



Condensed Zeiss Cookbook Probing Strategies



For Further Details Refer to the *Zeiss Measuring Strategies Cookbook (Tactile) for Coordinate Metrology*

METAL PLANE Probing Strategies (Z400L) Active Head

Plane Size (Length)	SPEED ACTIVE Functional/ Process Control Location	SCANNING STEP WIDTH	Ø STYLUS TIP	EVALUATION SETTINGS		
				FILTER/OUTLIER SETTING	PREFILTER RANGE	ADJACENT POINTS (±)
<25 MM	5 MM/s	0.1 MM	3 mm	0.8 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
<1"	0.198 "/s	0.004 "				
26-80 MM	10 MM/s	0.1 MM	3 mm	0.8 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
1.1-3"	0.394 "/s	0.004 "				
81-250 MM	20 MM/s	0.31 MM	3 mm	2.5 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
3.1-10"	0.787 "/s	0.012 "				
>250 MM	40 MM/s	1 MM	5 mm or more	8.0 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
3.1-10"	1.575 "/s	0.039 "				

METAL PLANE Probing Strategies (Z400L) Passive Head

Plane Size (Length)	SPEED ACTIVE Functional/ Process Control Location	SCANNING STEP WIDTH	Ø STYLUS TIP	EVALUATION SETTINGS		
				FILTER/OUTLIER SETTING	PREFILTER RANGE	ADJACENT POINTS (±)
<25 MM	3 MM/s	0.1 MM	3 mm	0.8 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
<1"	0.118 "/s	0.004 "				
26-80 MM	5 MM/s	0.1 MM	3 mm	0.8 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
1.1-3"	0.198 "/s	0.004 "				
81-250 MM	10 MM/s	0.31 MM	3 mm	2.5 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
3.1-10"	0.394 "/s	0.012 "				
>250 MM	20 MM/s	1 MM	5 mm or more	8.0 MM Wavelength Lc/GAUSS	0-10 MM Wavelength Lc	5
3.1-10"	0.787 "/s	0.039 "				

METAL BORE Probing Strategies (Z100) Active Head

Ø SIZE	SPEED ACTIVE Functional Location	SPEED ACTIVE Functional Form & Ø	SPEED ACTIVE Process Control Location & Ø	MINIMIM PROBING POINTS	CIRCLE ANGLE RANGE	Ø STYLUS TIP	EVALUATION SETTINGS		
							FILTER	OUTLIER PREFILTER RANGE	ADJACENT POINTS (±)
<8MM	3 MM/s	5 MM/s	10 MM/s	145	400°	Max 3 mm	15 UPR/GAUSS	10-5000 UPR	5
<0.3"	0.118 "/s	0.198 "/s	0.394 "/s						
8-25 MM	5 MM/s	10 MM/s	15 MM/s	425	380°	Max 3 mm	50 UPR/GAUSS	10-5000 UPR	5
0.3"-1"	0.198 "/s	0.394 "/s	0.591 "/s						
26-80 MM	5 MM/s	10 MM/s	30 MM/s	1270	380°	Max 3 mm	150 UPR/GAUSS	10-5000 UPR	5
1.-3.0"	0.198 "/s	0.394 "/s	1.181 "/s						
81-250MM	10 MM/s	15 MM/s	40 MM/s	4250	380°	5 mm	500 UPR/GAUSS	10-5000 UPR	5
3.1-10"	0.394 "/s	0.591 "/s	1.575 "/s						
>250	15 MM/s	25 MM/s	50 MM/s	12700	380°	>5 mm	1500 UPR/GAUSS	10-5000 UPR	5
>10"	0.591 "/s	0.984 "/s	1.969 "/s						

METAL SHAFT Probing Strategies (Z200) Active Head

Ø SIZE	SPEED ACTIVE Functional Location	SPEED ACTIVE Functional Form & Ø	SPEED ACTIVE Process Control Location & Ø	MINIMIM PROBING POINTS	CIRCLE ANGLE RANGE	Ø STYLUS TIP	EVALUATION SETTINGS		
							FILTER	OUTLIER PREFILTER RANGE	ADJACENT POINTS (±)
<8MM	2 MM/s	3 MM/s	5 MM/s	145	400°	Max 3 mm	15 UPR/GAUSS	10-5000 UPR	5
<0.3"	0.079 "/s	0.118 "/s	0.198 "/s						
8-25 MM	3 MM/s	5 MM/s	10 MM/s	425	380°	Max 3 mm	50 UPR/GAUSS	10-5000 UPR	5
0.3"-1"	0.118 "/s	0.198 "/s	0.394 "/s						
26-80 MM	3 MM/s	10 MM/s	15 MM/s	1270	380°	Max 3 mm	150 UPR/GAUSS	10-5000 UPR	5
1.-3.0"	0.118 "/s	0.394 "/s	0.591 "/s						
81-250MM	5 MM/s	15 MM/s	25 MM/s	4250	380°	5 mm	500 UPR/GAUSS	10-5000 UPR	5
3.1-10"	0.198 "/s	0.591 "/s	0.984 "/s						
>250	10 MM/s	17 MM/s	30 MM/s	12700	380°	>5 mm	1500 UPR/GAUSS	10-5000 UPR	5
>10"	0.394 "/s	0.669 "/s	1.181 "/s						

METAL BORE Probing Strategies (Z100) Passive Head

Ø SIZE	SPEED ACTIVE Functional Location	SPEED ACTIVE Functional Form & Ø	SPEED ACTIVE Process Control Location & Ø	MINIMIM PROBING POINTS	CIRCLE ANGLE RANGE	Ø STYLUS TIP	EVALUATION SETTINGS		
							FILTER	OUTLIER PREFILTER RANGE	ADJACENT POINTS (±)
<8MM	2 MM/s	2 MM/s	5 MM/s	145	400°	Max 3 mm	15 UPR/GAUSS	10-5000 UPR	5
<0.3"	0.079 "/s	0.079 "/s	0.198 "/s						
8-25 MM	3 MM/s	5 MM/s	5 MM/s	425	380°	Max 3 mm	50 UPR/GAUSS	10-5000 UPR	5
0.3"-1"	0.118 "/s	0.198 "/s	0.198 "/s						
26-80 MM	3 MM/s	5 MM/s	10 MM/s	1270	380°	Max 3 mm	150 UPR/GAUSS	10-5000 UPR	5
1.-3.0"	0.118 "/s	0.198 "/s	0.394 "/s						
81-250MM	5 MM/s	10 MM/s	20 MM/s	4250	380°	5 mm	500 UPR/GAUSS	10-5000 UPR	5
3.1-10"	0.198 "/s	0.394 "/s	0.787 "/s						
>250	10 MM/s	15 MM/s	25 MM/s	12700	380°	>5 mm	1500 UPR/GAUSS	10-5000 UPR	5
>10"	0.394 "/s	0.591 "/s	0.984 "/s						

METAL SHAFT Probing Strategies (Z200) Passive Head

Ø SIZE	SPEED ACTIVE Functional Location	SPEED ACTIVE Functional Form & Ø	SPEED ACTIVE Process Control Location & Ø	MINIMIM PROBING POINTS	CIRCLE ANGLE RANGE	Ø STYLUS TIP	EVALUATION SETTINGS		
							FILTER	OUTLIER PREFILTER RANGE	ADJACENT POINTS (±)
<8 MM	1 MM/s	2 MM/s	3 MM/s	145	400°	Max 3 mm	15 UPR/GAUSS	10-5000 UPR	5
<0.3"	0.039 "/s	0.079 "/s	0.118 "/s						
8-25 MM	2 MM/s	3 MM/s	5 MM/s	425	380°	Max 3 mm	50 UPR/GAUSS	10-5000 UPR	5
0.3"-1"	0.079 "/s	0.118 "/s	0.198 "/s						
26-80 MM	2 MM/s	3 MM/s	5 MM/s	1270	380°	Max 3 mm	150 UPR/GAUSS	10-5000 UPR	5
1.-3.0"	0.079 "/s	0.118 "/s	0.198 "/s						
81-250 MM	3 MM/s	5 MM/s	10 MM/s	4250	380°	5 mm	500 UPR/GAUSS	10-5000 UPR	5
3.1-10"	0.118 "/s	0.198 "/s	0.394 "/s						
>250 MM	5 MM/s	7 MM/s	10 MM/s	12700	380°	>5 mm	1500 UPR/GAUSS	10-5000 UPR	5
>10"	0.198 "/s	0.276 "/s	0.394 "/s						