



TESA INDUCTIVE PROBES WITH DETACHABLE CABLE

TESA INDUCTIVE PROBES WITH DETACHABLE CABLE allow users to maintain their measuring stations quicker and cheaper.

By unscrewing the probe from its cable, changing operations are easier and take less time and resources.

Particularly suitable for multi-gauging installations, the resistant and flexible cable combined with a robust connector allows the use of TESA probes in harsh environments.



UNIQUE FEATURES:

- DETACHABLE CABLE WITH ROBUST CONNECTOR
- EASY & QUICK MAINTENANCE BY REMOVING THE PROBE ONLY
- FLEXIBLE AND RESISTANT CABLE
- INTERCHANGEABLE WITH TESA INTEGRATED CABLE PROBES



SAVE UP TO 50%* OF YOUR MAINTENANCE TIME WITH EASY DETACHABLE PROBES!

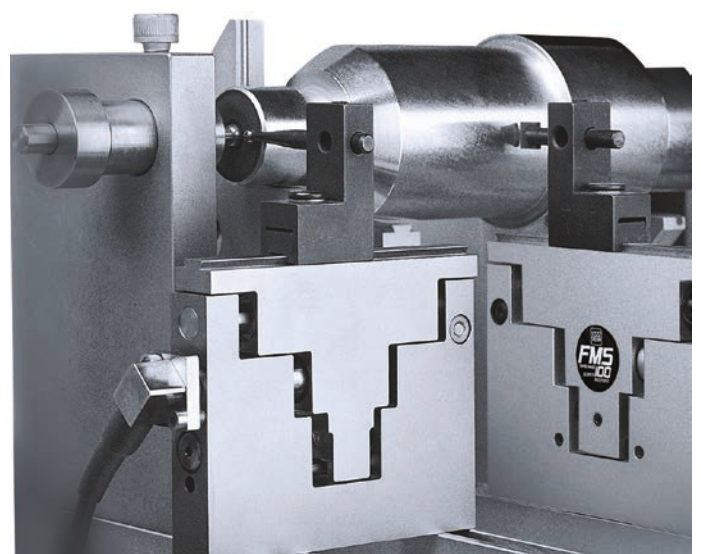
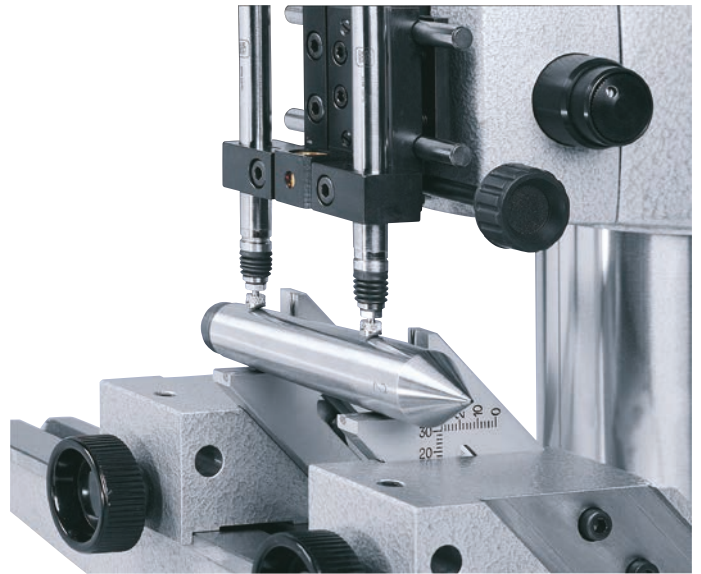
For more than 40 years, TESA has been manufacturing inductive probes that are well-known for their remarkable repeatability ($0,01 \mu\text{m}$) and low hysteresis ($0,02 \mu\text{m}$).

Incorporating this same reliable technology, TESA now extends its range, offering detachable cable probes.

Applications with TESA probes are now easier to set up and maintain, because it is possible to disconnect the cable from the probe.

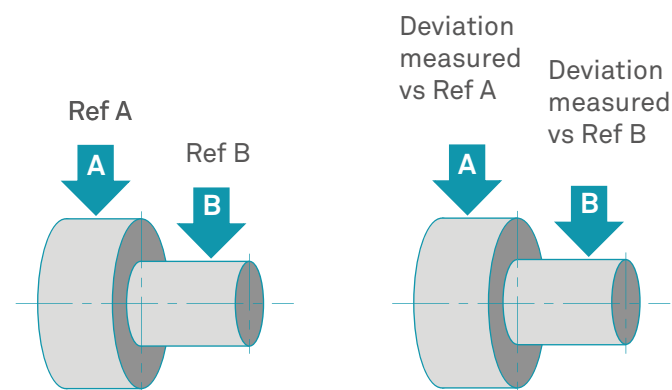
The size (length and diameter) of the probes is the same as the integrated cable versions.

TESA detachable inductive probes are also available in sets of 10.



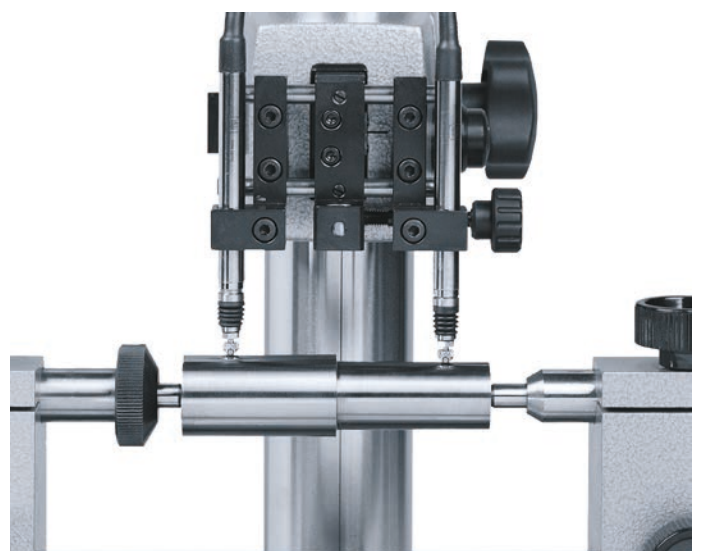
MULTI-GAUGING APPLICATION

Detachable TESA probes are particularly suitable for multi-gauging applications, where several probes are used to measure a piece compared to a reference (gauge block, setting ring, master).



Step 1:
Setting of the references
with master part

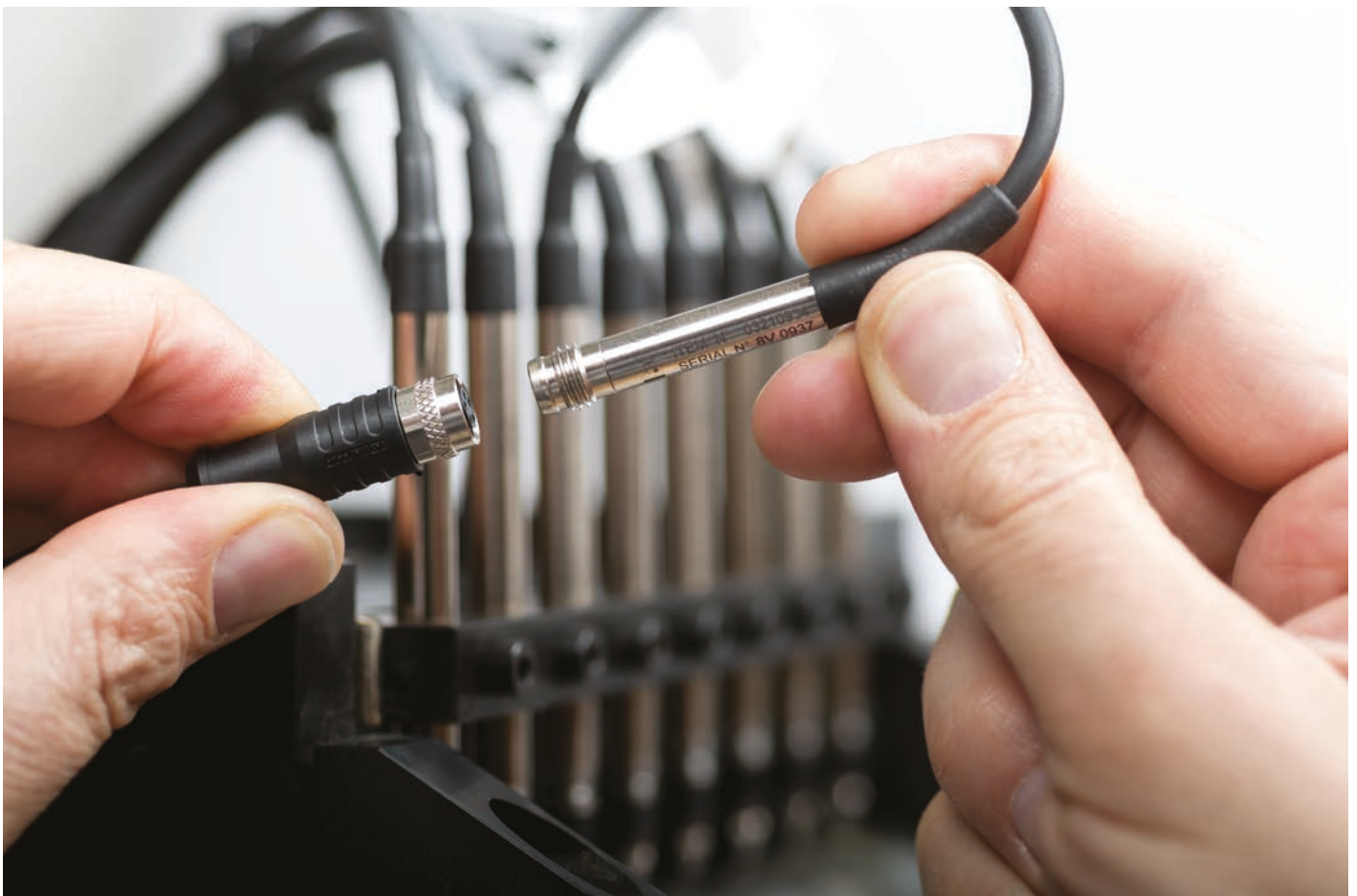
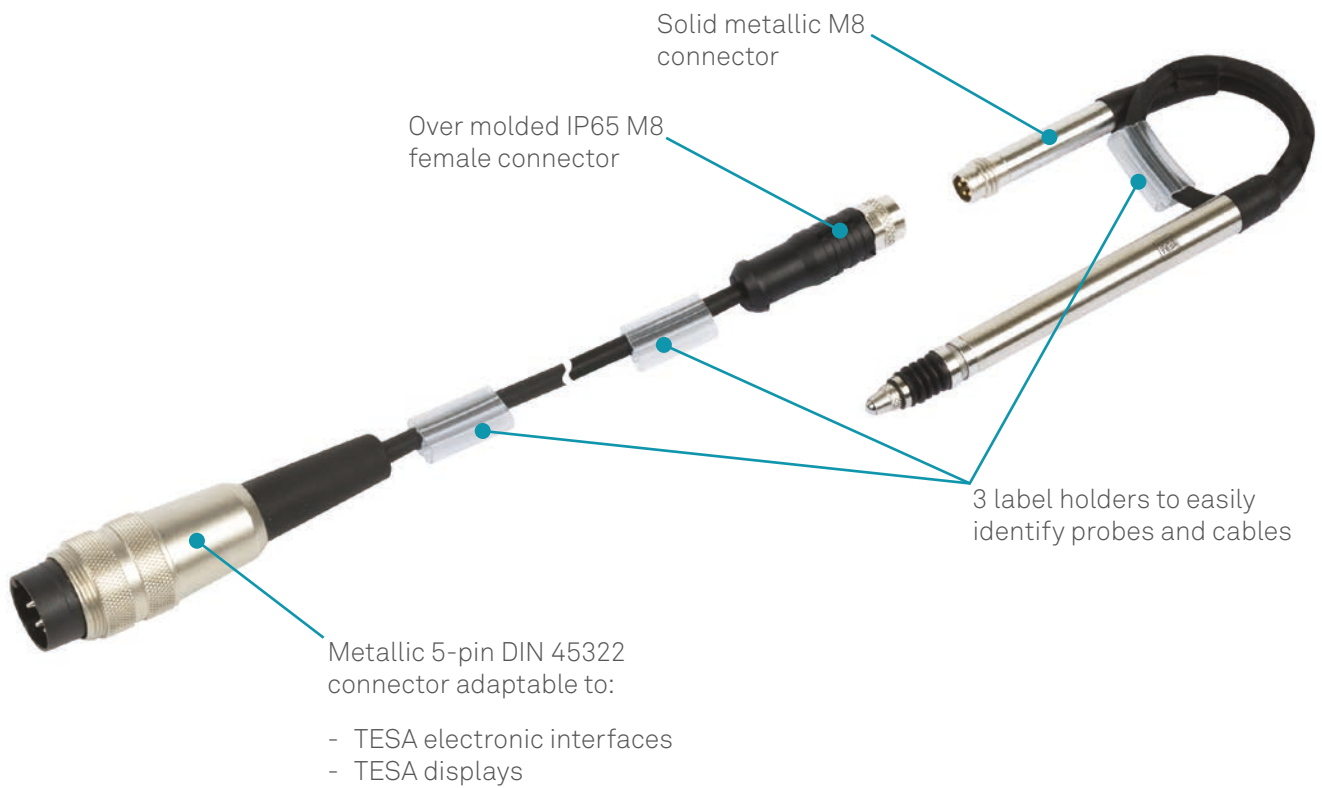
Step 2:
Measure of the deviation
vs master part



*Calculation made on average dismounting time

FLEXIBLE AND ROBUST CABLE:

- Min. 5 mm radius
- Oil resistant (according to VDE 0472 part. 803 method B)
- Hydrolysis resistant

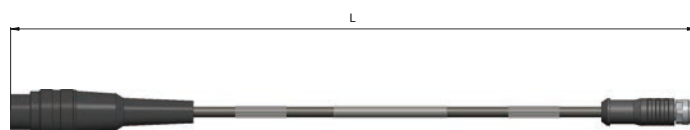


	Designation	Part number Single unit	Part number Set of 10 units	Measuring range (mm)	Measuring bolt travel (mm)	Cable output	Measuring bolt retraction	Sealing bellow	Nominal measuring force (N)
	GT 21-I Det	03210934	03290233	+/- 1	4,3	Axial	Mechanical	Nitrile	0,63
	GT 22-I Det	03210944	03290234	+/- 1	4,3	Radial	Mechanical/ vacuum	Nitrile	0,63
	GT 27 Det	03230127	03230227	+/- 2	10,3	Axial	Mechanical	Viton	0,63
	GT 28 Det	03230126	03230226	+/- 2	10,3	Radial	Mechanical/ vacuum	Viton	0,63
	GT 282 Det	03230153	03290241	+/- 2	10,3	Radial	Pneumatic pressure	Viton	1
	GT 282-A Det	03230169	03290273	+/- 2	10,3	Radial	Pneumatic pressure	-	0,85
	GT 61 Det	03230141	03290253	+/- 5	10,3	Axial	Mechanical	Viton	0,9
	GT 62 Det	03230142	03290235	+/- 5	10,3	Radial	Mechanical/ vacuum	Viton	0,9
	GT 622 Det	03230155	03290242	+/- 5	10,3	Radial	Pneumatic pressure	Viton	2
	GT 622-A Det	03230171	03290275	+/- 5	10,3	Radial	Pneumatic pressure	-	1
	GTL 222 Det	03230154	03290240	+/- 1,5	4,3	Radial	Pneumatic pressure	Viton	1,2
	GTL 222-A Det	03230163	03230271	+/- 1,5	4,3	Radial	Pneumatic pressure	-	1,2
	FMS 100 Det	03230119	-	+/- 2	5,8	Axial	Air pressure (optional)	-	2
	FMS 102 Det	03230128	-	+/- 2	5,8	Radial	Air pressure (optional)	-	2

*for an amplitude of 10% to the last value of the measuring range

COMPATIBLE CABLES

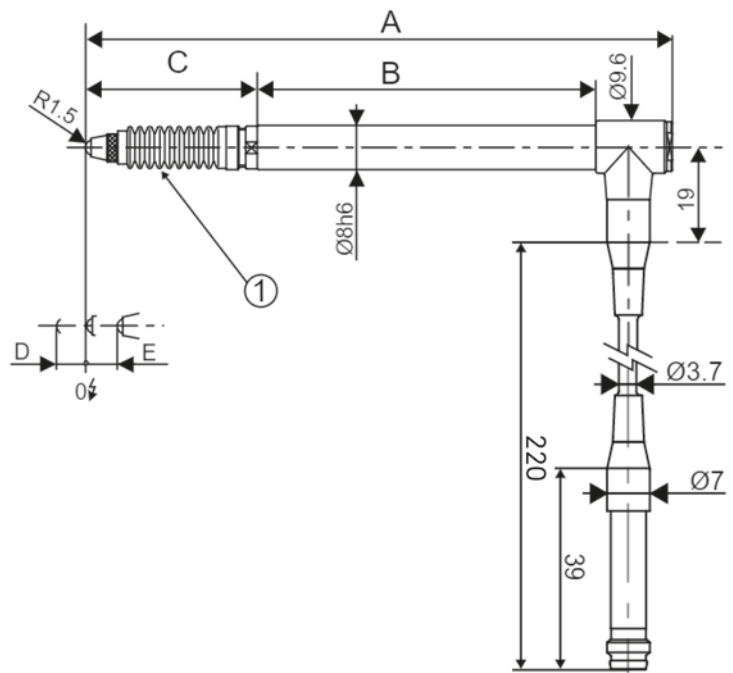
L (m)	Part number single unit	Part number set of 10 units
2	03240302	03240303
5	03240305	-
10	03240310	-



Mobile weight (g)	Mechanical limit Max. frequency * (Hz)	Repeatability (μm)	Max. permissible error for deviations in linearity (L in mm) (μm)	Hysteresis (μm)	Protection level (IP XX)	Datasheet N°	Equivalence with integrated cable
6	60	0,01	$0,2+3 \cdot L^3$	0,02	65	03200637	03210904
6	60	0,01	$0,2+3 \cdot L^3$	0,02	65	03200638	03210924
8	60	0,05	$0,2+3 \cdot L^3$	0,05	65	03200639	03230027
8	60	0,05	$0,2+3 \cdot L^3$	0,05	65	03200640	03230026
8	60	0,05	$0,2+3 \cdot L^3$	0,05	65	03200642	03230053
8	60	0,05	$0,2+3 \cdot L^3$	0,05	50	03200645	03230069
8	60	0,05	$1+4 \cdot L$	0,05	65	03200635	03230041
8	60	0,05	$1+4 \cdot L$	0,05	65	03200636	03230042
8	60	0,05	$1+4 \cdot L$	0,05	65	03200643	03230055
8	60	0,05	$1+4 \cdot L$	0,05	50	03200646	03230071
6	60	0,015	$0,2+2,4 \cdot L^2$	0,02	65	03200641	03230054
6	60	0,015	$0,2+2,4 \cdot L^2$	0,02	65	03200644	03230063
110	25	0,5	$0,2+3 \cdot L^3$	0,5	50	03200647	03230019
110	25	0,5	$0,2+3 \cdot L^3$	0,5	50	03200648	03230028

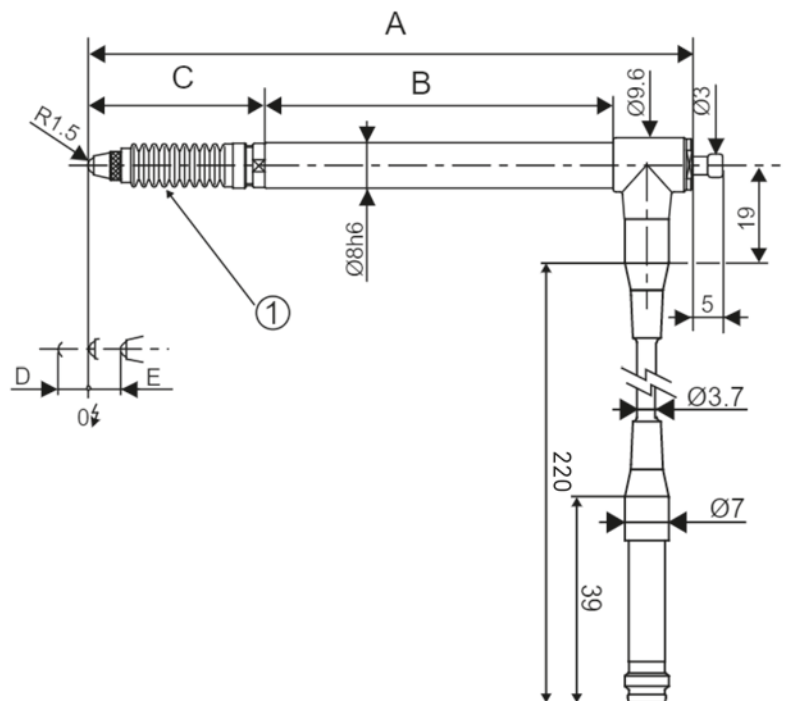
SIZE DRAWINGS

Probes with MECHANICAL or VACUUM measuring bolt retraction
GT22 Det / GT28 Det / GT62 Det



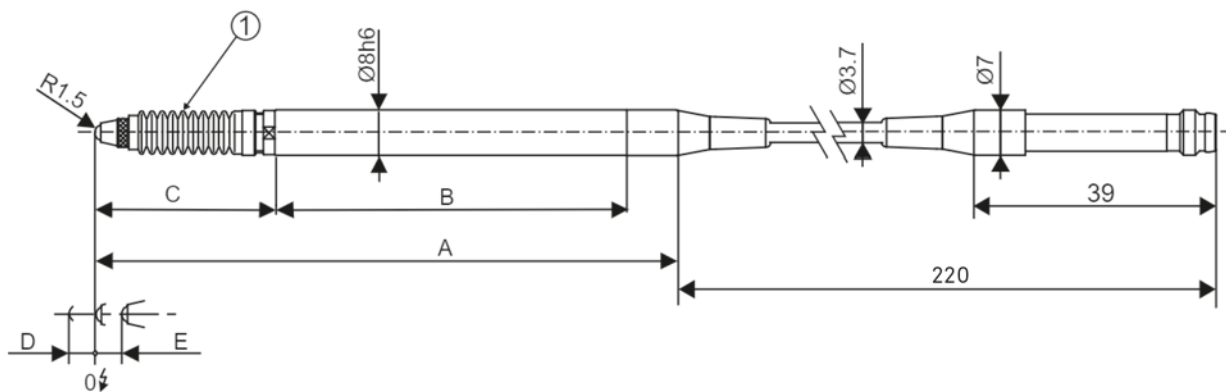
Designation	Part number	①	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
GT22 Det	03210944	Nitrile	81,5	47	20,5	-1,2	+3
GT28 Det	03230126	Viton	108,4	62,5	31,9	-1,2	+9
GT62 Det	03230142	Viton	110,7	67,2	29,5	-5	+5

Probes with activation of the measuring bolt by PNEUMATIC PRESSURE
GTL222 Det / GT282 Det / GT622 Det



Designation	Part number	①	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
GTL222 Det	03230154	Viton	81,5	47	20,5	-1,5	+1,5
GTL222-A Det	03230163	-	81,5	47	20,5	-1,5	+1,5
GT282 Det	03230153	Viton	108,4	62,5	31,9	-2,2	+8
GT282-A Det	03230169	-	108,4	62,5	31,9	-2,2	+8
GT622 Det	03230155	Viton	110,7	67,2	29,5	-5	+5
GT622-A Det	03230171	-	110,7	67,2	29,5	-5	+5

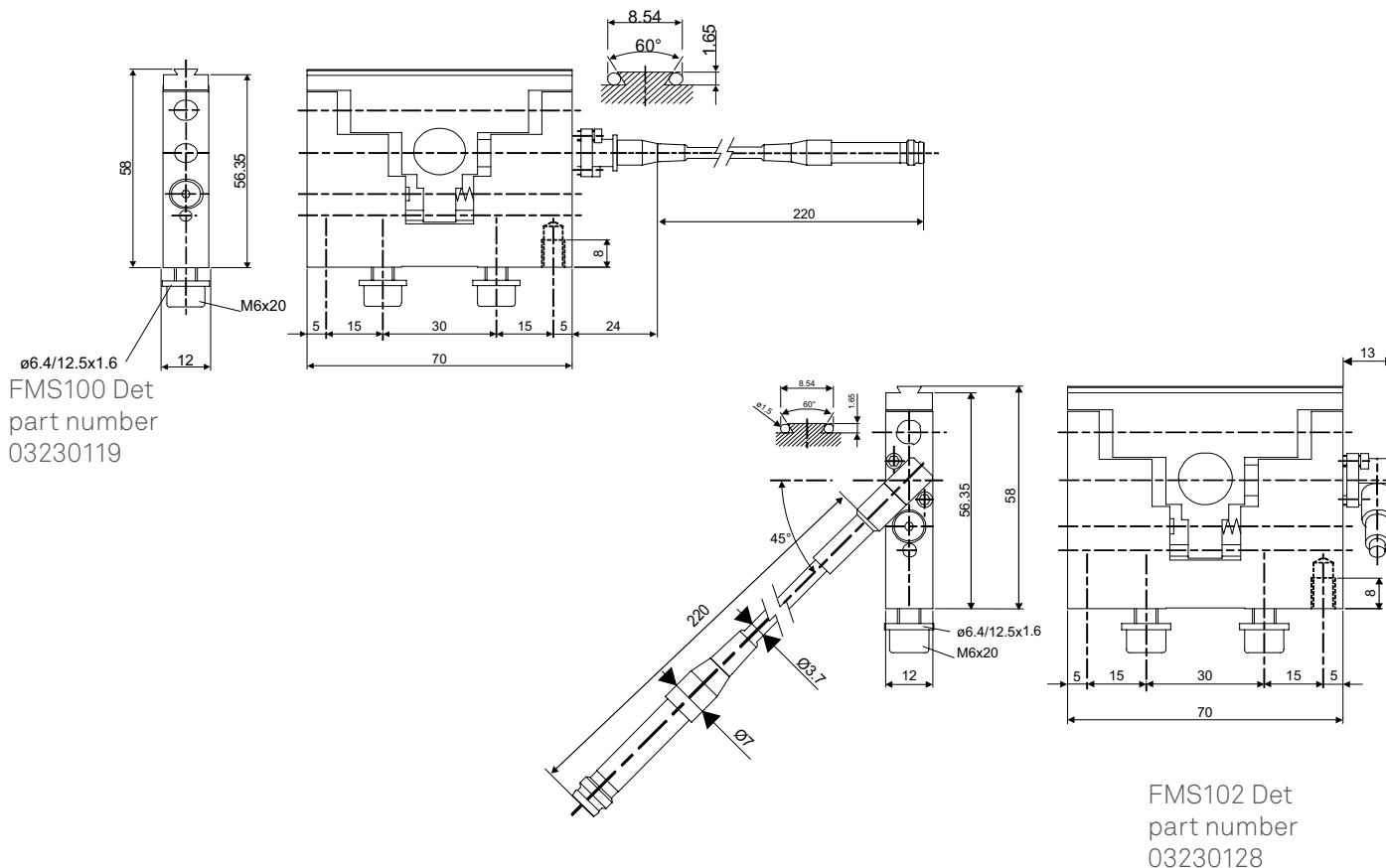
Probes with MECHANICAL measuring bolt retraction
 GT21 Det / GT27 Det / GT61 Det



Designation	Part number	①	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
GT21 Det	03210934	Nitrile	92	61,5	20,5	-1,2	+3
GT27 Det	03230127	Viton	117,9	76,5	31,9	-1,2	+9
GT61 Det	03230141	Viton	120	81	29,5	-5	+5

Probes with retraction by AIR PRESSURE (optional)
 FMS100 Det / FMS102 Det

Dimensions in mm



ACCESSORIES

ELECTRONIC INTERFACE UNITS

Electronic interfaces to manage and synchronize inductive probes and allow data transfer to a computer or an automatic inspection machine.

TESA PROBE INTERFACE BOXES - BPX SERIES

A modular system available in 2 versions (BPX and TWIN-STATION) for the conversion of measured signals to digital values and transmission of these values to a computer. These units are key components for multigauging inspection fixtures for centralised process control systems.

Signal inputs – 1 to 4 TESA standard half-bridge probes.

Signal output – digital, RS232 through USB port.

- Direct connection to the computer's USB port.
- Stand Alone operating mode: program routine via the computer, enabling the BPX box to execute a simple measuring function with classification signal relay via connector Sub-D 15P.
- Optimal adaptation for various measuring applications, for example, connection of 16 probes thanks to serial USB connections on 4 BPX boxes.
- Increased functional reliability and high precision.
- Increased immunity to negative environmental effects, whether of electrical origin or provoked by liquid and solid contaminants.
- BPX is compatible and can be used with TWIN-STATION.
- TIS interface software is included in the BPX (part number 05030010) for display of measured values. Possibility of indicating tolerance values, and simple functions +A, -A, +A+B, +A-B, export of values to a .csv file.



BPX Front



BPX Rear



TIS software included in the BPX supply

Part number	Number of probe inputs	Connector
05030010	4	Sub-D 15 p/f (for In/Out signals)

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About TESA

For more than 75 years, TESA has distinguished itself in the market through its excellent products, its unique expertise in micromechanics and precision machining as well as its proven experience in dimensional metrology.

The TESA brand is the global market leader in the field of height gauges and a pioneer thanks to its wide range of instruments, including callipers, micrometers, dial gauges, lever-type dial test indicators and inductive probes.

TESA is a true benchmark for the inspection of incoming goods, as well as for production workshops and quality assurance laboratories.

About Hexagon Manufacturing Intelligence

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.