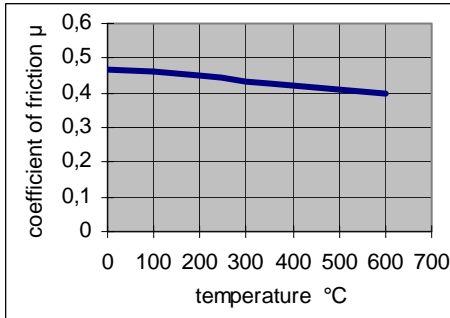


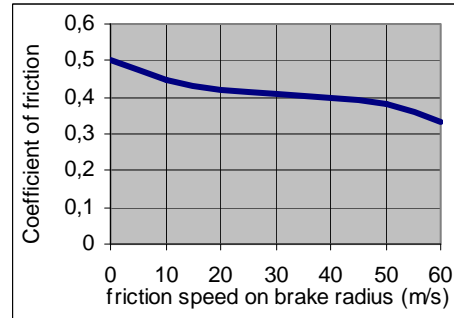
# Datasheet

## BM 40

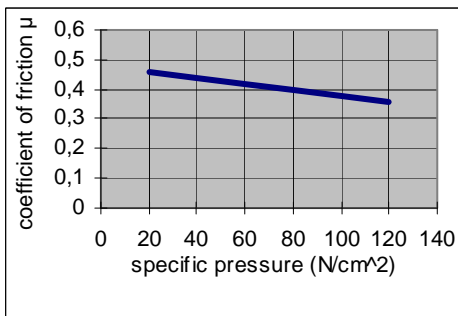
**Description: disc brake pad material for very high speed applications**



V = 15 m/sec       $p_{\text{spec}} = 80 \text{ N/cm}^2$



$p_{\text{spec}} = 80 \text{ N/cm}^2$        $\vartheta = 50 \text{ }^\circ\text{C}$



V = 15 m/sec       $\vartheta = 50 \text{ }^\circ\text{C}$

**Material description:** sintered friction material on copper base without asbestos, lead

**Range of application:** for speeds up to 350 km/h

**Disc material:** steel alloy

### Physical properties

Mean coefficient of friction (for calculation) <sup>1</sup>	$\mu_m = 0,40$	
Specific pressure <sup>2</sup>	$p \leq 120$	N/cm <sup>2</sup>
Friction rubbing speed at the brake radius <sup>2</sup>	$V \leq 55$	m/s
Temperature sustained <sup>2</sup>	$\vartheta = 500$	°C
Temperature momentarily	$\vartheta = 900$	°C
Density	$\rho = 5,12$	g/cm <sup>3</sup>
Compressive strength acc to EN 20604	$\sigma_{dB} = 42$	N/cm <sup>2</sup>
Modulus of elasticity acc to UIC	$E = 930$	N/mm <sup>2</sup>
Hardness	HHR = 60	N/mm <sup>2</sup>
Thermal conductivity (standard value)	$\lambda = 24$	W/(mK)
Specific heat capacity (standard value)	$c_p = 0,5$	kJ/kg K

<sup>1</sup>) Coefficient of friction tolerances acc. to UIC-leaflet 541-3 VE

<sup>2</sup>) Coincidence of the max. values may create other results

This information is recommended as a first guideline and do represent the material performance under standard conditions and results from standard dynamometer tests. As materials behave different under various conditions performance may vary. For final selection additional tests according application might be necessary. Our application engineer will support you in choosing the right quality. Our advise does not release you from the obligation to check its validity and to test our products as to their suitability from the intended application and uses.