PILLAR FIRE HYDRANT WITH FRACTURE SYSTEM type LNH1

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

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

PROCUREMENT DATA:*1 **<great flow (Kv= 150 m^3/h)=minor fire damage>**

* Name: Pillar fire hydrant with fracture system
* Made in accordance with the SRPS EN14384 standard.*2 CE
* Nominal sizes: DN80, PN16.
*With isolation "pre-valve". *With control valve.
* Activation without or with an additional tool.
* The possibility of blocking unauthorized use.
* Flow (for Di=2x50): Kv=min 145m3//h.
* Activation moment MOT= max. 60 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.
* The drainage drain is already closed at 20% of the opening stroke.
* Fracture; without damage to the pipeline, automatic stoppage of water flow (with the condition "proper foundation").
* Breaking moment M= max 1200 daN.*3

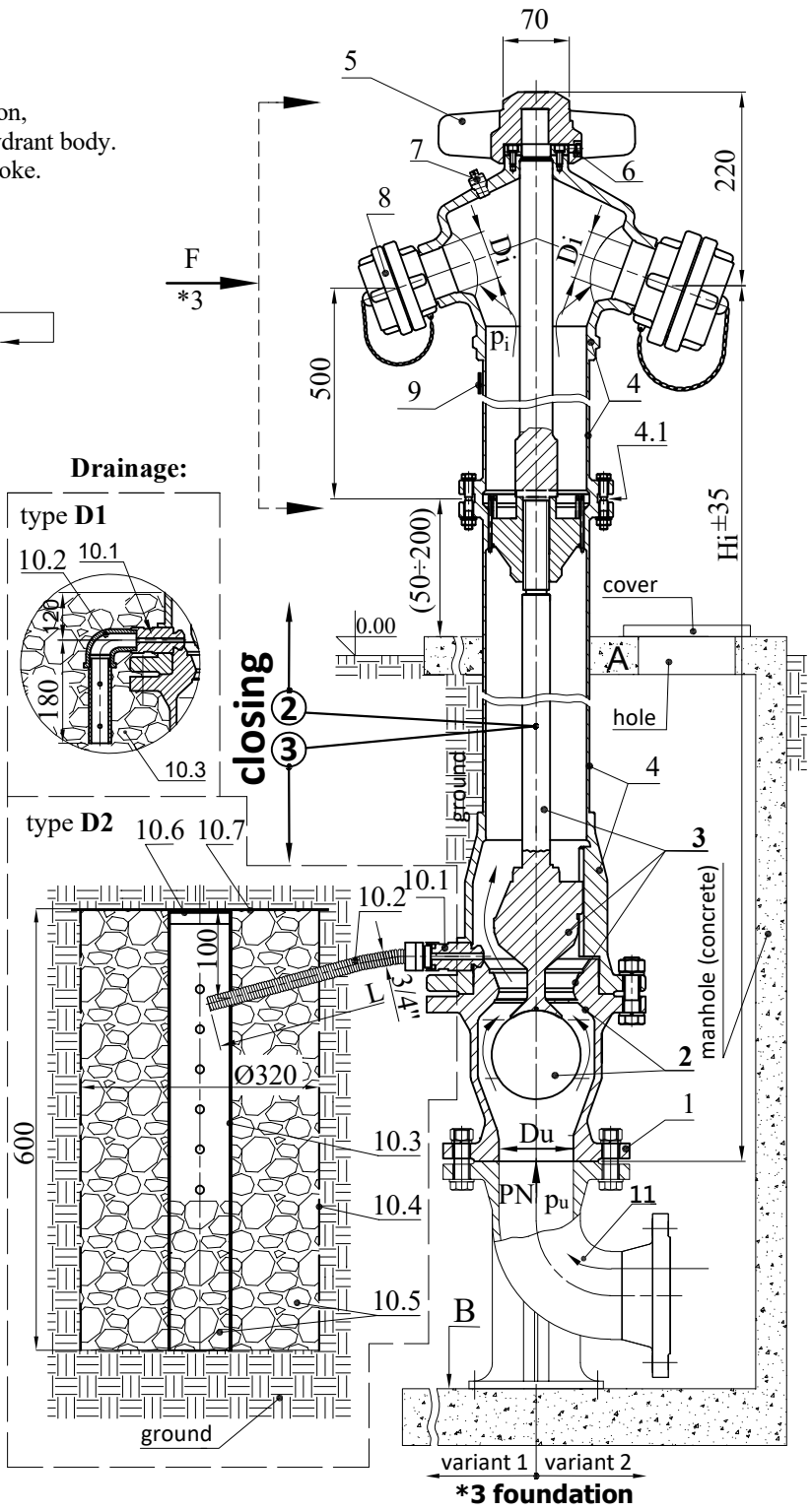
* Input connection: Flange EN1092-2 (Du80, PN16) (Du100, PN16) / Particular request, "describe"
* Nominal height Hi: (1300) (1500) (1800) mm / Particular request, "describe"
* Outlet opening Di: (2x50+1x65) mm / Particular request, "describe"
* Output couplings: Specify label and standard
* Drainage: With D1 / Without D2 (particular request)
* Medium:Water (technical) (drinking)
*Colors of external surfaces:
- overhead part (not pipe): red / special request
- underground part: black

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:
1. Inlet flange 2. Isolation "**pre-valve**"
3. Shutter - "**main valve**"
4. Body **4.1 Place of breakage,** Due to the impact of force F
5. Cap 6. Blocking of unauthorized use
7. Control valve (safety; tightness)
8. Output couplings
9. Ident plate ("CE", "Kv",...)
10. **Drainage drain**: (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 Drain valve
10.2 Drain pipe (L=?) mm
10.3 Distribution pipe 10.4 Wire basket
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 customer**

Appearance



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 WITH FRACTURE SYSTEM type LNH1

<Two in one = hydrant + isolating pre-valve>
<Double reliability = use even when main valve is defective>
<great flow (Kv= 150 m³/h)=minor fire damage>

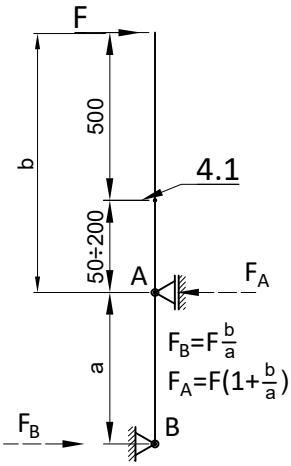
Basic technical characteristics:

* **Safe = complies with** the requirements of the **EN 14384 standard** = CE
* Purpose: Taking water from underground pipelines for fire fighting and communal needs
* → **See "Purchase data" L1/2**
* **Flow**: **Kv=150m3//h, for Di=2x50**

* **activation moment Mot:max 50 Nm (Class 1)**
* **breaking force** ..... F=1100 daN
* **In case of breakage: the hydrant remains closed, and part of the hydrant is below the fracture site remains undamaged**
* **foundation** .....
* **weight** ..... ~ (53÷67) daN for Hi (1300÷1800) mm
* **materials**:
  -hydrant body castings..... nodular cast
  -cap, and output couplings..... aluminium
  -sealants.....polypropylene/elastomers
  -pipe of body, spindle, and obtutator seat..... stainless steel

*3

Load scheme
(obligation under the standard)



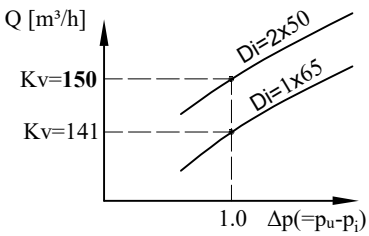
Advantages:

* 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,**
  - **to omit** a separate isolation **valve in front of the hydrant,**
  - **lower cost** of procurement and maintenance of the **hydrant network,**
  - **the use of a hydrant even when the main valve (3) is defective,**
* **Large flow: (Kv=150 m3//h**; for Di=2x50); **minor fire damage.**
* **The possibility of using** a hydrant (drainage drain closed) **at a flow rate of (20÷100)%.**
* **Activation without additional tools**, by turning the cap (5).
* **Possibility of blocking (6) unauthorized use.**
* **Possibility to control (7) the correctness of the** drainage and main valve**, greater operator safety.**
* **Easy activation: (class 1, MOT < 50 Nm) longer service life**.
* Great closing reliability; impermeability even after 1000 closures.
* **High reliability** of the drainage system = two outlet openings, **self-flushing drainage valve.**
* **High strength** of the closure and hydrant body, MsT > 250 Nm.
* **Very easy hydrant maintenance:**
  - **Replacing the main valve seal (3)**; **without digging up the ground and without disassembling the body(4).**
  - **Possibility (7) of checking the correctness of the drain and main valve.**
  - **Repair of the drainage valve** (9.1); from the outside, partial excavation, and **without dismantling the hydrant.**
  - **Easy replacement of seat**, main valve (3) and pre-valve (2).
  - **The main valve seal is conical**, **self-flushing** = dirt retention prevented = **longer service life.**

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]

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