PILLAR FIRE HYDRANT WITH FRACTURE SYSTEM type LNH2

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

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

PROCUREMENT DATA*1 **<high flow: Kv=265 m³/h>**

* Name: Break system pillar fire hydrant
* Made in accordance with the standard EN14384*2 CE
* Nominal sizes: DN100, PN16
* With isolating pre-valve *With control valve
* Use even when the main valve seal is broken
* With the blocking of unauthorized activation, or not
* Flow Kv [m³/h]: (for Di=2x65) → min 260
* MOT activation moment: max. 65 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
* Break (4.1): without damage to the underground part of the hydrant, and without water leakage (with the condition "proper foundation"),*3

* Breaking force F: max 1500 daN
* Input connection: → Flange EN1092-2 (DN100, PN16) (DN150, PN16); → Particular request, "describe"
* Nominal height Hi: → (1350) (1550) (1850) mm; → Particular request, "describe"
* Outlet opening Di: → (2x65+1x100) mm; → Particular request, "describe"
* Output couplings: → Specify label and standard
* Drainage: → With → D1, D2 (particular request); → Without
* Medium: Water (technical) (drinking)
* Submit documents:
- "Prospect"; in Serbian,
- "Test Report", issued by"authorized body"; in Serbian, or a certified translation
- Valid "Certificate of Compliance", issued by "authorized body"; in Serbian, or a certified translation

*1 → "Omit/Add" as needed

*2 → **The standard determines the min. performance, and recommends the better**

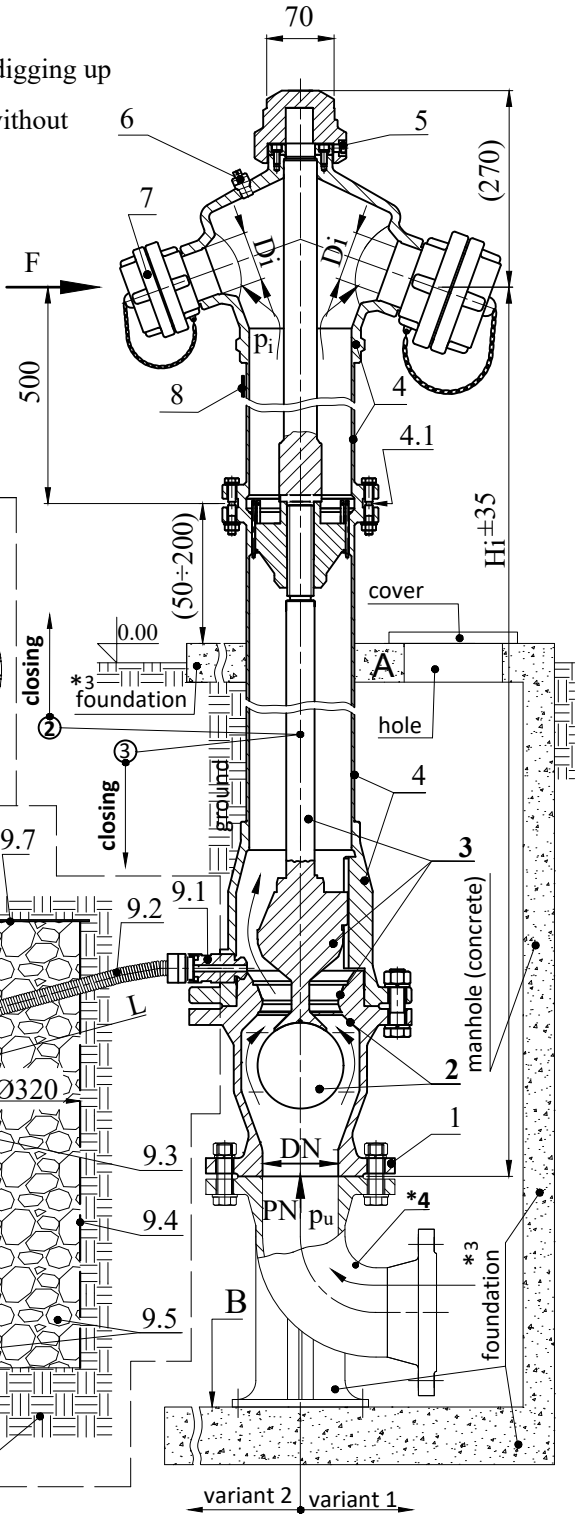
Appearance:
1. Inlet flange
2. Isolation **"pre-valve"**
3. Obtutator - **"main valve"**
4. Body
4.1 Place of breakage due to force F
5. Blocking of unauthorized activation
6. Control valve (safety; sealing)
7. Output couplings
8. Identification plate ("CE","K_v",...)
9. **Drainage drain:** (not defined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

type **D1:**
9.1 Drainage valve
9.2 Drain pipe
9.3 Stone*4 → (16÷31) mm

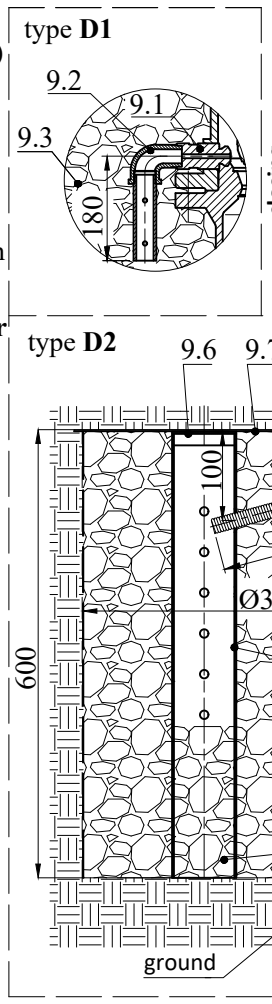
type **D2:**
9.1 Drain valve
9.2 Drain pipe → (L=?) mm
9.3 Distribution pipe
9.4 Wire basket
9.5 Stone*4 → (16÷31) mm
9.6 Cover
9.7 Plastic foil*4

*4 → **Provided by the buyer**

Appearance



Drainage:



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

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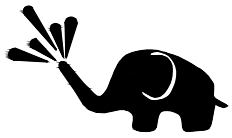
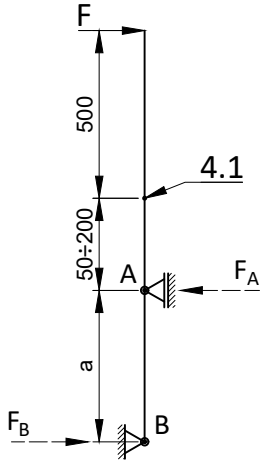


Basic technical characteristics:

* **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= 265m³/h**, for Di=2x65
* **momenat of activation Mot: max. 55Nm, (Class 1)**
* **fracture force** ..... F=1350 daN
* **foundation** .....
* **weight** ..... ~ (57÷94) daN for Hi (1350÷1850) mm
* **materials**:
  - hydrant body .....nodular cast / stainless steel
  - obturator seat .....brass
  - outlet couplings.....aluminium
  - spindle, and obturator seat.....stainless steel
  - sealants.....polypropylene/elastomers

*3

Load scheme
(obligation under the standard)



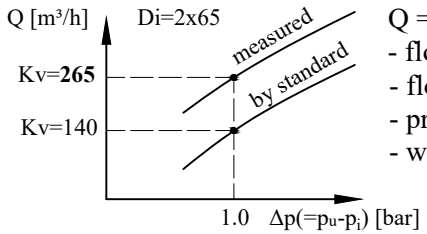
Advantages:

* 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**
  - **to omit a** separate isolation valve **in front of the hydrant,**
  - **lower cost of** construction and maintenance **of the hydrant network.**
* **High flow; Kv = 265 m³/h,** for Di= 2x65
* **In case of breakage due to force F: the hydrant remains closed, and the part of the hydrant below the breakage point remains undamaged,**
* **Replacing the** main valve seal**: without digging up the ground and without disassembling the body,**
* **The 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 < 55 Nm** (max. allowed 130 Nm; Class 3),
* **Quick activation:** 1 turn until water appears, 10 turns until maximum flow (max. 15 turns allowed),
* **High reliability of** the drainage system **= two outlet openings, and self-flushing drainage valve**
* **The possibility of easy control** (7) **of the correctness of closing and draining.**
* **Great closing reliability; impermeability of the shutter even after 1000 activations,**
* **The amount of residual water in the hydrant body**, < 80 cm³ (max.allowed 150 cm³),
* **Quick drainage, ≤7 min** (max. allowed 10 min/m),
* **Easy replacement of** main valve seat (3) and pilot valve seat (2),
* **Drainage valve** (9.1) **repair; from the** outside, partial excavation**, and without dismantling the hydrant body.**(4)

Documents with the delivery of hydrant:

* Declaration of Performance, or Certificate of Constancy 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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