

# MU37S 45-32N

## iC-MU200 MAGNETIC TARGET DESCRIPTION

preliminary



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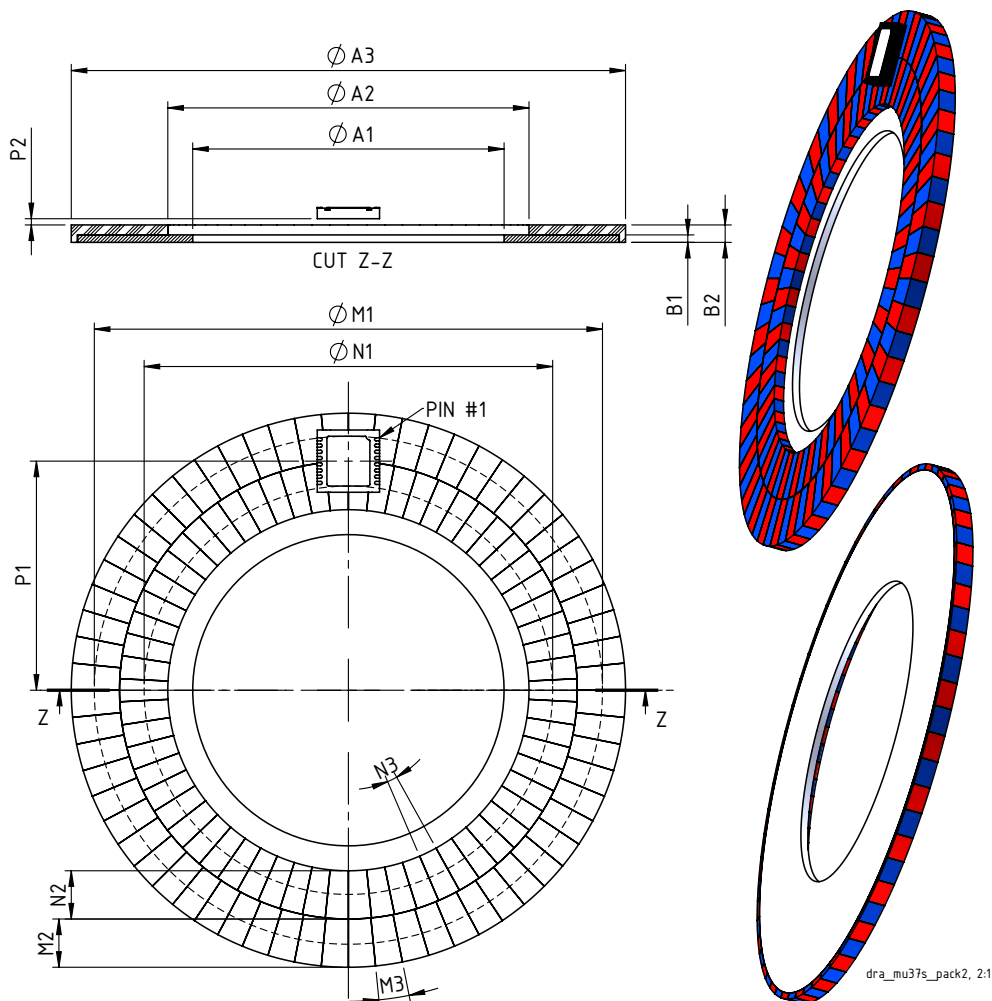
### ORDERING INFORMATION

Type	Order Destination	Description/Options
Magnetic target (rotary, axial)	MU37S 45-32N	2-Track axial magnetic target for use with iC-MU200 Nonius encoder iC Bipolar magnetized Number of pole pairs: Master 32, Nonius 31 Outer diameter 44.5 mm, for 25.0 mm shafts Metal carrier with vulcanized rubber magnet material

Magnetic Target Manufacturer: Hutchinson

For further information please [visit the Hutchinson website](#).

### CODE DISC DIMENSIONS



#### Notice: Interference in function

External magnetic 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.

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### ABSOLUTE MAXIMUM RATINGS

Beyond these values damage may occur; device operation is not guaranteed.

Item No.	Symbol	Parameter	Conditions			Unit
				Min.	Max.	
G001	Bext	Max. External Magnetic Field Strength	at disc surface		20	mT

### THERMAL DATA

Operation conditions: No changes of the magnetic characteristics

Item No.	Symbol	Parameter	Conditions				Unit
				Min.	Typ.	Max.	
T01	Ta	Operating Ambient Temperature Range		-40		140	°C

### DIMENSION TABLE

Item No.	Parameter	Comments					Unit
			Min.	Typ.	Max.	Tolerance	
<b>Physical Dimensions Disc</b>							
A1	Ring Inner Diameter			25.0		+0.03/-0.02	mm
A2	Magnetic Track Inner Diameter			29.0		±0.1	mm
A3	Ring Outer Diameter			44.5		±0.1	mm
B1	Thickness of Metal Carrier			0.60			mm
B2	Total Thickness			1.40		±0.1	mm
<b>Magnetic Dimensions Master Track</b>							
M1	Scanning diameter of Master Track			40.8			mm
M2	Width of Master Track			3.88			mm
M3	Pole Pitch of Master Track			$\frac{360}{64}$			deg
<b>Magnetic Dimensions Nonius Track</b>							
N1	Scanning diameter of Nonius Track			32.8			mm
N2	Width of Nonius Track			3.88			mm
N3	Pole Pitch of Nonius Track			$\frac{360}{62}$			deg
<b>Chip Position</b>							
P1	Radial Position of Chip Center	referred to axial center		18.4			mm
P2	Distance Package Surface	typical, referred to magnetic coating surface		0.6			mm
<b>Magnetic Material Characteristics</b>							
Br	Remanence	at 20 °C		190			mT
TKB	Temperature Coefficient of Remanence	temperature range -40 °C to 140 °C		-0.19			%/K
<b>Mechanical Characteristics</b>							
Wt	Weight			7			g

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### REVISION HISTORY

Rel.	Rel. Date*	Chapter	Modification	Page
A1	2020-10-09		Initial release	

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\* Release Date format: YYYY-MM-DD