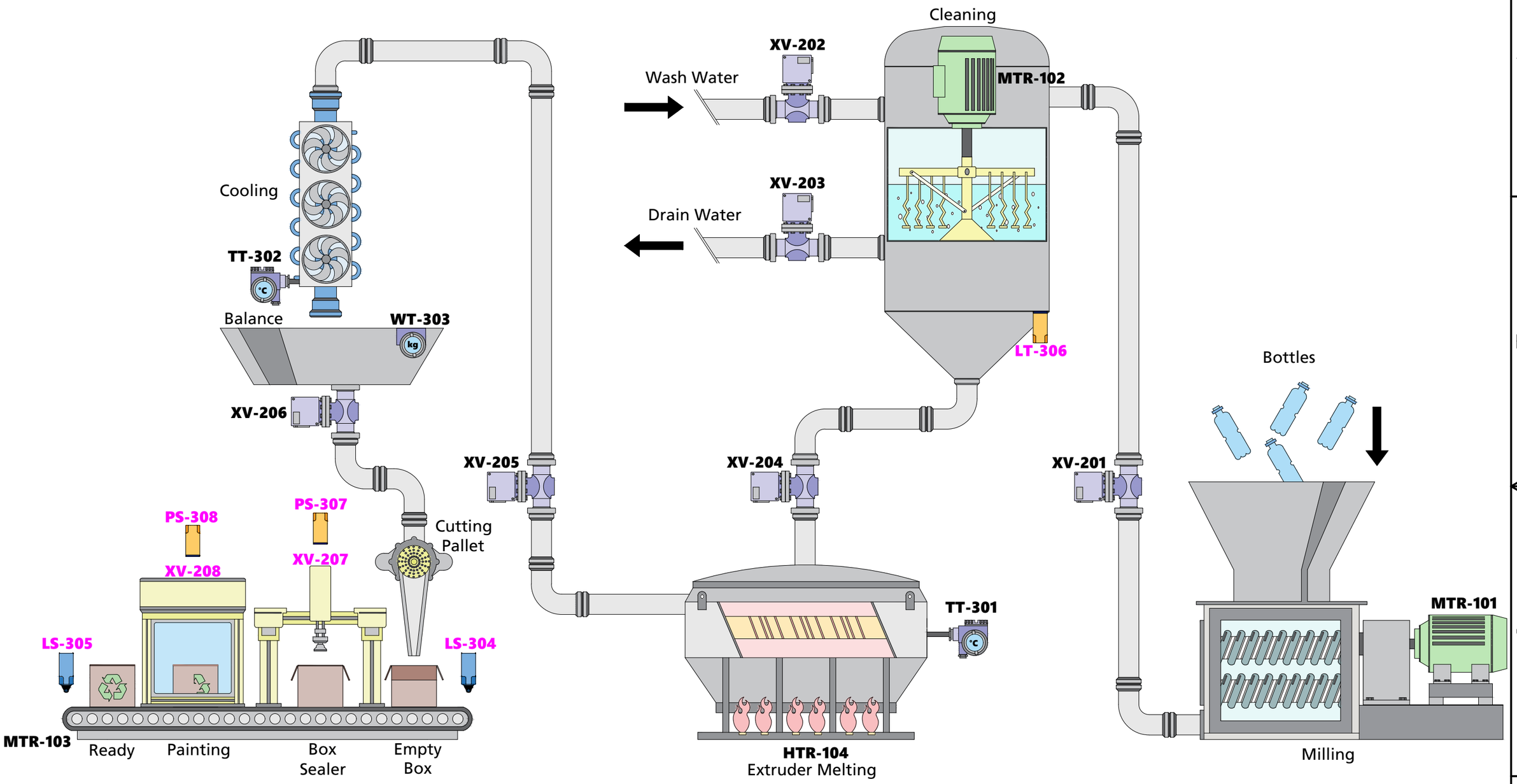
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Skill: Skill 19 Industrial Control				
Design by: Rodolfo Neves, SCM				
Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 01 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Module A – Main Project – Part B				Projection:
Extra Info 1		Extra Info 2		

Recycling of PET Bottles



Legend:

MTR-101: Milling Motor
MTR-102: Mixing/Cleaning Motor
MTR-103: Belt Motor
HTR-104: Heater
XV-201: Discharge Valve
XV-202: Wash Water Inlet Valve
XV-203: Drain Valve Outlet Valve
XV-204: Discharge Valve
XV-205: Discharge Valve
XV-206: Discharge Valve

TT-301: Temperature Sensor Heating
TT-302: Temperature Sensor Cooling
WT-303: Balance Sensor
XV-207: Box Closing Valve
XV-208: Painting Valve
LS-304: Empty Box Position
LS-305: Ready Position
LT-306: Level Sensor
PS-307: Box Sealer Sensor Position
PS-308: Painting Sensor Position

} Part B

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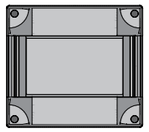
Skill: Skill 19 Industrial Control			
Design by: Rodolfo Neves, SCM			
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File Name: WSC2026_TP19_MA_mainproject_02_en			Rev: V2
Description: Synoptic – Recycling of PET Bottles – Part B			Projection:
Extra Info 1		Extra Info 2	

STATION Nº

SKILL 19 - INDUSTRIAL CONTROL

WSC

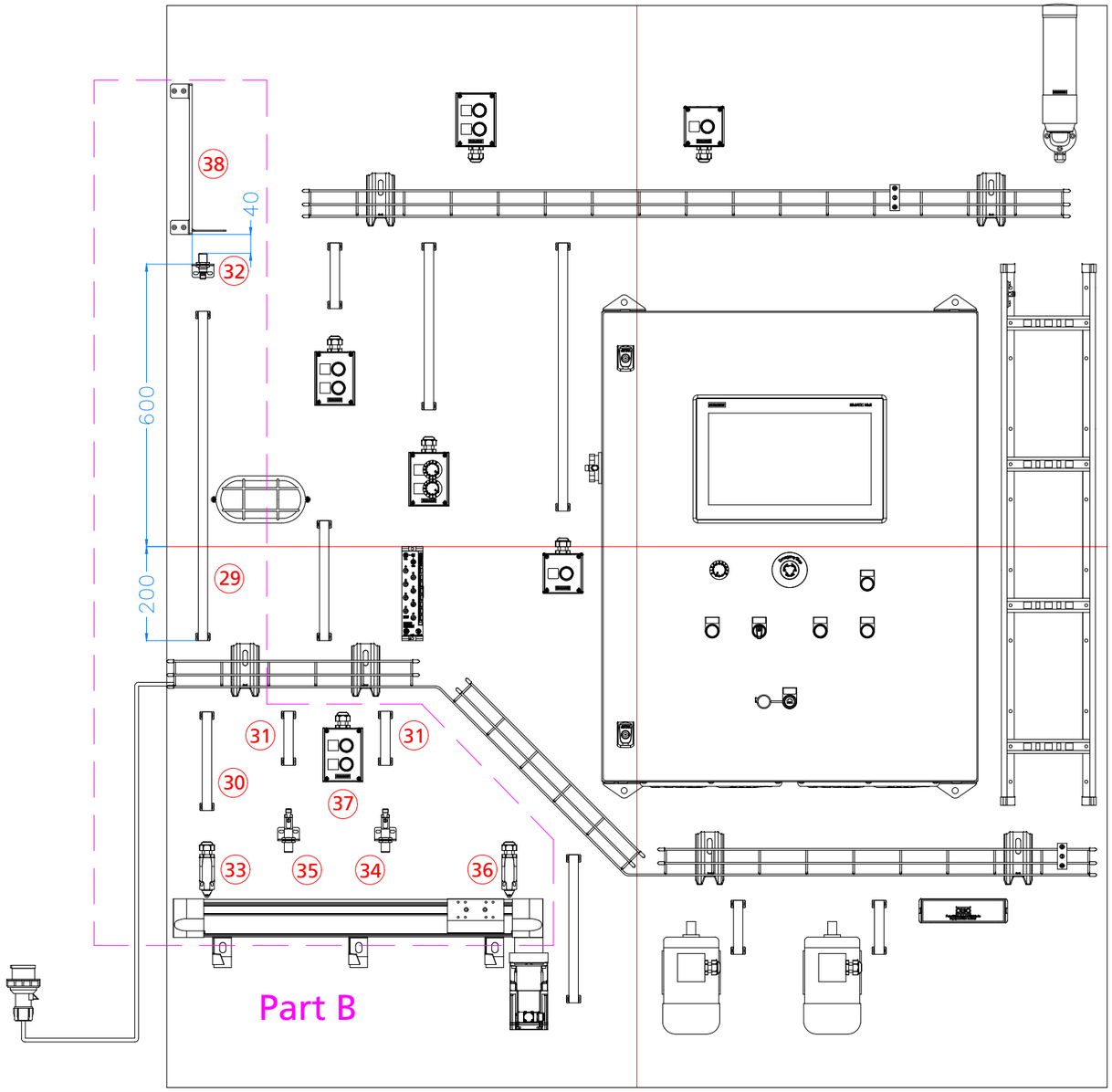
Competitor Name



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Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 03 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Project Overview – Part B				Projection:
Extra Info 1		Extra Info 2		

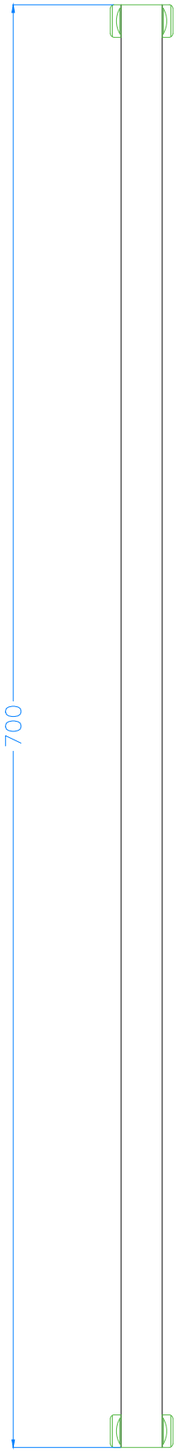


29: PVC Conduit diam. 20 mm - 700mm
30: PVC Conduit diam. 20 mm - 210mm
31: PVC Conduit diam. 20 mm - 115mm
32: (-LT306) Ultrasonic Level Sensor
33: (-LS305) Position Switch Ready
34: (-PS307) Capacitive Position Sensor Box Sealer
35: (-PS308) Capacitive Position Sensor Painting
36: (-LS304) Position Switch Empty Box
37: (-XV207, -XV208) Enclosure 2 control point
38: Level simulator

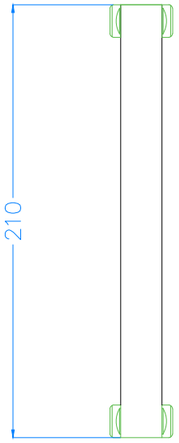
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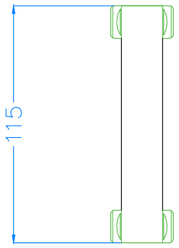
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Design by: Rodolfo Neves, SCM				
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File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Project Layout with Measurements – Part B				Projection:
Extra Info 1		Extra Info 2		



29



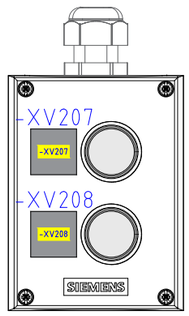
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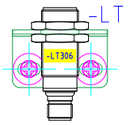
31

-W31
-W32

37

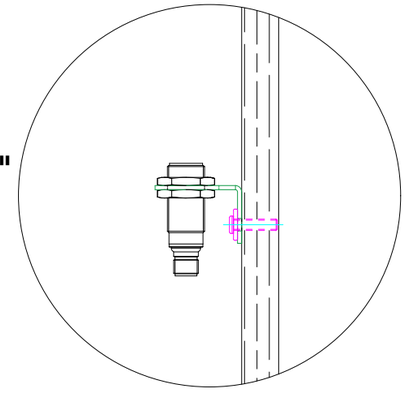


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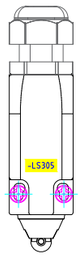
"O"

Detail "O"



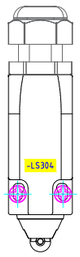
-W30
-LS305

33



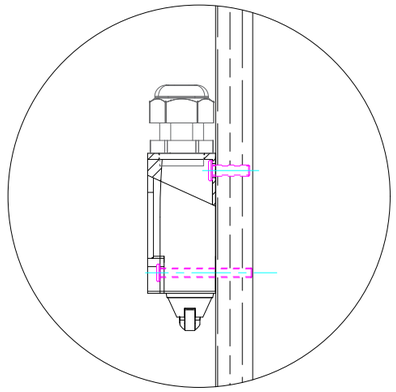
-W29
-LS304

36

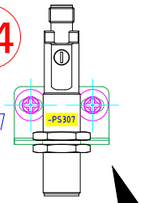


"P"

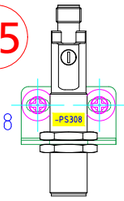
Detail "P"



-W26
34
-PS307

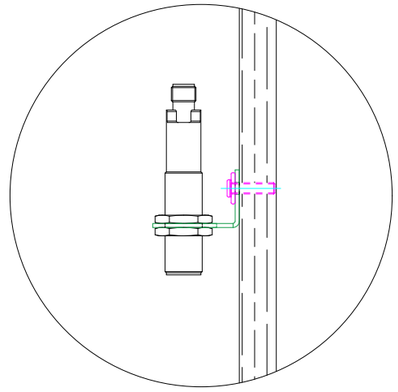


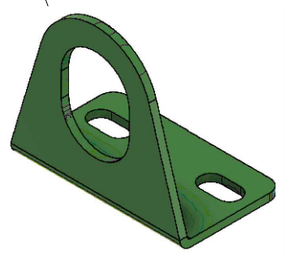
-W27
35
-PS308



"Q"

Detail "Q"





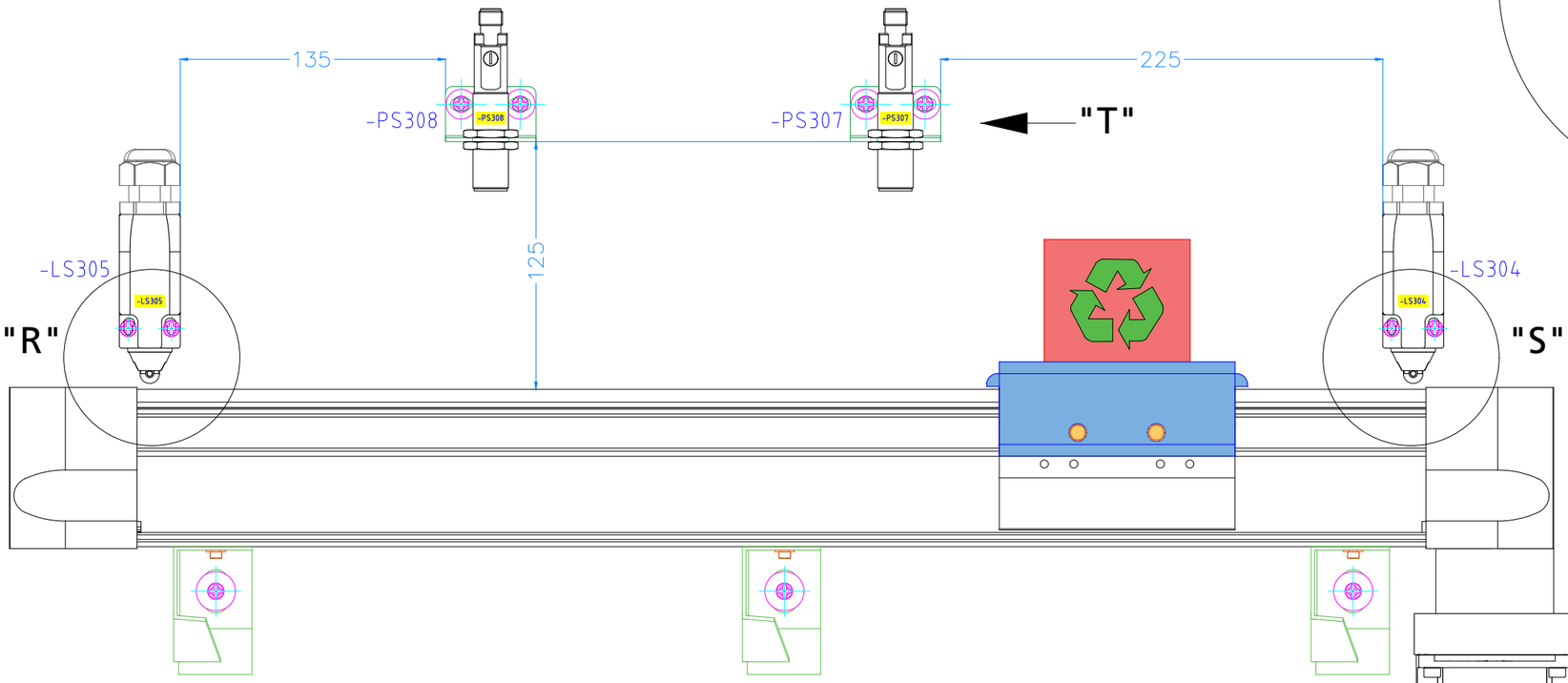
Sensor Mounting Base

29: PVC Conduit diam. 20 mm - 700mm
30: PVC Conduit diam. 20 mm - 210mm
31: PVC Conduit diam. 20 mm - 115mm
32: (-LT306) Ultrasonic Level Sensor
33: (-LS305) Position Switch Ready
34: (-PS307) Capacitive Position Sensor Box Sealer
35: (-PS308) Capacitive Position Sensor Painting
36: (-LS304) Position Switch Empty Box
37: (-XV207, -XV208) Enclosure 2 control point

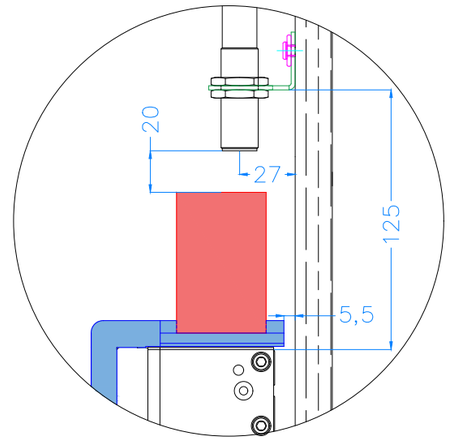
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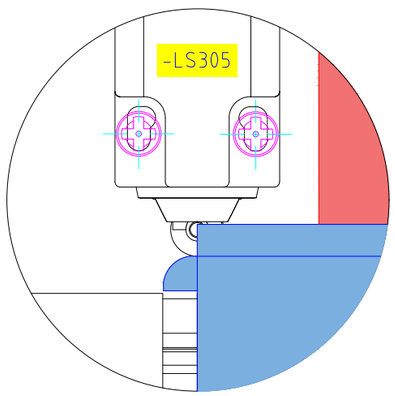
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Skill: Skill 19 Industrial Control				
Design by: Rodolfo Neves, SCM				
Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 05 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Device Installation Details – Part B				Projection:
Extra Info 1		Extra Info 2		

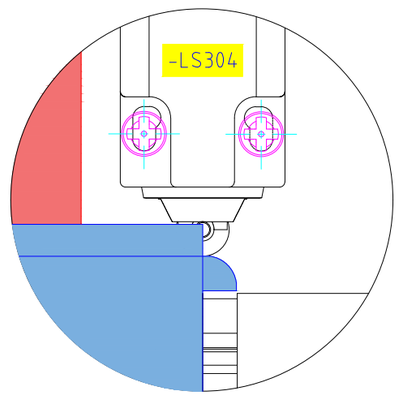


Detail "T"





Detail "R"
LS305 position for actuation by axis simulator



Detail "S"
LS304 position for actuation by axis simulator

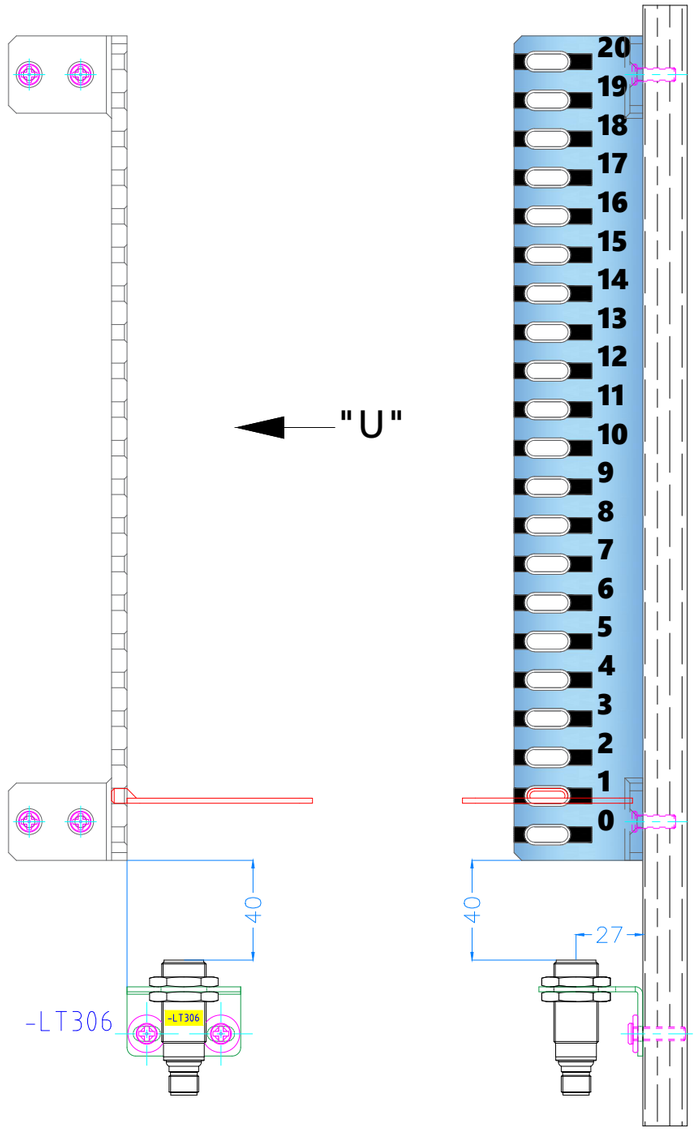
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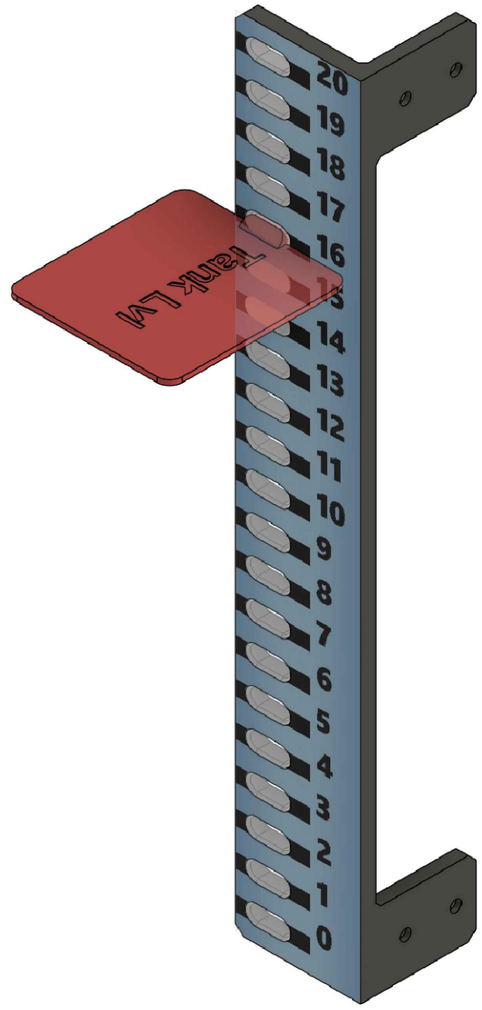
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Design by: Rodolfo Neves, SCM				
Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 06 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Toothed Belt Axis Details – Part B				Projection:
Extra Info 1		Extra Info 2		

Detail "U"



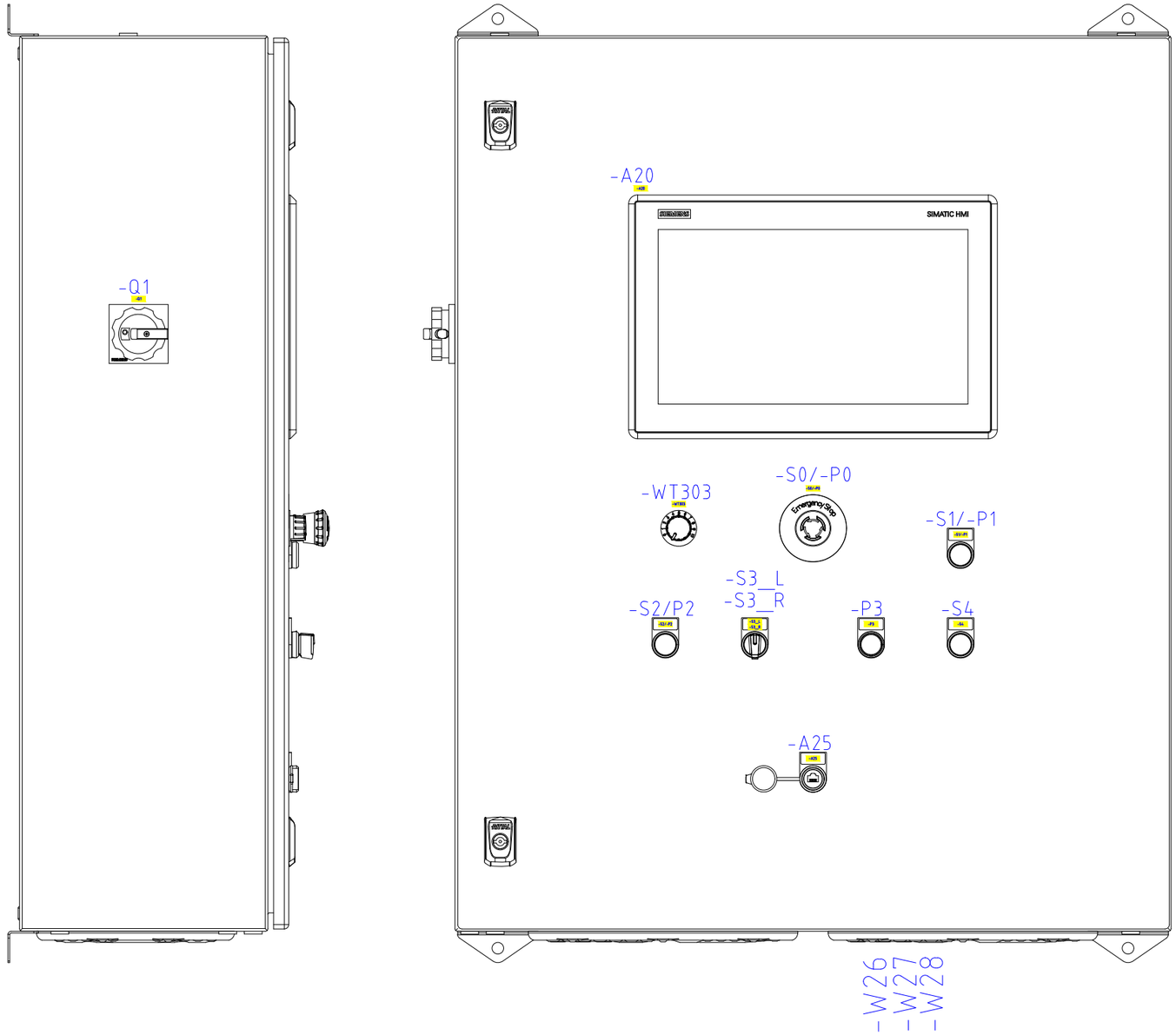


Level Simulator

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Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 07 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Details Level Sensor – Part B				Projection:
Extra Info 1		Extra Info 2		

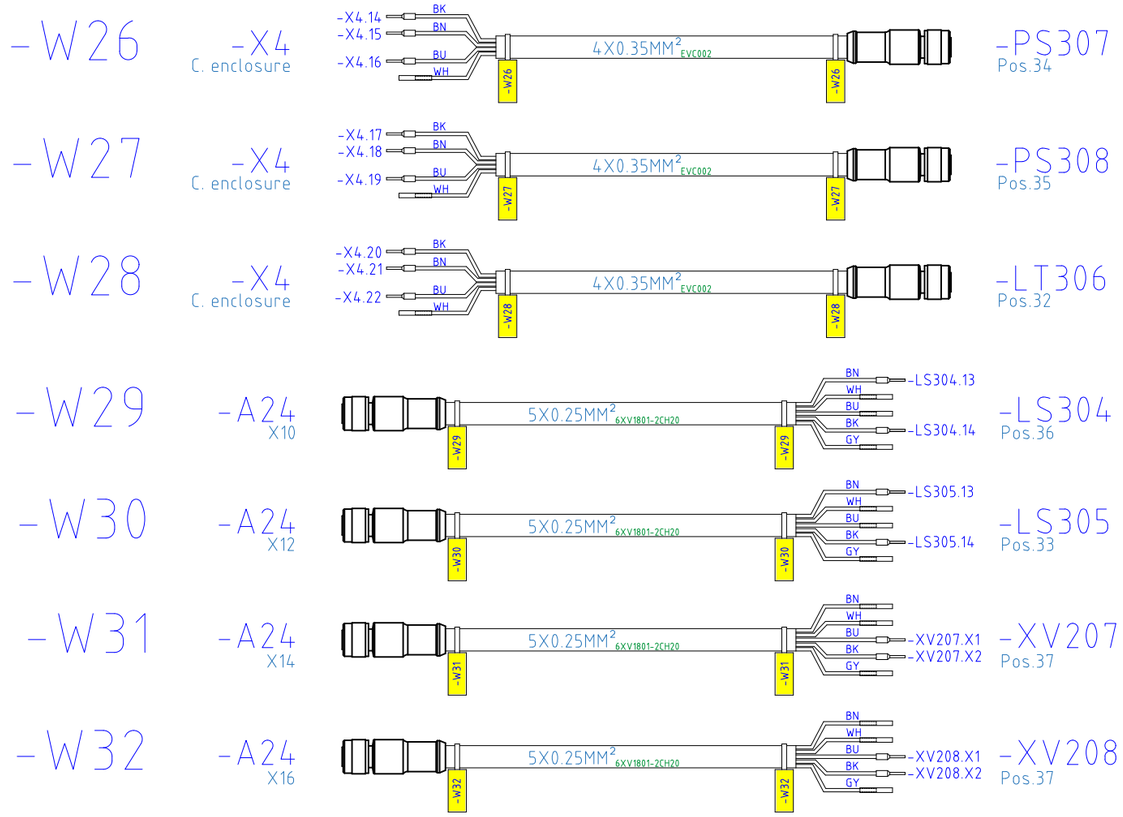


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Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 08 of 11	
File Name: WSC2026_TP19_MA_mainproject_02_en				Rev: V2
Description: Compact Enclosure Cables and Labels – Part B				Projection:
Extra Info 1		Extra Info 2		



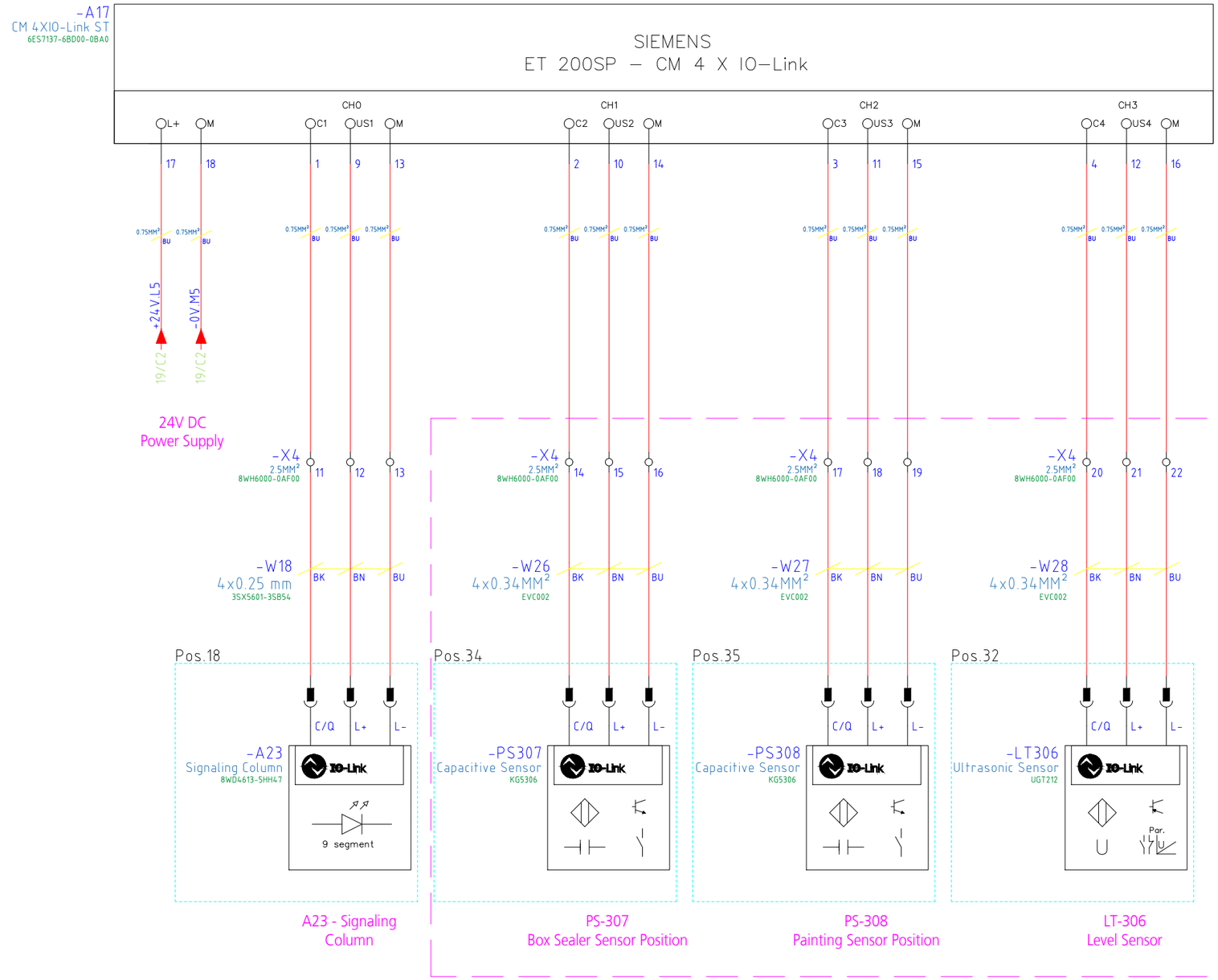
Colors Legend			
BN	Brown	YE	Yellow
WH	White	PK	Pink
BU	Blue	OG	Orange
BK	Black	GN/YE	Green/Yellow
GY	Gray		
GN	Green		

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Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 09 of 11
File Name: WSC2026_TP19_MA_mainproject_02_en			Rev: V2
Description: Cable Management – Part B			Projection:
Extra Info 1		Extra Info 2	



Colors Legend			
BN	Brown	YE	Yellow
WH	White	PK	Pink
BU	Blue	OG	Orange
BK	Black	GN/YE	Green/Yellow
GY	Gray		
GN	Green		

IO-Link	IO-Link		
3 4 / 2 1	1	BN	L+
	2	WH	(optional)
	3	BU	L-
	4	BK	C/Q

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Design by: Rodolfo Neves, SCM			
Last Update: 27.07.2026	Scale: N/A	Paper: A3	Page: 10 of 11
File Name: WSC2026_TP19_MA_mainproject_02_en			Rev: V2
Description: A17: IO Link Module – Part B			Projection:
Extra Info 1		Extra Info 2	

Pos.17

-A24
DIQ 16x24VDC/2A, M12-L
6ES7143-6BH00-0BB0

SIEMENS
ET 200ECO – DIQ 16x24VDC

X80	X10	X11	X12	X13	X14	X15	X16	X17
1L+ 1M 2L+ 2M	1US DIQ0	1US DIQ1	1US DIQ2	1US DIQ3	2M1 DIQ4	2M1 DIQ5	2M1 DIQ6	2M1 DIQ7
1 3 4 2	1 4	1 4	1 4	1 4	3 4	3 4	3 4	3 4

PE

-W19
4x1.5 mm
6XV1801-6DH50

BN BU WH BK

+24V 3L4 — 20/C2
0V M16 — 20/C3
+24V 4L8 — 20/C4
0V M30 — 20/C4

6MM² GN/YE
-XPE1.5 — 18/C6

24V DC Power Supply

-W29
5x0.25 mm
6XV1801-2CH20
BN BK

-W30
5x0.25 mm
6XV1801-2CH20
BN BK

-W31
5x0.25 mm
6XV1801-2CH20
BU BK

-W32
5x0.25 mm
6XV1801-2CH20
BU BK

Pos.36

-LS304
3SE5232-0FD03
13 14

LS-304 - Empty Box Position

Pos.33

-LS305
3LD2003-1TL53
13 14

LS-305 - Ready Position

Pos.37

-XV207
24Vdc/White
3SU1401-2BB60-3AA0
X1 X2

LS-304 - Empty Box Position

-XV208
24Vdc/White
3SU1401-2BB60-3AA0
X1 X2

XV-207 - Box Closing Valve

XV-208 - Painting Valve

Part B

Colors Legend			
BN	Brown	YE	Yellow
WH	White	PK	Pink
BU	Blue	OG	Orange
BK	Black	GN/YE	Green/Yellow
GY	Gray		
GN	Green		

SIEMENS Power Supply - ET 200eco

1	BN	1L+(+24V)
2	WH	2M (0V
3	BU	1M (0V)
4	BK	1L+(+24V)

SIEMENS DIQ - ET 200eco

1	BN	+24V
2	WH	Not used
3	BU	1M
4	BK	signal DIQ
5	GY	FE

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Last Update: 27.07.2026 | Scale: N/A | Paper: A3 | Page: 11 of 11
File Name: WSC2026_TP19_MA_mainproject_02_en | Rev: V2
Description: A23: External Digital Input and Output Module – Part B | Projection:
Extra Info 1 | Extra Info 2