

The best **Swiss quality** and **performances** measuring electronic probes

PRETEC is leading and well established Swiss manufacturer supplying standard or customized products and systems in the dimensional metrology for more than forty years.

This brochure focuses mainly on the electronic measuring probes that can be characterized as being Swiss technology, quality and high precision. PRETEC products offer a unique compatibility and modularity concept with other probes manufacturers. PRETEC large product range will for sure covers your application needs.

A large choice of accessories and options are as well available whether as standard or customizable.

Our electronic probes features

- Compatible with other manufacturers (TESA, etc.)
- Φ 8h6 mm probe stainless steel carbide-chromed housing
- Axial or radial cable exit
- Measuring bolt guided on ball bearing (except 2952)
- Special roller bearing locks the probe head against torsion
- Mechanical or vacuum retraction
- Pre/Post-travel setup from the back of the probe
- Wide range of accessories available

PRETEC products **benefits**

Compatibility

PRETEC probes integrate 2 sensitivities: PRETEC or TESA/others manufacturers! This is a standard feature on all our probes. Free yourselves from one brand!

Force Setup

Inside spring replacement to change the measuring force to adapt to your application need is possible. This is an optional feature.

Travel Setup

The travels set up is adjusted from the exit cable side! This is our insurance that you can perform the adjustments in any situation!

Cable Exit

Our probes 2940/2924 allow axial or radial cable exit and avoid the hassles of ordering and stocking two types of probes. With a simple clip!

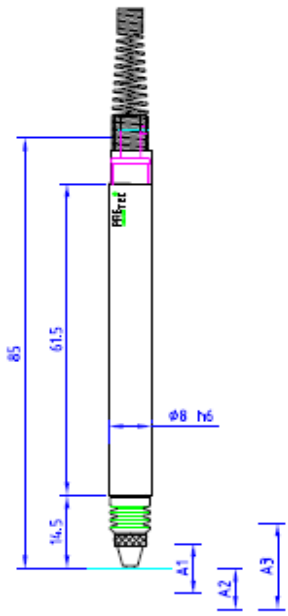
Cable Length

Cable length is up to your application need. Our standard length is 2 m, but supply of up to 20 m in PUR is possible. This is an optional feature.

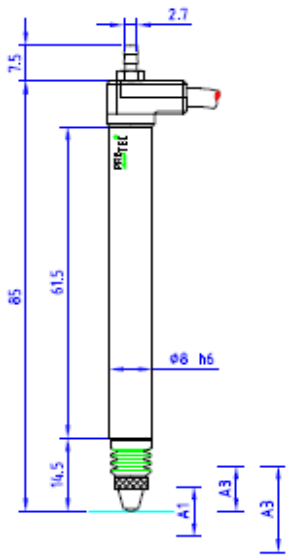
Accessories

Our accessories programme is substantial as shown here under. Tailor-made accessories are as well available. Just call us!

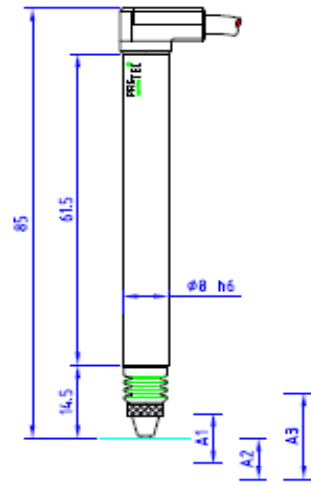
Product range



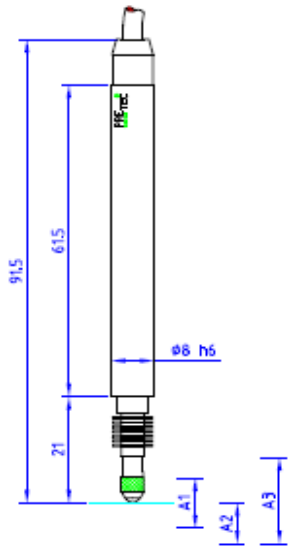
2940/2924



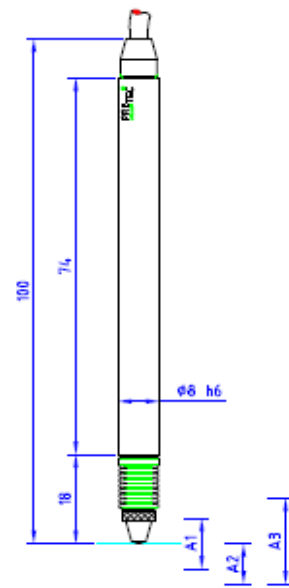
2922



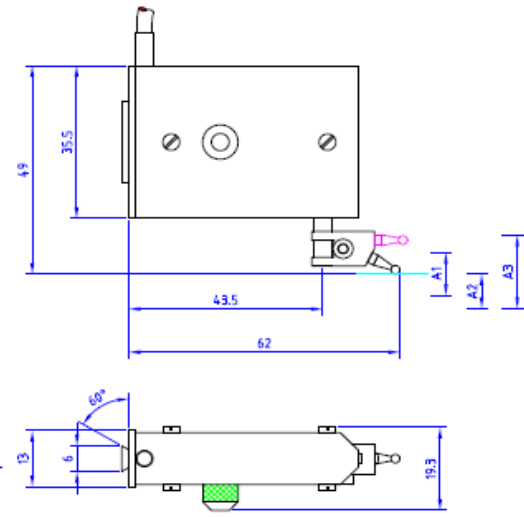
2928



2921



2970



2952

Product Specifications

Technical specifications										
Order Number	Measuring travel A1	Working Travel A2	Overall travel A3	Repeatability typical	Linearity	Hysteresis Error	Measuring force on zero point	Protection	Cable	Application
2921	±0.8 mm	0.8 – 1.1 mm Fix	3 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.6..1.0 N	IP66	2 m - Axial	Splash waterproof
2922	±1 mm	1.1 – 1.2 mm variable	3 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.45..0.75 N	IP64	2 m – Radial	Vacuum lift
2924	±1 mm	1.1 – 1.3 mm Fix	3 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.45..0.75 N	IP65	2 m – Axial	Splash waterproof
2928	±1 mm	1.1 – 1.3 mm variable	3 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.45..0.75 N	IP64	2 m – Radial	Universal
2929	±2 mm	1.1 – 1.3 mm variable	4.5 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.45..0.75 N	IP64	2 m – Radial and axial	Universal
2940	±2 mm	1.1 – 1.3 mm variable	4.2 mm	< 0.02 µm	±0.3 %	< 0.02 µm	0.45..0.75 N	IP64	2 m – Axial and radial	Universal
2970	±3 mm	3.5 mm Fix	7 mm	< 0.5 µm	±2 %	< 0.5 µm	0.8..1.2 N	IP64	2 m – Axial	Large measuring range
2952	±1 mm	1.05 – 1.1 mm Fix	2 mm	0.01 -0.05 µm	±0.3 %	< 0.02 µm	0..0.25 N	IP64	2m - Axial	Low measuring force

Product Specifications

Electrical Data sheet						
Nominal Sensitivity	Power Supply	Output resistive load	Typical input impedance	Typical output impedance	Maximum Power	Reference temperature
73.75 mV/V/mm	3 Vrms – 13 KHz	2000 Ω	260 Ω	1000 Ω	50 mVA	20 °C ±0.5

Environment		
Zero drift	Operating temperature	Maximum relative humidity
0.15 μm/°C	-10..+65 °C	80 %

Materials				
Housing	Contact point	Sealing bellows	Male cable connector	Cable*
Stainless steel carbide chromed	M 2.5 Carbide tungsten	Nitrile (Viton optional)	DIN 4532 without pin 6	2 m (available in size as long as 20 m in PUR as option)

*14 to 20 m cable length will affect the output electrical signal by a minimum of 2% loss.

Standard accessories product range

Contact points M2.5 for:
2920, 2921, 2922, 2928,
2929, 2940, 2970



Standard



Messerschneide
Couteau
Knife-edge



1910.210



Stift
Tige
Pin

1910.220



Hartmetall
Métal dur
Carbide ball

1910.230



Rolle
Rouleau
Roller bearing

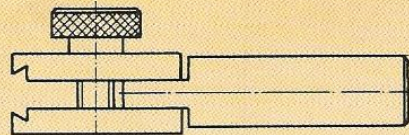
1910.240

**Cable extension with plugs
for all probes 1910.500:**

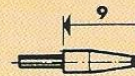
Each meter from
1 m (1910.500.1) to
20 m (1910.500.20)



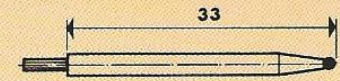
Accessories for 2952



1950.310



1960.200

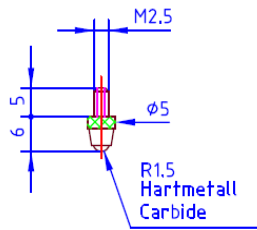


1960.210

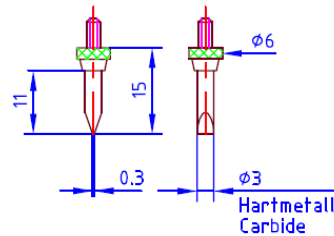
Customized ones are available!

Standard accessories product range

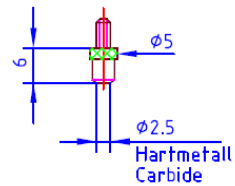
RT 130



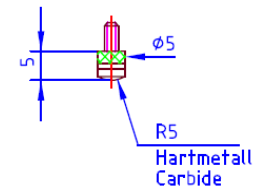
RT 131



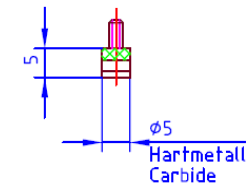
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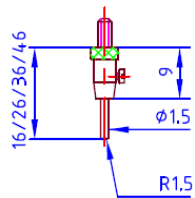
RT 133



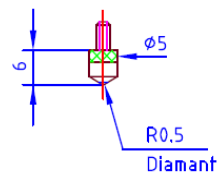
RT 134



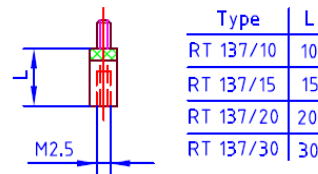
RT 135



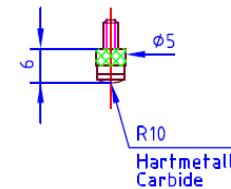
RT 136



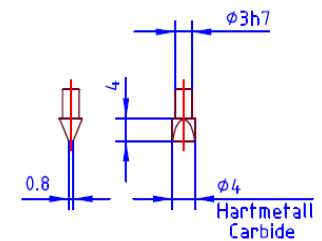
RT 137/...



RT 138



RT 140



Customized ones are available!

PRETEC products and services

Electronic comparators – Electronic measuring probes – Electronic bore gages – Air electronic converters – Air plugs – Measuring computers – SPC software – Custom design fixtures - Engineering

PFL Group

PRETEC is part of the Swiss Group PFL which includes PFL ANTRALUX, PRECEL, ECK-PFL and XACTOOLS Companies. All these sisters companies are specialized in putting together solution that combine a unique know how and long experience in projects in the fields of dimensional metrology, processes automation and engineering. Industries covered but not limited to are automotive, medical, watch, aviation, aerospace and food.

For more than 40 years, the Group PFL has continuously put a strong emphasize in using full synergies of the Group companies at the customer satisfaction.

PFL Group international sales network and business key partners are here to provide our customers with solution that are totally fulfilling their requirements. Please visit us at www.pfl.ch.



Standard and tailor-made solutions