XL200 Series Standard Open Loop Switch Settings, all Versions, 2.00 and Higher
Updated: October 9, 2024

Models: XL200, XL200H, XL200-SPD

Switch #	OFF	ON
1	Feed-to-Stop Shear	Non-Stop Shear
2	Shear Die Boost Output	Shear Up Output
3	Single-Speed Shear	Two-Speed Shear
4	Disable Auto Crop	Enable Auto Crop
5	Feed-to-Stop Punch	Non-Stop Punch
6	Punch Die Boost Output	Punch Up Output
7	Single-Speed Punch	Two-Speed Punch
8	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
9	CRT Disabled	CRT Enabled
10	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
11	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
12	Sys Ready Input DISABLED	Sys Ready Input ENABLED[2]
17	Single Line Encoder	Enable Second Line Encoder[3]
30	Welded Coils Disabled	Welded Coils Enabled
31	Synch Welded Coils	Reserved

Models: XL255 (only available when Dietrich IO option is set)

Switch #	OFF	ON
1	Feed-to-Stop Shear	Non-Stop Shear
2	Shear Die Boost Output	Shear Up Output
3	Single-Speed Shear	Two-Speed Shear
4	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
5	Feed-to-Stop Punch (All 7 Punches)	Non-Stop Punch (All 7 Punches)
6	Punch Die Boost Output (All 7 Punches)	Punch Up Output (All 7 Punches)
7	Single-Speed Punch (All 7 Punches)	Two-Speed Punch (All 7 Punches)
8	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
9	CRT Disabled	CRT Enabled
10	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
11	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
12	Sys Ready Input DISABLED	Sys Ready Input ENABLED[2]
17	Single Line Encoder	Enable Second Line Encoder[3]
30	Welded Coils Disabled	Welded Coils Enabled
31	Synch Welded Coils	Reserved

Notes:

1. Turning switches 5, 6, and 7 OFF disables the punch press(s) on models XL200, XL200H, and XL255D.
2. Beginning in version 4.68.00. Enables a Sys Ready Input that must be ON before Machine operations are allowed. Note!!! The use of this input is not to be used as a substitute for external, safety rated, e-stop protection.
3. Enable Second Line Encoder on Encoder Port 2

Models: XL202, XL202H, XL206, XL206H, XL212, XL212H

Switch #	OFF	ON
1	Feed-to-Stop (All Presses)	Non-Stop (All Presses)
2	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
3	Single-Speed (All Presses)	Two-Speed (All Presses)
8	Enable Up Outputs	All Boosts – No Up Outputs[1]
9	CRT Disabled	CRT Enabled
10	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
11	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
12	Sys Ready Input DISABLED	Sys Ready Input ENABLED[2]
17	Single Line Encoder	Enable Second Line Encoder[3]
30	Welded Coils Disabled	Welded Coils Enabled
31	Synch Welded Coils	Reserved

Switch 4	Switch 5	Switch 6	Switch 7	Number of Presses
OFF	OFF	OFF	OFF	1
ON	OFF	OFF	OFF	2
OFF	ON	OFF	OFF	3
ON	ON	OFF	OFF	4
OFF	OFF	ON	OFF	5
ON	OFF	ON	OFF	6
OFF	ON	ON	OFF	7
ON	ON	ON	OFF	8
OFF	OFF	OFF	ON	9
ON	OFF	OFF	ON	10
OFF	ON	OFF	ON	11
ON	ON	OFF	ON	12

Notes:

1. DIP Switch 8 is only valid for XL206 Models when configured for Non-Stop operation. When DIP switch 8 is on every press will have a boost instead of up outputs.
2. Beginning in version 4.68.00. Enables a Sys Ready Input that must be ON before Machine operations are allowed. Note!!! The use of this input is not to be used as a substitute for external, safety rated, e-stop protection.
3. Enable Second Line Encoder on Encoder Port 2

Models: XL266

Switch 1	Switch 2	Switch 3	Number of Presses[1]
OFF	OFF	OFF	1
ON	OFF	OFF	2
OFF	ON	OFF	3
ON	ON	OFF	4
OFF	OFF	ON	5
ON	OFF	ON	6
Switch #	**OFF**		**ON**
4	Drop Table Disabled		Drop Table ENABLED
5	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF
6	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF
7	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF
8	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF
9	CRT Disabled		CRT Enabled
10	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF
11	Front Shear Blanking Mode Disabled		Front Shear Blanking Mode Enabled
12	Sys Ready Input DISABLED		Sys Ready Input ENABLED[5]
17	Single Line Encoder		Enable Second Line Encoder[6]
30	Welded Coils Disabled		Welded Coils Enabled
31	Synch Welded Coils		Reserved

Notes:

1. This is the total number of presses including the normal (exit) shear. Turning switches 1, 2, and 3 all OFF allows for shear-only operation. The total number of presses defined must be 2 or greater to enable the front (entry) shear option.
2. This controller model does not support gagged presses.
3. Turning switch 4 on limits the number of presses to 5 presses.
4. For obvious reasons Front Shear Blanking Mode is only available in Version 4 and higher
5. Beginning in version 4.68.00. Enables a Sys Ready Input that must be ON before Machine operations are allowed. Note!!! The use of this input is not to be used as a substitute for external, safety rated, e-stop protection.
6. Enable Second Line Encoder on Encoder Port 2

XL2XX Standard Open Loop Inputs & Outputs Ver 2.00 & Higher

Models: XL200, XL200H, XL200-SPD, XL202, XL202H, XL206, XL206H, XL212, XL212H

IO#	Inputs	Outputs
1	Jog Forward	Fast
2	Jog Reverse	Slow
3	Run	Reverse
4	Not Used | Sys Ready	Run
5	Setup Lockout	Item Complete
6	Manual Shear	Forward
7	Manual Punch	Print Flush
8	Tail Out (Inverted Sheet Detect)	Print Trigger
9	Press 0 Complete (Shear)	Press 0 Down (Shear)
10	Press 1 Complete	Press 1 Down | Gag 1
11	Press 2 Complete | Press X Up Complete	Press 2 Down | Gag 2 | Press X Up/Boost | Boost X
12	Press 3 Complete | Press X Up Complete	Press 3 Down | Gag 3 | Press X Up/Boost | Boost X
13	Press 4 Complete	Press 4 Down | Gag 4 | Boost X
14	Press 5 Complete	Press 5 Down | Gag 5 | Boost X
15	Press 6 Complete | Press X Up Complete	Press 6 Down | Gag 6 | Press X Up | Boost X | Uncut Length[6]
16	Press 7 Complete | Press X Up Complete	Press 7 Down | Gag 7 | Press X Up Boost X | Short Part[6]
17	Press 8 Complete | Press X Up Complete	Press 8 Down | Gag 8 | Press X Up Boost X | Very Short Part[6]
18	Press 9 Complete | Press X Up Complete	Press 9 Down | Gag 9 | Press X Up Boost X
19	Press 10 Complete | Press X Up Complete	Press 10 Down | Gag 10 | Press X Up Boost X
20	Press 11 Complete | Press X Up Complete | Part Pause [7]	Press 11 Down | Gag 11 | Press X Up Boost X
21	Asynchronous Print Detect	Not Used
22	Manual Stacker	Stacker
23	Weld Detector	Not Used
24	Hole Detect	Not Used
33	Not Used	Short Part
34	Not Used	Very Short Part
44	Not Used	Uncut Length
45	Line Encoder 2	Not Used
49	PLC Remote	PLC Remote
50	Test Part	Dump Trigger
51	Scrap	Scrap Dump
52	Slow Run	Mister

Notes:

1. The maximum number of presses and/or gags allowed for each model is as follows (this includes the shear press):

Model	Max. Presses
XL200-SPD	1
XL200, XL200H, XL202, XL202H	2
XL206, XL206H	6

XL212, XL212H	12

2. Boost outputs take the place of the Press Up outputs on models XL200 and XL200H when selected. Up to two boost outputs are supported on the XL202 model. Up to three boosts on the XL206 are supported depending on how many presses are configured. On the XL206, Press Up and Gag outputs take priority and any remaining outputs, normally reserved for press and gag IO, are available for boost outputs. For XL202 and XL206 models, the first Boost output follows the last Press Up output.

3. Gag outputs are only available on models XL202, XL202H, XL206, XL206H, XL212, and XL212H. The number of available gag outputs is equal to the maximum number of presses allowed for that model **minus** the number of active presses configured by the dip-switch.

4. Each model (except those noted below) will provide Press Down and Press Up outputs for the number of presses configured by the dip-switch. For models XL200 and XL200H, Press Up outputs begin at output #11. For models XL202, XL202H, XL206, and XL206H, the first Press Up (Including Shear Up) output follows the last Gag output. If no gags are configured, the first Press Up (Including Shear Up) output follows the last Press Down output. No Press Up outputs are provided for models XL212 and XL212H. If there is a Press (Shear) Up defined on an output, it will have an Up Complete available on its corresponding input.

5. The “Hole Detect” input is only available on models with an “H” suffix in their name.

6. Only available when the ‘U’, Hump and Brake option is enabled.

7. Only available on the NTM option, superseding any complete that would be present without the NTM option.

XL200 Dietrich Open Loop Inputs & Outputs Ver 2.00 & Higher

IO#	Inputs	Outputs
1	Jog Forward	Fast
2	Jog Reverse	Slow
3	Run	Reverse
4	Not Used | Sys Ready	Run
5	Setup Lockout	Item Complete
6	Manual Shear	Forward
7	Manual Punch	Print Flush
8	Tail Out (Inverted Sheet Detect)	Print Trigger
9	Press 0 Complete (Shear)	Press 0 Down (Shear)
10	Press 1 Complete	Press 1 Down
11	Press 2 Complete	Press 2 Down | Press X Up/Boost
12	Not Used	Press X Up/Boost
13	Not Used	Press X Up/Boost
14	Not Used	Press X Up/Boost
15	Not Used	Uncut Length[8]
16	Not Used	Short Part[8]
17	Not Used	Very Shhort Part[8]
18	Not Used	Not Used
19	Not Used	Not Used
20	Not Used	Not Used
21	Manual Punch 2	Not Used
22	Manual Stacker	Stacker
23	Weld Detector	Scanner Verify
24	Asynchronous Print Detect	Horn
33	Not Used	Short Part
34	Not Used	Very Short Part
44	Not Used	Uncut Length
45	Line Encoder 2	Not Used
49	PLC Remote	PLC Remote
50	Test Part	Dump Trigger
51	Scrap	Scrap Dump
52	Slow Run	Mister

Notes:

1. These IO definitions apply to the standard XL2OL Version 2 software when the Dietrich IO bit code option is set.

2. Each model will have enough Press Down outputs available for the maximum number of presses allowed for that model. Press Up/Boost outputs will begin at the next available output following last Press Down output.

3. The maximum number of presses (including the shear press) allowed for each model is as follows:

Model	Max. Presses
XL200D	2
XL200DL (Alternating Punch)	3

4. Boost outputs are only available on model XL200D and the XL200DL and take the place of the Press Up outputs when selected.

5. Models XL202, XL206, XL212 are not available when the Dietrich I/O option is enabled.
6. The “Hole Detect” option is not available when the Dietrich IO option is enabled.
7. Manual Punch 2 input is only available when the Alternate Punch option is enabled.
8. Only available when the ‘U’, Hump and Brake, is enabled.

XL255D Dietrich Open Loop Inputs & Outputs Ver 2.00 & Higher

IO#	Inputs	Outputs
1	Jog Forward	Fast
2	Jog Reverse	Slow
3	Run	Reverse
4	Not Used | Sys Ready	Run
5	Setup Lockout	Print Flush
6	Manual Shear	Print Trigger
7	Manual Punch 1	Press 0 Down (Shear)
8	Tail Out (Inverted Sheet Detect)	Press 1 Down
9	Press 0 Complete (Shear)	Press 2 Down
10	Press 1 Complete	Press 3 Down
11	Press 2 Complete	Press 4 Down
12	Press 3 Complete	Press 5 Down
13	Press 4 Complete	Press 6 Down
14	Press 5 Complete	Press 7 Down
15	Press 6 Complete	Press 0 Up/Boost (Shear)
16	Press 7 Complete	Press 1 Up/Boost
17	Manual Punch 2	Press 2 Up/Boost
18	Manual Punch 3	Press 3 Up/Boost
19	Manual Punch 4	Press 4 Up/Boost
20	Manual Punch 5	Press 5 Up/Boost
21	Manual Punch 6	Press 6 Up/Boost
22	Manual Punch 7	Press 7 Up/Boost
23	Weld Detector[4]	Scanner Verify
24	Asynchronous Print Detect	Horn
33	Not Used	Short Part
34	Not Used	Very Short Part
44	Not Used	Uncut Length
45	Line Encoder 2	Not Used
49	PLC Remote	PLC Remote
50	Test Part	Dump Trigger
51	Scrap	Scrap Dump
52	Slow Run	Mister

Notes:

1. The model XL255D is only available when the Dietrich IO option is set.

2. Boost outputs take the place of press UP outputs when enabled by the appropriate dipswitches.

3. Manual Punch and Press Complete are only available when punches are enabled by the appropriate dipswitches.

4. When the Welded Coils feature is enabled.

XL266 Standard Open Loop Inputs & Outputs Ver 2.00 & Higher

IO#	Inputs	Outputs
1	Jog Forward	Fast
2	Jog Reverse	Slow
3	Run	Reverse
4	Manual Punch (Tool Select 2) | Sys Ready	Run
5	Setup Lockout	Item Complete
6	Manual Shear	Forward
7	Manual Punch (Tool Select 1)	Print Flush
8	Tail Out (Inverted Sheet Detect)	Print Trigger
9	Press 0 Complete (Shear)	Press 0 Down (Shear)
10	Press 1 Complete	Press 1 Down
11	Press 2 Complete	Press 2 Down
12	Press 3 Complete	Press 3 Down
13	Press 4 Complete	Press 4 Down
14	Press 5 Complete | Drop Open Complete	Press 5 Down | Drop Open
15	Press 0 Up Complete	Press 0 Up (Shear)
16	Press 1 Up Complete	Press 1 Up
17	Press 2 Up Complete	Press 2 Up
18	Press 3 Up Complete	Press 3 Up
19	Press 4 Up Complete	Press 4 Up
20	Press 5 Up Complete | Drop Closed Complete	Press 5 Up | Drop Close
21	Asynchronous Print Detect	Not Used
22	Manual Stacker[2] | Stacker Complete[2]	Stacker
23	Stacker Complete[2] | Weld Detect[2]	Not Used
24	Hole Correction	Not Used
33	Not Used	Short Part
34	Not Used	Very Short Part
44	Not Used	Uncut Length
45	Line Encoder 2	Not Used
49	PLC Remote	PLC Remote
50	Test Part	Not Used
51	Scrap	Not Used
52	Slow Run	Mister
53	Manual Stacker[2]	Not Used

Notes:

1. Drop inputs and outputs are enabled by dip switch 4. See dip switch settings for other limitations.
2. When the Welding Coils option is enabled, Weld Detect is present on Input 23, Stacker Complete moves from Input 23 to Input 22, Manual Stacker, if MODBUS is used, is available on Input 53.

XL212-SGF Switch Settings

Switch #	OFF		ON	
1	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
2	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
3	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
4	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
5	See Below		See Below	
6	See Below		See Below	
7	See Below		See Below	
8	See Below		See Below	
9	CRT Disabled		CRT Enabled	
10	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
11	NOT USED – MUST BE OFF		NOT USED – MUST BE OFF	
12	Sys Ready Input DISABLED		Sys Ready Input ENABLED[1]	
17	Single Line Encoder		Enable Second Line Encoder[2]	
Switch 5	**Switch 6**	**Switch 7**	**Switch 8**	**Number of Presses**
OFF	OFF	OFF	OFF	1
ON	OFF	OFF	OFF	2
OFF	ON	OFF	OFF	3
ON	ON	OFF	OFF	4
OFF	OFF	ON	OFF	5
ON	OFF	ON	OFF	6
OFF	ON	ON	OFF	7
ON	ON	ON	OFF	8
OFF	OFF	OFF	ON	9
ON	OFF	OFF	ON	10
OFF	ON	OFF	ON	11
ON	ON	OFF	ON	12

Note:

1. Beginning in version 4.68.00. Enables a Sys Ready Input that must be ON before Machine operations are allowed. Note!!! The use of this input is not to be used as a substitute for external, safety rated, e-stop protection.
2. Enable Second Line Encoder on Encoder Port 2

XL212-SGF IO

IO#	Inputs	Outputs
1	Input 1	Fast
2	Input 2	Slow
3	Run	Reverse
4	Not Used | Sys Ready	Run
5	Setup Lockout	Item Complete
6	Input 6	Output 6
7	Input 7	Print Flush
8	Tail Out	Print Trigger
9	Press 0 Complete (Shear)	Press 0 Down (Shear)
10	Press 1 Complete	Press 1 Down | Gag 1
11	Press 2 Complete	Press 2 Down | Gag 2
12	Press 3 Complete	Press 3 Down | Gag 3
13	Press 4 Complete	Press 4 Down | Gag 4
14	Press 5 Complete	Press 5 Down | Gag 5
15	Press 6 Complete	Press 6 Down | Gag 6
16	Press 7 Complete	Press 7 Down | Gag 7
17	Press 8 Complete	Press 8 Down | Gag 8
18	Press 9 Complete	Press 9 Down | Gag 9
19	Press 10 Complete	Press 10 Down | Gag 10
20	Press 11 Complete	Press 11 Down | Gag 11
21	Asynchronous Print Detect	Output 21
22	Future Hole Detect Functionality	Output 22
23	Weld Detect	Output 23
24	Part Detect	Output 24
33	Jog Forward	Short Part
34	Jog Reverse	Very Short Part
35	Manual Part Reference	Part Referencing
36	Manual Shear	Output 36
37	Manual Punch	Output 37
38	Input 38	Output 38
39	Input 39	Output 39
40	Input 40	Output 40
41	Input 41	Output 41
42	Punch Verify Mode	Output 42
43	Punch Skip	Velocity Stopped
44	Punch Allow	Uncut Length
45	Line Encoder 2	Output 45
46	Input 46	Output 46
47	Input 47	Punch Verify Mode
48	Input 48	Output 48
49	PLC Remote	PLC Remote
50	Test Part	Not Used
51	Scrap	Not Used
52	Slow Run	Mister

Model XL270 (Tile Machine Controller)
I/O Definitions

IO#	Inputs	Outputs
1	Jog Forward	Fast
2	Jog Reverse	Slow
3	Run	Reverse
4	Manual Punch 2[1]	Run
5	Setup Lockout	Item Complete
6	Manual Shear	Forward
7	Manual Punch 1	*(Future Print Flush)*
8	Tail Out	*(Future Print Trigger)*
9	Press 0 Complete, Shear	Press 0 Down (Shear)
10	Press 1 Complete	Forming Press 1 Down
11	Press 2 Complete[1]	Forming Press 2 Down[1]
12	Press 3 Complete, Entry Shear	Press 3 Down (Entry Shear)
13	Press 1 Forming Tool Complete[2] | Press 4 Complete (KMF)[3]	Press 4 Down (KMF) [3]
14	Press 5 Complete (KMF) [3]	Press 5 Down (KMF) [3]
15	Press 0 Up Complete	Press 0 Up (Shear)
16	Press 1 Up Complete	Forming Press 1 Up
17	Press 2 Up Complete[1]	Forming Press 2 Up[1]
18	Press 3 Up Complete	Press 3 Up (Entry Shear)
19	Not Used	Not Used
20	Not Used | Sys Ready	Press 1 Forming Tool
21	*(Future Asynchronous Print Detect)*	Press 2 Forming Tool[1]
22	Manual Stacker[6] | Stacker Complete[6]	Stacker
23	Stacker Complete | Weld Detect[6]	Not Used
24	Not Used	Not Used
33	Not Used	Short Part
34	Not Used	Very Short Part
44	Not Used	Uncut Length
45	Line Encoder 2	Not Used
49	PLC Remote	PLC Remote
50	Test Part	Not Used
51	Scrap	Not Used
52	Slow Run	Mister
53	Manual Stacker[6]	Not Used

Model XL270 (Tile Machine Controller)
Switch Settings

Switch #	OFF	ON
1	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
2	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
3	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
4	Disable Twin Press Option	Enable Twin Press Option
5	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
6	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
7	See Below	See Below
8	See Below	See Below
9	CRT Disabled	CRT Enabled
10	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
11	NOT USED – MUST BE OFF	NOT USED – MUST BE OFF
12	Sys Ready Input DISABLED	Sys Ready Input ENABLED[4]
17	Single Line Encoder	Enable Second Line Encoder[5]
30	Welded Coils Disabled	Welded Coils Enabled
31	Synch Welded Coils	Reserved
Switch 7	**Switch 8**	**Machine Type**
OFF	OFF	Formia
ON	OFF	Sen Fung
OFF	ON	Reserved
ON	ON	Reserved

Notes for Model XL270 (Tile Machine Controller):

1. Inputs/Outputs only available when Twin Press Option is selected via dipswitch configuration.
2. Press 1 Forming Tool Only available when configured as a Sen Fung Machine.
3. The Press 4 and 5 inputs and outputs were added to support the KMF Felt applicator module. They are only added when the Machine is configured for a Formia tile machine. The KMF module only requires Down outputs so, to preserve the remaining outputs for other unforeseen uses, no down outputs are provided.
4. Beginning in version 4.68.00. Enables a Sys Ready Input that must be ON before Machine operations are allowed. Note!!! The use of this input is not to be used as a substitute for external, safety rated, e-stop protection.
5. Enable Second Line Encoder on Encoder Port 2
6. When the Welding Coils option is enabled, Weld Detect is present on Input 23, Stacker Complete moves from Input 23 to Input 22, Manual Stacker, if MODBUS is used, is available on Input 53.