

MEASURING INSTRUMENTS  
STRUMENTI DI MISURA

  
MADE IN ITALY



*NEWS*

*2024*

# IRIS H

Electronic measuring gauge for internal measurement  
Strumento digitale per misurazioni interne

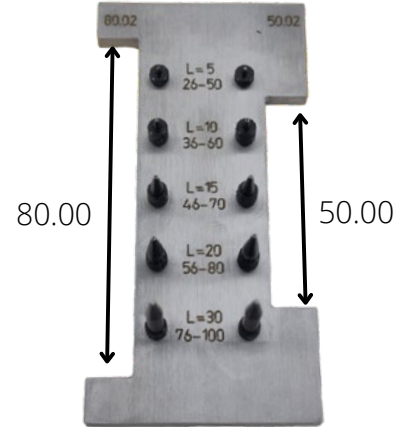


## DIGITAL DIAL GAUGES

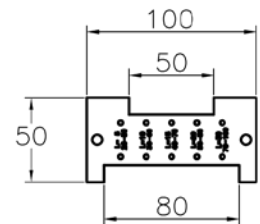


- Interchangeable tips
- Data transmission via Proximity-USB
- Arms length 60, 80, 120, depending on the need

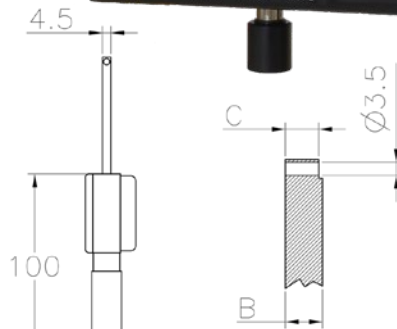
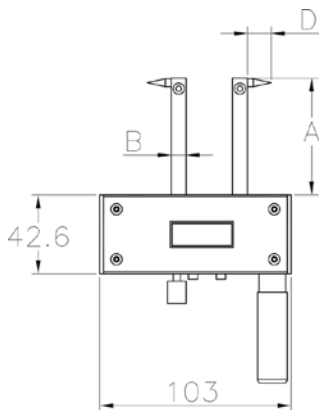
- Puntali intercambiabili
- Elettronica con uscita dati Proximity-USB
- Lunghezza bracci 60, 80, 120, a seconda della necessità



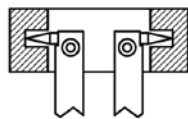
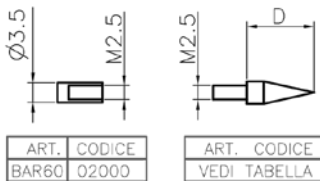
MASTER AZZERAMENTO



**Article Code**  
MA 00748



Article	Range	A	B	C	Accuracy	Resolution	Code	Kg
IRIS 60 H	26-100	60	8	8	0.01	0.01	00744	0.300
IRIS 80 H	26-100	80	10	8	0.01	0.01	00746	0.300
IRIS 120 H	26-100	120	12	8	0.01	0.01	00747	0.340



Article	D	Range	Code	Kg
TH05	5	26 - 50	00749	0.004
TH10	10	36 - 60	00750	0.005
TH15	15	46 - 70	00751	0.007
TH20	20	56 - 80	00752	0.009
TH30	30	76 - 100	00753	0.010



# IRIS HE

Electronic measuring gauge for internal measurement  
Strumento digitale per misurazioni interne

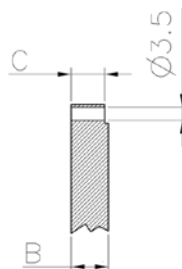
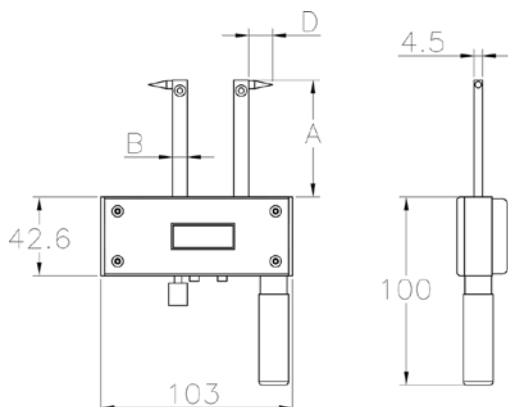


## DIGITAL DIAL GAUGES



- Interchangeable tips
- Data transmission via OPTO - RS232
- Arms length 60, 80, 120, depending on the need

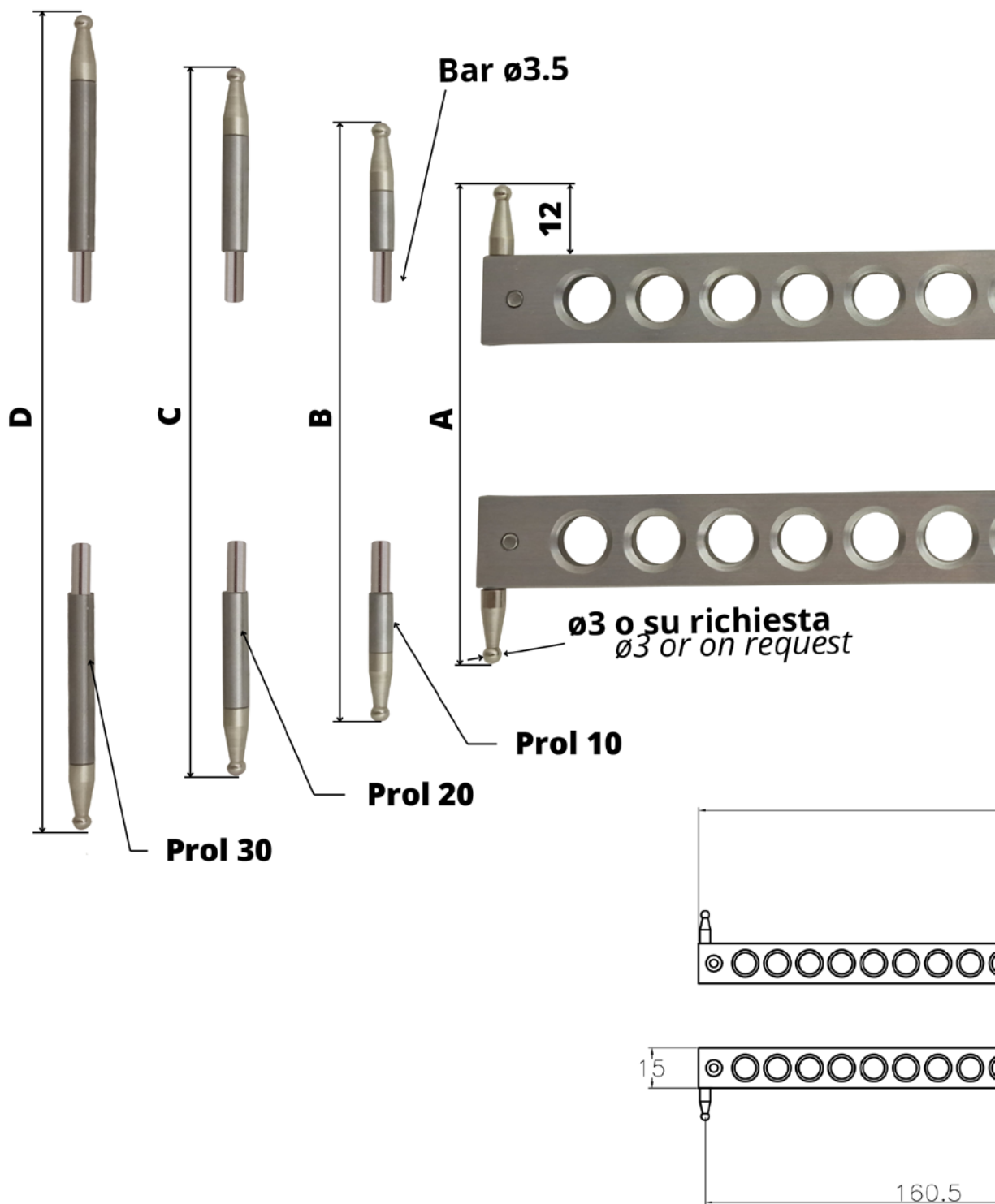
- Puntali intercambiabili
- Elettronica con uscita dati OPTO - RS232
- Lunghezza bracci 60, 80, 120, a seconda della necessità



Article	Range	A	B	C	Accuracy	Resolution	Code	Kg
IRIS 60 HE	0 - 74	60	8	8	0.01	0.01	00844	0.300
IRIS 80 HE	0 - 74	80	10	8	0.01	0.01	00845	0.300
IRIS 120 HE	0 - 74	120	12	8	0.01	0.01	00846	0.340



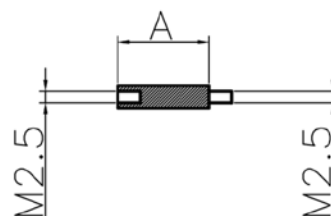
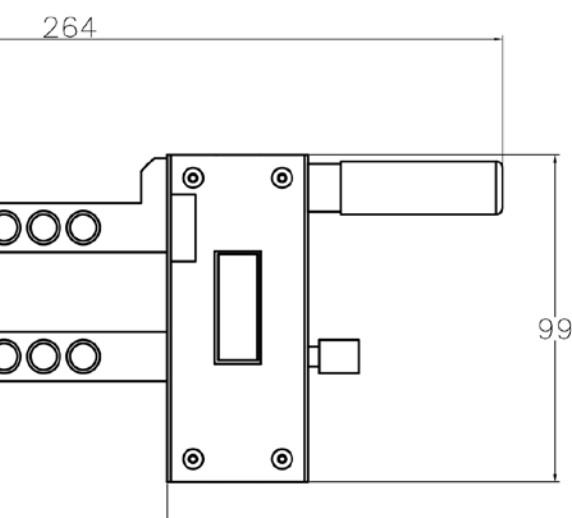
## DIGITAL DIAL GAUGES



Article	Range	A	B	C	D	E	Accuracy	Resolution	Code	Kg
IRIS IK 80	< 44 - 128 >	44 - 68	64 - 88	84 - 108	104 - 128	10	0.01	0.01	00847	0.360
IRIS IK 120	< 48 - 132 >	48 - 72	68 - 92	88 - 112	108 - 132	12	0.01	0.01	00848	0.400
IRIS IK 160	< 54 - 138 >	54 - 78	74 - 98	94 - 118	114 - 138	15	0.01	0.01	00859	0.440

## DIGITAL DIAL GAUGES

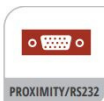
- Interchangeable tips
  - Electronic module IP67 Big Numbers
  - Functions: Preset, Min-Max-Delta, Scaling Factor
  - Data transmission via PROXIMITY-USB
  - ARM length 80/120/160 mm and total width of the arms 20/24/30 mm
  - Excursion 24mm
- Puntali intercambiabili
  - Elettronica IP67 Grandi Numeri
  - Funzioni: Preset, Min-Max-Delta, Fattore di scala
  - Uscita dati PROXIMITY-USB
  - Lunghezza Bracci 80/120/160 mm con ingombro totale becche 20/24/30 mm
  - Escursione 24mm



### PROLUNGHE OPZIONALI OPTIONAL EXTENSIONS

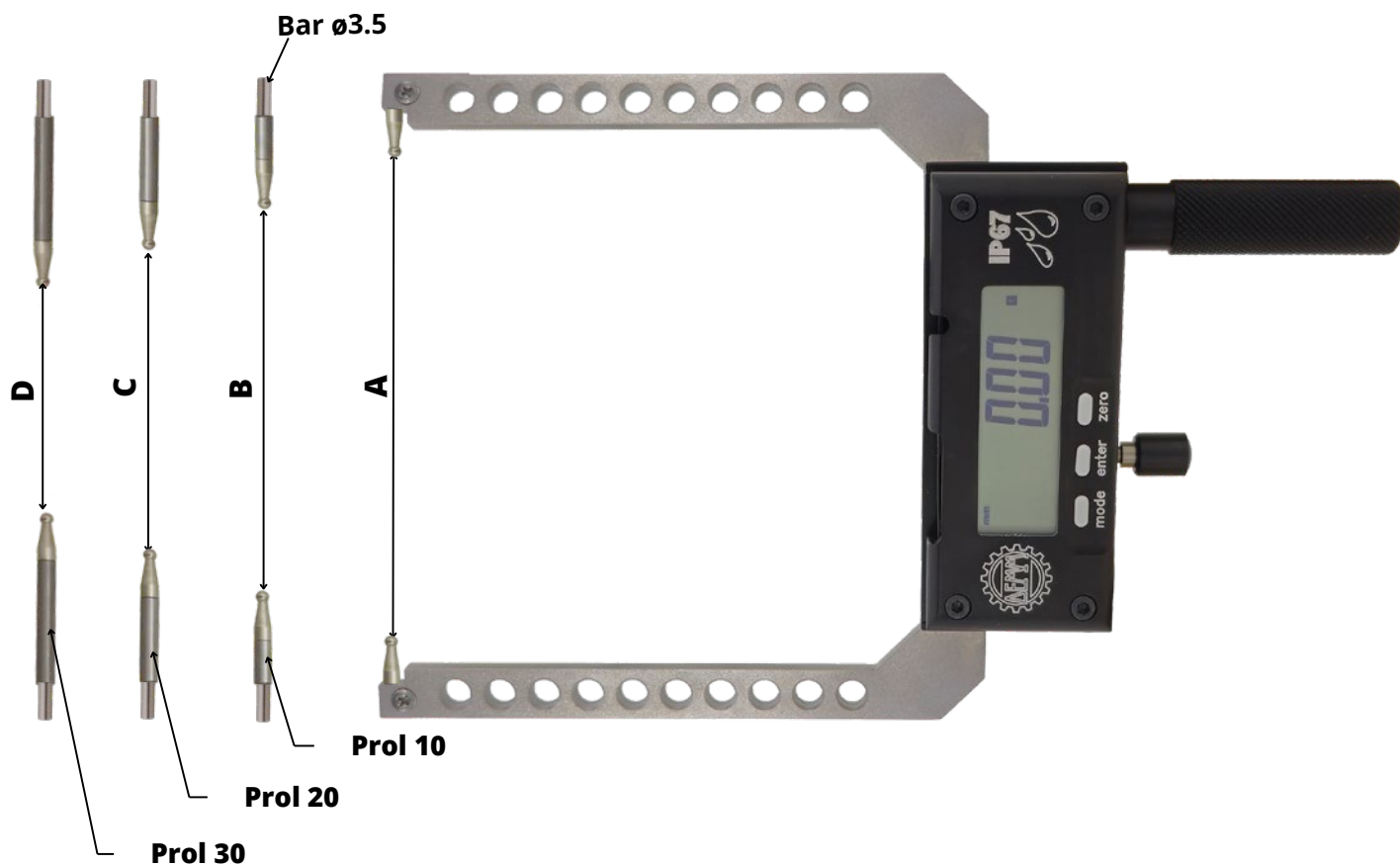
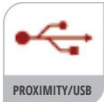
Article	A (MM.)	Code	Kg
PROL 10	10	00860	0.005
PROL 20	20	00861	0.006
PROL 30	30	00862	0.007

## DIGITAL DIAL GAUGES

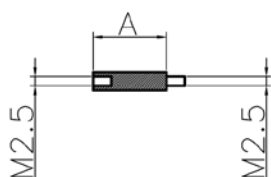


- Interchangeable tips
- Electronic module IP67 Big Numbers
- Functions: Preset, Min-Max-Delta, Scaling Factor
- Data transmission via PROXIMITY-USB
- ARM length 80/120/160 mm and total width of the arms 20/24/30 mm
- Excursion 24mm

- Puntali intercambiabili
- Elettronica IP67 Grandi Numeri
- Funzioni: Preset, Min-Max-Delta, Fattore di scala
- Uscita dati PROXIMITY-USB
- Lunghezza Bracci 80/120/160 mm con ingombro totale becche 20/24/30 mm
- Escursione 24mm



Article	Range	A	B	C	D	E	Accuracy	Resolution	Code	Kg
IRIS EK 80	< 0 - 84 >	60 - 84	40 - 64	20 - 44	0 - 24	10	0.01	0.01	00863	0.360
IRIS EK 120	< 0 - 84 >	60 - 84	40 - 64	20 - 44	0 - 24	12	0.01	0.01	00864	0.400
IRIS EK 160	< 0 - 84 >	60 - 84	40 - 64	20 - 44	0 - 24	15	0.01	0.01	00865	0.440



### PROLUNGHE OPZIONALI OPTIONAL EXTENSIONS

Article	A (MM.)	Code	Kg
PROL 10	10	00860	0.005
PROL 20	20	00861	0.006
PROL 30	30	00862	0.007

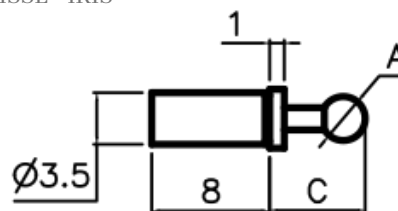
# TERMINALI INTERCAMBIABILI



ACCESSORIES

ACCESSORI

INTERCHANGEABLE RODS FOR DIGI BASCOM - APOLLO - DIGI ULISSE - IRIS  
 TERMINALI INTERCAMBIABILI PER DIGI BASCOM - APOLLO - DIGI ULISSE - IRIS



STEEL RODS 65HRC WITH CALIBRATED SPHERE  
 TERMINALI IN ACCIAIO 65HRC CON SFERE CALIBRATE

RODS WITH CALIBRATED SPHERE IN CARBIDE  
 TERMINALI CON SFERE CALIBRATE IN METALLO DURO

Article	A	*C	Code	Kg
TSNC 1	Ø 1	5	00791	0.005
TSNC 1.25	Ø 1.25	5	00795	0.005
TSNC 1.5	Ø 1.5	5	00796	0.005
TSNC 1.75	Ø 1.75	5	00797	0.005
TSNC 2	Ø 2	5	00798	0.005
TSNC 2.25	Ø 2.25	5	00799	0.005
TSNC 2.5	Ø 2.5	5	00814	0.005
TSNC 2.75	Ø 2.75	5	00816	0.005
TSNC 3	Ø 3	6.5	00817	0.005
TSNC 3.5	Ø 3.5	6.5	00818	0.005
TSNC 4	Ø 4	6.5	00819	0.005
TSNC 4.5	Ø 4.5	6.5	00821	0.005
TSNC 5	Ø 5	6.5	00822	0.005
TSNC 5.5	Ø 5.5	8	00823	0.005
TSNC 6	Ø 6	8	00824	0.005
TSNC 6.35	Ø 6.35	8	00825	0.005
TSNC 6.5	Ø 6.5	8	00826	0.005

\*Length also on request  
 \*Lunghezza anche su richiesta

Article	A	*C	Code	Kg
TSNCW 1	Ø 1	5	00827	0.005
TSNCW 1.25	Ø 1.25	5	00828	0.005
TSNCW 1.5	Ø 1.5	5	00829	0.005
TSNCW 1.75	Ø 1.75	5	00830	0.005
TSNCW 2	Ø 2	5	00831	0.005
TSNCW 2.25	Ø 2.25	5	00832	0.005
TSNCW 2.5	Ø 2.5	5	00833	0.005
TSNCW 2.75	Ø 2.75	5	00834	0.005
TSNCW 3	Ø 3	6.5	00835	0.005
TSNCW 3.5	Ø 3.5	6.5	00836	0.005
TSNCW 4	Ø 4	6.5	00837	0.005
TSNCW 4.5	Ø 4.5	6.5	00838	0.005
TSNCW 5	Ø 5	6.5	00839	0.005
TSNCW 5.5	Ø 5.5	8	00840	0.005
TSNCW 6	Ø 6	8	00841	0.005
TSNCW 6.35	Ø 6.35	8	00842	0.005
TSNCW 6.5	Ø 6.5	8	00843	0.005

\*Length also on request  
 \*Lunghezza anche su richiesta

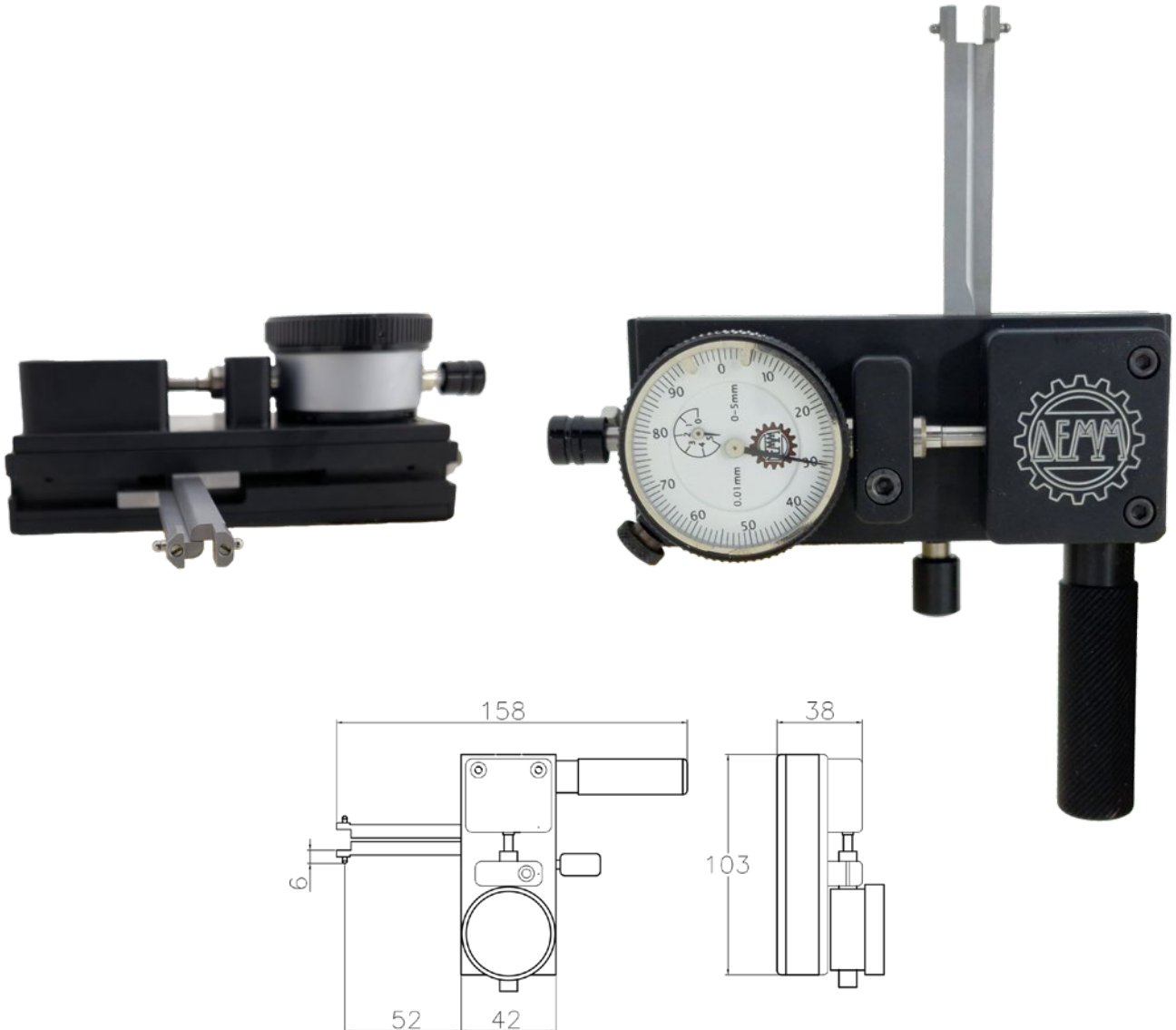


## DIGITAL DIAL GAUGES



- Interchangeable tips
- Dial  $\varnothing 40$  with 0.01mm reading
- Customizable range of motion from 12mm up to 22mm

- Puntali intercambiabili
- Orologio  $\varnothing 40$  con lettura 0,01mm
- Range di misurazione modificabile da 12mm a 22mm



Article	Range	Code	Kg
IRIS ANALOGICO	12 - 22	00866	0.450



# MINI PLATON

Comparison gauge for inside/outside measurements  
Calibro a comparazione interni/esterni



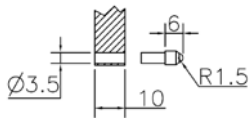
## COMPARISON GAUGE CALIBRO A COMPARAZIONE



- Comparison gauge for inside / outside measurements
- Lightweight caliper, carbon fiber steel
- Interchangeable rods and jaws
- Double dial gauge positionment (image 1 & 2)
- Supplied with jaws BEC35 and BEC35L; height adjustable supports APM & APF; dial gauge 0,01  $\varnothing$  60
- Preload range 20 mm
- Calibro a comparazione interno/esterno con precarica
- Corpo in alluminio e asta in carbonio
- Puntali e becche intercambiabili
- Doppio sistema d'attacco comparatore (figura 1 & 2)
- Di serie: becche BEC35 e BEC35L, appoggi APM e APF regolabili in altezza, comparatore  $\varnothing$  60 0,01
- Corsa utile di precarica 20 mm



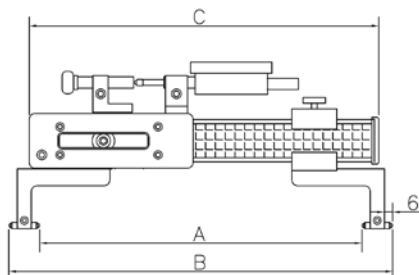
Fig.1  
MINI PLATON I/E 320  
WITH UPPER DIAL GAUGE



For interchangeable rods see pag.134 DEMM catalogue



Fig.2  
MINI PLATON I/E 320  
WITH LATERAL DIAL GAUGE



SEZIONE ASTA IN CARBONIO

Article	A	B	C	Reapetibility	Code	Kg
MINI PLATON I/E 320	0 - 290	32 - 320	265	0,002	00655	0,850
MINI PLATON I/E 500	0 - 470	32 - 500	445	0,002	00656	1,000

# MINI DIGI PLATON

Digital comparison gauge for  
inside/outside measurements  
Calibro digitale a  
comparazione interni/esterni



## COMPARISON GAUGE CALIBRO A COMPARAZIONE



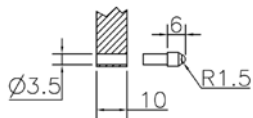
- Digital comparison gauge for inside / outside measurements
- Lightweight caliper, carbon fiber steel
- Interchangeable rods and jaws
- Double dial gauge positionament (image 1 & 2)
- Supplied with jaws BEC35 and BEC35L, height adjustable supports and dial gauge 0,01  $\phi$  60
- Preload range 20 mm

- Calibro digitale a comparazione interno/esterno con precarica
- Corpo in alluminio e asta in carbonio
- Puntali e becche intercambiabili
- Doppio sistema d'attacco comparatore (figura 1 & 2)
- Di serie: becche BEC35 e BEC35L, appoggi APM e APF regolabili in altezza, comparatore  $\phi$  60 0,01
- Corsa utile di precarica 20 mm



Fig.1

MINI DIGI PLATON I/E 500  
WITH UPPER DIAL GAUGE



For interchangeable rods see  
pag.134 DEMM catalogue

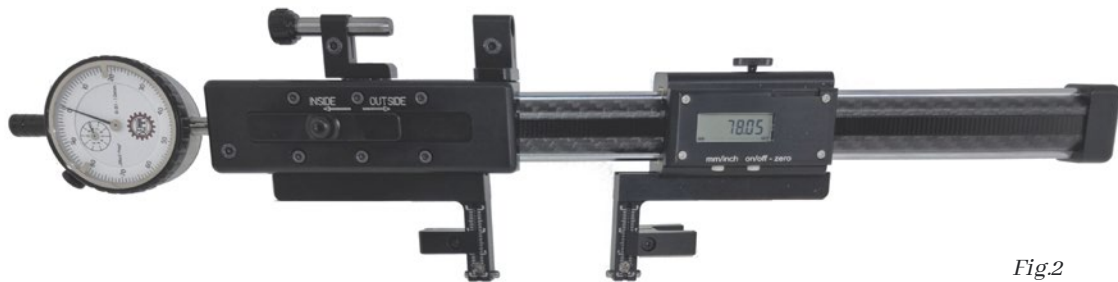
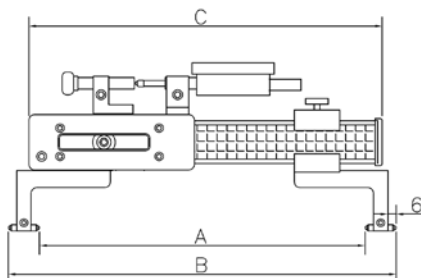


Fig.2

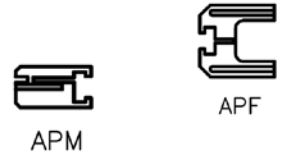
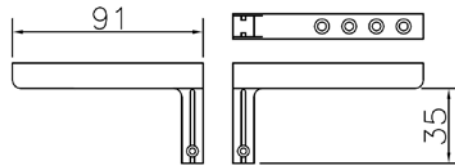
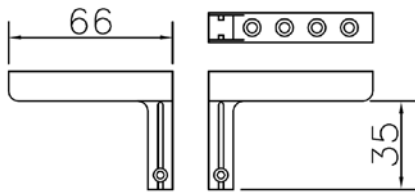
MINI DIGI PLATON I/E 500  
WITH LATERAL DIAL GAUGE



SEZIONE ASTA IN CARBONIO

Article	A	B	C	Reapetibility	Code	Kg
MINI DIGI PLATON I/E 320	0 - 290	32 - 320	265	0,002	00686	0,850
MINI DIGI PLATON I/E 500	0 - 470	32 - 500	445	0,002	00687	1,000

**STANDARD ACCESSORIES MINI PLATON/MINI DIGI PLATON** ACCESSORI DI SERIE MINI PLATON/MINI DIGI PLATON

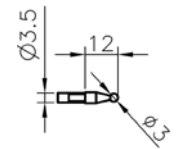
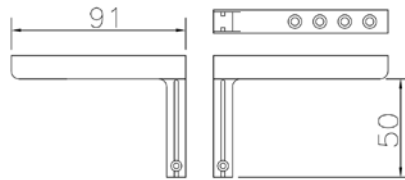
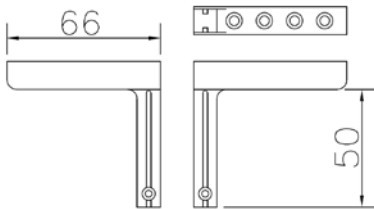


Article	Code	Kg
BEC 35	00657	0,060

Article	Code	Kg
BEC 35L	00658	0,080

Article	Code	Kg
APM	00659	0,008
APF	00660	0,014

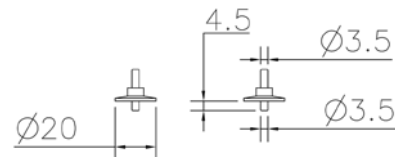
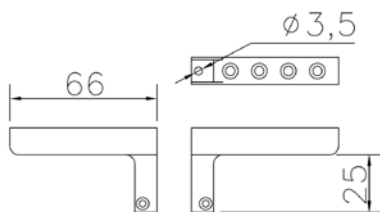
**OPTIONAL ACESORIES MINI PLATON/MINI DIGI PLATON** ACCESSORI OPZIONALI MINI PLATON/MINI DIGI PLATON



Article	Code	Kg
BEC 50	00661	0,068

Article	Code	Kg
BEC 50L	00662	0,088

Article	Code	Kg
TS....	see page 135 of DEMM catalog	

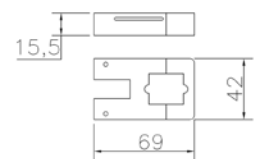
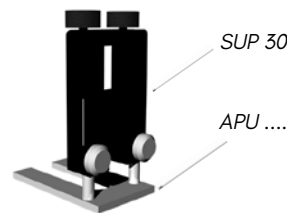


To use pin disc TS AP in vertical positionament  
Per utilizzo puntalini in verticale ( TS AP)

\*use only with BEC VERT  
\*utilizzo solo con BEC VERT

Article	Code	Kg
BEC VERT	00663	0,060

Article	Code	Kg
*TS AP	00664	0,014



\*use only with SUP 30  
\*utilizzo solo con SUP 30

Article	Code	Kg
• APU 70	00665	0,062
• APU 120	00666	0,138
• APU 160	00667	0,172

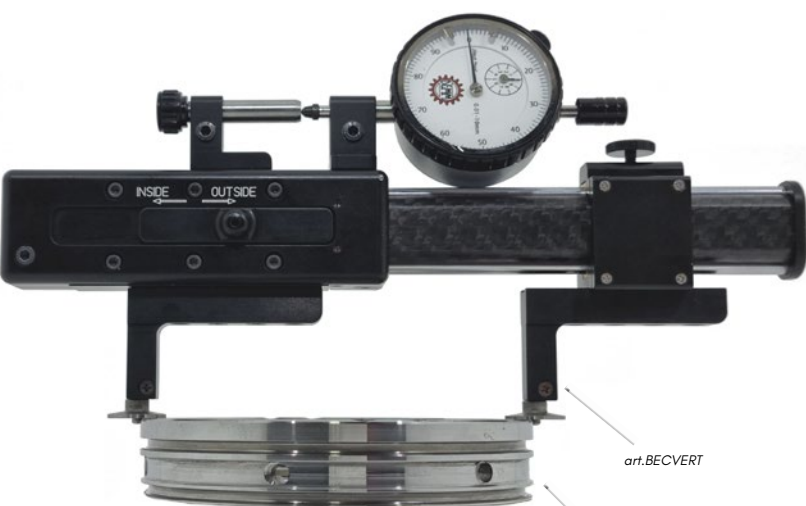
Article	Code	Kg
SUP 30	00668	0,104



MULTIFUNCTIONAL CALIPER IDEAL FOR PARTICULAR MEASUREMENTS  
STRUMENTO INDICATO PER OPERAZIONI DI CONTENUTO INGOMBRO

*Internal measurement with standard dotation*  
*Misurazione interni con dotazione standard*

*Possibility of entering with the instrument in Ø*  
*Possibilità di entrare con tutto lo strumento in Ø, per usare bracci corti che non flettono*



*External measurement with pin disc*  
*Misurazione esterni con puntalini a disco TS AP e perno di riferimento*

Adjustable support art.APM

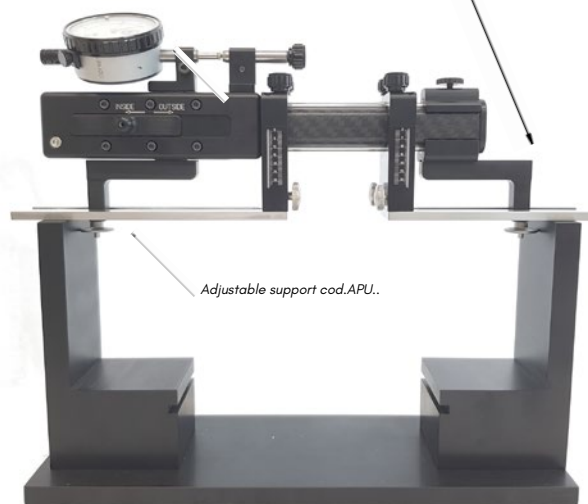
Adjustable support art.APF

*The jaws can be extended beyond the body of the instrument*  
*La becca può fuoriuscire dal corpo dello strumento*

art.BECVERT

Pin disc art.TS AP

*Measuring internal by entering with all the instrument in the Ø, with adjustable supports*  
*Misurazione interno entrando con tutto lo strumento nel Ø, con utilizzo supporti regolabili in altezza e in linea*



*Internal measurement with pin disc + adjustable supports*  
*Misurazione interno con puntali a disco + utilizzo coppia supporti regolabili in altezza e linea*

Adjustable support art.SUP30

Adjustable support cod.APU..

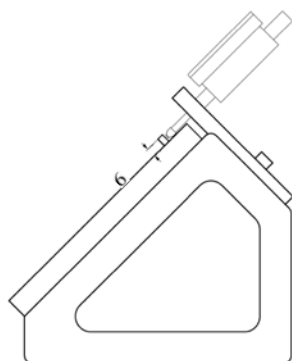
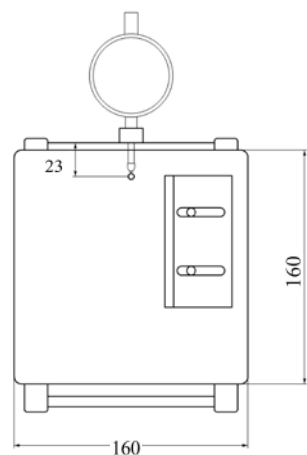
art.BEC50

### MEASURE INSTRUMENTS STRUMENTI CONTROLLO



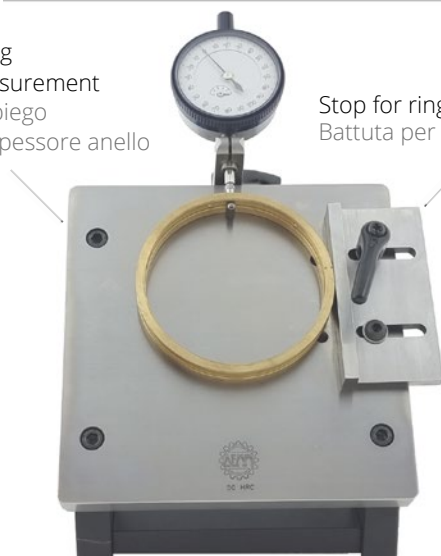
- Comparison gauge for diameters control of 0-10 / 30 mm thicknesses
- Adjustable reference support  $\varnothing 50-100$  mm
- Interchangeable dial gauge contact M2,5
- Base in hardened stainless steel inox tempre 50 HRC
- Dial gauge shaft  $\varnothing 8$
- Supplied with dial gauge 0.001  $\varnothing 60$
- Strumento a comparazione per il controllo circolare degli spessori 0-10/30 mm
- Appoggio di riferimento regolabile  $\varnothing 50-100$  mm
- Terminale di contatto comparatore intercambiabile M2,5
- Piano acciaio inox 50 HRC
- Attacco comparatore  $\varnothing 8$
- Di serie comparatore  $\varnothing 60$  con lettura 0.001 mm

QUICK CHECK TABLE USEFUL FOR CONSTRUCTION OF CRANKCASES / BEARINGS  
STRUMENTO INDICATO NEL SETTORE COSTRUZIONI BASAMENTI/CUSCINETTI



Article	Range mm	Base dimension mm	Repeatability	Code	Kg
ETNA	$\varnothing 50-100$	160 x 160	0.002	00669	4,500

Application ring  
thickness measurement  
Esempio d'impiego  
misurazione spessore anello



Stop for ring positioning repetition  
Battuta per ripetizione posizionamento anello

Stop locking lever  
Leva di bloccaggio battuta

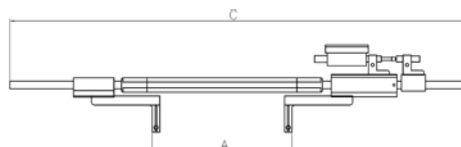
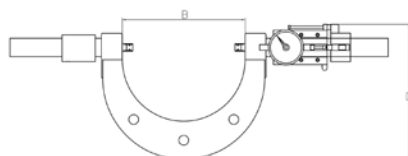
Dial gauge  
locking lever  
Leva di bloccaggio  
comparatore



### MEASURE INSTRUMENTS STRUMENTI CONTROLLO



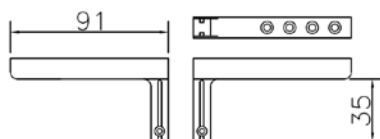
- Carbon fiber light weight with spring system for inside /outside measurements
- Interchangeable jaws and rods with shaft  $\varnothing$  3,5
- height adjustable supports for measurements
- Dial gauge shaft  $\varnothing$  8
- Supplied with: couple of interchangeable rods art.TS3, supports APM & APF, jaws art.BEC 35L, dial gauge 0.01  $\varnothing$  60
- Calibro a comparazione in fibra di carbonio con precarica per misurazioni interne ed esterne
- Bracci e puntali intercambiabili con attacco  $\varnothing$  3,5
- Supporti regolabili in altezza per misurazioni sull'asse richiesto
- Attacco comparatore  $\varnothing$  8
- Dotazione standard: coppia terminali intercambiabili TS 3, appoggi APM e APF regolabili in altezza, coppia becche BEC 35L, comparatore  $\varnothing$ 60 con lettura 0,01 mm



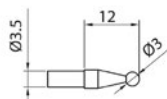
Article	A Range	B	C	D	Repeatability	Code	Kg
ARACNE 200	$\varnothing$ 170 - 680	200	620	220	0.002	00670	1,800
ARACNE 270	$\varnothing$ 240 - 750	270	690	255	0.002	00684	2,000
ARACNE 320	$\varnothing$ 290 - 800	320	740	280	0.002	00685	2,200

### STANDARD EQUIPMENT DOTAZIONE STANDARD

Interchangeable jaws  
Coppia bracci intercambiabili

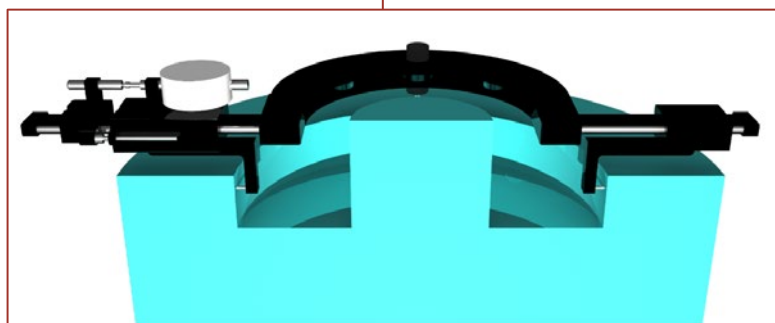


STANDARD EQUIPMENT  $\varnothing$ 3



For interchangeable rods see pag.134 DEMM catalogue  
Per i terminali intercambiabili vedere pag.134 catalogo DEMM

### APPLICATION APPLICAZIONE



Article	Code	Kg
BEC 35L	00586	0.080

Height adjustable supports  
Appoggi regolabili in altezza



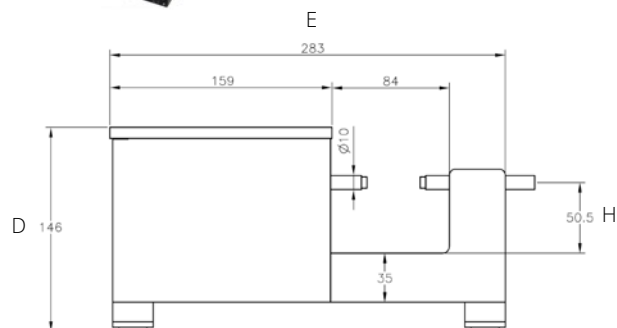
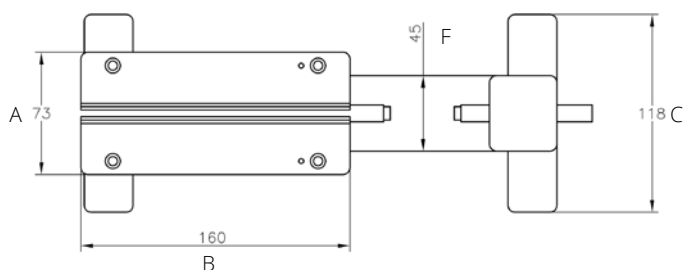
Article	Code	Kg
APM	00587	0.008
APF	00588	0.014

### MEASURE INSTRUMENTS STRUMENTI CONTROLLO



- Measurement table internal/external
  - Base in hardened stainless steel inox tempre 50 HRC
  - Optional: flexibility to operate dial gauge analogic or digital, shaft  $\varnothing 8$
  - Interchangeable rods  $\varnothing 3,5$
  - Range 0-50mm
  - Supplied with user manual
  - Available SELENE DS version table top with movement in X-Y-Z- (R)otation
- Tavola per misurazioni interni/esterni con terminali intercambiabili con attacco  $\varnothing 3,5$
  - Piano in acciaio inox temprato per misurazioni interne/esterne sulla piastra
  - Opzionale: possibilità d'utilizzo di comparatore digitale o analogico con attacco  $\varnothing 8$
  - Corsa stelo 20 mm
  - Range misurazioni 0-50 mm
  - Manuale di utilizzo tavola incluso
  - Disponibile versione SELENE DS piano tavola con movimentazione in X-Y-Z- (R)otazione

SELENE



Articolo	A	B	C	D	E	F	H	Ripetibilità	Codice	Kg
SELENE	73	160	118	146	283	45	50,5	0.001	00671	7,300

### INTERNAL/EXTERNAL MEASUREMENT ON THE TABLE CONTROLLO MISURAZIONE INTERNI / ESTERNI SU PIASTRA



INTERNAL MEASUREMENT  
CONTROLLO SUL PIANO MISURAZIONE INTERNI



EXTERNAL MEASUREMENT  
CONTROLLO SUL PIANO MISURAZIONE ESTERNI

**CHECK BETWEEN THE OPPOSING TIPS CONTROLLO TRA I PUNTALI CONTRAPPOSTI**



Interchangeable rods  $\varnothing 3,5$  mm  
Puntali intercambiabili  $\varnothing 3,5$  mm

The draft on the adjustable stem to fix at the distance needed to carry out the measurements .  
Range: 0-50mm

La leva presente sullo stelo regolabile serve per fissare alla distanza necessaria. Range 0 - 50 mm.

**CHECK DIAL GAUGE BACK AND FORWARD POINT THREADED ROD CONTROLLO CORSA/INVERSIONE COMPARATORI TRAMITE STELO FILETTATO**



Anvil 0.5 pitch thread for contrast with movable stem  
Incudine con filetto a passo 0,5 per contrasto a stelo mobile

Body  $\varnothing 10$  for compatibility to replace the adjustable stem. Knob is possible to advance the movable rod with high precision

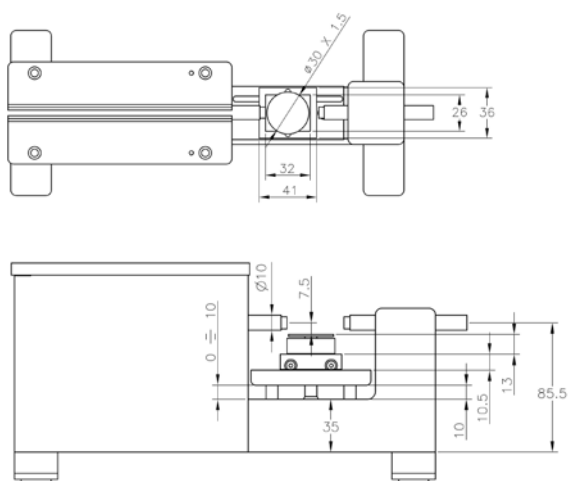
Corpo  $\varnothing 10$  per compatibilità da sostituire allo stelo regolabile. Tramite la manopola è possibile avanzare contro lo stelo mobile e muoversi con precisioni elevate

# SELENE DS

**MEASURE INSTRUMENTS STRUMENTI CONTROLLO**

- SELENE DS table top with movement in X-Y-Z-(R)otation
- Movements: X - 35 mm; Y- 15mm; Z - 13mm; R - 360°
- Internal range between the stems  $\varnothing 0 - 60$  mm
- Mobile probe 20 mm stroke

- SELENE DS piano tavola con movimentazione in X-Y-Z-(R)otazione
- Movimentazioni: X - 35 mm; Y- 15mm; Z - 13mm; R - 360°
- Range interno tra gli steli  $\varnothing 0 - 60$  mm
- Tastatore mobile corsa 20 mm



SELENE DS

Articolo	A	B	C	D	E	F	H	Ripetibilità	Codice	Kg
SELENE DS	73	160	118	146	283	45	50,5	0.001	00689	7,800



# SELENE PLUS

Measurement instrument  
Tavola di controllo



MEASURE INSTRUMENTS STRUMENTI CONTROLLO



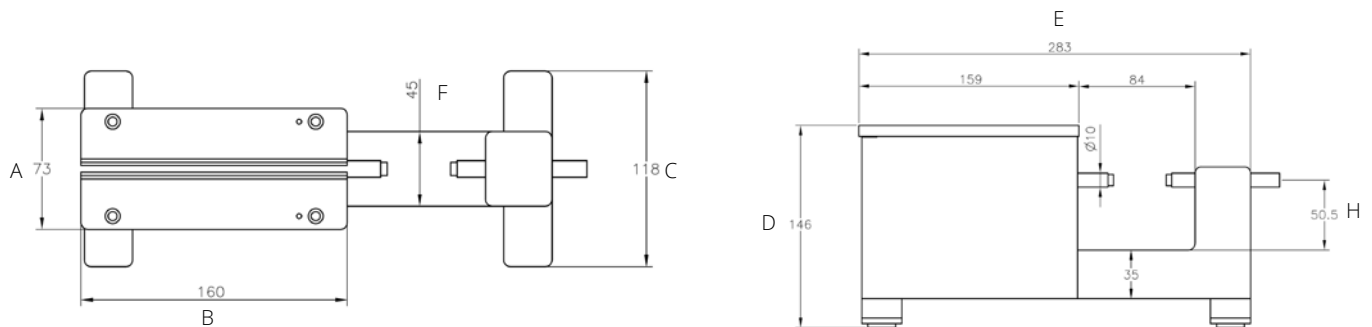
- Measurement table with display for reading with probe with functions for check pieces / digital comparators
- Measurement table internal/external
- Base in hardened stainless steel inox tempre 50 HRC
- Optional: flexibility to operate dial gauge analogic or digital, shaft  $\varnothing 8$
- Interchangeable rods  $\varnothing 3,5$
- Range 0-50mm
- Supplied with user manual
- Available SELENE DS PLUS version table top with movement in X-Y-Z- (R)otation
- Tavola di controllo completa di display per lettura con sonda con funzioni per controllo dei pezzi / comparatori digitali
- Tavola per misurazioni interni/esterni con terminali intercambiabili con attacco  $\varnothing 3,5$
- Piano in acciaio inox temprato per misurazioni interne/esterne sulla piastra
- Opzionale: possibilità d'utilizzo di comparatore digitale o analogico con attacco  $\varnothing 8$
- Corsa stelo 20 mm
- Range misurazioni 0-50 mm
- Manuale di utilizzo tavola incluso
- Disponibile versione SELENE DS PLUS piano tavola con movimentazione in X-Y-Z- (R)otazione



SELENE PLUS

Duo Marpos 4.3" touch screen display, with the possibility to read two probes at the same time;  
Reading  $1 \mu\text{m} / 0.1 \mu\text{m}$

Display Duo Marpos 4,3" touch screen, con possibilità lettura due sonde contemporaneamente; Lettura  $1 \mu\text{m} / 0,1 \mu\text{m}$



Articolo	A	B	C	D	E	F	H	Ripetibilità	Codice	Kg
SELENE PLUS	73	160	118	146	283	45	50,5	0.001	00690	8,000

## INTERNAL/EXTERNAL MEASUREMENT ON THE TABLE CONTROLLO MISURAZIONE INTERNI / ESTERNI SU PIASTRA



INTERNAL MEASUREMENT  
CONTROLLO SUL PIANO MISURAZIONE INTERNI



EXTERNAL MEASUREMENT  
CONTROLLO SUL PIANO MISURAZIONE ESTERNI

**CHECK BETWEEN THE OPPOSING TIPS CONTROLLO TRA I PUNTALI CONTRAPPOSTI**



Interchangeable rods  $\varnothing$  3,5 mm  
Puntali intercambiabili  $\varnothing$  3,5 mm

The draft on the adjustable stem to fix at the distance needed to carry out the measurements.  
Range: 0-50mm

La leva presente sullo stelo regolabile serve per fissare alla distanza necessaria. Range 0 - 50 mm

**CHECK DIAL GAUGE BACK AND FORWARD THREADED ROD CONTROLLO CORSA/INVERSIONE COMPARATORI TRAMITE STELO FILETTATO**

Anvil 0.5 pitch thread for contrast with movable stem  
Incudine con filetto a passo 0,5 per contrasto a stelo mobile



Body  $\varnothing$  10 for compatibility to replace the adjustable stem. Knob is possible to advance the movable rod with high precision

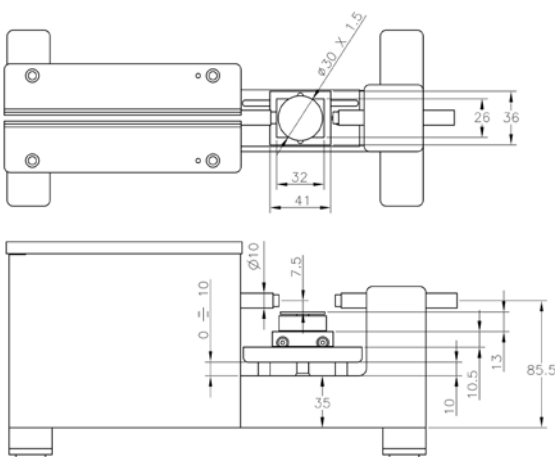
Corpo  $\varnothing$  10 per compatibilità da sostituire allo stelo regolabile. Tramite la manopola è possibile avanzare contro lo stelo mobile e muoversi con precisioni elevate

# SELENE DS PLUS

**MEASURE INSTRUMENTS STRUMENTI CONTROLLO**

- SELENE DS PLUS version table top with movement in X-Y-Z- (R)otation
- Movements: X - 35 mm; Y- 15mm; Z - 13mm; R - 360°
- Internal range between the stems  $\varnothing$  0 - 60 mm
- Mobile probe 20 mm stroke

- SELENE DS PLUS piano tavola con movimentazione in X-Y-Z- (R)otazione
- Movimentazioni: X - 35 mm; Y- 15mm; Z - 13mm; R - 360°
- Range interno tra gli steli  $\varnothing$  0 - 60 mm
- Tastatore mobile corsa 20 mm



SELENE DS PLUS

Articolo	A	B	C	D	E	F	H	Ripetibilità	Codice	Kg
SELENE DS PLUS	73	160	118	146	283	45	50,5	0.001	00691	8,500

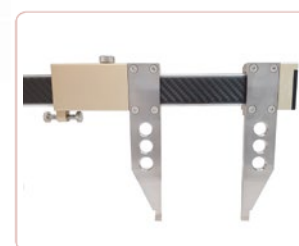
# DIGI PLUTO CARBON FIBER FLAT



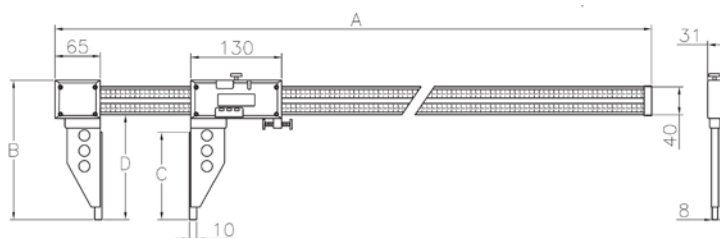
BIG GAUGES GRANDI CALIBRI



- Sliding gauge in carbon fiber for internal / external measurements
- Jaws in hardened stainless steel
- Clamping screw
- Electronic IP67 with big numbers
- Push / pull spring system
- Calibro a corsoio in fibra di carbonio per misurazioni interni / esterni
- Becche in acciaio inox temprato
- Bloccaggio a vite
- Elettronica IP67 grandi numeri
- Pressore a molla tiro / spinta



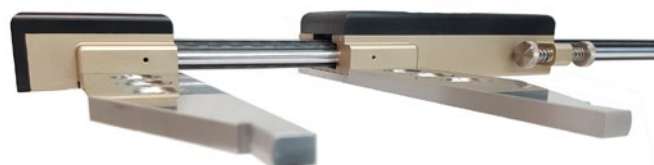
CARBON BAR SECTION  
SEZIONE ASTA



Article	Range mm	A	B	C	D	Resolution	Accuracy	Code	Kg
DIGI PLUTO CARBON FIBER FLAT IP67 800/150	800	1050	200	125	150	0,01	0,04	00672	1,650
DIGI PLUTO CARBON FIBER FLAT IP67 1000/150	1000	1250	200	125	150	0,01	0,04	00673	1,850
DIGI PLUTO CARBON FIBER FLAT IP67 1500/150	1500	1750	200	125	150	0,01	0,05	00674	2,200
DIGI PLUTO CARBON FIBER FLAT IP67 2000/150	2000	2250	200	125	150	0,01	0,06	00675	2,600

APPLICATION APPLICAZIONE

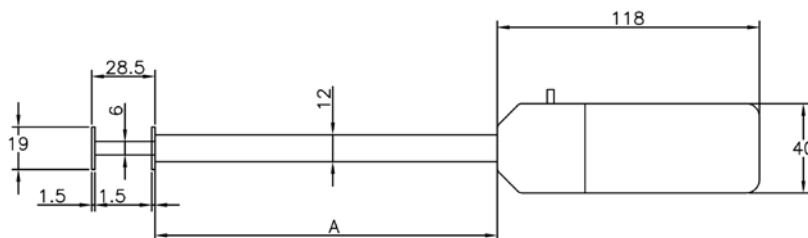
Flexibility to be used lying down  
Peculiarità asse base becche in appoggio assiale al piano



### GROOVES CALIPER CALIBRO PER GOLE



- Digital measure instrument for check the width of internal grooves
- Hole mm 20
- Excursion mm 25
- Spring system
- Electronic IP54 prest, reading 0,01
- Strumento digitale per il controllo della larghezza delle gole
- Foro minimo di ingresso mm 20
- Escursione per la misurazione fino a mm 25
- Misurazione con precarica a molla
- Elettronica IP54 con preset, lettura 0,01



Article	Range mm	A	Resolution	Accuracy	Code	Kg
FEBO 100	0 - 25 MM	100	0.01	0.02	00680	0.500
FEBO 150	0 - 25 MM	150	0.01	0.02	00681	0.600

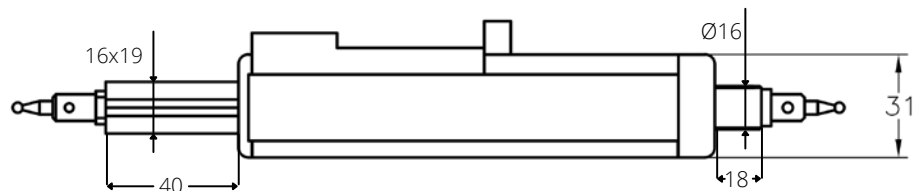
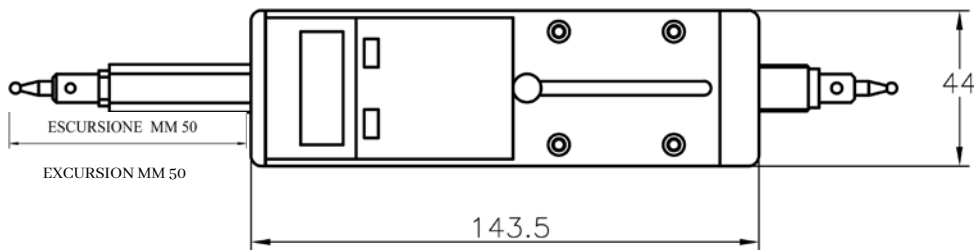
### APPLICATION APPLICAZIONE



## GROOVES CALIPER CALIBRO PER GOLE



- Digital instrument for internal measurements with excursion of mm 50, spring system
- Interchangeable rods with sphere,  $\varnothing$  by request
- Optional extensions in carbon fiber range 50 - 800 mm
- Large cursor excursion, for measurements of grooves depth 30 or 50 mm
- Manufactured on steel inox and aluminium
- Standard interchangeable rods  $\varnothing 3$  sphere and 12mm length
- Strumento digitale per misurazione di interni con escursione mm 50, contatto a molla
- Puntali intercambiabili a sfera  $\varnothing$  a richiesta
- Prolunghe opzionali per campo di lavoro fino a mm 800
- Grande escursione del cursore, per misurazioni di gole profonde mm 30 o 50
- Costruito in alluminio anodizzato e acciaio inox
- Puntalini con terminali a sfera  $\varnothing 3$  di serie lunghezza 12mm



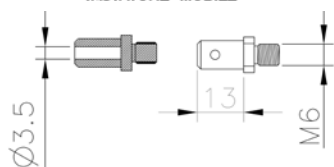
Article	Range	Resolution	Accuracy	Code	Kg
Mitra 30	125-155/800	0.01	$\pm 0.01$	00867	0,480
Mitra 50	200-250/800	0.01	$\pm 0.01$	00676	0,640

**APPLICATION** APPLICAZIONE



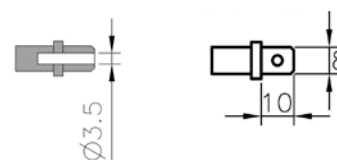
**ACCESSORIES** ACCESSORI

**MOBILE PROBE**  
**TASTATORE MOBILE**



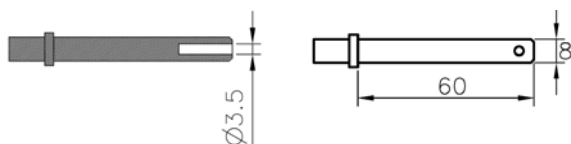
Article	Code	Kg
TAS13	00677	0,02

**PROBE FOR RANGE 200-250**  
**TASTATORE PER UTILE 200-250**



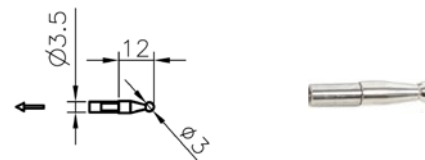
Article	Code	Kg
TAS10	00678	0,02

**PROBE FOR RANGE 250-300**  
**TASTATORE PER UTILE 250-300**



Article	Code	Kg
TAS60	00679	0,03

**STANDARD EQUIPMENT Ø3**

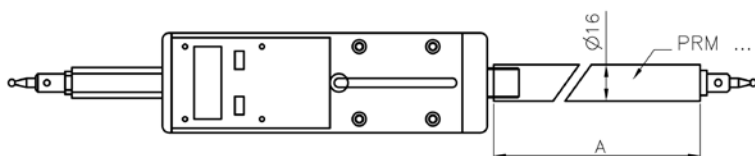


Article	Code
TS....	see page 135 of the DEMM catalog

**OPTIONAL EXTENTIONS** PROLUNGHE OPZIONALI



**OPTIONAL EXTENTIONS LIGHT WEIGHT**  
**PROLUNGHE OPZIONALI CON STELO IN CARBONIO**



Article	A mm	Code	Kg
PRM50	50	01910	0,040
PRM100	100	01911	0,080
PRM200	200	01912	0,120
PRM300	300	01913	0,160

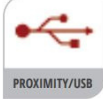
# BIG MITRA

Instrument for measuring internal diameters and grooves

Strumento per misurazione di diametri e gole interne



## GROOVES CALIPER CALIBRO PER GOLE



- Digital instrument for internal measurements with spring system
- Interchangeable rods with sphere,  $\phi$  on request
- Optional extensions in carbon fiber range 100 - 1000 mm
- Large cursor excursion, for measurements of grooves depth 100 mm and  $\phi$  up to 3m
- Manufactured on steel inox and aluminium
- Standard interchangeable rods sphere  $\phi$  3
- Electronic module IP67, data transmission Proximity-USB
- Preset, minimum/maximum, scaling factor (for diametral reading)

- Strumento digitale per misurazione di interni con contatto a molla
- Puntali intercambiabili a sfera  $\phi$  a richiesta
- Prolunghe opzionali in fibra di carbonio per range 100 - 1000 mm
- Grande escursione del cursore, per misurazioni di gole profonde mm 100 e  $\phi$  fino a 3m
- Costruito in alluminio anodizzato e acciaio inox
- Puntalini con terminali a sfera  $\phi$  3 di serie
- Elettronica IP67, trasmissione dati Proximity-USB
- Preset, minimo/massimo, fattore di scala (per letture diametrali)

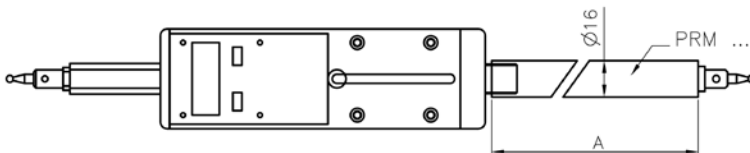


Article	Range	Resolution	Accuracy	Code	Kg
BIG MITRA	300-400/3000	0,01	0,01	00886	0,850

## OPTIONAL EXTENTIONS PROLUNGHE OPZIONALI



## OPTIONAL EXTENTIONS LIGHT WEIGHT PROLUNGHE OPZIONALI CON STELO IN CARBONIO



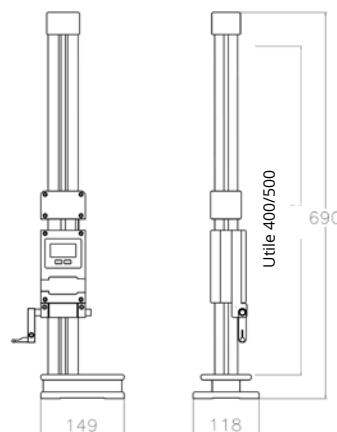
Article	A mm	Code	Kg
PRMB 100	100	00868	0,100
PRMB 200	200	00869	0,140
PRMB 300	300	00872	0,220
PRMB 500	500	00874	0,300
PRMB 1000	1000	00875	0,450

HEIGHT GAUGES TRUSCHINI



- Digital measure instrument for check heights, with spring system
- High rigidity tubular column, guarantees very accurate precision and smoothness
- Double carriage for preloading in push and pull measurements
- Sliding system on bearings, counterweight for balancing
- Base in hardened stainless steel inox tempre 50HRC
- Electronic IP54, with data output OPTO/RS232 or OPTO/USB

- Misuratore digitale a corsoio per altezze, tiro e spinta con molla di carico
- Colonna tubolare ad elevata rigidità, garantisce un'accuratissima precisione e scorrevolezza
- Doppio carrello per precarica a misurazioni in tiro e spinta
- Sistema di scorrimento su cuscinetti, contrappeso per bilanciamento
- Base in acciaio temprato 50 HRC
- Elettronica IP54, con uscita dati OPTO/RS232 o OPTO/USB



Article	Range	A	Base	Resolution	Accuracy	Code	Kg
IDRA 400	0 - 400 110 - 500	690	149 x 118	0.01	± 0.005	00683	7,950



# BILANCIATORE

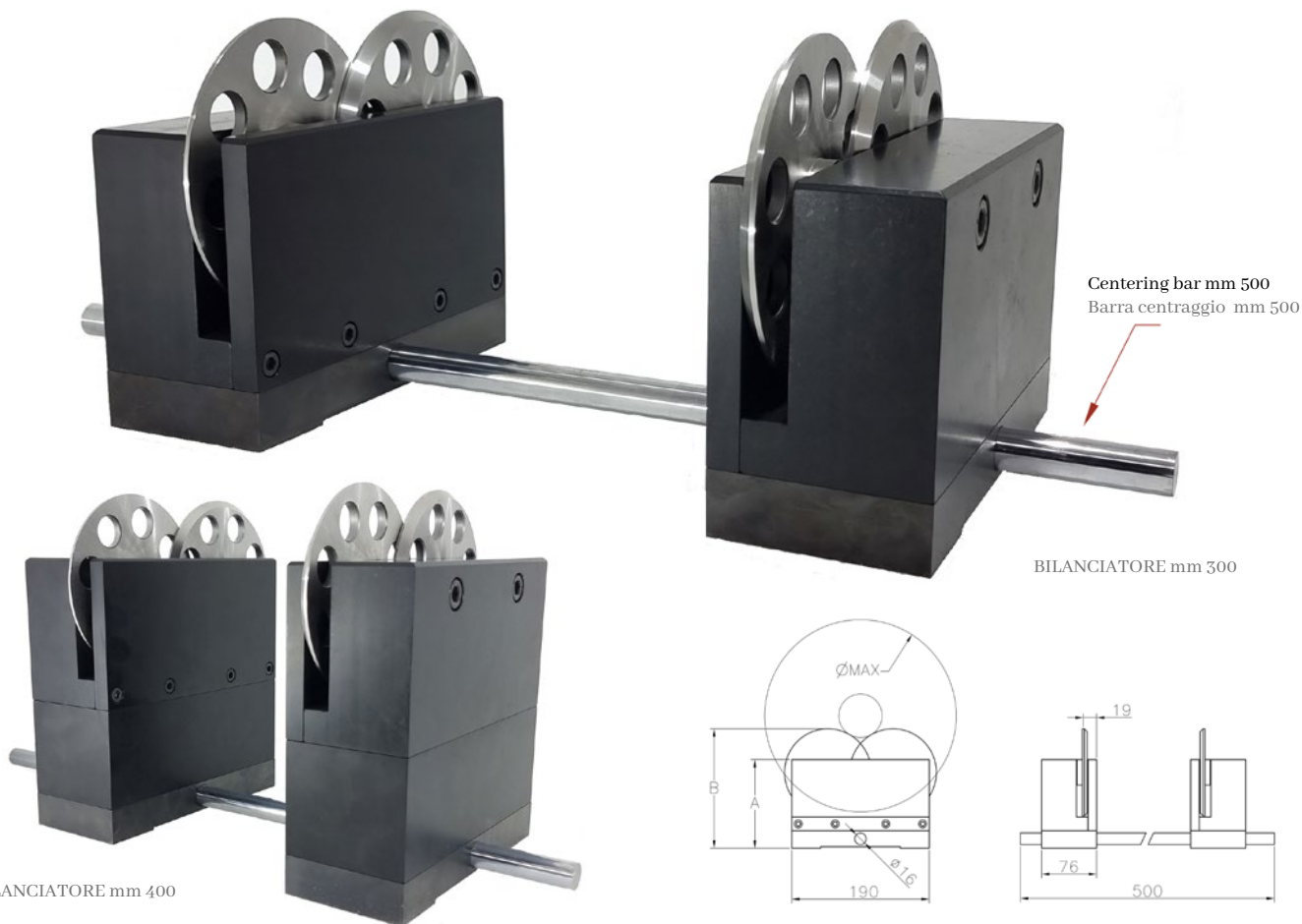
Balancing tool  
Strumento per bilanciamento



MEASURE INSTRUMENTS STRUMENTI CONTROLLO



- Pieces balancing tool (e.g. grinding wheels)
  - Concentricity control and balance  $\phi$  on shafts
  - Standard centering bar of the bodies 500 mm, possibility of different range on request
  - Possibility of making measurements on any flat surface, optimal use on a test bench
  - Raised supports for wheel balancing up to  $\phi$  400 mm
- Strumento per il bilanciamento di alberi
  - Per misurare concentricità e bilanciatura  $\phi$  su alberi
  - Barra di centraggio dei corpi tra loro standard 500 mm, possibilità di utili su richiesta
  - Possibilità di effettuare misurazioni su qualsiasi superficie piana, utilizzo ottimale su banco di riscontro
  - Supporti rialzati per bilanciamento pezzi fino a  $\phi$  400 mm



BILANCIATORE mm 400

BILANCIATORE mm 300

Article	$\phi$ MAX	A	B	Code	Kg
BILANCIATORE 300	300	122 MM	164 MM	00692	15,000
BILANCIATORE 400	400	190 MM	232 MM	00693	19,400

## APPLICATION APPLICAZIONE



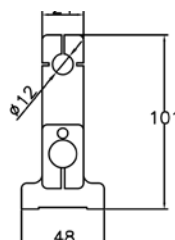
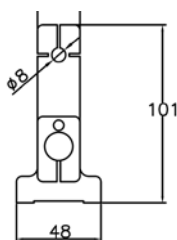
WHEEL BALANCING FOR GRINDING  
BILANCIAMENTO MOLE PER RETTIFICA





- Adjustable supports for the stroke of the dial gauge to be measure
- Dial gauge shaft  $\varnothing 8$
- Supporti regolabili per la corsa del comparatore da controllare
- Attacco comparatore  $\varnothing 8$

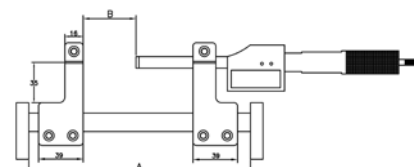
**NEW**



Article	A	B	Resolution	Code	Kg
PALLAS	250 MM	160 MM	0.001	00682	1,100

## EXAMPLE OF APPLICATION ESEMPIO D'APPLICAZIONE

CHECK DIAL GAUGES BACK AND FORWARD POINT/ CONTROL ALIGNMENT  
CONTROLLO CORSA E PUNTO DI INVERSIONE COMPARATORI

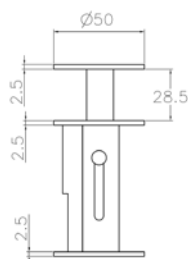
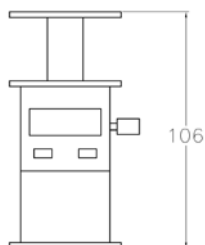


MEASURE INSTRUMENTS STRUMENTI CONTROLLO



- Instrument for check heights, thicknesses and grooves
- Hardened steel plates
- Range: 28 mm

- Strumento per misurare altezze, spessori e canalini
- Piattelli in acciaio temprato  $\varnothing 50 \times 2,5$  mm
- Corsa 28 mm

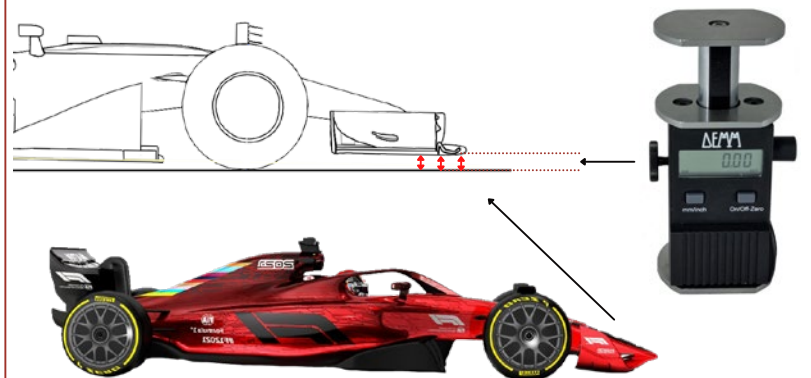


Article	Range mm	Repeatability	Code	Kg
ALETTO	0 - 28 MM	0.002	00688	0,350

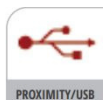
APPLICATION APPLICAZIONE

Instrument useful for measuring height of front ailerons in F1

Strumento indicato per la misurazione dell'altezza degli alettoni anteriori in Formula1



SPECIAL GAUGES CALIBRI SPECIALI



- Digital plug gauge for measuring thread depth up to 3 times the thread diameter
- Electronic module IP67 with preset function, 0,01 reading
- Data output Proximity-USB
- Option for electronic module with Bluetooth

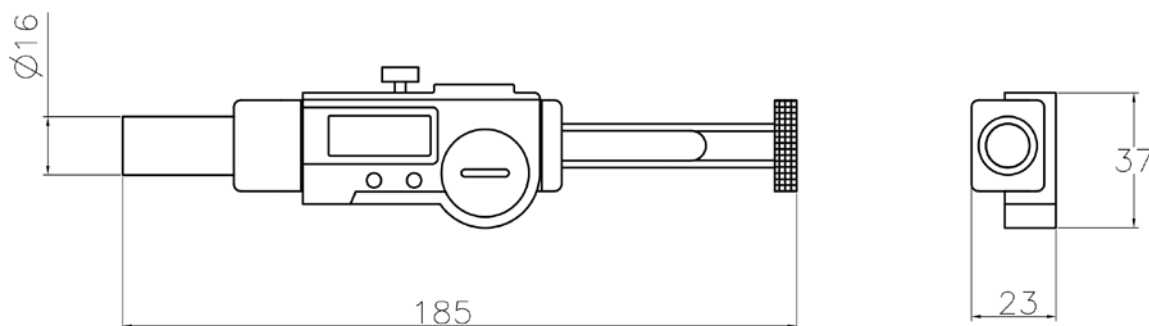
- Calibro a tampone digitale per misurare la profondità dei filetti fino a 3 volte il diametro del filetto
- Elettronica IP67 con funzione di preset, risoluzione 0,01
- Uscita dati Proximity-USB
- Opzione con Elettronica Bluetooth



Article	Code	Kg
DIGI SANTORINI M3	00780	0,218
DIGI SANTORINI M4	00781	0,218
DIGI SANTORINI M5	00782	0,218
DIGI SANTORINI M6	00783	0,218
DIGI SANTORINI M8	00784	0,218
DIGI SANTORINI M10	00785	0,218
DIGI SANTORINI M12	00786	0,218

\*Passi speciali a richiesta

\*Special threads on request



SPECIAL GAUGES CALIBRI SPECIALI

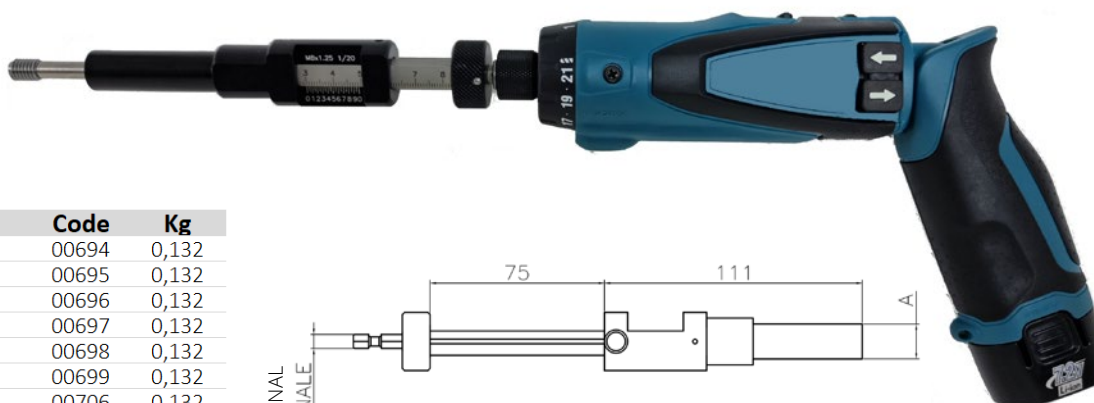


- Analogic plug gauge for measuring depth and thread to go with drill attachment

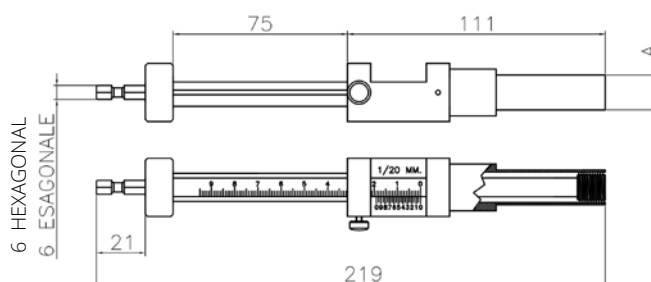
- Calibro a tampone analogico profondità filetti passa con attacco per avvitatore



Article	A	Code	Kg
SANTORINI P/NP M3	∅ 15	00718	0,132
SANTORINI P/NP M4	∅ 15	00719	0,132
SANTORINI P/NP M5	∅ 15	00726	0,132
SANTORINI P/NP M6	∅ 15	00727	0,132
SANTORINI P/NP M8	∅ 15	00728	0,132
SANTORINI P/NP M10	∅ 15	00729	0,132
SANTORINI P/NP M12	∅ 15	00736	0,132
SANTORINI P/NP M14	∅ 20	00737	0,132
SANTORINI P/NP M16	∅ 20	00738	0,132
SANTORINI P/NP M18	∅ 25	00739	0,132
SANTORINI P/NP M20	∅ 25	00741	0,132



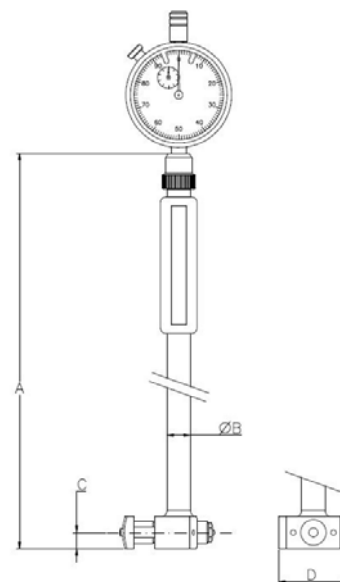
Article	A	Code	Kg
SANTORINI M M3	∅ 15	00694	0,132
SANTORINI M M4	∅ 15	00695	0,132
SANTORINI M M5	∅ 15	00696	0,132
SANTORINI M M6	∅ 15	00697	0,132
SANTORINI M M8	∅ 15	00698	0,132
SANTORINI M M10	∅ 15	00699	0,132
SANTORINI M M12	∅ 15	00706	0,132
SANTORINI M M14	∅ 20	00707	0,132
SANTORINI M M16	∅ 20	00708	0,132
SANTORINI M M18	∅ 25	00709	0,132
SANTORINI M M20	∅ 25	00716	0,132



### BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral and with radius
- Interchangeable fixed tips with sphere MD (Widia)
- Handle with insulation chamber
- $\varnothing 8$  mm dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 60$

- Puntale mobile MD (WIDIA) *integrale* R 8
- Puntali fissi intercambiabili con sfera MD (Widia)
- Impugnatura con camera di isolamento
- Attacco per comparatore  $\varnothing 8$  mm
- Di serie comparatore 0,01  $\varnothing 60$

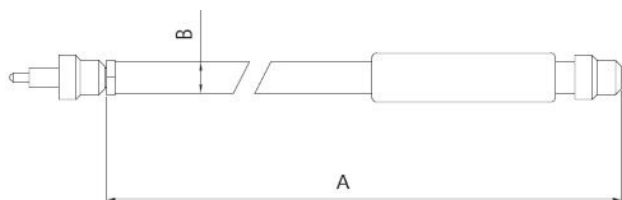


Article	Range mm	Hole Depth (mm)	Number of fixed tips	Number of washers	Extensions quantity (length) (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Mobile tip movement (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	CODE	Kg
ALESO 15-35	15+35	125	7	2	-	200	8	4	13	1,6	$\pm 1$	1	D00005	0,080
ALESO 30-100	30+100	250	5	3	2(25)	275	13	7	25	2,3	$\pm 1$	1	D00010	0,190
ALESO 50-160	50+160	250	6	3	1(25) - 1(55)	280	13	9	38	3,3	$\pm 1$	1	D00015	0,220
ALESO 50-210	50+210	380	6	3	1(25) - 2(55)	397	13	9	42	3,3	$\pm 1$	1	D00020	0,270
ALESO 100-300	100+300	350	6	2	1(50) - 1(100)	375	15	10	66	3,5	$\pm 1$	1	D00025	0,460
ALESO 150-450	150+450	350	6	2	1(50) - 2(100)	375	15	10	88	3,5	$\pm 1$	1	D00028	0,510
ALESO 100-500	100+500	650	6	2	1(50) - 3(100)	715	15	10	66	3,5	$\pm 1$	1	D00030	0,730
ALESO 160-650	160+650	650	6	2	1(50) - 4(100)	725	15	10	114	4	$\pm 1$	1	D00032	1,080
ALESO 190-1000	190+1000	650	6	2	1(50)-3(100)-2(200)	725	15	10	125	4	$\pm 1$	1	D00035	1,100
ALESO 250-1000	250+1000	650	6	2	1(50)-3(100)-2(200)	725	15	10	145	4	$\pm 1$	1	D00041	1,150

\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0.5 mm measuring travel (excluding dial gauge)

### DEPTH EXTENSION BAR PROLUNGHE ASTA DI PROFONDITA'



per/for ALESO 30-100 / 50-160 / 50-210

Article	A (mm)	B (mm)	CODE	Kg
PA 265	260	13	D20101	0,180
PA 385	380	13	D20102	0,200
PA 500	562	13	D20103	0,300
PA 750	765	13	D20104	0,410
PA 1000	1030	13	D20105	0,530

per/for ALESO 100-300 / 150-450 / 100-500 e oltre

Article	A (mm)	B (mm)	CODE	Kg
PAB 360	355	15	D20111	0,290
PAB 500	565	15	D20112	0,470
PAB 750	780	15	D20113	0,590
PAB 1000	1040	15	D20114	0,770

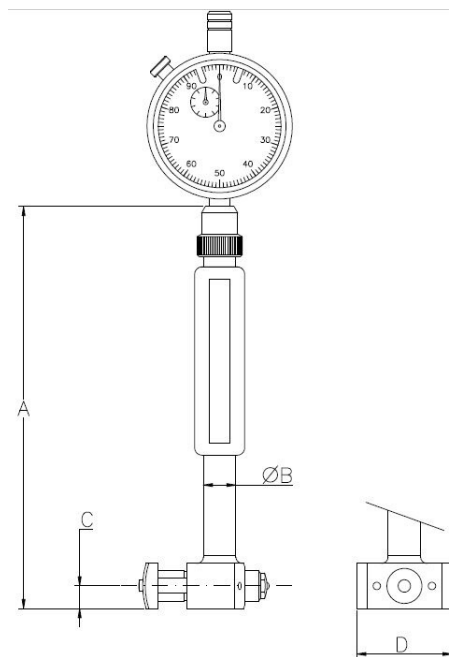
# ALESO C

Short rod bore gauge  
Alesometro asta corta



## BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral and with radius
- Interchangeable fixed tips with sphere MD (Widia)
- Handle with insulation chamber
- $\varnothing 8$  mm dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 60$
- Puntale mobile MD (WIDIA) *integrale* R 8
- Puntali fissi intercambiabili con sfera MD (Widia)
- Impugnatura con camera di isolamento
- Attacco per comparatore  $\varnothing 8$  mm
- Di serie comparatore 0,01  $\varnothing 60$



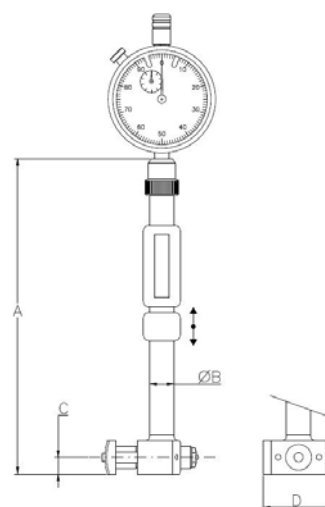
Article	Range mm	Hole depth (mm)	Number of fixed tips	Number of washers	Extensions quantity (length)	A (mm)	B (mm)	C (mm)	D (mm)	Mobile tip movement (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	CODE	Kg
ALESO C 15-35	15÷35	35	7	2	-	94	8	4	13	1,6	$\pm 1$	1	D00105	0,050
ALESO C 30-100	30÷100	130	5	3	2(25)	155	13	7	25	2,3	$\pm 1$	1	D00110	0,150
ALESO C 50-160	50÷160	130	6	3	1(25) - 1(55)	160	13	9	38	3,3	$\pm 1$	1	D00115	0,180
ALESO C 100-300	100÷300	220	6	2	1(50) - 1(100)	245	15	10	66	3,5	$\pm 1$	1	D00125	0,390
ALESO C 100-500	100÷500	350	6	2	1(50) - 3(100)	375	15	10	66	3,5	$\pm 1$	1	D00130	0,460
ALESO C 190-1000	190÷1000	440	6	2	1(50)-3(100)-2(200)	470	15	10	125	4	$\pm 1$	1	D00135	0,910

\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0.5 mm measuring travel (excluding dial gauge)

## BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral and with radius
- Interchangeable fixed tips with sphere MD (Widia)
- Ø8 mm dial guage clamping shank
- Probe Release
- Handle with insulation chamber
- Supplied with dial guage 0,01 Ø60
- Aluminium protection for the dial guage (PROTI)
- Puntale mobile MD (WIDIA) *integrale* R 8
- Puntali fissi intercambiabili con sfera MD (Widia)
- Attacco per comparatore Ø8 mm
- Richiamo tastatore
- Impugnatura con camera di isolamento
- Di serie comparatore 0,01 Ø60
- Protezione in alluminio per il comparatore (PROTI)



Article	Range (mm)	Hole depth (mm)	Number of fixed tips	Number of washers	Extensions quantity (length) (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Mobile tip movement (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	CODE	Kg
ALESO RC 30-100	30÷100	140	5	3	2(25)	165	13	7	25	2,3	$\pm 1$	1	D00210	0,160
ALESO RC 50-160	50÷160	140	6	3	1(25) - 1(55)	170	13	9	38	3,3	$\pm 1$	1	D00215	0,190
ALESO RC 100-300	100÷300	220	6	2	1(50) - 1(100)	245	15	10	66	3,5	$\pm 1$	1	D00225	0,400

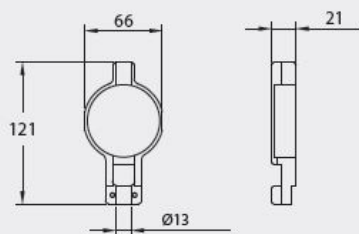
\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0,5 mm measuring travel (excluding dial guage)

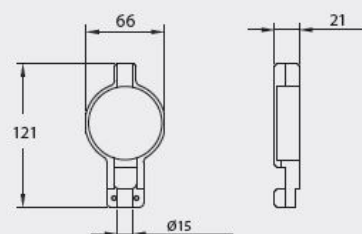
## PROTECTION FOR DIAL GAUGE WITH Ø58 DIAL

## PROTEZIONE COMPARATORE CON QUADRANTE Ø58

PROTI 13-58



PROTI 15-58



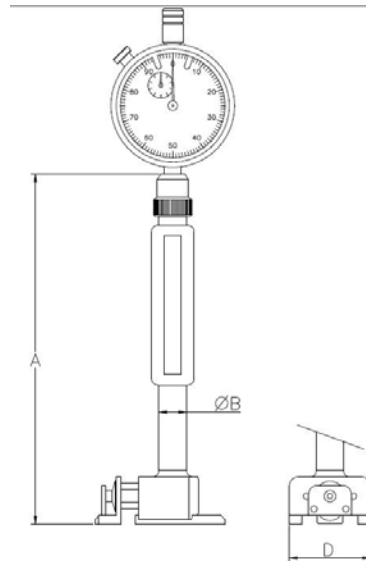
Article	Bore gauge compatible	CODE	Kg
PROTI 13-58	ALESO RC 30-100 / ALESO RC 50-160	D20010	0,080
PROTI 15-58	ALESO RC 100-300	D20015	0,080



### BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral
- Instrument used for measurement at a minimum distance from the bottom
- Handle with insulation chamber
- $\varnothing 8$ mm dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 60$

- Puntale mobile MD (WIDIA) *integrale*
- Strumento utilizzabile per misurazioni ad una distanza minima dal fondo
- Impugnatura con camera di isolamento
- Attacco per comparatore  $\varnothing 8$  mm
- Di serie comparatore 0,01  $\varnothing 60$  mm



Article	Range (mm)	Hole depth (mm)	Number of contact rod	Number of washers	A (mm)	B (mm)	D (mm)	Mobile tip movement (mm)	Measurement distance from the bottom (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	CODE	Kg
ALESO FC 15-35	15-35	90	7	3	162	8	11,5	1,4	1,5	$\pm 2$	1	D00303	0,080
ALESO FC 25-60	25-60	130	7	-	155	8	18	1,6	2	$\pm 2$	1	D00305	0,100
ALESO FC 50-150	50-150	150	7	-	162	13	38	2,5	1,5	$\pm 2$	1	D00310	0,190
ALESO FC 100-300	100-300	230	5	-	250	15	66	3,3	1,5	$\pm 2$	1	D00325	0,400

\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0,5 mm measuring travel (excluding dial gauge)

### DETAILS DETTAGLI

#### ALESO FC 25-60

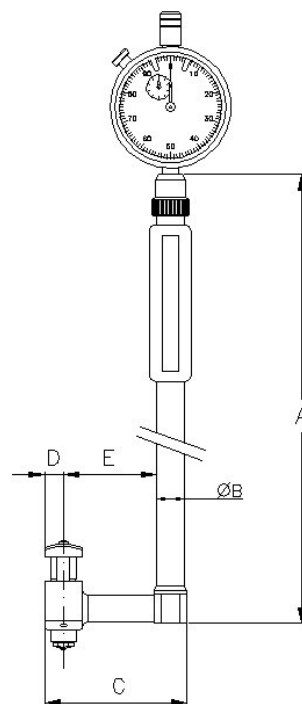


#### ALESO FC 50-150



### BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral and with radius
- For measurements of holes and bearing seats in orthogonal positions to the instrument axis
- $\varnothing 8\text{mm}$  with dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 60$
- Handle with insulation chamber
- Puntale mobile MD (WIDIA) *integrale* R 8
- Per misurazioni di fori e sedi per cuscinetti in posizioni ortogonali rispetto all'asse dello strumento
- Attacco per comparatore  $\varnothing 8\text{mm}$
- Di serie comparatore 0,01  $\varnothing 60$
- Impugnatura con camera di isolamento



Article	Range (mm)	Number of fixed tips	Number of washers	Extensions quantity (length) (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Mobile tip movement (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	CODE	Kg
ALESO L 15-35	15+35	7	2	-	200	8	44	4	32	1,6	$\pm 2$	1	D00405	0,090
ALESO L 30-100	30+100	5	3	2(25)	275	13	66	7	44	2,3	$\pm 2$	1	D00410	0,270
ALESO L 50-160	50+160	6	3	1(25) - 1(55)	275	13	69	9	45	3,3	$\pm 2$	1	D00415	0,300
ALESO L 100-300	100+300	6	2	1(50) - 1(100)	375	15	102,5	10	70	3,5	$\pm 2$	1	D00425	0,510

\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0,5 mm measuring travel (excluding dial gauge)

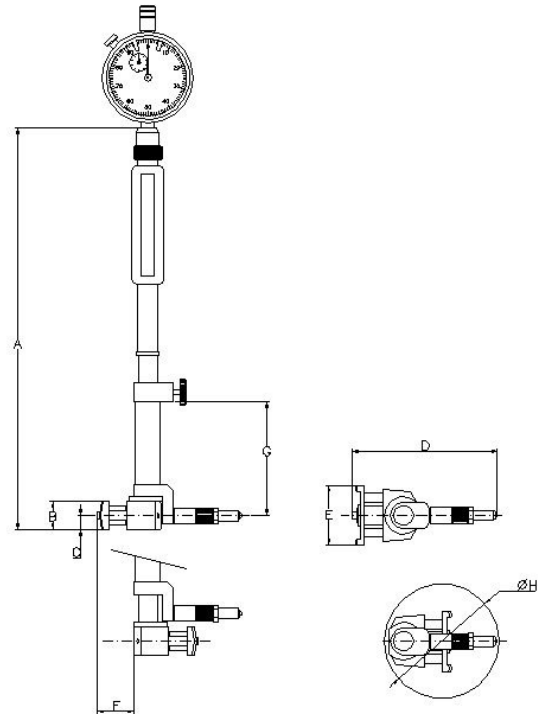
# ALESO Z

Grooves and recesses bore gauge  
Alesametro per scanalature e rientranze



## BORE GAUGES ALESAMETRI

- Instrument to measure diameter bigger than the entry point (ex. grooves, seats or recesses)
  - Mobile tip in MD (WIDIA) integral and with radius
  - Interchangeable fixed tips with sphere MD (WIDIA)
  - Handle with insulation chamber
  - $\varnothing 8$ mm dial gauge clamping shank
  - Supplied with dial gauge 0,01  $\varnothing 60$
- Strumento per misurare un diametro più grande rispetto al foro d'entrata (es. scanalature, sedi o rientranze)
  - Puntale mobile in MD (WIDIA) *integrale* R 8
  - Puntali fissi intercambiabili con sfera MD (WIDIA)
  - Impugnatura con camera di isolamento
  - Attacco per comparatore  $\varnothing 8$  mm
  - Di serie comparatore 0,01  $\varnothing 60$

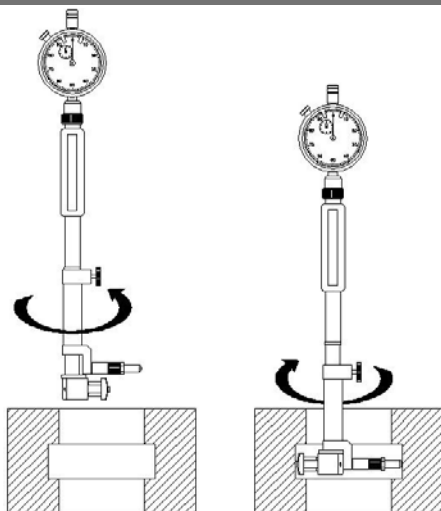


Artide	D Range (mm)	$\varnothing H$ Entry minimum diameter (mm)	F Retraction (mm)	G Measuring depth (mm)	A (mm)	B (mm)	C (mm)	E (mm)	Number of fixed tips	Number of washers	Extensions quantity(length) (mm)	Mobile tip movement (mm)	Accuracy $\mu m^*$	Repeatability $\mu m$	CODE	Kg
ALESO Z 50-160	50÷160	50	20	70	255	18	9	38	6	3	1(25) - 1(55)	3,3	$\pm 1$	1	D00515	0,250
ALESO Z 100-300	100÷300	75	35	90	350	20	10	66	6	2	1(50) - 1(100)	3,5	$\pm 1$	1	D00525	0,510

\*Precisione su un'escursione di 0,5 mm (escluso comparatore)

\*Accuracy on 0,5 mm measuring travel (escluding dial guage)

## APPLICATION APPLICAZIONE



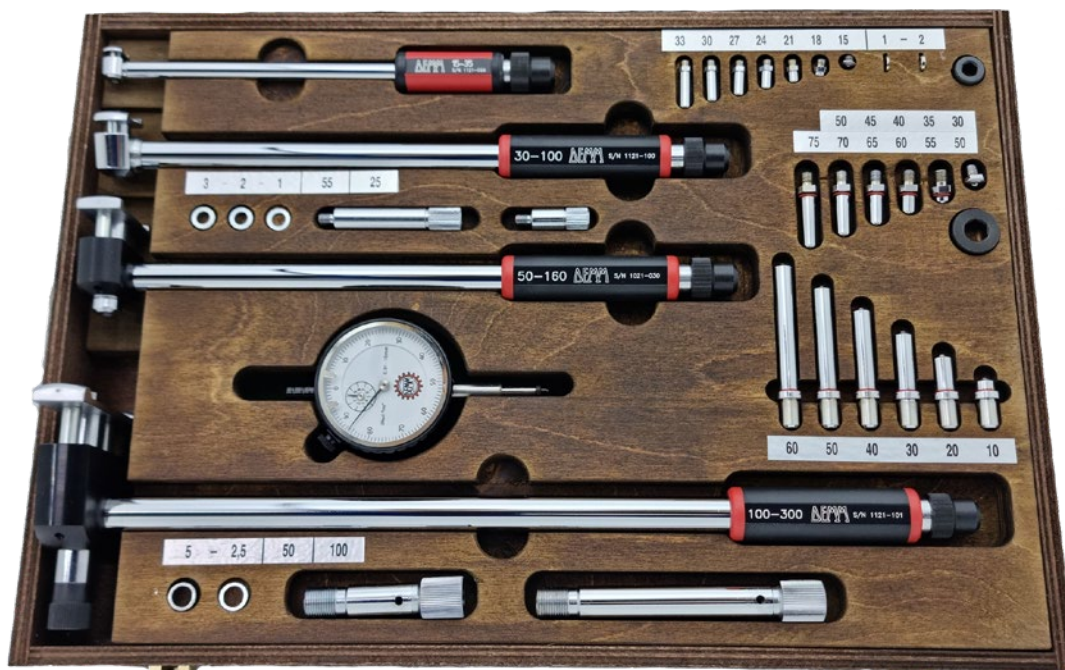
# ALESO SET

Standard Bore Gauge Set  
Set Alesametri Standard



## BORE GAUGES ALESAMETRI

- Mobile tip in MD (WIDIA) integral and with radius
- Interchangeable fixed tips with sizable sphere MD (WIDIA)
- Handle with insulation chamber
- $\varnothing 8$ mm dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 60$
- Puntale mobile in MD (WIDIA) *integrale* R 8
- Puntali fissi intercambiabili con sfera maggiorata in MD (WIDIA)
- Impugnatura con camera di isolamento
- Attacco per comparatore  $\varnothing 8$  mm
- Di serie comparatore 0,01  $\varnothing 60$



**ALESO 15 - 300**

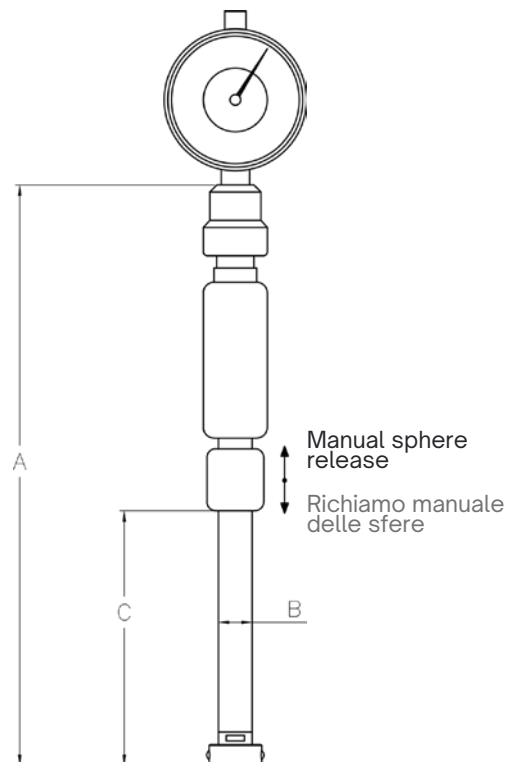
Article	Range	Composition*	Code
ALESO Set 15 - 210	15 - 210	ALESO 15 - 35 ALESO 30-100 ALESO 50-210	D10005
ALESO Set 15 - 300	15 - 300	ALESO 15 - 35 ALESO 30-100 ALESO 50-160 ALESO 100-300	D10010

*\*See individual characteristics on pg.56 of the catalog*

*\*Vedi caratteristiche individuali a pag.56 del catalogo*

## BORE GAUGES ALESAMETRI

- Interchangeable measuring heads with MD (Widia) spheres
- Supplied with 10 measuring heads
- Manual recall of the mechanism, to facilitate entry into the holes
- $\varnothing 8\text{mm}$  dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 40$
- Testine di misurazione intercambiabili in dotazione con sfere in MD (Widia)
- Di serie 10 testine incluse
- Richiamo manuale del meccanismo, per facilitare l'ingresso nei fori
- Attacco comparatore  $\varnothing 8\text{mm}$
- Di serie comparatore 0,01  $\varnothing 40$



Article	Range (mm)	A	B	C	Single head range (mm)	Min. measurement distance from the bottom (mm)	Accuracy $\mu\text{m}^*$	Repeatability $\mu\text{m}$	Code	Kg
EFESO 5-10	5-10	145	4,8	70	0,5	2	$\pm 2$	2	D01005	0,060
EFESO 10-20	10-20	160	9,5	70	1	3	$\pm 2$	2	D01010	0,100

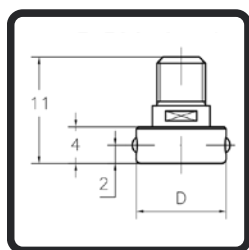
\*Accuracy on 0.5mm measuring travel (excluding dial gauge)

\*Precisione con escursione di 0,5mm (escluso comparatore)

## INTERCHANGEABLE HEADS TESTINE INTERCAMBIABILI

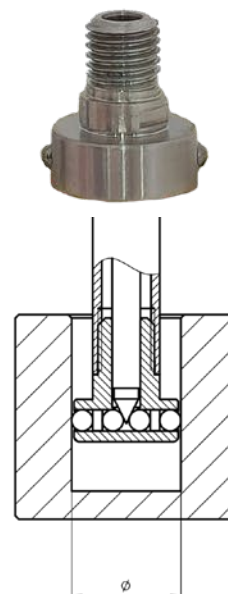
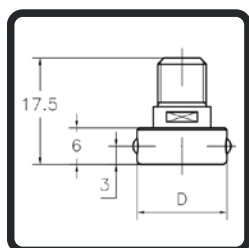
### EFESO 5 - 10

Article	Range (mm)	D	Code
Testa 5-10/d5	5 - 5,5	4,8	DR0005
Testa 5-10/d5,5	5,5 - 6	5,3	DR0010
Testa 5-10/d6	6 - 6,5	5,8	DR0015
Testa 5-10/d6,5	6,5 - 7	6,3	DR0020
Testa 5-10/d7	7 - 7,5	6,8	DR0025
Testa 5-10/d7,5	7,5 - 8	7,3	DR0030
Testa 5-10/d8	8 - 8,5	7,8	DR0035
Testa 5-10/d8,5	8,5 - 9	8,3	DR0040
Testa 5-10/d9	9 - 9,5	8,8	DR0045
Testa 5-10/d9,5	9,5 - 10	9,3	DR0050



### EFESO 10 - 20

Article	Range (mm)	D	Code
Testa 10-20/d10-11	10 - 11	9,8	DR0105
Testa 10-20/d11-12	11 - 12	10,8	DR0110
Testa 10-20/d12-13	12 - 13	11,8	DR0115
Testa 10-20/d13-14	13 - 14	12,8	DR0120
Testa 10-20/d14-15	14 - 15	13,8	DR0125
Testa 10-20/d15-16	15 - 16	14,8	DR0130
Testa 10-20/d16-17	16 - 17	15,8	DR0135
Testa 10-20/d17-18	17 - 18	16,8	DR0140
Testa 10-20/d18-19	18 - 19	17,8	DR0145
Testa 10-20/d19-20	19 - 20	18,8	DR0150



# EFESO PLUS

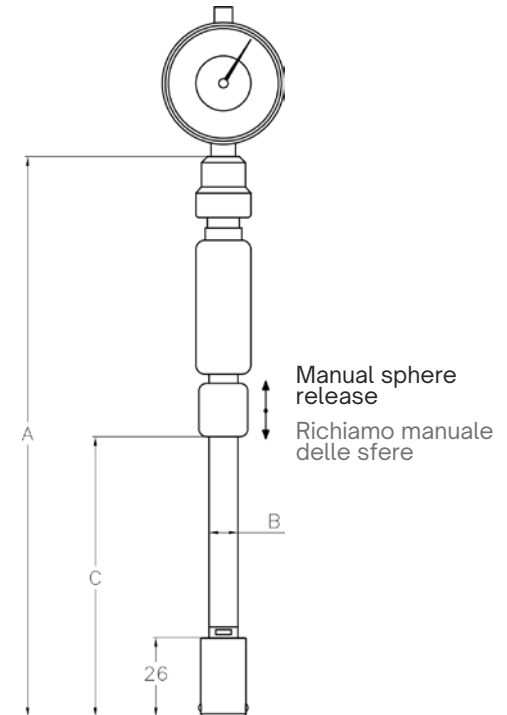
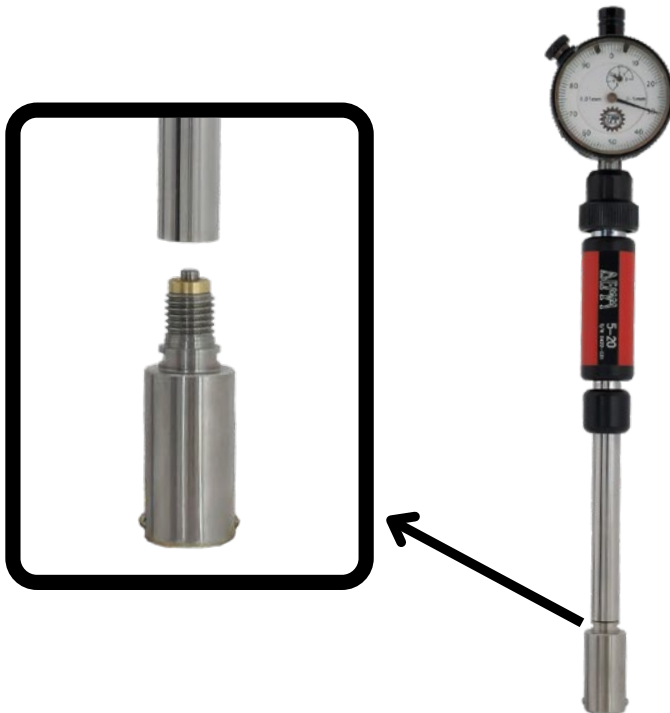
Small bores gauge  
Alesametro per piccoli fori



## BORE GAUGES ALESAMETRI

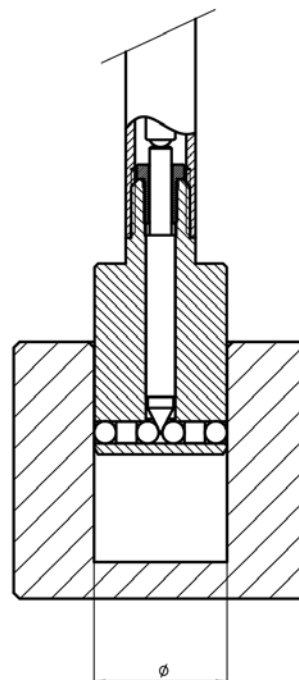
- Manual recall of the mechanism, to facilitate entry into the holes
- $\varnothing 8\text{mm}$  dial gauge clamping shank
- Supplied with dial gauge 0,01  $\varnothing 40$
- Optional: interchangeable measuring heads with MD (Widia) spheres

- Richiamo manuale del meccanismo, per facilitare l'ingresso nei fori
- Attacco comparatore  $\varnothing 8\text{mm}$
- Di serie comparatore 0,01  $\varnothing 40$
- Opzionali: testine di misurazione intercambiabili con sfere in MD (Widia)



Article	Range (mm)	A	B	C	Repeatability $\mu\text{m}$	Code	Kg
EFESO 5-20	5-20	180	9,5	90	1	D01015	0,100

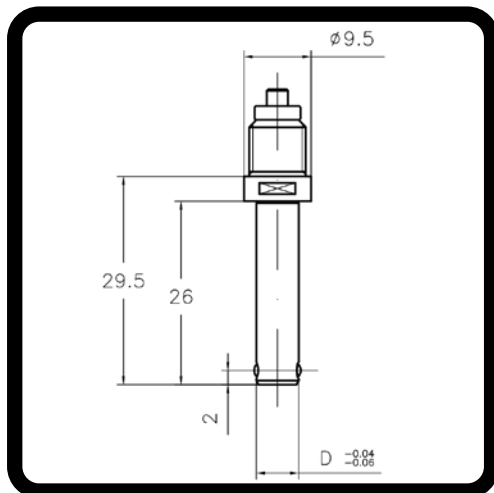
## EFESO PLUS OPTIONAL HEADS TESTINE OPZIONALI PER EFESO PLUS



## HEADS/PADS WITH TWO CONTACT POINTS FOR PRECISION MEASUREMENTS

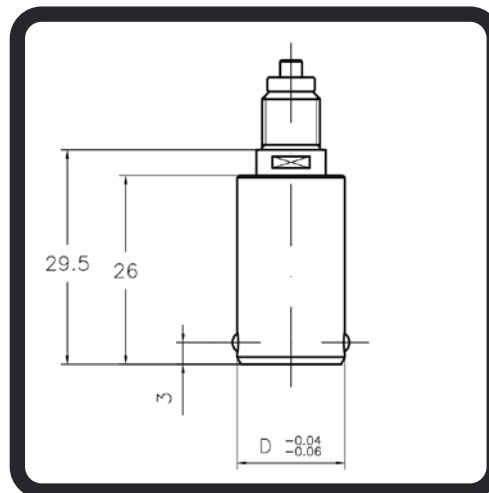
TESTINE/TAMPONE A DUE PUNTI DI CONTATTO PER MISURAZIONI DI PRECISIONE

EFESO PLUS  $\varnothing 5 - 10$



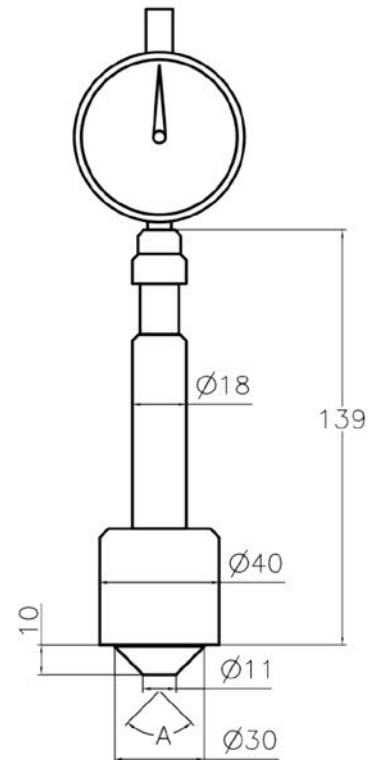
Article	Range (mm)	D	Code
TESTINA PLUS d.5,0	5 - 5,2	5	DR0200
TESTINA PLUS d.5,2	5,2 - 5,4	5,2	DR0201
TESTINA PLUS d.5,4	5,4 - 5,6	5,4	DR0202
TESTINA PLUS d.5,6	5,6 - 5,8	5,6	DR0203
TESTINA PLUS d.5,8	5,8 - 6	5,8	DR0204
TESTINA PLUS d.6,0	6 - 6,2	6	DR0205
TESTINA PLUS d.6,2	6,2 - 6,4	6,2	DR0206
TESTINA PLUS d.6,4	6,4 - 6,6	6,4	DR0207
TESTINA PLUS d.6,6	6,6 - 6,8	6,6	DR0208
TESTINA PLUS d.6,8	6,8 - 7	6,8	DR0209
TESTINA PLUS d.7,0	7 - 7,2	7	DR0210
TESTINA PLUS d.7,2	7,2 - 7,4	7,2	DR0211
TESTINA PLUS d.7,4	7,4 - 7,6	7,4	DR0212
TESTINA PLUS d.7,6	7,6 - 7,8	7,6	DR0213
TESTINA PLUS d.7,8	7,8 - 8	7,8	DR0214
TESTINA PLUS d.8	8 - 8,2	8	DR0215
TESTINA PLUS d.8,2	8,2 - 8,4	8,2	DR0216
TESTINA PLUS d.8,4	8,4 - 8,6	8,4	DR0217
TESTINA PLUS d.8,6	8,6 - 8,8	8,6	DR0218
TESTINA PLUS d.8,8	8,8 - 9	8,8	DR0219
TESTINA PLUS d.9	9 - 9,2	9	DR0220
TESTINA PLUS d.9,2	9,2 - 9,4	9,2	DR0221
TESTINA PLUS d.9,4	9,4 - 9,6	9,4	DR0222
TESTINA PLUS d.9,6	9,6 - 9,8	9,6	DR0223
TESTINA PLUS d.9,8	9,8 - 10	9,8	DR0224

EFESO PLUS  $\varnothing 10 - 20$



Article	Range (mm)	D	Code
TESTINA PLUS d.10,0	10 - 10,2	10	DR0225
TESTINA PLUS d.10,2	10,2 - 10,4	10,2	DR0226
TESTINA PLUS d.10,4	10,4 - 10,6	10,4	DR0227
TESTINA PLUS d.10,6	10,6 - 10,8	10,6	DR0228
TESTINA PLUS d.10,8	10,8 - 11	10,8	DR0229
TESTINA PLUS d.11	11 - 11,2	11	DR0230
TESTINA PLUS d.11,2	11,2 - 11,4	11,2	DR0231
TESTINA PLUS d.11,4	11,4 - 11,6	11,4	DR0232
TESTINA PLUS d.11,6	11,6 - 11,8	11,6	DR0233
TESTINA PLUS d.11,8	11,8 - 12	11,8	DR0234
TESTINA PLUS d.12	12 - 12,2	12	DR0235
TESTINA PLUS d.12,2	12,2 - 12,4	12,2	DR0236
TESTINA PLUS d.12,4	12,4 - 12,6	12,4	DR0237
TESTINA PLUS d.12,6	12,6 - 12,8	12,6	DR0238
TESTINA PLUS d.12,8	12,8 - 13	12,8	DR0239
TESTINA PLUS d.13	13 - 13,2	13	DR0240
TESTINA PLUS d.13,2	13,2 - 13,4	13,2	DR0241
TESTINA PLUS d.13,4	13,4 - 13,6	13,4	DR0242
TESTINA PLUS d.13,6	13,6 - 13,8	13,6	DR0243
TESTINA PLUS d.13,8	13,8 - 14	13,8	DR0244
TESTINA PLUS d.14	14 - 14,2	14	DR0245
TESTINA PLUS d.14,2	14,2 - 14,4	14,2	DR0246
TESTINA PLUS d.14,4	14,4 - 14,6	14,4	DR0247
TESTINA PLUS d.14,6	14,6 - 14,8	14,6	DR0248
TESTINA PLUS d.14,8	14,8 - 15	14,8	DR0249
TESTINA PLUS d.15	15 - 15,2	15	DR0250
TESTINA PLUS d.15,2	15,2 - 15,4	15,2	DR0251
TESTINA PLUS d.15,4	15,4 - 15,6	15,4	DR0252
TESTINA PLUS d.15,6	15,6 - 15,8	15,6	DR0253
TESTINA PLUS d.15,8	15,8 - 16	15,8	DR0254
TESTINA PLUS d.16	16 - 16,2	16	DR0255
TESTINA PLUS d.16,2	16,2 - 16,4	16,2	DR0256
TESTINA PLUS d.16,4	16,4 - 16,6	16,4	DR0257
TESTINA PLUS d.16,6	16,6 - 16,8	16,6	DR0258
TESTINA PLUS d.16,8	16,8 - 17	16,8	DR0259
TESTINA PLUS d.17	17 - 17,2	17	DR0260
TESTINA PLUS d.17,2	17,2 - 17,4	17,2	DR0261
TESTINA PLUS d.17,4	17,4 - 17,6	17,4	DR0262
TESTINA PLUS d.17,6	17,6 - 17,8	17,6	DR0263
TESTINA PLUS d.17,8	17,8 - 18	17,8	DR0264
TESTINA PLUS d.18	18 - 18,2	18	DR0265
TESTINA PLUS d.18,2	18,2 - 18,4	18,2	DR0266
TESTINA PLUS d.18,4	18,4 - 18,6	18,4	DR0267
TESTINA PLUS d.18,6	18,6 - 18,8	18,6	DR0268
TESTINA PLUS d.18,8	18,8 - 19	18,8	DR0269
TESTINA PLUS d.19	19 - 19,2	19	DR0270
TESTINA PLUS d.19,2	19,2 - 19,4	19,2	DR0271
TESTINA PLUS d.19,4	19,4 - 19,6	19,4	DR0272
TESTINA PLUS d.19,6	19,6 - 19,8	19,6	DR0273
TESTINA PLUS d.19,8	19,8 - 20	19,8	DR0274
TESTINA PLUS d.20	20 - 20,2	20	DR0275

- Tip with inclination corresponding to the countersinking to be measured
- $\varnothing 8\text{mm}$  dial gauge clamping shank
- Puntale ad inclinazione corrispondente alla svasatura da misurare
- Attacco comparatore  $\varnothing 8$



Article	Range $\varnothing$	A	Code	Kg
MEDUSA 1130	$\varnothing 11 - \varnothing 30$	$90^\circ$	00754	0,600



Per svasature a  $90^\circ$   
For  $90^\circ$  countersinking

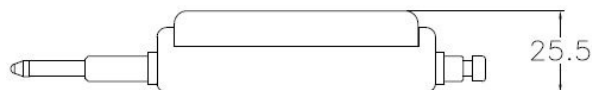
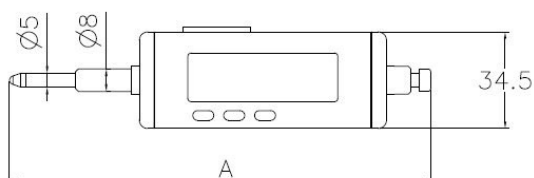


Per svasature  $< 90^\circ$   
For countersinking  $< 90^\circ$





- Accuracy and quality for workshop
- Stern and spindle stainless steel, hardened and lapped
- Adjustable tolerance marks
- Built in accordance with DIN 878
- Data transmission Proximity-USB, Optional wireless
- Preset, Set minimum / maximum
- Diametral reading using scaling factor integrated
- Precisione e qualità di lavoro
- La cremagliera e la bussola sono in acciaio inox, lappato
- Misura regolabile con contatto
- Costruito in rispetto alle norme DIN 878
- Trasmissione dati Proximity-USB, Opzionale wireless
- Preset, Impostazione minimo / massimo
- Lettura diametrale usando fattore di scala integrato



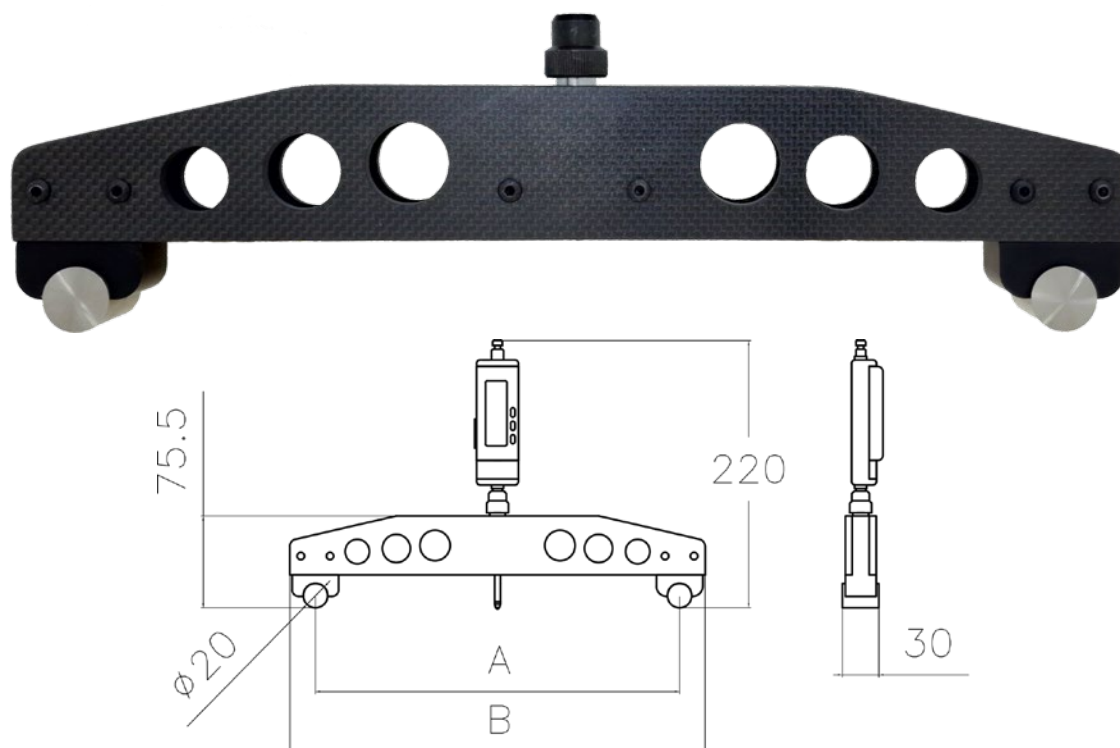
Article	Range (mm)	A (mm)	*Resolution	Accuracy	CODE	Kg
FEDRA 15	15	150	0.01	±0.01	00769	0,150
FEDRA 30	30	180	0.01	±0.01	00770	0,170
FEDRA 50	50	220	0.01	±0.01	00771	0,190

\*on request possibility of reading 0.001

\*su richiesta possibilità lettura millesimale 0.001

Article	Range (mm)	A (mm)	*Resolution	Accuracy on 5mm range	CODE	Kg
FEDRA 5	5	150	0.001	±0.003	00877	0,150
FEDRA 10	10	180	0.001	±0.003	00878	0,170

- Carbon fiber tool to determine the Radius/Diameter of a piece by detecting it from its arc
- Use of external Computer/Tablet PC to calculate the Radius/Diameter using formulas and Sylvac Software
- Connection to computer/Tablet PC via Proximity-USB, optionally Wireless
- Use of digital dial for data detection and transmission
- Zeroing on the reference plane
- Strumento in fibra di carbonio per determinare il Raggio/Diametro di un pezzo rilevandolo da un suo arco
- Uso di Computer/Tablet PC esterno per il calcolo del raggio/diametro tramite formule e software Sylvac
- Connessione a Computer/Tablet PC Proximity-USB opzionalmente Wireless
- Utilizzo di comparatore digitale per rilevazione e trasmissione dati
- Azzeramento su piano di riscontro



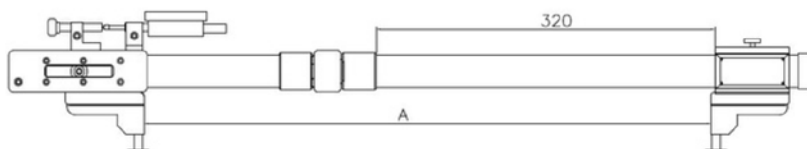
Article	Raggio	A (mm)	B (mm)	CODE	Kg
ARCHIMEDE 80	50 - 200	80	122	00787	0,670
ARCHIMEDE 130	97 - 800	130	172	00788	0,730
ARCHIMEDE 300	470 - 2000	300	342	00789	0,810
ARCHIMEDE 500	1270 - 10000	500	542	00790	0,980



COMPARISON GAUGES CALIBRO A COMPARAZIONE



- Comparison caliper 20 mm of spring system preload push/pull optional inserting extensions useful to increase the measuring range
- Lightweight Carbon Fiber bar
- Supplied with dial gauge 0.01  $\phi$  60 mm, pair contacts (TS81660)  $\phi$ 8
- Calibro a comparazione con precarica corsa 20 mm in tiro/spinta sezionabile per l'inserimento di prolunghe per aumentare il campo di misura
- Aste in fibra di carbonio
- Di serie: comparatore 0.01  $\phi$ 60, coppia di terminali a piattello  $\phi$ 20 (TS81660) con sede  $\phi$ 8



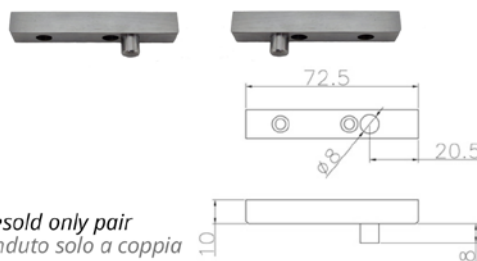
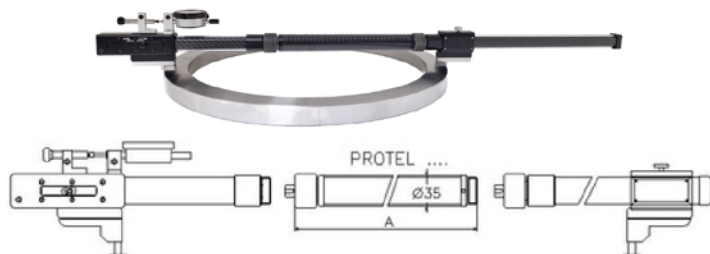
Article	Range	A	Repeteability	Code	Kg
PROTOS 600	250-3000	540	0,01/1000	00772	1,600

OPZIONAL ACCESSORIES PROTOS

ACCESSORI OPZIONALI PROTOS

OPZIONAL CALIBRATED EXTENSIONS PROTOS  
PROLUNGHE CALIBRATE OPZIONALI PROTOS

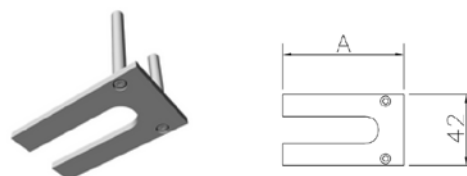
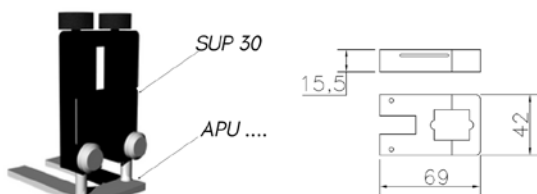
TASTATORI CON PUNTALE  $\phi$  8



•sold only pair  
•venduto solo a coppia

Article	A	Code	Kg
PROTEL 300	300	00773	0,550
PROTEL 500	500	00774	0,650
PROTEL 1000	1000	00775	0,830

Article	Code	Kg
PROTAST	00776	0,130



•use only with SUP 30  
•utilizzo solo con SUP 30

Article	Code	Kg
SUP30	00668	0,104

Article	Code	Kg
APU 70	00665	0,062
APU 120	00666	0,138
APU 160	00667	0,172



# Your Everyday Partner

## Kinds and Symbols of Geometrical Tolerances

Kind of tolerance	Symbol	Definition of tolerance zone	Examples of diagrammatical indication and its interpretation
Form tolerance	Straightness tolerance	Where symbol $\phi$ is attached before the numerical value indicating a tolerance zone, this tolerance zone is a zone in a cylinder of diameter $t$ .	Where a tolerance frame is connected to the dimension showing the diameter of a cylinder, the axis of the cylinder shall be contained a cylinder of 0.08mm diameter.
	Flatness tolerance	The tolerance zone is a zone held between two parallel planes a distance $t$ apart.	This surface shall be contained between two parallel planes 0.08mm apart.
	Circularity tolerance	The tolerance zone in the considered plane is a zone between two concentric circles a distance $t$ apart.	The circumference in any section normal to the axis shall be contained between two concentric circles 0.1mm apart on the same plane.
	Cylindricity tolerance	The tolerance zone is a zone contained between two coaxial cylinder surfaces a distance $t$ apart.	The considered surface shall be contained between two coaxial cylinder surfaces 0.1mm apart.
	Profile tolerance of line	The tolerance zone is a zone held between two lines enveloping circles of diameter $t$ , the centers of which are situated on a theoretically exact profile line.	In any cross-section parallel to the projection plane the considered profile shall be contained between two lines enveloping circles of 0.04mm in diameter, the centers of which are situated on a line having the theoretically exact profile.
	Profile tolerance of surface	The tolerance zone is a zone held between the two surfaces enveloping the spheres of diameter $t$ , the centers of which are situated on a theoretically exact profile surface.	The considered surface shall be contained between two surfaces enveloping the spheres of diameter 0.02mm, the centers of which are situated on a surface having the theoretically exact profile.
Orientation tolerance	Parallelism tolerance	The tolerance zone is a zone held between two parallel planes parallel to the datum plane and a distance $t$ apart from each other.	The surface shown by the arrow of the leader line shall be contained between two planes parallel to the datum plane A and 0.01mm apart from each other in the direction of the arrow of the leader line.
	Perpendicularity tolerance	Where symbol $\phi$ is attached before the numerical value indicating the tolerance, the tolerance zone is a zone within a cylinder of diameter $t$ perpendicular to the datum plane.	The axis of the cylinder shown by the arrow of the leader line shall be contained within a cylinder of diameter 0.01mm perpendicular to the datum plane A.
	Angularity tolerance	The tolerance zone is a zone held between two parallel planes inclined at the specified angle to the datum plane and a distance $t$ apart from each other.	The surface shown by the arrow of the leader line shall be contained between two parallel planes which are inclined at 40° with theoretical exactness to the datum plane A and which are 0.08mm apart from each other in the direction of the arrow of the leader line.
Location tolerance	Positional tolerance	The tolerance zone is a zone within a circle or sphere of diameter $t$ having its center at the theoretically exact location, hereinafter referred to as the "true location".	The point shown by the arrow of the leader line shall be contained within a circle of 0.03mm diameter having its center at the true location 60mm and 100mm apart, respectively, from the datum straight line A and from the datum straight line B.
	Coaxiality tolerance or concentricity tolerance	Where symbol $\phi$ is attached before the numerical value indicating the tolerance, the tolerance zone is a zone within a cylinder of diameter $t$ whose axis agrees with the datum axial straight line.	The axis shown by the arrow of the leader line shall be contained within a cylinder of 0.01mm diameter whose axis agrees with the datum axial straight line A.
	Symmetry tolerance	The tolerance zone is a zone held between two parallel planes a distance $t$ apart from each other and arranged symmetrically about the datum median plane.	The median surface shown by the arrow of the leader line shall be contained between two parallel planes 0.08mm apart from each other and arranged symmetrically about the datum median plane A.
Run-out tolerance	Circular run-out tolerance	The tolerance is a zone between two concentric circles whose centers agree with the datum axial straight line on any measuring plane normal to the datum axial straight line and which are a distance $t$ apart from each other in the radial direction.	The run-out in the radial direction of the cylinder surface shown by the arrow of the leader line shall not exceed 0.1mm on any measuring plane normal to the datum axial straight line when the cylinder is rotated by one rotation about the datum axial straight line A-B.
	Total run-out tolerance	The tolerance zone is a zone between two coaxial cylinders having axes agreeing with the datum axial straight line and a distance $t$ apart from each other in the radial direction.	The total radial run-out of the cylinder surface shown by the arrow of the leader line shall not exceed 0.1mm at any point on the cylinder surface when the cylinder part is rotated about the datum axial straight line A-B with a relative movement in the axial direction.

Lines used in the drawings in the column of "definition of tolerance zone" indicate the following meanings :

Thick solid line or broken line: Feature

Thin alternate long and short dash line: Center line

Thick alternate long and short dash line: Datum

Thin alternate long and two short dashes line: Supplementary projection plane or sectional plane

Thin solid line or broken line: Tolerance zone

Thick alternate long and two short dashes line: Projection of a feature to supplementary Projection plane or sectional plane

**DEMM ITALIANA CALIBRI**

**NOLAN S.r.l.**

**Tel e Fax +39 0546 665049**

**E-mail: info@calbridemm.it**

**www.calbridemm.it**