

#titleconst#

#authorconst# Nicklas Karlsson

#dateconst# 12/25/16

<i>Machine dialect</i>	<i>Letter</i>	<i>Number</i>	<i>Description short</i>	<i>Modal</i>
Linuxcnc	G	0	Rapid Move	
Linuxcnc	G	1	Linear Move	
Linuxcnc	G	2	Arc Move	
Linuxcnc	G	3	Arc Move	
Linuxcnc	G	4	Dwell	
Linuxcnc	G	5	Cubic Spline	
Linuxcnc	G	5.1	Quadratic Spline	
Linuxcnc	G	5.2	NURBS	
Linuxcnc	G	7	Lathe Diameter Mode	
Linuxcnc	G	8	Lathe Radius Mode	
Linuxcnc	G	10	Set Tool Table, Set Coordinate System	
Linuxcnc	G	17	Plane Select XY	
Linuxcnc	G	17.1	Plane Select UV	
Linuxcnc	G	18	Plane Select ZX	
Linuxcnc	G	18.1	Plane Select WU	
Linuxcnc	G	19	Plane Select YZ	
Linuxcnc	G	19.1	Plane Select VW	
Linuxcnc	G	20	Units	
Linuxcnc	G	21	Units	
Linuxcnc	G	28	Go/Set Predefined Position	
Linuxcnc	G	28.1	Go/Set Predefined Position	
Linuxcnc	G	30	Go/Set Predefined Position	

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Linuxcnc	G	30.1	Go/Set Predefined Position	
Linuxcnc	G	33	Spindle Synchronized Motion	
Linuxcnc	G	33.1	Rigid Tapping	
Linuxcnc	G	38.2	Straight Probe	
Linuxcnc	G	38.3	Straight Probe	
Linuxcnc	G	38.4	Straight Probe	
Linuxcnc	G	38.5	Straight Probe	
Linuxcnc	G	40	Compensation Off	
Linuxcnc	G	41	Cutter Compensation	
Linuxcnc	G	41.1	Dynamic Cutter Compensation	
Linuxcnc	G	42	Cutter Compensation	
Linuxcnc	G	42.1	Dynamic Cutter Compensation	
Linuxcnc	G	43	Tool Length Offset	
Linuxcnc	G	43.1	Dynamic Tool Length Offset	
Linuxcnc	G	43.2	Apply additional Tool Length Offset	
Linuxcnc	G	49	Cancel Tool Length Compensation	
Linuxcnc	G	53	Move in Machine Coordinates	
Linuxcnc	G	54	select coordinate system 1	

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Linuxcnc	G	55	select coordinate system 2	
Linuxcnc	G	56	select coordinate system 3	
Linuxcnc	G	57	select coordinate system 4	
Linuxcnc	G	58	select coordinate system 5	
Linuxcnc	G	59	select coordinate system 6	
Linuxcnc	G	59.1	select coordinate system 7	
Linuxcnc	G	59.2	select coordinate system 8	
Linuxcnc	G	59.3	select coordinate system 9	
Linuxcnc	G	61	Exact Path Mode	
Linuxcnc	G	61.1	Exact Path Mode	
Linuxcnc	G	64	Path Blending	
Linuxcnc	G	73	Drilling Cycle, Chip Breaking	
Linuxcnc	G	76	Threading Cycle	
Linuxcnc	G	80	Cancel Canned Cycle	
Linuxcnc	G	81	Drilling Cycle	
Linuxcnc	G	82	Drilling Cycle, Dwell	
Linuxcnc	G	83	Drilling Cycle, Peck	
Linuxcnc	G	85	Boring Cycle, Feed Out	

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Linuxcnc	G	89	Boring Cycle, Dwell, Feed Out	
Linuxcnc	G	90	Distance Mode	
Linuxcnc	G	90.1	Arc Distance Mode	
Linuxcnc	G	91	Distance Mode	
Linuxcnc	G	91.1	Arc Distance Mode	
Linuxcnc	G	92	Coordinate System Offset	
Linuxcnc	G	92.1	Reset G92 Offsets	
Linuxcnc	G	92.2	Reset G92 Offsets	
Linuxcnc	G	92.3	Restore G92 Offsets	
Linuxcnc	G	93	Feed Rate Mode	
Linuxcnc	G	94	Feed Rate Mode	
Linuxcnc	G	95	Feed Rate Mode	
Linuxcnc	G	96	Spindle Control Mode	
Linuxcnc	G	97	Spindle Control Mode	
Linuxcnc	G	98	Canned Cycle Return Level	
Linuxcnc	M	0	Program Pause	
Linuxcnc	M	1	Program Pause	
Linuxcnc	M	2	Program End	
Linuxcnc	M	3	Spindle Control	
Linuxcnc	M	4	Spindle Control	
Linuxcnc	M	5	Spindle Control	
Linuxcnc	M	6	Tool Change	
Linuxcnc	M	7	Coolant Control	
Linuxcnc	M	8	Coolant Control	
Linuxcnc	M	9	Coolant Control	

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Linuxcnc	M	19	Orient Spindle	
Linuxcnc	M	30	Program End	
Linuxcnc	M	48	Speed and Feed Override Control	
Linuxcnc	M	49	Speed and Feed Override Control	
Linuxcnc	M	50	Feed Override Control	
Linuxcnc	M	51	Spindle Speed Override Control	
Linuxcnc	M	52	Adaptive Feed Control	
Linuxcnc	M	53	Feed Stop Control	
Linuxcnc	M	60	Pallet Change Pause	
Linuxcnc	M	61	Set Current Tool	
Linuxcnc	M	62	turn on digital output synchronized with motion. The P- word specifies the digital output number.	
Linuxcnc	M	63	turn off digital output synchronized with motion. The P- word specifies the digital output number.	

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Linuxcnc	M	64	turn on digital output immediately. The P- word specifies the digital output number.	
Linuxcnc	M	65	turn off digital output immediately. The P- word specifies the digital output number.	
Linuxcnc	M	66	Wait on Input	
Linuxcnc	M	67	Analog Output,Synchroniz ed	
Linuxcnc	M	68	Analog Output, Immediate	
Linuxcnc	M	101	User Defined Commands	
Linuxcnc	M	102	User Defined Commands	
Linuxcnc	M	103	User Defined Commands	
Linuxcnc	M	104	User Defined Commands	
Linuxcnc	M	105	User Defined Commands	
Linuxcnc	M	106	User Defined Commands	
Linuxcnc	M	199	User Defined Commands	
Sodick wire EDM	G	0	Positioning	M

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Sodick wire EDM	G	1	Linear interpolation	M
Sodick wire EDM	G	2	Circular interpolation CW	M
Sodick wire EDM	G	3	Circular interpolation CCW	M
Sodick wire EDM	G	4	Dwell	x
Sodick wire EDM	G	5	X mirror image	M
Sodick wire EDM	G	6	Y mirror image	M
Sodick wire EDM	G	7	Z mirror image	M
Sodick wire EDM	G	8	X-Y exchange	M
Sodick wire EDM	G	9	Mirror image and X-Y exchange cancel	M
Sodick wire EDM	G	11	Skip On	M
Sodick wire EDM	G	12	Skip Off	M
Sodick wire EDM	G	13	Reference return On	M
Sodick wire EDM	G	14	Reference return Off	M
Sodick wire EDM	G	15	Reference point return executed with discharge off	M
Sodick wire EDM	G	17	X-Y plane specification	M
Sodick wire EDM	G	22	Stored stroke limit On	M
Sodick wire EDM	G	23	Stored stroke limit Off	M
Sodick wire EDM	G	26	Pattern rotation On	M

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Sodick wire EDM	G	27	Pattern rotation Cancellation	M
Sodick wire EDM	G	28	Return to reference point	M
Sodick wire EDM	G	29	Reference point memory	M
Sodick wire EDM	G	30	Return to G92/G97 set point	M
Sodick wire EDM	G	40	Wire diameter compensation cancellation	M
Sodick wire EDM	G	41	Wire diameter compensation left	M
Sodick wire EDM	G	42	Wire diameter compensation right	M
Sodick wire EDM	G	48	Edge control ON	M
Sodick wire EDM	G	49	Edge control OFF	M
Sodick wire EDM	G	50	Taper incline cancellation	M
Sodick wire EDM	G	51	Taper incline left	M
Sodick wire EDM	G	52	Taper incline right	M
Sodick wire EDM	G	54	Work coordinate system 0	M
Sodick wire EDM	G	55	Work coordinate system 1	M
Sodick wire EDM	G	56	Work coordinate system 2	M
Sodick wire EDM	G	57	Work coordinate system 3	M
Sodick wire EDM	G	58	Work coordinate system 4	M

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Sodick wire EDM	G	59	Work coordinate system 5	M
Sodick wire EDM	G	60	Return to main reference point	x
Sodick wire EDM	G	74	4 Axis Offset ON	x
Sodick wire EDM	G	75	4 Axis Offset OFF	x
Sodick wire EDM	G	80	Shifts until contact detector operates	x
Sodick wire EDM	G	81	Shifts to machine system limit	x
Sodick wire EDM	G	82	Shifts half way between current position and origin	x
Sodick wire EDM	G	83	Reading code of current position	x
Sodick wire EDM	G	84	Automatic Perpendicular Adjustment	x
Sodick wire EDM	G	90	Absolute command	M
Sodick wire EDM	G	91	Incremental command	M
Sodick wire EDM	G	92	Coordinate origin sitting command	x
Sodick wire EDM	G	93	X mirror image (Y mirror off)	M
Sodick wire EDM	G	94	Y mirror image (X mirror off)	M
Sodick wire EDM	G	95	X, Y simultaneous mirror image	M

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Sodick wire EDM	G	96	Mirror image and X and Y exchange cancel	M
Sodick wire EDM	G	97	Shifts all coordinate systems (except the machine coordinate system)	M
Sodick wire EDM	G	126	Coordinate Rotation ON	M
Sodick wire EDM	G	127	Coordinate Rotation OFF	M
Sodick wire EDM	G	128	Return to FIRST sub reference point	M
Sodick wire EDM	G	129	Set FIRST sub reference point	M
Sodick wire EDM	G	132	Interference check and avoidance ON	M
Sodick wire EDM	G	133	Interference check and avoidance OFF	M
Sodick wire EDM	G	134	Taper interference check and avoidance ON	M
Sodick wire EDM	G	135	Taper interference check and avoidance OFF	M
Sodick wire EDM	G	136	Interference check and error occurrence ON	M

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Sodick wire EDM	G	137	Interference check and error occurrence OFF	M
Sodick wire EDM	G	140	Independent Top/Bottom Geometry Programming mode cancel	M
Sodick wire EDM	G	141	Independent Top/Bottom Geometry Programming offset to left	M
Sodick wire EDM	G	142	Independent Top/Bottom Geometry Programming offset to right	M
Sodick wire EDM	G	152	Local coordinate system	M
Sodick wire EDM	G	228	Return to SECOND sub reference point	M
Sodick wire EDM	G	229	Set SECOND sub reference point	M
Sodick wire EDM	G	328	Return to THIRD sub reference point	M
Sodick wire EDM	G	329	Set THIRD sub reference point	M

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Sodick wire EDM	G	428	Return to FOURTH sub reference point	M
Sodick wire EDM	G	429	Set FOURTH sub reference point	M
Sodick wire EDM	G	528	Return to FIFTH sub reference point	M
Sodick wire EDM	G	529	Set FIFTH sub reference point	M
Sodick wire EDM	G	628	Return to SIXTH sub reference point	M
Sodick wire EDM	G	629	Set SIXTH sub reference point	M
Sodick wire EDM	G	728	Return to SEVENTH sub reference point	M
Sodick wire EDM	G	729	Set SEVENTH sub reference point	M
Sodick wire EDM	G	828	Return to EIGHTH sub reference point	M
Sodick wire EDM	G	829	Set EIGHTH sub reference point	M
Sodick wire EDM	G	928	Return to NINTH sub reference point	M
Sodick wire EDM	G	929	Set NINTH sub reference point	M

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Sodick wire EDM	M	0	Program stop (modal commands preserved)	
Sodick wire EDM	M	1	Optional Program stop	
Sodick wire EDM	M	2	End of program (modal commands preserved)	
Sodick wire EDM	M	3	AWT JUMP code	
Sodick wire EDM	M	5	ST CANCEL (ignores contact direction of op. in one direction only)	
Sodick wire EDM	M	6	No electrical discharge	
Sodick wire EDM	M	10	External Signal Output ON	
Sodick wire EDM	M	20	External Signal Output OFF	
Sodick wire EDM	M	33	External Signal Output ON	
Sodick wire EDM	M	34	External Signal Output ON	
Sodick wire EDM	M	35	External Signal Output ON	
Sodick wire EDM	M	36	External Signal Output ON	
Sodick wire EDM	M	37	External Signal Output ON	

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Sodick wire EDM	M	43	External Signal Output OFF --ON and OFF codes are paired, for example: M33 (ON) and M43 (OFF).	
Sodick wire EDM	M	44	External Signal Output OFF --ON and OFF codes are paired, for example: M33 (ON) and M43 (OFF).	
Sodick wire EDM	M	45	External Signal Output OFF --ON and OFF codes are paired, for example: M33 (ON) and M43 (OFF).	
Sodick wire EDM	M	46	External Signal Output OFF --ON and OFF codes are paired, for example: M33 (ON) and M43 (OFF).	

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Sodick wire EDM	M	47	External Signal Output OFF --ON and OFF codes are paired, for example: M33 (ON) and M43 (OFF).	
Sodick wire EDM	M	70	External Signal Output	
Sodick wire EDM	M	71	External Signal Output	
Sodick wire EDM	M	72	External Signal Output	
Sodick wire EDM	M	73	External Signal Output	
Sodick wire EDM	M	74	External Signal Output	
Sodick wire EDM	M	75	External Signal Output	
Sodick wire EDM	M	76	External Signal Output	
Sodick wire EDM	M	77	External Signal Output	
Sodick wire EDM	M	98	Sub-prgram call-up	
Sodick wire EDM	M	99	Sub-program completion	
Sodick wire EDM	M	199	Termination of Q File Execution	
Sodick wire EDM	T	80	Wire run	
Sodick wire EDM	T	81	Wire run stop	
Sodick wire EDM	T	82	Auto Drain OFF	

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Sodick wire EDM	T	83	Auto Drain ON	
Sodick wire EDM	T	84	Pump On	
Sodick wire EDM	T	85	Pump Off	
Sodick wire EDM	T	86	Flush On	
Sodick wire EDM	T	87	Flush Off	
Sodick wire EDM	T	88	Oil/Water (enables machining in oil to be performed)	
Sodick wire EDM	T	89	Oil/Water (for machining in water)	
Sodick wire EDM	T	90	AWTI (anneals and then cuts the wire)	
Sodick wire EDM	T	91	AWTI (pass the cut wire through the bottom guide & connect it)	
Sodick wire EDM	T	94	Water Submerged Machining	