

LS3 BPM pick-up buttons procurement

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BPM pick-up buttons

■ Technical specifications:

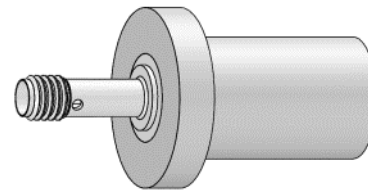
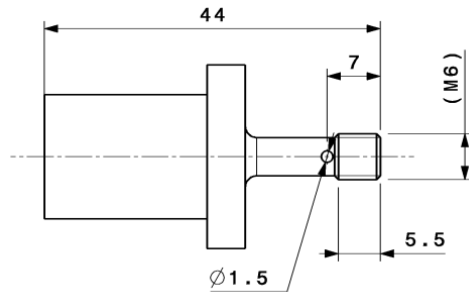
- Material: stainless steel or preferably titanium (max grade 2);
- Insulation/spacer: Al₂O₃ or glass or aluminium nitride which have a better thermal conductivity;
- Connector SMA 50 Ohms;
- No UHV tightness request;
- Machining and cleaning compatible with UHV;
- Operational temp: +20°C to +70°C;
- Bakeout temperature: 300 °C;
- Radiation dose : >20 MGy.



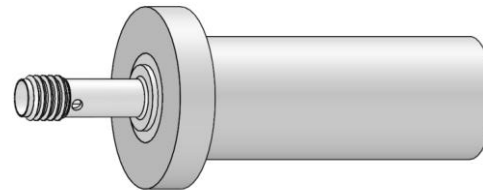
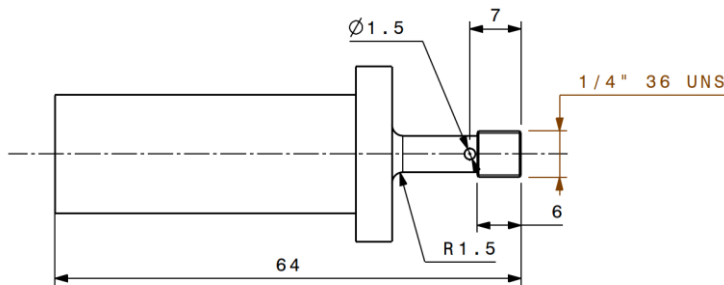
BPM pick-up buttons types

The SPARES are included (10%)

- 140 for the TCXPM, TCLP and TCTPXH/V ([LHCTCLIA0267](#))



- 20 for the TCLPX ([LHCTCLPX_0031](#))



Market survey BPM pick-ups

Price estimation done by Kyocera(JP), the company that manufactured all the LS2 pick-up buttons.

■ Stainless steel

- 10 pcs = 455 EUR (PPU)
- 12 pcs = 445 EUR (PPU)

Tooling cost for 10/12pcs = 1'020 EUR

- 100 pcs => 334 EUR (PPU)

Tooling cost for 100pcs => 1'516 EUR

~ 18% difference between the two materials for the full production

■ Ti grade 2

- 10 pcs = 516 EUR (PPU)
- 12 pcs = 506 EUR (PPU)

- 100 pcs => 394 EUR (PPU)

Possible In-kind from Japan?

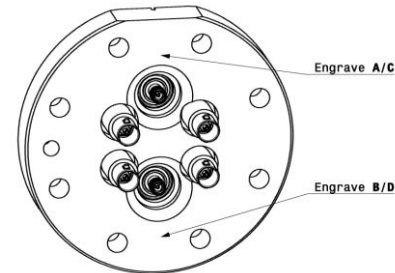


LS3 new flange assembly for prototypes

- New flange assembly for the TCLPX collimators:

- Previous version:

- 2x SMA feedthrough UHV compliant
- 4x BNC connector UHV compliant



- New version:

- 2x SMA feedthrough UHV compliant
- 1x 9 pin connector UHV compliant

