

## DMH 410 PA Polyamide Mechanical, Physical and Thermal Properties

properties	condition	standard	unit	unit	unit
colour				nature	nature
density/specific gravity	23 °C	DIN 53479	kg/m <sup>3</sup>	<b>1130</b>	g/cm <sup>3</sup> <b>1,13</b>
hardness	23 °C	ISO 868	Shore D	<b>85 ±3</b>	Shore D <b>85 ±3</b>
ball indentation hardness	23 °C	DIN 53456 H135/30	MPa	<b>153</b>	psi <b>22200</b>
tensile strength	23 °C	ASTM D 4745-79	MPa	<b>80</b>	psi <b>11600</b>
elongation at break	23 °C	ASTM D 4745-79	%	<b>40</b>	% <b>40</b>
compressive strength	23 °C	DIN 53455	MPa	<b>110</b>	psi <b>16000</b>
thermal conductivity		DIN 52612	$\frac{J * 10^3}{m * h * K}$	<b>0,29</b>	$\frac{J * 10^3}{m * h * K}$ <b>0,29</b>
coefficient of thermal expansion	25 °C - 200 °C		$K^{-1} * 10^{-5}$	<b>8</b>	$K^{-1} * 10^{-5}$ <b>8</b>
coefficient of friction *	23 °C		μ	<b>0,4</b>	μ <b>0,4</b>
minimum service temperature			°C	<b>-40</b>	°F <b>-40</b>
maximum service temperature			°C	<b>110</b>	°F <b>230</b>
young's modulus	23 °C	DIN 53457	MPa	<b>3000</b>	psi <b>435000</b>

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

### Chemical Properties

Homopolymere, based on caprolactam

Resistant to lubricants, fuels, solvents, natural oil and greases, water, ester and ketones

Not resistant to strong acids and lyes

Foodstuff approval -

Detailed information concerning chemical resistance see DMH Chemical Resistance Guide

DMH GmbH

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#### DMH Dichtungs- und Maschinenhandel GmbH

A-8772 Traboch  Industriepark West 11

T: +43 (0)3833/200 60-0  F: +43 (0)3833/200 60-500

E: office@dmh.at  www.dmh.at

