

FREUDENBERG GAS DIFFUSION LAYERS

TECHNICAL DATA

PROPERTIES	UNIT	H14	H23	H23I2	H14C7	H14C9	H14C10	H15C11	H15CX483 (H15C12)	H23C2	H23C7	H23C9	H23C10	H23C3	H24C5
HYDROPHOBIC TREATMENT				•	•	•	•	•	•		•	•	•	•	
MICROPOROUS LAYER					•	•	•	•	•	•	•	•	•	•	•
Thickness @ 0.025MPa (Internal*)	µm	150	210	222	175	180	170	198	185	255	250	250	240	290	270
Thickness @ 1MPa (Internal*)	µm	115	170	187	145	150	141	165	145	215	210	210	205	230	215
Area Weight (DIN EN ISO 29073-1)	g/m ²	65	95	114	100	100	97	100	87	135	135	135	135	150	130
Compression Set @ 1MPa (Internal*)	µm	1.5	2	6	8	7	3	8	10	8	9	8	3	25	15
TP Electrical Resistance @ 1 MPa (Internal*)	mΩ·cm ²	4	4.5	6	6	7	5	9	7	10	7	8	7	9	9
IP Electrical Resistance (Internal*)	Ω	1.1	0.8	-	1.0	1.0	1.1	1.1	1.1	0.8	0.7	0.7	0.8	0.6	0.7
TP Air Permeability** (DIN EN ISO 9237)	l / m ² ·s	570	400	179	-	-	-	-	-	-	-	-	-	-	-
TP Air Permeability acc. to Gurley (ISO 5636-5)	s	-	-	-	50	30	70	30	1	70	50	30	70	35	40
IP Air Permeability @ 1 MPa (Internal*)	µm ²	4.0	4.2	2.2	1.0	1.5	1.4	3.2	3.0	2.5	1.9	2.0	1.6	1.5	2.5
Tensile Strength (DIN EN ISO 29073-3)	N/50mm	20	25	35	70	70	70	70	70	80	70	70	70	70	70

* Freudenberg internal measurement standard

** @ 200 Pa pressure drop

TP = through-plane

IP = in-plane

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All values represent averages, which are subject to usual production tolerances. The values do not represent specifications.

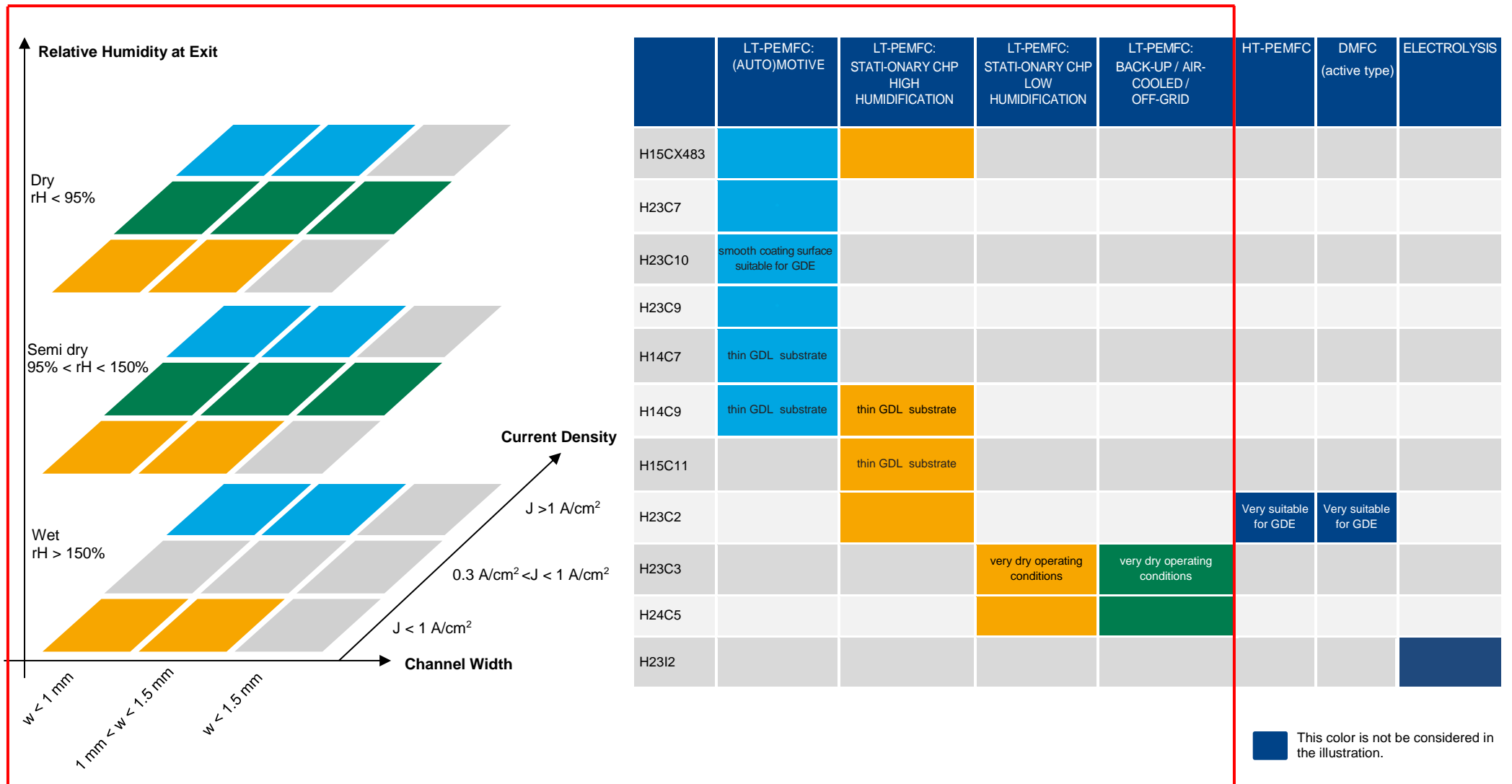
Any warranty and liability is subject to Freudenberg Performance Materials SE & Co. KG's General Terms of Delivery and Payment applicable at the date of delivery.

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GDL RECOMMENDATION FOR LT-PEMFC APPLICATIONS



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