#### Description

M9020 is a heavy duty composite woven from yarns containing brass wire.

It is suitable for light to heavy duty service, applications include:

- Winches
- Cranes
- Hoists

and other heavy duty industrial purposes.

This dense, tough material exhibits exceptional resistence to heat and compression under high loads. M9020 has excellent fade and recovery stability. It is capable of running in oil immersed applications, however the coefficient of friction will decrease.

M9020 is approved by Germanischer Lloyd for use in G/L classed marine winches (Cert.no: 21 138 04HH).

### Short material description

Woven x

Moulded

Oil-Resistant x

Metallic x
Asbestos free x

Material availability

Sheet x Roll x Lining x

Disc

Width up to 380mm Thickness 3,2 to 25,4mm Length 10 meters

All the information on this data sheet are obtained by scientific and laboratory testings. But it is suggested that this material be thorougly tested and is suitability for use be determined before final acceptance.



# Physical / Mechanical and Friction properties

Density	1,6 g/cm <sup>3</sup>
Ultimate shear strength	42 N/mm²
Tensile strength	33 N/mm <sup>2</sup>
Rivet holding capacity	110 N/mm <sup>2</sup>
Coefficient of Friction - normal	0,53
Coefficient of Friction - hot	0,53
Coefficient of Friction - @ 200°C	0,56

# Recommended operating range

Pressure	3,5 N/mm <sup>2</sup>
Maximum rubbing speed	21 m/s
Maximum intermittent temp.	280 °C
Maximum continuous temp.	250 °C

#### **Temperature Sensitivity**

