

# **Inductive Probes** A wide range of Half Bridge gauging probes





The Half Bridge or LVDT inductive probes technology has been known for over 100 years and enables to offer a products range covering most of the needs in dimensional control.

Materials used to manufacture our probes leads to an unqualed robustness and longevity.

Probes are either spring or pneumatically actuated with Feather Touch (low tip force) and protected cable (stainless steel sheath) variants available.

#### Spring Push or Pneumatic actuation

In a conventional 'pencil' probe the tip pushes outwards under the influence of an internal spring. When installed in a fixture it is frequently required to design a mechanism to bring the probe into contact with the piece part being gauged.

In contrast, pneumatic operation allows the number of moving parts in a fixture to be reduced, resulting in improved reliability and reduced fixture costs. It also enables fast and safe automatic loading of components into a gauge when required.

#### Feather Touch Probes

Feather Touch probes have been designed especially to gauge delicate surfaces such as car windscreens, TV tubes, pharmaceutical bottles, electro-mechanical components and plastic parts. Whereas a traditional probe exerts a tip force of approximately 0.7N, the Feather Touch exerts a mere 0.18N when used in the horizontal position. This reduction is achieved by replacing the naturally elastic traditional gaiter with a close tolerance gland. On pneumatic versions the air leakage through the gland is restricted to less than 2.5 millilitres per second at 1 bar to minimise the possibility of contamination to the surface being gauged. Despite the low volume of air flow the bearing within the probe is constantly purged, avoiding the build up of dust (use of filtered air is recommended).

#### **Optionnal Protected cable**

As an option we can deliver our probes ref M802 and M804 with a cable protected by a stainless steel sheath.

#### Environmental protection

Our probes are all fitted with Viton<sup>®</sup> gaiters to exclude moisture and dust.

Viton<sup>®</sup> is chemically inert and does not degrade when subjected to cutting fluids.

Probes with the Feather Touch option have glands instead of gaiters, and therefore should only be used in a dry environment.

All gauging transducer cables feature a 2m polyurethane (PUR) sheath with a foil screen layer for better electrical screening. Improved mechanical properties include reduced 'memory' effect and superior resistance to scuffs and cuts.

Spring Push			(D) Metro		7
Product type	M801	M802(A)	M804(A)	ME810	ME820
Measurement range (mm)	± 0.5	±1	± 2	± 5	± 10
Pre-travel (mm)	0.15	0.15	0.15	0.15	0.15
Post- travel (mm)	0.35	0.35	0.85	0.85	0.85
Repeatability (µm)	< 0.15	< 0.15	<0.15	<0.15	<0.15
Accuracy (% of reading)	0.3%	0.3%	0.3%	0.3%	0.3%
Tip force (N ): Standard	0.7	0.7	0.7	0.7	0.7
Tip force (N) : Feather touch (T suffix)	-	0.3	0.3	0.3	-
Operating Temp. °C	+5 +80	+5 +80	+5 +80	+5 +80	+5 +80
Gaiter	Viton ®	Viton <sup>®</sup>	Viton <sup>®</sup>	Viton <sup>®</sup>	Viton ®
Cable	2m PUR	2m PUR	2m PUR	2m PUR	2m PUR
Body diameter	8h6	8h6	8h6	8h6	8h6
IP rating	IP65	IP65	IP65	IP65	IP65
Standard product ref	80001	80002	80003	80004	80005
Feather touch product ref (T suffix)	-	80022	80023	80024	80025
Armoured product ref (A suffix)	-	80202	80203	-	-

# **Pneumatic**

M802/P M804/P M810/P ME810-2/P ME820/P Product type Measurement range (mm) ± 2 ± 5  $\pm 10$ ± 1 ± 1 Pre-travel (mm) 0.15 0.15 0.15 0.15 0.15 Post- travel (mm) 0.35 0.35 0.85 0.85 0.85 Repeatability (µm) < 0.15 < 0.15 < 0.15 < 0.15 < 0.15 Accuracy (% of reading) 0.3% 0.3% 0.3% 0.3% 0.3% Tip force (N@0,4 / 1bar) 0.85 / 2.5 0.85 / 2.5 0.85 / 2.5 0.85 / 2.5 0.8 / 2.8 Operating Temp. °C +5 +80 +5 + 80+5 + 80+5 + 80+5 + 80Gaiter Viton <sup>®</sup> Viton <sup>®</sup> Viton <sup>®</sup> Viton <sup>®</sup> Viton <sup>®</sup> 2m PUR Cable 2m PUR 2m PUR 2m PUR 2m PUR Body diameter 8h6 8h6 8h6 8h6 8h6 IP65 IP rating IP65 IP65 IP65 IP65 Standard product ref 80102 80103 80104 80114 80105 Feather touch product ref (T 80122 80122 80124 80125 suffix)

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## Extension cables :

Cable extension can be used to increase the distance from the probe to the measuring device. Our standard version is a 2m cable. Others length are available on demand.

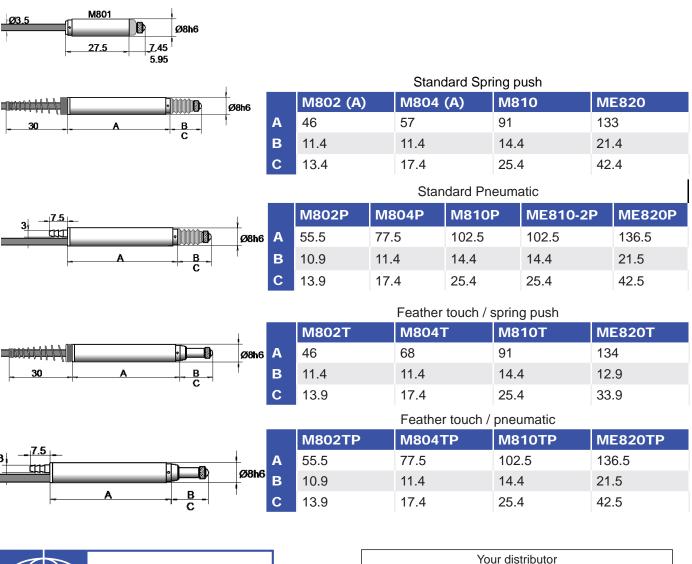
# Gaiters :

Replacement gaiters for analogue and digital gauging probes and linear encoders. Gaiters are in Viton that is chemically inert and does not degrade when subjected to cutting fluids.

### Springs :

Replacement springs for analogue gauging probes







Your distributor	
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