ACA RoQ Inline

FULLY AUTOMATED IN-LINE ROLL HARDNESS MEASUREMENT

R.A.M. Realtime Application Measurement GmbH



EVERY ROLL MEASURED

The ACA RoQ Inline measures the hardness profile of every roll on the conveyor – after the winder and before packaging, without an operator. The profiles help to optimise winding, converting and finishing processes.

Key Features

- **Why hardness:** During winding, thousands of layers are placed on top of each other. Even the smallest cross-direction profile differences add up to clear hardness variations at the roll surface.
- **Fully automated:** All rolls are measured, always with the same procedure – no operator and no operator-related variation.
- **Data handling:** Automated data handling and communication with the mill system; the hardness profiles support the handling of customer claims.
- **Profile control:** Better control of the cross-direction profile, especially caliper – for better runnability, fewer winding problems and more uniform rolls for converters.
- **Design:** ACA RoQ A20 measuring head and ACA RollBeam manipulator (type RB800-685), designed for unsupervised continuous operation.

TECHNICAL SPECIFICATIONS

Category	Property	Specifications
Mechanical (RB800-685)	Width	900 mm
	Depth	550 mm (chassis) · 735 mm with gear rack
	Height	480 mm
	Weight	25 kg
Operation	Max. conveyor speed	300 mm/s
	Min. space between rolls	1500 mm (unsupervised)
	Min. roll width	400 mm
	Roll diameter	300–1600 mm (design 800 mm)
	Home → roll / roll → home	2 s / 1.5 s
	Return to home after reset	30 s
Electrical	Main power input	AC 100–240 V, 1.6–0.7 A, 50–60 Hz · DC 110–150 V, 1.4 A
	Fuses	2 × 3.15 AT (5 × 20 mm)
	Internal supply	24 V DC, 0 V connected to chassis ground
	Power supply output	24 V DC, max. 100 mA
	Digital inputs	24 V, ground-referenced · “0”: −3…5 V · “1”: 11…30 V · 3 mA
	Clock outputs	typ. 10 mA, max. 12 mA
	Relay outputs	potential-free, isolation 500 V, 127 Vac / 30 Vdc, 0.5 A AC / 2 A DC, resistive loads only
	Emergency stop and interlock loop	potential-free contacts for ≥ 24 V DC only
Applications	Paper and board	containerboard, specialty and graphic papers
	Converting	labels, flexible packaging
	Plastic films	PE, PP, PVC, PET; BOPE, BOPP, BOPA; technical and special films
Service	Manufacturer	ACA Systems
	Sales and service	R.A.M. GmbH: installation, commissioning, calibration, maintenance, spare parts

Manufacturer and documentation

Manufactured by ACA Systems; sales, commissioning, calibration, maintenance and spare parts: R.A.M. GmbH, Flörsheim am Main, Germany.

The manufacturer’s declaration of conformity, wiring diagrams and operating instructions are available on request.

All data refer to the standard configuration. Values are nominal unless a tolerance is stated. Subject to technical change without notice; this datasheet is not a guarantee of properties.

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