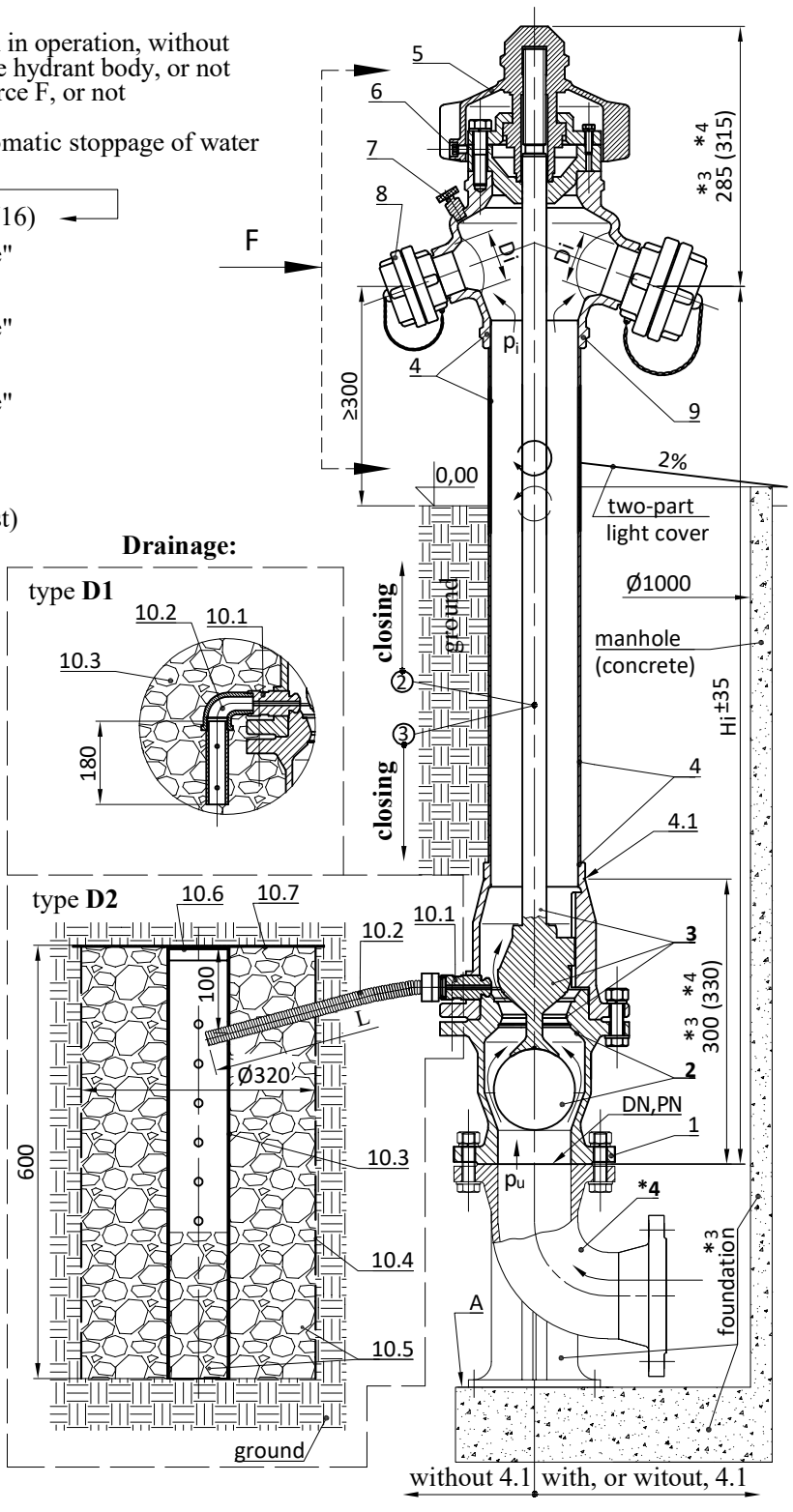
<great flow = 136 m³/h>

PROCUREMENT DATA*1

* Name: Above-ground fire hydrant
* Made in accordance with the standard EN14384*2 CE
* Nominal sizes: DN80, 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=2x50) → min 130
* Activation moment Mot: max. 40 Nm (Class 1)
* Repair of the main valve: the other hydrants remain in operation, without digging up the ground, and without dismantling the hydrant body, or not
* With a defined point of breaking (4.1) due to the force F, or not
* Break (4.1): without damage to the pipeline (with the condition "proper foundation"),*3with automatic stoppage of water
* Moment of breakage: max 6500 Nm
* Input connection: Flange EN1092-2 (DN80, PN16) (DN100, PN16) / Particular request, "describe"
* Nominal height Hi: (1300) (1500) (1800) mm / Particular request, "describe"
* Outlet openings Di: (2x50+1x65) mm / Particular request, "describe"
* Outlet couplings: → Specify label and standard
* Drainage: With → D1 / D2 (particular request); Without
* Medium: Water (technical) (drinking)
* Deliver documents:
- "Prospect";
- "Test Report",
issued by an "authorized body";
- Valid "Certificate of Conformity",issued by an "authorized body";

*1 → If necessary, "omit/add"
*2 → **The standard determines the min. performance, and recommends the better**

Appearance



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

type **D1:**
10.1 Drain valve 10.2 Drain pipe
10.3 Stone*4 → (16÷31) mm

type **D2:**
10.1 Drainage valve
10.2 Drain pipe → (L=?) mm
10.3 Distribution pipe
10.4 Wire basket
10.5 Stone*4 → (16÷31) mm
10.6 Cover
10.7 Plastic foil*4

*4 → **Provided by the buyer**

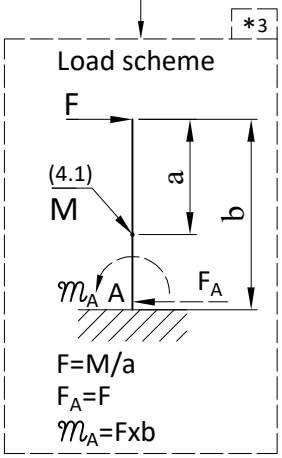
TECOOP - ENG D.O.O
INDUSTRIJSKI INŽENJERING

Srbija - 26000 PANČEVO, Savska 12 - 14.
Tel. +381 13 346226 Tel./Fax +381 13 346042
www.tecoop.co.rs / tecoopeng@mts.rs

PILLAR FIRE HYDRANT type NH1
<two in one = hydrant + isolating pre-valve>
<double reliability = use even when main valve is defective>
<high flow: K_V= 136 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=136 m³/h**, for Di=2x50
* **moment of activation Mot: max. 30 Nm (Class 1)**
* **moment of breakage** (at point 4.1) due to force F ..... M=6300 Nm
* **foundation** .....
* **weight** ..... ~ (51÷65) daN for Hi (1300÷1800) mm
* **materials**:
  - hydrant body .....nodular cast / stainless steel
  - spindle and obturator seat,.....stainless steel
  - cap, and output couplings.....aluminium
  - sealants.....polypropylene/elastomers

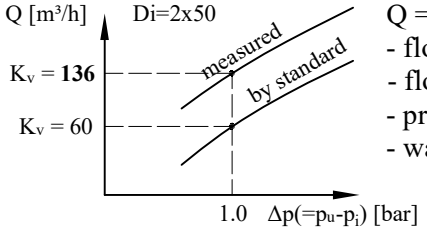


Advantages:

* 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 = 136 m³/h,** for Di = 2 x 50
* **Replacing the** main valve seal**: without digging up the ground and without disassembling the body,**
* **The threaded part of the obturator is:** out of the water flow**, 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,**
* **Easy activation: Class 1, MOT < 30 Nm (**max allowed 125 Nm; Class 3**),**
* **Quick activation:** 1 turn until water appears, 8 turns until maximum flow (max. 15 turns allowed),
* **High closing reliability:** sealing of the closure even after 1000 closures
* **High reliability of the** drainage system **= two outlet openings, and self-flushing drainage valve**
* **Great strength of the** obturator and the body of the hydrant, MsT > 250 Nm,
* **The possibility of easy control** (7) **of the correctness of the hydrant,**
* **Amount of residual water** in the hydrant body, < 80 cm³ (max. allowed 150 cm³),
* **Fast draining, ≤5 min** (permitted max. 10 min/m),
* **Easy replacement of** main valve seat (3) and pre-valve seat (2)**,**
* **Drainage valve** (10.1) **repair; from the** outside, partial excavation, **and without dismantling the hydrant body.**(4)

Documents with 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]

TECOOP - ENG D.O.O
INDUSTRIJSKI INŽENJERING

Srbija - 26000 PANČEVO, Savska 12 - 14.
Tel. +381 13 346226 Tel./Fax +381 13 346042
www.tecoop.co.rs / tecoopeng@mts.rs