

## Hidravlični izračun ribje steze novi ALPLESOV JEZ

preliv:

b=	0.4 m	l=	1.5 m	$\rho$ =	1000 kg/m <sup>3</sup>
$h_{p,\min}$ =	0.25 m	$h_b$ =	0.8 m		
$\mu$ =	0.52 -	B=	1.5 m		
$h_{p,\max}$ =	0.3 m	$\Delta h$ =	0.28 m		

---

bazen:

pretočnost prelivov:

$$Q_p = \frac{2}{3} \cdot \mu \cdot b \cdot \sqrt{2 \cdot g} \cdot h_p^{\frac{3}{2}}$$

$$Q_{p,\min} = \mathbf{0.0768} \text{ m}^3/\text{s} \quad \text{minimalni pretok}$$
$$76.78 \text{ l/s}$$

$$Q_{p,\max} = \mathbf{0.1009} \text{ m}^3/\text{s} \quad \text{maximalni pretok}$$
$$100.93 \text{ l/s}$$

hitrosti na prelivu:

$$v_p = \frac{Q_p}{A_p} = \frac{Q_p}{b \cdot h_p}$$

$$v_{p,\min} = \mathbf{0.77} \text{ m/s}$$

$$v_{p,\max} = \mathbf{0.84} \text{ m/s}$$

Gostota disipacije energije:

$$E = \frac{\rho \cdot g \cdot Q_{p,\max} \cdot \Delta h}{B \cdot h_b \cdot l}$$

$$E = \mathbf{117.16} \text{ W/m}^3$$

$$E = \mathbf{154.01} \text{ W/m}^3$$