

Piezoelectric actuators

by JOHNSON MATTHEY PIEZOPRODUCTS

SIGNAL is proud to distribute the Piezoelectric actuators manufactured by **JOHNSON MATTHEY** Piezoproducts, for electronic needle selection.

Since 40 years the Piezoproducts Division, located in Germany, is developing and producing piezoelectric ceramics, piezo components and piezo modules in accordance with the individual requirements and kinds of application specified by customers world-wide.

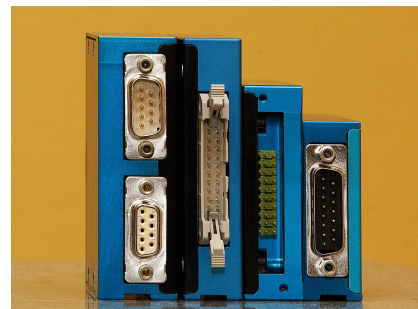
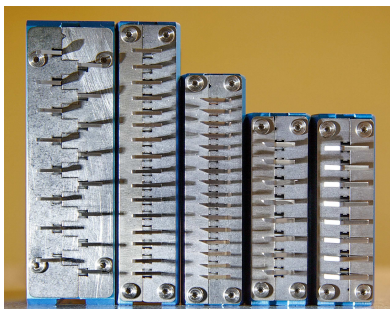
These well-known products are already in use since many years and available in two product lines:

- **direct drive actuators**, for Socks and Seamless machines application
- **smart actuators**, with onboard electronic module for bus connection management.

The smart type actuators are available in two models, compliant with the most diffused fieldbus standard: SIEMENS[®] type, WAC[®] BUS COMPATIBLE (RECAM type)

Applied on many type of knitting machines, these actuators are the best choice for the electronic needle selection system on Circular knitting Machine with an high number of working feed (big diameter machines).

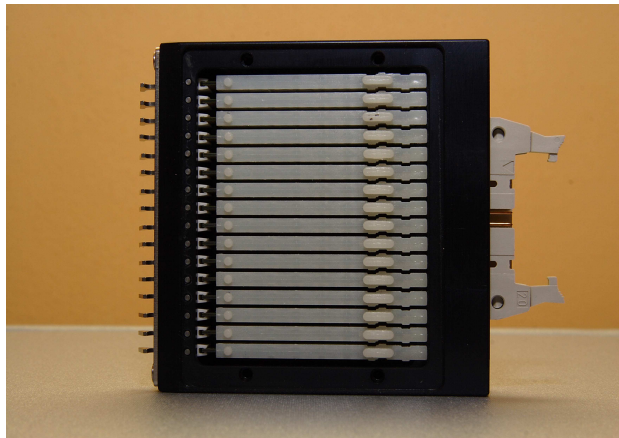
Product features



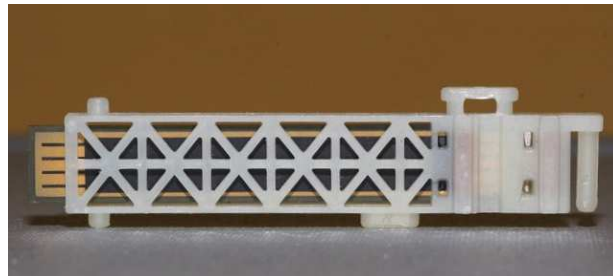
Front, side and rear view of actuators.

- Proven 3-wires technology prevents depolarization over time
- Fast and repeteable response time; flaps fly time is 2,5 ms, complete process is 4,4ms.
- A wide range of flaps profiles is available on catalogue; specific flaps profiles can be machined on customer drawing, using high hardness steel and toughness
- Field replaceable parts (ceramics, flaps, card if any) for all actuators model.
- One line flaps or two line flaps 3-way knit technique selection.
- Flaps pitch: fine 3.2, standard 4 mm and 5 mm (special)
- All metallic housing

All products use piezo ceramic technology that allows high working speed with minimum consumption of energy and no heating. Also the sizes are decidedly low.



Side view of the stacked piezo-bender



The "core" of the actuator - the piezo ceramic (bender)

JOHNSON MATTHEY manufacture piezo ceramic internally with proprietary technologies. This leads to ceramics at the top of the market for minimum footprint and low power consumption.

For more information about products and related applications, please visit the Piezoproducts Division website at <http://www.piezoproducts.com>.

You can also watch application examples video at <http://www.youtube.com/watch?v=-pBQJEcy6L8>.

Trust on **SIGNAL** and **JOHNSON MATTHEY**, over 100,000,000 piezo products shipped till now.

SIGNAL deliveries also a complete line of Electronic Controller tailored for this actuators and suited for Circular knitting and Socks knitting machines and can support the customer in all related problems (designing, set-up, phasing, repairing).

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Signal is ISO 9001:2008 certified

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