

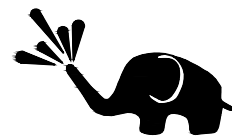


# UNDERGROUND FIRE HYDRANT type PH1

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

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

<high flow:  $K_v = 104 \text{ m}^3/\text{h}$ >



## PROCUREMENT DATA\*1

- \* Name: Above-ground fire hydrant
- \* Made in accordance with the EN14339 standard
- \* Nominal sizes: (DN80; DN100), PN16 \*2
- \* With isolation „pre-valve“
- \* Possibility of use even when the main valve seal is defective
- \* Flow  $K_v$  [ $\text{m}^3/\text{h}$ ]: min 100
- \* 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

- \* Input connection:
  - Flange EN1092-2 (DN80, PN16) (DN100, PN16)
  - Particular request, "describe"

- \* Nominal height  $H_i$ :
  - (700) (850) (1000) mm
  - Particular request, "describe"

- \* Outlet opening  $D_i$ :
  - 65 mm
  - Particular request, "describe"

- \* Output coupling: Specify label and standard

- \* Drainage:
  - With
    - D1
    - D2 (particular request)
  - Without

- \* Medium: Water (technical) (drinking)
- \* 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. Obturator - "main valve"
4. Body
5. Adapter
6. Outlet coupling
7. Identification plate ("CE", " $K_v$ ", ...)

## 8. Drainage drain:

### type D1:

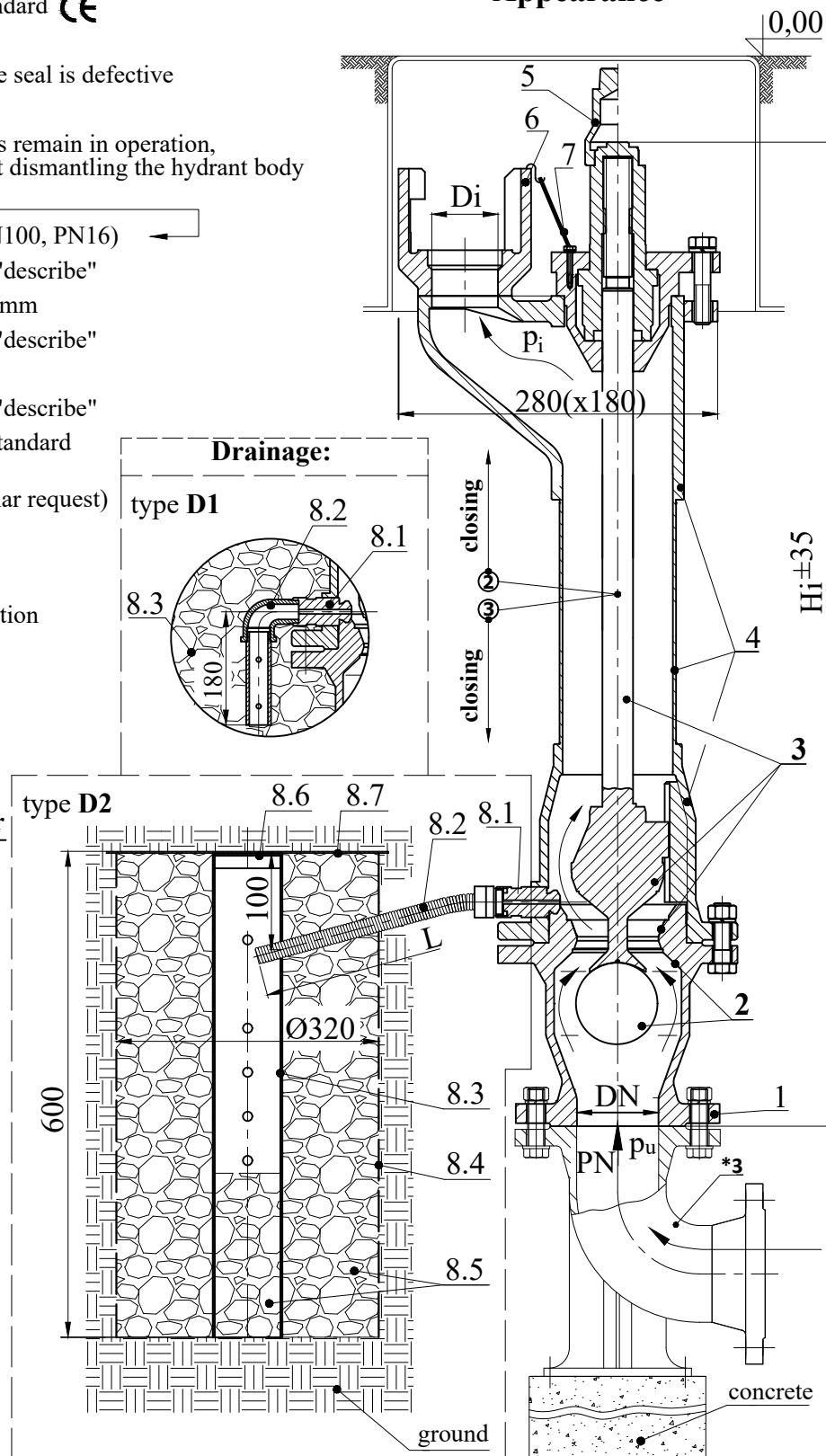
- 8.1 Drainage valve
- 8.2 Drainage pipe
- 8.3 Stone\*3  $\rightarrow$  (16÷31) mm

### type D2:

- 8.1 Drainage valve
- 8.2 Drainage tube  $\rightarrow$  (L=? ) mm
- 8.3 Distribution pipe
- 8.4 Wire basket
- 8.5 Stones\*3  $\rightarrow$  (16÷31) mm
- 8.6 Cover
- 8.7 Plastic foil\*3

\*3 Provided by the buyer

## Appearance



# UNDERGROUND FIRE HYDRANT type PH1


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

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

<high flow:  $K_v = 104 \text{ m}^3/\text{h}$ >



## Basic technical characteristics:

- \* Safe = compliant with the requirements of the standard = **CE**
- \* Purpose: Taking water from underground pipelines for fire fighting and communal needs
- \*  See "Order information" P1/2
- \* Flow:  $K_v = 104 \text{ m}^3/\text{h}$
- \* Moment of activation Mot: max. 30 Nm (Class 1)
- \* Weight..... ~ (42÷48) daN for Hi (700÷1000) mm
- \* Materials:
  - hydrant body .....nodular cast / stainless steel
  - spindle and obturator seat.....stainless steel
  - sealant.....polypropylene/elastomers

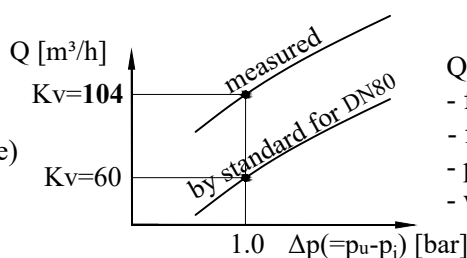
## Advantages:

- \* Isolation pre valve (2) inside the hydrant, automatic, self-blocking, which enables:
  - to omit a separate isolation valve in front of the hydrant,
  - use of the hydrant and in case the main valve is defective,
  - that the other hydrants remain in operation even when the main valve seal is replaced
  - lower cost of procurement and maintenance of the hydrant network.
- \* High flow:  $K_v = 104 \text{ m}^3/\text{h}$
- \* 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,
- \* 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,  $M_sT > 250 \text{ Nm}$ ,
- \* Easy activation: Class 1, MOT < 30 Nm (max allowed 125 Nm; Class 3),
- \* Ability to prevent (5) unauthorized activation,
- \* Quick activation: 1 turn until water appears, 8 turns until maximum flow (max. 15 turns allowed),
- \* High reliability of the drainage system = two outlet openings, and self-flushing drainage valve,
- \* Obturator tightness even after 1000 activations,
- \* The amount of residual water in the hydrant body, < 80 cm<sup>3</sup> (max. allowed 100 cm<sup>3</sup>),
- \* Quick drainage, ≤ 5 min (max. allowed 10 min/m),
- \* Easy replacement of seat, main valve (3) and pre-valve (2)
- \* Drainage valve (8.1) repair; only partial excavation, and without dismantling the hydrant body.(4)

## Flow of hydrant:

### Documents with the delivery of hydrant:

- \* Declaration of Performance, or Certificate of Constancy of Performance
- \* Instruction for safety work (installation, handling, inspection, maintenance, guarantee)



$$Q = K_v \times (1000 \Delta p / \rho)^{1/2}$$

- flow.....  $Q = [\text{m}^3/\text{h}]$
- flow coefficient.....  $K_v = [\text{m}^3/\text{h}]$
- pressure difference.....  $\Delta p = [\text{bar}]$
- water density.....  $\rho = [\text{kg}/\text{m}^3]$