UNDERGROUND FIRE HYDRANT type PH1

<Two in one = hydrant + isolating pre-valve>
<Double reliability = use even when main valve is defective>
<great flow (Kv= 110 m³/h)=minor fire damage>

PROCUREMENT DATA:*1

* Name: Underground fire hydrant
* Made in accordance with the EN14339 standard.*2 CE
* Nominal sizes:(DN80; DN100), PN16.
* With isolation „pre-valve".
* Possibility of use even when the main valve seal is defective.
* Flow Kv [m³/h]: min 105.
* Momentum of activation MOT: <40 Nm.
* Repair of the main valve: the other hydrants remain in operation. without digging up the ground, and without dismantling the hydrant body.
*Drainage drain closed already at 20% opening stroke.

* Input connection: Flange EN1092-2 (Du80, PN16) (Du100, PN16) / Particular request, "describe"
* Nominal height Hi: (700) (850) (1000) mm / Particular request, "describe"
* Outlet opening Di: 65 mm / Particular request, "describe"
* Output coupling: Specify label and standard
* Drainage: With (D1 / D2 (particular request)) / Without
* Medium: Water (technical) (drinking)
*Colors of external surfaces:
  - overhead part (not pipe): red / special request
  - underground part: black
* Submit documents:
  - "Prospect"; in Serbian, or certified translation
  - "Test Report", issued by an "authorized body"; in Serbian, or a certified translation
  - Valid "Certificate of Conformity", issued by an "authorized body"; in Serbian, or a certified translation

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

Appearance:

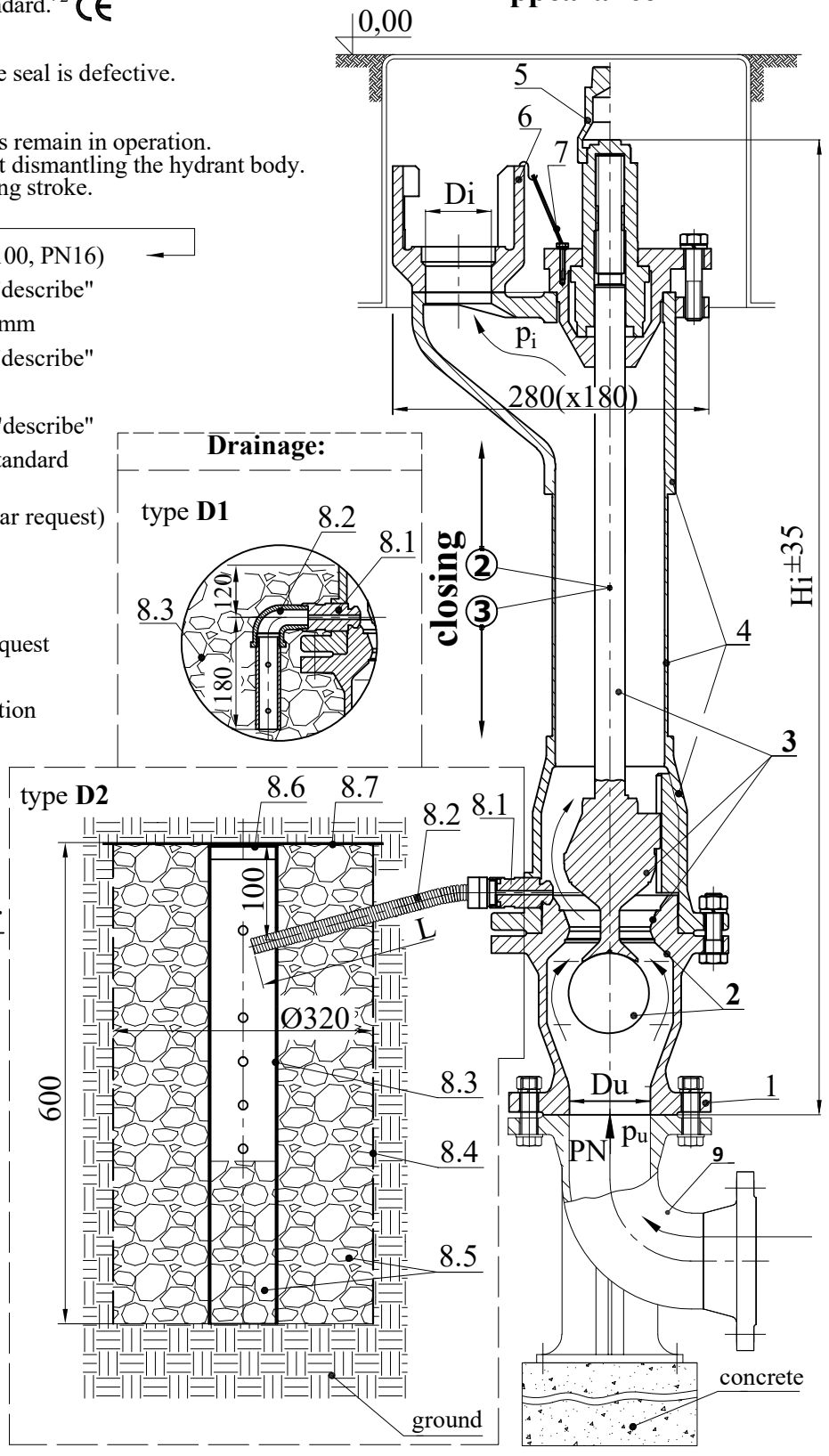
1. Inlet flange
2. Isolation **"pre-valve"**
3. Obtutator - **"main valve"**
4. Body
5. Adapter
6. Outlet coupling
7. Identification plate ("CE","K_v",...)
8. **Drainage drain:**

type **D1:**
8.1 Drainage valve
8.2 Drainage pipe
8.3 Stone → (16÷31) mm*3

type **D2:**
8.1 Drainage valve
8.2 Drainage tube → (L=?) mm
8.3 Distribution pipe
8.4 Wire basket
8.5 Stones → (16÷31) mm*3
8.6 Cover
8.7 Plastic foil*3
9. Arch with foot EN545*3

*3 → **Provided by the buyer**

Appearance



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<Two in one = hydrant + isolating **pre-valve>**
<Double reliability = use even when main valve is defective>
<great flow (Kv= 110 m³/h)=minor fire damage>

Basic technical characteristics:
*** Safe = compliant with the requirements of the EN 14339 standard = CE**
*** Purpose: Taking water from underground pipelines for fire fighting and communal needs**
*** See "Order information" P1/2**
*** Flow: Kv= 110 m³/h**

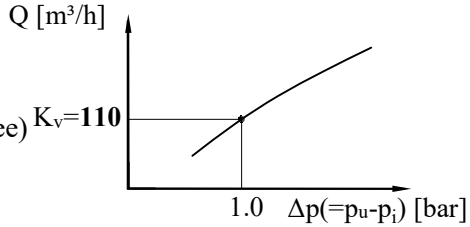
*** Moment of activation Mot: max. 30 Nm (Class 1)**
*** Weight**..... ~ (42÷48) daN for Hi (700÷1000) mm
*** Materials**:
-hydrant body castings..... nodular cast
-sealants.....polypropylene/elastomers
-pipe of body, spindle, and obtutator seat..... stainless steel

Advantages:
* Isolation **pre valve** (2) **inside the hydrant**, automatic, self-blocking, **which allows**:
- **to omit** a separate isolation **valve in front of the hydrant,**
- **the use of a hydrant even when the main valve (3) is defective**,
- **that the other hydrants remain in operation even when the main valve (3) malfunction,**
- **lower cost** of procurement and maintenance of the **hydrant network,**

*** Large flow: (Kv= 110 m3/h), minor fire damage.**
*** The possibility of using** a hydrant (drainage drain closed) **at a flow rate of (20÷100)%.**
*** Easy activation: (class 1, MOT < 30 Nm) longer service life**.
*** Ability (5) to prevent unauthorized use.**
*** High reliability** of the drainage system = two outlet openings, **self-flushing drainage valve.**
*** Great closing reliability, impermeability even after 1000 closings.**
*** 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)**.
- **The threaded part of the closure is** outside the flow of water, **permanently lubricated, maintenance-free** throughout its working life.
- **Repair of the drainage valve** (8.1); only partial excavation, **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]

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