

WARP KNITTING

# 4D-KNIT THERMAL RESISTANCE



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**Hohenstein Laboratories tested the thermal resistance value  $R_{ct}$  ( $m^2K/W$ ) with the method “Thermoregulation model of the human skin” (Skin Model) DIN EN ISO 11092:2014-12**

To measure the thermal resistance of a textile, the  $R_{ct}$  value is measured, which determines the insulation value of a fabric.

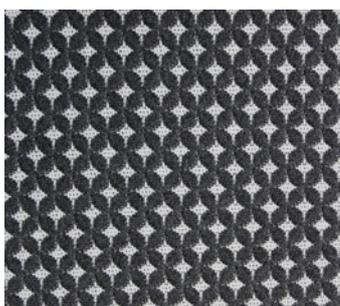
Different activities require different levels of warming and insulating fabrics. The overall insulation effect also depends on the combination of the different textile layers.

On the KARL MAYER 4d-knit machine you can use a filler yarn with different yarn counts and qualities. We have tested three different 4d-knit fabrics with a PES textured yarn.

By a clever fabric construction and selection of yarns, e.g. hollow fibres, you can affect the thermal resistance value.

The test results give you an initial idea.

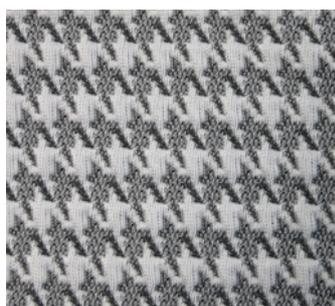
Article	thickness in mm	weight $g/m^2$	gauge	$R_{ct}$ value
2021/122	1,5–1,6	250	E28	0,0394
2021/124 with integrated holes	1,5–1,8	225	E28	0,0594
2019/176	2,0–2,1	280	E24	0,0571



Artikel 2021/122



Artikel 2021/124



Artikel 2019/176



### For more information

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