

**PILLAR FIRE HYDRANT type NH2**

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

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

<high flow: $K_v = 265 \text{ m}^3/\text{h}$ >**PROCUREMENT DATA*1**

*Name: Above-ground fire hydrant

*Made in accordance with the standard EN14384*2CE

*Nominal sizes: DN100, 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 K_v [m^3/h]:(for $D_i=2 \times 65$) \longrightarrow min 260

*Activation moment MOT: max. 50Nm (Class 1)

*Repair of the main valve: the other hydrants remain in operation, without digging up the soil and without dismantling the hydrant body;

*With a defined point of breaking (4.1) due to force F, or not

*Break (4.1): without pipeline damage,

automatic stop of water discharge (with the condition "proper foundation")*3

*Moment of breakage: max 7800 Nm

*Input connection:
 Flange EN1092-2 (DN100, PN16) (DN150, PN16)
 Particular request, "describe"*Nominal height H_i :
 (1350) (1550) (1850) mm
 Particular request, "describe"*Outlet opening D_i :
 (2x65+1x100) mm

Particular request, "describe"

*Outlet couplings: Specify label and standard

*Drainage:
 With \longrightarrow D1
 Without \longrightarrow D2(particular request)*Medium: Water
 \longrightarrow Technical
 \longrightarrow Drinking

*Submit documents:

-"Prospect",

-"Test report", issued by the "authorized body",

-Valid "Certificate of Conformity", issued by an "authorized body",

*1 \longrightarrow "Omit/Add" as needed*2 \longrightarrow The standard determines min. performance, and recommends the better**Appearance**

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. Outlet couplings

9. Identification plate ("CE", " K_v ",)10. **Drainage drain:** (not defined by the standard)

type D1:

10.1 Drain valve 10.2 Drain pipe

10.3 Stone \longrightarrow (16÷31)mm*4

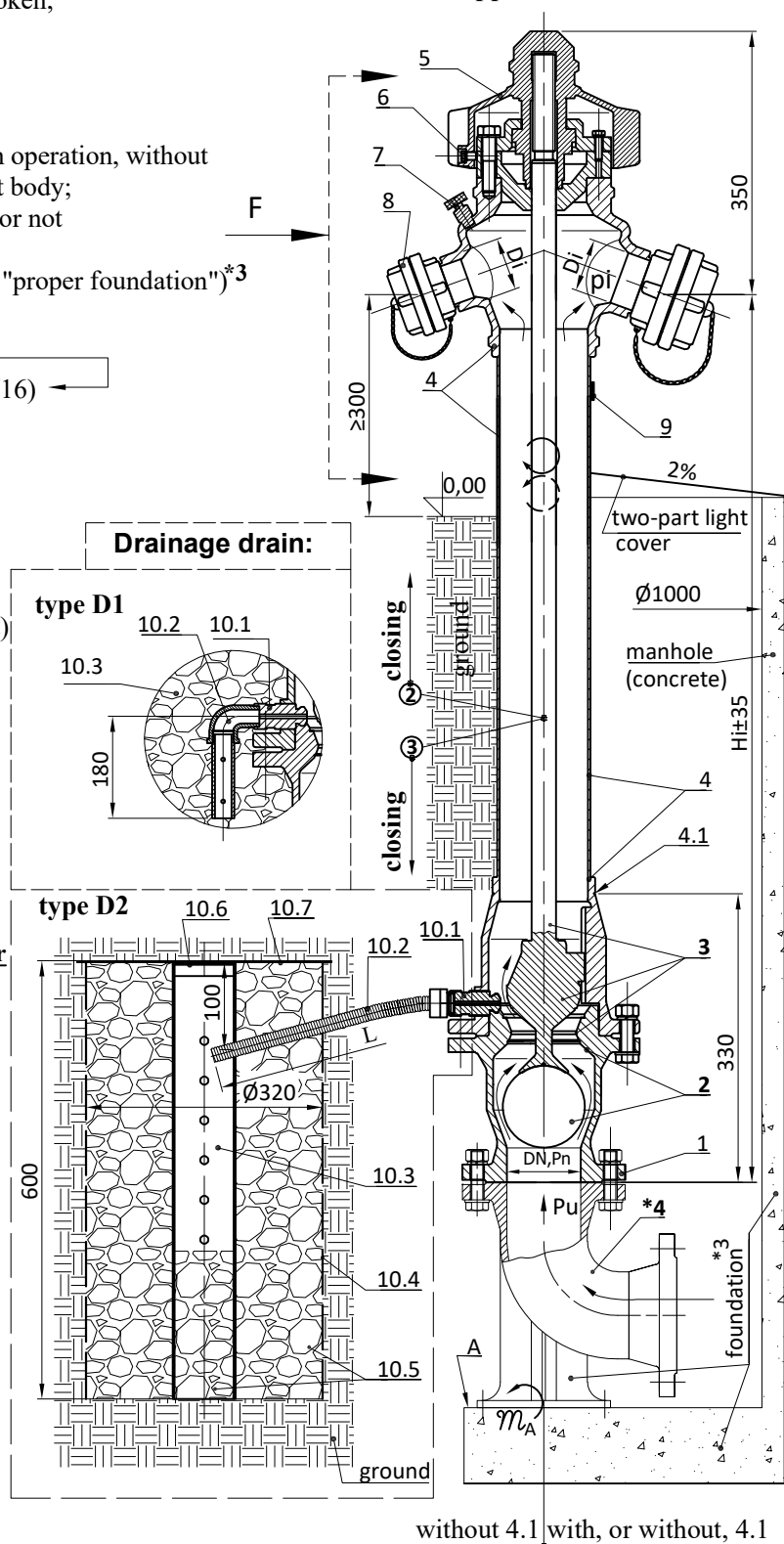
type D2:

10.1 Drainage valve 10.2 Drain pipe \longrightarrow (L=?) mm

10.3 Distribution pipe 10.4 Wire basket

10.5 Stone \longrightarrow (16÷31) mm*4

10.6 Cover 10.7 Plastic foil*4

*4 \longrightarrow Provided by the buyer**Appearance**

without 4.1 with, or without, 4.1



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

<high flow: $K_v = 265 \text{ m}^3/\text{h}$ >**Basic technical characteristics:***Safe = complies 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: $K_v = 265 \text{ m}^3/\text{h}$, for $D_i = 2 \times 65$

*moment of activation Mot: max 45Nm, (Class 1)

*moment of breakage (at point 4.1) due to force F.... $M = 7500 \text{ Nm}$ *foundation ~ (65 ÷ 76) daN for H_i (1350 ÷ 1850) mm

*materials:

-hydrant body..... nodular cast /stainless steel

-cap, and output couplings..... aluminium

-sealants..... polypropylene/elastomers

-spindle, and obturator seat..... stainless steel

**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: $K_v = 265 \text{ m}^3/\text{h}$, for $D_i = 2 \times 65$

*Replacing the main valve seal (3): without digging up the ground and without disassembling the body, (4)

*The threaded part of the obturator is: outside the flow of water, permanently lubricated, maintenance-free during its entire 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 < 45 Nm (max allowed 130 Nm, class 3),

*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

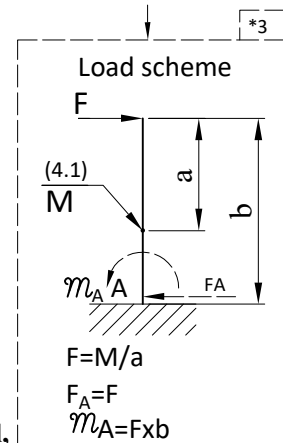
*Great strength of the obturator and the body of the hydrant, $M_s T > 250 \text{ Nm}$

*The possibility (7) of easy control of the correctness of closing and draining the hydrant,

*The amount of residual water in the hydrant body, < 80 cm^3 (max. allowed 150 cm^3),*Fast drainage $\leq 5 \text{ min}$ (max. allowed 10 min/m),

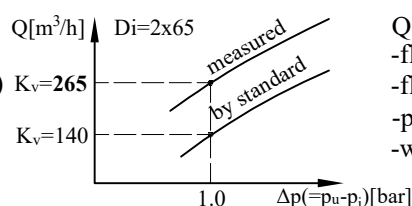
*Easy replacement of the seat, main valve (3) and pre-valve (2)

*Repair of the drainage valve (10.1), outside, partial excavation, and without dismantling the hydrant body.(4)

**Documents with the 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..... $Q [\text{m}^3/\text{h}]$ -flow ratio..... $K_v [\text{m}^3/\text{h}]$ -pressure difference..... $\Delta p [\text{bar}]$ -water density..... $\rho [\text{kg}/\text{m}^3]$ 