isovac®

FULLY PROCESSED

isovac high-perm 330-65 A

The specialist with the highest permeability

Manufactured in the most modern production lines, this fully processed isovac® grade exhibits highly homogeneous properties across the width and length of the entire strip. The result is excellent and consistent processability in the manufacture of highly efficient electrical components.
The optimum adjustment of texture increases magnetizability and reduces core losses of isovac HP 330-65 A. This increase in efficiency makes it possible to maintain the same level of performance while reducing component size and saving material, weight and costs. This also means that a higher level of performance can be achieved with the same component size.
Upon request, isovac HP 330-65 A can be supplied with an electrical steel insulation system and can be used directly in as-delivered condition.

Convincing advantages:

- Increased performance achieved by increasing torque based on higher magnetizability (improvement by up to 0.05 T at J25, J50, J100)
- Possible cost optimization through less material usage, less weight and less space requirement resulting from downsizing while maintaining the same level of performance
- Best processability through consistent mechanical properties and high dimensional accuracy (thickness tolerance)
- Innovative electrical steel insulation systems upon request

greentec steel

Premium quality
with reduced carbon footprint

isovac®
greentec steel

voestalpine supplies isovac HP 330-65 A, an electrical steel of the highest quality. We offer you a customer-focused overall package of products, service and logistics in addition to all the advantages of our integrated metallurgical facility and Steel Service Centers.

Grade named pursuant to conventional international standards:

Grade named according to isovac®	DIN EN 10106		IEC 60404-8-4	JIS C2552	GOST 21427.2	ASTM A677	AISI	IS648	GB/T2521.1
	Material No.	Abbreviation							
isovac HP 330-65 A	1.0819	M330-65A	M330-65A 5	65A330	-	64F200	-	65C330	-

Mechanical properties:

Tensile test pursuant to DIN EN ISO 6892-1 and hardness pursuant to DIN EN ISO 6507-1 (Typical values);
Test direction: Transverse

Grade named according to isovac®	Yield strength R_{eH} [MPa]	0.2 %-Yield strength $R_{p0.2}$ [MPa]	Tensile strength R_m [MPa]	Elongation A_{80} [%]	Hardness HV5 [-]
isovac HP 330-65 A	- [1]	345	475	28.5	180

[1] No distinct yield strength

Magnetic properties:

in as-delivered condition (Typical values)
Magnetic measurement pursuant to DIN EN 60404-2 (Epstein test)
Test direction: Mixed longitudinal and transverse

Grade named according to isovac®	Specific total loss				Magnetic polarization			Relative permeability
	1.0 T P10		1.5 T P15		2500 A/m J25	5000 A/m J50	10000 A/m J100	1.5 T μ_r
	50 Hz [W/kg]	60 Hz [W/lb]	50 Hz [W/kg]	60 Hz [W/lb]	[T]	[T]	[T]	[-]
isovac HP 330-65 A	1.35	0.80	3.10	1.83	1.59	1.68	1.79	1130

Physical properties:

Typical values
Density in accordance with DIN EN 10106

Grade named according to isovac®	Density ρ [g/cm³]	Specific electrical resistance ρ_s [µΩcm]	Thermal conductivity λ [W/mK]
isovac HP 330-65 A	7.60	52.0	25

Datasheets and simulation data are available at
www.voestalpine.com/isovac/en/product-overview/data-sheets

Available Dimensions

Grade named according to isovac®	Delivery form	Width [mm]	Length [mm]
isovac HP 330-65 A	Wide strip / Slit strip	19 – 1590	-
	Cut-to-length sheets	300 – 1590	300 – 5000

Deliverable coating systems

Grade named according to isovac®	Uncoated	C-3	Backlack	C-5	C-6
isovac HP 330-65 A	✓	✓	○	✓	✓

✓ Available ○ On request

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Premium quality with reduced carbon footprint

isovac®

greentec steel

Fully processed electrical steel – greentec steel Edition
Max. carbon footprint 2.45 kg CO_2e per kg of steel [1]

[1] per EN 15804+A2 (EPD methodology) cradle to gate

All products, dimensions and steel grades listed in each voestalpine supply range are available as greentec steel Edition.

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Please find further information and downloadable files at the following link:
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