

Simple integration and fast evaluation

COMPACT, HIGH-PRECISION MAGNETIC DISCS FOR ABSOLUTE ROTARY MAGNETIC ENCODERS

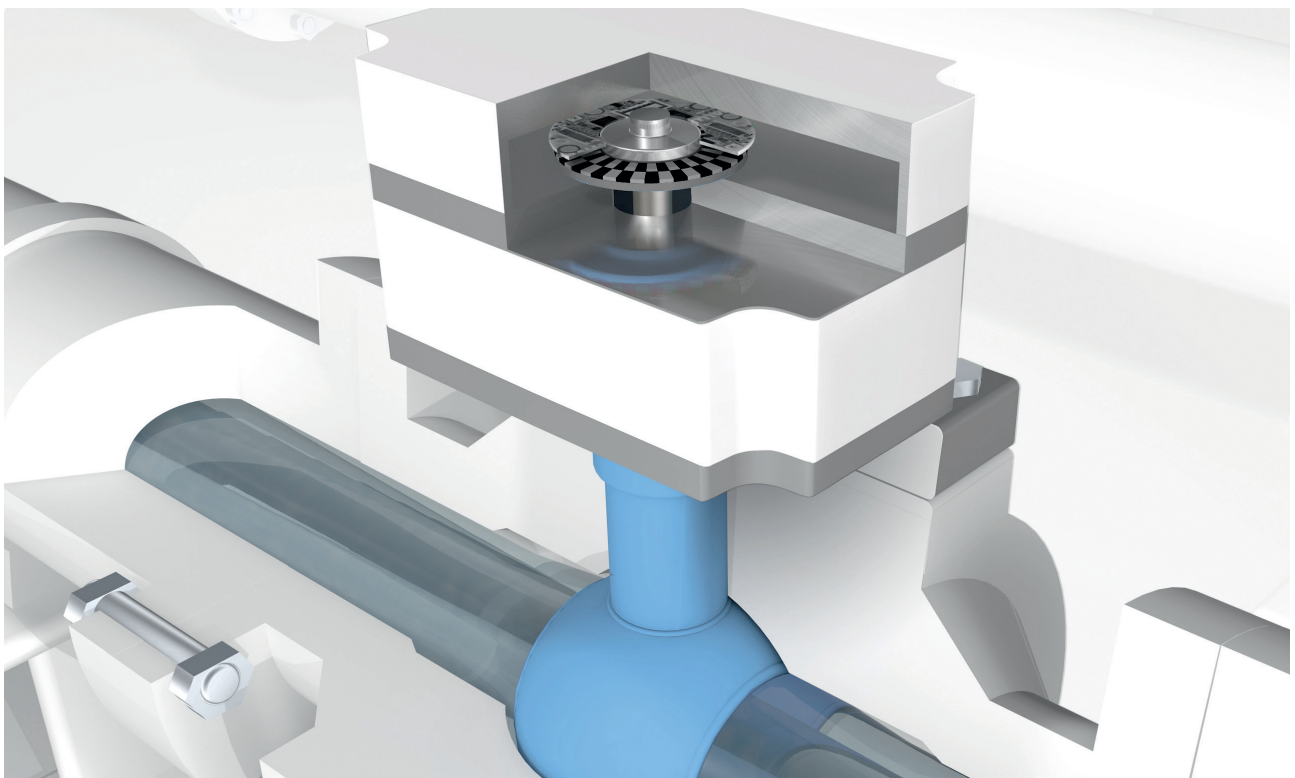
The BML BM1 rotary magnetic encoder is perfect for integrating into compact rotary systems. It detects all rotations at high speed by measuring the angle or rotational speed. And the incredibly small form factor of its absolute encoder discs allows for use in even tight spaces. These details make it easy for you to implement simple to integrate, highly precise absolute feedback solutions for motors, drives and mechatronics.

Whether you are using our complete system with sensor and electronics or want to integrate your own electronics with the IC-MU chip, our wide range of compact discs leaves nothing to be desired when it comes to mechanical integration and accuracy.

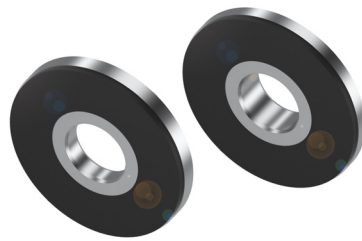
To evaluate the system for your application, we offer a diverse portfolio of standardized flat and hub-shaped discs. This provides you with great leeway in your configuration. Inside diameters of up to 70 mm are available. Mechanical modifications to meet your requirements are performed by our engineering partner management and our modification department. Contact us.

Features

- Reliable: non-contact and wear-free measuring principle
- Fast startup: generous distance between sensor and disc
- Direct integration: space-saving compact form factor
- Simple qualification: portfolio of standard discs for evaluation; various codings available (16/15, 32/31, 64/63)
- Customized mechanical adjustment possible



MAGNETIC DISCS
FOR MAGNETIC
ENCODERS



FOR ENCODER CHIP	IC-MU 128	IC-MU 150	IC-MU 200
Flat disc	Height $h \geq 3,5$ mm		
Hub-shaped disc	Shaft height $h \geq 3$ mm; total height $h_f + h \geq 6$ mm; shaft diameter $\varnothing D_f$ preferable 18/29 mm		
Pole width master track	1.28 mm	1.5 mm	2 mm

Coding 16/15

FOR FLAT DISC	BML DSF-N2CZ-HZZZ-Xaaaa-iiii*	BML DSF-N5CZ-HZZZ-Xaaaa-iiii*	BML DSF-N1CZ-HZZZ-Xaaaa-iiii*
FOR HUB-SHAPED DISC	BML DSS-N2CZ-HZZZ-Xaaaa-iiii*	BML DSS-N5CZ-HZZZ-Xaaaa-iiii*	BML DSS-N1CZ-HZZZ-Xaaaa-iiii*
Inside diameter max.	3 mm	3,5 mm	9 mm
Outside diameter min.	17 mm	19 mm	24 mm

Coding 32/31

FOR FLAT DISC	BML DSF-NGCZ-HZZZ-Xaaaa-iiii*	BML DSF-NHCZ-HZZZ-Xaaaa-iiii*	BML DSF-N3CZ-HZZZ-Xaaaa-iiii*
FOR HUB-SHAPED DISC	BML DSS-NGCZ-HZZZ-Xaaaa-iiii*	BML DSS-NHCZ-HZZZ-Xaaaa-iiii*	BML DSS-N3CZ-HZZZ-Xaaaa-iiii*
Inside diameter max.	14 mm	19 mm	29 mm
Outside diameter min.	30 mm	33.5 mm	44.5 mm

Coding 64/63

FOR FLAT DISC	BML DSF-NKCZ-HZZZ-Xaaaa-iiii*	BML DSF-NMCZ-HZZZ-Xaaaa-iiii*	BML DSF-N6CZ-HZZZ-Xaaaa-iiii*
FOR HUB-SHAPED DISC	BML DSS-NKCZ-HZZZ-Xaaaa-iiii*	BML DSS-NMCZ-HZZZ-Xaaaa-iiii*	BML DSS-N6CZ-HZZZ-Xaaaa-iiii*
Inside diameter max.	41 mm	50 mm	70 mm
Outside diameter min.	56 mm	65 mm	85.5 mm

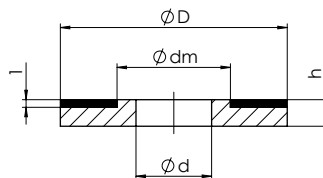
* aaaa Outside diameter
iiii Inside diameter

Standard versions available at
www.balluff.de in the product finder.

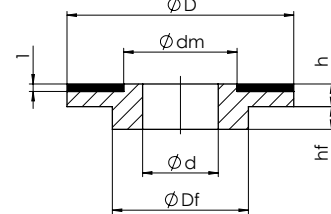
More versions and various combinations of disc type, pole width, inside and outside diameter on request.

Please contact us.

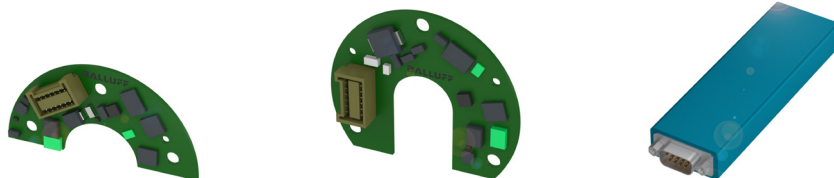
Flat disc



Hub-shaped disc



EVALUATION BOARDS



	BML08NT	BML08NR	BAE010W
With encoder chip	IC-MU 128	IC-MU 150	Configuration tool