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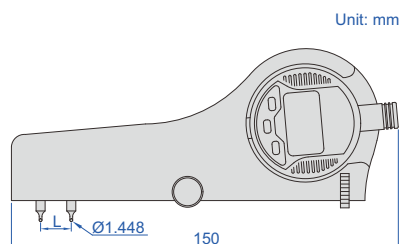
RTJ Ring Groove Calipers
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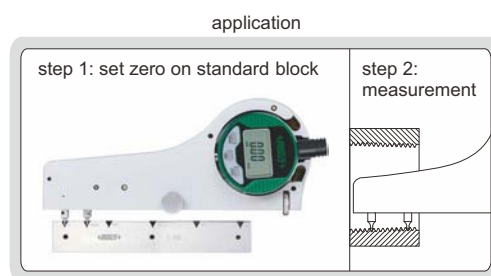
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DIGITAL THREAD PITCH MEASURING INSTRUMENT

MEET INTERNATIONAL
STANDARD API5B



- Measure the pitch of external thread and internal thread with nominal diameter larger than 5 1/2" (139.7mm)
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-50M** page 13), ball points (code **6252** series), standard pitch blocks (code **6251** series)

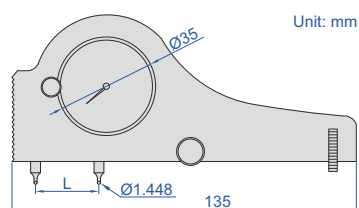


Code	Range (L)	Digital indicator stroke	Resolution	Accuracy
2245-4	0.5-4"/12.7-101.6mm	0.2"/5mm	0.0005"/0.01mm	0.02mm

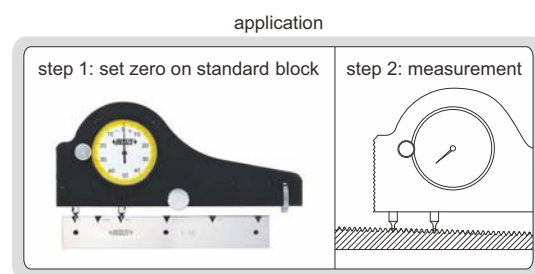
THREAD PITCH MEASURING INSTRUMENTS

MEET INTERNATIONAL
STANDARD API5B

2234-4



- Measure the pitch of external thread and internal thread with nominal diameter larger than 5 1/2" (139.7mm)
- Optional accessory: ball points (code **6252** series), standard pitch blocks (code **6251** series)



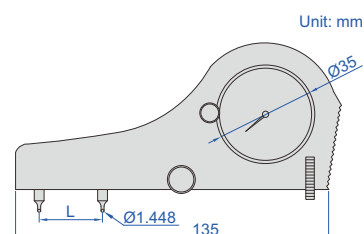
Code	Range (L)	Dial indicator stroke	Dial indicator graduation	Accuracy
2234-4	0.5-4"/12.7-101.6mm	0.5mm	0.01mm	0.02mm
2234-4E	0.5-4"/12.7-101.6mm	0.025"	0.0005"	0.0008"

MEET INTERNATIONAL
STANDARD API5B

INTERNAL THREAD PITCH MEASURING INSTRUMENTS



2235-4

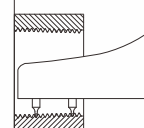


application

step 1: set zero on standard block



step 2:
measurement



- Measure the pitch of internal thread with nominal diameter larger than 1 1/2" (38.1mm) and less than 5 1/2" (139.7mm)
- Optional accessory: ball points (code 6252 series), standard pitch blocks (code 6251 series)

Code	Range (L)	Dial indicator stroke	Dial indicator graduation	Accuracy
2235-4	0.5-4"/12.7-101.6mm	0.5mm	0.01mm	0.02mm
2235-4E	0.5-4"/12.7-101.6mm	0.025"	0.0005"	0.0008"

CAN BE CUSTOMIZED
ACCORDING TO WORKPIECES

STANDARD PITCH BLOCKS

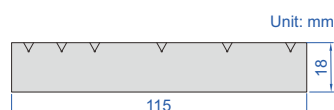
13



6251-S8

- Set zero of internal and external pitch measuring instruments (code 2234, 2235, 2245)

Code	Taper	Threads per inch
6251-S8	1:16	8, 10
6251-S5	1:16	5
6251-S4	1:6	4

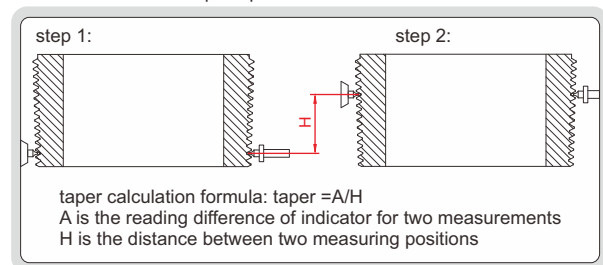


DIGITAL EXTERNAL THREAD TAPER MEASURING INSTRUMENT

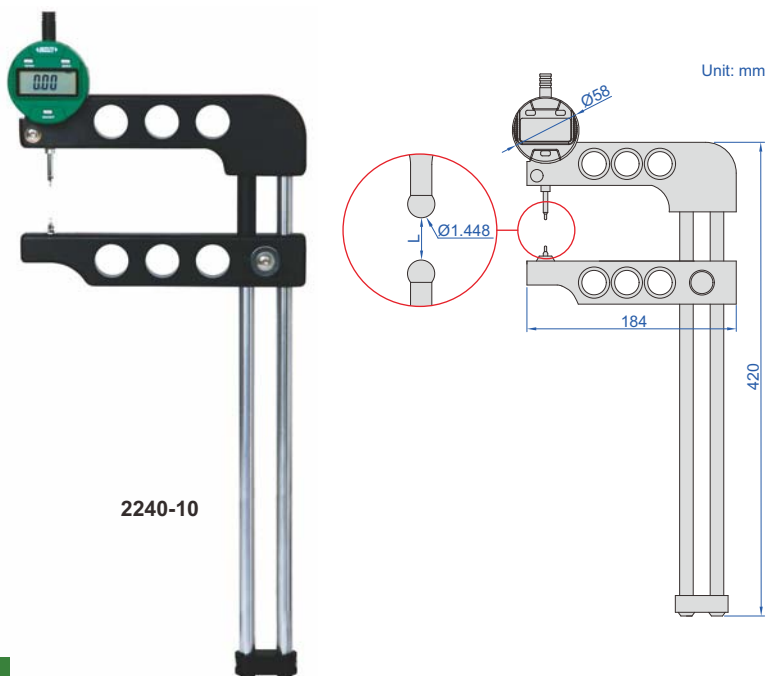
MEET INTERNATIONAL
STANDARD API5B

- Measure the taper of external thread
- Digital indicator stroke: 10mm/0.4"
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13), ball points (code **6252** series)

principle of measurement



Code	Range (L)	Resolution	Accuracy
2240-10	0-10"/0-254mm	0.0005"/0.01mm	0.03mm

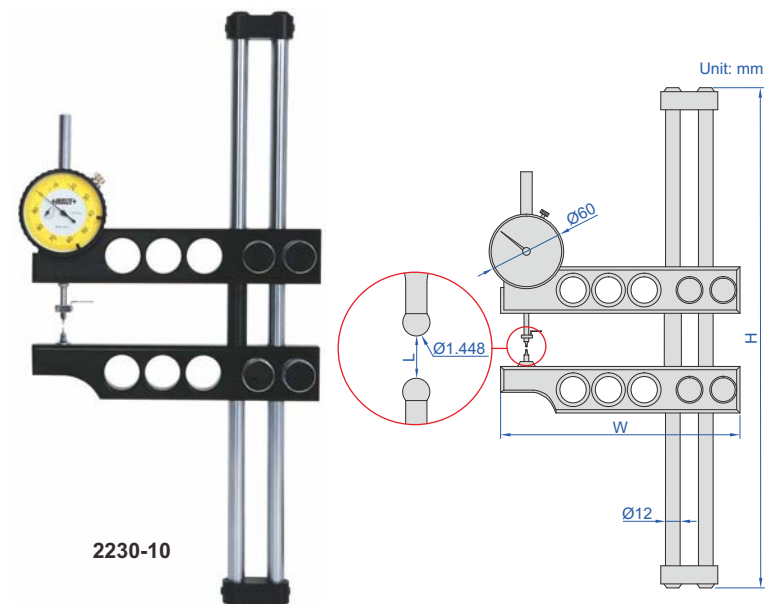
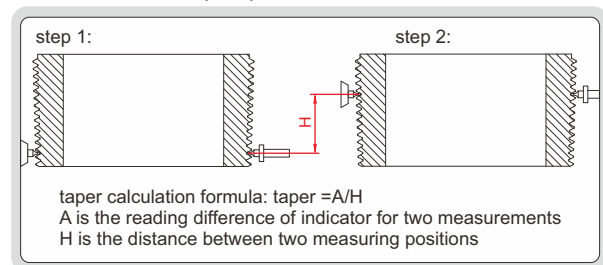


EXTERNAL THREAD TAPER MEASURING INSTRUMENTS

MEET INTERNATIONAL
STANDARD API5B

- Measure the taper of external thread
- Dial indicator stroke: 0.5"
- Dial indicator graduation: 0.001"
- Optional accessory: ball points (code **6252** series)

principle of measurement



Code	Range (L)	Accuracy	H	W
2230-10	0-10"/0-254mm	0.0015"	400mm	200mm
2230-45	1-4 1/2"/25.4-114.3mm	0.0015"	278mm	178mm
2230-16	8-16"/203.2-406.4mm	0.0015"	600mm	260mm
2230-20	8-20"/203.2-508mm	0.0015"	680mm	260mm

MEET INTERNATIONAL
STANDARD API5B

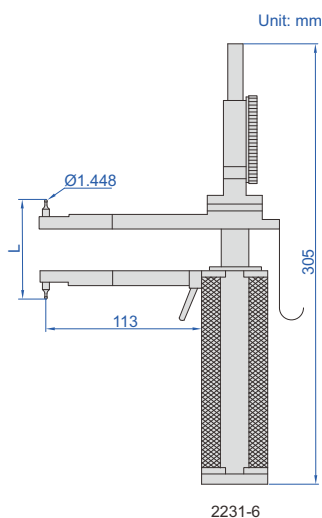
INTERNAL THREAD TAPER MEASURING INSTRUMENTS



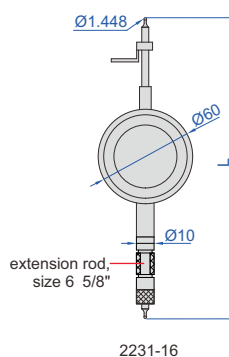
2231-6



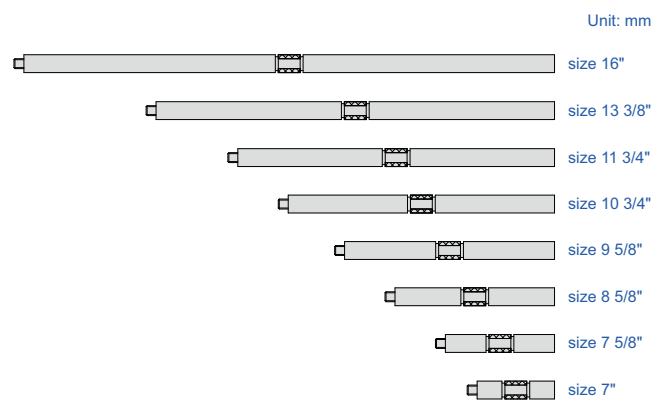
2231-16



2231-6



2231-16

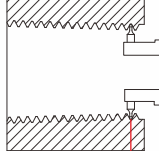


Unit: mm

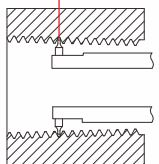
principle of measurement

2231-6

step 1:

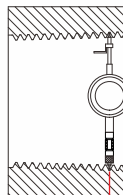


step 2:

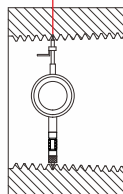


2231-16

step 1:



step 2:



taper calculation formula: $\text{taper} = A/H$
A is the reading difference of two measurements
H is the distance between two measuring positions

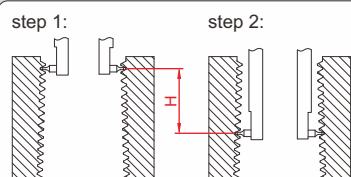
- Measure the taper of internal thread
- Optional accessory: ball points (code 6252 series)

Code	Range (L)	Dial indicator stroke	Dial indicator graduation	Accuracy	Remark
2231-6	1.5-6"/38.1-152.4mm	1"	0.001"	0.0015"	—
2231-16	5 1/2-16"/139.7-406.4mm	0.5"	0.001"	0.0015"	with 9 extension rods

DIGITAL INTERNAL THREAD TAPER MEASURING INSTRUMENT

MEET INTERNATIONAL
STANDARD API5B

principle of measurement



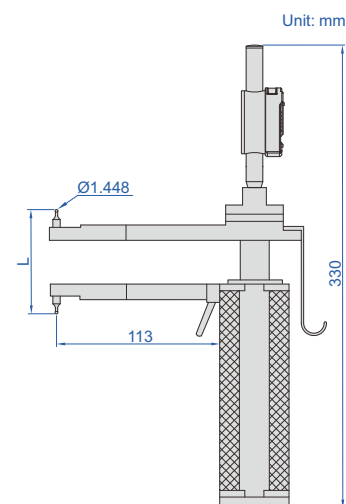
taper calculation formula: $\text{taper} = A/H$
A is the reading difference of two measurements
H is the distance between two measuring positions



2241-6

- Measure the taper of internal thread
- Digital indicator stroke: 25.4mm/1"
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13), ball points (code **6252** series)

Code	Range (L)	Resolution	Accuracy
2241-6	1.5-6"/38.1-152.4mm	0.0005"/0.01mm	0.04mm



BALL POINTS

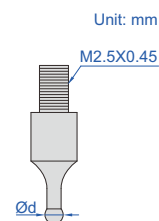
- Supplied in pair
- For taper measuring instruments (code **2230**, **2231**, **2240**, **2241**) and pitch measuring instruments (code **2234**, **2235**, **2245**)



6252-B10

Code	Thread type	Threads per inch	Ball dia. (Ød)	
			taper	pitch
6252-B8	round thread, line pipe	8	1.829mm	1.829mm
6252-B10	round thread, line pipe	10	1.448mm	1.448mm
6252-B115	line pipe	11.5	1.27mm	1.27mm
6252-B14	line pipe	14	1.041mm	1.041mm
6252-B18	line pipe	18	0.813mm	0.813mm
6252-B27	line pipe	27	0.533mm	0.533mm
6252-B5	buttress thread	5	2.286mm	—
6252-B51	buttress thread	5	—	1.575mm
6252-B52	extreme line thread	5,6	1.524mm	—
6252-B53	extreme line thread	5	—	2.667mm*
6252-B6	extreme line thread	6	—	2.210mm*

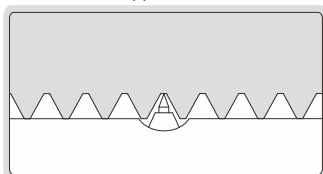
* 0.58mm off the top of ball



MEET INTERNATIONAL
STANDARD API5B

DIGITAL INTERNAL THREAD HEIGHT MEASURING INSTRUMENT

application

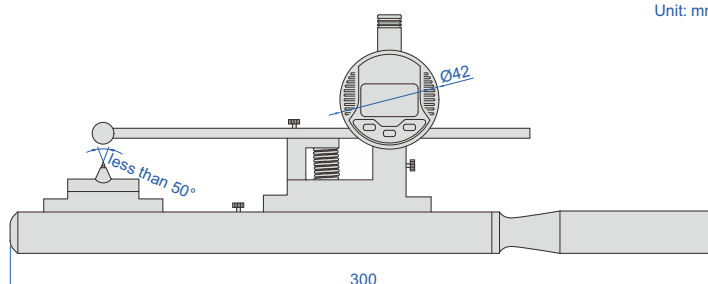


2243-35

- Measure the height of internal thread with nominal diameter less than 5 1/2" (139.7mm)
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-50M** page 13), thread height standard blocks (code **6250**)

Unit: mm

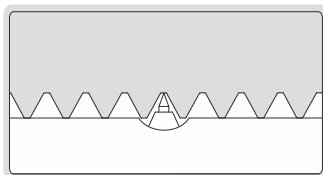
Code	Range	Resolution	Accuracy
2243-35	0-0.135"/0-3.5mm	0.0005"/0.01mm	0.02mm



MEET INTERNATIONAL
STANDARD API5B

INTERNAL THREAD HEIGHT MEASURING INSTRUMENTS

application

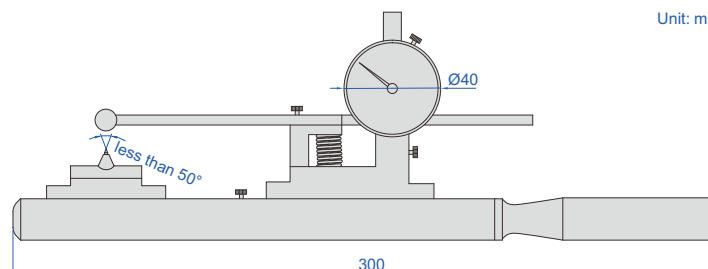


2233-35

- Measure the height of internal thread with nominal diameter less than 5 1/2" (139.7mm)
- Optional accessory: thread height standard blocks (code **6250**)

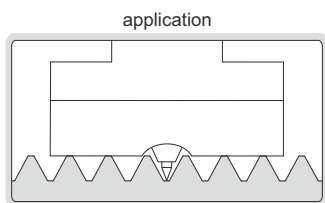
Unit: mm

Code	Range	Dial indicator graduation	Accuracy
2233-35	0-3.5mm	0.01mm	0.02mm
2233-35E	0-1/4"	0.0005"	0.0008"



DIGITAL THREAD HEIGHT MEASURING INSTRUMENT

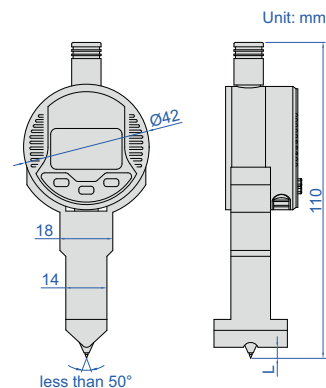
MEET INTERNATIONAL
STANDARD API5B



- Measure the height of external thread and internal thread with nominal diameter larger than 5 1/2" (139.7mm)
- Optional accessory: data output cable (code **7315-50M** need receiver page 5, **7302-40M** page 13), thread height standard blocks (code **6250**)



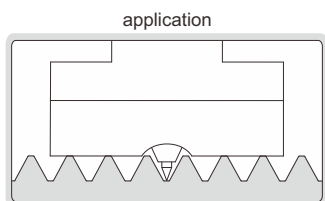
2242-35



Code	Range (L)	Resolution	Accuracy
2242-35	0-0.135"/0-3.5mm	0.0005"/0.01mm	0.02mm

THREAD HEIGHT MEASURING INSTRUMENTS

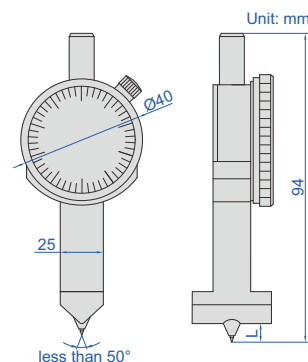
MEET INTERNATIONAL
STANDARD API5B



- Measure the height of external thread and internal thread with nominal diameter larger than 5 1/2" (139.7mm)
- Optional accessory: thread height standard blocks (code **6250**)



2232-35



Code	Range (L)	Dial indicator graduation	Accuracy
2232-35	0-3.5mm	0.01mm	0.02mm
2232-35E	0-1/4"	0.0005"	0.0008"

THREAD HEIGHT STANDARD BLOCKS

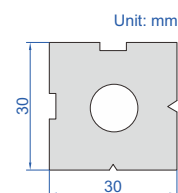
CAN BE CUSTOMIZED
ACCORDING TO WORKPIECES

- Set zero of internal and external thread height measuring instruments (code **2232**, **2233**, **2242**, **2243**)

Code	Taper	Number of thread per inch
6250-4	1:4	4
6250-5	1:4	5
6250-8	1:16	8, 10
6250-51	1:16	5

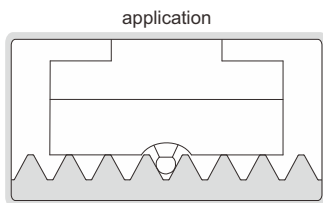


6250-8



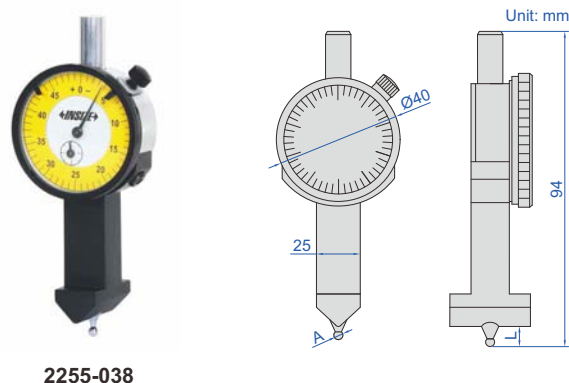
MEET INTERNATIONAL
STANDARD API 7-2

ROTARY SHOULDERED EXTERNAL THREAD CONNECTION HEIGHT MEASURING INSTRUMENTS



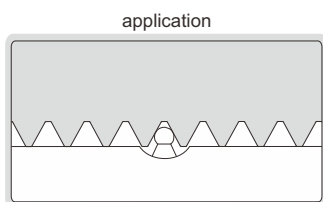
- Measure the height of rotary shouldered external thread connections
- Dial indicator graduation: 0.01mm
- Accuracy: 0.02mm
- Optional accessory: thread height standard blocks (code 6255)

Code	Form of thread to be inspected	Range (L)	A
2255-038	V-0.038R	0-3.5mm	Ø1.829mm
2255-040	V-0.040	0-3.5mm	Ø0.864mm
2255-050	V-0.050	0-5mm	Ø1.118mm
2255-055	V-0.055	0-3.5mm	Ø1.829mm



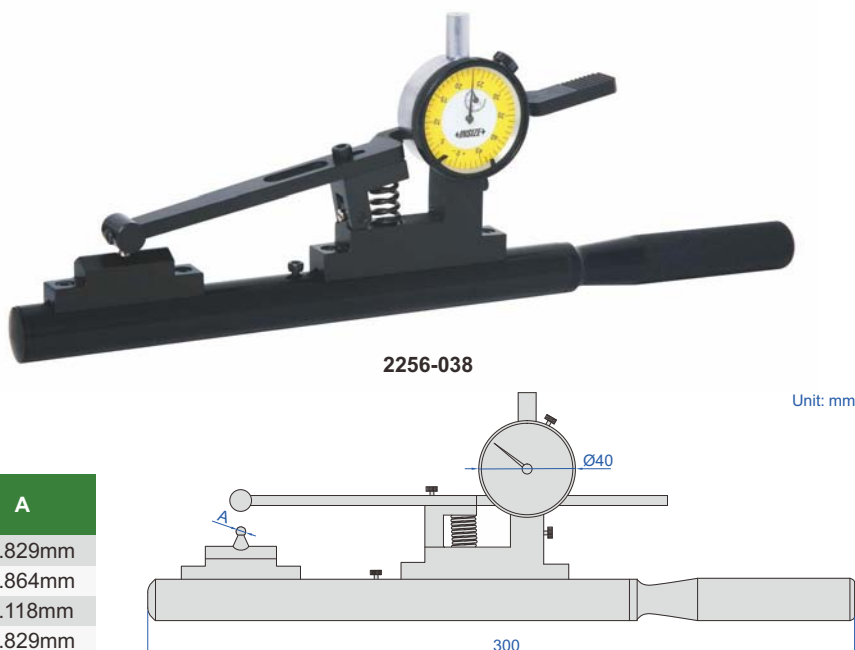
MEET INTERNATIONAL
STANDARD API 7-2

ROTARY SHOULDERED INTERNAL THREAD CONNECTION HEIGHT MEASURING INSTRUMENTS



- Measure the height of rotary shouldered internal thread connections
- Dial indicator graduation: 0.01mm
- Accuracy: 0.02mm
- Optional accessory: thread height standard blocks (code 6255)

Code	Form of thread to be inspected	Range (L)	A
2256-038	V-0.038R	0-3.5mm	Ø1.829mm
2256-040	V-0.040	0-3.5mm	Ø0.864mm
2256-050	V-0.050	0-5mm	Ø1.118mm
2256-055	V-0.055	0-3.5mm	Ø1.829mm



- Set zero of internal and external thread height measuring instruments (code 2255, 2256)

Code	Form of thread to be inspected	Taper	Number of thread per inch
6255-038	V-0.038R	1:6 and 1:4	4
6255-040	V-0.040	1:4	5
6255-050	V-0.050	1:6 and 1:4	4
6255-055	V-0.055	1:8	6

THREAD HEIGHT STANDARD BLOCKS

CAN BE CUSTOMIZED
ACCORDING TO WORKPIECES



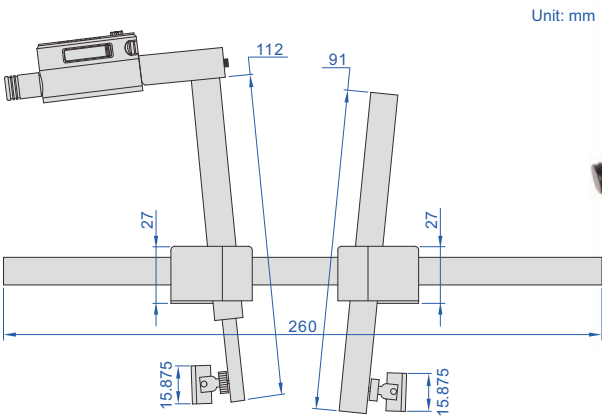
DIGITAL DEPTH GAGE (60° KNIFE EDGE BASE)

REFER TO PAGE 81
FOR DETAILS

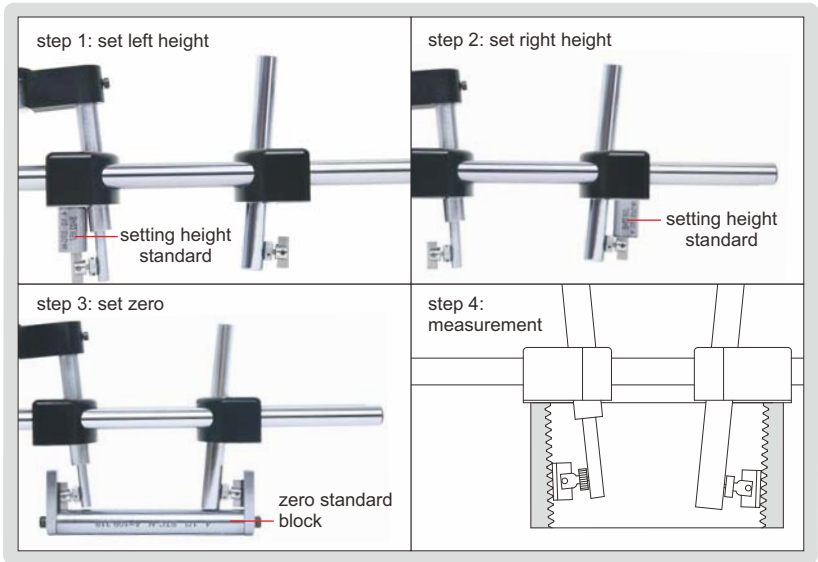


DIGITAL INTERNAL THREAD CREST DIAMETER MEASURING INSTRUMENT

MEET INTERNATIONAL
STANDARD API5B



application



- Measure the crest diameter of internal thread with nominal diameter larger than 2 3/8" (60.325mm) and less than 5 1/2" (139.7mm)
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13), height standard and zero standard block (code 2237-G□□□, 2237-K□□□)

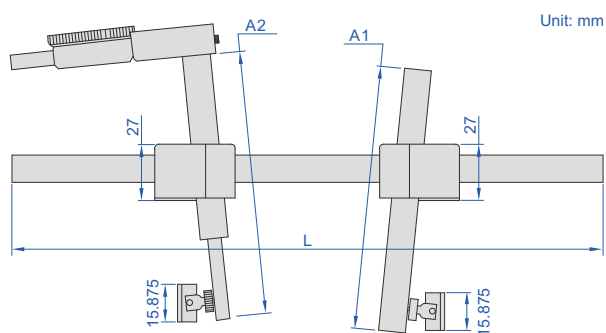
Code	Range	Digital indicator stroke	Resolution	Accuracy
2247-5	2 3/8-5 1/2"/60.325-139.7mm	0.2"/5mm	0.0005"/0.01mm	0.02mm

MEET INTERNATIONAL
STANDARD API5B

INTERNAL THREAD CREST DIAMETER MEASURING INSTRUMENTS

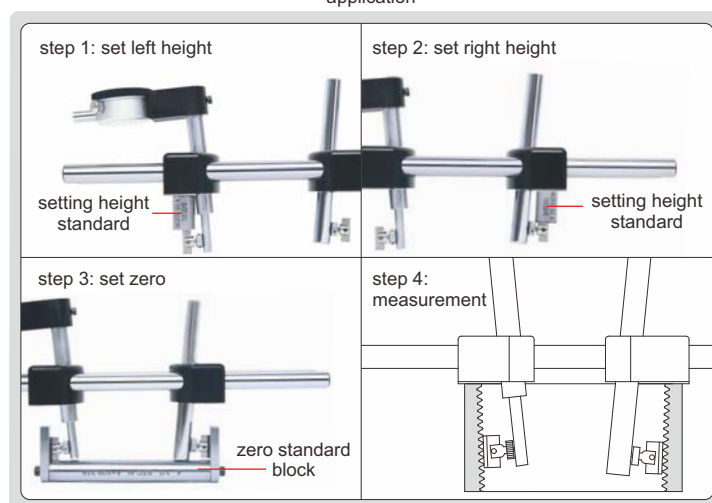


2237-5



- Measure the crest diameter of internal thread with nominal diameter larger than 2 3/8" (60.325mm) and less than 20" (508mm)
- Optional accessory: height standard and zero standard block

application



Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy	L	A1	A2
2237-5	2 3/8-5 1/2"/60.325-139.7mm	5mm	0.01mm	0.02mm	260mm	112mm	91mm
2237-5E	2 3/8-5 1/2"/60.325-139.7mm	0.25"	0.0005"	0.0008"	260mm	112mm	91mm
2237-20	4 1/2-20"/114.3-508mm	0.50"	0.0005"	0.002"	12", 18" or 24" *	177mm	182mm

* Select suitable length of arm according to workpieces



HEIGHT STANDARD AND ZERO STANDARD BLOCK (optional)

Code	Remark
2237-G □□□ **	including height standard and zero standard block A (without taper)
2237-K □□□ **	including height standard and zero standard block B (with taper)

** Can be customized according to workpieces

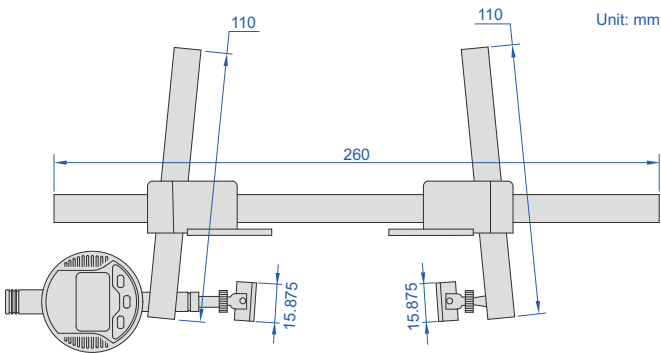
DIGITAL EXTERNAL THREAD CREST DIAMETER MEASURING INSTRUMENT

MEET INTERNATIONAL
STANDARD API5B

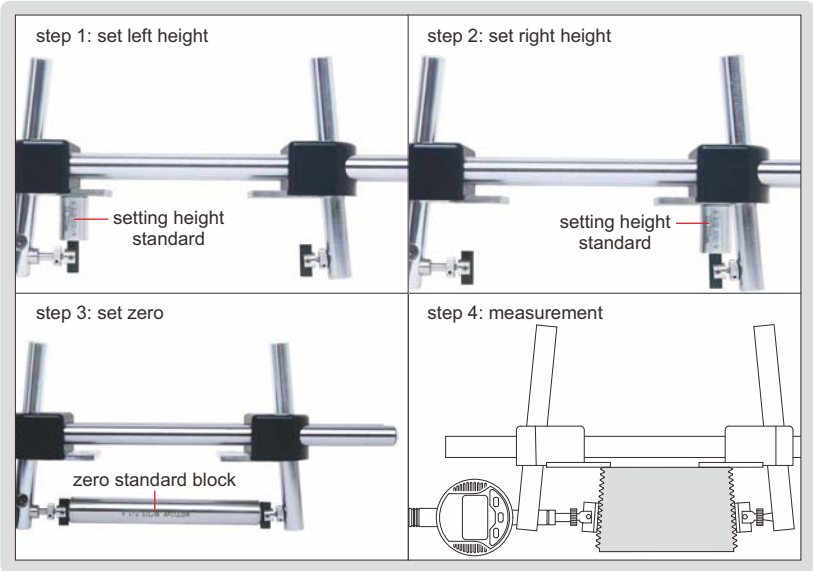


2246-5

- Measure the crest diameter of external thread with nominal diameter larger than 2 3/8" (60.325mm) and less than 5 1/2" (139.7mm)
- Optional accessory: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13), height standard and zero standard block (code 2236-G□□□, 2236-K□□□)



application



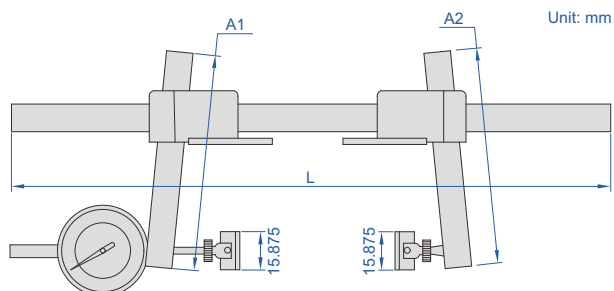
Code	Range	Digital indicator stroke	Resolution	Accuracy
2246-5	2 3/8-5 1/2"/60.325-139.7mm	0.2"/5mm	0.0005"/0.01mm	0.02mm

MEET INTERNATIONAL
STANDARD API5B

EXTERNAL THREAD CREST DIAMETER MEASURING INSTRUMENTS

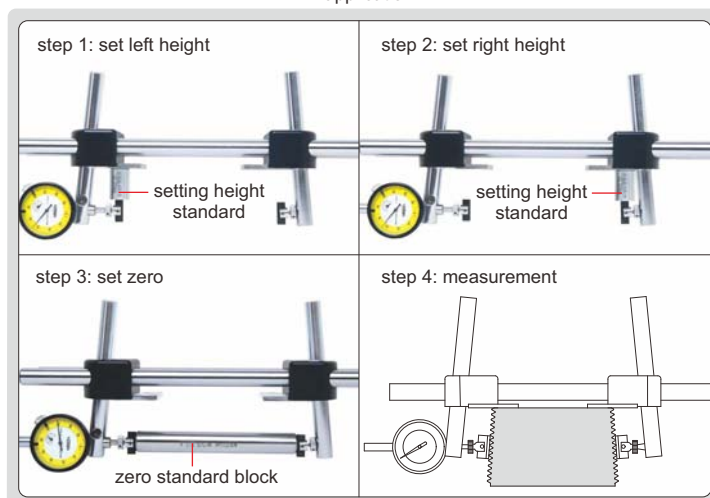


2236-5



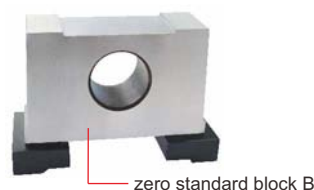
- Measure the crest diameter of external thread with nominal diameter larger than 2 3/8" (60.325mm) and less than 20" (508mm)
- Optional accessory: height standard and zero standard block

application



Code	Range	Dial indicator stroke	Dial indicator graduation	Accuracy	L	A1	A2
2236-5	2 3/8-5 1/2"/60.325-139.7mm	5mm	0.01mm	0.02mm	260mm	110mm	110mm
2236-5E	2 3/8-5 1/2"/60.325-139.7mm	0.25"	0.0005"	0.0008"	260mm	110mm	110mm
2236-20	2 3/8-20"/60.325-508mm	0.50"	0.0005"	0.002"	12", 18" or 24" *	177mm	160mm

* Select suitable length of arm according to workpieces



HEIGHT STANDARD AND ZERO STANDARD BLOCK (optional)

Code	Remark
2236-G □□□ **	including height standard and zero standard block A (without taper)
2236-K □□□ **	including height standard and zero standard block B (with taper)

** Can be customized according to workpieces

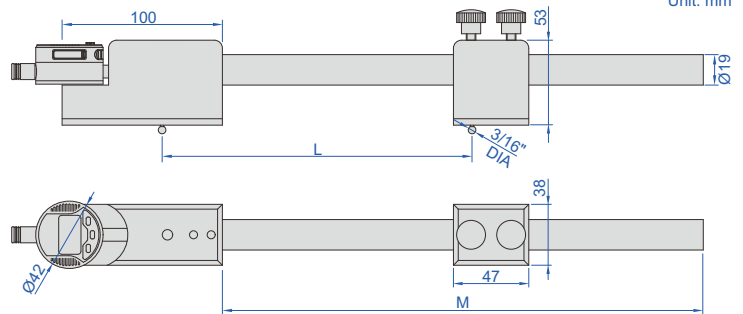
DIGITAL GROOVE DIAMETER MEASURING INSTRUMENT

POINT DIAMETER CAN BE CUSTOM-MADE



2261-5

- Measure the groove diameter of flange ring groove
- Point height is adjustable
- Optional: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13), groove standard block (code 6254)



Stem (optional)

Code	M
2261-M24	24"/600mm
2261-M30	30"/750mm
2261-M36	36"/900mm

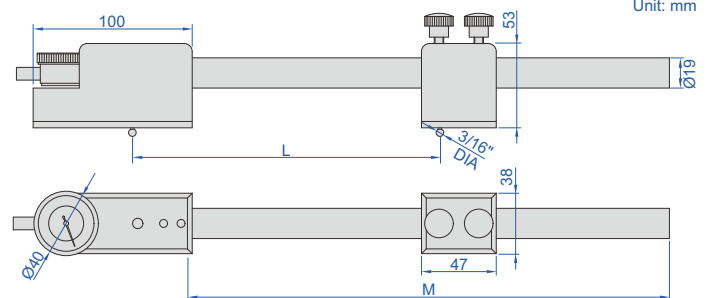
GROOVE DIAMETER MEASURING INSTRUMENTS

POINT DIAMETER CAN BE CUSTOM-MADE



2251-5

- Measure the groove diameter of flange ring groove
- Point height is adjustable
- Optional: groove standard block (code 6254)



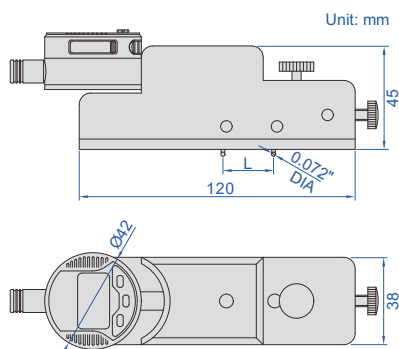
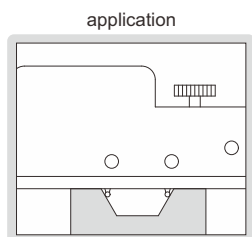
Stem (optional)

Code	M
2261-M24	24"/600mm
2261-M30	30"/750mm
2261-M36	36"/900mm

Code	Range (L)	Movable point stroke	Graduation	Repeatability	M
2251-5	2.6-13"/66-330mm	0.2"/5mm	0.01mm	0.005mm	12"/300mm
2251-5E	2.6-13"/66-330mm	0.2"/5mm	0.0005"	0.0002"	12"/300mm

POINT DIAMETER CAN
BE CUSTOM-MADE

DIGITAL GROOVE WIDTH MEASURING INSTRUMENT



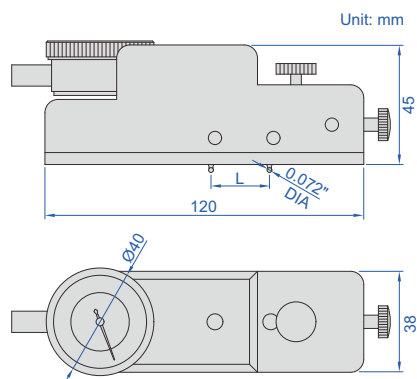
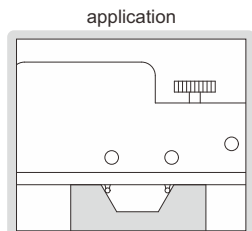
2260-4

- Measure the groove width of flange ring groove
- Point height is adjustable
- Optional: data output cable (code 7315-50M need receiver page 5, 7302-40M page 13), groove standard block (code 6254)

Code	Range (L)	Movable point stroke	Resolution	Repeatability
2260-4	0.55-1.4"/14-35.5mm	0.16"/4mm	0.00005"/0.001mm	0.002mm

POINT DIAMETER CAN
BE CUSTOM-MADE

GROOVE WIDTH MEASURING INSTRUMENTS



2250-4

- Measure the groove width of flange ring groove
- Point height is adjustable
- Optional: groove standard block (code 6254)

Code	Range (L)	Movable point stroke	Graduation	Repeatability
2250-4	0.55-1.4"/14-35.5mm	0.16"/4mm	0.01mm	0.005mm
2250-4E	0.55-1.4"/14-35.5mm	0.16"/4mm	0.0005"	0.0002"

CUSTOM-MADE

STANDARD GROOVE BLOCK CODE 6254



- Set zero of groove width and groove diameter measuring instruments (code 2250, 2251, 2260, 2261)

DIGITAL CALIPERS WITH INTERCHANGEABLE BALL TIPS

REFER TO PAGE 61
FOR DETAILS



1527-3001



1528-3001

DIGITAL RTJ RING GROOVE CALIPERS

REFER TO PAGE 60
FOR DETAILS



1179-300



1179-600

THREAD GAGES FOR ROTARY SHOULDERED CONNECTIONS OF PETROLEUM EQUIPMENT

REFER TO PAGE 372
FOR DETAILS



4177-23

CASING, TUBING AND LINE PIPE THREAD GAGES OF PETROLEUM AND GAS EQUIPMENT

REFER TO PAGE
373-374 FOR DETAILS



4178-21T