

# TECHNICAL DATA SHEET

<b>DATE</b>	09/05/2017	<b>Rev.</b>	01
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<b>PRODUCT</b>	DB 600 ZETATRE SUPERWASHABLE
<b>CUSTOMER REFERENCE</b>	24910
<b>SUPPLIER</b>	
<b>MANUFACTURING PLACE</b>	

<b>1. INTENDED USE</b>
Changing colour pens..

## 2. PHISICAL AND DIMENSIONAL FEATURES

CARACTERISTICS	SPECIFICATIONS	TOLERANCE
Available colours	100	
Description of inks	Water based	
Diameter of the tip (mm)	6	
Thickness of writing (mm)	2 - 4	
Blocking tip system	Mechanical	
Kind of cap (ventilated,...)	Ventilated cap	
Personalization of the fibre pen	Hot printing	
Colour of the cap	Ink colour	
Production code	Available (YYWW)	
Shelf life	> 24 Months	

<b>CARACTERISTICS</b>	<b>SPECIFICATIONS</b>	<b>TOLERANCE</b>
Quantity of ink (g)	2.0	+/- 10%
Weight of the fibre pen (g)	10.25	+/- 10%
Weight of the different parts (g) :		
• Cap	1.68	+/- 1%
• Barrel	4.72	+/- 1%
• Tip Holder	0.81	+/- 1%
• Ink Carrier	0.87	+/- 1%
• Tip	0.17	+/- 1%
Total dimension of marker (mm):		
• Length	128.0	+/- 1%
• Diameter	13.1	+/- 1%
Dimensions of different parts (mm) :		
• Cap (Ø x L)	10.8 x 44.7	+/- 1%
• Barrel (Ø x L)	10.2 x 93.8	+/- 1%
• Tip Holder (Ø x L)	10.0 x 40.5	+/- 1%
• Ink Carrier (Ø x L)	6.0 x 92.0	+/- 1%
• Tip (Ø x L)	3.6 x 24.5	+/- 1%

### 3. CARACTERISTICS AND COMPOSITION OF ROUGH MATERIALS

<b>CARACTERISTICS</b>	<b>SPECIFICATIONS</b>	<b>TOLERANCE</b>
Composition of different parts :		
• Cap	Polypropylene	
• Barrel	Polypropylene	
• Tip Holder	Polypropylene	
• Ink Carrier	Polyester	
• Tip	PE Syntered	

### 4. MECHANICAL/ ANALYSIS/CHEMICAL FEATURES

<b>CARACTERISTICS</b>	<b>SPECIFICATIONS</b>	<b>TOLERANCE</b>
Writing lengths (m)	> 300	+/- 10%
Ink flow (mg/m)	6.7	+/- 10%
Ink washability		
• On the hands (with warm water and soap)	yes	
• On the textiles (Washing Temperature [°C] )	40	
Resistance of nib to pressure (N)	> 50	+/- 10%

## 5. LAWS AND NORMS

The plastic components of the pen body (barrel, cap, tip, ink carrier,...) are produced by materials tested for the cadmium and phthalates content, according to the REACH (EC) No.1907/2006, Annex XVII. Test reports are available as a proof of the quality and safety of the materials used.

The ink is not classified according to the REACH regulation. Therefore, the product does not need to be labeled, according to the CLP regulation for chemical substances and mixtures.

The pen complies also to the following requirements :

- EN71-1 :2011, Mechanical and Physical properties ;
- EN71-2 :2011, Flammability test ;
- EN71-3 :2013, Migration of certain elements ;
- BS7272-1 :2008, Specification for safety caps - risk of asphyxiation.

Therefore, the pen is allowed to be used by children, according to the 2009/48/CE regulation. The declaration of compliance to the CE marking is available.

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