

Plug Gauges

The best and quickest method for inspecting bores with small diameters.

TESA CARY plug gauges with diameters from 0,050 up to 0,300 mm

Type TDH

Due to their small size, these plug gauges are best handled using tweezers.

mm	STANDARD		ETALON	
	Step 2 µm	1 µm	Step 2 µm	1 µm
0,050 ÷ 0,080	CJ1D1S2	CJ1D1S0	CJ1D1E2	CJ1D1E0
0,081 ÷ 0,309	CJ1D2S2	CJ1D2S0	CJ1D2E2	CJ1D2E0

Type TLH

This type is identical to the TDH one, but with a 30 mm long handle.

mm	STANDARD ± 0,4 µm		ETALON ± 0,15 µm	
	Step 2 µm	1 µm	Step 2 µm	1 µm
0,050 ÷ 0,080	CJ1L1S2	CJ1L1S0	CJ1L1E2	CJ1L1E0
0,081 ÷ 0,309	CJ1L2S2	CJ1L2S0	CJ1L2E2	CJ1L2E0

Type TLH-5 or TLH-10 with a length of 5 or 10 mm

mm	STANDARD		ETALON		
	Step 2 µm	1 µm	Step 2 µm	1 µm	
TLH-5	0,101 ÷ 0,309	CJ1L5S2	CJ1L5S0	CJ1L5E2	CJ1L5E0
TLH-10	0,101 ÷ 0,309	CJ1L10S2	CJ1L10S0	CJ1L10E2	CJ1L10E0



EN ISO 1938
Factory standard



Light alloy, coloured handle
with engraved nominal diameter

Accuracy:
STANDARD (blue handle)
± 0,4 µm.

ETALON (yellow handle)
± 0,15 µm

Inspection report available on request

PLUG AND RING GAUGES

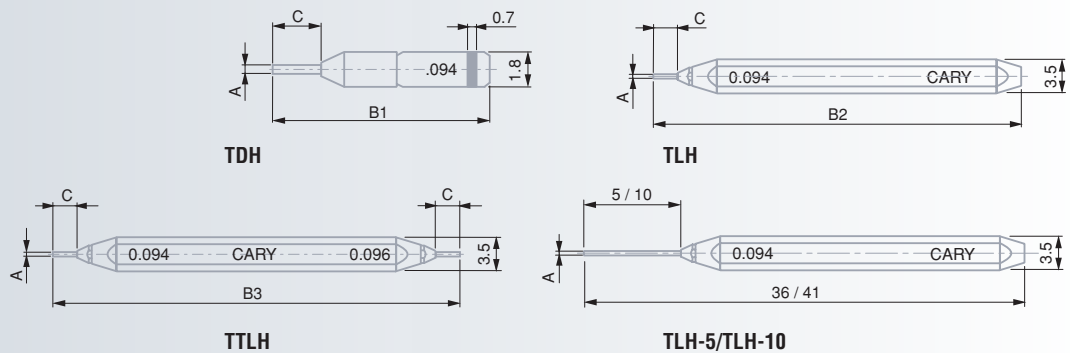


Type TTLH

Double-ended plug gauges consisting of two TDH-type plug gauges.



mm	STANDARD ± 0,4 μm		ETALON ± 0,15 μm	
	Step 2 μm	1 μm	Step 2 μm	1 μm
0,050 ÷ 0,080	–	CJ1LL1S0	–	CJ1LL1E0
0,081 ÷ 0,309	–	CJ2LL2S0	–	CJ1LL2E0



TDH/TLH/TTLH gauge sizes

A mm	B1 mm	B2 mm	B3 mm	C mm
0,050 ÷ 0,100	10,3	31,8	33,6	0,8
0,100 ÷ 0,150	10,5	32	34	1,0
0,150 ÷ 0,200	10,7	32,2	34,2	1,2
0,200 ÷ 0,250	10,9	32,4	34,4	1,4
0,250 ÷ 0,300	11,1	32,6	34,6	1,6

Standard accessories

No	A	=
CJ1ED25N	ED25N	Wooden case for 25 TDH plug gauges
CJ1EL25N	EL25N	Wooden case for 25 TLH plug gauges
CJ1XDL	XDL	Plastic case for TDH/TLH/TXH plug gauges



Type TZH for deep bores with diameters from 0,050 up to 0,300 mm



These plug gauges are mounted on holders for checking hard-to-reach bores.

When ordering, please specify:

- plug gauge diameter (0,050 to 0,300 mm)
- desired quality (STANDARD or ETALON)
- holder length (23 or 33 mm)

TESA CARY steel plug gauges with diameters from 0,3 up to 10 mm

Type TXH

Single-ended steel plug gauges (1 item).



mm	STANDARD			ETALON		
	Step 10 µm	2 µm	1 µm	Step 10 µm	2 µm	1 µm
0,300 ÷ 1,509	CJ1X1S10	CJ1X1S2	CJ1X1S0	CJ1X1E10	CJ1X1E2	CJ1X1E0
1,510 ÷ 3,509	CJ1X2S10	CJ1X2S2	CJ1X2S0	CJ1X2E10	CJ1X2E2	CJ1X2E0
3,510 ÷ 10,000	CJ1X3S10	–	CJ1X3S0	CJ1X3E10	–	CJ1X3E0



EN ISO 1938
Factory standard



Steel



Light alloy,
coloured
handle

with engraved nominal
diameter



Accuracy:
STANDARD (blue
handle) ± 0,4 µm
for diameters 0,3 ÷ 3 mm or
± 0,5 µm for diameters
3 ÷ 10 mm. ETALON (yellow
handle) ± 0,25 µm for diam-
eters 0,3 ÷ 3 mm or ± 0,3 µm
for diameters 3 ÷ 10 mm.



Inspection
report available
on request

Type TTXH

Steel plug gauges, type GO/NOT GO (2 items)



mm	STANDARD	ETALON
	Step 1 µm	Step 1 µm
0,300 ÷ 1,509	CJ1XX1S0	CJ1XX1E0
1,510 ÷ 3,509	CJ1XX2S0	CJ1XX2E0
3,510 ÷ 6,509	CJ1XX3S0	CJ1XX3E0
6,510 ÷ 10,000	CJ1XX4S0	CJ1XX4E0



0,3 ÷ 3 mm or ± 0,5 µm for diameters 3 ÷ 6 mm. ETALON (red handle) ± 0,25 µm for diameters 0,3 ÷ 3 mm or ± 0,3 µm for diameters 3 ÷ 6 mm.



TESA CARY tungsten carbide plug gauges with diameters from 0,3 up to 6 mm

Type TCH

Single-ended tungsten carbide plug gauges (1 item)



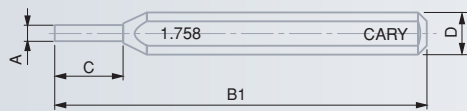
mm	STANDARD	1 µm		ETALON	1 µm
	Step 10 µm	Step 10 µm	Step 10 µm		
0,300 ÷ 1,509	CJ1C1S10	CJ1C1S0	CJ1C1E10	CJ1C1E0	
1,510 ÷ 3,509	CJ1C2S10	CJ1C2S0	CJ1C2E10	CJ1C2E0	
3,510 ÷ 6,000	CJ1C3S10	CJ1C3S0	CJ1C3E10	CJ1C3E0	

Type TTCH

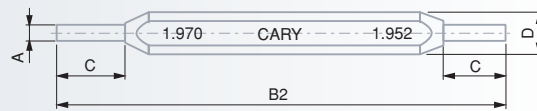
Tungsten carbide plug gauges, type GO/NOT GO (2 items)



mm	STANDARD	1 µm		ETALON	1 µm
	Step 1 µm	Step 1 µm	Step 1 µm		
0,300 ÷ 1,509	CJ1CC1S0	CJ1CC1S0	CJ1CC1E0	CJ1CC1E0	
1,510 ÷ 3,509	CJ1CC2S0	CJ1CC2S0	CJ1CC2E0	CJ1CC2E0	
3,510 ÷ 6,000	CJ1CC3S0	CJ1CC3S0	CJ1CC3E0	CJ1CC3E0	



TXH/TCH



TTXH/TTCH

Plug gauge sizes

A mm	B1 mm	B2 mm	C mm	D mm
0,30 ÷ 0,50	38	41	3	3,5
0,50 ÷ 1,00	39	43	4	3,5
1,00 ÷ 1,50	40	45	5	3,5
1,50 ÷ 2,00	46	52	6	5
2,00 ÷ 2,50	47	54	7	5
2,50 ÷ 3,00	48	56	8	5
3,00 ÷ 3,50	49	58	9	5
3,50 ÷ 4,00	60	70	10	8
4,00 ÷ 5,00	61	72	11	8
5,00 ÷ 10,0	62	74	12	8

Standard accessories

No	Accessories	Description
CJ1PTXK	PTXK	Suited case for 50 plug gauges Ø 0,300 ÷ 1,509 mm
CJ1MTXK	MTXK	Suited case for 50 plug gauges Ø 1,510 ÷ 3,509 mm
CJ1GTXK	GTXK	Suited case for 50 plug gauges Ø 3,510 ÷ 10,00 mm



LTXH-type precision steel pins with diameters from 0,30 up to 10 mm

These steel pins can be made available without handle upon request.

When ordering, please specify:

- pin diameter (0,30 to 10 mm)
- desired quality (STANDARD or ETALON)

PNH-type wires with handle for checking threads. wire diameters from 0,10 up to 10 mm



	STANDARD	ETALON
mm	Step 10 µm	Step 10 µm
0,10 ÷ 0,15	CJ1N1S	CJ1N1E
0,16 ÷ 0,50	CJ1N2S	CJ1N2E
0,51 ÷ 4,00	CJ1N3S	CJ1N3E
4,01 ÷ 10,00	CJ1N4S	CJ1N4E



EN ISO 1938



Hardened steel,
ground and lapped



Aluminium,
coloured
handle with
engraved nominal
diameter



Accuracy:
STANDARD (blue
handle) ± 0,8 µm
for diameters 0,1 ÷ 10 mm.
ETALON (yellow handle)
± 0,3 µm for diameters
0,1 ÷ 6 mm or ± 0,5 µm for
diameters 6 ÷ 10 mm.



Inspection
report available
on request



PNH

Plug gauge sizes

A mm	B mm	C mm	D mm	E mm
0,10 ÷ 0,15	20	9,5	1,8	0,9
0,16 ÷ 0,30	32	9,5	1,8	0,9
0,31 ÷ 1,10	32	14	3,5	1,5
1,11 ÷ 10,00	32	14	5	2

Standard accessories

№	=
CJ1N50	Suited clear box for 50 PNH thread wires
CJ1N3	Carrying tube for 3 PNH thread wires
CJ1NGC	Box engraving for each diameter
CJ1NLSM	Thread wire alone, without handle

Ring Gauges

Designed for inspecting cylindrical components such as pivots or axles – Used to determine external diameters.



EN ISO 1938
Factory standard

Steel

Inserted into a light alloy, blue coloured ring for easier handling. Also with engraved nominal diameter.

Ø 0,15 ÷ 3 mm:
± 0,6 µm
Ø 3 ÷ 4,999 mm:
± 0,75 µm

Inspection report available on request

TESA CARY steel ring gauges with diameters from 0,151 up to 5 mm



Typ BAH	1 Steel ring gauge	
Typ BIMHa	2 BAH steel ring gauges mounted in pairs on plates for use as GO/NOT GO type gauges	
	BAH	BIMHa
mm	Step 1 µm	Step 1 µm
0,151 ÷ 1,500	CJ1B2A	CJ1B2IA
1,501 ÷ 2,500	CJ1B3A	CJ1B3IA
2,501 ÷ 4,000	CJ1B4A	CJ1B4IA
4,001 ÷ 4,999	CJ1B5A	CJ1B5IA



EN ISO 1938
Factory standard

Tungsten carbide

Inserted into a black coloured, light alloy ring for easier handling. Also with engraved nominal diameter of the ring

Ø 0,060 ÷ 3 mm:
± 0,6 µm
Ø 3 ÷ 4,999 mm:
± 0,75 µm

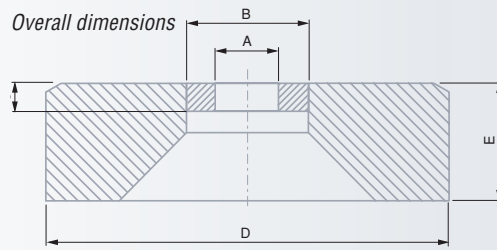
Inspection report available on request

TESA CARY carbide ring gauges with diameters from 0,060 up to 5 mm



Typ BCH	1 Carbide ring gauge	
Typ BIMHm	2 BCH carbide ring gauges mounted in pairs on plates for use as GO/NOT GO type gauges	
	BCH	BIMHm
mm	Step 1 µm	Step 1 µm
0,060 ÷ 0,150	CJ1B1C	CJ1B1IM
0,151 ÷ 1,500	CJ1B2C	CJ1B2IM
1,501 ÷ 2,500	CJ1B3C	CJ1B3IM
2,501 ÷ 4,000	CJ1B4C	CJ1B4IM
4,001 ÷ 4,999	CJ1B5C	CJ1B5IM





 A mm	Ring gauges				Outer rings	
	B mm		C mm		D mm	E mm
	BAH	BCH	BAH	BCH		
0,060 ÷ 0,50	1,4	1,8	0,35	0,5	8	2,5
0,50 ÷ 0,75	1,8	1,8	0,5	0,5	8	2,5
0,75 ÷ 1,25	2,4	2,4	0,75	0,75	8	2,5
1,25 ÷ 1,50	3	3	0,9	0,9	8	2,5
1,50 ÷ 2,50	5	5	1,5	1,5	12	4
2,50 ÷ 4,00	8	8	2,4	2,4	16	5,5
4,00 ÷ 5,00	10	10	3	3	20	7

Standard accessories

CJ1CEB3	Suited case for 3 rings	0,06 ÷ 1,50
CJ1CEB4	Suited case for 4 rings	0,06 ÷ 1,50
CJ1EB12	Suited case for 12 rings	0,06 ÷ 1,50
CJ1CB40	Suited case for 12 rings	1,50 ÷ 2,50
CJ1CB24	Suited case for 24 rings	2,50 ÷ 4,00
CJ1CB18	Suited case for 12 rings	4,00 ÷ 5,00
CJ1280,21.010A	Aluminium resting plate for 2 rings	0,06 ÷ 1,50
CJ1280,21.011A	Aluminium resting plate for 2 rings	1,51 ÷ 2,50
CJ1280,21.012A	Aluminium resting plate for 2 rings	2,51 ÷ 4,00
CJ1280,21.013A	Aluminium resting plate for 2 rings	4,01 ÷ 5,00
CJ1BAA	Bearing ring (one item for each ring gauge)	

TESA CARY steel ring gauges with diameters from 5 up to 30 mm



Type BOMa	1 Steel ring gauge	
Type BBOMa	2 BOMa steel ring gauges mounted in pairs on plates for use as GO/NOT GO type gauges	
 mm	 BOMa Step 1 µm	 BBOMa Step 1 µm
5,00 ÷ 9,99	CJ1BOA1	CJ1BBA1
10,00 ÷ 11,99	CJ1BOA2	CJ1BBA2
12,00 ÷ 13,99	CJ1BOA3	CJ1BBA3
14,00 ÷ 15,99	CJ1BOA4	CJ1BBA4
16,00 ÷ 17,99	CJ1BOA5	CJ1BBA5
18,00 ÷ 19,99	CJ1BOA6	CJ1BBA6
20,00 ÷ 22,99	CJ1BOA7	CJ1BBA7
23,00 ÷ 25,99	CJ1BOA8	CJ1BBA8
26,00 ÷ 29,99	CJ1BOA9	CJ1BBA9



Inserted into a light alloy, grey coloured ring for easier handling. Also with engraved nominal diameter.

5 ÷ 10 mm dia.: ± 1,25 µm
10 ÷ 18 mm dia.: ± 1,5 µm
18 ÷ 29,99 mm dia.: ± 2 µm

Inspection report available on request



EN ISO 1938
Factory standard

Tungsten carbide





Inserted into a light alloy, black coloured ring for easier handling. Also with engraved nominal diameter.

Ø 5 ÷ 10 mm: ± 1,25 µm
Ø 10 ÷ 18 mm: ± 1,5 µm
Ø 18 ÷ 29,99 mm: ± 2 µm

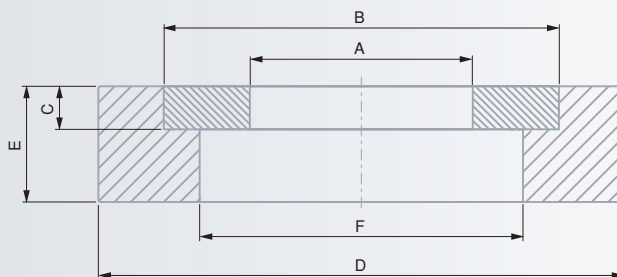
Better quality upon request (Q5)
5 ÷ 10 mm dia.: ± 1 µm
10 ÷ 18 mm dia.: ± 1,2 µm
18 ÷ 29,99 mm dia.: ± 1,5 µm


Inspection report available on request

TESA CARY tungsten carbide ring gauges with diameters from 5 up to 30 mm

Type BOMm	1 Tungsten carbide ring gauge	
Type BBOMm	2 BOMm carbide ring gauges mounted in pairs on plates for use as GO/NOT GO plug gauges	
		
BOMm	BBOMm	
		
Step 1 µm	Step 1 µm	
mm		
5,00 ÷ 9,99	CJ1BOM1	CJ1BBM1
10,00 ÷ 11,99	CJ1BOM2	CJ1BBM2
12,00 ÷ 13,99	CJ1BOM3	CJ1BBM3
14,00 ÷ 15,99	CJ1BOM4	CJ1BBM4
16,00 ÷ 17,99	CJ1BOM5	CJ1BBM5
18,00 ÷ 19,99	CJ1BOM6	CJ1BBM6
20,00 ÷ 22,99	CJ1BOM7	CJ1BBM7
23,00 ÷ 25,99	CJ1BOM8	CJ1BBM8
26,00 ÷ 29,99	CJ1BOM9	CJ1BBM9

Overall dimensions



	Ring gauges		Outer rings		
	B mm	C mm	D mm	E mm	F mm
A mm					
5 ÷ 10	18	2	30	4	10,5
10 ÷ 14	24	2,5	38	5	15
14 ÷ 18	30	3	46	6	19
18 ÷ 24	38	3,5	56	8	25
24 ÷ 30	46	4	68	8	31

Standard Accessory



CJ1BBA



Bearing ring (one item for each ring gauge)