



Automatic capacitors winding machine

SIGMA 4

Producing high quality capacitors for traction, power electronic, HVDC, EV and HEV applications with flat metallized film capacitors

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Worldwide leader in the manufacturing of capacitors winding machine

METAR machines swiss made

Product

▶ Winding dimensions

	S-Mode	D-Mode
Minimum diameter	48 mm	48 mm
Maximum diameter	155 mm	155 mm
Minimum width	75 mm	38 mm
Maximum width	① 158 mm	① 76 mm

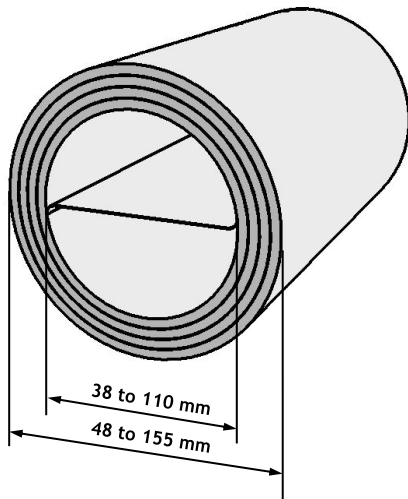
① Including inner core film

▶ Mandrel dimensions

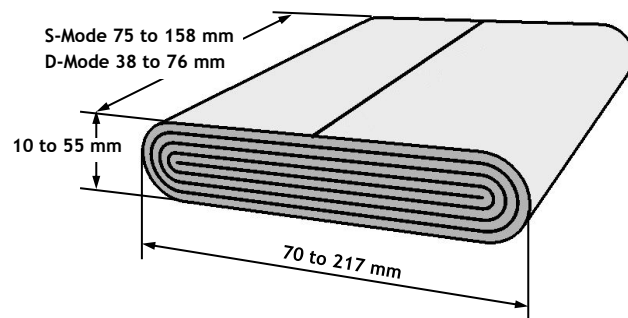
	D-Mode / S-Mode
Minimum diameter	② 38 mm
Maximum diameter	110 mm

② Upon request Ø30 mm

From round to flat



▶ Dimensions of the pre-flattened product



Equipment

▶ Standard and optional equipment for Sigma Basic machine

S-Mode (2 burn-off included)

▶ Standard equipment S-Mode

Quantity Designation

- 2 Reel carrier for rolls diameter 75 mm (3 inch)
- 1 Initial thermowelding device (Circular type)
- 1 Final thermowelding device (Multiple points type)
- 2 Burn-off device for one side of two films
- 2 Rewinder for aluminium reel, inside diameter 33 mm or 40 mm
- 2 Aluminium roll for demetallization
- 1 Mandrel from Ø38 mm to Ø110 mm
- 1 Set of special tools
- 1 Winding upto number of turns
- 1 Pre-flattening device
- 1 Electronic control on pressure regulator for metallized film tensions
- 1 Output conveyor belt system

▶ Optional equipment

Designation

- ▶ D-Mode
- ▶ Equipment for S4-Mode (2MPP + 2PP)
- ▶ Cover film winding
- ▶ Inner core film
- ▶ Thermowelding inner core film
- ▶ Automatic positioning for metallized and cover film
- ▶ Edge guiding system for metallized film
- ▶ Variable film tension during main winding
- ▶ Mandrel Ø38 mm to Ø110 mm
- ▶ Mandrel Ø30 mm upon request