



FEDERAL PUBLIC SERVICE  
MJSP - FEDERAL POLICE  
POLICE LOGISTICS CONTROL SERVICE - SECOL / DPC / CGPLAM / DLOG / PF

**ANNEX I**  
**TECHNICAL SPECIFICATIONS OF BALLISTIC VESTS**  
**TRANSLATED RESUMED VERSION**

Each vest must be accompanied by information sheet with instructions for use, storage, conservation and cleaning of the ballistic panels and their tactical covers.

<b>TECHNICAL REFERENCE STANDARDS</b>	
US Department of Justice - Ballistic Resistance of Body Armor - NIJ Standard - 0101.06, dated July 2008.	
ASTM E3003-15, Standard Practice for Body Armor Wearer Measurement and Fitting of Armor, ASTM International, West Conshohocken, PA, 2015, <a href="http://www.astm.org">www.astm.org</a> .	
ASTM D5034-09 (2017), Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test), ASTM International, West Conshohocken, PA, 2017, <a href="http://www.astm.org">www.astm.org</a> .	
MIL-SPEC-AA-55126C. <a href="http://everyspec.com/">http://everyspec.com/</a>	

<b>BALISTIC PANELS</b>	
Level of ballistic protection	III-A
Internal identification (ballistic material)	(Must have) serial numbering on the two outer layers, as well as the inscription "PF" in easy-to-read size. (i.e. PF00001)
Enclosure	Must be 100% waterproof. The closure shall be of seamless thermofusion or similar technology provided that it is fully sealed to ensure complete impermeability of the ballistic panels.
Geometry	The specific linear measurement values of the panels will be defined by the winning company, aiming to improving mobility and grip as well as achieving weight reduction. Such measures should maintain the protection of vital organs, in compliance with the rules of protection (minimum areas) of NIJ STANDARD 0101.06 - National Institute of Justice.
Sizes	<p>Manufacturers may choose to provide police vests:</p> <ul style="list-style-type: none"> <li>• male - male model or unisex model; and</li> <li>• female - female model (no bulge) or unisex model.</li> </ul> <p>The Federal Police will provide a database with the body size of its officers to the winning company, which must define the appropriate sizes and provide the vests compatible with these measures, using as appropriate, the ASTM-E3003-15 standard.</p>
Comprovação (In the Provisional Receipt, the characteristics described in this document shall be presented by means of laboratory reports, which shall be	Proof that the sizes of the ballistic panels were produced according to ASTM-E3003-15.

delivered to the Federal Police team at the Company's Factory, namely:)	Failure to submit, incomplete documentation, or failure to meet minimum standards will result in disqualification from the company.
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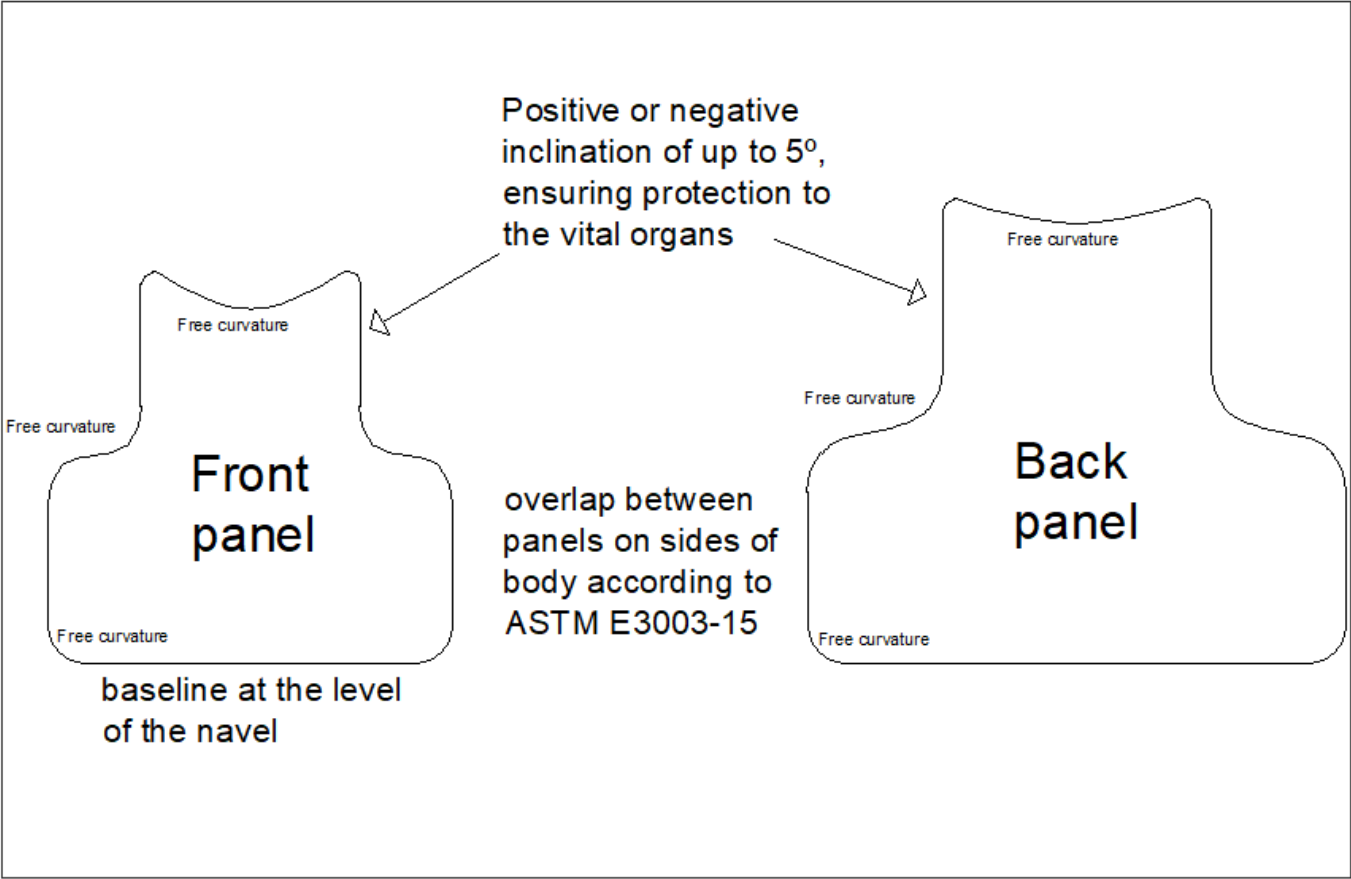


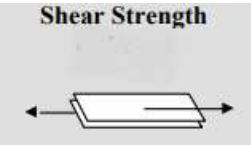
Figure 1 - Minimal geometry of the ballistic panels.

TACTICAL COVERS (EXTERNAL COVERS)	
Fabric	The external covers must be made of Cordura 300 or similar fabric.
Sizes & Compatibility	<p>Shall be of a shape compatible with the ballistic panels and their enclosures. They should be lightweight and weather-resistant fabric to ensure comfort and usability of federal police.</p> <p>They should also be internally provided with horizontal openings to allow insertion and removal of the ballistic panels with ease.</p>
Color	<p>Federal Police (Polícia Federal)</p> <p>They (must be) black in color with opaque texture, except for the Federal Police visual identity insignia, as shown in the following section (PF Visual Identity Manual).</p> <hr/> <p>Federal Highway Police (Polícia Rodoviária Federal)</p> <p>To be determined by the PRF</p> <hr/> <p>Federal District Military Police</p>

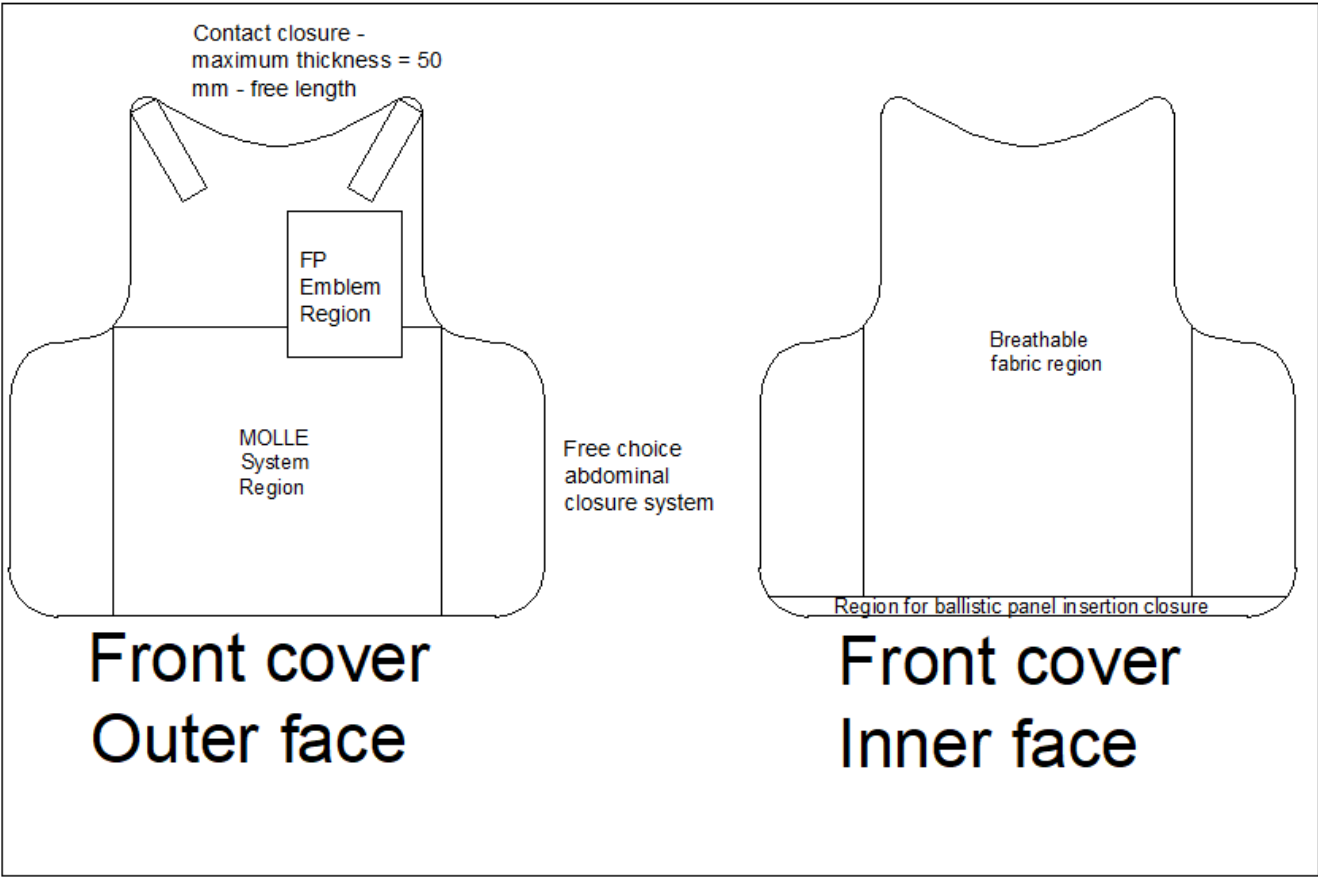
	(Polícia Militar do Distrito Federal) To be determined by the PMDF
Front & Back design	<p>(Federal Police)</p> <p>At the front, in the left breast region of the cover, above the MOLLE system region, the Federal Police Coat of Arms, in the colors and pattern of the Federal Police, shall be made in high definition, sewn or glued permanently, according to PF Visual Identity Manual. The size M of the vest should have the Coat measuring 10cm in the vertical direction.</p> <p>On the dorsal top the inscription “POLÍCIA FEDERAL” must be in Federal Police colors and standard, centered on the dorsal part of the black cover, perfectly finished, sewn or glued permanently, and according to PF's Visual Identity Manual.</p> <p>The predicted dimensions may be increased or reduced proportionally to suit the front/back of the cover, according to the manufacturer's design and size of the cover.</p> <hr/> <p>Federal Highway Police (Polícia Rodoviária Federal)</p> <p>To be determined by the PRF</p> <hr/> <p>Federal District Military Police (Polícia Militar do Distrito Federal)</p> <p>To be determined by the PMDF</p>
Height and width adjustments (shoulder & waist)	<p>The tactical covers shall allow independent adjustments and settings using elastic with strips for the shoulder height with a maximum width of 50 mm (fifty millimeters) each. The tactical covers also shall allow settings at the width of the waist.</p> <p>Contact closures must be sturdy and easy to handle. Adjustment should only be by elastic. Clips, hooks, hoops, or other types of fittings are not allowed.</p>
Contact closures	Should allow a police officer to be able to wear and remove his vest alone. For closing the flaps will be used adhesive strip (velcro or similar) in black.
MOLLE system	The covers should be equipped with MOLLE system. This system should be present in the largest possible area of the cover, without affecting the areas for adjustment and visual identity.
Confort	They should have breathable spacer fabric inside, which provides thermal comfort, such as 3D knitting, hole making, Spacer Air Mesh or other of similar quality. This tissue aims to provide ventilation through body temperature management.
Rescue strap	On the outer dorsal, at shoulder height, the cover must have a sewn rescue strap with tensile strength. The attachment of the rescue strap must be reinforced and guaranteed to be durable throughout the life of the vest.
Comprovements (The bid phase winner will be able to prove the characteristics described in this document through	<ul style="list-style-type: none"> <li>• Proof that the external covers have breathable spacer fabric that provides thermal comfort, such as 3D</li> </ul>

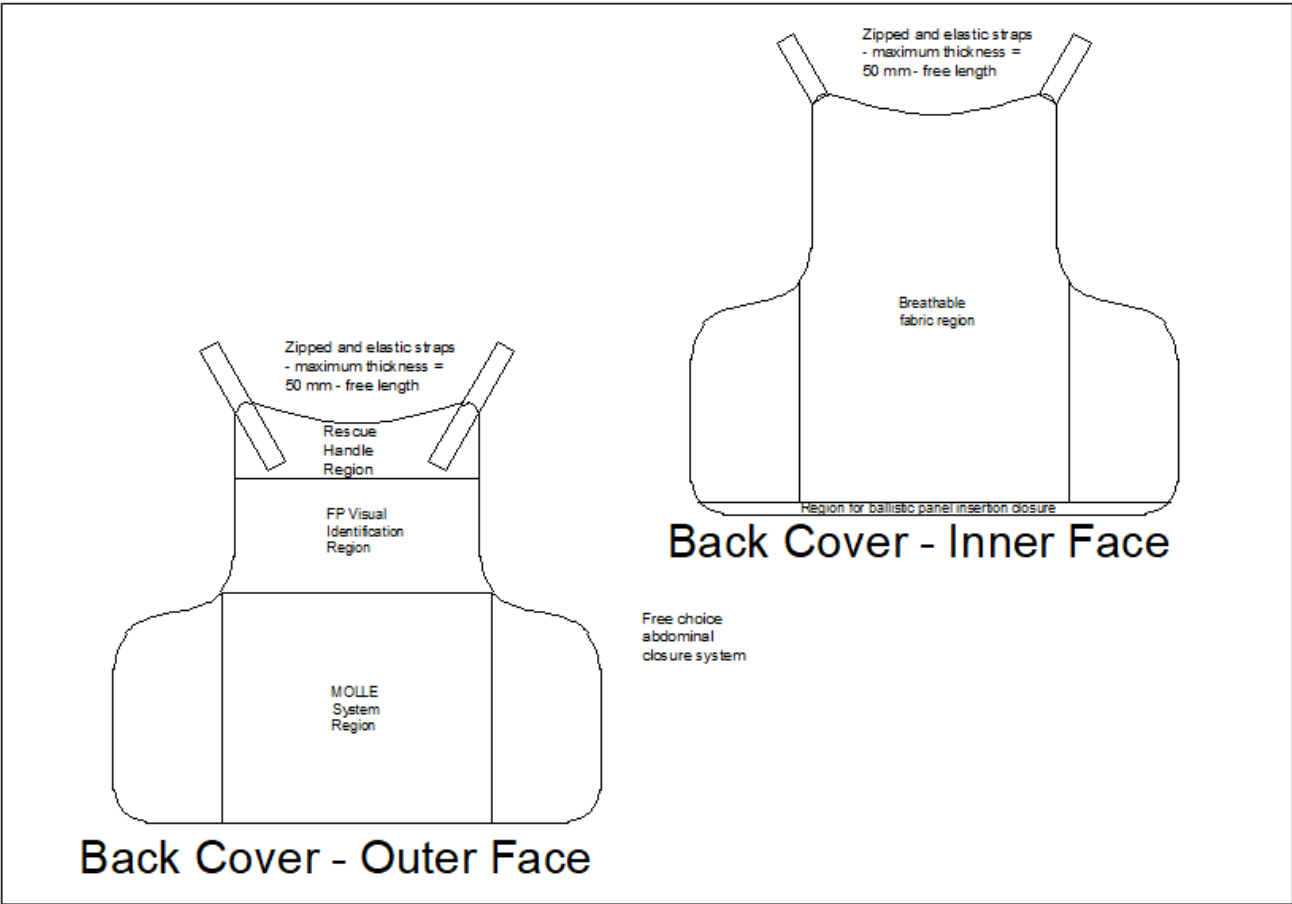
laboratory reports, which should be sent along with the price proposal)	<p>knitting, hole making, Spacer Air Mesh or similar quality;</p> <ul style="list-style-type: none"><li>• Proof that the external cover fabric has tensile strength (weft) and tensile strength (warp) [according to ASTM D5034 - Grab (Standard Test Method for Strength and stretching of textile fabrics)] with minimum values equivalent to the fabric Cordura 300 or similar;</li><li>• Proof that closure straps (velcro-type) meets the MIL-SPEC-AA-55126C standard, with minimum (average) values of 8.0 PSI (Shear *) and 1.0 PIW ( Peel **), and at least 1,000 cycles open and close of service life.</li></ul> <p>Failure to submit, incomplete documentation, or failure to meet minimum standards will result in disqualification from the company.</p>
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*\*Shear Strength - Strength in pounds per square inch required to open a fastener. The attached straps are pulled in opposite directions. The default shear force is measured by the linear direction. (PSI)*



*\*\*Peel Strength - Strength in Pounds per inch of width required to open a fastener. The attached straps are pulled in opposite directions and the required “Peel” force measured. (PIW)*





CARRYING BAG	
Sizes & Compatibility	According to the size of the vest.
Color	Black
Opening	The opening for insertion and removal of the vests must be by polyamide zipper, having 2 (two) cursors in its extension.

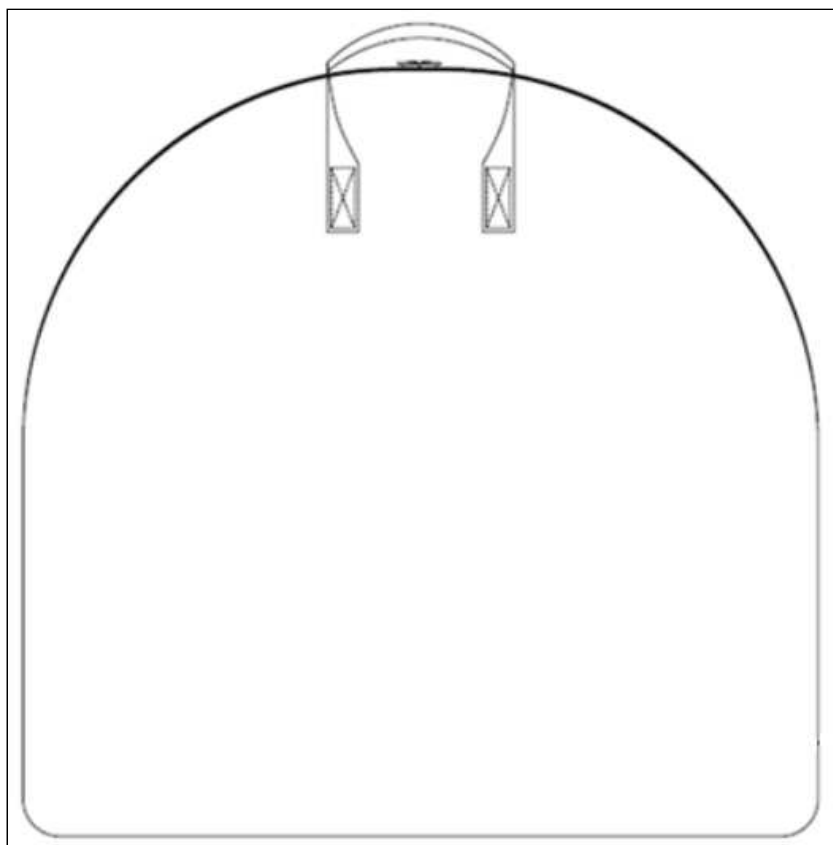


Figure 3 - Carrying bag geometry

## **FEDERAL POLICE VISUAL IDENTITY MANUAL**



Figure 4 - Emblem Proportions



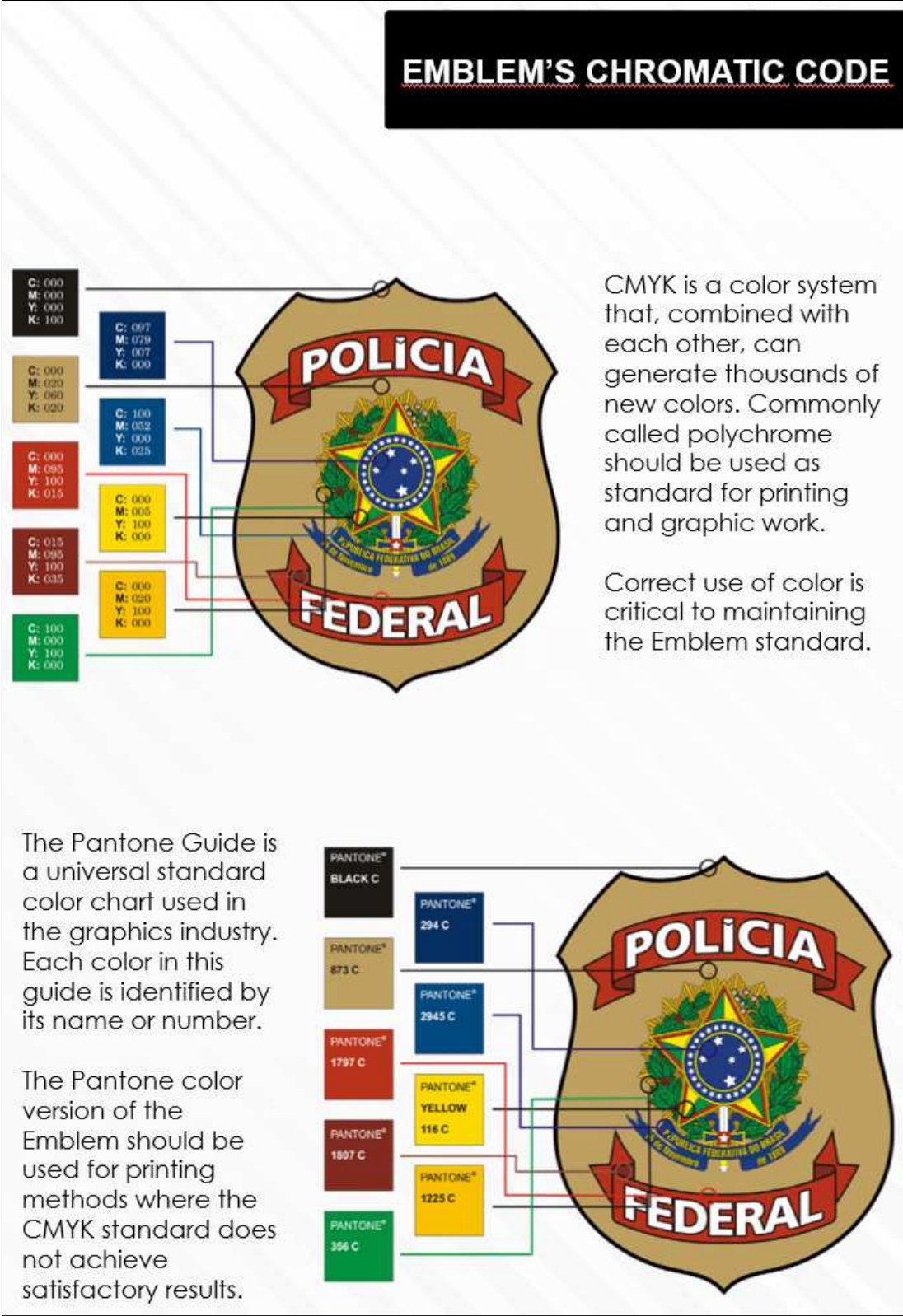


Figure 5 - Emblem's Chromatic Code





Figure 6 - Typography

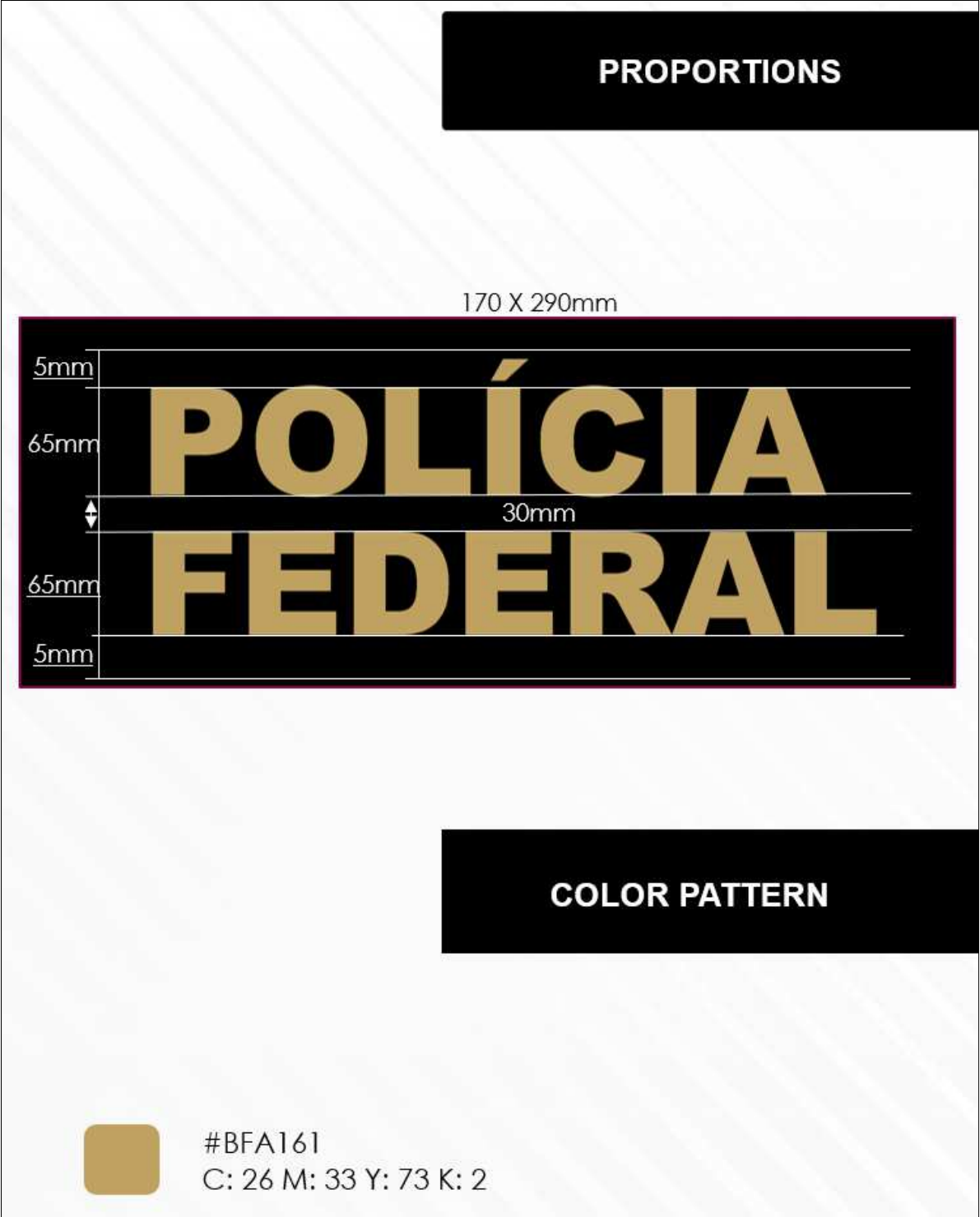


Figure 7 - Inscription "POLÍCIA FEDERAL" - Proportions & color

MASS OF BALLISTIC VESTS AND BALLISTIC PANELS THICKNESS

The maximum mass of the ballistic vests (including the ballistic panels and their enclosure, as well as the external tactical cover) - tolerance = ± 10%.	REFERENCE SIZE	Max Total Mass (Kg)
	XS	1,878
	S	2,175
	M	2,479
	L	2,800
	XL	3,143
More than the five reference sizes listed above may be manufactured, provided that the contractor matches the sizes with the supplied police measurement database, respecting the maximum mass limits.		
Regardless of the nomenclature used by the manufacturer, the maximum total mass for the vests may under no circumstances exceed 3.143 kg with		

a tolerance of  $\pm 10\%$ .

The maximum thickness of the ballistic material, including the enclosure,  
i.e. the maximum thickness of the inner cover shall be a maximum of  
11,00 mm, with a tolerance of  $\pm 10\%$ .



Documento assinado eletronicamente por **VICTOR POZZI ZOCH, Perito(a) Criminal Federal**, em 27/11/2019, às 08:58, conforme horário oficial de Brasília, com fundamento no art. 6º, § 1º, do [Decreto nº 8.539, de 8 de outubro de 2015](#).



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