

## DMH 641 PTFE E-CARBON virgin PTFE + carbon fillers + additives

### Mechanical, Physical and Thermal Properties

properties	condition	standard	unit	unit	unit
colour				black	black
density/specific gravity	23 °C	DIN 53479	kg/m <sup>3</sup>	2140	g/cm <sup>3</sup> 2,14
hardness	23 °C/3 sec.	ISO 868	Shore D	60 ±3	Shore D 60 ±3
hardness	23°C/15 sec.	ISO 868	Shore D	57 ±3	Shore D 57 ±3
ball indentation hardness	23 °C	DIN 53456 H135/30	MPa	30 ±5	psi 4350 ±725
tensile strength	23 °C	ASTM D 4745-11a	MPa	≥ 24	psi ≥ 3480
elongation at break	23 °C	ASTM D 4745-11a	%	≥ 250	% ≥ 250
compressive strength	23 °C	DIN 53455	MPa		psi
thermal conductivity		DIN 52612	$\frac{J * 10^3}{m * h * K}$	≥ 3,5	$\frac{J * 10^3}{m * h * K}$ ≥ 3,5
coefficient of thermal expansion	25 °C - 200 °C		K <sup>-1</sup> * 10 <sup>-5</sup>	≥ 10,9	K <sup>-1</sup> * 10 <sup>-5</sup> ≥ 10,9
coefficient of friction *	23 °C		μ	≥ 0,18	μ ≥ 0,18
minimum service temperature			°C	-200	°F -328
maximum service temperature			°C	260	°F 500
young's modulus	23 °C	DIN 53457	MPa		psi

\* coefficient of friction dry dynamic Steel 16MnCr5 v=0,6m/s; p=0,05 MPa; t=5h

### Chemical Properties

Filled PTFE

Resistant to almost all chemicals

Not resistant to halogenides, elemental fluorine, CF<sub>3</sub>, molten alkali metals

Detailed information concerning chemical resistance see DMH Chemical Resistance Guide

DMH GmbH

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