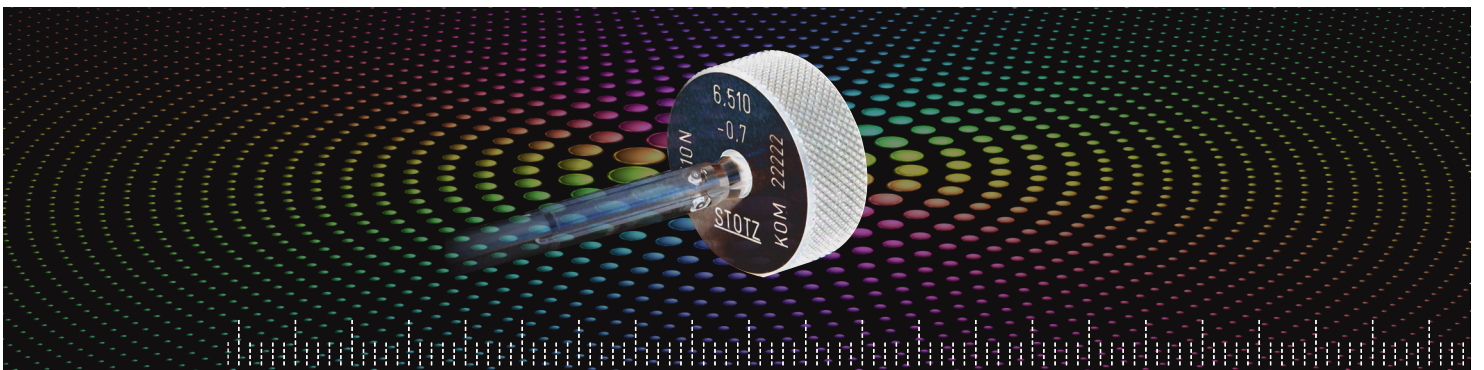




Rapid Pneumatic Transducer SPW



SPW

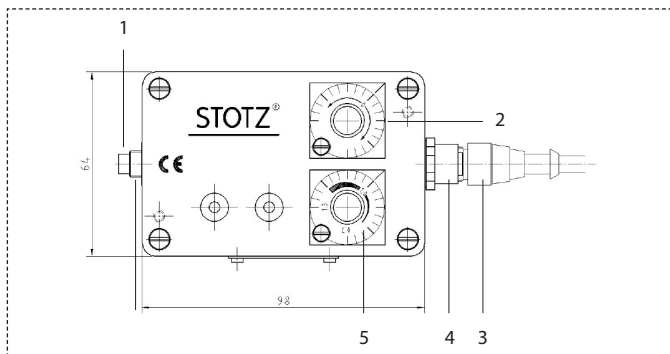
SPW

description

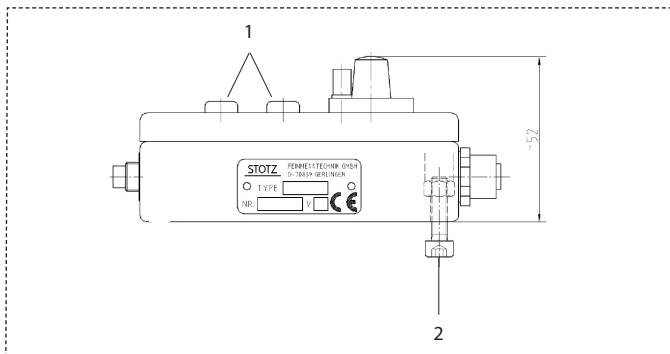
The Rapid Pneumatic Transducer SPW is used with pneumatic measuring tools to evaluate longitudinal changes in micrometer ranges. The SPW produces an analog electric output signal proportional to the longitude change. The signal can be displayed on several devices or be employed to control processing machines.

The SPW contains no moving parts and is therefore free of wear. It has the distinction of high precise measuring for quick measurements, a negligible small hysteresis and small dimensions.

The setting time of the SPW is only 30 ms.



position	description
1	plug 5-pole
2	zero correction
3	connection cable 2 m with plug to electronic box
4	insert coupling with 8-pole for transducer connection
5	sensitivity correction



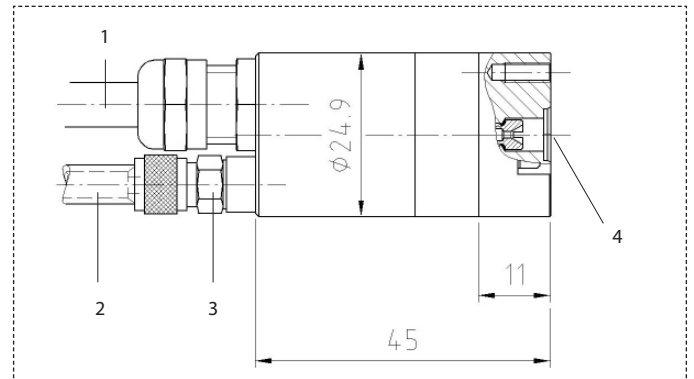
position	description
1	jacks for additional measurement output
2	standard fixation M5 x (14+s) DIN912

operating mode

With the pneumatic measurement tool (e.g. an airjet mandrel) connected to the SPW an air pressure proportional to the longitude that has to be measured (e.g. a bore diameter) is generated at the measuring point. This air pressure is captured by a pressure sensor and converted into a voltage output proportional to the longitude. A second pressure sensor monitors the fluctuations of the compressed air supply and readjusts correlatively the voltage output.

application area

The SPW is employed mainly for dynamic measurements. Its dimensions in association with its specific electronic guaranties a minimal setting time and a quick conversion into an output voltage of $\pm 10V$. The values can be displayed via a Multifunctional Measuring and Control Device (MSG) or a Computer.



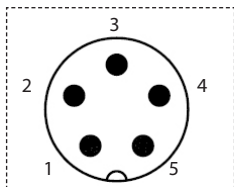
position	description
1	connecting cable 2 m with plug to electronic box
2	hose PU-4 (provided by the customer)
3	connector for compressed air
4	connector for pneumatic measuring tool

technical data SPW

device characteristics

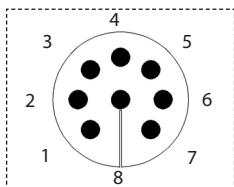
power supply	24 V DC / 24 VAC / 50 Hz
power input	1 VA
voltage output	±10V (± 15 V FSC)
linearity	≤ 0,5% of measuring range
operating area	18...36 V DC
power output	max. 5 mA
pressure	3,0 ± 0,1 bar
air consumption	ca. 2 m ³ /h with free blow out
requirements	oilfree, filtered
setting time	30 ms
transformation	100 mV/μm
ingress protection	IP 65
temperature	5 ... 60 °C (ambient temperature limit)
dimensions	2,05 x 3,86 x 2,52 inch / 52 x 98 x 64 mm

plug configuration



plug 5-pole

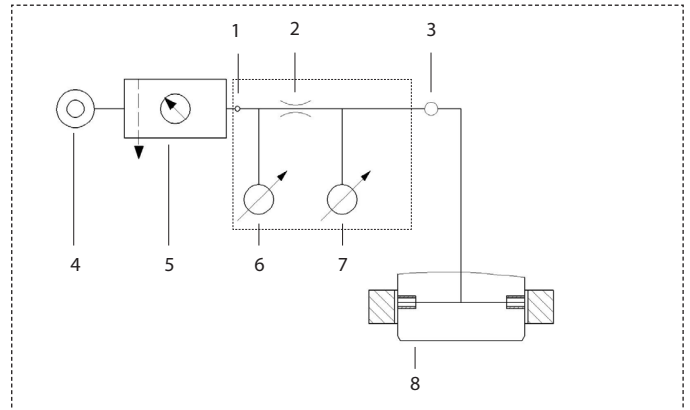
position	cable color	description
1	brown	measuring signal -
2	screen	electromagnetic shielding
3	green	measuring signal +
4	white	-12V input
5	yellow	+12V input



plug 8-pole

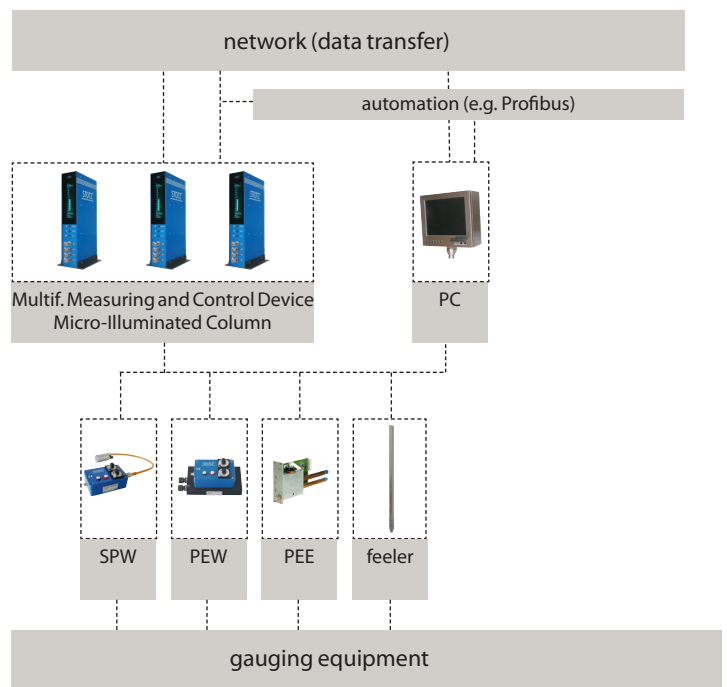
position	cable color	description
1	white	- 5.6V input
2	brown	measuring signal +
3	green	measuring signal -
4	yellow	+ 5.6V input
5	grey	measuring signal +
6	pink	measuring signal -
7	blue	free
8	red	electromagnetic shielding

measuring principle



position	description
1	input compressed air
2	nozzle
3	connector for measuring tool
4	compressed air source
5	service unit for compressed air
6	sensor 1
7	sensor 2
8	measuring tool

network



9 offices worldwide

USA

Air Gaging LLC

– sales- and service-branch

Germany

STOTZ Feinmesstechnik GmbH

– head office

– 4 sales- and service-offices

France

STOTZ France

– sales- and service-branch

Italy

STOTZ Italia

– sales- and service-branch

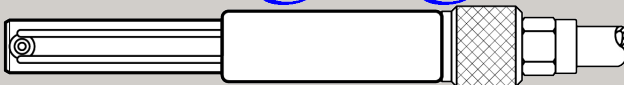
Czech Republic, Slovakia

STOTZ Slowakei

– sales- and service-branch



Air Gaging LLC



Air Gaging LLC

1050 N Riverside Drive., Suite B

Freeport, IL 61032

Phone (815) 242-0027

Fax (815) 242-0054

info@airgaging.com

www.airgaging.com