

## Hidravlični izračun ribje steze novi Dermotov jez

preliv:		bazen:		$\rho =$	1000 kg/m <sup>3</sup>
b=	0.4 m	l=	2 m		
$h_{p,\min} =$	0.25 m	$h_b =$	0.7 m		
$\mu =$	0.52 -	B=	2 m		
$h_{p,\max} =$	0.35 m	$\Delta h =$	0.3 m		

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### pretočnost prelivov:

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

$Q_{p,\min} =$  **0.0768** m<sup>3</sup>/s      minimalni pretok  
76.78 l/s

$Q_{p,\max} =$  **0.1272** m<sup>3</sup>/s      maksimalni pretok  
127.18 l/s

### hitrosti na prelivu:

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

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

$v_{p,\max} =$  **0.91** m/s

### Gostota disipacije energije:

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

$E =$  **80.70** W/m<sup>3</sup>      min