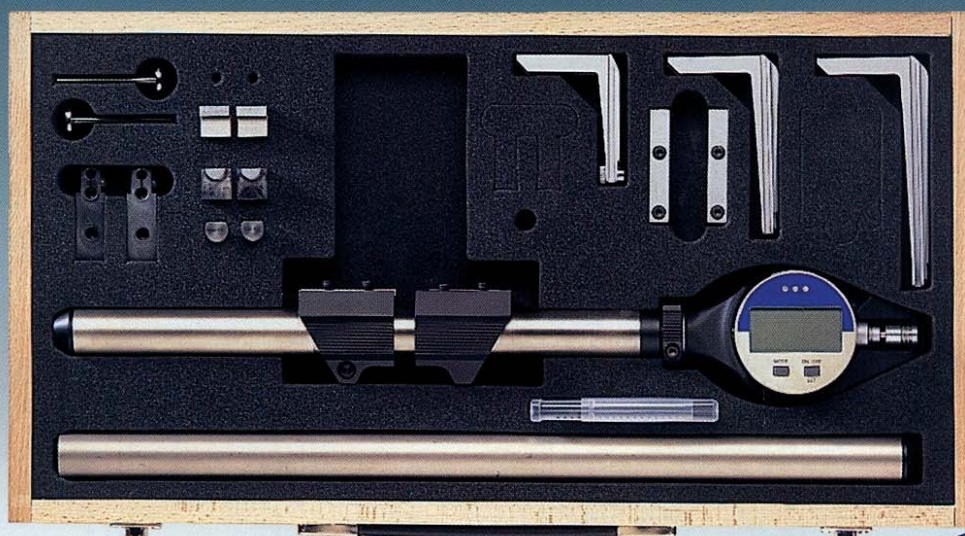


The new Bowers Universal Measuring gauge has been designed for measurement of internal and external dimensions such as inside & outside diameters, internal & external threads, grooves, tapers, splines, shallow spigots and recess diameters etc. The large variety of accessories can be interchanged to enable the measurement of virtually any type of work piece.

La nouvelle Jauge de Mesure Universelle de fabrication Bowers a été conçue pour le mesure des côtes intérieur et extérieur, à savoir: diamètres internes et externes, filetages intérieurs et extérieurs, gorges, conicité, cannelures, petits emboîtements, diamètres en retrait etc... Une grande gamme d'accessoires interchangeables permet pratiquement toutes les mesures.

Das neue Universal-Messgerät der Firma Bowers wurde für sowohl Innen als auch Außenmessungen konzipiert, z. B.: Innen- und Außen-Durchmesser, Nuten, Kegelförmigkeit, Innen- und Außenverzahnungen, schmale Ansätze/ Zentriersitze und Einstiche etc. Die Messung von fast allen Werkstücksarten wird durch reichhaltiges Zubehör ermöglicht.



- Internal and external measurement
- Large measuring range 0-3000mm (0-118") – longer lengths available
- Constant Measuring Force
- Digital or mechanical readout display
- Large range of accessories for standard measurement of threads, grooves, splines, diameters, lengths, shallow spigots and recess diameters etc
- Anvil travel of 15mm
- Special anvil designs available P.O.A.

- Mesures internes et externes
- Grande gamme de mesure (de 0 à 3000mm)
- Pression de mesure constante
- Comparateur analogique ou à affichage digital
- Large gamme d'accessoires pour le mesure standard de filetages standards, gorges, cannelures, diamètres, longueurs, emboîtements de petites profondeurs diamètres en retrait etc
- Course de mesure de touche de 15mm
- Touches spéciales disponibles - prix sur demande

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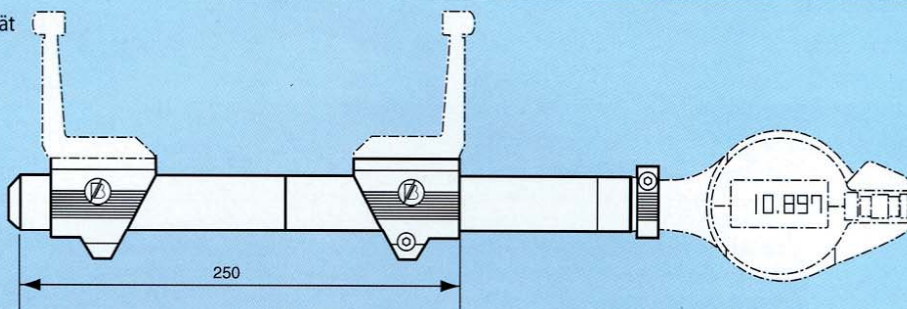
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Région Sud Ouest

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Email: jlouismenegon@aol.com
www.menegon-metrologie.com

Standard Gauge/ Jauge Standard/ Universal-Grundgerät

Model No	Measuring Range Internal	Measuring Range External
TGU 1000	30-250mm (1.20-10.00")	0-715mm (0-8.50")



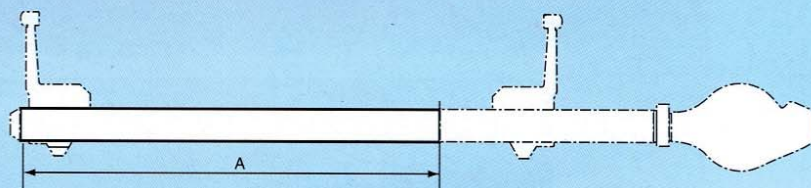
Extensions/ Rallonges/ Verlängerungen

A	Model No	Range Internal	Range External
150	TGUA 033	30-400mm (1.2-15.00")	0-365 (0-14.0")
500	TGUA 032	30-750mm (1.2-29.0")	0-715 (0-28.0")

Intermediate & additional lengths can be made up by using 150 or 500mm extensions

Rallonges supplémentaires de longueur 150 et 500mm disponibles

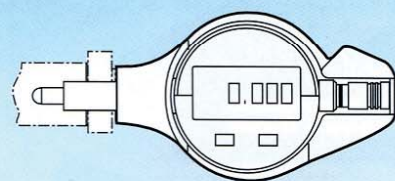
Verlängerungen Länge 150 und 500mm auch erhältlich



Digital Indicator & protective shroud

Comparateur à affichage digital avec protection anti-choc

Digital-Anzeige mit Schutzkappe

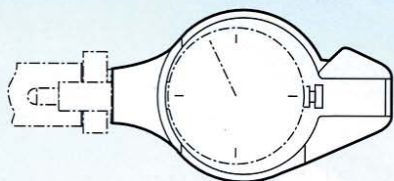


Model No
TGUA 001

Protective shroud for dial/ digital indicator

Comparateur analogique avec protection anti-choc

Schutzkappe für Analog-Messuhr

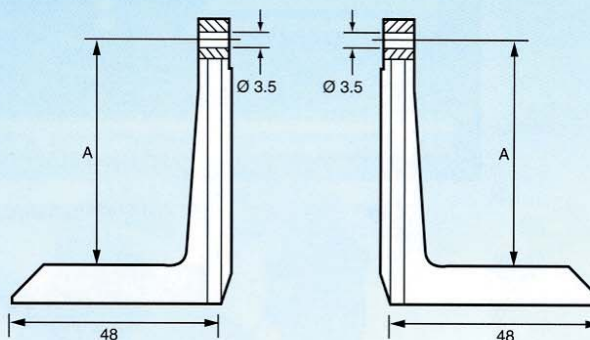


Model No
TGUA 002

Measuring Arms (reversible for inside/outside diameters)

Bras de mesure (réversibles pour mesure diamètres internes/externes)

Messarme (umkehrbar zur Innen-Außenmessung)

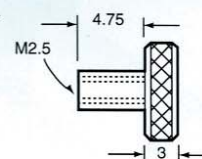


A	Model No
50	TGUA 006
75	TGUA 007
100	TGUA 008

Clamping Insert

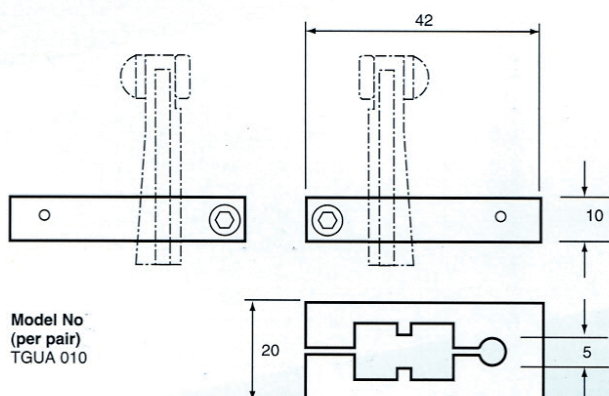
Insert de serrage

Spanneinsatz

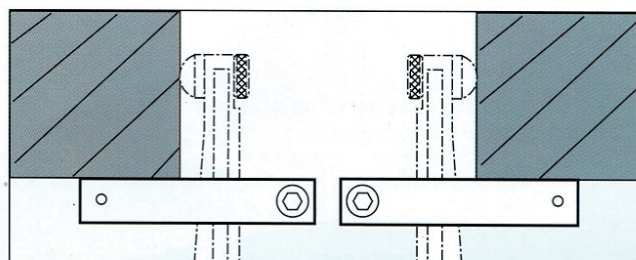


Model No
TGUA 003

Adjustable depth stops for measuring arms/ Arrêt de profondeur pour bras de mesure/ Tiefenanschläge für Meßarme



Model No
(per pair)
TGUA 010



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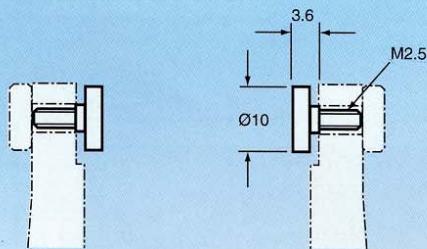
Contacts for use with measuring arms

Touches à utiliser avec les bras de mesure

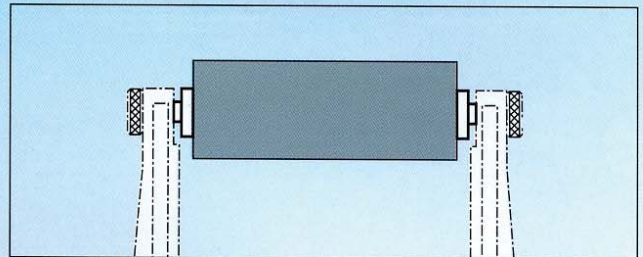
Messeinsätze zur Verwendung mit den Messarmen

Flat for outside diameters/ lengths

Touches plates pour diamètres externes / mesures de longueurs
Messeinsätze für Außen-Durchmesser / Längen

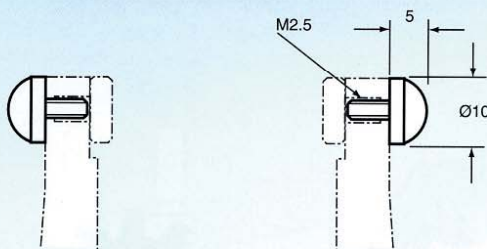


Model No
TGUA 004

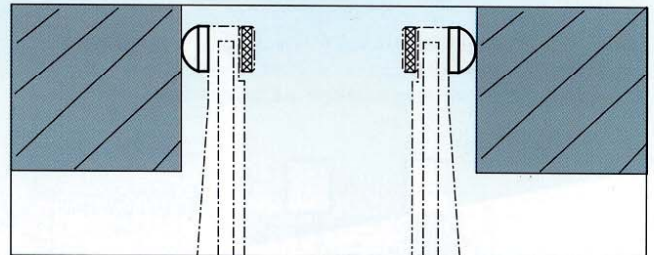


Spherical for inside diameters

Touches sphériques pour diamètres internes
Ballige Messflächen zur Innenmessung

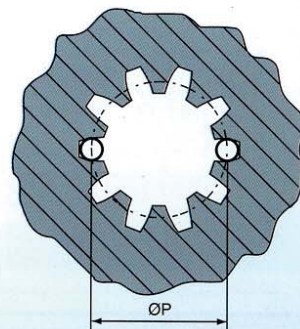
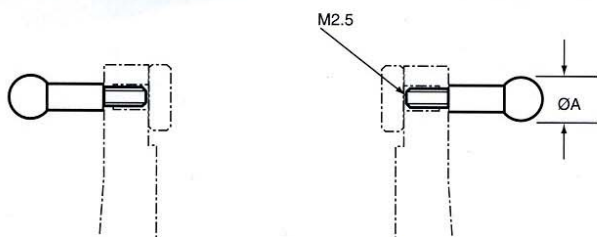


Model No
TGUA 005

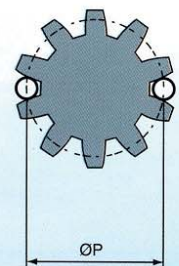


Ball Anvils for measurement of Pitch diameter (P) on internal or external gears/ splines

Touches à billes pour le mesure de diamètres de pas sur cannelures internes / externes
Kugelmesseinsätze zur Messung des Flankendurchmessers auf innen / Außenverzahnungen



Internal/ Interne/ Innen



External/ Externe/ Außen

Module	Nominal Ball Dia 'A'	Model No	DP	Nominal Ball Dia 'A'	Model No
0.6	1.0	TGUA 100	40	0.043	TGUA 150
0.7	1.25	TGUA 101	36	0.049	TGUA 151
0.9	1.5	TGUA 102	32	0.054	TGUA 152
1.0	1.75	TGUA 103	24	0.071	TGUA 153
1.25	2.0	TGUA 104	20	0.089	TGUA 154
1.5	2.5	TGUA 105	16	0.108	TGUA 155
1.75	3.0	TGUA 106	12	0.144	TGUA 156
2.0	3.5	TGUA 107	10	0.177	TGUA 157
2.5	4.0	TGUA 108	8	0.216	TGUA 158
2.75	4.5	TGUA 109	6	0.295	TGUA 159
3.0	5.0	TGUA 110	5	0.354	TGUA 160
3.25	5.5	TGUA 111	4	0.394	TGUA 161
3.5	6.0	TGUA 112			
4.0	7.00	TGUA 113			
5.0	9.00	TGUA 114			
6.0	10.00	TGUA 115			

Other sizes available P.O.A./ Autres dimensions disponibles sur demande/ Andere Meßgrößen auf Anfrage erhältlich

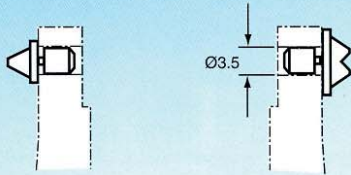
Jean-Louis MENEGON

Représentant & conseiller Sud Ouest

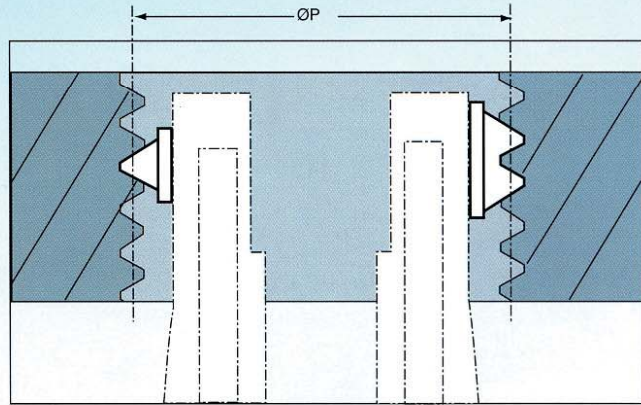
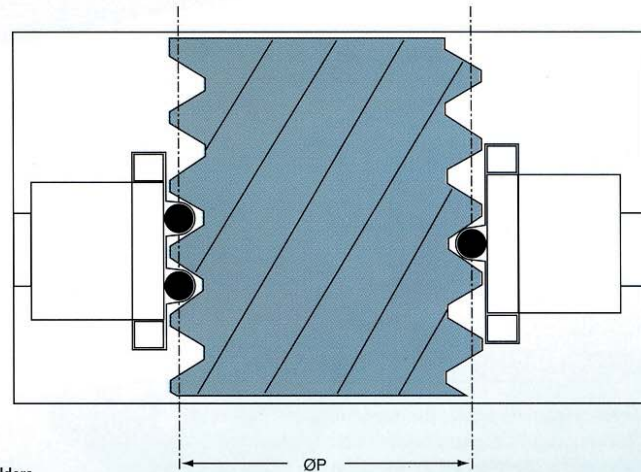
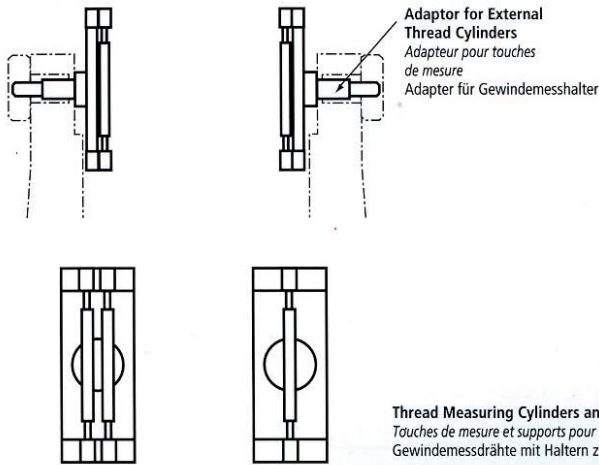
Tél: 06.76.08.96.83

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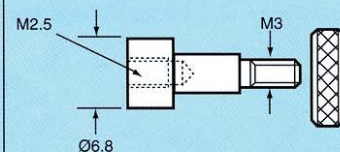
Thread anvils for Internal Pitch diameter*Touches pour mesure de diamètres de filetages internes**Gewindemesseinsätze zur Messung von Innengewinden*

Metric Pitch 60°	Model No (per set)	Unified 60° T.P.I.	Model No (per set)	Whitworth 55° T.P.I.	Model No (per set)
0.4-0.45	TGUA 30I	64.0	TGUA 40I	60-48	TGUA50I
0.5-0.6	TGUA 31I	56-44	TGUA 41I	40-32	TGUA51I
0.7-0.8	TGUA 32I	40-32	TGUA 42I	28-22	TGUA52I
1.0-1.25	TGUA 33I	28-20	TGUA 43I	20-16	TGUA53I
1.5-1.75	TGUA 34I	18-14	TGUA 44I	14-11	TGUA54I
2.0-2.5	TGUA 35I	13-10	TGUA 45I	10-8	TGUA55I
3.0-3.5	TGUA 36I	9.0-7.0	TGUA 46I	7-6	TGUA56I
4.0-5.0	TGUA 37I	6.0-5.0	TGUA 47I	5-4	TGUA57I
5.5-6.0	TGUA 38I	4.5-4.0	TGUA 48I	3.5-2.75	TGUA58I
				2.625-2	TGUA59I

**Thread Cylinders & Holders for External Threads***Touches de mesure et supports pour mesure de filetages externes**Gewindemessdrähte mit Haltern zur Außengewindemessung***Thread Measuring Cylinders and Holders***Touches de mesure et supports pour mesure de filetages**Gewindemessdrähte mit Haltern zur Außengewindemessung*

Metric Pitch 60° mm	P Value in mm	Unified 60° T.P.I.	P Value in inches	55° Whitworth T.P.I.	P Value in inches	Cylinder Diameter	Model No (per set)
.25-.30	0.0465-0.0899	—	—	80	.00421	0.170mm (.00669")	TGUA 30E
—	—	80	.00315	72	.00438	0.195mm (.00768")	TGUA 31E
.35	0.0831	72	.00337	64	.00491	0.220mm (.00866")	TGUA 32E
.40	0.0866	64	.00333	60	.00500	0.250mm (.00984")	TGUA 33E
.45	0.0900	60	.00354	56	.00520	0.275mm (.01083")	TGUA 34E
.50	0.0937	56	.00354	52	.00540	0.300mm (.01181")	TGUA 35E
.60	0.1847	48	.00485	40	.00864	0.335mm (.01319")	TGUA 35E
.65	0.1730	44-40	.00433-.00630	36	.00879	0.390mm (.01535")	TGUA 36E
.70-.75	0.1514-0.1946	36-32	.00615-.00915	32	.00914	0.455mm (.01791")	TGUA 37E
.80-.90	0.1628-0.2494	28-26	.01006-.01244	28-26	.00998-.01261	0.530mm (.02087")	TGUA 38E
1.0	0.2459	24	.01167	24-22	.01157-.01520	0.620mm (.02854")	TGUA 39E
1.25	0.3576	20	.01476	20-19	.01476-.01728	0.725mm (.02854")	TGUA 40E
1.5	0.4039	18-16	.01287-.01889	18-16	.01228-.01895	0.895mm (.03524")	TGUA 41E
1.75	0.4155	14-13	.01855-.02331	14	.01811	1.100mm (.04331")	TGUA 42E
2.0	0.3820	12-11	.01902-.02558	12-11	.01809-.02536	1.350mm (.05315")	TGUA 43E
2.5	0.5151	10-9	.02164-.03126	10-9	.02033-.03100	1.650mm (.06496")	TGUA 44E
3.0-3.5	0.5481-0.9809	8-7	.02754-.04301	8-7	.02598-.04313	2.050mm (.08071")	TGUA 45E
4.0-4.5	0.9141-1.3472	6	.04395	6	.04306	2.550mm (.10039")	TGUA 46E
5.0-5.5	1.1303-1.5631	5-4.5	.04722-.06647	5-4.5	.04525-.06659	3.200mm (.12598")	TGUA 47E

Adaptor for External Thread
Cylinders or M2.5 Contact
Tips/4-48 Contact Tips
Adapteur pour supports de
touches de mesure de filetages
externes, ou touches M2.5/4-48
Adapter für Außengewinde -
M2.5 / 4-48



Model No
M2.5 TGUA 017
4-48 TGUA 018

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Sud Ouest

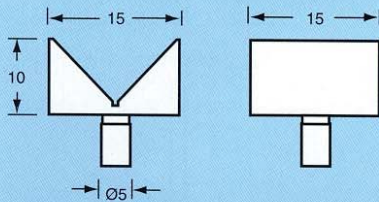
Tél: 06.76.08.96.83

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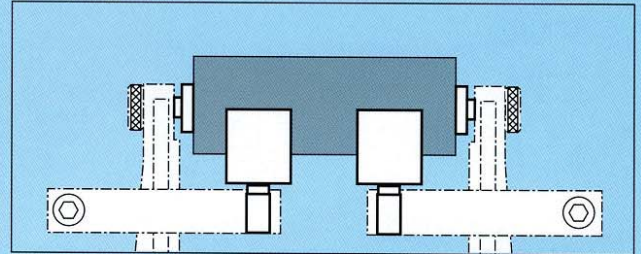
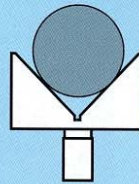
Other sizes available P.O.A./ Autres dimensions disponibles sur demande/ Andere Maßgrößen auf Anfrage erhältlich

Vee support for length measurement

Support en V pour mesure de longueurs
Abstütz-Prisma zur Längenmessung

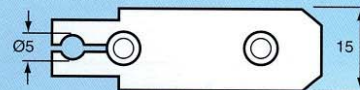
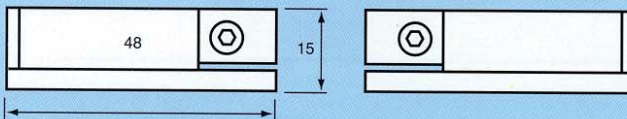


Model No. ☐
TGUA 022

**Mounting attachment for use with the following anvils**

Support à utiliser avec les touches suivantes:

Aufnahmestück für die folgenden Messeinsätze

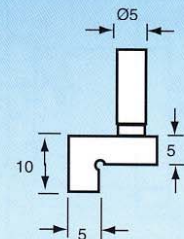


Model No
TGUA 009

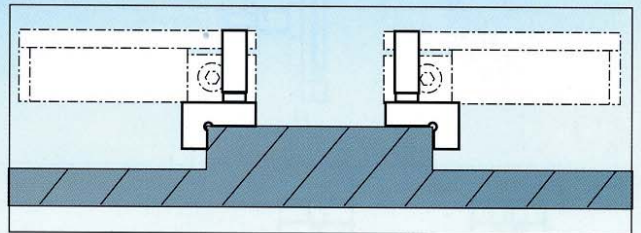
Shoulder anvils flat outside spigot diameter

Touches épaulées pour emboîtements extérieurs plats

Schultermesseinsätze zur Messung von Außen-Zentriersitzen

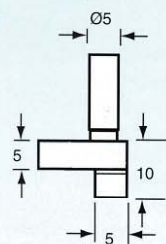


Model No
TGUA 011

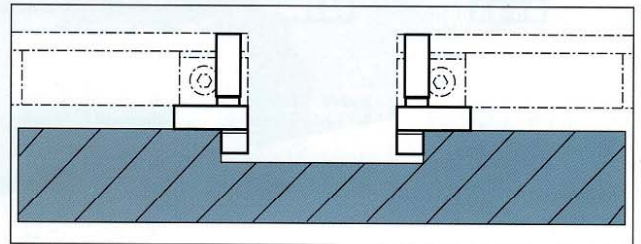
**Semi-cylindrical anvils for inside register diameters**

Touches cylindriques pour diamètres internes de lamages internes

Zylindrische Messflächen zur Messung von Innen-Zentriersitzen

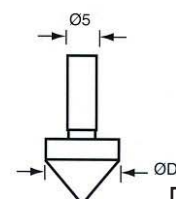


Model No
TGUA 012

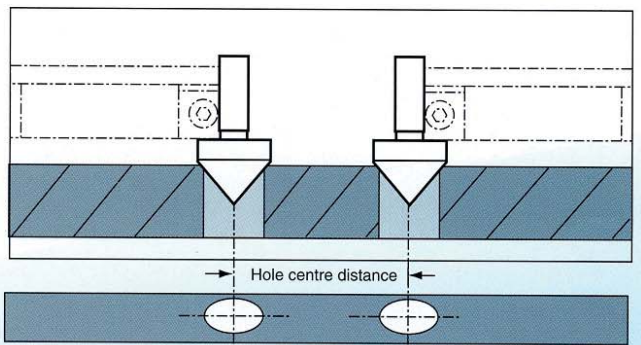
**Cone anvils for measuring Hole Centre Distance**

Touches coniques pour mesure d'entre-axes

Kegelförmige Messeinsätze für Messungen von Bohrungsabständen



Model No	Diameter 'D'
TGUA 019	13
TGUA 020	25
TGUA 021	50



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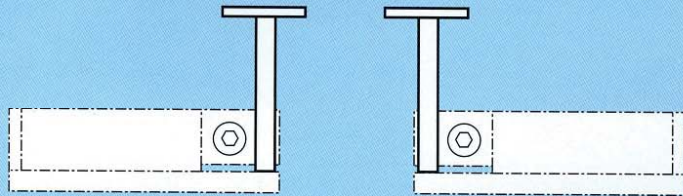
site web: www.menegon-metrologie.com



Disc anvils for measuring Groove diameter

Touches à disques pour mesure de diamètres de gorges

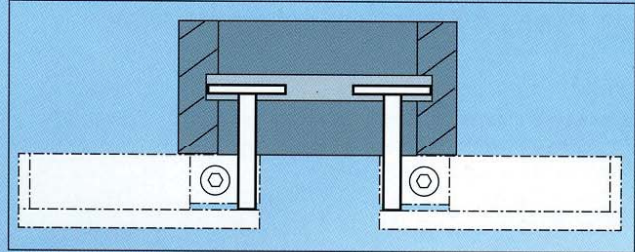
Messeinsätze mit Messteller zur Messung von Nuten-Durchmessern



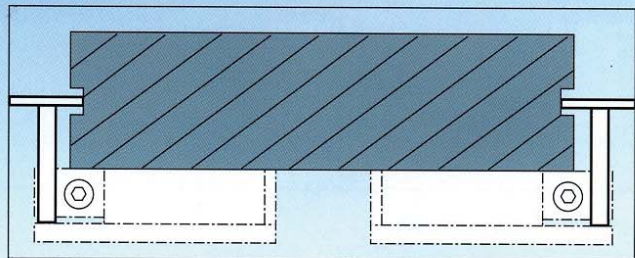
Model No
TGUA 013

Model No
TGUA 014

Internal/ Interne/ Innen



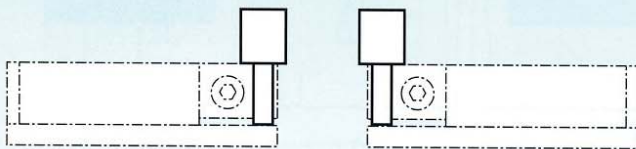
External/ Externe/ Außen



Cylindrical measuring pins for internal & external gear measurement

Piges de mesure cylindriques pour mesure de cannelures internes / externes

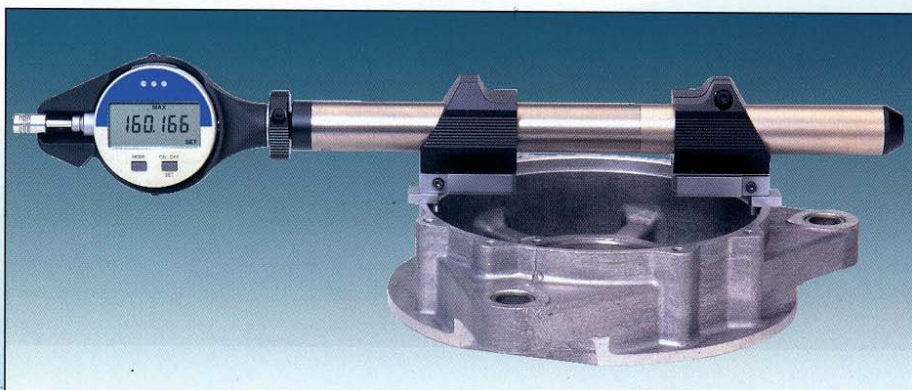
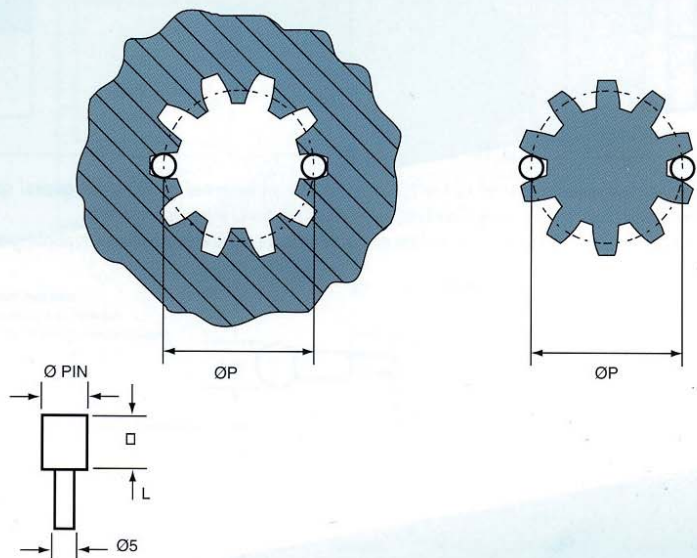
Zylindrische Meßstifte zur Messung von Innen- und Außenverzahnungen



Module	Nominal Pin Dia	Length 'L'	Model No	DP	Nominal Pin Dia	Length 'L'	Model No
1.25	2.0	10 (0.4")	TGUA 200	20	0.089	10 (0.4")	TGUA 250
1.5	2.5	10 (0.4")	TGUA 201	16	0.108	10 (0.4")	TGUA 251
1.75	3.0	15 (0.6")	TGUA 202	12	0.144	15 (0.6")	TGUA 252
2.0	3.5	15 (0.6")	TGUA 203	10	0.177	20 (0.8")	TGUA 253
2.5	4.0	15 (0.6")	TGUA 204	8	0.216	20 (0.8")	TGUA 254
2.75	4.5	20 (0.8")	TGUA 205	6	0.295	25 (1.0")	TGUA 255
3.0	5.0	20 (0.8")	TGUA 206	5	0.354	25 (1.0")	TGUA 256
3.25	5.5	20 (0.8")	TGUA 207	4	0.394	25 (1.0")	TGUA 257
3.5	6.0	20 (0.8")	TGUA 208				
4.0	7.00	25 (1.0")	TGUA 209				
5.0	9.00	25 (1.0")	TGUA 210				
6.0	10.00	25 (1.0")	TGUA 211				

Other sizes available P.O.A.

Autres dimensions disponibles sur demande
Andere Meßgrößen auf Anfrage erhältlich



Jean Louis MENEGON

Représentant et Conseiller
Région Sud Ouest

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