Colibri 490



MAGNETIC ACTUATION

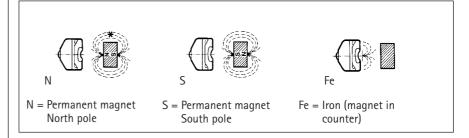
ACTUATING MAGNETS

DIMENSIONS OF ACTUATING MAGNETS

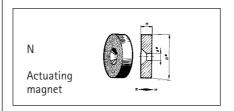
ATTACHMENT

With Magnetic Actuator

- Contactless counting
- Miniature size
- Simple installation
- Protection class IP 66
- Maintenance-free operation



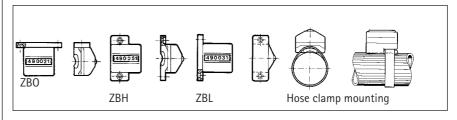
Actuation is effected by a magnetic field. With suitable magnets it is possible to achieve actuating distances of up to 50 mm. The direction of approach of the actuating magnet is not critical. When choosing a counter, it is important to observe the correct polarity of the actuator (see Figure).



We supply suitable magnets for actuating this counter. The magnet core consists of barium iron (hard ferrite 22/17 acc. to DIN 17 410). For attachment (centre hole) only screws made of nonmagnetic material may be used.

Ordering code	D	d	Н	
3 532 023	15.2 mm	3.2 mm	6 mm	
3 532 024	31.0 mm	5.3 mm	15 mm	

"Colibri" is available for several means of attachment:



ZOB = Counter without attachment plate ZBO = Counter with attachment plate top

ZBL = Counter with attachment plate left ZBH = Counter with attachment plate behind

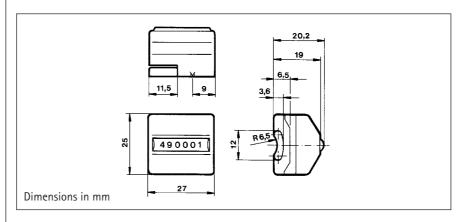
Technical data

Colibri 490

TECHNICAL DATA

Digit height 4 mm, visual Operating temperature - 10 + 50 °C Storage temperature - 40 + 60 °C Mounting depending on version Mounting position any Protection class (DIN 4050) IP 65 Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation 10 million increments Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. Reset none	Display	6-digit	
Storage temperature - 40 + 60 °C Mounting depending on version Mounting position any Protection class (DIN 4050) IP 65 Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation 10 million increments Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Digit height	4 mm, visual	
Mounting depending on version Mounting position any Protection class (DIN 4050) IP 65 Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation 10 million increments Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Operating temperature	- 10 + 50 °C	
Mounting position any Protection class (DIN 4050) IP 65 Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation 10 million increments Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Storage temperature	- 40 + 60 °C	
Protection class (DIN 4050) Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation Case Makrolon Weight approx. 12 g Counting mode Actuation Actuation Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density Actuating speed 2 m/s Counting frequency max. 20 digits/s	Mounting	depending on version	
Vibrostability 20 m/s² (10150 Hz) acc. to IEC 068-2-6 Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation 10 million increments Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Mounting position	any	
Shock stability 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Maintenance-free operation Case Makrolon Weight Counting mode Actuation Actuation Response flux density Release flux density Actuating speed Counting speed 2 m/s Counting frequency max. 2.000 m/s² (3 ms) acc. to IEC 068-2-27 Makrolon 10 million increments Adkrolon approx. 12 g Counting mode adding Actuation with conventional permanent magnets Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Protection class (DIN 4050)	IP 65	
Maintenance-free operation Case Makrolon Weight Counting mode Actuation Actuation Actuating distance Response flux density Release flux density Actuating speed Counting speed Counting mode 10 million increments Makrolon approx. 12 g adding with conventional permanent magnets Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Vibrostability	20 m/s ² (10150 Hz) acc. to IEC 068-2-6	
Case Makrolon Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Shock stability	2.000 m/s ² (3 ms) acc. to IEC 068-2-27	
Weight approx. 12 g Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Maintenance-free operation	10 million increments	
Counting mode adding Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Case	Makrolon	
Actuation with conventional permanent magnets Actuating distance Fe-version 0.5 mm N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Weight	approx. 12 g	
Actuating distance Response flux density Release flux density Actuating speed Counting frequency max. Fe-version 0.5 mm N and S magnets see order information N and S magnets see order information > 10 mT (100 Gauss) < 4 mT (40 Gauss) 2 m/s Counting frequency max. 20 digits/s	Counting mode	adding	
N and S magnets see order information Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Actuation	with conventional permanent magnets	
Response flux density > 10 mT (100 Gauss) Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s	Actuating distance	Fe-version 0.5 mm	
Release flux density < 4 mT (40 Gauss) Actuating speed 2 m/s Counting frequency max. 20 digits/s		N and S magnets see order information	
Actuating speed 2 m/s Counting frequency max. 20 digits/s	Response flux density	> 10 mT (100 Gauss)	
Counting frequency max. 20 digits/s	Release flux density	< 4 mT (40 Gauss)	
	Actuating speed	2 m/s	
Reset none	Counting frequency max.	20 digits/s	
	Reset	none	

DIMENSIONS



ORDER INFORMATION

Ordering code Ordering code Ordering code Counter without North pole South pole Fe 0 490 001 0 490 002 0 490 003 attachment accessories Attachment plates ZB0 ZBL ZBH 2 490 011 2 490 012 2 490 005 20 ... 32 mm 25 ... 40 mm Hose clamps 40 ... 60 mm 3 515 050* 3 515 055 3 515 057 Distance 10 mm Distance 30 mm Magnetic plate 6 mm 3 532 023 3 532 024 3 532 025

Actuating magnets (North pole)

^{*} on request