

AXIAL NONIUS MAGNET RINGS

DATA SHEET



ITEM	PARAMETER	HUT128A32	HUT128A64	HUT150A32	HUT150A64	HUT200A32	HUT200A64
DIMENSION TABLE							
ØD1	Ring inner diameter (mm)	15,00 ^{+0,03} / _{-0,02}	38,00 ^{+0,03} / _{-0,02}	18,00 ^{+0,03} / _{-0,02}	47,40 ^{+0,03} / _{-0,02}	25,00 ^{+0,05} / _{-0,00}	62,00 ^{+0,03} / _{-0,02}
ØD2	Magnetic track inner diameter (mm)	16,00 ^{+0,1} / _{-0,1}	41,00 ^{+0,1} / _{-0,1}	20,50 ^{+0,1} / _{-0,1}	49,90 ^{+0,1} / _{-0,1}	29,10 ^{+0,1} / _{-0,1}	70,00 ^{+0,1} / _{-0,1}
ØD3	Ring outer diameter (mm)	29,00 ^{+0,2} / _{-0,2}	56,00 ^{+0,2} / _{-0,2}	34,50 ^{+0,2} / _{-0,2}	65,10 ^{+0,2} / _{-0,2}	44,50 ^{+0,2} / _{-0,2}	85,00 ^{+0,2} / _{-0,2}
E1	Stainless Steel Insert thickness (mm)	0,60	0,60	0,60	0,60	0,60	1
E2	Total thickness (mm)	1,10 ^{+0,1} / _{-0,1}	1,10 ^{+0,1} / _{-0,1}	1,10 ^{+0,1} / _{-0,1}	1,10 ^{+0,1} / _{-0,1}	1,40 ^{+0,1} / _{-0,1}	1,80 ^{+0,1} / _{-0,1}

MAGNETIC DIMENSION TABLE							
N1	Number of pole pairs on Nonius track	31	63	31	63	31	63
	Scanning reading diameter of Nonius track	18,88 mm	44,95 mm	23,36 mm	53,90 mm	32,80 mm	73,50 mm
	Pole width of Nonius track	0,96 mm	1,12 mm	1,18 mm	1,34 mm	1,66 mm	1,83 mm
M1	Number of pole pairs on master track	32	64	32	64	32	64
	Scanning reading diameter of master track	26,08 mm	52,15 mm	30,56 mm	61,10 mm	40,80 mm	81,50 mm
	Pole width of master track	1,28 mm	1,28 mm	1,50 mm	1,50 mm	2,00 mm	2,00 mm

MAGNETIC MATERIAL CHARACTERISTICS							
Br	Remanence @20°C					190 mT	
Tc	Temperature coefficient of the remanence					-0,19 %/K	
	Coercitivity field					240 KA/m	

RECOMMENDED CHIP POSITION							
	Radial position of chip center <i>referred to axial center</i>	11,24 mm	24,28 mm	13,48 mm	28,75 mm	18,40 mm	38,75 mm
	Recommended mechanical air gap <i>referred to magnetic coating surface</i>	0,40 mm	0,40 mm	0,40 mm	0,40 mm	0,60 mm	0,60 mm

THERMAL DATA							
	Magnet ring operating ambient temperature range	-40 to 140 °C					

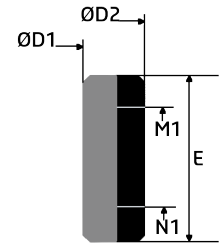
	iC-Haus Chips	iC-MU	iC-MU	iC-MU150	iC-MU150	iC-MU200	iC-MU200
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External fields can change the functional properties and may reduce system accuracy or damage the disc magnetization. The functionality of the system may no longer be ensured. Direct contact with magnetic clamps or other permanent magnets must be avoided.



RADIAL NONIUS MAGNET RINGS

DATA SHEET



ITEM	PARAMETER	HUT128R32	HUT150R64
DIMENSION TABLE			
ØD1	Ring inner diameter (mm)	20 ^{+0,02} _{-0,00}	53,1 ^{+0,03} _{-0,00}
ØD2	Ring outer diameter (mm)	24,50 ^{+0,1} _{-0,1}	59,6 ^{+0,15} _{-0,15}
E	Height (mm)	6 ^{+0,1} _{-0,1}	8 ^{+0,2} _{-0,0}
MAGNETIC DIMENSION TABLE			
N1	Number of pole pairs on Nonius track	31	63
	Scanning reading position of Nonius track (mm)	1,2	2,2
	Pole width of Nonius track (°)	360/62	360/126
M1	Number of pole pairs on master track	32	64
	Scanning reading position of master track (mm)	4,8	5,8
	Pole width of master track (°)	360/64	360/128
MAGNETIC MATERIAL CHARACTERISTICS			
Br	Remanence @20°C (mT)	190	
Tc	Temperature coefficient of remanence (%/K)	-0,19	
	Coercitivity field (KA/m)	240	
RECOMMENDED CHIP POSITION			
	Radial position of chip center (mm) <i>referred to axial center</i>	3	4
	Recommended mechanical air gap (mm) <i>referred to magnetic coating surface</i>	0,40	0,40
THERMAL DATA			
	Magnet ring operating ambient temperature range (°C)	-40 to 140	
	iC-Haus Chips	iC-MU	iC-MU150

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