

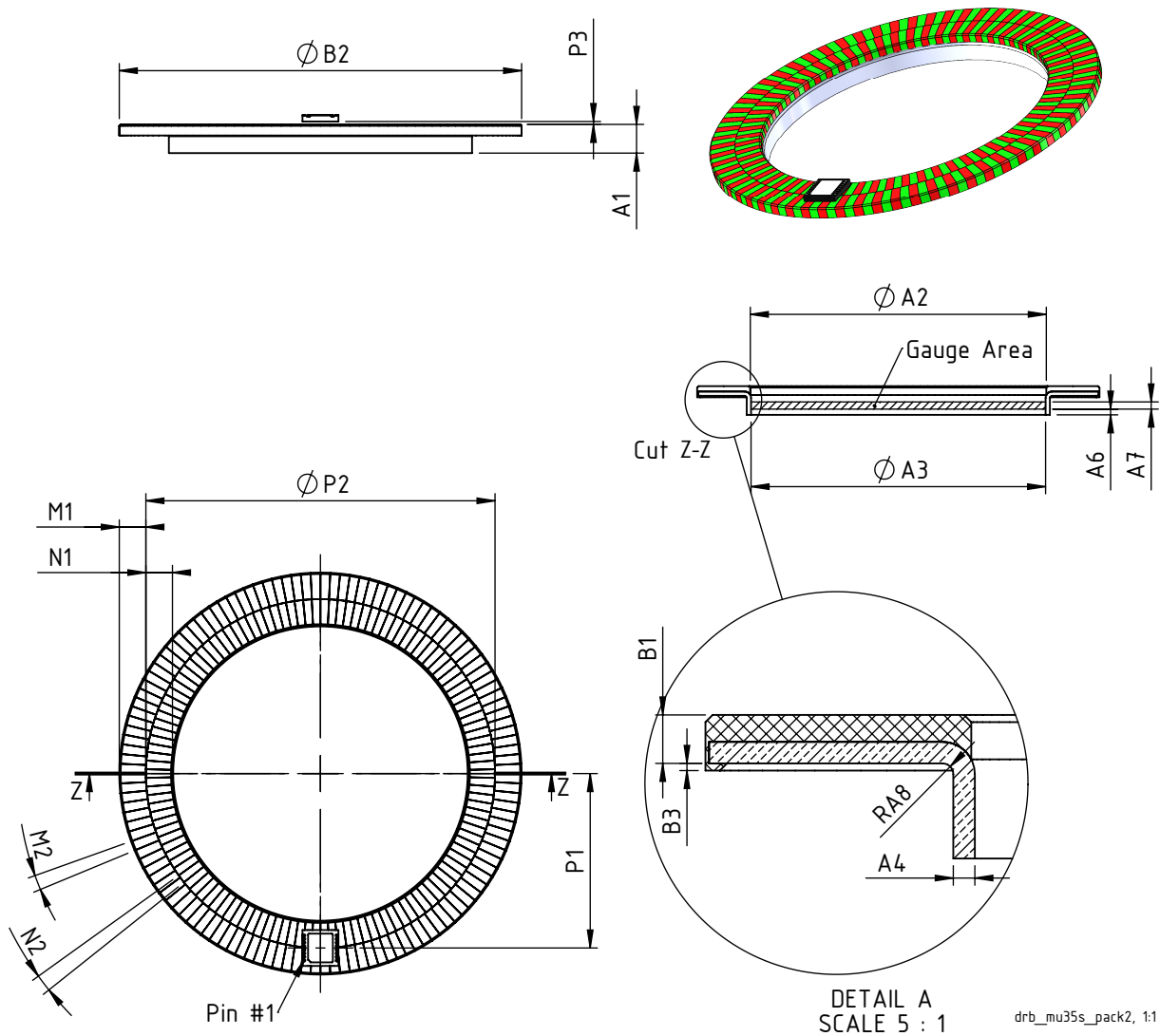
# MU35S 56-64N

## iC-MU MAGNETIC TARGET DESCRIPTION

### ORDERING INFORMATION

Type	Order Destination	Description/Options
Magnetic target (rotary, axial)	MU35S 56-64N	2-Track axial magnetic target for use with iC-MU nonius encoder iC Bipolar magnetized Number of pole pairs: master 64, nonius 63 Outer diameter 56 mm, for 41.0 mm shafts Deep-drawn metal carrier with vulcanized rubber magnet material

### 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.

# MU35S 56-64N

## iC-MU MAGNETIC TARGET DESCRIPTION

preliminary



Rev A2, Page 2/3

### 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		110	°C

### DIMENSION TABLE

Item No.	Parameter	Comments					Unit
			Min.	Typ.	Max.	Tolerance	
<b>Physical Dimensions Disc</b>							
A1	Total Height			4.0		±0.15	mm
A2	Inner Diameter of magnetic rubber material			41.2		±0.1	mm
A3	Diameter of Gauge Area			41.0		-0.07 / -0.20	mm
A4	Thickness of Metal Carrier			0.6			mm
A6	Distance Gauge Area vs. Edge			0.8			mm
A7	Height Gauge Area			1.0			mm
A8	Radius of Metal Carrier				0.3		mm
<b>Physical Dimensions Magnetic Coating</b>							
B1	Height of Magnetic Material and Carrier			1.35			mm
B2	Outer Diameter of magnetic material			56.0		±0.1	mm
B3	Allowable magnetic material protrusion			0.2			mm
<b>Magnetic Dimensions Master Track</b>							
M1	Width of Master Track			3.7			mm
M2	Pole Pitch of Master Track			$\frac{360}{128}$			deg
<b>Magnetic Dimensions Nonius Track</b>							
N1	Width of Nonius Track			3.7			mm
N2	Pole Pitch of Nonius Track			$\frac{360}{126}$			deg
<b>Chip Position</b>							
P1	Radial Position of Chip Center	referred to axial center		24.3			mm
P2	Borderline Master / Nonius Track			48.6			mm
P3	Distance Package Surface DFN16-5x5	referred to magnetic coating surface		0.4			mm
<b>Magnetic Material Characteristics</b>							
Br	Remanence	at 20 °C		288			mT
TKB	Temperature Coefficient of Remanence	temperature range -40 °C to 110 °C		-0.91			%/K
<b>Mechanical Characteristics</b>							
Wt	Weight			9.8			g

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preliminary



Rev A2, Page 3/3

### REVISION HISTORY

Rel.	Rel. Date*	Chapter	Modification	Page
A1	2019-07-16		Initial Release	

Rel.	Rel. Date*	Chapter	Modification	Page
A2	2020-01-29	ORDERING INFORMATION	Corrected typo	1

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\* Release Date format: YYYY-MM-DD