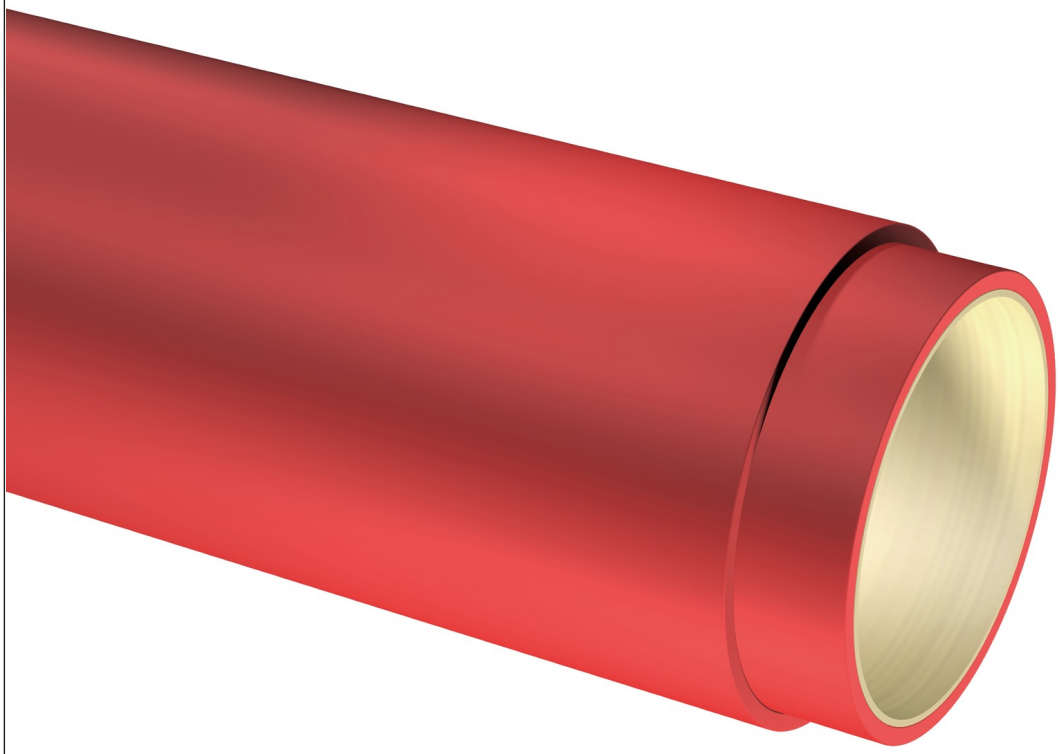
# Red Esa

The only Atex certified, explosion-proof elastomer in the world



ATEX certified

E.S.A. System

hardness range 75-90

max load 15 [kg/cm]

max temp 150°C

Speedwell System

Elastomer designed for printing impression rollers with electrostatic assist (ESA) for printing on plastic film and paper. Red Esaeliminates the ionization effect typical of traditional black rubber compounds with carbon black. The only product certified in compliance with the ATEX Ex II 2G IIA T4 standard for use in Zone 1 issued as a non-flammable elastomer. The volumetric resistance, dynamic resistance and insulation values of Red Esa comply with the electrostatic assist system installed on the printing press and the type of application (Direct Charge, Top Loading and/or Side-Loading). For printing with solvent-bases ink, acetate, alcohol, MEK and 20% toluol.Cleaning with a blend of 75% ethyl alcool and 25% ethyl acetate.

The special Rossini conpounds are available both in Speedwell Sleeve configuration and Rubber roller.

# structure

Rubber-coated roller with steel core and/or Speedwell sleeve with conductive or insulated fibreglass conical base depending on the application. Red Esa coating ground to measurement.

# specifications

| | |
|---|---|
| **Colour** | Red |
| **Rubber-coated roller - Min/Max diameter** | 35 - 550 [mm] // 1.373 - 21.569" |
| **Rubber-coated roller - Min/Max length including pins** | 150 - 5.000 [mm] // 5.882 - 196.078" |
| **Speedwell Sleeve - Min/Max diameter** | 80 - 450 [mm] // 3.137 - 17.647" |
| **Speedwell Sleeve - Min/Max length - Tolerance UNI:ISO 2768T1m** | 350 - 3500 [mm] // 13.725" - 137.255" |
| **Coating thickness** | 10 - 35 [mm] // 0.392 - 1.373" |
| **Min coating thickness to guarantee after grinding** | 8 [mm] // 0.315" - Grinding value at a minimum must be supplied by the client based on the possible adjustment of the printing press |
| **Surface hardness - Tolerance +/-3 Shore A** | 75 - 90 Shore A |
| **Maximum resistance to pressure** | 15 [Kg/cm] |
| **Electrical resistance** | Rollers and Speedwell Sleeves are designed and built according to technical specifications released by the manufacturers of ESA systems and the type of application of the electrostatic charge (Top Loading - Side Loading - Direct Charge) |
| **Compressed air for sleeve assembly** | 12 - 20 [bar] // 174 - 290 PSI Minimum capacity: 700 [l//min] with air input having a free passage with D => 8[mm] |
| **Maximum temperature resistance** | 150 °C / 302 °F |
| **Working tolerance** | External finishing with precision grinding (Ra=0.8) with T.I.R. < 0.03 mm] when measured on a mandrel with T.I.R. <= 0.005 [mm] |
| **Resistance to chemicals** | Alcohol - Acetates max 30% - Water - Ozone |

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**Rossini World**
Italy • France • Spain
Germany • United Kingdom
Romania • Brasil • China
United States • India

**Rossini S.p.A. HeadQuarters**
Via de Gasperi, 5
20027 Rescaldina - Milano - Italy
Tel. +39 0331 47 27 11 - Fax +39 0331 57 97 46
comm.dept@rossini-spa.it

WWW.ROSSINI-SPA.IT