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Number	Data Type Name	Data Type Description	Index	Value String
481	ABOVEBELOW_CONFIG			
409	ADDITIONAL_CHART	For SPC		
153	ALIGN_LIST	Show alignment in alignment list (Yes / No)		
300	ANGLE_COMP_TOGGLE	Toggle field for complement state of angle dimensions		
149	ANGLE_OFFSET	Angle Offset for loops and rotary tables		
373	ANGULARITY_NOM_ANGLE	The reference angle used, not the dimension's nominal		
103	ANGVEC_I	Angle vector i	0	Numeric value
104	ANGVEC_J	Angle vector j	0	Numeric value
105	ANGVEC_K	Angle vector k	0	Numeric value
164	ARROW_MULTIPLIER	Dimension arrow multiplier value		
479	ARTICULATEDARM_TYPE			
234	AUTO_CLEAR_PLANE	Auto clear plane flag		
461	AUTO_ONERROR_TYPE			
533	AUTO_PH9			
219	AUTO_PRINT	Auto print flag for hyper report object		
295	AUTOBEEPING	Turn auto trigger beeping on/off		

52	AUTOFIT_CONSTRAINT	Toggle for type of constraint on best fit alignment		
298	AUTOTOLZONE	Tolerance zone for AUTOTRIGGER		
294	AUTOTRIGGERONOFF	Turn the auto trigger on or off.		
140	AVERAGE_ERROR	Flag for iterative alignments		
749	AXIS_DESCRIPTION			
747	AXIS_MINUS_TOL			
132	AXIS_NOMINAL	Axis		
748	AXIS_NOMINAL			
746	AXIS_PLUS_TOL			

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Number	Data Type Name	Data Type Description	Index	Value String
51	BF_MATH_TYPE	Math type used to calculate best fit		
50	BOUND_TYPE	Bound / Unbound		
967	BOUDARY_OFFSET	Gets and sets the boundary offset distance during a Void Detection.		
360	BOUNDARY_POINT_X	Boundary Point x		
361	BOUNDARY_POINT_Y	Boundary point y		
362	BOUNDARY_POINT_Z	Boundary point z		
476	BSMETHOD_TYPE			

207	BUFFER_SIZE_TYPE	File i/o buffer size		
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Number	Data Type Name	Data Type Description	Index	Value String
492	CAD_COMP			
237	CAD_TOLERANCE	CAD tolerance for perimeter scans		
471	CALC_STYLE_FILE			
413	CENTER_POINT	For SPC		
478	CENTER_ROTATION_MEAS	Best fit alignments		
477	CENTER_ROTATION_THEO	Best fit alignments		
445	CHART_SUB_TYPE	For SPC		
388	CHART_TYPE	For SPC: charts		
42	CIRC_TYPE	Circular or straight probe motion (circles and cylinders)		
614	CLIP_LEFT_DIST			
604	CLIP_LOW_DIST			
615	CLIP_RIGHT_DIST			
603	CLIP_UP_DIST			
244	COL132_TYPE	On / Off setting for column 132 object		
701	COLUMN_HDR			

296	COLUMN_ID	Sets the column id for a load or unload column command		
245	COMMAND_STRING	For external command object		
189	COMMENT	Comment text		
709	COMMENT_INPUT	Add new type for comment input value		
190	COMMENT_TYPE	Comment type		
724	COMPOSITE			
468	CONE_CONVEX_TYPE			
60	CONE_LENGTH_ANGLE_TYPE	For cones: show length or angle		
39	COORD_TYPE	Coordinate System		
621	COP_BOOLEANTYPE			
618	COP_COLORMAP			
619	COP_CPLEMENT			
616	COP_EXPORTFILETYPE			
543	COP_FILTER			
622	COP_IMPORTFILETYPE			
617	COP_SELECTIONTYPE			
544	COP_SIZE			
545	COP_TYPE			

425	CPOINT_DIAM			
428	CPOINT_F_SCANSPEED			
422	CPOINT_I			
423	CPOINT_J			
424	CPOINT_K			
426	CPOINT_SCAN_CROSS_TOTAL			
427	CPOINT_SCAN_DENSITY			
430	CPOINT_TYPE			
419	CPOINT_X			
420	CPOINT_Y			
421	CPOINT_Z			
433	CREATE_WEIGHTS	For best fit 2D/3D alignments		
65	CURVE_TYPE	For curves - type of curve		

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Number	Data Type Name	Data Type Description	Index	Value String
252	DATA_MEM_PAGES	Database memory pages for statistics object		
250	DATA_READ_LOCK	Database read lock for statistics object		

251	DATA_WRITE_LOCK	Database write lock for statistics object		
731	DATUM1_MODIFIER			
734	DATUM1_MODIFIER2			
725	DATUM2	This is because DATUM and DATUM2 are used in two different groups in summary mode.		
732	DATUM2_MODIFIER			
735	DATUM2_MODIFIER2			
733	DATUM3_MODIFIER			
736	DATUM3_MODIFIER2			
389	DB_CHART_NAME	For SPC: chart name		
386	DB_QUERY_OP	For SPC		
387	DB_SOURCE_NAME	For SPC		
459	DB_SOURCE_TYPE	For SPC		
539	DELETE_TYPE	FILE/CLOSE, fptr, KEEP   DELETE		
203	DESCRIPTION	Subroutine parameter description		
727	DESCRIPTION2	This is because DESCRIPTION and DESCRIPTION2 are used in two different groups in summary mode.		
133	DEST_EXPR	Destination expressions (assign, subroutine, hyper report)		
353	DEV_DIAM	Dev diam value		

280	DEV_PERPEN_CENTERLINE			
350	DEV_X	Dev x value		
351	DEV_Y	Dev y value		
352	DEV_Z	Dev z value		
390	DEVIATION_ANGLE	Deviation angle		
180	DEVIATION_SYMBOLS	Dimension format deviation symbols toggle		
737	DEVPERCENT_NOM			
739	DEVPERCENT2			
199	DIGIT_COUNT	Digit count for dmi5 file read/write command		
324	DIM_BONUS	Dimension bonus		
340	DIM_DEVIATION	Dimension deviation		
182	DIM_HEADING	Dimension format heading item		
304	DIM_ID	For Best Fit 2d Alignments		
160	DIM_INFO_LOC	Dimension info object location axis toggle		
159	DIM_INFO_ORDER	Dimension info order toggle		
161	DIM_INFO_TP_LOC	Dimension info object true position location axis toggle		
173	DIM_LENGTH	Dimension length		
754	DIM_LENGTH2			

332	DIM_MAX	Dimension max value		
328	DIM_MEASURED	Measured dimension value		
336	DIM_MIN	Dimension min value		
344	DIM_OUTTOL	Dimension out of tolerance		
703	DIM_RPT_DATUM			
705	DIM_RPT_DEVPERCENT			
704	DIM_RPT_GRAPHIC			
706	DIM_RPT_ISBILATERAL			
702	DIM_RPT_ISDATUM			
707	DIM_RPT_NUMZONES			
917	DIM_RPT_TOLERANCECOLOR1	Gets the color of the dimension as determined by PC-DMIS. This is the primary color.		
918	DIM_RPT_TOLERANCECOLOR2	Gets the secondary color for bilateral dimensions that have a secondary color. If the color is not defined for this dimension, it returns -1 as the value.		
177	DIM_TEXT	Dimension format dim text toggle		
178	DIM_TEXT_OPTIONS	Dimension format dim text options toggle		
510	DISPLAY_ADVANCED_PARAMETERS			
236	DISPLAY_HITS	Scan flag (yes / no) for display of scan hits		



184	DISPLAY_ID	Point info show id toggle		
607	DISPLAY_PROBE_PARAMETERS			
256	DISPLAY_TRACE	Tracefield object yes/no toggle for dialog display		
185	DISPLAY_TYPE	Point info show type toggle		
155	DISTANCE	Distance		
676	DRF_COLUMN_HDR			
681	DRF_ROTATIONX			
682	DRF_ROTATIONY			
683	DRF_ROTATIONZ			
677	DRF_SEGNAME			
678	DRF_SHIFTX			
679	DRF_SHIFTY			
680	DRF_SHIFTZ			
641	DRF_TBLHDR			
291	DTYPE_LEAPFROGFULLPARTIAL	Leapfrog type: Full leapfrog or partial leapfrog		
290	DTYPE_LEAPFROGNUMHITS	Number of hits to be taken during leapfrog procedure		
289	DTYPE_LEAPFROGTYPE	Type of leapfrog being performed		

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Number	Data Type Name	Data Type Description	Index	Value String
99	END_ANG	End angle	0	Radian value
144	END_NUM	End number of loop		
787	END_OFFSET	Ending depth	0	Ending depth value
467	ERROR_LABEL			
202	ERROR_MODE	Error mode for on error flow control command		
201	ERROR_TYPE	Error type for on error flow control command		
292	EXCLUSION_ZONE	Exclusion zone command is on or off		
293	EXECUTE	Is the attached measurement routine executed (Yes / No)		
595	EXPOSURE			

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Number	Data Type Name	Data Type Description	Index	Value String
79	F_AUTOMOVE	Auto move distance		
85	F_BOXLENGTH			
84	F_BOXWIDTH			
88	F_CHECK	The only numeric associated with the CPCDcheck feature		
87	F_CIRCRADIN			

86	F_CIRCRADOUT			
81	F_CORNER_RADIUS			
78	F_DEPTH	Depth of measurements	0	Depth value
82	F_INCREMENT			
80	F_INDENT	Measurement offsets for various features	1	Offset value
243	F_LOCATION	Location value for section scans		
89	F_MAXACCELX	Maximum X acceleration		
90	F_MAXACCELY	Maximum Y acceleration		
91	F_MAXACCELZ	Maximum Z acceleration		
168	F_MINUS_TOL	Dimension minus tol value		
95	F_MOVESPEED	Move speed		
74	F_OFFSET	Offset value		
76	F_PITCH	Auto feature pitch		
167	F_PLUS_TOL	Dimension plus tol value		
97	F_SCANSPEED	Scan speed		
434	F_SIZE	For SPC		
75	F_SPACER	Auto feature spacer	0	Max distance value
77	F_THICKNESS	Sheet metal thickness	0	Thickness value

593	F_THICKNESS_EDGE			
83	F_TOLERANCE			
96	F_TOUCHSPEED	Touch speed		
208	FAIL_ON_EXIST	File i/o fail on exist mode		
303	FEAT_TYPE	Feature Type		
198	FIELD_WIDTH	Field width for dmis file read/write command		
206	FILE_COMMAND_TYPE	File i/o command type		
152	FILE_NAME	File name		
197	FILE_POINTER	File pointer name for file i/o commands		
598	FILTER_NEIGHBOR_NUM			
606	FILTER_TOGGLE			
600	FILTER_TOL_ABOVE			
601	FILTER_TOL_BELOW			
602	FILTER_TOL_RIGHT			
472	FILTER_TYPE	Basic scan filter type		
460	FIND_HOLE_PERCENT	For the check command and find hole check distance		
54	FIND_NOM_AXIS_TYPE	Selects between X, Y, Z, or user defined nominal axis		
233	FIND_NOMS_TYPE	Type for find noms mode		

47	FINDHOLE_TYPE	Use find hole algorithm (Yes / No)		
527	FINDNOMS_BESTFIT			
528	FINDNOMS_ONLYSELECTED			
452	FIT			
465	FIXTURE_TOL			
226	FIXTURE_TYPE	Type for load fixture object		
246	FLY_MODE_TYPE	Fly mode Off/On toggle		
560	FREQUENCY			

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Number	Data Type Name	Data Type Description	Index	Value String
183	GAP_ONLY_TYPE	ON / OFF toggle		
708	GDT_SYMBOL			
730	GDT_SYMBOL2			
64	GEN_ALIGN_TYPE	Generic feature alignment type (independent / dependent)		
63	GEN_FEAT_TYPE	Generic feature type		
162	GRAPH_ANALYSIS	Use graphical analysis on dimension (yes / no)		
785	GRAPH_ANALYSIS_MINUS_TOL	Auto Feature cad point minus tolerance		
784	GRAPH_ANALYSIS_PLUS_TOL	Auto Feature cad point plus tolerance		

783	GRAPH_ANALYSIS_POINT_SIZE	Auto Feature cad point size		
458	GRAPH_OPTION	Dimension info and point info commands		
408	GRID	For SPC		

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Number	Data Type Name	Data Type Description	Index	Value String
483	HIGH_ACCURACY			
223	HIGH_THRESHOLD	High threshold for temp comp object		
407	HISTOGRAM	For SPC		
359	HIT_TYPE	Hit type		
68	HITINT_TYPE	Interior/Exterior measurement flag		

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Number	Data Type Name	Data Type Description	Index	Value String
2	ID	Object id		
392	IGNOREMOTIONERRORS_TYPE	For ignore motion errors command		
205	INDEX_END	Array index end number		
204	INDEX_START	Array index start number		
72	INIT_HITS	Initial hits		

40	INOUT_TYPE	Inside / Outside		
596	INTENSITY			
150	INTERNAL_EXTERNAL	Recall Alignment		
454	IOCHANNEL_NUMBER	For IO channel management commands		
457	IOCHANNEL_PULSE_DURATION	No longer used, probably should be removed		
456	IOCHANNEL_PULSE_INTERVAL	No longer used, probably should be removed		
455	IOCHANNEL_PULSE_WIDTH	No longer used, probably should be removed		
634	ISLAND_AI			
635	ISLAND_AJ			
636	ISLAND_AK			
638	ISLAND_CLEARANCEDIST			
625	ISLAND_DIAM			
631	ISLAND_I			
632	ISLAND_J			
633	ISLAND_K			
626	ISLAND_LENGTH			
637	ISLAND_TYPE			
627	ISLAND_WIDTH			

628	ISLAND_X			
629	ISLAND_Y			
630	ISLAND_Z			
138	ITEM_USED	Best fit item used in calculation of alignment		
354	ITERATE_COLUMNS	Iterate columns setting		

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No Entries Available

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No Entries Available

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Number	Data Type Name	Data Type Description	Index	Value String
200	LABEL_ID	Label field for flow control objects that reference labels		
729	LEADER_LINE_ID			
480	LEFTYRIGHTY_CONFIG			
4	LEVEL_REF_ID	Ref id for a level feature of an iterative alignment		
62	LIN_POL_FILT_TYPE	Filter object - linear or polar filter		
782	LINE1_BONUS			
643	LINE1_CALLOUT			



644	LINE1_COLUMN_HDR			
650	LINE1_DEV			
651	LINE1_DEVPERCENT			
750	LINE1_DEVPERCENT_NOM			
752	LINE1_DEVPERCENT2			
645	LINE1_FEATNAME			
652	LINE1_ISBILATERAL			
768	LINE1_MAX			
647	LINE1_MEAS			
769	LINE1_MIN			
649	LINE1_MINUSTOL			
646	LINE1_NOMINAL			
653	LINE1_NUMZONES			
765	LINE1_OUTTOL			
648	LINE1_PLUSTOL			
642	LINE1_TBLHDR			
751	LINE1_USE2DEVIATIONS			
686	LINE2_AXIS			

658	LINE2_BONUS			
655	LINE2_CALLOUT			
656	LINE2_COLUMN_HDR			
660	LINE2_DATUMSHFT			
662	LINE2_DEV			
663	LINE2_DEVANG			
664	LINE2_DEVPERCENT			
740	LINE2_DEVPERCENT_NOM			
742	LINE2_DEVPERCENT2			
657	LINE2_FEATNAME			
697	LINE2_ISBILATERAL			
695	LINE2_MAX			
688	LINE2_MEAS			
696	LINE2_MIN			
694	LINE2_MINUSTOL			
687	LINE2_NOMINAL			
698	LINE2_NUMZONES			
766	LINE2_OUTTOL			

693	LINE2_PLUSTOL			
654	LINE2_TBLHDR			
659	LINE2_TOL			
661	LINE2_UNUSEDZONE			
741	LINE2_USE2DEVIATIONS			
669	LINE3_BONUS			
666	LINE3_CALLOUT			
667	LINE3_COLUMN_HDR			
671	LINE3_DATUMSHFT			
673	LINE3_DEV			
674	LINE3_DEVANG			
675	LINE3_DEVPERCENT			
743	LINE3_DEVPERCENT_NOM			
745	LINE3_DEVPERCENT2			
668	LINE3_FEATNAME			
699	LINE3_ISBILATERAL			
774	LINE3_MAX			
771	LINE3_MEAS			

775	LINE3_MIN			
773	LINE3_MINUSTOL			
770	LINE3_NOMINAL			
700	LINE3_NUMZONES			
767	LINE3_OUTTOL			
772	LINE3_PLUSTOL			
665	LINE3_TBLHDR			
670	LINE3_TOL			
672	LINE3_UNUSEDZONE			
744	LINE3_USE2DEVIATIONS			
355	LOAD_TYPE	Load setting		
287	LOCATOR_BMP	Feature Locator BMP On/Off		
288	LOCATOR_WAV	Feature Locator WAV On/Off		
210	LOW_FORCE	Low force for option probe object		
224	LOW_THRESHOLD	Low threshold for temp comp object		

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Number	Data Type Name	Data Type Description	Index	Value String
227	MACHINE_TYPE	Machine type for load machine object		

485	MAGNIFICATION			
176	MAN_RETRACT			
94	MANUAL_FINE_PROBING	Manual fine probing		
534	MANUAL_PREPOSITION	Whether manual pre-position needed on vision target		
221	MATERIAL_COEFFICIENT	Material coefficient for temp comp object		
242	MAX_ANGLE	Setting for variable technique on scans		
209	MAX_FORCE	Max force for option probe object		
240	MAX_INCREMENT	Setting for variable technique on scans		
491	MEAN			
569	MEAS_A			
612	MEAS_A2	For CMT characteristic point 1		
30	MEAS_ANGLE	Measured angle		
721	MEAS_AREA			
556	MEAS_DEPTH			
29	MEAS_DIAM	Measured diameter		
584	MEAS_EA			
585	MEAS_EH			
624	MEAS_END_ANG			

583	MEAS_ER			
313	MEAS_EX	Measured endpoint x component		
314	MEAS_EY	Measured endpoint y component		
315	MEAS_EZ	Measured endpoint z component		
552	MEAS_FLUSH			
554	MEAS_GAP			
570	MEAS_H			
613	MEAS_H2	For CMT characteristic point 1		
306	MEAS_HEIGHT	Measured height		
25	MEAS_I	Measured i		
26	MEAS_J	Measured j		
27	MEAS_K	Measured k		
28	MEAS_LENGTH	Measured length		
305	MEAS_MINOR_AXIS	Measured minor axis (ellipse)		
719	MEAS_PERIMETER			
568	MEAS_R			
611	MEAS_R2	For CMT characteristic point 1		
581	MEAS_SA			

582	MEAS_SH			
307	MEAS_SLOTVEC_I	Measured slot vector i - See the "Slot Vector Data Type" note below.		
308	MEAS_SLOTVEC_J	Measured slot vector j - See the "Slot Vector Data Type" note below.		
309	MEAS_SLOTVEC_K	Measured slot vector k - See the "Slot Vector Data Type" note below.		
580	MEAS_SR			
623	MEAS_START_ANG			
310	MEAS_SX	Measured start point x component		
311	MEAS_SY	Measured start point y component		
312	MEAS_SZ	Measured start point z component		
316	MEAS_WIDTH	Measured width		
22	MEAS_X	Hit point measured x	point number	X-Coordinate
396	MEAS_X2	For CMT characteristic point 1		
23	MEAS_Y	Hit point measured y	point number	Y-Coordinate
397	MEAS_Y2	For CMT characteristic point 1		

			point number	Z-Coordinate
24	MEAS_Z	Hit point measured z		
398	MEAS_Z2	For CMT characteristic point 1		
141	MEASURE_ALL_FEATURES	Flag for iterative alignments		
59	MEASURE_ORDER_TYPE	Measure order for edge feature SURFACE/ EDGE/ BOTH		
66	MEASURED_2D3D_TYPE	Determines plane in which solution will lie or 3D solution		
106	MEASVEC_I	Measure vector i		
107	MEASVEC_J	Measure vector j		
108	MEASVEC_K	Measure vector k		
357	METHOD_TYPE	Scan method type		
100	MIDPOINT_X	Midpoint x		
101	MIDPOINT_Y	Midpoint y		
102	MIDPOINT_Z	Midpoint z		
241	MIN_ANGLE	Setting for variable technique on scans		
239	MIN_INCREMENT	Setting for variable technique on scans		
486	MINOR_WORD_TOGGLE			
58	MODE_TYPE	MANUAL or DCC		
45	MOVE_TYPE	Use auto move (yes / no)		



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Number	Data Type Name	Data Type Description	Index	Value String
429	N_CONTROLPOINTS	Number of control points in a scan		
70	N_HITS	Number of hits per row	0	1 or more
55	N_INIT_HITS_TYPE	Toggle field for fixed number of initial hits		
56	N_PERM_HITS_TYPE	Toggle field for fixed number of perm hits		
71	N_ROWS	Number of rows	0	1 or more
489	N_SIDES	Number of polygon sides		
249	NEW_STATS_DIR	Empty stats directory field in editor for statistics object		
157	NEW_TIP	New tip in move ph9 offset		
0	NINGUNO_TIPO	No type, default value, used with constants		
826	NO_APPROACH_VECTOR_FLIP	Allow the feature vector to be flipped during optimization	0	"YES" or "NO"
482	NOFLIPFLIP_CONFIG			
166	NOMINAL	Dimension nominal value		
321	NOMINAL_COLOR	Vision Nominal Color		
232	NORM_RELEARN	Normal scan mode or re-learn nominals mode		
317	NUM_CONTROL_POINTS	Number of control points		
320	NUM_FIT_POINTS	Number of points used for fitting surface		

356	NUM_ITERATIONS	Number of iterations		
215	NUM_RETURN_DATA	Return data for option probe object		

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Number	Data Type Name	Data Type Description	Index	Value String
61	OFFSET_LINE_METHOD	method for offset lines		
238	OFFSET_TOLERANCE	offset tolerance for perimeter scans		
156	OLD_TIP	old tip in move ph9 offset		
285	ONOFF_TYPE	Initially implemented for use with IGNOREROTAB but can be used with any ON OFF toggle field		
620	OPERTYPE			
220	ORIGIN	Origin data point for temp comp object		
6	ORIGIN_REF_ID	Ref id for an origin feature of an iterative alignment		
449	OUTPUT_DMIS_REPORT	DMO reporting		
448	OUTPUT_FEAT_W_DIMENS	DMO reporting		
447	OUTPUT_FEATURE_NOMS	DMO reporting		
165	OUTPUT_TYPE	Mode of output for dimensions		
558	OVERLAP			

559	OVERSCAN			
446	OVERWRITE	DMO reporting		

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Number	Data Type Name	Data Type Description	Index	Value String
374	_PRINT_TO_FILE	Prepended with _ to avoid confusion with Edit window constants		
375	_PRINT_TO_PRINTER	Prepended with _ to avoid confusion with Edit window constants		
191	PART_NAME			
519	PATTERN_TYPE	Auto plane pattern	0	"SQUARE" or "RADIAL"
487	PERCENTAGE			
73	PERM_HITS	Number of Perm (sample) hits	0	0 or more
170	PERP_PARALLEL_TYPE	Dimension perpendicular parallel type		
115	PINVEC_I	Pin vector i		
116	PINVEC_J	Pin vector j		
117	PINVEC_K	Pin vector k		
605	PIXEL_TOGGLE			

186	POINT_INFO_HEADING	Point info heading type		
380	POINTINFO_FILTER_DEVIATION	Toggle field for deviation filter state of point info commands		
381	POINTINFO_FILTER_DEVIATION_NUMBER	Number field associated with deviation filter state of point info commands		
301	POINTINFO_FILTER_INTERVAL	Toggle field for interval filter state of point info commands		
302	POINTINFO_FILTER_INTERVAL_NUMBER	Number field associated with interval filter state of point info commands		
382	POINTINFO_FILTER_OUTTOL	Toggle field for out of tolerance filter state of point info commands		
378	POINTINFO_FILTER_WORST	Toggle field for worst filter state of point info commands		
379	POINTINFO_FILTER_WORST_NUMBER	Number field associated with worst filter state of point info commands		
218	POLAR_VECTOR_COMPENSATION	Polar vector compensation object		
277	POS_REPORT_AXIS_X	Positive reporting axis		
278	POS_REPORT_AXIS_Y	Positive reporting axis		
279	POS_REPORT_AXIS_Z	Positive reporting axis		
462	POS_REPT_DISPLAY_OPTION			
214	POSITIONAL_ACCURACY	Positional accuracy for option probe object		

786	PPAP_INDEX			
399	PPROG	Measurement routine name (used in a database query)		
175	PRECISION	Dimension display precision		
377	PRINT_DELETE_RUNS			
376	PRINT_DRAFTMODE			
213	PROBE_ACCURACY	Probe accuracy for option probe object		
228	PROBE_COMP	Probe comp (on/off) toggle		
299	PROBING_MODE	Probing mode for option probe		
174	PROFILE_FORM_TYPE	Dimension profile form type toggle		
550	PROFILE_TYPE			
521	PROGRAM_GAGE_FEAT_TYPE			
522	PROGRAM_GAGE_TYPE			
118	PUNCHVEC_I	Punch vector i		
119	PUNCHVEC_J	Punch vector j		
120	PUNCHVEC_K	Punch vector k		

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Number	Data Type Name	Data Type Description	Index	Value String
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470	QUERY_SHOW_GRAPHIC_SETTINGS" ?>QUERY_SHOW_GRAPHIC_SETTINGS			
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Number	Data Type Name	Data Type Description	Index	Value String
171	RADIUS_TYPE	Dimension 2D Distance radius type		
196	READ_WRITE	Read / Write toggle		
46	READPOS_TYPE	Read Position (yes / no)		
3	REF_ID	ID of object being referred to		
222	REF_TEMP	Reference temperature for temp comp object		
412	REGR	For SPC		
142	REPIERCE_CAD	Flag for iterative alignments		
383	REPORT_SURFVEC_I	Extended sheet metal vector for DCC Edge		
384	REPORT_SURFVEC_J	Extended sheet metal vector for DCC Edge		
385	REPORT_SURFVEC_K	Extended sheet metal vector for DCC Edge		
121	REPORTVEC_I	Report vector i		
122	REPORTVEC_J	Report vector j		
123	REPORTVEC_K	Report vector k		
188	RET_ONLY_TYPE	Retrolinear only on / off toggle		
216	RETURN_SPEED	Return speed for option probe object		

192	REVISION_NUMBER	File header revision number		
48	RMEAS_TYPE	Use relative measures (yes / no)		
69	RMEASFEATID	Name of relative measure feature		
524	RMEASFEATIDX	Referenced feature (X axis)	0	Feature label
525	RMEASFEATIDY	Referenced feature (Y axis)	0	Feature label
526	RMEASFEATIDZ	Referenced feature (Z axis)	0	Feature label
5	ROTATE_REF_ID	Ref id for a rotate feature of an iterative alignment		
158	ROTATION_TYPE	Move rotary table type		
286	ROW_ID			
639	RPT_DIMENSION_TABLES			

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Number	Data Type Name	Data Type Description	Index	Value String
151	SAVE_ALIGN_CAD_TO_PARTS	Save Align Save Type		
92	SCAN_ACCELERATION	Scan acceleration		
265	SCAN_AXISVEC_I	Axis vector i - for boundary conditions...		
266	SCAN_AXISVEC_J	Axis vector j - for boundary conditions...		
267	SCAN_AXISVEC_K	Axis vector k - for boundary conditions...		

432	SCAN_BNDRY_TYPE			
274	SCAN_CROSS_TOTAL	Number of crossings allowed in boundary condition		
259	SCAN_CUTPLANEVEC_I	Cut plane vector i		
260	SCAN_CUTPLANEVEC_J	Cut plane vector j		
261	SCAN_CUTPLANEVEC_K	Cut plane vector k		
217	SCAN_DENSITY	Scan density for option probe object		
276	SCAN_EDGE_THICK	Edge thickness for edge scans		
268	SCAN_ENDVEC_I	End touch vector i		
269	SCAN_ENDVEC_J	End touch vector j		
270	SCAN_ENDVEC_K	End touch vector k		
271	SCAN_INITDIR_I	Unit direction vector i		
272	SCAN_INITDIR_J	Unit direction vector j		
273	SCAN_INITDIR_K	Unit direction vector k		
262	SCAN_INITVEC_I	Initial touch vector i		
263	SCAN_INITVEC_J	Initial touch vector j		
264	SCAN_INITVEC_K	Initial touch vector k		
93	SCAN_OFFSET_FORCE	Scan offset force		
358	SCAN_TECHNIQUE	Scan technique		



275	SCAN_TIME_INCR	Time increment for manual scans		
540	SCREEN_CAPTURE_AUTO_TIME	Screen capture time (always or on error)		
536	SCREEN_CAPTURE_AUTO_TYPE	Screen capture auto type (which gives more options than basic screen capture)		
503	SCREEN_CAPTURE_QUALITY	Screen capture image color depth		
502	SCREEN_CAPTURE_SCALE	Screen capture image size		
535	SCREEN_CAPTURE_TYPE	Screen capture type (can now do Live Image View as well as CAD)		
57	SEARCHMODE_TYPE	Box or circular search mode for high point feature		
764	SECTION_INDEX			
225	SENSOR_LIST	Sensor list for temp comp object		
193	SERIAL_NUMBER	File header serial number		
494	SHOW_COLUMN			
136	SHOW_DETAILS	Display details for alignments and scans		
179	SHOW_HEADINGS	Dimension format headings toggle		
135	SHOW_IDS	Display id for alignments and loops		
414	SHOW_MORE_SPC_CALC	For SPC		
723	SHOW_NOMS			
728	SHOW_OPTIONS			
187	SHOW_POINT_INFO	Point info / Show point info		

493	SHOW_ROW			
402	SHOW_SPC_CALC	For SPC		
763	SIMULT_EVAL			
235	SINGLE_POINT	Point mode on dcc scan object		
145	SKIP_NUM	Skip number of loop		
53	SLOT_MIN_MAX_TYPE	Measure slot using 5 (NORM) or 6 (MINMAX) hits		
297	SLOT_NUMBER	Sets the column slot number for a column load and unload		
563	SLOT_TYPE			
109	SLOTVEC_I	Theoretical slot vector i - See the "Slot Vector Data Type" note below.		
110	SLOTVEC_J	Theoretical slot vector j - See the "Slot Vector Data Type" note below.		
111	SLOTVEC_K	Theoretical slot vector k - See the "Slot Vector Data Type" note below.		
43	SNAP_TYPE	Vector features / Surface features		
416	SOLID	For SPC		
403	SPEC_LIMITS	For SPC		
415	SPEC_OFFSET	For SPC		
134	SRC_EXPR	Source expression (assign, subroutine, call sub, basic script, flow control)		

181	STANDARD_DEVIATION	Dimension format standard deviation toggle		
98	START_ANG	Start angle	0	Radian value
466	START_LABEL			
143	START_NUM	Start number for loop		
254	STAT_CALC_TYPE	Calculation type on/off toggle for statistics object		
194	STAT_COUNT	File header statistics count		
253	STAT_NAME_TYPE	Variable name type for statistics object		
1	STATIC_TOGGLE	Used for toggle fields that cannot contain expressions		
391	STATS_DATASOURCE	Data source for statistics object		
453	STATS_DB_TYPE	For stats command database option		
248	STATS_DIR	Stats directory for statistics object		
247	STATS_TYPE	Stats type for statistics object		
405	STDDEV	For SPC		
195	SUB_NAME	Subroutine name		
690	SUMMARY_AXIS			
781	SUMMARY_BONUS			
684	SUMMARY_COLUMN_HDR			
640	SUMMARY_DEV			

685	SUMMARY_FEAT			
779	SUMMARY_MAX			
692	SUMMARY_MEAS			
780	SUMMARY_MIN			
778	SUMMARY_MINUSTOL			
691	SUMMARY_NOMINAL			
776	SUMMARY_OUTTOL			
777	SUMMARY_PLUSTOL			
689	SUMMARY_TBLHDR			
484	SURFACE			
112	SURFVEC_I	Surface vector i		
113	SURFVEC_J	Surface vector j		
114	SURFVEC_K	Surface vector k		
546	SURFVEC_MEAS_I	Surface vector i meas		
547	SURFVEC_MEAS_J	Surface vector j meas		
548	SURFVEC_MEAS_K	Surface vector k meas		

### Slot Vector Data Type

Note that SLOTVEC\_I, SLOTVEC\_J, and SLOTVEC\_K are enumerations. They only function within the context of automation.

For an automation example using enumerations, you should use SLOTVEC\_I, SLOTVEC\_J, and SLOTVEC\_K as shown below:

```
FeatureCommand.PutData (LocSlotVector, FDATA_SLOT_VECTOR, FDATA_MEAS, FDATA_PART, "", PLANE_TOP)
Command.PutText ("0", MEAS_SLOTVEC_I, 1)
Command.PutText ("1", MEAS_SLOTVEC_J, 1)
Command.PutText ("0", MEAS_SLOTVEC_K, 1)
```

If you're using pointers or variables directly in the Edit window via the PC-DMIS expression language, you need to use TANGVEC\_IJK or ANGVEC\_IJK:

- TANGIJK gets the *theoretical* IJK slot vector.

You can also get the specific values:

- TANGI gets the I value.
- TANGJ gets the J value.
- TANGK gets the K value.

- ANGIJK gets the *measured* IJK slot vector.

You can also get the specific values:

- ANGI gets the I value.
- ANGJ gets the J value.
- ANGK gets the K value.

For an expression example, to give variables V1 and V2 the theoretical and measured IJK values of the a round slot, you can use the following:

```
ASSIGN/V1=SLTR.TANGIJK
```

```
ASSIGN/V2=SLTR.ANGIJK
```

-T-

Number	Data Type Name	Data Type Description	Index	Value String
345	T_VALUE	T value on hits		
572	TARG_A			
590	TARG_EA			
591	TARG_EH			
589	TARG_ER			
516	TARG_EX	Target endpoint x component		
517	TARG_EY	Target endpoint y component		
518	TARG_EZ	Target endpoint z component		
573	TARG_H			
31	TARG_I	Target i - vector		
32	TARG_J	Target j - vector		
33	TARG_K	Target k - vector		
571	TARG_R			

587	TARG_SA			
588	TARG_SH			
586	TARG_SR			
513	TARG_SX	Target start point x component		
514	TARG_SY	Target start point y component		
515	TARG_SZ	Target start point z component		
19	TARG_X	Target x - centroid		
20	TARG_Y	Target y - centroid		
21	TARG_Z	Target z - centroid		
557	TARGET_BLOB_TYPE			
282	TARGET_COLOR	Vision Target Color		
474	TARGET_DIRECTION			
520	TARGET_EDGE_ANGLE			
508	TARGET_EDGE_DENSITY			
712	TARGET_EDGE_EDGEDETECT			
538	TARGET_EDGE_EDGENUM			
537	TARGET_EDGE_EDGESELECT			
717	TARGET_EDGE_GRADIENT			

711	TARGET_EDGE_HEIGHT			
505	TARGET_EDGE_ILLUM			
475	TARGET_EDGE_POLARITY			
504	TARGET_EDGE_SIZE			
507	TARGET_EDGE_STRENGTH			
506	TARGET_EDGE_TOL			
509	TARGET_EDGE_TYPE			
549	TARGET_EDGE_UNDERSCAN			
710	TARGET_EDGE_WIDTH			
715	TARGET_FILTER_AREA			
716	TARGET_FILTER_AREA_SIZE			
713	TARGET_FILTER_CLEAN			
714	TARGET_FILTER_CLEAN_STRENGTH			
561	TARGET_FILTER_OUTLIER			
562	TARGET_FILTER_OUTLIER_DISTANCE_THRESHOLD			
599	TARGET_FILTER_OUTLIER_STD_DEV_THRESHOLD			
523	TARGET_FOCUS			



722	TARGET_SURFACE_CROSSHAIR_HEIGHT			
722	TARGET_SURFACE_CROSSHAIR_HEIGHT			
499	TARGET_SURFACE_DURATION			
497	TARGET_SURFACE_HEIGHT			
501	TARGET_SURFACE_HIACC			
490	TARGET_SURFACE_ILLUM			
500	TARGET_SURFACE_MODE			
498	TARGET_SURFACE_RANGE			
511	TARGET_SURFACE_TYPE			
496	TARGET_SURFACE_WIDTH			
564	TARGET_TYPE			
124	TARGSLOT_I	Target slot vector i		
125	TARGSLOT_J	Target slot vector j		
126	TARGSLOT_K	Target slot vector k		
532	TEMPP	Current Part temperature		
529	TEMPX	Current X axis temperature		
530	TEMPY	Current Y axis temperature		

531	TEMPZ	Current Z axis temperature		
163	TEXT_ANALYSIS	Use text analysis on dimension (Yes / No)		
761	TEXTANAL_LABEL_DEV			
758	TEXTANAL_LABEL_MEAS_I			
759	TEXTANAL_LABEL_MEAS_J			
760	TEXTANAL_LABEL_MEAS_K			
755	TEXTANAL_LABEL_MEAS_X			
756	TEXTANAL_LABEL_MEAS_Y			
757	TEXTANAL_LABEL_MEAS_Z			
762	TEXTANAL_LABEL_MINMAX			
566	THEO_A			
609	THEO_A2	For CMT characteristic point 1		
38	THEO_ANGLE	Theoretical angle		
720	THEO_AREA			
555	THEO_DEPTH			
34	THEO_DIAM	Theoretical diameter		
578	THEO_EA			
579	THEO_EH			

284	THEO_END_ANG	Vision Circle Feature		
577	THEO_ER			
13	THEO_EX	Theoretical x - end point		
14	THEO_EY	Theoretical y - end point		
15	THEO_EZ	Theoretical z - end point		
551	THEO_FLUSH			
553	THEO_GAP			
567	THEO_H			
610	THEO_H2	For CMT characteristic point 1		
37	THEO_HEIGHT	Theoretical height		
16	THEO_I	Hit point theoretical i - vector	point number	Numeric value
17	THEO_J	Hit point theoretical j - vector	point number	Numeric value
18	THEO_K	Hit point theoretical k - vector	point number	Numeric value
36	THEO_LENGTH	Theoretical length		
130	THEO_MINOR_AXIS	Theoretical minor access		
718	THEO_PERIMETER			

565	THEO_R			
608	THEO_R2	For CMT characteristic point 1		
575	THEO_SA			
576	THEO_SH			
574	THEO_SR			
283	THEO_START_ANG	Vision Circle Feature		
10	THEO_SX	Theoretical x - start point		
11	THEO_SY	Theoretical y - start point		
12	THEO_SZ	Theoretical z - start point		
35	THEO_WIDTH	Theoretical width		
7	THEO_X	Hit point theoretical x - centroid	point number	X-Coordinate
393	THEO_X2	For CMT characteristic point 1		
8	THEO_Y	Hit point theoretical y - centroid	point number	Y-Coordinate
394	THEO_Y2	For CMT characteristic point 1		
9	THEO_Z	Hit point theoretical z - centroid	point number	Z-Coordinate
395	THEO_Z2	For CMT characteristic point 1		

49	THEOBF_TYPE	Use theoretical values for best fit algorithm (yes / no)		
41	THICKNESS_TYPE	Theoretical or actual thickness	0	"THICKNESS_NONE", "THEO_THICKNESS", or "ACTL_THICKNESS"
594	THICKNESS_TYPE_EDGE	Theoretical or actual thickness		
67	THINNING_TOL	Thinning tolerance for curves		
488	THRESHOLD			
450	TIME_ARG	For SPC		
401	TIME_FILTER	For SPC: filtering based on time stamps		
229	TIP_I	Tip shank vector i component		
230	TIP_J	Tip shank vector j component		
231	TIP_K	Tip shank vector k component		
418	TITLE	For SPC		
349	TOOL_DIAM	Tool diameter		
346	TOOL_X	Tool x value		
347	TOOL_Y	Tool y value		
348	TOOL_Z	Tool z value		
169	TP_MODIFIER	Dimension Position modifier		

726	TP_MODIFIER2	This is because TP_MODIFIER and TP_MODIFIER2 are used in two different groups in summary mode.		
400	TRACE_FILTER	For SPC: filtering based on tracefields		
451	TRACE_FILTER_ARG	For SPC		
257	TRACE_NAME	Tracefield name		
258	TRACE_VALUE	Tracefield value		
473	TRACE_VALUE_LIMIT	Trace command character limit for the value field		
255	TRANSFER_DIR	Transfer directory for statistics object		
212	TRIGGER_FORCE	Trigger force for option probe object		
469	TRIGGERPLANE			
463	TRIGGERTOLERANCE			
464	TRIGGERTOLVALUE			
131	TWO_D_THREE_D_TYPE	2d or 3d		

-U-

Number	Data Type Name	Data Type Description	Index	Value String
318	U_HITS	Number of U points for surface		

417	U_L_BOUNDS	For SPC		
406	UCL_LCL	For SPC		
172	UNIT_TYPE	Unit type (inch / mm)		
211	UP_FORCE	Up force for option probe object		
127	UPDATEVEC_I	Update vector i		
128	UPDATEVEC_J	Update vector j		
129	UPDATEVEC_K	Update vector k		
431	USE_3DFILTER			
139	USE_AXIS	Flag for iterative alignments and start TP dimension		
753	USE_AXIS2			
968	USE_BOUNDARY_OFFSET	Enables or disables using the boundary offset as a minimum distance from the boundary (the edge) where the hits are automatically placed during a Void Detection. If set to NO, the tip's radius value is the minimum distance.		YES/NO
541	USE_HSSDAT			
542	USE_STARTENDDELAY			
281	USE_THEO			
44	USEPIN_TYPE	Use pin vector or normal vector		
738	USETWODEVIATIONS			

-V-

Number	Data Type Name	Data Type Description	Index	Value String
319	V_HITS	Number of V points for surface		
363	VIDEO_GAIN			
366	VIDEO_LASERLIGHT1			
367	VIDEO_LASERLIGHT2			
365	VIDEO_LEDLIGHT			
370	VIDEO_LSEG			
364	VIDEO_OFFSET			
371	VIDEO_XSEG			
369	VIDEO_YEND			
368	VIDEO_YORIGIN			
372	VIDEO_YSEG			
512	VOID_DETECT	Turn off void detection	0	"YES" or "NO"

-W-

Number	Data Type Name	Data Type Description	Index	Value String
322	WAVE_FILE	Feature Locator Wave File		
137	WEIGHT	Weight value for Best Fit alignments		



154	WORK_PLANE	Workplane		
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-X-

Number	Data Type Name	Data Type Description	Index	Value String
146	X_OFFSET	X Offset for loops		

-Y-

Number	Data Type Name	Data Type Description	Index	Value String
147	Y_OFFSET	Y Offset for loops		

-Z-

Number	Data Type Name	Data Type Description	Index	Value String
148	Z_OFFSET	Z Offset for loops		
404	ZONES	For SPC		