





#### **Dial Indicator Points**

Our wide range of styles and sizes of contact points fit all AGD 1,2,3,4 series Dial Indicators with 4-48 threads. All items Made In USA.

Please call us for special and custom sizes and designs, as we can manufacture to your print or specifications. We are constantly adding new contacts, and can cross reference from most other manufacturers part numbers.

**Material: Corrosion Resistant 303 Stainless Steel** 



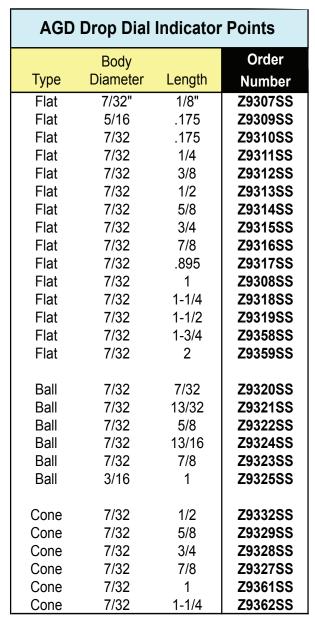


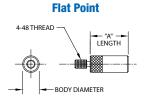
**Ball Point** 

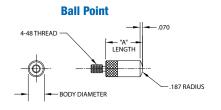


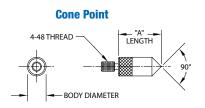
**Cone Point** 

SPECIAL ORDERS
AVAILABLE—
Small Quantities
to Large Volume









(Cone points have 90 degree angle. Length does not include threads.)







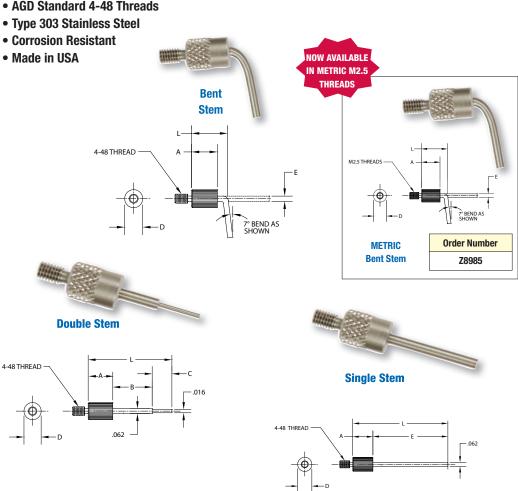




#### **Stem Indicator Points**

Specially designed for user modifications. These single and double stem indicator points can be shaped for your special application. The reduced diameter stem can be angled and positioned for hard to reach areas. Please note that these points can vary, and dimensions are approximate.

• AGD Standard 4-48 Threads



Stem Indicator Points							
Туре	D	Α	Е	L	С	В	Order Number
Bent Stem	7/32"	5/16"	1/16"	7/16"	n/a	n/a	Z9333SS
Double Stem	7/32	5/16	n/a	45/64	1/8	1/4	Z9334SS
Double Stem	7/32	1/4	n/a	31/32	3/32	19/32	Z9336SS
Double Stem	7/32	1/4	n/a	31/32	15/64	15/32	Z9337SS
Double Stem	3/16	5/16	n/a	3/4	7/64	19/64	Z9349SS
Single Stem	3/16	3/16	1/16 Dia x 1-5/32 Lth	1-23/64	n/a	n/a	Z9338LSS
Single Stem	7/32	3/16	1/16 Dia x 3/4 Lth	15/16	n/a	n/a	FOW-52-525-112











#### Select-A-Point Kit

22 pieces of the most popular indicator points, including flat, ball, cone, and stems. Fits all AGD 1,2,3 and 4 style drop indicators.

All Points have 4-48 thread and are made from **corrosion resistant Type 303 Stainless Steel.** 

#### Made in USA

#### KIT INCLUDES:

(1) Z9310SS—Flat Point 7/32" Dia X 11/64" Lth (1) Z9311SS—Flat Point 7/32" Dia X 1/4" Lth (1) Z9312SS—Flat Point 7/32" Dia X 3/8" Lth (1) Z9313SS—Flat Point 7/32" Dia X 3/8" Lth (1) Z9313SS—Flat Point 7/32" Dia X 1/2" Lth (1) Z9314SS—Flat Point 7/32" Dia X 5/8" Lth (1) Z9315SS—Flat Point 7/32" Dia X 3/4" Lth (1) Z9315SS—Flat Point 7/32" Dia X 7/8" Lth (1) Z9317SS—Flat Point 7/32" Dia X 7/8" Lth (1) Z9317SS—Flat Point 7/32" Dia X 7/8" Lth

(1) 29316SS—Flat Point 7/32" Dia X 7/8" Lth (1) Z9317SS—Flat Point 7/32" Dia X 57/64" Lth (1) Z9318SS—Flat Point 7/32" Dia X 1-1/4" Lth (1) Z9320SS—Ball Point 7/32" Dia X 7/32" Lth

(1) Z9320SS—Ball Point 7/32" Dia X 7/32" Lth (1) Z9321SS—Ball Point 7/32" Dia X 25/64" Lth (1) Z9322SS—Ball Point 7/32" Dia X 5/8" Lth

(1) Z9323SS—Ball Point 7/32" Dia X 7/8" Lth (1) Z9324SS—Ball Point 7/32" Dia X 53/64" Lth (1) Z9327SS—Cone Point 7/32" Dia X 7/8" Lth

(1) Z9328SS—Cone Point 7/32" Dia X 3/4" Lth (1) Z9329SS—Cone Point 7/32" Dia X 5/8" Lth

(1) Z9332SS—Cone Point 7/32" Dia X 1/2" Lth (1) Z9333SS—Bent Stem Point 1/16" Dia X 5/16" Lth

(1) Z9336SS—Double Stem Point 1/16" Dia X 15/16" Lth

(1) Z9338SS—Stem Point 1/16" Dia X 21/32" Lth

(1) Z9337SS—Double Stem Point 1/16" Dia X 61/64" Lth







#### Mini-Point Kit

A smaller version of our Select-A-Point Kit.

This version consists of 11 points.

One stem point and 10 Flat, Ball, and Cone, points.

All Points have 4-48 thread and are made from corrosion resistant Type 303 Stainless Steel.

#### Made in USA

#### KIT INCLUDES:

(1) Z9311SS—Flat Point 7/32" Dia X 1/4" Lth (1) Z9312SS—Flat Point 7/32" Dia X 3/8" Lth (1) Z9313SS—Flat Point 7/32" Dia X 1/2" Lth (1) Z9314SS—Flat Point 7/32" Dia X 5/8" Lth (1) Z9316SS—Flat Point 7/32" Dia X 7/8" Lth (1) Z9318SS—Flat Point 7/32" Dia X 7/8" Lth (1) Z9320SS—Ball Point 7/32" Dia X 7/32" Lth (1) Z9322SS—Ball Point 7/32" Dia X 5/8" Lth (1) Z9329SS—Cone Point 7/32" Dia X 5/8" Lth (1) Z9328SS—Cone Point 7/32" Dia X 3/4" Lth (1) Z9328SS—Cone Point 7/32" Dia X 3/4" Lth

(1) Z9333SS—Bent Stem 1/16" Dia X 5/16" Lth



Order Number Z9001













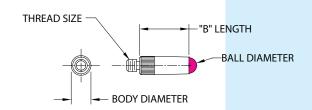
## **Ruby Ball Points**

Body Material: Corrosion Resistant 303 Stainless Steel







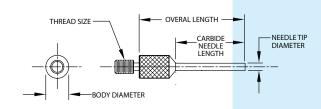


	Ruby Ball Point						
	"B" Length			Metric			
Ball	Ball Center to	Body	4-48 Threads	M2.5 Threads			
Diameter	End of Body	Diameter	Order Number	Order Number			
2mm	.250	.187	Z7025	Z7026			
3mm	.250	.187	Z6972	Z6973			
4mm	.250	.187	Z6978	Z6979			
2mm	.500	.187	Z7027	Z7028			
3mm	.500	.187	Z6974	Z7029			
4mm	.500	.187	Z6980	Z7030			
2mm	.750	.187	Z7031	Z7032			
3mm	.750	.187	Z6976	Z7033			
4mm	.750	.187	Z6982	Z7034			
2mm	1.00	.187	Z7035	Z7036			
3mm	1.00	.187	Z7037	Z7038			
4mm	1.00	.187	Z7039	Z7040			



#### **Flat Carbide Needle Points**





Flat Needle Point — Carbide Tip							
Needle Tip Diameter	Needle Length	Overall Length	Thread	Order Number			
.015	.120	.400	4-48	Z7041			
.031	.120	.400	4-48	Z7042			
.031	.500	.780	4-48	Z7043			
.062	.500	.800	4-48	Z7044			
.062	1.00	1.300	4-48	Z7045			
.078	1.00	1.300	4-48	Z7046			
.062	.500	.780	4-48	MTI131279			
.062	.500	.780	M2.5	MTI120064			
.031	.120	.400	4-48	MTI131280			
.031	.120	.400	M2.5	MTI131280M			











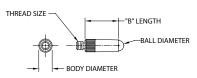






## **Carbide Ball Points**

Body Material: Corrosion Resistant 303 Stainless Steel



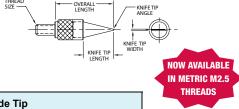
Carbide Ball Point						
	"B" Length					
Ball	Ball Center to	Body	4-48 Threads	M2.5 Threads		
Diameter	End of Body	Diameter	Order Number	Order Number		
2mm	.250	.187	Z6963	Z6965		
3mm	.250	.187	Z6960	Z6961		
4mm	.250	.187	Z6966	Z6967		
3mm	.300	.190	MTI131262	MTI120049		
2mm	.500	.187	Z6969	Z6971		
3mm	.500	.187	Z6962	Z6975		
4mm	.500	.187	Z6968	Z6977		
2mm	.750	.187	Z6981	Z7016		
3mm	.750	.187	Z6964	Z7017		
4mm	.750	.187	Z6970	Z7018		
2mm	1.00	.187	Z7019	Z7020		
3mm	1.00	.187	Z7021	Z7022		
4mm	1.00	.187	Z7023	Z7024		





## **Carbide Knife Points**

Body Material: Corrosion Resistant 303 Stainless Steel



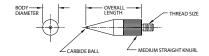
Knife Point — Carbide Tip					
Knife Tip	Knife	Knife	Overall		Order
Angle	Length	Width	Length	Thread	Number
25 Degrees	.300	.160	.600	4-48	MTI131282
25 Degrees	.300	.160	.600	M2.5	MTI120067





## **Carbide Ball Points**

Body Material: Corrosion Resistant 303 Stainless Steel



# SPECIAL ORDERS AVAILABLE— Small Quantities to Large Volume

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Carbide Ball Points					
Ball	Body	Overall		Order	
Diameter	Diameter	Length	Thread	Number	
.5MM	.25"	.895"	4-40	JL0197RADTIP	
1MM	.25	.895	4-40	JL020RADTIP	





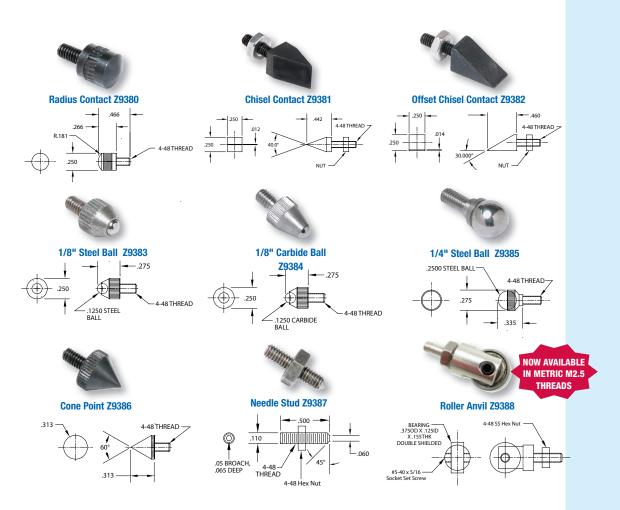






## **Popular Specialized Contacts for Dial Indicators**

4-48 threads to fit all AGD Groups 1,2,3,4 Indicators. Made In USA



Special Dial Indicator Contacts					
Contact Type	Description	S-T Industries Functional Equivalent	Order Number		
Radius Contact	1/4" Dia. x 17/64" Length	50-5008-00	Z9380		
Chisel Contact	.250 tapering to .012" tip, .442 Overall Length	50-5011-00	Z9381		
Offset Chisel	.250 tapering to .014" tip, .460 Overall Length	50-5012-00	Z9382		
1/8" Steel Ball	1/4" Dia. x .275" Overall Length 1/8" colleted ball	50-5014-00	Z9383		
1/8" Carbide Ball	1/4" Dia. x .275" Overall Length 1/8" colleted ball	50-5015-00	Z9384		
1/4" Steel Ball	.335 Lth., 4-48 thread	_	Z9385		
5/16" Cone Point	5/16" Dia. x 5/16" Length	50-5018-00	Z9386		
1/16" Needle Stud	.110" Dia. x .500 Lth., 4-48 thread, .060" Dia. Needle Tip	50-5019-00	Z9387		
Roller Anvil	3/8" Roller, 4-48 thread	50-5026-00	Z9388		
Roller Anvil	3/8" Roller, M2.5 threads		Z9388M		
Cone Point	13/64" Dia., 9/32" Length, 4-48 Thread, Hardened Steel	Starrett PT06632/10	Z9361		



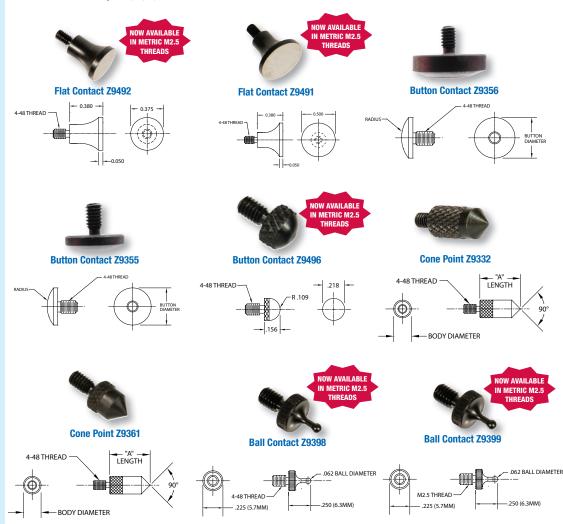






#### **All-New Specialized Contacts for Dial Indicators**

Fit all AGD Groups 1,2,3,4 Indicators. Made In USA



	Special Dial Indicator Contacts						
Contact			Order				
Type	Description	Functional Equivalent	Number				
Flat Contact	3/8 Ground, 3/8" Lth, 4-48 Thds	Starrett PT06632/2 - 70790	Z9492				
Flat Contact	3/8 Ground, 3/8" Lth, M2.5 Thds	Starrett PT06632/2 - 70790	Z9492M				
Flat Contact	1/2 Ground, 3/8" Lth, 4-48 Thds	Starrett PT06632/3 - 70791	Z9491				
Flat Contact	1/2 Ground, 3/8" Lth, M2.5 Thds	Starrett PT06632/3 - 70791	Z9491M				
Button Contact	1/2" Button, 4-48 Thds., Steel Black Oxide	Starrett PT06632/4 - 70792	Z9356				
Button Contact	3/8" Button, 4-48 Thds., Steel Black Oxide	Starrett PT06632/5 - 70793	Z9355				
Button Contact	13/64" Dia X 5/32" Lth, 4-48 Thds., Steel Black Oxide	Starrett #28 - 50199	Z9496				
Button Contact	13/64" Dia X 5/32" Lth, M2.5 Thds., Steel Black Oxide	Starrett #28 - 50199	Z9496M				
Cone Point	1/2" Lth, 90 Degree, 4-48 Thds., Steel Black Oxide	Starrett PT06632/6 - 70794	Z9332				
Cone Point	9/32 Lth, Stl Hard, 4-48 Thds, Black Oxide	Starrett PT06632/10	Z9361				
Ball Contact	1/16" Ball, 1/4" Lth, 4-48 Thds., Steel Black Oxide	Starett PT06632/7 - 70795	Z9398				
Ball Contact	1/16" Ball, 1/4" Lth, M2.5 Thds., Steel Black Oxide	Starett PT06632/7 - 70795	Z9398M				
Ball Contact	1/16" Ball, 1/4" Lth, M2.5, Steel Black Oxide	Starrett PT06632/8 - 70796	Z9399				

SPECIAL ORDERS
AVAILABLE—
Small Quantities
to Large Volume



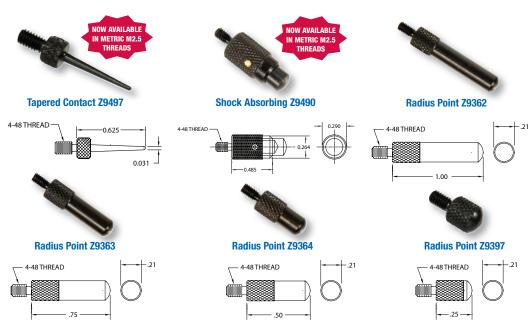






## **All-New Specialized Contacts for Dial Indicators**

Fit all AGD Groups 1,2,3,4 Indicators. Made In USA

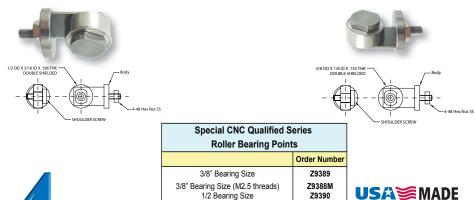


Special Dial Indicator Contacts						
Contact Type	Description	Functional Equivalent	Order Number			
Tapered Contact	5/8" Lth, 4-48 Thds., Steel Black Oxide	Starrett PT06632/9 - 70797	Z9497			
Tapered Contact	5/8" Lth, M2.5 Thds., Steel Black Oxide	_	Z9497M			
Shock Absorbing	4-48 Threads	_	Z9490			
Shock Absorbing	M2.5 Threads	_	Z9490M			
Radius Point	1" Lth, 4-48 Thds, Stl Hard Black Oxide	Starrett PT06677B	Z9362			
Radius Point	3/4" Lth, 4-48 Thds, Steel Black Oxide	Starrett PT06677A	Z9363			
Radius Point	1/2" Lth, 4-48 Thds, Steel Black Oxide	Starrett PT06677	Z9364			
Radius Point	1/4" Lth, 4-48 Thds, Steel Black Oxide	Starrett PT07215	Z9397			



## **Special CNC-Qualified Series Roller Bearing Points**

Specially manufactured Roller Bearing Points in 3/8" and 1/2" bearing sizes. Points are constructed to allow the changing of the roller bearings, for unlimited life. 4-48 threads to fit all AGD standard Indicators







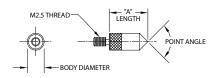


#### **Metric Cone Points**

All Points St/St and have M2.5 Threads Corrosion Resistant Type 303 Stainless Steel







Metric Cone Points					
Point Angle	Length	Body Diameter	Material	Order Number	
90°	5mm	5mm	St/St	Z8965	
60°	10mm	5mm	St/St	Z8966	
60°	15mm	5mm	St/St	Z8967	
60°	20mm	5mm	St/St	Z8968	



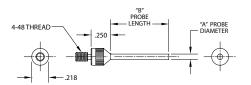
#### **Mini Probe Points for Dial Indicators**

A handy way to measure the depth of small diameter holes, pockets, and other hard to reach part features. Steel, Black Oxide Plated.

#### Made in USA

Mini Probe Points				
"A" Probe "B" "C"	Order			
Diameter Probe Length Body Len	ngth Number			
.020" 1/4" 1/4"	Z2410			
.030 1/2 1/4	Z2412			
.050 3/4 1/4	Z2414			
.070 3/4 1/4	Z2416			
.090 1" 1/4	Z2418			

Replacement point for all standard AGD 4-48 Dial Indicators. 3/16" major diameter X 5/16" long with steel ball tip.





## **Bell Shaped Flat Contact**

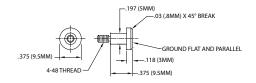
3/8" wide ground flat bottom contact point. 3/8" long, measuring face is .118" thick. Steel, case hardened, nickel plated and then ground flat and parallel on the measuring surface.

#### Made in USA

**Standard Ball Tip** 

Steel with Black Oxide plating.

Made in USA

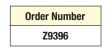




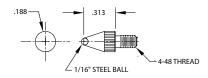


#### SPECIAL ORDERS AVAILABLE— Small Quantities to Large Volume

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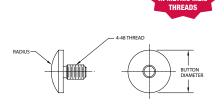




#### **Button Indicator Contacts—Steel & Stainless Steel**

Low Carbon Steel, Case Hard, Black Oxide Plated, or 300 series Stainless

Button Indicator Contacts					
Overall Order N					ler Number
Diameter	Threads	Radius	Length	Steel	Stainless Steel
3/8	4-48	.373	.300	Z9355	Z9355SS
3/8	M2.5	.373	.300	Z9355M	Z9355MSS
3/8	4-48	.373	.320	Z9400	_
1/2	4-48	.500	.355	Z9356	Z9356SS
1/2	M2.5	.500	.355	Z9356M	Z9356MSS
3/4	4-48	.750	.410	Z9357	Z9357SS
3/4	M2.5	.750	.410	Z9357M	Z9357MSS
3/4	4-48	.870	.320	Z9402	_





#### Flat Indicator Contacts—Steel & Stainless Steel

Low Carbon Steel, Case Hard, Black Oxide Plated, or 300 series Stainless

	Flat Indicator Contacts				
Diameter	Threads	Thickness	Steel Order Number	Stainless Steel Order Number	
1/4"	4-48	.112"	Z9365	Z9365SS	
1/4	M2.5	.112	Z9365M	Z9365MSS	
3/8	4-48	.093	Z9366	Z9366SS	
3/8	M2.5	.093	Z9366M	Z9366MSS	
1/2	4-48	.100	Z9367	Z9367SS	
1/2	M2.5	.100	Z9367M	Z9367MSS	
1/2	4-48	.160	Z9367TH		
5/8	4-48	.100	Z9368	Z9368SS	
5/8	M2.5	.100	Z9368M	Z9368MSS	
3/4	4-48	.100	Z9370	Z9370SS	
3/4	M2.5	.100	Z9370M	Z9370MSS	
1	4-48	.125	Z9369	Z9369SS	
1	M2.5	.125	Z9369M	Z9369MSS	
1-1/2	4-48	.125	Z9371	Z9371SS	
2	4-48	.125	Z9372	Z9372SS	
2-1/2	4-48	.125	Z9373	_	





## Flat Indicator Contact—2" OD w/Screw

Low Carbon Steel, Case Hard, Black Oxide Plated, .125" Thick Drilled through Center, comes with 4-48 screw

Order Number Z9372RT









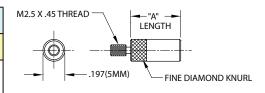




#### Flat End Indicator Points—18-8 Stainless Steel—Metric

Corrosion Resistant Type 303 Stainless Steel, M2.5 Threads

Flat End Indicator Points			
"A"	Body		Order
Length	Diameter	Thread	Number
5MM	5MM	M2.5	Z8970
10MM	5MM	M2.5	Z8971
15MM	5MM	M2.5	Z8972
20MM	5MM	M2.5	Z8973
25MM	5MM	M2.5	Z8974
30MM	5MM	M2.5	Z8975



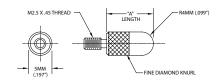




#### **Shell End Indicator Points—18-8 Stainless Steel—Metric**

Corrosion Resistant Type 303 Stainless Steel, M2.5 Threads

Shell End Indicator Points			
"A"	Body		Order
Length	Diameter	Thread	Number
5MM	5MM	M2.5	Z8980
10MM	5MM	M2.5	Z8981
15MM	5MM	M2.5	Z8982
20MM	5MM	M2.5	Z8983
25MM	5MM	M2.5	Z8984







## **Tapered Indicator Contacts—18-8 Stainless Steel**

Corrosion Resistant Type 303 Stainless Steel

Tapered Indicator Contacts				
Body		Stainless Steel		
Length	Threads	Order Number		
1/2"	4-48	Z9379SS		
5/8	4-48	Z9374SS		
13/32	4-48	Z9375SS		
13/32	M2.5	Z9375MSS		
1	4-48	Z9376SS		
1	M2.5	Z9376MSS		
1-1/4	4-48	Z9400SS		
1-1/2	4-48	Z9377SS		
1-1/2	M2.5	Z9377MSS		
2	4-48	Z9378SS		
2	M2.5	Z9378MSS		

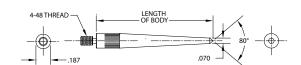




SPECIAL ORDERS
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Small Quantities to Large Volume







# **Contact Point Rings/Sets**



#### **Accurate 10 Pc. Contact Point Set**

A top quality contact assortment for the professionally equipped dial indicator. Includes the following contacts, secured in a machined ring suitable for workbench or flat storage.

10 Stainless Steel Contacts in Aluminum ring stand.

#### Made in USA

	Accurate Contact Point Ring—Set			
Qty	Description	Order Number		
1	3/8 CNC Qualified Roller Bearing	Z9389		
1	1/2 CNC Qualified Roller Bearing	Z9390		
1	3MM Ruby Tip x 1/2" long	Z6974		
1	Flat Steel Point 7/32 diameter X 1/4 long	Z9311		
1	Flat Steel Point 7/32 diameter X 1/2 long	Z9313		
1	Flat Steel Point 7/32 diameter X 3/4 long	Z9315		
1	Flat Steel Point 7/32 diameter X 1-1/4 long	Z9318		
1	Flat Contact 1/4 wide	Z9365		
1	Flat Contact 1/2 wide	Z9367		
1	.060 Steel Ball Tip, 5/16 long	Z9396		



**Set Order Number** 

Z9414



#### **Accurate 14 Pc. Contact Point Set**

#### **Functional Equivalent to Starrett Set 25R**

14 Contacts in metal ring stand. Made in USA

A top quality contact assortment for the professionally equipped dial indicator.

Includes the following contacts, secured in a machined ring suitable for workbench or flat storage.

	Starrett Contact Point Ring—Set 25R			
Qty	Description	Fuctional Equivalent	Order Number	
1	3/8 Ground Flat Bottom Contact, 3/8" Lth, 4-48 Thds	Starrett PT06632/2 - 70790	Z9492	
1	1/2 Ground Flat Bottom Contact, 3/8" Lth, 4-48 Thds	Starrett PT06632/3 - 70791	Z9491	
1	1/2 Button Contact, 4-48, Steel Black Oxide	Starrett PT06632/4 - 70792	Z9356	
1	3/8 Button Contact, 4-48, Steel Black Oxide	Starrett PT06632/5 - 70793	Z9355	
1	1/2" Lth 90 Degree Cone Point Contact, 4-48, Steel Black Oxide	Starrett PT06632/6 - 70794	Z9332	
1	1/16" Ball Contact, 1/4" Lth, 4-48 Steel Black Oxide	Starrett PT06632/7 - 70795	Z9398	
1	5/8" Lth Tapered Contact, 4-48, Steel Black Oxide	Starrett PT06632/8 - 70796	Z9497	
1	Button Contact, 13/64" Dia X 5/32" Lth, 4-48, Steel Black Oxide	Starrett PT06632/9 - 70797	Z9496	
1	Shock Abosorbing Contact Point, 4-48	Starrett #28 - 50199	Z9490	
1	9/32 Lth Cone Point, Stl Hard, Black Ox, 4-48 Thds	Starrett PT06632/10	Z9361	
1	1" Lth Polished Radius Point, Stl Hard Black Ox, 4-48 Thds	Starrett PT06677B	Z9362	
1	3/4" Lth Polished Radius Point, Steel Black Ox, 4-48 Thds	Starrett PT06677A	Z9363	
1	1/2" Lth Polished Radius Point, Steel Black Ox, 4-48 Thds	Starrett PT06677	Z9364	
1	1/4" Lth Polished Radius Point, Steel Black Ox, 4-48 Thds	Starrett PT07215	Z9397	





# Fowler 6 Pc. Contact Point Set

Made in USA















# **Gage Ball Tips**





## **Gage Balls—Chrome Alloy Steel**

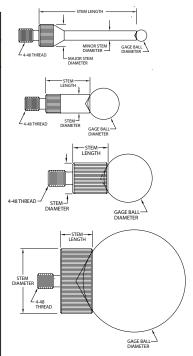
A complete line of Grade 25 (accurate to 25 millionths) Chrome Alloy Steel Gage Balls, mounted on our stems with 4-48 threads.

These Gage Ball Tips attach directly to Dial Indicators, or use the attachments listed on the following page to attach them to Calipers.

Ball is Chrome Alloy Steel. Bodies are made from corrosion resistant Type 303 Stainless Steel.

#### Made in USA

Gage Ball Tips					
Gage Ball	Stem	Major Stam Diameter	Minor Stam Diameter	Thread	Order Number
Diameter	Length	Stem Diameter	Stem Diameter		
0.0310"	.600"	.156"	.025"	4-48	Z6931
0.0460	.710	.156	.040	4-48	Z6932
0.0625	.710	.156	.040	4-48	Z6933
0.0780	.830	.156	.058	4-48	Z6934
0.0938	.830	.156	.058	4-48	Z6935
0.1250	.800	.156	.100	4-48	Z6936
0.1562	.800	.156	.100	4-48	Z6937
0.1562	.800	.156	.100	M2.5	Z6937M
0.1875	.375	.156	.156	4-48	Z6938
0.2188	.375	.156	.156	4-48	Z6939
0.2500	.250	.218	.218	4-48	Z6940
0.2812	.250	.218	.218	4-48	Z6941
0.3125	.250	.218	.218	4-48	Z6942
0.3438	.250	.218	.218	4-48	Z6943
0.3750	.250	.218	.218	4-48	Z6944
0.4060	.250	.218	.218	4-48	Z6945
0.4060	.250	.218	.218	M2.5	Z6945M
0.4370	.250	.218	.218	4-48	Z6946
0.4680	.250	.218	.218	4-48	Z6947
0.5000	.250	.218	.218	4-48	Z6948
0.5310	.250	.218	.218	4-48	Z6950
0.5625	.250	.312	.312	4-48	Z6951
0.5937	.250	.312	.312	4-48	Z6952
0.6250	.250	.312	.312	4-48	Z6953
0.6250	.250	.312	.312	M2.5	Z6953M
0.6560	.250	.312	.312	4-48	Z6954
0.6870	.250	.312	.312	4-48	Z6955
0.7180	.250	.312	.312	4-48	Z6956
0.7100	.250	.312	.312	4-48	Z6957
0.7812	.250	.312	.312	4-48	Z7100
0.7612	.250	.312	.312	4-48	Z7100 Z7101
0.0123	.200	.512	.512	4-40	2/101
0.8750	.250	.500	.500	4-48	Z7102
0.9375	.250	.500	.500	4-48	Z7103
1.0000	.250	.500	.500	4-48	Z7104
1.0625	.250	.500	.500	4-48	Z7105
1.1250	.250	.500	.500	4-48	Z7106
1.1875	.250	.500	.500	4-48	Z7107
1.2500	.250	.500	.500	4-48	Z7108



SPECIAL ORDERS
AVAILABLE—
Small Quantities
to Large Volume



**Note:** These tips are designed for use as an indicator point, and are not to be used for sizing and gaging applications where side pressure is present.



**USA**MADE

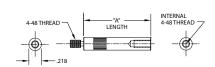


# **Drop Dial Indicator Extension Points USA**■ MADE

#### **Indicator Extension Points—Stainless Steel**

Use to gain extra length. 7/32" diameter points have 4-48 internal and 4-48 external threads. Made from corrosion resistant Type 303 Stainless Steel.

Indicator Extension Points		
	Order	
Length	Number	
1/2"	Z9391SS	
3/4	Z9392SS	
1	Z9339SS	
1-1/4	Z9393SS	
1-1/2	Z9343SS	
1-3/4	Z9394SS	
2	Z9340SS	
2-1/2	Z9351SS	
3	Z9341SS	
4	Z9352SS	
1 6	7935355	



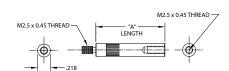




#### **Metric Indicator Extension Points**

Use to gain extra length. 7/32" diameter points have M2.5 X 0.45 Internal and M2.5 X 0.45 External threads. Made from corrosion resistant Type 303 Stainless Steel.

Metric Extension Points		
	Order	
Length	Number	
1/2"	Z9391SS-M	
3/4	Z9392SS-M	
1	Z9339SS-M	
1-1/4	Z9393SS-M	
1-1/2	Z9343SS-M	
1-3/4	Z9394SS-M	
2	Z9340SS-M	
2-1/2	Z9351SS-M	
3	Z9341SS-M	
4	Z9352SS-M	
l 6	Z9353SS-M	

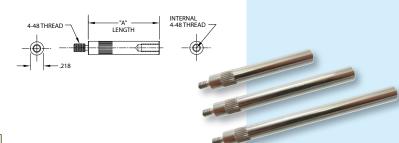


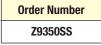


#### **Extension Point Kit**

Handy kit of the most used Extension Points with 4-48 internal and external threads. Contains 1 each of 1", 2", and 3" extensions. Packaged in clear plastic tube.

Made from corrosion resistant Type 303 Stainless Steel.











## Indicator Conversion Points & Accessories USA SMADE





#### Adapt-A-Tip

Converts Test Indicator Tips to 4-48 Threads

This point converts any Test Indicator Tip to a 4-48 thread, enabling it to be used on any standard AGD Dial Indicator. Allows you to measure small pockets, grooves, recesses, and holes.

Low Carbon Steel, Nickel Plated.

#### Made in USA

Adapt-A-Tip					
Converts Test	Converts Test Indicator Tips to 4-48 Threads				
Internal External					Order
Fits Test Indicator Tips	Thread	Thread	Diameter	Length	Number
Tesa, Brown & Sharpe, Girod	M1.4 X 0.30	4-48	3/16"	.330"	Z6995
Interapid, Teclock, Peacock, Mitutoyo	M1.7 X .35	4-48	3/16	.330	Z6996





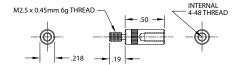
## **Metric to English Conversion Point**

4-48 Internal Threads to M2.5 External Threads. Use your standard Inch AGD points in Dial Indicators with Metric threads. Point is 7/32" diameter, 1/2" length, with 4-48 internal tap and M2.5 X 0.45 male stud.

Corrosion Resistant Type 303 Stainless Steel

#### Made in USA

Order Number	
Z9344SS	<b>USA</b> MADE



4-48 THREAD



## **English to Metric Conversion Point**

M2.5 X 0.45 Internal Threads to 4-48 External Threads. Use your Metric AGD points in Standard Dial Indicators. Point is 7/32" diameter, 1/2" length, with M2.5 X 0.45 internal tap and 4-48 male stud. Corrosion Resistant Type 303 Stainless Steel

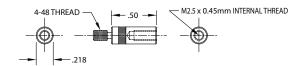
#### Made in USA



**Indicator Chuck** 

Low Carbon Steel, black oxide plated



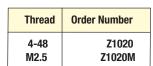




#### • .014-.040 chucking capacity Made in USA

AVAILABLE— Small Quantities

SPECIAL ORDERS





Dial Indicator and stand not included









# **Dial Indicator Backs**





Indicator Backs—Black Anodized Aluminum		
Description	Order Number	
Flat Back for Accu Pro AGD 2	Z0256	
Lug Back for Accu Pro AGD 2	Z0257	
Offset Lug Back for Accu Pro AGD 2	Z0258	
Post Back for Accu Pro AGD 2	Z0259	
Adjustable Back for Accu Pro AGD 2	Z0261	
Flat Back for Fowler Chinese Indicator	Z0300	
Lug Back for Fowler Chinese Indicator	Z0301	
Offset Lug Back for Fowler Chinese Indicator 52-525-010	Z0302	
Post Back for Fowler Chinese Indicator 52-525-020	Z0303	
Screw Back for Fowler Chinese Indicator	Z0304	
Flat Back for Fowler Sylvac Indicator	Z0310	
Lug Back for Fowler Sylvac Indicator 52-525-005	Z0311	
Offset Lug Back for Fowler Sylvac Indicator 52-525-010	Z0312	
Post Back for Fowler Sylvac Indicator 52-525-020	Z0313	
Screw Back (1/4-20) for Fowler Sylvac Indicator 52-525-025	Z0314	
Flat Back for Fowler Baker AGD 2 Drop Indicator (3 Hole)	Z0316	
Lug back for Fowler Baker Indicator	Z0317	
Offset Lug Back for Fowler Baker Indicator	Z0318	
Post Back for Fowler Baker Indicator 52-525-020	Z0323	
Screw Back for Fowler Baker Indicator 52-525-025	Z0324	
Adjustabel Back for Fowler Baker Indicator 52-525-030	Z0325	
Flat Back for Teclock Indicator AGD 1	Z0370	
Lug Back for Teclock Indicator AGD 1	Z0371	
Lug Back for Teclock Indicator AGD 2	Z0376	
Flat Back for B&S Indicator AGD 2 (3 Hole)	Z0822	







# **Magnetic Back System for Dial Indicators**



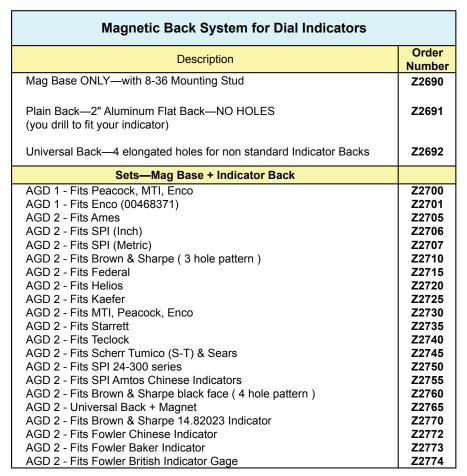


A versatile, secure, and time saving system for mounting any Dial Indicator to any metal surface.

Applications include mounting on machine tools for in process gaging applications, set ups, and many other uses.

System consists of our standard magnetic mounting base, with interchangeable backs to fit most AGD group 1 and 2 Dial Indicators.

Made in USA





**Z2692**-Universal Back



Z2700-Mag Base & Indicator Back



**Z2705**-Mag Base & Indicator Back



**Z2690**-Magnetic Base

**Base dimensions:** 

2" round X .340 Thick with 60 Lb Pull Aluminum Backs made from 1/8" thick Aluminum, anodized.



Small Quantities to Large Volume





**USA**MADE

## **Indicator Bases, Stands, & Accessories**





Precision hardened and ground Depth Base accepts any standard AGD Dial Indicator with 3/8" stem. Ground flat and parallel on both top and bottom surfaces. Set screw in bases holds Indicator in place. Black Oxide plated.

#### Made in USA

Dial Indicator Depth Base			
Description	Order Number		
2-1/2" Long Base, 3/4" High, 5/8" Thick	Z9228		
4" Long Base, 3/4" High, 5/8" Thick	Z9229		





## **Dial Indicator Depth Bases—Metric**

Accepts Dial Indicators with 8mm stem. Ground flat and parallel on both top and bottom surfaces. Set screw in bases holds Indicator in place. Black Oxide plated.

Metric Dial Indicator Depth Base		
Description	Order Number	
65mm Long Base, 19mm High, 16mm Thick	Z9228M	
100mm Long Base, 19mm High, 16mm Thick	Z9229M	



## **Indicator Measuring Stand**

Perfect for turning any standard AGD Dial Indicator with 3/8" diameter stem into a thickness measuring device, or special gaging device. Perfect for measuring wall thickness and most conical measurement applications.

- · Lightweight and sturdy bench tool.
- Non skid bottom prevents rocking or tipping of stand.
- Anodized aluminum resists corrosion.
- Measuring anvil marked to facilitate repetitive measurements.
- 3-3/4" maximum height for measurements.
- 1-5/8" maximum length for measurements.

Raco	1" long v 2-1/2" wide

3-3/8" maximum clearance from Indicator Stem to upright rod.

1/8" diameter tapers to .074 diameter

2-5/16" length

Anvil made from Stainless Steel





Indicator Measuring Stand			
Description	Order Number		
Dial Indicator Measuring Stand	Z8200		
Anvil Tip Only	Z8201		



## **Indicator Stem Bushing**

- Brass. Split one side for entire length.
- 5/32" ID to 3/8" OD.
- 19/32" overall length.









## **Metric Indicator Stem Bushing**

Accepts 8MM Indicator stem converts to 3/8" diameter stem.

- Brass. Split one side for entire length.
- 5/8" head OD x .065" thick.
- 9/16" overall length.





## **Straight Metric Indicator Stem Bushing**

For Metric Dial Indicators with 8MM shanks. Allows use in any holding device built for AGD standard 3/8 Shanks.

- Accepts 8MM stem, converts to 3/8" diameter stem.
- · Straight bushing, no head.
- .600" length.
- Brass, Nickel Plated.

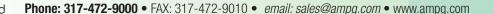


**USA**MADE









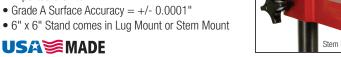


# **Granite Gage Stands**

#### **Granite Gage Stands**

- USA Components
- Imported Granite

Dial Indicators



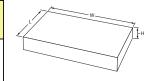








Granite Dial Indicator Stands						
"L"	"W"	"H"				
Granite	Granite	Granite	Rod	Rod	Indicator	Order
Length	Width	Height	Diameter	Height	Mount	Number
6"	6"	2"	1.25"	8"	Lug Mount	STA-662
6	6	2	1.25	8	3/8 Stem Mount	STA-662-SM
8	12	2	1.25	12	3/8 Stem Mount	STA-8122
12	18	4	1.25	12	3/8 Stem Mount	STA-12184







- Ebony Granite
- 2" thick X 6" Square
- 1" nominal diameter Post X 8" Height
- Flatness specification on the granite base is 0.0005".
- Clamp with fine adjustment fits all AGD 1,2, and 3 Indicators.
- Imported







H20





Dial Indicator not included



# **Surface Plate Cleaner & Vee Blocks**

#### **Precision Surface Plate Cleaner**

An exclusive formulation that is extremely effective for the cleaning and care of Granite Surface Plates. It is also easy to ship via UPS or Common Carriers. MSDS sheets are shipped with each order.

#### Made in USA

Precision Surface Plate Cleaner				
Description	Number per Case	Order Number		
Pint	12	Z9412		
Pint Spray Pump	12	Z9406		
Quart	_	Z9407		
1/2 Gallon	_	Z9408		
Gallon	4	Z9409		
5 Gallon		Z9410		



A safe and effective formula originally invented over 10 years ago to specifications developed by a leading metrologist and marine biologist, our "Precision Surface Plate Cleaner" has been one of the most widely used for over 10 years. Works quickly and effectively, leaves no residue on the granite.



#### Mini Vee Block Set

A universal holding tool for miniature parts, used in conjunction with larger V-blocks. Ideal for grinding and/or indexing punches and pins, EDM tooling, comparator fixturing.

- Fully hardened and precision ground
- Squareness and parallelism within .0002"
- Capacity .030 to 9/32"
- Made in USA

#### **Fitted Case Includes:**

- (1) Mini V Block up to 5/32" capacity with clamp,
  - Fits into a ¾" and larger V Block
- (1) Mini V Block holds up to 9/32" capacity with clamp - Fits into a 1" and larger V Block
- (2) **Bridges** clamping screw from the regular V Block will contact this part, securely mounting the Mini V Block in the V, and not interfering with the part being clamped in the Mini V System.
- **(5) Fingers** lay on top of the cylinder being fixtured in the mini V system. The clamp contacts the finger to hold the workpiece in place.



Large V Block & Large Clamp not included.







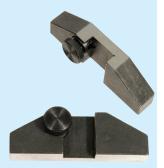
**Order Number** 











## **Depth Base Attachment for Calipers**

This handy attachment transforms your Dial, Vernier, or Digital Caliper into a depth measurement device, without the expense of standalone Depth Micrometers.

- Fits all brands of Calipers
- Precision Ground Base
- Screw Locking Clamp
- Cold Rolled Steel
- Case Hardened .005/.010 deep
- Black Oxide Plated
- Made in USA





Caliper not included

Depth Base Attachment for Calipers					
Description	Base Width	Base Height	Slot Width	Order Number	
3" Base - Fits 4-6" Calipers	1/2"	1"	0.675"	Z9225	
4" Base - Fits 4-6" Calipers	1/2"	1"	0.675"	Z9226	
5" Base - Fits 12" Calipers	1/2"	1"	0.820"	Z9227	
Fits most new electronic calibers with bar at the end of the beam.					





## **T-Bar Depth Base Attachment**

This handy attachment transforms your Dial, Vernier, or Digital Caliper into a depth measurement device, without the expense of standalone Depth Micrometers.

- Fits all brands of Calipers
- Locking Screw
- Case Hardened Steel
- Black Oxide Plated
- Made in USA





Caliper not included

T-Bar Depth Base Attachment				
	Base	Base	Slot	Order
Description	Width	Height	Width	Number
3" Base - Fits 4-6" Calipers	.210"	.975"	0.620"	Z9223



SPECIAL ORDERS AVAILABLE— Small Quantities to Large Volume

H22





#### **USA**MADE

## **Jaw Clamp On**

- Clamps on to Caliper jaws, allows attachment of Standard Gage Balls & Depth Probes.
- Available in 3 sizes for different size Calipers.
- Right Angle Adaptor also available, which fits any of the 3 sizes of Jaw Clamp Ons.
- Steel, Black Oxide plated.
- Made in USA











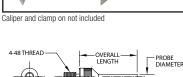
Caliper Jaw Mounting Attachments			
Jaw Clamp On & Right Angle Attachme	nt		
Description	Order Number		
Jaw Clamp On for 6" Calipers (.133 max jaw width)	Z6958		
Jaw Clamp on for 12" Calipers (.186 max jaw width)	Z6959		
Jaw Clamp on for 18" Calipers (.245 max jaw width)	Z6983		
Right Angle Adaptor fits any of the above Jaw Clamp Ons	Z6988		



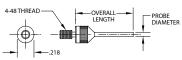
## **Depth Probes**

- Attach these Depth probes to 6", 12", or 18" Calipers using our Jaw Clamp Ons above.
- Available in 5 different lengths.
- Can also be attached to the Right Angle Adaptor.
- Stainless Steel
- Made in USA

Depth Probe				
Overall Length	Probe Diameter	Order Number		
1/2"	0.049"	Z6989		
3/4	0.049	Z6990		
1"	0.062	Z6985		
1-1/2	0.062	Z6986		
2"	0.062	Z6987		









#### **Use our Mic Anvils on your 4-6-8" Calipers**

- Clamps on to Caliper jaws, allows attachment of Standard Mic Anvils.
- Steel, Black Oxide plated.
- Made in USA





**USA**MADE



















Z9511





Z9513





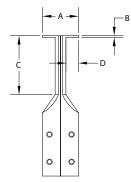
A complete range of accessory jaws that fit on any 6" Caliper, for measuring grooves. Finds many uses, including undercuts, and grooves of all types.

Works with Dial, Vernier, and Electronic tools, with measuring capacity from 0.200" to 6" in diameter. Bodies are self aligning, as they have an alignment pin built in to each pair.

Manufactured in the USA of cold rolled Steel, Black Oxide finished for protection. Sets come in plastic fitted case.

#### Made in USA





Bodies have .125" wide slot to admit Caliper Jaws

G							
Minimum Measurement	Width of	Maximum Depth	Groove Depth				
Diameter (A)	Feet (B)	(C)	(D)	Order Number			
0.200"	.015"	.400"	.050"	Z9510			
0.300	.015	.625	.070	Z9511			
0.600	.025	1.00	.200	Z9512			
0.725	.040	1.25	.255	Z9513			
External Measurement	.024	3.00	.375	Z9514			







SPECIAL ORDERS AVAILABLE—

Small Quantities to Large Volume

Set	Description	Order Number
3 Pair Set	Includes Max. Depth of .400, .625, & 1" (Z9510, Z9511, Z9512)	Z9500
5 Pair Set	Includes All Jaws Pictured Above (Z9510, Z9511, Z9512, Z9513, Z9514)	Z9505











## **Universal Caliper Accessory Kit**

The original caliper jaw attachment accessory.

The square bodies attach to the jaws of any 4", 6", 8" Caliper. Threaded holes are located in the front, both sides, and the bottoms of the bodies, allowing the use of the points on any side. Measures slots, grooves, shoulders, holes, pockets, and takes ID and OD measurements. Corrosion Resistant Type 303 Stainless Steel

Universal Caliper Accessory Kit		
Kit contains: Description		
(2) Universal Caliper Bodies	3/8" square x 2" length. Slot for Caliper jaws is .147 wide.	
	4-40 holes for set screws fasten the body to the caliper jaw	
(2) Flat Points	3/16 diameter x .810 length. 4-48 threads	
(2) Cone Points	3/16 diameter x .810 length. 4-48 threads	
(2) Stem Points	3/16 body diameter, .084 stem diameter x .820 length. 4-48 threads	
(2) Ball Points	3/16 diameter x .810 length. 4-48 threads	







Caliper not included



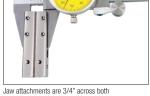
Minimum center to center measurement that can be made with this configuration is 3/8"

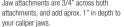


Minimum hole diameter for these attachments is 2-3/8'



Caliper not included





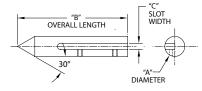
# **Centerline Gages**

- Measures centerline distances.
- Easily attaches to Dial, Vernier, and Digital Calipers.
- 60 Degree Conical Points.
- Hardened Steel with Black Oxide finish.
- Attaches in seconds with Set Screws.
- Supplied in High Impact Tubes with Allen Wrench.
- User friendly instructions.
- Made in USA

USA	<b>MADE</b>

Caliner not included

Centerline Gages			
"A"	"B"	"C"	Order
Diameter	Overall Length	Slot Width	Number
.375"	2-5/16"	.127"	Z9009
.500"	2.762"	.144"	Z9010

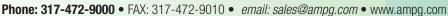


Z9009 Fits 4", 6", and 8" Calipers—Closest center to center hole dimension that can be measured is 3/8". Z9010 fits 12" Calipers—New Size!!—Closest center to center hole dimension that can be measured is 1/2".



Products Group







# +5 +1

Caliper not included

## **Caliper Extender Attachments**

A unique Caliper accessory that extends the range of your 6" Caliper **up to 91"!**Allows both inside and outside measurements of up to 51" with your 6" Dial, Vernier, or Digital Caliper. These Extender Kits allow you to perform measuring operations without the expense of purchasing a stand alone Caliper, which could cost thousands of dollars! For the occasional measuring situation, these Kits provide the answer at a reasonable cost!

Extension bars are manufactured from high grade Aluminum, and Black Anodized with white numerals for clarity and protection. The 91" model is clear anodized, with white numerals. All mounting hardware and calibration rods are included. **Made in the USA.** 

Complete instructions accompany this easy to use kit. Choose the model that fits the range of measurements you need.

Caliper Extender Attachment		
In addition to the tolerance on		
caliper, for cumulative accuracy,		Order
Description	add the following tolerances:	Number
26" Extension Kit	+/- 0.003"	Z2526
36" Extension Kit	+/- 0.003"	Z2536
51" Extension Kit	+/- 0.004"	Z2551
71" Extension Kit	+/- 0.005"	Z2571
91" Extension Kit*	+/- 0.006"	Z2591





**USA**MADE



## **Calibration Standard for Caliper Extenders**

6" calibration standard for calibrating any of the Cal Extender units. This Standard is also included with each Caliper Extender Kit.

Order Number

Z2526-4





H26









All Caliper Extender Kits come equipped with 1/2" projection length pins. These pins extend 1/2" under the Extender Bar. You can order replacements for the originals included with your kit (Part # Z2526-10), or order the optional longer pins for added clearance. (Part #s Z2526-11 and -12)







Caliper & Extender Bar not included
+5
1/2" Projection Pins





Projection Pins	
Description Order Numbe	
1/2" Projection Pins (pair)	Z2526-10
1" Projection Pins (pair)	Z2526-11
1-1/2" Projection Pins (pair) Z2526-12	



## **Centerline Gage Pins for Caliper Extenders**

For measuring centerline distances between hole centers.

Kit includes special end block, 2 points (.620 diameter tapers to a sharp point), special 6" centerline calibration bar, hex key, and complete instructions.

**Order Number Z2526-CG** 





Caliper & Extender Bar not included

## **Layout Kit for Caliper Extenders**

A specially adapted carbide scriber point allows you to scribe and make markings with the caliper.

The special carbide scribing point attachs to the Extender Bar, and the special projection pin with a milled flat goes into the block attached to the movable jaw of the caliper. The flat of the pin goes against the edge of your material, and you scribe the line with the scriber's carbide point.





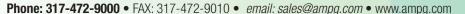








Caliper & Extender Bar not included



# Indicator Holders & Caliper Accessories USASSMADE



#### **Universal Dovetail Indicator Holder**

#### **Steel & Stainless Steel Models**

1/4" shank diameter with 3" reach.

This spring loaded holder locks in any of (4) 90 degree guadrants, and allows many variable angles of holding.

• Brass contact will not scar Indicator.

• Fits all dovetail equipped Indicators.

Made in USA

**Order Number** Z9008SS









## **Dual Action Dovetail Indicator Holders**

- Steel with Black Oxide finish
- Made in USA

<b>Dual Action Dovetail Indicator Holders</b>		
Description	า	Order Number
8MM Dia. Shank x 18mm Lth	1-1/2" Overall Lth	Z9645
5/32" Dia. Shank X 11/16" Lth	1-1/2 Overall Lth	Z9646
7/32 Di.a Shank X 11/16 Lth	1-1/2 Overall Lth	Z9647
3/8 Dia. Shank X 11/16 Lth	1-1/2 Overall Lth	Z9648
3/8 Dia. Shank X 2" Lth	3" Overall Lth	Z9649



Indicator, stand, & clamp not included



## **Z** Axis Caliper Mounting Kit for Mills

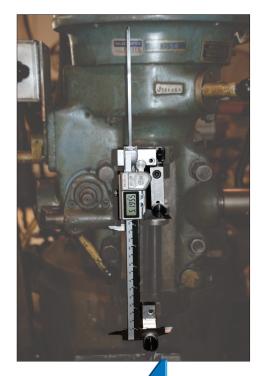
Holds all common Digital Calipers, for mounting on the Z axis of most Milling Machines. Simple installation with minor machining. Full instructions and all mounting hardware included.

After the initial installation, the Caliper can be mounted and taken off quickly and easily.

Made in USA









H28









## **Axial Support Bracket**

#### **Steel & Stainless Steel Models**

- Used for mounting Indicators with dovetails or rods.
- 3/8" diameter body for secure clamping, with 5-1/2" overall reach.
- Bends in many directions!
- Made in USA

Axial Support Bracket	
Order Number	
Steel	Stainless Steel
Z9610	Z9610SS











#### **Dovetail Stems**

A complete range of Dovetail Stems to fit all applications. Stem has screw driver slot in bottom, and screws up through the dovetail to safely and securely clamp the Indicator.

- Dovetail dimension: .205" top to .220" bottom.
- Overall Length: .900"
- Corrosion Resistant Type 303 SS
- Made in USA

Dovetail Stems		
Shaft Diameter	Order Number	
5/32"	Z7500SS	
3/16	Z7504SS	
7/32	Z7501SS	
1/4	Z7502SS	
5/16	Z7503SS	



Indicator, stand, & clamp not included



## **Single-Jointed Dovetail Holder**

Brass Setting Nut allows orientation of the indicator in a full 360 degrees, with secure clamping. It also allows a fine adjustment for the indicator of .060 up and down.

- 1/4" diameter body for clamping
- 2-3/4" overall reach
- Fits all dovetail equipped Indicators
- Made in USA







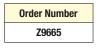
Indicator, stand, & clamp not included



#### **Double-Jointed Dovetail Holder**

Brass Setting Nut allows orientation of the indicator in a full 360 degrees, with secure clamping. It also allows a fine adjustment for the indicator of .060 up and down.

- 3/8" diameter body for secure clamping
- 4-1/2" overall reach
- Fits all dovetail equipped Indicators
- Made in USA







Indicator, stand, & clamp not included













## **Indicator Swivel Clamp**

Use for clamping any indicator that has a 1/4" Rod

- Rod is 1/4" diameter X 3-1/2 Long
- Clamp accepts 1/4" rods
- · Large thumb nut for easy tightening
- Made in USA

Order Number
Z1018

## **Clamps with Dovetails**

For any Indicator equipped with rods or dovetails. Used to fixture Indicators on Surface Gages, Gage Stands, Magnetic Bases, Height Gages, Transfer Stands, and many others.

- · Steel with Black Oxide finish
- Made in USA

Indicators & stands not included





Clamps with Dovetails		
Mounting Holes	Order Number	
3/8" and 7/32"	Z9600	
3/8 and 1/4	Z9601	
3/8 and 5/32	Z9602	
7/32 and 5/32	Z9620SS	
1/4 and 1/8 plus adjustable hole up to 1/4	Z9618	











#### **USA**MADE

## **Test Indicator Body Clamp**

#### **For Starrett Indicators**

Functional Equivalent of Starrett PT 07101F, 711-28-29-30

- Clamps to any diameter rod from 1/8-1/4"
- Steel with Black Oxide finish







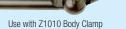
**Long & Short Arm Attachment** 

#### **For Starrett Indicators**

Functional Equivalent of Starrett PT 07104F

- Dimensions: 3/16" Dia. arms that are 13/16" & 1-3/16" in Length
- Steel with Black Oxide finish





**USA**MADE

## **Double-Jointed Attachment**

#### **For Starrett Indicators**

Functional Equivalent of Starrett PT13301, 711-48

- Dimensions: 3/8" Dia. on one end, 1/4" Dia. on other end.
- Steel with Black Oxide finish







#### **Ball Shank Attachment**

#### For Starrett Indicators

Functional Equivalent of Starrett PT05119

- Replaces the ball shank of the Starrett No. 711EA
- Allows Starrett No. 711G & No. 711L Indicators to be used on holders with smaller clamp holes.
- Steel with Black Oxide finish

## **Order Number** Z1001





## 3/16" ID Coupling

#### For Starrett Holders PT07104F & PT13175

Functional Equivalent of Starrett PT05116, 711-46

• Dimensions: 3/16" ID x 1" · Steel with Black Oxide finish Order Number Z1003





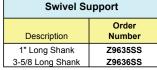
## **Swivel Support**

**USA**MADE

A swivel mount for any Indicator equipped with dovetails. The Spring loaded dovetail adjusts to fit any size.

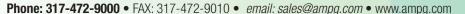
- 3/8" diameter shank features secure clamping.
- Available with 1" long shank or extra length 3-5/8" shank.

Swivel Support	
Description	Order Number
1" Long Shank	Z9635SS
3-5/8 Long Shank Z9636SS	















#### **Universal Friction Holder**

#### For Starrett Indicators

Functional Equivalent of Starrett PT13175

- 3/16" (4.8mm) Diameter Shank will fit into Starrett No. 57 & No. 257 Surface Gages, as well as chucks.
- Inserts at top of Indicator body in place of end plug
- Steel with Black Oxide finish







#### **Universal Shank**

#### For Starrett Indicators

Functional Equivalent of Starrett PT07103A

- Includes Long & Short Arm Attachment Z1004
- Shank Dimensions: 1/4" x 1/2"
- Steel with Black Oxide finish







#### Surface Gage Adapter

#### For Gem-type Test Indicators

Functional Equivalent of Gem #515

- · Overall Length:
- Steel with Black Oxide finish

**Order Number** Z1017





## Angle Attachment

Accepts all Dial Indicators with standard 3/8" stem.

- 3/8" mounting hole
- 3/8" diameter by 1" long shank
- Aluminum Black Anodized
- Made in USA

#### **Order Number Z9640**





#### **Round Bar**

- 7/32" diameter with .163" stepped clamping end
- 2-7/8" overall length
- .220" diameter stud
- Steel Black Oxide plated
- Made in USA

**Order Number** Z9630





A versatile holder for test indicators equipped with stems or dovetails.

- 1/4" x 2" long holding bar.
- Accepts 5/32" stem or a complete range of dovetails.
- 3 1/2" effective measuring range.
- Made in USA

**Order Number** Z7800



The versatile connector has a hole that accepts a 5/32" stem, but also has an adjustable slot that connects to a complete range of dovetails.



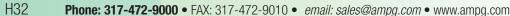
Indicator not included



Indicator & stand not included









# Indicator & Height Gage Accessories USA SMADE

## **Height Gage Bar & Universal Clamp Set**

Popular set combining Z9627 Height Gage Bar with Z9620 Universal Clamp.

This set is one of the most widely used for Height Gage measurement applications. Holds all instruments equipped with dovetails or 7/32" diameter pins.

(OEM Part # Interapid AI-310 74.106331)









Indicator not included

#### **Height Gage Bar & Clamp Set**

3 Pc. set combining Z9625 & 9630 Height Gage Bars with Z9600 Clamp.

This set is one of the most widely used for Height Gage measurement applications. Holds all instruments equipped with dovetails or 7/32" diameter pins.







Z9600

Z9625

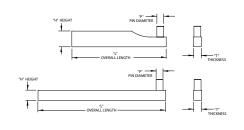
## **Rectangular Bars**

For use with all height gages.

 All bars are manufactured from corrosion resistant Type 303 SS



Rectangular Bars						
"T" Thickness	"H" Height	"L" Overall Length	"P" Pin Diameter	Order Number		
3/16"	5/16"	3"	.220"	Z9625		
5/16	5/16	4	.220	Z9626		
1/4	1/2	3	.220	Z9627		
1/4	1/2	3		Z9628		





## **Accurate Monorail Indicator Holder**

For use in Milling Machines or Holders. Reach is 5-1/2". Mounting is secure and rock solid. 5/32" hole in shaft accepts Dovetail Holder with 5/32" stem (See page 183, Item Z7500). An excellent device for set ups and measurements.

#### **Specifications:**

- Aluminum Body
- 5-1/2" Reach
- Accepts 5/32" Dovetail Stems
- · Locking shaft for secure mounting









## **Inside/Outside Diameter Groove Gages**

A quick way to inspect steps, counterbores, keyways, and O-Ring grooves.

- Available in 0-6" and 6-12" ranges
- Black Anodized Aluminum

Inside/Outside Diameter Groove Gages		
Description	Order Number	
0-6" Range	Z0001	
6-12 Range	Z0002	



**Order Number** 

Z9861









# **Indicator & Height Gage Accessories**





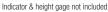
Popular accessory for use with Height Gages and other measuring stands.

- Bar is 3/16" wide by 5/16" high and 3" long.
- Adjustable pin is 7/32" diameter, which fits several of the most widely used clamps.



Holding Bar with Pin			
Description	Order Number		
Holding Bar with Pin	Z9611		
Holding Bar only	Z9611-1F		
Holding Pin only	Z9611-3E		
7/32" and 5/32" dia.			







## **Height Gage Attachment**

#### For Starrett Height Gages

Functional Equivalent of Starrett PT 24706, 711-45

- Shank Dimensions: 3/16" x 11/32"
- Steel with Black Oxide finish

Order Number	
Z1008	<b>USA</b> MADE



#### **Height Gage Attachement**

#### **For Starrett Height Gages**

Functional Equivalent of Starrett PT 08054

- Dimensions: 3/16" x 3/8"
- Steel with Black Oxide finish

Order Number			
71002			





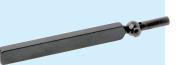
## **Height Gage Attachement**

#### For Starrett Height Gages

Functional Equivalent of Starrett PT 07127

- Dimensions: 1/8" x 5/16"
- Steel with Black Oxide finish





H34

#### **Universal Shank Holder**

#### For Gem-type Test Indicators

Functional Equivalent of Gem #35

- Overall Length:
- Steel with Black Oxide finish









# Indicator & Height Gage Accessories USA MADE

## **Height Gage Universal Clamp Set**

The #1 problem when using any height gage accessory—every manufacturer has different size clamps on their scribers, which means many accessories cannot be clamped—the operator has to hunt through the shop for something that fits.

PROBLEM SOLVED— A universal clamp set that adjusts from 1.075" down to .575". This means that 99.9% of all attachments can be used with any height gage, whether it's Chinese, Swiss, or German. Every shop with a height gage needs one of these sets.

#### Set Includes:

(1) Master Clamp (1) 1/8" Ht Riser

(1) 1/8" Ht Riser (1) 1/4" Ht Riser

(1) 3/8" Ht Riser

(1) 1/2" Ht Riser

(1) 1/4" Ht Riser with V for accomodating Round Shafts

**Order Number** 

Z9607

(1) 3/8" Ht Riser with V for accomodating Round Shafts

7 Total Items + 1 Mahogany Box













#### Attach Probe Styli for fine measurements

- This Height Gage Attachment lets you use any M2 threaded CMM Probe in your Height Gage
- Holder comes with (3) Ruby Ball CMM Probes—2MM Ruby Ball x 20MM Length (Z3100)
- Packed in Fitted Wood Box

#### Set Includes:

(1) Attachment Bar

(3) Z3100-Ruby Ball CMM Probes

4 Total Items + 1 Mahogany Box









## **Height Gage Centering Cone Set**

Quickly and easily establish the distance between two hole centers using a height gage.

- Locates the hole center as the cone is inserted into a hole.
- Measures holes from 1/16" to 1-1/16" ID
- Packed in Fitted Wood Box

#### Set Includes:

(1) Holding Bar(2) Centering Cones

3 Total Items

+ 1 Mahogany Box















# ZeroSet Indicator Set-Up Attachments **USA S** MADE



#### **ZeroSet**

#### Perfect for Milling Machines, Magnetic Bases, and all Measuring Set Ups

A precision measuring accessory designed for any test indicator with dovetails, to quickly align the center of round workpieces in relationship to your cutting head. Attach the ZeroSet to the collet with the hardened clamping post equipped with 1/4", 3/8", and 1/2" diameters. You can reach anywhere within an 8" radius, and you can adjust by approx. 3/8" with the fine adjustment mechanism.

#### Made in USA



**Order Number** Z9860M









#### **ZeroSet Universal Attachment**

A unique attachment for our standard ZeroSet Indicator Accessory.

Allows the placement of any Test Indicator with dovetails in a multitude of positions.

**Order Number** Z9865M

- Angles up to 90 degrees on either side.
- · Bends both forward and backward.
- Allows for an infinite range of measurements over an extensive area.
- Attaches in seconds to our Z9860.
- Made In USA

Indicator not included



Indicator and ZeroSet not included





AVAILABLE— Small Quantities to Large Volume

H36

SPECIAL ORDERS



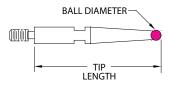




# Replacement Tips for Test Indicators USA MADE

#### **BROWN & SHARPE Replacement Tips**

Manufactured to fit BROWN & SHARPE				
M1.4 x 0.3	3 Threads	С	order Numb	er
Ball	Tip	Steel	Carbide	Ruby
Diameter	Length	Ball	Ball	Ball
.015	1/2"	_	Z6594	_
.040	1/2	Z6149	Z6595	_
.080	1/2	Z6205	Z6730	_
2mm	1/2	_	_	Z6300
.120	1/2	Z6295	Z6905	_
.080	11/16	_	Z6830	-
.015	1-7/16	_	Z6644	_
.040	1-7/16	_	Z6645	_
.080	1-7/16	Z6230	Z6802	_
2mm	1-7/16	_	_	Z6301
.120	1-7/16	_	Z6918	_



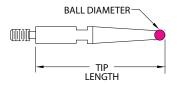




Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.

#### **PEACOCK Replacement Tips**

Manufactured to fit PEACOCK				
M1.7 x 0.35	Threads	C	order Numb	er
Ball Diameter	Tip Length	Steel Ball	Carbide Ball	Ruby Ball
.031"	3/8"	_	Z6523	_
.038	3/8	Z6112	_	_
.078	3/8	Z6117		_
.080	3/8	_	Z6723	_
2mm	3/8	_		Z6335
.125	3/8	Z6122	_	_
.038	3/4	Z6062	_	_
.078	3/4	Z6067	_	_
2mm	3/4	_	_	_
.125	3/4	Z6072	_	_
.038	1-3/4	Z6092	_	_
.078	1-3/4	Z6097	_	_
2mm	1-3/4	_	_	_
.125	1-1/2	Z6102	_	_











# **Replacement Tips for Test Indicators**



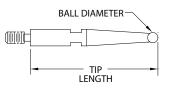


#### **PROCHECK Replacement Tips**

Manufactured to fit PROCHECK					
Order Number					
Ball	Ball Tip Steel Carbide				
Diameter	Length	Thread	Ball	Ball	
.080	.500	M2	Z6220	_	
.080	.535	M1.4	-	Z6726	

Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.





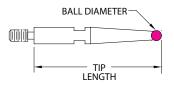




Manufactured to fit TESA					
M1.4 x 0.3	M1.4 x 0.3 Threads Order Number				
Ball	Tip	Steel	Carbide	Ruby	
Diameter	Length	Ball	Ball	Ball	
.015	1/2"	_	Z6530	-	
.031	1/2	Z6032	_	_	
.040	1/2	Z6033	Z6532	_	
.060	1/2	Z6034	_	_	
.080	1/2	Z6035	Z6534	_	
2mm	1/2	_	_	Z6312	
.090	1/2	Z6036	_	_	
.120	1/2	Z6042	Z6536	_	
.015	1-1/2	_	Z6538	_	
.031	1-1/2	Z6044	_	_	
.040	1-1/2	Z6045	Z6540	_	
.060	1-1/2	Z6046	_	_	
.080	1-1/2	Z6047	Z6542	_	
2mm	1-1/2	–	_	Z6313	
.090	1-1/2	Z6048	_	_	
.120	1-1/2	Z6050	Z6544	_	

Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.





TESA Equivalents				
	Steel	Carbide	Ruby	
AMPG	Ball	Ball	Ball	
Z6032	_	_	_	
Z6033	18.60101	_	_	
Z6034	_	_	_	
Z6035	18.60102	_	_	
Z6036	_	_	_	
Z6042	18.60103	_	_	
Z6044	_	_	_	
Z6045	18.60111	_	_	
Z6046	_	_	_	
Z6047	18.60112	_	_	
Z6048	_	_	_	
Z6050	18.60113	_	_	
Z6312	_	_	108-080R	
Z6313	_	_	109-080R	
Z6530	_	108-015	_	
Z6532	18.60201	108-040	_	
Z6534	18.60202	108-080	_	
Z6536	18.60203	_	_	
Z6538	_	109-015	_	
Z6540	18.60211	109-040	_	
Z6542	18.60212	109-080	_	
Z6544	18.60213	_	_	

SPECIAL ORDERS
AVAILABLE—
Small Quantities
to Large Volume

H38

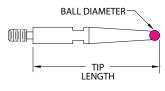




# Replacement Tips for Test Indicators USA MADE

## **INTERAPID Replacement Tips**

Manufactured to fit INTERAPID           M1.7 x 0.35 Threads         Order Number           Ball Diameter         Tip Length         Steel Ball Ball Ball Ball         Ruby Ball Ball Ball           .015         11/16"         — Z6510         —           .031         11/16         Z6200         Z6690         —           .080         11/16         Z6204         Z6738         —           2.0MM         11/16         — Z6204         Z6738         —           2.0MM         11/16         — Z6206         —           .093         11/16         — Z6206         —           .08MM         18MM         Z6804         Z6798         —           1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6801         Z6797         —           .015         13/16         — Z6606         Z6525         —           .080         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         Z6225         Z6739         —           2.0MM         21MM         Z6811 <t< th=""><th>INILIIA</th><th>ווט ווכ</th><th>piacci</th><th>nent m</th><th>Jo</th></t<>	INILIIA	ווט ווכ	piacci	nent m	Jo	
Ball Diameter         Tip Length         Steel Ball         Carbide Ball         Ruby Ball           .015         11/16"         —         Z6510         —           .031         11/16         Z6105         Z6520         —           .060         11/16         Z6200         Z6690         —           .080         11/16         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305           .093         11/16         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —           2.0MM         18MM         Z6801         Z6797         —           2.0MM         13/16         —         Z6689         —           .031         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         21MM         Z6811         Z6807	Manufactured to fit INTERAPID					
Diameter         Length         Ball         Ball         Ball           .015         11/16"         —         Z6510         —           .031         11/16         Z6200         Z6520         —           .060         11/16         Z6204         Z6738         —           .080         11/16         —         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305         —           .093         11/16         —         —         Z6305         —           .093         11/16         —         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —         —           2.0MM         18MM         Z6801         Z6797         —         —         Z6305         —         —         —         26397         —         —         Z6689         —         —         26689         —         —         26689         —         —         Z6692         —         —         Z6306	M1.7 x 0.3	5 Threads	(	Order Numb	er	
.015         11/16"         —         Z6510         —           .031         11/16         Z6105         Z6520         —           .060         11/16         Z6200         Z6690         —           .080         11/16         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305           .093         11/16         —         —         Z6305           .093         11/16         —         —         Z6305           .093         11/16         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —           2.0MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           .015         13/16         —         Z6689         —           .080         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6811         Z6807         —	Ball	Tip	Steel	Carbide	Ruby	
.031         11/16         Z6105         Z6520         —           .060         11/16         Z6200         Z6690         —           .080         11/16         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305           .093         11/16         —         —         Z6305           .093         11/16         —         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —         —           2.0MM         18MM         Z6801         Z6797         —         —         —           2.0MM         18MM         Z6800         Z6795         — <td< th=""><th>Diameter</th><th>Length</th><th>Ball</th><th>Ball</th><th>Ball</th></td<>	Diameter	Length	Ball	Ball	Ball	
.060         11/16         Z6200         Z6690         —           .080         11/16         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305           .093         11/16         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —           1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           .015         13/16         —         Z6689         —           .031         13/16         Z6106         Z6525         —           .080         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         —         Z6807         —           2.0MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6810         Z6805         —           .031         1.450         —         Z6524         — <th>.015</th> <th>11/16"</th> <th>_</th> <th>Z6510</th> <th>_</th>	.015	11/16"	_	Z6510	_	
.080         11/16         Z6204         Z6738         —           2.0MM         11/16         —         —         Z6305         —           0.93         11/16         —         Z6206         —         Z6305         —           0.8MM         18MM         Z6804         Z6798         —         —         Z6206         —         —         26807         —         —         —         2689         —         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2689         —         —         2692         —         —         2692         —         —         2692         —         —         2692         —         —         2692         —         —         2692         —         —         2692         —         —         2692         —         —         26306         —         —         26306         —         —         26306         —         —         26306         —	.031	11/16	Z6105	Z6520	_	
2.0MM         11/16         —         —         Z6305           .093         11/16         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —           1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           0.015         13/16         —         Z6689         —           .031         13/16         Z6106         Z6525         —           .080         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         Z6225         Z6739         —           2.0MM         13/16         —         Z6807         —           2.0MM         21MM         Z6811         Z6807         —           2.0MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           0.8MM         37MM         —         Z6524         —           .080         1-3/4         —         Z6521         —	.060	11/16	Z6200	Z6690	_	
.093         11/16         —         Z6206         —           0.8MM         18MM         Z6804         Z6798         —           1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           .015         13/16         —         Z6689         —           .031         13/16         Z6106         Z6525         —           .060         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         —         Z6809         —           2.0MM         21MM         Z6811         Z6807         —           2.0MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           0.31         1.450         —         Z6524         —           0.8MM         37MM         —         Z6799         —           2.0MM         37MM         —         Z6521         —           0.80         1-3/4         —         Z6522         — <tr< th=""><th>.080</th><th>11/16</th><th>Z6204</th><th>Z6738</th><th>  –</th></tr<>	.080	11/16	Z6204	Z6738	–	
0.8MM         18MM         Z6804         Z6798         —           1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           .015         13/16         —         Z6689         —           .031         13/16         Z6106         Z6525         —           .080         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         —         Z6306         —           0.8MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           .031         1.450         —         Z6524         —           .080         1.450         —         Z6524         —           .080         1.450         —         Z6799         —           .015         1-3/4         —         Z6521         —           .080         1-3/4         —         Z6521         — <tr< td=""><td>2.0MM</td><td>11/16</td><td>_</td><td>_</td><td>Z6305</td></tr<>	2.0MM	11/16	_	_	Z6305	
1.5MM         18MM         Z6801         Z6797         —           2.0MM         18MM         Z6800         Z6795         —           .015         13/16         —         Z6689         —           .031         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         —         —         Z6306           0.8MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           .031         1.450         —         Z6524         —           .080         1.450         —         Z6524         —           .080         1.450         —         Z6799         —           2.0MM         37MM         —         Z6799         —           .015         1-3/4         —         Z6521         —           .080         1-3/4         —         Z6522         —           .080         1-3/4         —         Z6742         —	.093	11/16	_	Z6206	-	
.015       13/16       —       Z6689       —         .031       13/16       Z6106       Z6525       —         .080       13/16       Z6225       Z6739       —         2.0MM       13/16       —       —       Z6306         0.8MM       21MM       Z6811       Z6807       —         1.5MM       21MM       Z6810       Z6805       —         2.0MM       21MM       Z6808       Z6526       —         .031       1.450       —       Z6524       —         .080       1.450       —       Z6809       —         0.8MM       37MM       —       Z6799       —         2.0MM       37MM       —       Z6796       —         .015       1-3/4       —       Z6521       —         .080       1-3/4       —       Z6522       —         .080       1-3/4       —       Z6742       —         2.0MM       45MM       —       Z6813       —         2.0MM       45MM       —       Z6879       —	0.8MM	18MM	Z6804	Z6798	l _	
.015       13/16       —       Z6689       —         .031       13/16       Z6106       Z6525       —         .080       13/16       Z6225       Z6739       —         2.0MM       13/16       —       —       Z6306         0.8MM       21MM       Z6811       Z6807       —         1.5MM       21MM       Z6810       Z6805       —         2.0MM       21MM       Z6808       Z6526       —         .031       1.450       —       Z6524       —         .080       1.450       —       Z6809       —         0.8MM       37MM       —       Z6799       —         2.0MM       37MM       —       Z6796       —         .015       1-3/4       —       Z6521       —         .080       1-3/4       —       Z6522       —         .080       1-3/4       —       Z6742       —         2.0MM       45MM       —       Z6813       —         2.0MM       45MM       —       Z6879       —	1.5MM	18MM	Z6801	Z6797	_	
.031         13/16         Z6106         Z6525         —           .060         13/16         Z6201         Z6692         —           .080         13/16         Z6225         Z6739         —           2.0MM         13/16         —         —         Z6306           0.8MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           .031         1.450         —         Z6524         —           .080         1.450         —         Z6809         —           0.8MM         37MM         —         Z6799         —           2.0MM         37MM         —         Z6796         —           .015         1-3/4         —         Z6521         —           .080         1-3/4         —         Z6522         —           .080         1-3/4         —         Z6742         —           2.0MM         45MM         —         Z6813         —           2.0MM         45MM         —         Z6879         —	2.0MM	18MM	Z6800	Z6795	-	
.060     13/16     Z6201     Z6692     —       .080     13/16     Z6225     Z6739     —       2.0MM     13/16     —     —     Z6306       0.8MM     21MM     Z6811     Z6807     —       1.5MM     21MM     Z6810     Z6805     —       2.0MM     21MM     Z6808     Z6526     —       .031     1.450     —     Z6524     —       .080     1.450     —     Z6809     —       0.8MM     37MM     —     Z6799     —       2.0MM     37MM     —     Z6521     —       .031     1-3/4     —     Z6521     —       .080     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6879     —	.015	13/16	_	Z6689	_	
.060     13/16     Z6201     Z6692     —       .080     13/16     Z6225     Z6739     —       2.0MM     13/16     —     —     Z6306       0.8MM     21MM     Z6811     Z6807     —       1.5MM     21MM     Z6810     Z6805     —       2.0MM     21MM     Z6808     Z6526     —       .031     1.450     —     Z6524     —       .080     1.450     —     Z6809     —       0.8MM     37MM     —     Z6799     —       2.0MM     37MM     —     Z6521     —       .031     1-3/4     —     Z6521     —       .080     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6879     —	.031	13/16	Z6106	Z6525	_	
2.0MM     13/16     —     —     Z6306       0.8MM     21MM     Z6811     Z6807     —       1.5MM     21MM     Z6810     Z6805     —       2.0MM     21MM     Z6808     Z6526     —       .031     1.450     —     Z6524     —       .080     1.450     —     Z6809     —       0.8MM     37MM     —     Z6799     —       2.0MM     37MM     —     Z6796     —       .015     1-3/4     —     Z6521     —       .080     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	.060	13/16	Z6201	Z6692	_	
0.8MM         21MM         Z6811         Z6807         —           1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           .031         1.450         —         Z6524         —           .080         1.450         —         Z6809         —           0.8MM         37MM         —         Z6799         —           2.0MM         37MM         —         Z6796         —           .015         1-3/4         —         Z6521         —           .080         1-3/4         —         Z6522         —           .080         1-3/4         —         Z6742         —           2.0MM         1-3/4         —         Z6307           0.8MM         45MM         —         Z6813         —           2.0MM         45MM         —         Z6812         —           .080         2-3/4         —         Z6879         —	.080	13/16	Z6225	Z6739	_	
1.5MM         21MM         Z6810         Z6805         —           2.0MM         21MM         Z6808         Z6526         —           .031         1.450         —         Z6524         —           .080         1.450         —         Z6809         —           0.8MM         37MM         —         Z6799         —           2.0MM         37MM         —         Z6796         —           .015         1-3/4         —         Z6521         —           .080         1-3/4         —         Z6522         —           .080         1-3/4         —         Z6742         —           Z.0MM         45MM         —         Z6813         —           2.0MM         45MM         —         Z6812         —           .080         2-3/4         —         Z6879         —	2.0MM	13/16	_	_	Z6306	
2.0MM     21MM     Z6808     Z6526     —       .031     1.450     —     Z6524     —       .080     1.450     —     Z6809     —       0.8MM     37MM     —     Z6799     —       2.0MM     37MM     —     Z6796     —       .015     1-3/4     —     Z6521     —       .031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	0.8MM	21MM	Z6811	Z6807	l <u> </u>	
.031     1.450     —     Z6524     —       .080     1.450     —     Z6809     —       0.8MM     37MM     —     Z6799     —       2.0MM     37MM     —     Z6796     —       .015     1-3/4     —     Z6521     —       .031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     1-3/4     —     Z6307       0.8MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	1.5MM	21MM	Z6810	Z6805	_	
0.8MM 37MM — Z6799 — 2.0MM 37MM — Z6796 —  .015 1-3/4 — Z6521 — .031 1-3/4 — Z6522 — .080 1-3/4 — Z6742 — 2.0MM 1-3/4 — Z6307  0.8MM 45MM — Z6813 — 2.0MM 45MM — Z6812 — .080 2-3/4 — Z6879 —	2.0MM	21MM	Z6808	Z6526	-	
0.8MM 37MM — Z6799 — 2.0MM 37MM — Z6796 —  .015 1-3/4 — Z6521 — .031 1-3/4 — Z6522 — .080 1-3/4 — Z6742 — 2.0MM 1-3/4 — Z6307  0.8MM 45MM — Z6813 — 2.0MM 45MM — Z6812 — .080 2-3/4 — Z6879 —	.031	1.450	_	Z6524	l _	
.015     1-3/4     —     Z6521     —       .031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     1-3/4     —     —     Z6307       0.8MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	.080	1.450	–	Z6809	–	
.015     1-3/4     —     Z6521     —       .031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     1-3/4     —     —     Z6307       0.8MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	0.8MM	37MM	_	Z6799	_	
.031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     1-3/4     —     —     Z6307       0.8MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —			_		–	
.031     1-3/4     —     Z6522     —       .080     1-3/4     —     Z6742     —       2.0MM     1-3/4     —     —     Z6307       0.8MM     45MM     —     Z6813     —       2.0MM     45MM     —     Z6812     —       .080     2-3/4     —     Z6879     —	.015	1-3/4	_	Z6521	_	
2.0MM 1-3/4 — <b>Z6307</b> 0.8MM 45MM — <b>Z6813</b> — <b>Z6812</b> 0.80 2-3/4 — <b>Z6879</b> —	.031	1-3/4	_	Z6522	_	
0.8MM 45MM — <b>Z6813</b> — <b>26812</b> — .080 2-3/4 — <b>Z6879</b> —	.080	1-3/4	_	Z6742	_	
2.0MM 45MM — <b>Z6812</b> — .080 2-3/4 — <b>Z6879</b> —	2.0MM	1-3/4	–	_	Z6307	
2.0MM 45MM — <b>Z6812</b> — .080 2-3/4 — <b>Z6879</b> —	0.8MM	45MM	_	Z6813	_	
			–		-	
			_		_	



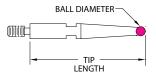




Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.

### **COMPAC Replacement Tips**

Manufactured to fit COMPAC				
M1.6 x 0.35	Threads	Order	Number	
Ball Diameter	Tip Length	Carbide Ball	Ruby Ball	
.080"	.675"	Z6737	_	
.080	.720	Z6757	_	
2mm	.720	_	Z6317	
.120	.720	Z6915	_	
.080	1.44	Z6806	_	
2mm	1.44	<b>—</b>	Z6318	
.120	1.44	Z6922	_	











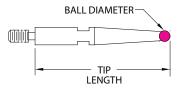
# **Replacement Tips for Test Indicators**





#### **TECLOCK Replacement Tips**

Manufactured to fit TECLOCK			
M1.7 x 0.3	5 Threads	Order I	Number
Ball Diameter	Tip Length	Steel Ball	Ruby Ball
.038"	5/8"	Z6110	_
.078	5/8	Z6115	_
2mm	5/8	_	Z6325
.125	5/8	Z6120	_
.038	3/4	Z6060	_
.078	3/4	Z6065	_
2mm	3/4	_	Z6326
.125	3/4	Z6070	_
.038	1-1/2	Z6090	_
.078	1-1/2	Z6095	_
2mm	1-1/2	_	Z6327
.125	1-1/2	Z6100	_



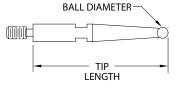


Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.



#### **FOWLER Replacement Tips**

Mai	Manufactured to fit FOWLER			
M1.6 x 0.3	5 Threads	Order I	Number	
Ball Diameter	Tip Length	Steel Ball	Carbide Ball	
.080"	.416"	Z6216	_	
.040 .080	.500 .500	_	Z6590 Z6725	
.120	.500	_	Z6860	
.030	.768	Z6028	_	
.040	.780	_	Z6610	
.080	.780	Z6222	Z6785	
.120	.780	_	Z6895	
.040 .080 .120	1.500 1.500 1.500	= =	Z6649 Z6820 Z6920	
.080	2.930	Z6236	_	
.080	3.077	Z6650	_	



SPECIAL ORDERS
AVAILABLE—

Small Quantities to Large Volume





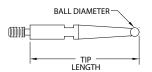


# Replacement Tips for Test Indicators USA SMADE

### **MITUTOYO Replacement Tips**

Manufactured to fit MITUTOYO				
M1.7 x 0.3	5 Threads	Order	Number	
Ball	Tip	Steel	Carbide	
Diameter	Length	Ball	Ball	
.040"	.500	_	Z6588	
.015	.606	_	Z6814	
.031	.606	Z6821	Z6815	
.040	.606	Z6822	Z6823	
.062	.606	Z6214	Z6816	
.080	.606	Z6824	Z6817	
.093	.606	_	Z6818	
.120	.606	Z6825	Z6819	
.015	.643	_	Z6838	
.031	.643	Z6844	Z6839	
.040	.643	Z6845	Z6840	
.062	.643	Z6846	Z6788	
.080	.643	Z6847	Z6841	
.093	.643	Z6848	Z6842	
.120	.643	Z6849	Z6843	
.080	.670	_	Z6786	
.040	.700	Z6150	-	
.080	.700	Z6215	Z6740	
.120	.700	Z6400	_	

Chart continued on right



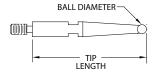
Manufactured to fit MITUTOYO				
M1.7 x 0.35	Threads	Order	Number	
Ball	Tip	Steel	Carbide	
Diameter	Length	Ball	Ball	
.015	.900	_	Z6826	
.031	.900	Z6833	Z6732	
.040	.900	Z6834	Z6827	
.062	.900	Z6835	Z6828	
.080	.900	Z6836	Z6829	
.093	.900	_	Z6831	
.120	.900	Z6837	Z6832	
.040	1	Z6180	_	
.080	1	Z6223*	Z6790	
.120	1	Z6410	_	
.015	1.195	_	Z6850	
.031	1.195	Z6856	Z6851	
.040	1.195	Z6857	Z6852	
.062	1.195	Z6793	Z6853	
.080	1.195	Z6858	_	
.093	1.195	_	Z6792	
.120	1.195	_	Z6855	
.040	1.438	_	Z6646	
.080	1.438	_	Z6527	
.040	1.500	Z6190	_	
.080	1.500	Z6231	_	
.120	1.500	Z6420	Z6789	

Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.



## **STARRETT Replacement Tips**

Manufactured to fit STARRETT						
Ball	Tip	Ball	OEM	To Fit	Order	
Diameter	Length	Type	Part Number	Starrett Model #	Number	
1MM	13/16"	Carbide	PT23942	Starrett	Z6010	
2MM	13/16	Carbide	PT23914	708, 708M	Z6011	
3MM	13/16	Carbide	PT23943	709, 709M	Z6012	
2MM	5/8	Carbide	PT23953	Series	Z6013	
0.032 0.032 0.078 0.078 0.032 0.032 0.078 0.078	5/8" 5/8 5/8 5/8 1/5/16 1-5/16 1-5/16	Steel Carbide Steel Carbide Steel Carbide Steel Carbide Steel Carbide	PT23062 PT23062X PT22315 PT23953 PT23064 PT23064X PT23011 PT23011X	For Starrett 811, 811M Series	Z6015 Z6016 Z6017 Z6018 Z6019 Z6020 Z6021 Z6022	













# **Replacement Tips for Test Indicators**







	Manufactured to fit GIROD							
Ball Tip Diameter Length		Ball Type	Thread Size	Order Number				
.040 .080 .120 .040 .080 .120	1/2" Carbide 1/2 Carbide 1/2 Carbide 1-7/16 Carbide 1-7/16 Carbide 1-7/16 Carbide		M1.6 x 0.35 Threads	Z6591 Z6728 Z6911 Z6648 Z6803 Z6917				
.040 .080 .120 .040 .080	1/2" 1/2 1/2 1-7/16 1-7/16 1-7/16	Carbide Carbide Carbide Carbide Carbide Carbide	after 1999 M1.4 x 0.3 Threads	Z6532 Z6730 Z6905 Z6645 Z6802 Z6918				
.120 1-7/16  2MM 1/2"  2MM 1-7/16  2MM 1-1/2  2MM 1/2"  2MM 1-7/16  2MM 1-7/16  2MM 1-7/16		Ruby Ruby Ruby Ruby Ruby Ruby	pre 1999 M1.6 x 0.35 Threads after 1999 M1.4 x 0.3 Threads	Z6340 Z6341 Z6342 Z6300 Z6301 Z6313				

BALL DIAMETER

TIP

LENGTH

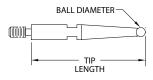
Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.



## **KAFER Replacement Tips**



Manufactured to fit KAFER						
M1.6 x 0.3	M1.6 x 0.35 Threads					
Ball Tip		Carbide				
Diameter	Diameter Length					
.015"	.438"	Z6866				
.040	.438	Z6006				
.080	.438	Z6867				
.015	.469	Z6868				
.040	.469	Z6869				
.080	.469	Z6005				



SPECIAL ORDERS
AVAILABLE—
Small Quantities
to Large Volume







## **Micrometer Accessories**



#### **Multi-Mike Micrometer Anvil Attachment Kit**

#### **Turns your Micrometer into 7 different Tools!**

At last a kit for the machinist who must measure odd workpieces. The "MULTI-MIKE" Kit measures Shoulders, Webs, Angles, Slots, Grooves, Holes and many other hard to reach places.

This handy kit contains seven of the most sought after Accessories for outside Micrometers!

Each Anvil Attachment is held on with its own reinforced Neoprene Boot. Made in the USA to exacting standards, this kit will fit any 1-12" Micrometer, English or Metric, and all brands too!

- All 7 anvils come packaged in a protective hinged case.
- Individual Replacement Anvils are available from stock.
- Can be used singly or in pairs.
- All Anvils are 1/2" long.
- Ball Attachments are 0.200" Diameter, manufactured from Chrome Alloy Steel.
- All Anvils securely index to the Micrometer face with our heavy duty rubber holding boot.

All Anvils are hardened Steel with Black Oxide plating. Fits .235 and .250 spindle diameters.





- (1) Z9301 Knife Anvil Attachment
- (1) Z9302 Comparator Anvil Attachment
- (1) Z9303 Super Spline Anvil Attachment
- (1) Z9304 Spline Anvil Attachment
- (1) Z9305 Disc Anvil Attachment
- (1) Z9306 Blade Anvil Attachment
- (2) .200" Diameter Ball Attachments (z9300)



Micrometer not included













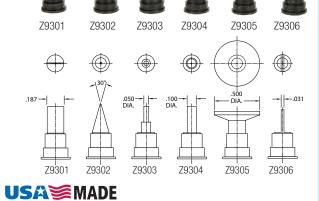
Z9300

#### **Individual Micrometer Anvil Attachments**

A must accessory for every Micrometer. Each Anvil is 1/2" long. Comes with reinforced holding boot, and will fit on any 1-12" Micrometer.

- Anvils are hardened Steel w/Black Oxide plating
- Fits .235 and .250 spindle diameters
- Made In USA

Micrometer Anvil Attachments						
Anvil Type	Specifications	Order Number				
Super Spline	.050" face	Z9303				
Spline	.100 face	Z9304				
Blade	.300 thick	Z9306				
Disc	.500 face	Z9305				
Knife	30 degrees	Z9301				
Comparator	30 degrees	Z9302				



#### **Ball Attachment**

The most commonly used Micrometer accessory. Allows measurement of cylindrical wall thickness and single point contact on round parts.

Fits .235, .250. & .270 diameter Spindles. Chrome Alloy Ball, 0.200" diameter for Inch version, and 5mm ChromeAlloy Ball in the metric version.

• All come with one attachment boot and (2) balls.

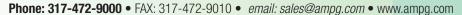
Ball Attachment					
Description	Order Number				
.200 Inch	Z9300				
5 mm Metric	Z9300M				













## **Micrometer Accessories**





#### **Caliper Jaw Attachment for Anvils**

Use our Mic Anvils on your 4-6-8" Calipers

Caliper Jaw Attachment is fastened to your Caliper jaw, and the Mic Anvil fits onto the Jaw Attachment.

Made In USA





Caliner & Anvil Not Included



#### **Thread Measuring Triangle Set**

Checks for Class of Thread on all 60 degree threads. Perfect for checking thread dimensions when copying parts. Made of hardened steel with a black oxide finish.

#### Made in USA

#### Set includes:

- 2 Thread Triangles,
- 2 rubber Micrometer Holding Straps
- Comes in a protective hinged plastic case with a Unified Thread Chart







Micrometer & threaded rod not included



#### **Thread Measuring Triangles**

Checks for Class of Thread on all 60 degree threads. Perfect for checking thread dimensions when copying parts. Made of hardened steel with a black oxide finish. **Made in USA** 

Can be operated with one hand—does not need to be attached to your Mic.







H44

#### **Micrometer Stand—Imported**

Designed to hold round and irregular shapes for measuring, machining, grinding, and other operations.

Sturdy cast iron Micrometer Stand. Position and viewing angle are adjustable. Base is 6-5/8" long and 4-1/2" wide. Order Number STA-MIC1

Imported

- Rubber clamp faces make sure that your Mic is not marked when clamped.
- Sturdy ribbed plastic tightening knobs insure quick and secure action.
- 3/4" Maximum clamp opening.
- Spring loaded clamp keeps jaws apart, and maintain pressure.
- Rubber feet on bottom of base keep stand from moving.
- Cast Iron, with black baked enamel painted finish.



Micrometer not included





**Phone: 317-472-9000** • FAX: 317-472-9010 • *email: sales@ampg.com* • www.ampg.com

# **Measuring Accessories**



#### **Pin Gage Handle**

Machined from solid aluminum, this premium handle can hold diameters from 1/32" to 1/2".

- Go and No Go marked on gage.
- Completely self contained, does not use any bushings.
- Available in plain Aluminum, or Green, Purple, Red, or Yellow Anodized Aluminum
- Made in USA

Pin Gage Handles	Order Number
Aluminum	Z2800
Green Anodized Aluminum	Z2800-GREEN
Purple Anodized Aluminum	Z2800-PURPLE
Red Anodized Aluminum	Z2800-RED
Yellow Anodized Aluminum	Z2800-YELLOW







#### **Dial Depth Gage Extensions Rods**

- 4-48 Internal and External Thread.
- 3/16" diameter points.
- Knurling at the internally tapped end.
- Fits all Depth Gages with AGD standard 4-48 threads.



Dial Depth Gage Extension Rods					
Length	Order Number				
1"	Z9590				
1-1/2	Z9591				
2	Z9592				
3	Z9593				
4	Z9594				
5	Z9595				
6	Z9596				
Set of Six					
1", 1-1/2", 2", 3",	Z9599				
4", and 6" Points					



## **Magnetic Single Edge Finder**

Firmly attaches to workpiece with integral magnet.

- Made in USA to exacting specifications.
- Precision ground to  $\pm$  0001".
- Case Hardened and Plated.











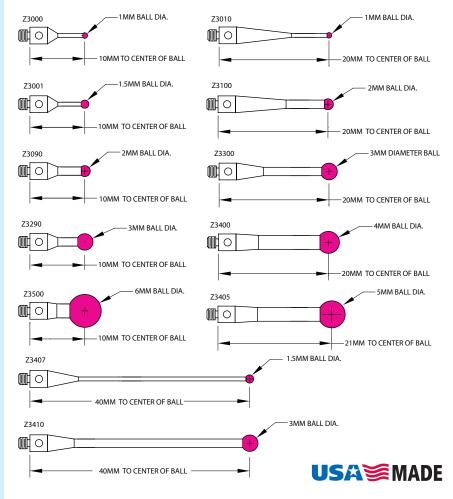
# **CMM Styli**





## **M2 Thread Styli**

CMM Styli—M2 Thread							
Ball Size	Renishaw Functional Carbide Length Equivalent Probes Fowler Q Mark					Order Number	
1MM Ruby 1.5MM Ruby 2MM Ruby 3MM Ruby 6MM Ruby	10MM 10MM 10MM 10MM 10MM	PS24R PS8R PS1R PS14R	A/5000/7802 A/5000/7807 A/5000/3604 A/5000/4156	265-1R — — — — 265-6R	54-772-300 — 54-772-309 54-772-329 54-772-350	TM2-1010 TM2-1510 TM2-2010 TM2-3010 TM2-6010	Z3000 Z3001 Z3090 Z3290 Z3500
8MM Ruby  1MM Ruby  1.5MM Ruby  2MM Ruby  3MM Ruby  4MM Ruby	12MM 20MM 20MM 20MM 20MM 20MM	PS15R PS23R PS2R PS16R PS17R	A/5000/4158 A/5000/7808 A/5000/3603 A/5000/4160 A/5000/4161	265-8R 266-1R 266-2R 266-3R 266-4R	54-772-360 54-772-301 54-772-310 54-772-330 54-772-340	TM2-8015 TM2-1020-07 TM2-2020 TM2-3020 TM2-4020	Z3600 Z3010 Z3011 Z3100 Z3300 Z3400
5MM Ruby 1.5MM Ruby 3MM Ruby	21MM 40MM 40MM						Z3405 Z3407 Z3410



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AVAILABLE—
Small Quantities
to Large Volume





# **CMM Styli**



## **M3 Thread Styli**

CMM Styli—M3 Thread							
Ball Size	Length		w Functional uivalent	Fowler	Q Mark	Order Number	
1MM Ruby 6MM Ruby	10MM 10MM						Z3000M3 Z3500M3
8MM Ruby	12MM						Z3600M3
1MM Ruby 2MM Ruby 3MM Ruby 4MM Ruby	20MM 20MM 20MM 20MM	PS1-9R PS1-10R PS1-11R PS1-12R	A/5000/3551 A/5000/3552 A/5000/3553 A/5000/7606	261-1R 261-2R 261-3R 261-4R	_ _ _	TM3-1020 TM3-2020 TM3-3020 TM3-4020	Z3010M3 Z3100M3 Z3300M3 Z3400M3
5MM Ruby	21MM	PS1-13R	A/5000/7630			TM3-5020	Z3405M3





## **M4 Thread Styli**

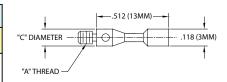
CMM Styli—M4 Thread								
Ball Size	Length		w Functional uivalent	Carbide Probes	Fowler	Q Mark	Order Number	
1MM Ruby 6MM Ruby	10MM 10MM						Z3000M4 Z3500M4	
8MM Ruby	12MM						Z3600M4	
1MM Ruby 2MM Ruby 3MM Ruby 4MM Ruby	20MM 20MM 20MM 20MM	PS2-3R PS2-4R PS2-5R PS2-6R	A/5000/7545 A/5000/7547 A/5000/7549 A/5000/7551	840-1R 840-2R 840-3R 840-4R	TM4-1020 TM4-2020 TM4-3020 TM4-4020	_ _ _	Z3010M4 Z3100M4 Z3300M4 Z3400M4	
5MM Ruby	21MM						Z3405M4	





# **Cylinder Styli**

Cylinder CMM Styli							
	Cylinder	Styli	"C" Base	Order			
Thread	Diameter	Length	Diameter	Number			
M2 x .4	3M	13MM	3M	Z3999			
M3 x .5	3M	13MM	3M	Z3999M3			
M4 x .7	3M	13MM	4.75M	Z3999M4			













# **CMM Styli Sets & Extensions**





#### **Fowler 11 Pc. CMM Styli Set in Plastic Case**

#### Made in USA

#### **Kit Contains:**

(1) Z3000 1MM RUBY CMM TRACER TIP 10 MM LTH M2X.4 THDS (1) Z3010 1MM RUBY BALL CMM TRACER TIP 20 MM LTH M2 X.4 THDS

(1) Z3090 2MM RUBY BALL CMM TRACER TIP 10 MM LTH M2 X .4 THD (1) Z3100 2MM RUBY BALL CMM TRACER TIP 20 MM LTH M2 X .4 THD

(1) Z3290 3MM RUBY BALL CMM TRACER TIP 10 MM LTH M2 X .4 THD (1) Z3300 3MM RUBY BALL CMM TRACER TIP 20 MM LTH M2 X .4 THD

(1) Z3820 CMM EXTENSION - 20MM LTH M2 X .4 THREADS ST/ST

(1) Z3840 CMM EXTENSION - 40MM LTH M2 X .4 THREADS ST/ST

(1) Z3860 8MM CMM PROBE SWIVEL M2 X .4 THREADS ST/ST

(1) Z3864 CMM X-HEAD 6.5 X 6.5MM X 3MM THK,(5)M2 FEM, ST/ST

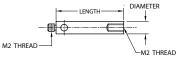
(1) Z2999 STYLI WRENCH .050 OD TIP X 1-13/16 OAL S/S

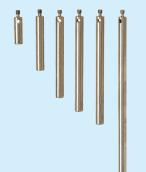




#### **M2 Thread Extensions**

Stainless Steel • Made in USA





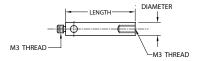
M2 Thread Extensions — Stainless Steel								
	Renishaw Functional						Order	
Length	Diameter	Ed	quivalent	Probes	Fowler	Q Mark	Number	
5MM	3MM						Z3805	
10MM	3MM	SE4	M/5000/3647	265-E10	54-772-810	VM2-10	Z3810	
20MM	3MM	SE5	M/5000/3648	265-E20	54-772-820	VM2-20	Z3820	
30MM	3MM	SE6	M/5000/4162	265-E30	54-772-830	VM2-30	Z3830	
35MM	3MM	_	_	_	_	_	Z3835	
40MM	3MM	SE18	M/5000/7779	265-E40	54-772-840	VM2-40	Z3840	
60MM	3MM	_	_	_	_	_	Z3849	





#### **M3 Thread Extensions**

Stainless Steel • Made in USA



1									
		M3 Thread Extensions — Stainless Steel							
			Renishaw Functional					Order	
	Length	Diameter	Equivalent		Probes	Fowler	Q Mark	Number	
	10MM	4MM	SE8	M/5000/7633	261-E10	_	VM3-10	Z3810M3	
	20MM	4MM	SE2	M/5000/3592	261-E20	_	VM3-20	Z3820M3	
	30MM	4MM	_	_	261-E30	_		Z3830M3	
	35MM	4MM	_	M/5000/3593	261-E35	_	VM3-35	Z3835M3	
	40MM	4MM	_	M/5000/3593		_	_	Z3840M3	
	60MM	4MM	_	_	_	_	_	Z3849M3	



## SPECIAL ORDERS AVAILABLE—

Small Quantities to Large Volume

H48



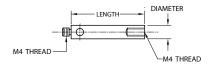


# **CMM Extensions & Accessories**



#### **M4 Thread Extensions**

Stainless Steel • Made in USA



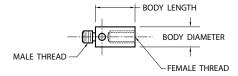
M4 Thread Extensions — Stainless Steel								
		Renishav	v Functional	Carbide			Order	
Length	Diameter	Equ	ivalent	Probes	Fowler	Q Mark	Number	
10MM	6.3MM			823-E10	_	VM4-10	Z3810M4	
20MM	6.3MM	_	_	823-E20	_	VM4-20	Z3820M4	
30MM	6.3MM	_	_	823-E30	_	VM4-30	Z3830M4	
35MM	6.3MM	_	_	_	_	_	Z3835M4	
40MM	6.3MM	_	_	_	_	_	Z3840M4	
60MM	6.3MM	_	_	_		_	Z3849M4	





## **Adaptor Tips—Stainless Steel**

Converts your probe head to a different thread size, allowing multiple uses of CMM Styli or accessories.



	Adaptor Tips — Stainless Steel								
Male	Male Female Body Body Renishaw Functional Carbide							Order	
Thread	Thread	Diameter	Length	Equivalent		Probes	Fowler	Q Mark	Number
M3 X .5	M2 X .4	4MM	5MM	SA3	M/5000/4163	261-AD5	54-772-850	RM3-M2	Z3850
M2 X .4	M3 X .5	4MM	10MM	SA2	M/5000/4164	265-AD7	54-772-851	RM2-M3	Z3851
M4 X .7	M2 X .4	6.3MM	5MM	SA5	M/5000/6622	399	54-772-852	_	Z3852
M2 X .4	M4 X .7	6.3MM	15MM	_	_	_	54-772-853	RM4-M2	Z3853
M4 X .7	M3 X .5	6.3MM	10MM	SA6	M/5000/6714	_	54-772-854	_	Z3854

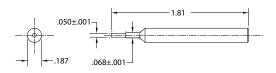




## **CMM Styli Universal Wrench**

Fits all Styli











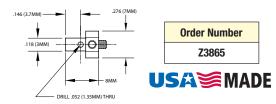


# **CMM Accessories**



#### **CMM Crossheads**





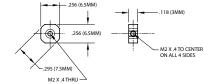






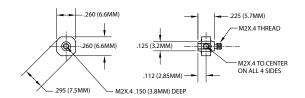
M2 thru thread







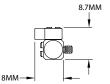
















## **CMM Star Styli**

#### 6 Piece Set:

6 Piece Set:

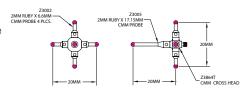
(1) Z3864T CMM Crosshead

(1) Z3864T CMM Crosshead

(1) Z3005 2MM x 17.2MM Ruby Ball Probe

(4) Z3002 2MM x 6.6MM Ruby Ball Probe

(1) Z3005 2MM x 17.2MM Ruby Ball Probe





**Order Number** 

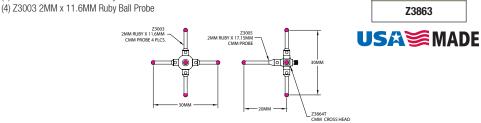
Z3863



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Small Quantities to Large Volume

H50







# **Gage Balls & Hardness Penetrators**



#### **Grade 25 Chrome Alloy Steel Balls**

Diameter Tolerance: +/- .0001" — Sphericity of .000025"

	Grade 25 Chrome Alloy Steel Balls							
	Diameter Tolerance: +/0001" — Sphericity of .000025"							
Diameter	Order Number	Diameter	Order Number	Diameter	Order Number	Diameter	Order Number	
1/32"	BAL200CA031	3/8"	BAL200CA375	3/4"	BAL200CA750	1MM	BAL200CA039MM	
3/64	BAL200CA046	13/32	BAL200CA406	25/32	BAL200CA781	3MM	BAL200CA118	
1/16	BAL200CA062	7/16	BAL200CA437	13/16	BAL200CA812	5MM	BAL200CA05MM	
5/64	BAL200CA078	15/32	BAL200CA468	7/8	BAL200CA875	7MM	BAL200CA275MM	
				15/16	BAL200CA937			
3/32	BAL200CA093	1/2	BAL200CA500					
5/32	BAL200CA156	17/32	BAL200CA531	1	BAL200CA1000			
3/16	BAL200CA187	9/16	BAL200CA562	1-1/16	BAL200CA1062			
7/32	BAL200CA218	9/32	BAL200CA593	1-1/8	BAL200CA1125			
				1-3/16	BAL200CA1187			
1/4	BAL200CA250	5/8	BAL200CA625	1-1/4	BAL200CA1250			
9/32	BAL200CA281	21/32	BAL200CA656					
5/16	BAL200CA312	11/16	BAL200CA687					
11/32	BAL200CA343	23/32	BAL200CA718					



#### **Grade 25 Tungsten Carbide Gage Balls**

**Metric & Inch Sizes** 

Grade 25 Tungsten Carbide Gage Balls								
	Metric & Inch Sizes							
Diameter	Order Number	Diameter	Order Number					
.031"	BAL25TC031	2mm	BAL25TC2MM					
.040	BAL25TC040	3mm	BAL25TC3MM					
.062	BAL25TC062	4mm	BAL25TC4MM					
.080	BAL25TC080							
.093	BAL25TC093							



#### **Hardness Tester Penetrators**

Hardness Tester Penetrators				
Description	Order Number			
1/16" Ball Penetrator with 50 extra Balls 1/4 Shank with Flat	Z0790			
1/8 Ball Penetrator with 8 extra Balls 1/4 Shank with Flat	Z0791			
1/4 Ball Penetrator with 2 extra Balls 1/4 Shank with Flat	Z0792			
1/2 Ball Penetrator with 1 extra Ball	Z0793			







#### **Diamond Penetrator**

Order Number Z9970-1







## **Parallel Sets**





#### **Thin Parallel Value Set**

Our 1/8" thick 10 Pair Parallel Set, in custom fitted plastic box with carrying handle.

10 Pairs in Set Hardened Steel, 6" Length X 1/8" Thick. Heights: 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2", 1-5/8"

- Parallel within 0.0008" each pair. (+/- .0004")
- Heights matched within +/- 0.001 each pair

Thin Parallel Value Set						
			Order			
Height	Length	Thickness	Number			
1/2"	6"	1/8"	Z9980-1P			
5/8"	6"	1/8"	Z9980-2P			
3/4"	6"	1/8"	Z9980-3P			
7/8"	6"	1/8"	Z9980-4P			
1"	6"	1/8"	Z9980-5P			
1-1/8"	6"	1/8"	Z9980-6P			
1-1/4"	6"	1/8"	Z9980-7P			
1-3/8"	6"	1/8"	Z9980-8P			
1-1/2"	6"	1/8"	Z9980-9P			
1-5/8"	6"	1/8"	Z9980-10P			
	10 Pair Se	et	Z9980B			



#### 1/4" Parallel Set

9 Pair Set, in custom fitted plastic box with carrying handle.

9 Pairs in Set Hardened Steel, 6" Length X 1/4" Thick. Heights: 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2", 1-5/8", 1-3/4"

- Parallel within +/- 0.0005" each pair.
- Heights matched within +/- 0.001" each pair.

1/4" Parallel Set						
			Order			
Height	Length	Thickness	Number			
3/4"	6"	1/4"	Z9985-1P			
7/8"	6"	1/4"	Z9985-2P			
1"	6"	1/4"	Z9985-3P			
1-1/8"	6"	1/4"	Z9985-4P			
1-1/4"	6"	1/4"	Z9985-5P			
1-3/8"	6"	1/4"	Z9985-6P			
1-1/2"	6"	1/4"	Z9985-7P			
1-5/8"	6"	1/4"	Z9985-8P			
1-3/4"	6"	1/4"	Z9985-9P			
	9 Pair Se	et	Z9985			



# Ultra Thin 1/32" Thick 20 Pair Parallel Set

Ultra Thin Parallels are 1/32" Thick, 6" long, and heights from 1/2" thru 1-11/16".

#### **Specifications:**

+/- 0.0001" in Parallelism
Paired in Height to +/- 0.0001"
Height matched to nominal within +/- 0.001"

Oltra Hilli—1/32 Hillick							
20 Pair Parallel Set							
Height	Length	Thickness	Order Number				
1/2"	6"	1/32"	Z9981-1P				
9/16	6	1/32	Z9981-2P				
5/8	6	1/32	Z9981-3P				
11/16	6	1/32	Z9981-4P				
3/4	6	1/32	Z9981-5P				
13/16	6	1/32	Z9981-6P				
7/8	6	1/32	Z9981-7P				
15/16	6	1/32	Z9981-8P				
1	6	1/32	Z9981-9P				
1-1/16	6	1/32	Z9981-10P				
1-1/8	6	1/32	Z9981-11P				
1-3/16	6	1/32	Z9981-12P				
1-1/4	6	1/32	Z9981-13P				
1-5/16	6	1/32	Z9981-14P				
1-3/8	6	1/32	Z9981-15P				
1-7/16	6	1/32	Z9981-16P				
1-1/2	6	1/32	Z9981-17P				
1-9/16	6	1/32	Z9981-18P				
1-5/8	6	1/32	Z9981-19P				
1-11/16	6	1/32	Z9981-20P				
	20 Pair Kit		Z9981				

Ultra Thin-1/32" Thick

# SPECIAL ORDERS AVAILABLE— Small Quantities to Large Volume





# 1/4" Tight Tolerance Parallels



#### **Matched Pairs**

#### 1/4" Parallel Pairs.

Precision ground in matched pairs, on two sides.

Hardened Steel, 6" Length X 1/4" Thick.

#### **Tolerances:**

Height +/- .001" from nominal Parallelism over entire Length +/- .0001" Total matched size tolerance in pair +/- .0001"

Individual Pairs of Parallels					
			Order		
Height	Length	Thickness	Number		
3/8"	6"	1/4"	Z9983-06		
7/16	6	1/4	Z9983-07		
1/2	6	1/4	Z9983-08		
9/16	6	1/4	Z9983-09		
5/8	6	1/4	Z9983-10		
11/16	6	1/4	Z9983-11		
3/4	6	1/4	Z9983-12		
13/16	6	1/4	Z9983-13		
7/8	6	1/4	Z9983-14		
15/16	6	1/4	Z9983-15		
1	6	1/4	Z9983-16		
1-1/16	6	1/4	Z9983-18		
1-1/8	6	1/4	Z9983-20		
1-3/16	6	1/4	Z9983-22		
1-1/4	6	1/4	Z9983-24		
1-5/16	6	1/4	Z9983-26		
1-3/8	6	1/4	Z9983-28		
1-7/16	6	1/4	Z9983-30		
1-1/2	6	1/4	Z9983-32		
1-9/16	6	1/4	Z9983-34		
1-5/8	6	1/4	Z9983-36		
1-11/16	6	1/4	Z9983-38		
1-3/4	6	1/4	Z9983-40		
1-13/16	6	1/4	Z9983-42		
1-7/8	6	1/4	Z9983-44		
1-15/16	6	1/4	Z9983-46		
2	6	1/4	Z9983-48		

#### **Parallel Sets in Custom Fitted Cases**

#### 1/4" Parallel Sets.

Precision ground in matched pairs, on two sides.

Hardened Steel, 6" Length X 1/4" Thick.

Wooden cases are manufactured in the USA to conform to these large Sets. Foam inserts are molded to hold and protect each Parallel pair.

#### **Tolerances:**

Height +/- .001" from nominal Parallelism over entire Length +/- .0001" Total matched size tolerance in pair +/- .0001"

Sets in Custom Fitted Cases					
Description	Order Number				
<b>9 Pair Set — 3/8" thru 7/8"</b> 3/8", 7/16", 1/2", 9/16", 5/8",11/16", 3/4", 13/16, 7/8"	Z9983-SET1				
<b>9 Pair Set - 15/16" thru 1-7/16"</b> 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4", 1-5/16", 1-3/8", 1-7/16"	Z9983-SET2				
9 Pair Set — 1-1/2" thru 2" 1-1/2", 1-9/16", 1-5/8", 1-11/16", 1-3/4", 1-13/16", 1-7/8", 1-15/16", 2"	Z9983-SET3				
22 Pair Set - 1/2" thru 1-13/16" 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16", 1-1/4", 1-5/16", 1-3/8", 1-7/16", 1-1/2", 1-9/16", 1-5/8", 1-11/16", 1-3/4", 1-13/16"	Z9983-SET4				







