

**MAIN FEATURES**

- Magnetic tape to be used with TMAA
- Easy mounting due to premounted double side adhesive
- High pole accuracy
- Available in reels up to 75 m

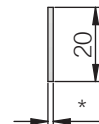
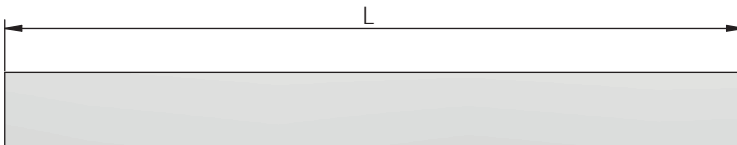


**ORDERING CODE**

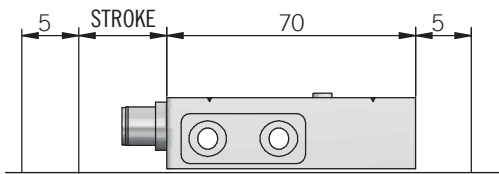
**BMA A 50 - 1 .XXX**

|  |  |  |  |  |   |
|--|--|--|--|--|---|
| <b>SERIES</b><br>magnetic tape <b>BMA</b>              |  |  |  |  |   |
| <b>TAPE TYPE</b><br>20 mm width magnetic tape <b>A</b> |  |  |  |  |   |
| <b>ACCURACY CLASS</b><br>± 50 µm <b>50</b>             |  |  |  |  |   |
| separate the code with a dash -                        |  |  |  |  |   |
|  |  |  |  | <b>TAPE LENGTH</b><br>0,2 ... 75 m <b>1</b><br>in intervals of 0,1 m |   |
|  |  |  |  |  | <b>VARIANT</b><br>custom version <b>XXX</b> |

**BMAA**



1,4 mm without steel cover tape  
1,58 mm with steel cover tape



Minimum tape length (mm) = 70 + 10 + STROKE

dimensions in mm

for fixing clips please refer to Accessories

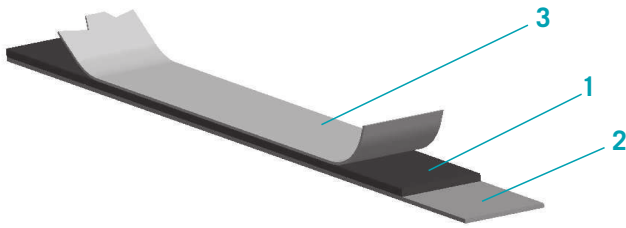
**SPECIFICATIONS**

|                                     |                                  |
|-------------------------------------|----------------------------------|
| <b>Operating temperature</b>        | -20° ... +70°C (-4° ... +158°F)  |
| <b>Storage temperature</b>          | -40° ... +70°C (-40° ... +158°F) |
| <b>Relative humidity</b>            | 100%                             |
| <b>Accuracy</b>                     | ± 50 µm                          |
| <b>Linear expansion coefficient</b> | (11 ± 1) x 10 <sup>-6</sup> m/K  |
| <b>Bending radius</b>               | > 350 mm                         |

## CONSTRUCTION

As shown in the figure below, Eltra magnetic tape is composed by three layers:

- 1 - a flexible magnetic tape made of elastomer filled with ferrite
- 2 - a stainless steel tape used to create a shield against any external magnetic fluxes and other external agents. Furthermore it's glued to the upper layer in order to give the correct mechanical rigidity to the magnetic tape. The stainless steel tape is supplied with an acrylic double side adhesive (thickness 0,1 mm) not shown in the figure
- 3 - a steel tape, magnetically transparent and with the function to protect mechanically the magnetic layer; it is the most rigid part and therefore is supplied separately due to transport and application needs. It must be stuck on the magnetic tape by the user  
The steel tape is supplied with an acrylic double side adhesive (thickness 0,1 mm) not shown in the figure



To prevent damage from possible internal stresses in the magnetic tape rolled up with magnetic layer facing outwards, with a minimum internal diameter of 200 mm; keep of least 5 mm between the layers. If supplied in single strip keep at least 10 mm between the strips.

## TIPS TO STICK THE MAGNETIC TAPE ON

### Fixing pressure

The magnetic tape is adhesive. Therefore it is important an optimum contact between surfaces for right use. A good pressure must be uniformly applied to guarantee a perfect result.

### Applying temperature

In order to guarantee optimal sticking it is recommended a surface temperature between +20°C and +37°C (+68°F to +98,6°F). Maximum adhesion is obtained after 72 hours at temperature of +21°C (+69,8°F). Please do not apply magnetic tape when surface temperature is lower than +10°C (+50°F).

### Application materials

Magnetic tape must be placed on dry, smooth and clean surfaces. Surfaces must be cleaned with aqueous solution (like water and alcohol 50% or heptane). Metallic surfaces like brass, copper etc. must be protected to prevent possible oxidation.

| CHEMICAL AGENTS AND MAGNETIC TAPE BEHAVIOUR |               |  |
|---|---------------|--|
| Null effect                                 | Medium effect | Strong effect  |
| motor oil                                   | JP-4 fuel     | aromatic hydrocarbons<br>(benzene, toluene, xylene, trichloroethylene, freon 10) |
| transmission oil                            | gasoline      | ketones (acetone)  |
| ATF (automatic transmission fluid)          | heptane       | mineral acids<br>(hydrochloric, sulphuric, nitric, phosphoric, boric)            |
| hydraulic oil                               | alcohols      |  |
| kerosene                                    |               |  |
| antifreeze                                  |               |  |
| detergents, disinfectants (Clorox®)         |               |  |
| turpentine                                  |               |  |
| water                                       |               |  |
| salt spray                                  |               |  |