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Product Liability

The supplier's product liability is only valid if no alterations, additions etc. have been made to the equipment without the supplier's express permission. Use only genuine parts.



Produkthaftung

Damit die Produkthaftung des Lieferanten ihre Gültigkeit behält, dürfen ohne ausdrückliche Genehmigung des Lieferanten keine Änderungen, Ergänzungen o. Ä. an der Ausrüstung vorgenommen werden. Verwenden Sie nur Originalteile.



Produktansvar

För att en leverantörs produktansvar skall gälla får ändringar, kompletteringar och liknande ej göras i utrustningen utan leverantörens godkännande. Originalreservdelar skall alltid användas.



Ответственность поставщика

Для сохранения ответственности нельзя вводить в оборудование изменения, дополнения и т.п. без разрешения поставщика. Пользуйтесь только оригинальными запасными частями, выпущенным изготовителем бензоколонок.

Caution

To prevent damage that might result in electric shock or fire, disconnect the main power prior to any work.

Vorsicht

Um Beschädigungen zu vermeiden, die zu einem elektrischen Schlag oder Feuer führen können, unterbrechen Sie vor jeder Arbeit die Stromzufuhr.

Varning

Gör pumpen/enheten strömlös innan Du gör ingrepp i den. I annat fall föreligger risk för skada.

Осторожно

Во избежание поражения электрическим током или пожара отключайте напряжение питания перед началом любых работ.

Warning

Never run a leaking pump! Be careful with the environment and mind the skidding risk; take care of leaking fuel immediately.

Warnung

Lassen Sie nie eine undichte Zapfsäule laufen! Seien Sie umweltbewusst und denken Sie an die Rutschgefahr; beseitigen Sie austretenden Kraftstoff umgehend.

Varning

Använd aldrig en läckande pump. Tänk på miljön och halkrisken, sanera utläckt drivmedel snarast.

Предупреждение

Не пользуйтесь колонкой при наличии утечки топлива! Охраняйте окружающую среду, помните об опасности скольжения: в случае утечки топлива на дорожное покрытие возле колонки, примите меры немедленно.

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1 Service and maintenance

See also the "Users Manual". (list on page 83)

**WARNING: Contains
intrinsically safe equipment**

1.1 Separation of power supply

Separation is done by removing the main fuse of the pump on the station.


WARNING! To prevent damage which may result in electric shock or fire, disconnect the main power prior to any work.
CAUTION! Unauthorised personnel may not execute service and maintenance. This may cause personal injury or property damage.
CAUTION! Avoid the heat element of the electronics head, risk of skin burn.


WARNING! Mind the rotating V-belt when the cover of the hydraulic unit is removed! (suction pump)
WARNING! The driving belt may be replaced only by original belt from Dresser Wayne, otherwise there is a risk of explosion.
WARNING! Use your protective equipment. (Protective mask, gloves etc.)

1.2 Electrostatic discharge (ESD)

Before service/maintenance of a pump discharging must be done. This is done when you open the covers of the pump with a key.

If an extensive repair work is to be done, discharge should be done regularly by touching the key.


WARNING! The key must have direct contact with the skin.

NOTE! Avoid direct contact with electronic parts of the pump.

2 Product History

2.1 GS phase I

The first HH model released in 2002.

Spare parts: 461293

Spare parts VR module: 461302

Spare parts hydraulic module (GHM): 461259



2.2 GS phase II

LHR was introduced and HH was changed to have the same hydraulic cabinet as LHR. Also LPG, B2B and SCR Dispenser was developed

Spare parts: 461362

2.3 GS phase III

H-style was introduced and changed the complete barrier solution for the GS family

Spare parts LHR/HH: WM011948

Spare parts H: WM011950

Spare parts, electronic head: WM011946

Spare parts, LPG: WM011949

Spare parts, SCR (ADBlue): WM011947

Spare parts, hydraulic unit: WM011952

Spare parts, VR module: WM011951



2.4 GS phase IV

Change of framework, fuel tube dimension and material, vapour tube and coupling material. GS Flexi was introduced.

Unique spare parts, H, LHR, HH: WM023808

(See also phase III spare part lists)

Unique Flexi spare parts: WM022339

2.5 GS phase V

A consolidation of HH and LHR to only offer one height of the hose handling module. The exterior design got a facelift to improve usability, quality appearance, fit & finish and to get a robust look. Framework and interior design have been simplified to decrease assembly time and to improve serviceability.

Spare parts: WM029611 (this document)

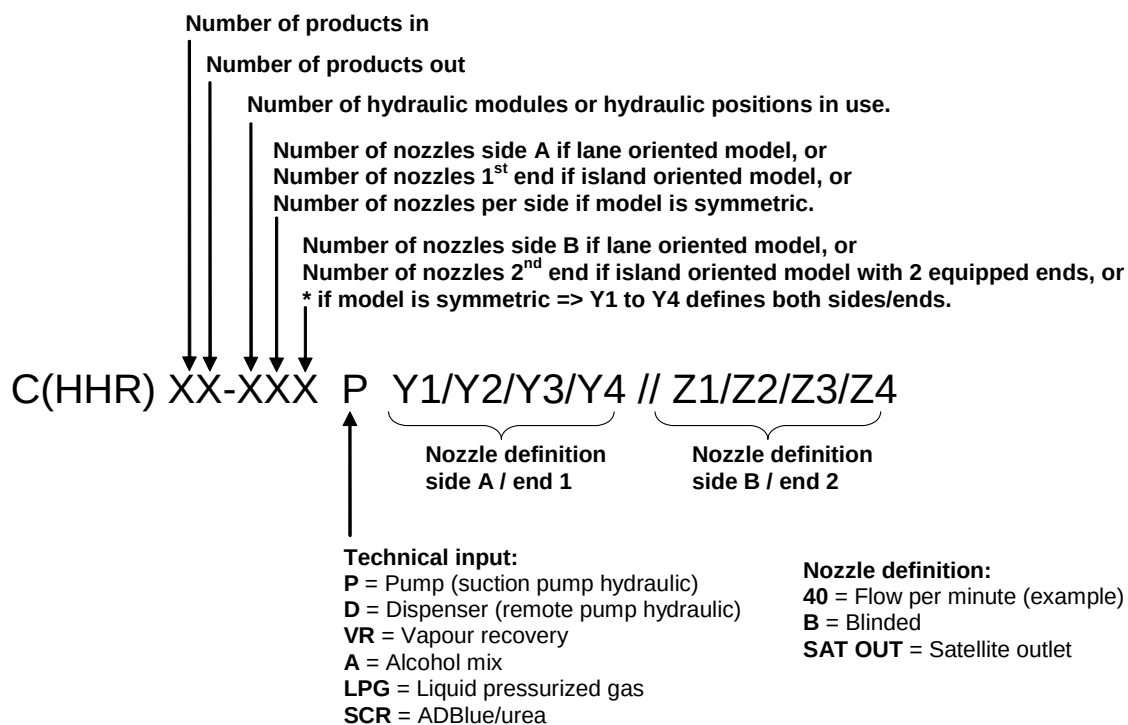


3 Models



Global Star V HHR (GS V HHR)
(High Hose Retraction)

3.1 What does the denomination of the pump indicate



4 Contents

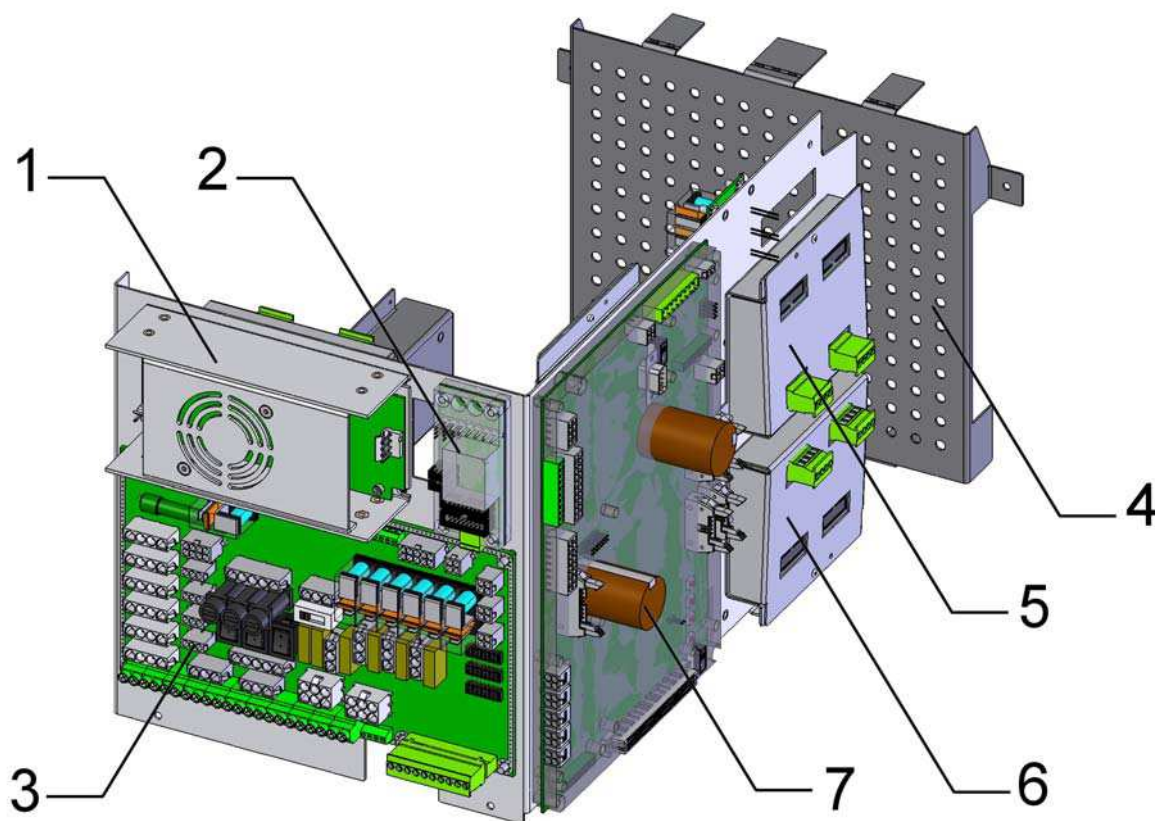
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Contents - alphabetical order, see page 114

Connection Instruction and Installation instructions, see the User's Manual or the ftp-server. (list on page 83)

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5 Electronic head

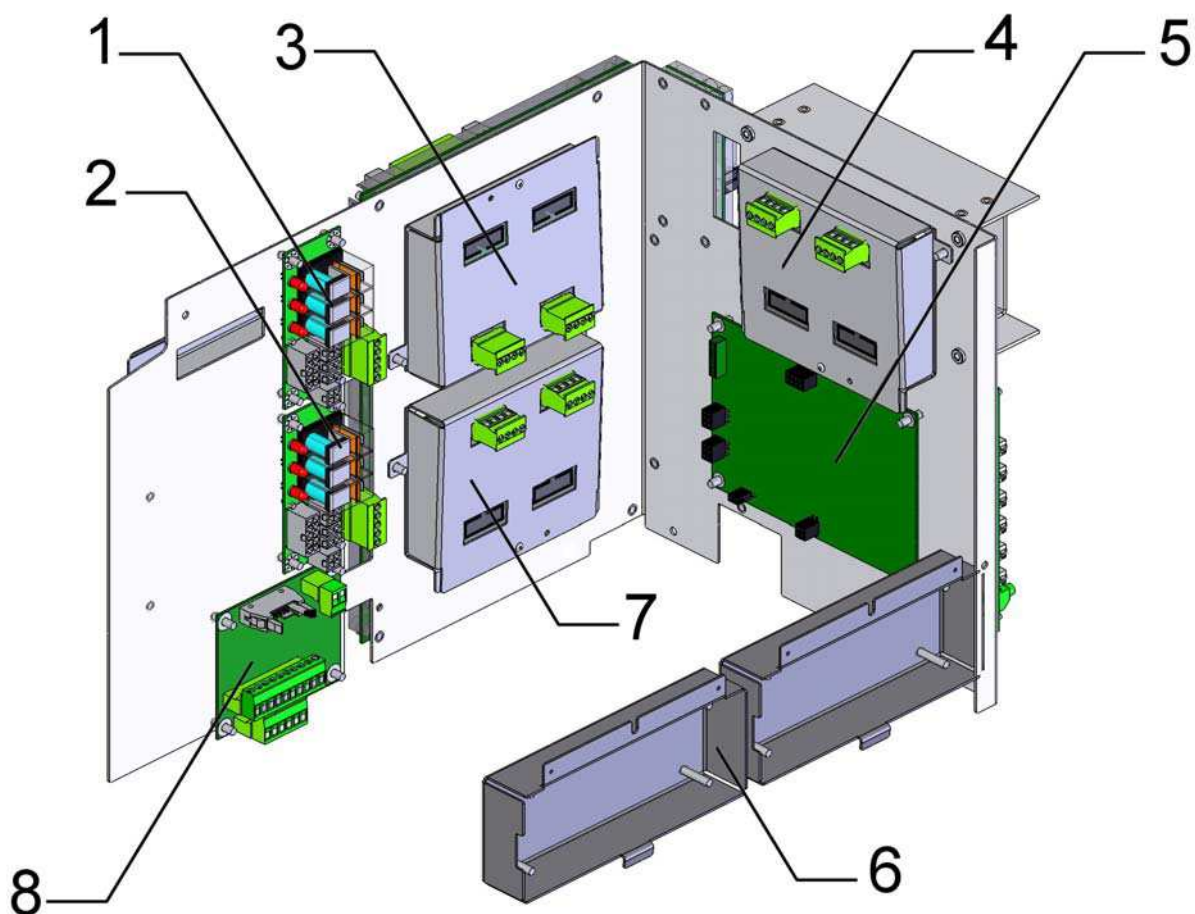


Cables and wiring diagram, see page 84.

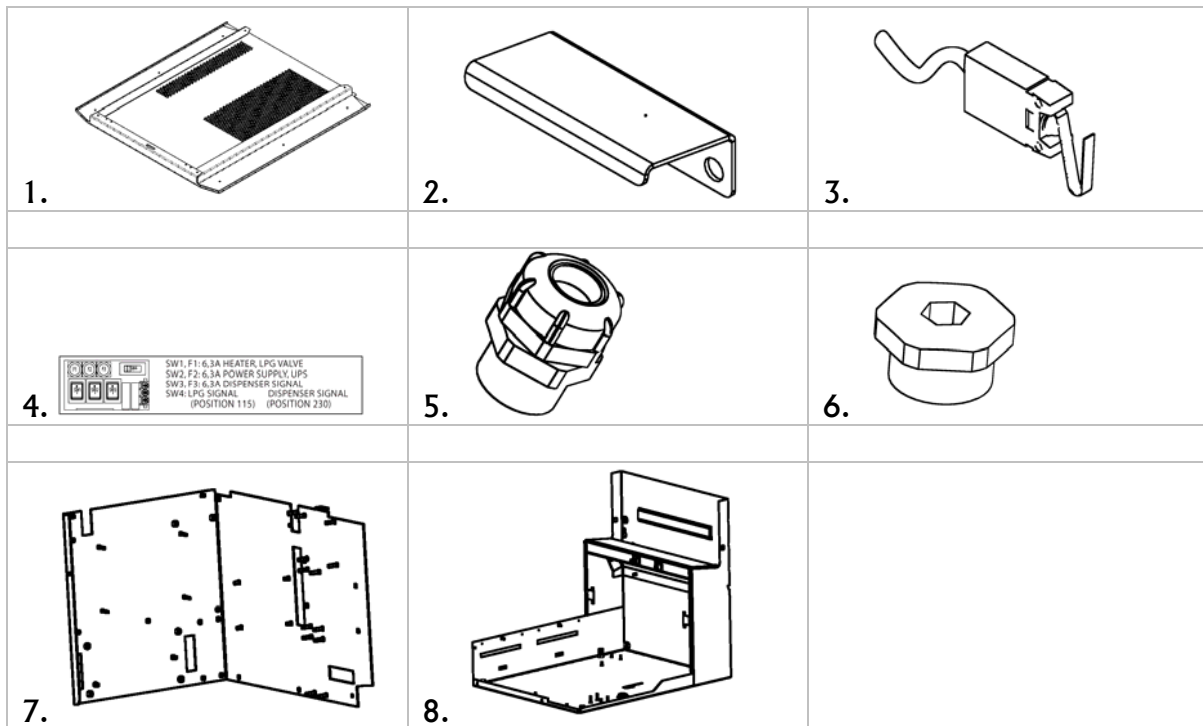
Connection Instruction and Installation instructions, see User's Manual. (list on page 83)

	Part number	Description
1	WM027313-0001	Power supply 24V, 150W, UL/IEC
2	WM001827	Communication board (serial board ATCL pump terminal)
3		Board power 400/230V
	WM025501-0001	Pump, suction (shown in the picture)
	WM025501-0002	Pump, suction - full
	WM025501-0003	Pump, dispenser, LPG, B2B
	WM025501-0004	Pump, dispenser, LPG, B2B - full
	WM025501-0005	Pump - full
4	WM029907-0001	Heating element, 340W
		Cover heating element
5	WM002450	Intrinsic safe barrier (ISB)
6	WM002450	Intrinsic safe barrier (ISB)
7	WM001908-0005	iGEM CPU board, IEC full with CAN
	WM001905	Board, VR Bürkert
	WM001825	Board, RS422
	WM008766	Board, IFSF
	WM004360	Board, isolated interface

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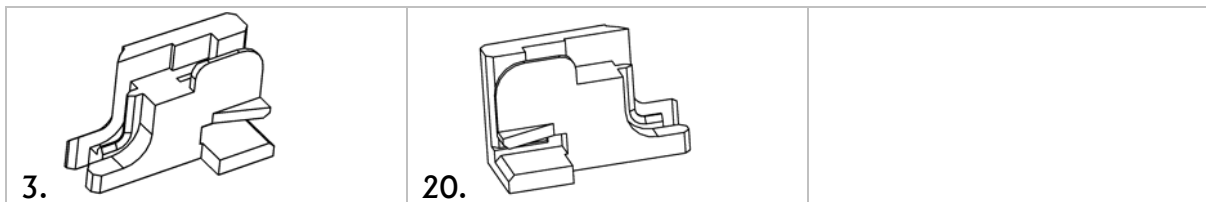
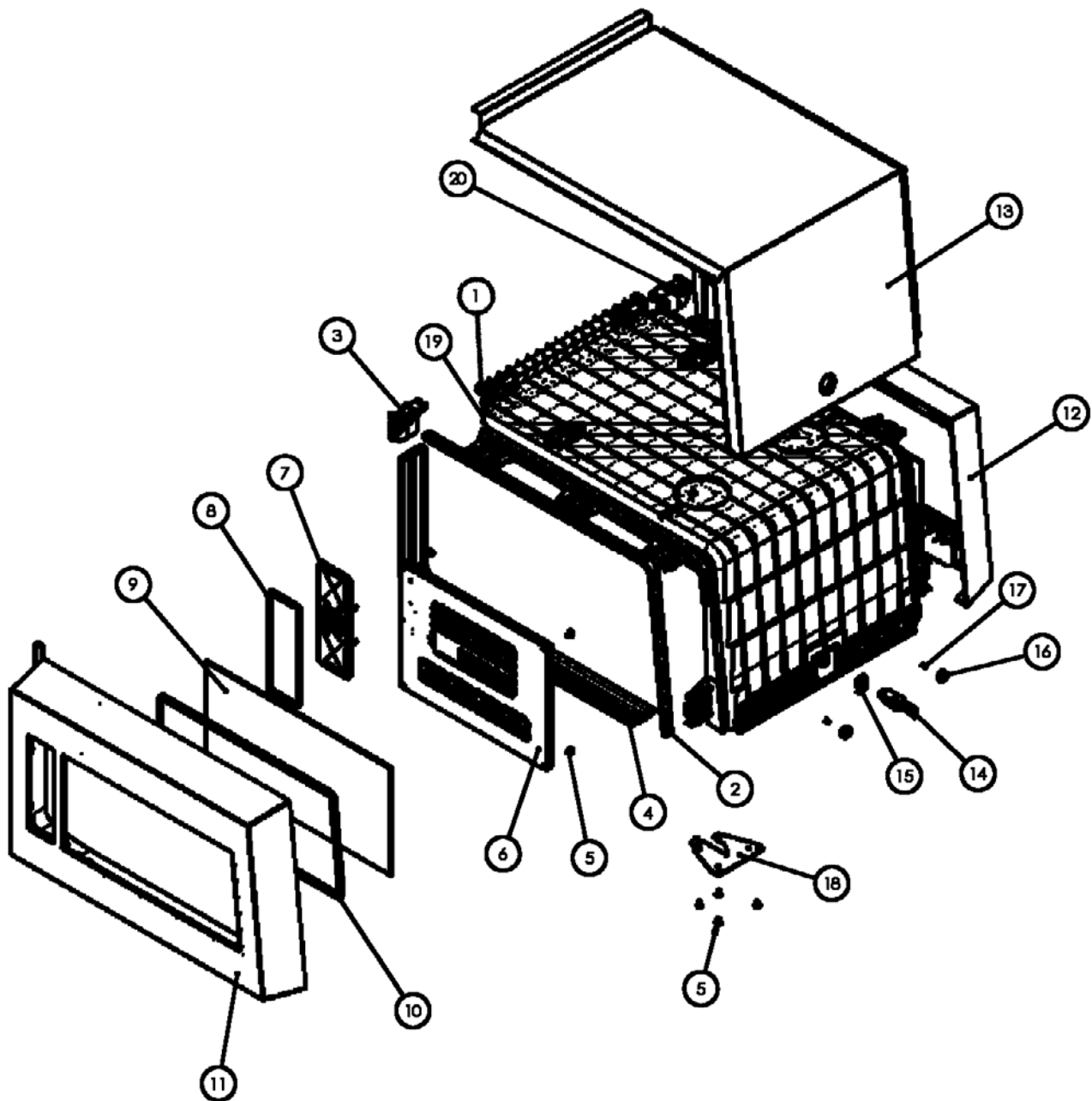
	Part number	Description
1	WM027195-0001	Board relay SAT side A
	WM027195-0002	Board for cash button/tank level
2	WM027195-0001	Board relay SAT side B
	WM027195-0002	Board for cash button/tank level
3	WM018523	Intrinsically safe barrier (ISB) and interface for vapour meter
4	WM002450	Intrinsic safe barrier (ISB) (Hydraulic no: 5)
5	WM026154	Board Cepsa voice synthesizer
6		Electromechanical totalizer
	WM002451-0001	x1
	WM002451-0002	x2
	WM002451-0003	x3
	WM002451-0004	x4
7	WM019881	Intrinsically safe barrier (ISB), (ATC)
8	WM023331-0001	Board satellite receiver (satellite with display)



	Part number	Description
1	WM028232	Cable cover
2	WM028327	Support, L-shape lock to hinge
3	WM004180	On/off switch
4	WM028359	Sticker, switch and fuse T6,3A board power
5		Grommet
	WM001540-0001	M20, Ø 8-12 mm
	WM001540-0002	M20, Ø 10-14 mm
6		Grommet, blind
	WM001591	M20
	WM003241	M25
7	WM028304	Support, L-shape for components
8	WM028306	Support, L-shape

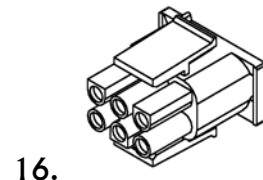
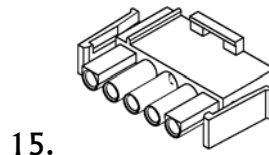
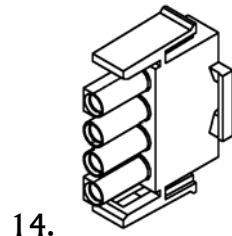
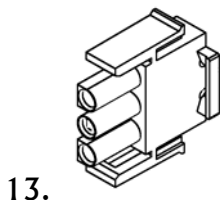
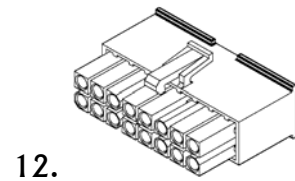
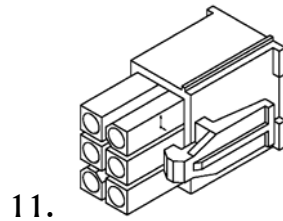
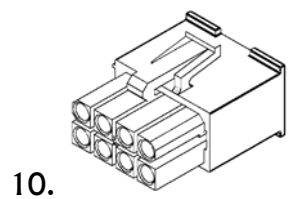
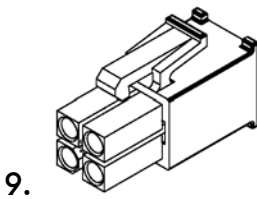
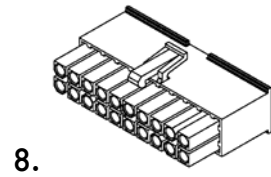
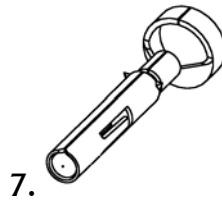
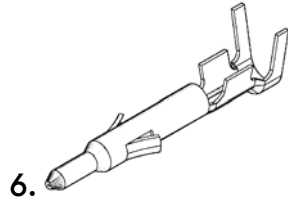
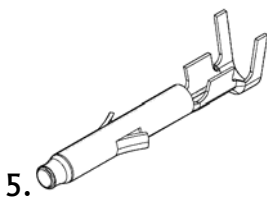
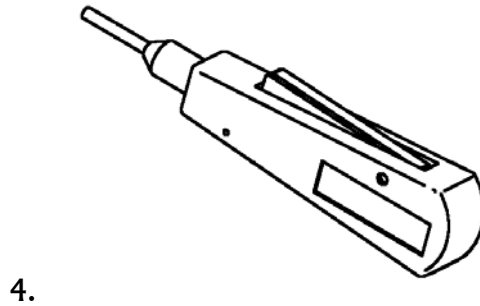
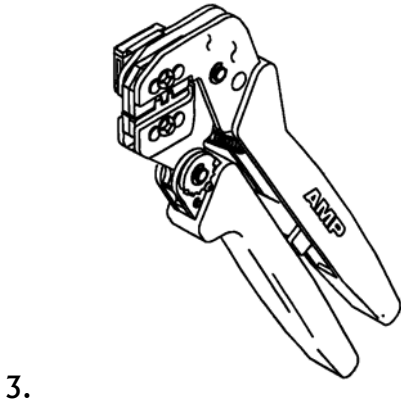
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5.1 Cover - electronic head



	Part number	Description
1	WM028160-0001	Support, L-shape midsection electronic head
2	WM028329	Gasket D-shape, l=760mm, h=15.1mm
3	WM028164-0001	Gasket t-shaped for electronic head A-side
4	WM030653	Gasket d-list, l=688, h=48
5	WM014931-0001	Self tapping screw, poz, pan head 4 x 8, for plastic
6		Display board double row
	WM023035-0001	6+6, 1 unit price display
	WM023035-0002	6+6, 2 unit price displays
	WM023035-0003	6+6, 3 unit price displays
	WM023035-0004	6+6, 4 unit price displays
	WM023035-0005	6+6, 5 unit price displays
	WM023035-0006	7+6, 1 unit price display
	WM023035-0007	7+6, 2 unit price displays
	WM023035-0008	7+6, 3 unit price displays
	WM023035-0009	7+6, 4 unit price displays
	WM023035-0010	7+6, 5 unit price displays
7	WM028162	Support, flat for keyboard and speaker
8	WM029424	Gasket for keyboard adapter
	WM027735	Key pad 12 buttons
9	WM026088	Glass 383x193x4
10		Gasket for glass front
	WM029414	96°
	WM029415	90°
11		Front panel, side A
	WM028152-0001	96°
		96°, blind
		90°
		90°, blind
12		Front panel, side B
	WM028154-0001	96°
		96°, blind
		90°
		90°, blind
13		Cover plate, top panel
	WM028340-0001	96°
		90°
14	WM001994-0001	Lock individually keyed
15	WM028233	Latch, for electronic head
16	WM003859	Magnet, ring
17	WB000631-0001	Self tapping screw, Torx, csk head, type c st2,9 x 9.5
18	WM028235	Support, flat for spring
19	WM028330	Gasket, D-list L=342mm
20	WM028164-0002	Gasket t-shaped for electronic head B-side

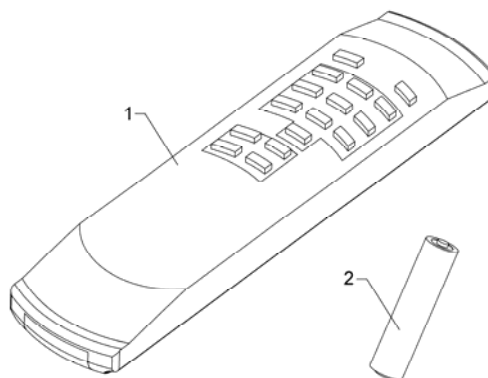
5.2 Crimp tools and connectors



	Part number	Description
1	WM002168	Crimp tool (mini umnl)
2	WM002167	Extraction tool (mini umnl)
3	WM029986	Crimper tool (umnl)
4	WM029985	Extraction tool (umnl)
5		Socket, mini umnl
	WM002694-0002	0.12-0.35 mm ² (mini umnl)
	WM002694-0001	0.30-0.89 mm ² (mini umnl)
6		Pin, mini umnl
	WM002693-0002	0.12-0.35 mm ² (mini umnl)
	WM002693-0001	0.30-0.89 mm ² (mini umnl)
		Socket, umnl
7	WM027773-0001	0.50-2.00 mm ² (umnl)
		Connector, mini umnl
8	WM003347	Cable, mini umnl 20 pin (2x10) (for valves)
9	WM002592	Cable, mini umnl 4 pin (2x2) (for power / spare outputs)
10	WM002590	Cable, mini umnl 8 pin (2x4) (for motors)
11	WM005227	Cable, mini umnl 6 pin (2x3)
12	WM002587	Cable, mini umnl 16 pin (2x8) (for nozzle switch)
		Connector, umnl
13	WM002601	Cable, umnl 3 pin (1x3)
14	WM024983	Cable, umnl 4 pin (1x4)
15	WM002602	Cable, umnl 5 pin (1x5)
16	WM025911	Cable, umnl 6 pin (2X3)

umnl - universal MATE-N-LOK

5.3 Remote control

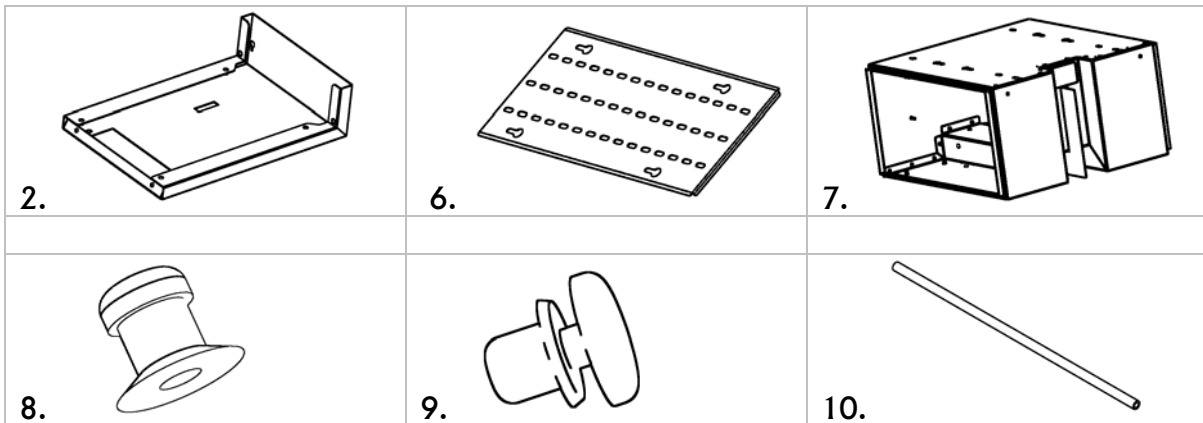
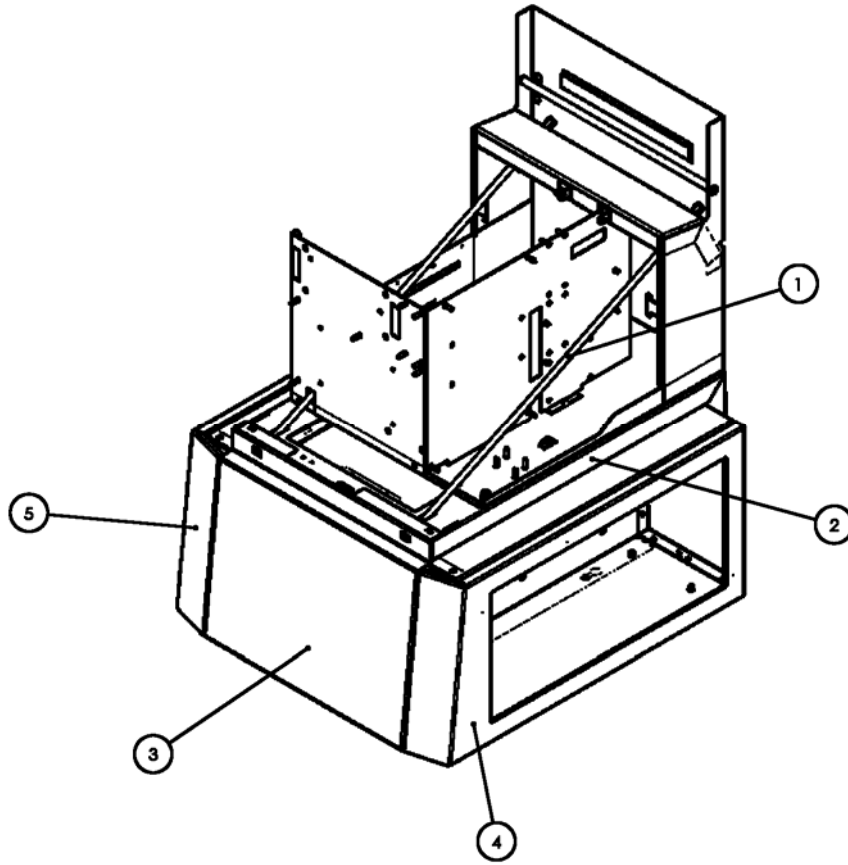


	Part number	Description
1	WM002290	Remote control with battery
2	WM002289	Battery LR03 size AAA 1.5V

WM023838 - document - "intelligent Global Electronics Module (iGEM) - Maintenance mode"

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6 Terminal head



	Part number	Description
1	WM028365	Pin for PT support
2	WM028237	Support, L-shape PT support
3		Cover plate
	WM030155	Square, H = 275
	WM026144	Square, H = 375
	WM026142	Sloping, H = 275
	WM030164	Sloping, H = 375
4		Front panel, side B
	WM030410-0001	Square, H = 275
	WM030417-0001	Square, H = 275, blind
	WM030415-0001	Square, H = 375
	WM030419-0001	Square, H = 375, blind
	WM030409-0001	Sloping, H = 275
	WM030421-0001	Sloping, H = 275, blind
	WM030413-0001	Sloping, H = 375
	WM030423-0001	Sloping, H = 375, blind
	WM030317-0001	Tokheim
	WM030319-0001	Tokheim, blind
5		Front panel, side A
	WM030410-0001	Square, H = 275
	WM030416-0001	Square, H = 275, blind
	WM030414-0001	Square, H = 375
	WM030418-0001	Square, H = 375, blind
	WM030408-0001	Sloping, H = 275
	WM030420-0001	Sloping, H = 275, blind
	WM030412-0001	Sloping, H = 375
	WM030423-0001	Sloping, H = 375, blind
	WM030316-0001	Tokheim
	WM030318-0001	Tokheim, blind
6	WM017918	Cover plate with holes, 468 x 190
7		Support, box
	WM017916	H = 275
		H = 375
8	WB000251-0001	Pop rivet, csk head, 4.0 diameter x 9, grip range 2.0 - 4.4, closed end
9	WB000339-0001	Plastic fastener rivet, thickness range 2.5 - 4.0 THK
10	WM028221	Tube for hinge

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7 Hose handling

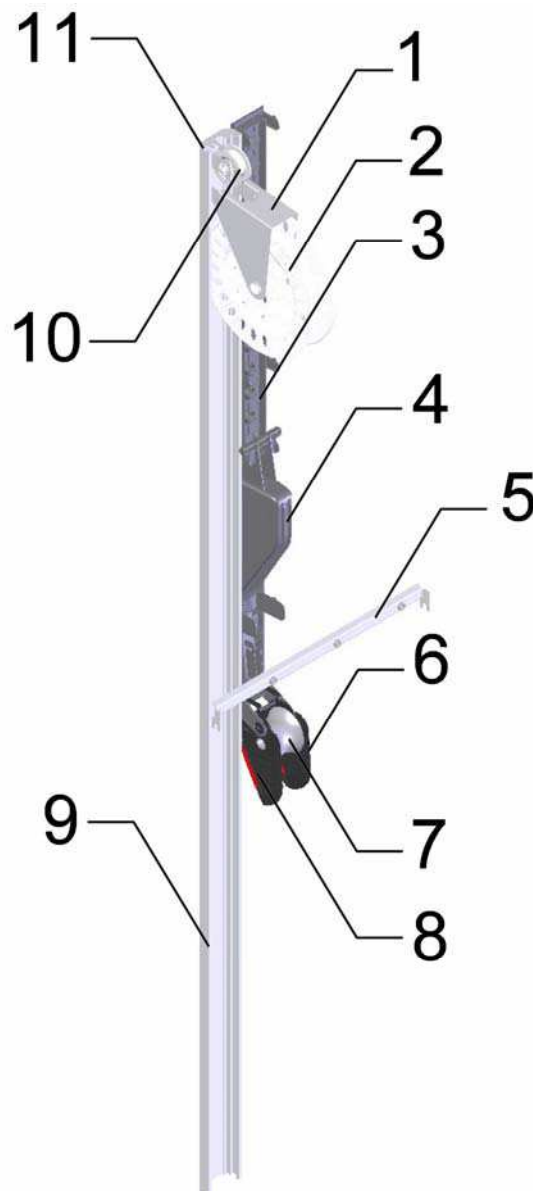
7.1 Push button and nozzle switch



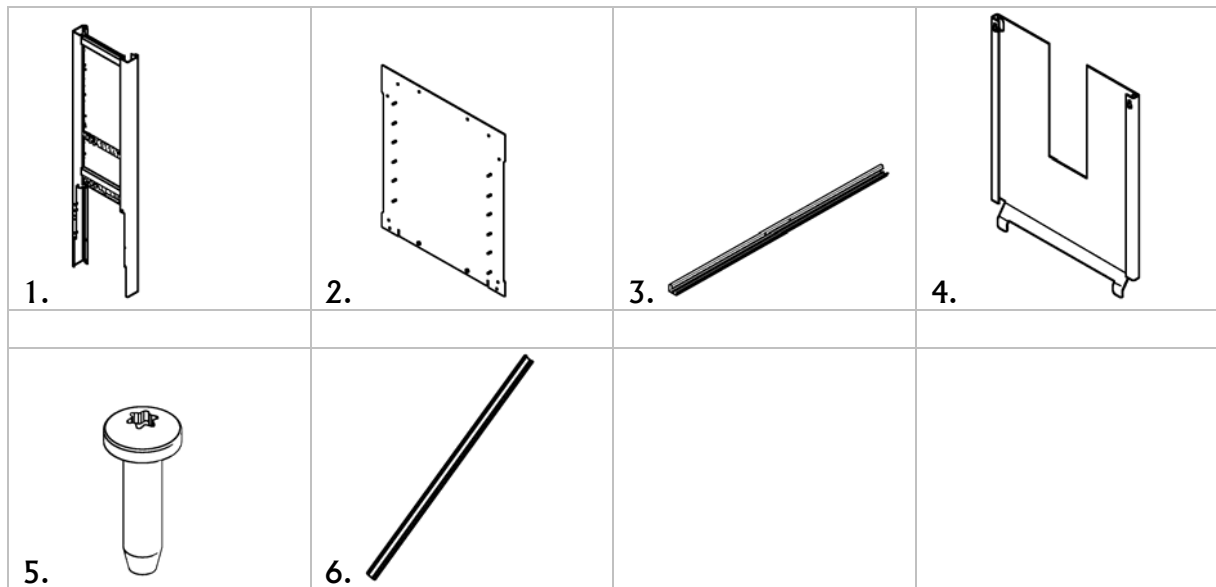
	Part number	Description
1		Push button
	WM027750-0001	Red
	WM027750-0002	Green
	WM027750-0003	Black
	WM027750-0004	Yellow
	WM027750-0005	Blue
	WM027750-0006	White
2	WM027743	Black Mushroom (LPG)
3		Switch
	WM027741-0002	On/Off (LPG)
	WM027741-0001	On/Off spring back (LPG)
4	WM015970-0001	Switch, magnetic reed, 2-wire, normally open, 1.5m cable

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7.2 HHR



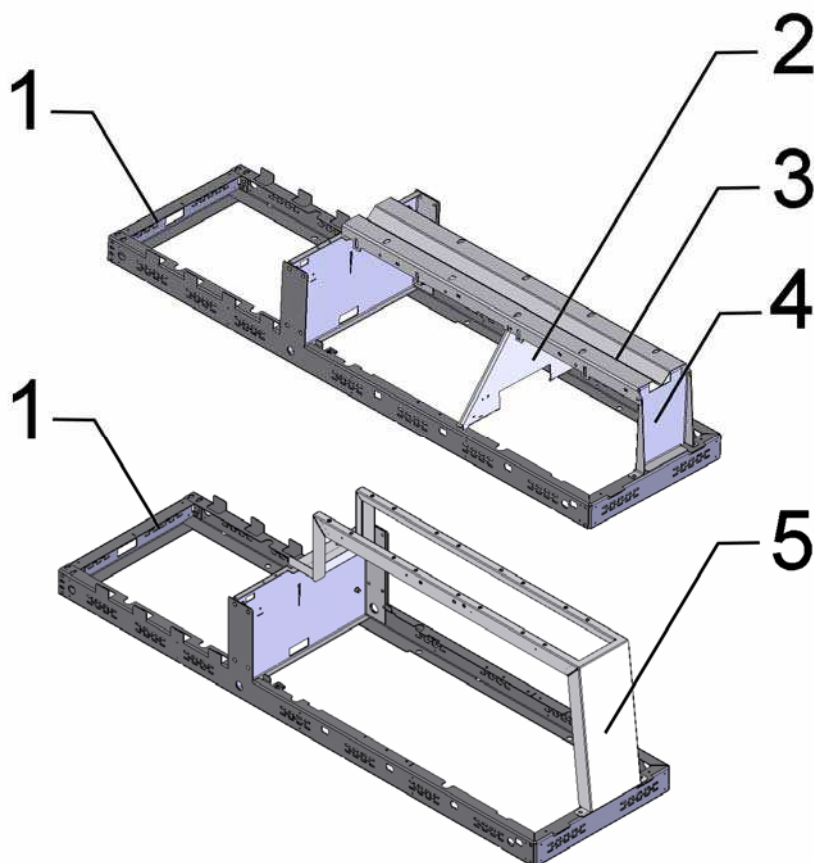
	Part number	Description
1	WM028902	Bracket, hose retraction
2	WM028140	Wheel, D = 239
3	WM028139	Side panel, decal cover
4	WM025564	Nozzle boot
5		Support, U-shape
	WM026491	3 hose
	WM026487	4 hose
6	WM028141	Bracket, wheel, nozzle boot
7	WM025573	Wheel, D = 85
8	WM028145	Bushing, roller, L = 66
9	WM026539	Column
10	WM028144	Wheel, D = 55
11	WM029423	Support, box shape



	Part number	Description
1	WM026564	Blind column
2		Top panel
	WM026526	3 modules
		4 modules
3	WM026534	Corner column
4	WM028337	Blind panel, with slot for tubes, between hose and hydraulic cabinet
5	WB000295-0001	Self tapping screw, Torx, pan head, type F ST5,5 x 22
6	WM026275	Column

8 Hydraulic cabinet

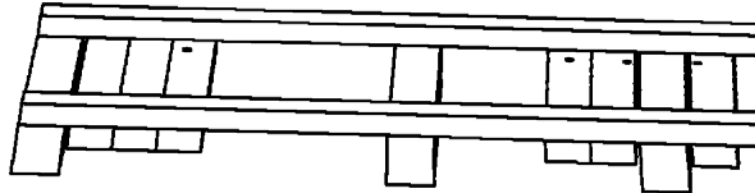
8.1 HHR



	Part number	Description
	WM028263-0001	Pop rivet, CSK head, 6.4 diameter x 13, grip range 3.8
1		Base
	WM025400	3 hydraulic modules, 1 hose module
	WM025401	3 hydraulic modules, 2 hose modules
	WM025402	3 hydraulic modules, 3 hose modules
	WM025403	4 hydraulic modules, 2 hose modules
	WM025404	4 hydraulic modules, 3 hose modules
	WM025405	4 hydraulic modules, 4 hose modules
2	WM028189	Support, flat, middle, hydraulic shelf
3		Support, suction hydraulic
	WM028191	3 modules
	WM028193	4 modules
4	WM028186	Support, flat, end support hydraulic shelf
5		Support, remote hydraulics
	WM028204-0001	3 modules, iMeter
	WM028204-0002	4 modules, iMeter
	WM028206	3 modules, Xflo™
	WM028208	4 modules, Xflo™

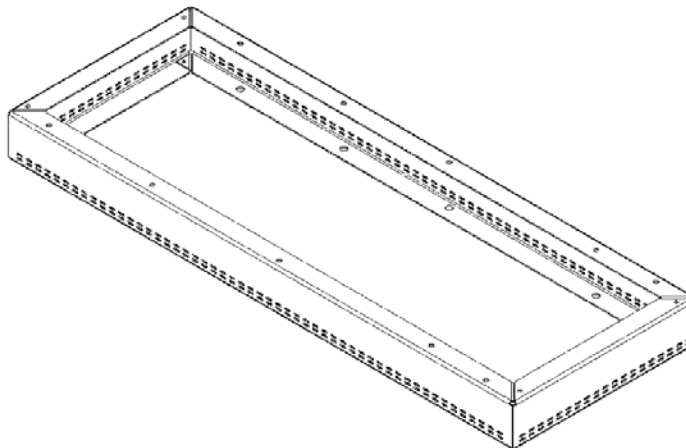
9 Pallet / drip pan / foundation frame

9.1 Pallet



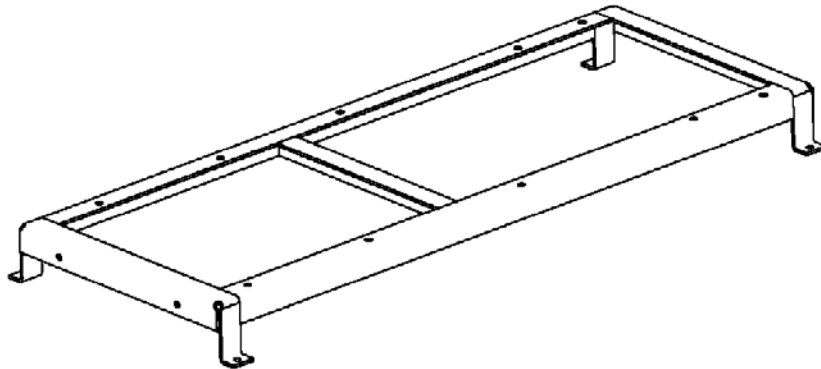
	Part number	Description
		Pallet LHR & HH
	WM007471	L = 1360 mm (CXX-32, CXX-22, CXX-31, CXX-11, CXX-21)
	WM007466	L = 1630 mm (CXX-33)
	WM007470	L = 1895 mm (CXX-42, CXX-43, CXX-44)

9.2 Extended base frame



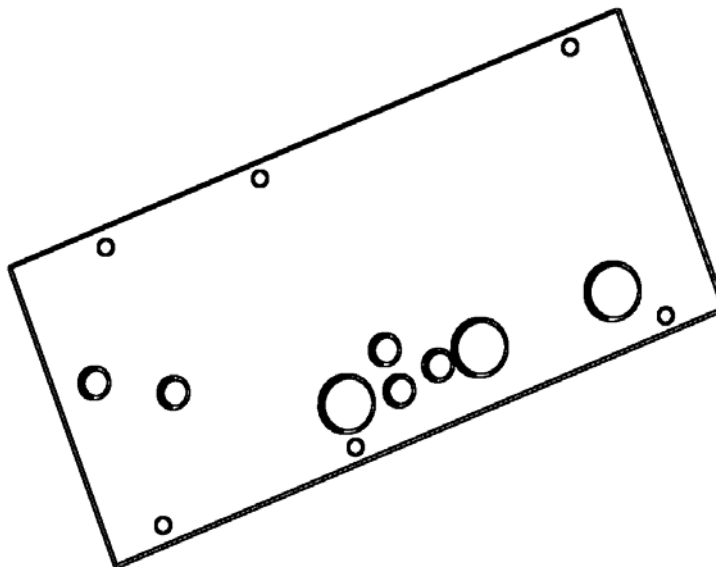
	Part number	Description
		Extended base frame LHR & HH
	WM004160	C11-11
	WM004161	C22-22
	WM004162	C33-33
	WM004163	C44-42
	WM004164	C44-43
	WM004165	C44-44

9.3 Foundation frame



	Part number	Description
		Foundation frame LHR & HH
	WM004018	3 hydraulics, 1 nozzle
	WM004019	3 hydraulics, 2 nozzle
	WM004020	3 hydraulics, 3 nozzle
	WM004023	4 hydraulics, 2 nozzle
	WM004022	4 hydraulics, 3 nozzle
	WM004021	4 hydraulics, 4 nozzle

9.4 Drip pan (suction pump)



	Part number	Description
	WM028240	3 hydraulics + 1 nozzle modules, l= 1100mm
	WM028241	3 hydraulics + 2 nozzle modules, l= 1240mm
	WM028242	3 hydraulics + 3 nozzle modules, l= 1380mm
	WM028243	4 hydraulics + 2 nozzle modules, l= 1500mm
	WM028244	4 hydraulics + 3 nozzle modules, l= 1640mm
	WM028245	4 hydraulics + 4 nozzle modules, l= 1780mm

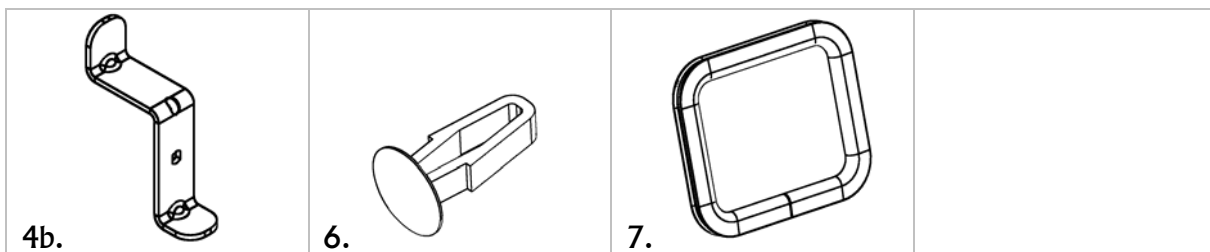
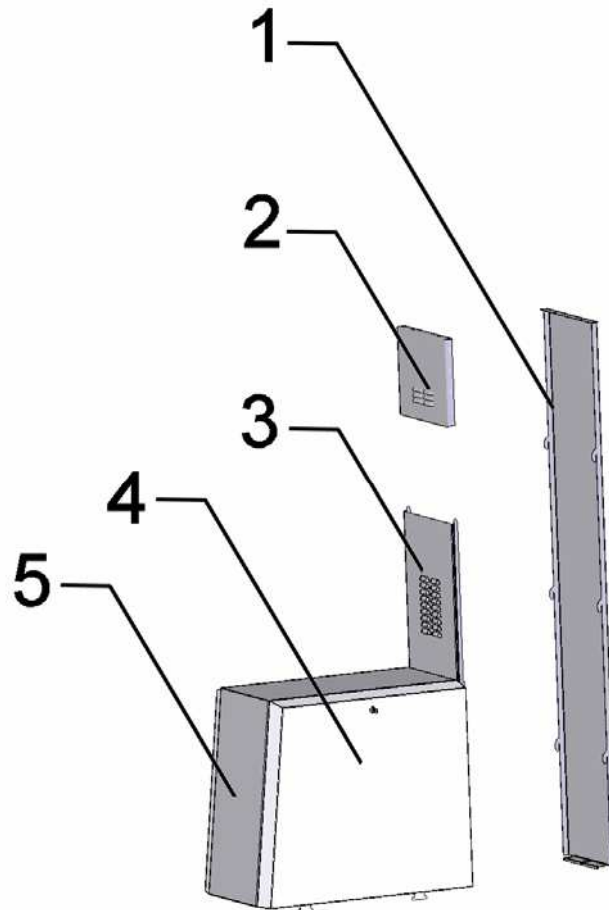
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10 Exterior

10.1 HHR



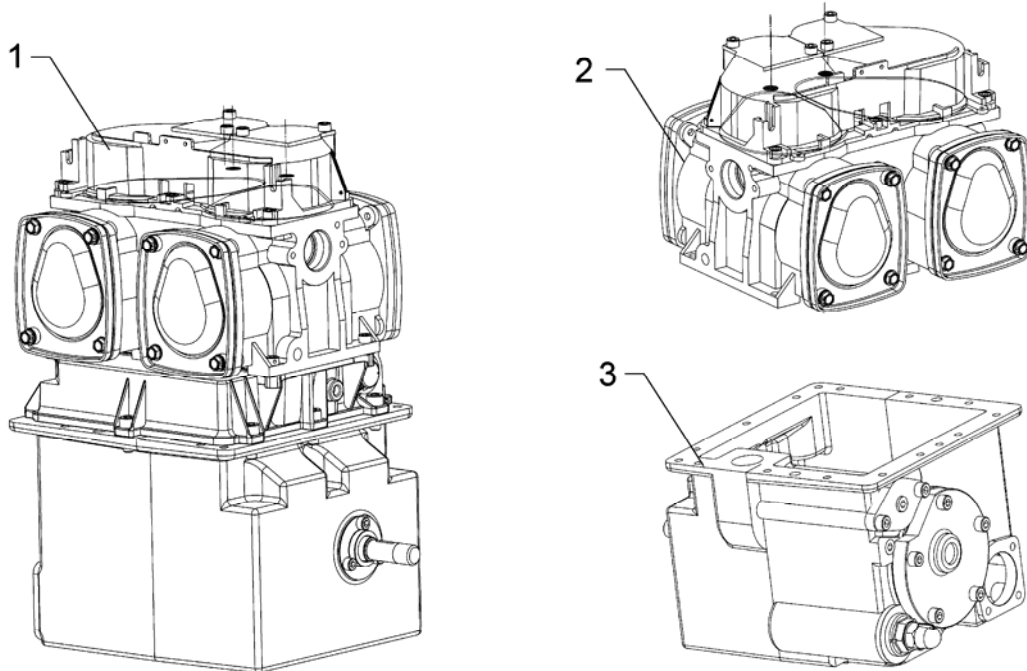
	Part number	Description
1		Side panel
	WM025580	AL
	WM029859-0001	White
2	WM25614	Side panel, upper barrier, with gaskets
3		Side panel
	WM025529	Std, with gaskets
	WM028719	Pay terminal H = 275, with gaskets
	WM028720	Pay terminal H = 375, with gaskets
	WM003175	Gasket U-shape
4		Front panel
	WM024795-0001	A-side, 3 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0003	A-side, 3 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0005	A-side, 4 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0007	A-side, 4 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0002	B-side, 3 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0004	B-side, 3 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0006	B-side, 4 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM024795-0008	B-side, 4 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM003119	Key
	WM001994-0002	Lock
4b	WM025663	Latch
5		Top panel
	WM025304	3 module, 96°
	M025302	3 module, 90°
	WM025309	4 module, 96°
	WM025307	4 module, 90°
6	WB000264-0001	Plastic fastener
7	WB000267-0001	Edge protector grip range 1.0 - 2.0 THK

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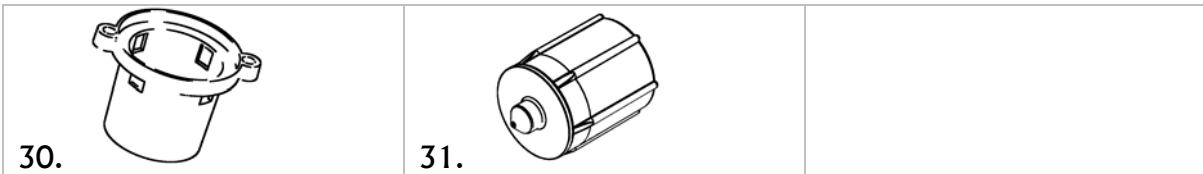
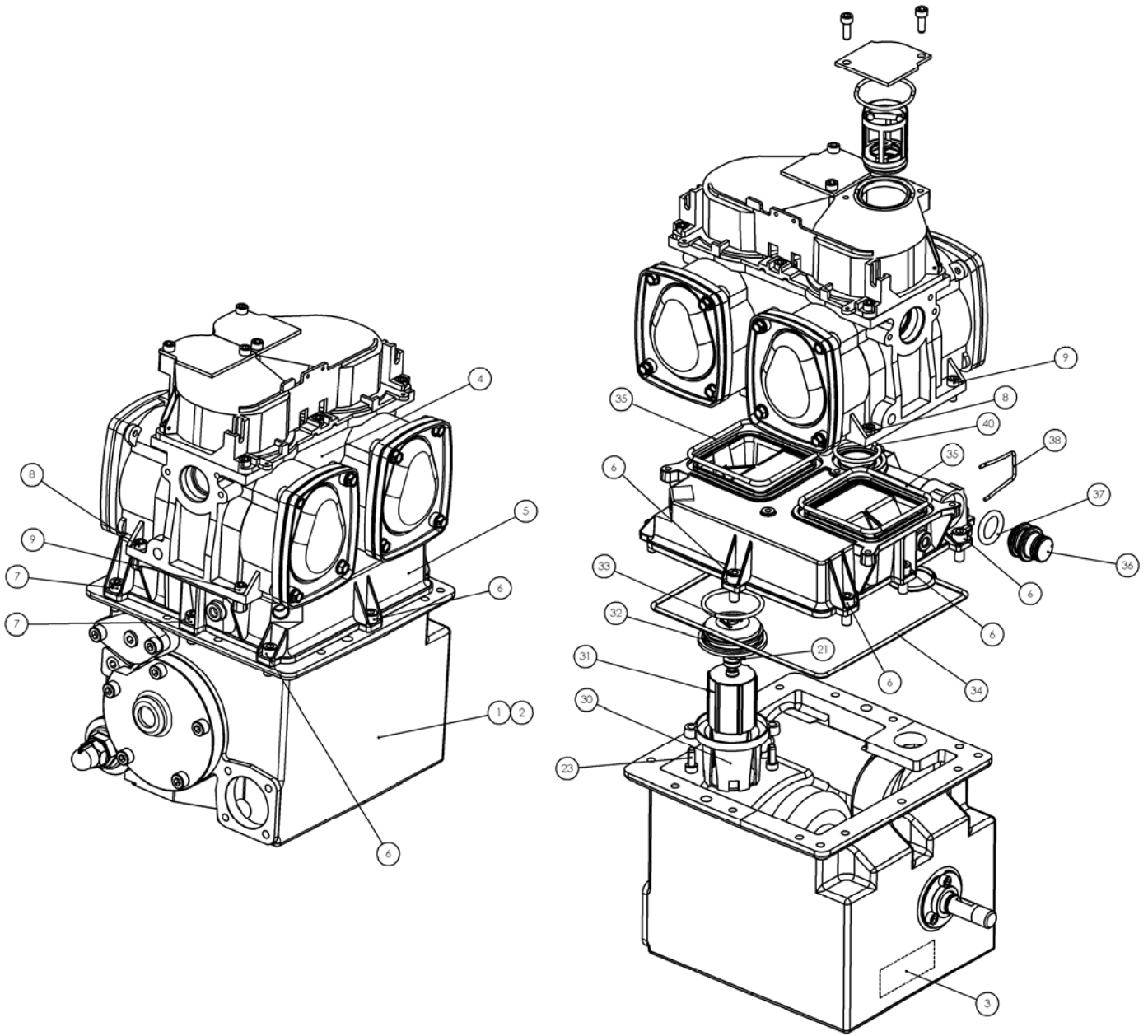
11 Hydraulic

11.1 iMeter (Petrol, diesel)



	Part number	Description
1		Pulser see page 40
		Combined unit
		With single bump connection for the air venting tube
	WM020553-0004	Compact pump
	WM020553-0001	Pump and meter diesel and gasoline 40 lpm & 70 lpm
	WM020553-0002	Pump and meter diesel and gasoline single sided side A 40 lpm & 70 lpm
2	UWM009289-0004	Pump and meter diesel 70 lpm (only U)
	UWM009289-0001	Pump and meter gasoline 40 lpm (only U)
		Fuel meter
	UWM002393	Fuel meter (field exchange part for WM002393-0001, WM002393-0002, WM002393-0003, WM002393-0004)
	WM002393-0001	Double sided, 40 lpm
	WM002393-0003	Double sided, 70 lpm
3	WM002393-0002	Single sided side A, 40 lpm
	WM002393-0004	Single sided side A, 70 lpm
	WM018719-0001	Fuel pump
	WM002219-0001	Internal gear diesel
	WM002219-0002	Internal gear gasoline

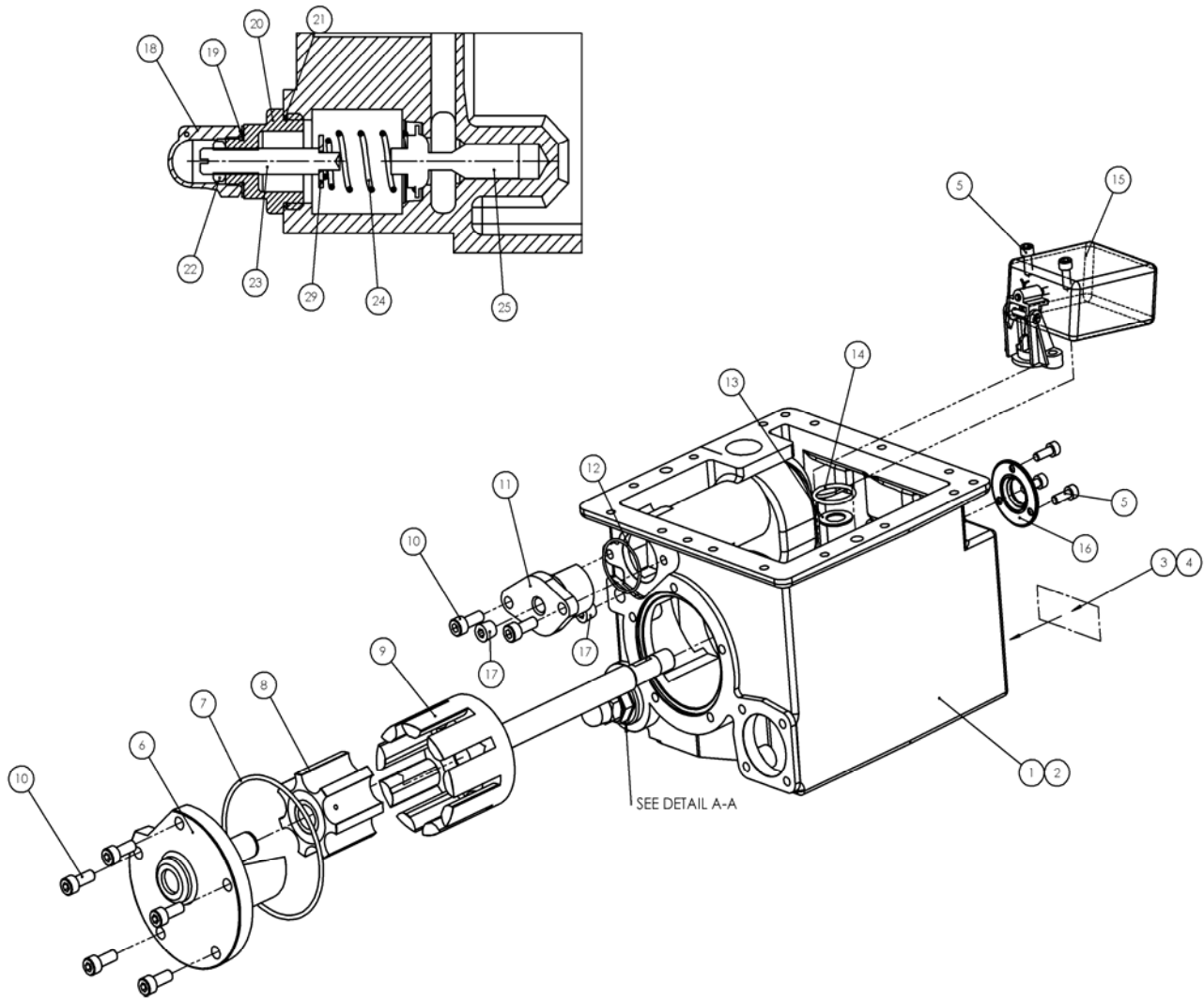
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	Part number	Description
	see page 37	Valve ass'y
1	WM011353	Housing, machined, pump
2		---
3		Identification label
	WM004739-0007	Combined unit, compact pump
	WM004739-0002	Combined unit, pump & meter gasoline s a 40 lpm
	WM004739-0003	Combined unit, pump and meter diesel 40 lpm
	WM004739-0004	Combined unit, pump and meter diesel 70 lpm
	WM004739-0005	Combined unit, pump and meter diesel s a 40 lpm
	WM004739-0006	Combined unit, pump and meter diesel s a 70 lpm
	WM004739-0001	Combined unit, pump and meter gasoline 40 lpm
	WM004739-0020	Fuel pump, internal gear diesel
	WM004739-0021	Fuel pump, internal gear gasoline
4		Fuel meter see page 27 and page 36
5		Cover, machined
	WM009207-0001	With single bump connection for the air venting tube
6	WB000212-0001	Screw, hexagon socket cap, M8 x 20
7	WB000212-0001	Screw, hexagon socket cap, M8 x 20
8	WM002236	Seal screw, hexagon socket cap, M6 x 16
9	WB000211-0001	Screw, hexagon socket cap, M6 x 16
21	WM002282	Seal, V-shape
23	WB000260-0001	Taptite screw, hexagon socket cap, M6 x 16
30	WM017874	Float guide (old WM000474)
31	WM008785	Float (old WM002234)
32	WM000473	Cover, moulded
33	WM001979	O-ring T = 3.5, ID = 47
34	WM000611	O-ring formed T = 4
35	WM000613	O-ring T = 4.0, ID = 98
36	WM001438	Plug
37	WM002217	O-ring T = 5.0, ID = 21
38	WM001440	Pin (Note! Pin for liquid tubes WM001925, page 50)
40	WM000612	O-ring T = 3.5, ID = 35

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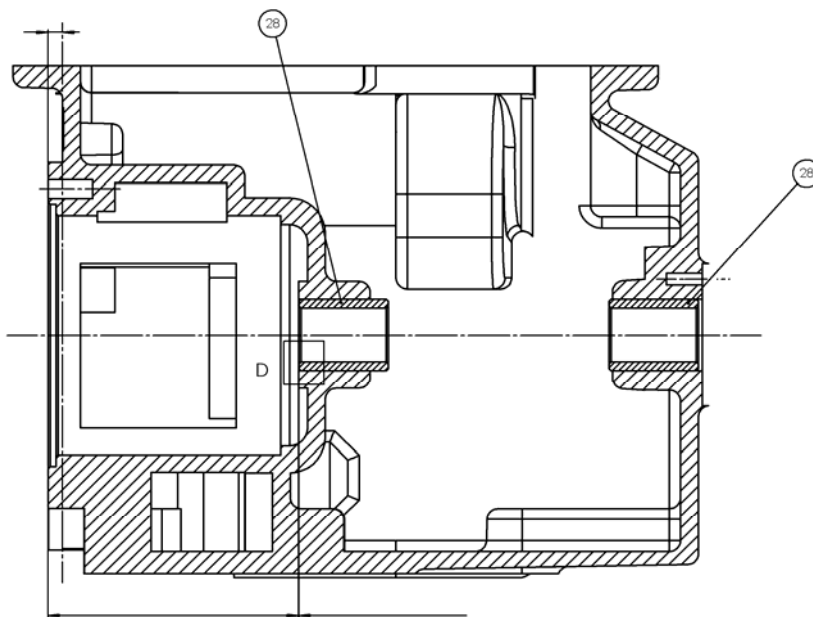
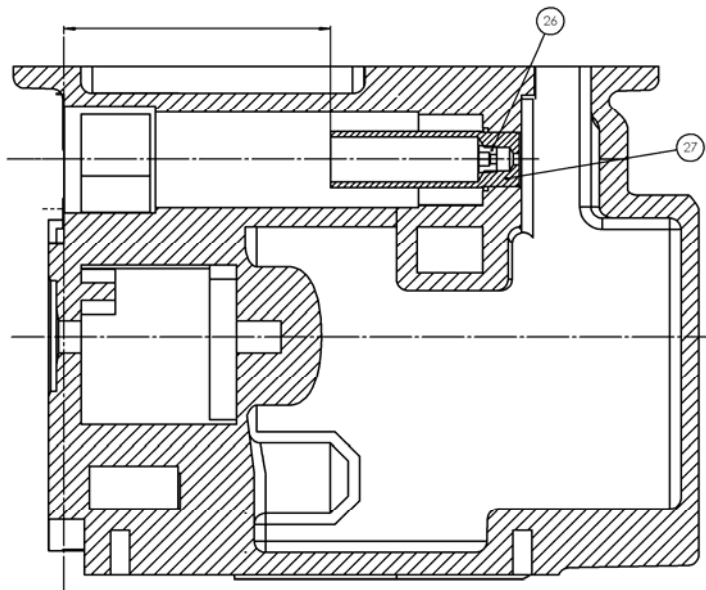
11.1.1 Pump internal gear



r

	Part number	Description
1	WM011353	Housing, machined, pump
3		see page 29
4	WM004736	Sealant Loctite 603
5	WB000211-0001	Screw, hexagon socket cap, M6 x 16
6	WM001387	Flat head and shaft
7	WM001956	O-ring T = 3.53, ID = 85,32
8	WM001420	Idler
9	WM001426	Rotor
10	WB000212-0001	Screw, hexagon socket cap, M8 x 20
11	WM000700	Cover, machined end cap
12	WM001957	O-ring T = 1.78, ID = 37.82
13	WM001952	Washer, plain ID = 15.2, OD = 26, T = 1.4
14	WM001953	O-ring T = 3, ID = 28
15	WM001430	Float
	WM017958	Float (See "Service Info SI-06-003 2006-11-06.pdf") (Used in production on diesel units from 2007-03-01)
16	WM001934	Seal
17	WM001083	Plug 1/4"
18	WM001088	Seal cap
19	WM001089	Gasket ID = 17, OD = 26, T = 0.8
20	WM001434	Cap
21	WM001955	O-ring T = 1.78, ID = 29.8
22	WM001423	Nut hexagon
23	WM001421	Screw adjusting
24	WM001382	Spring D = 18.5, L = 58.7
25	WM001383	Damper
29	WM001422	Washer, plain ID = 5, OD = 10.5, T = 1

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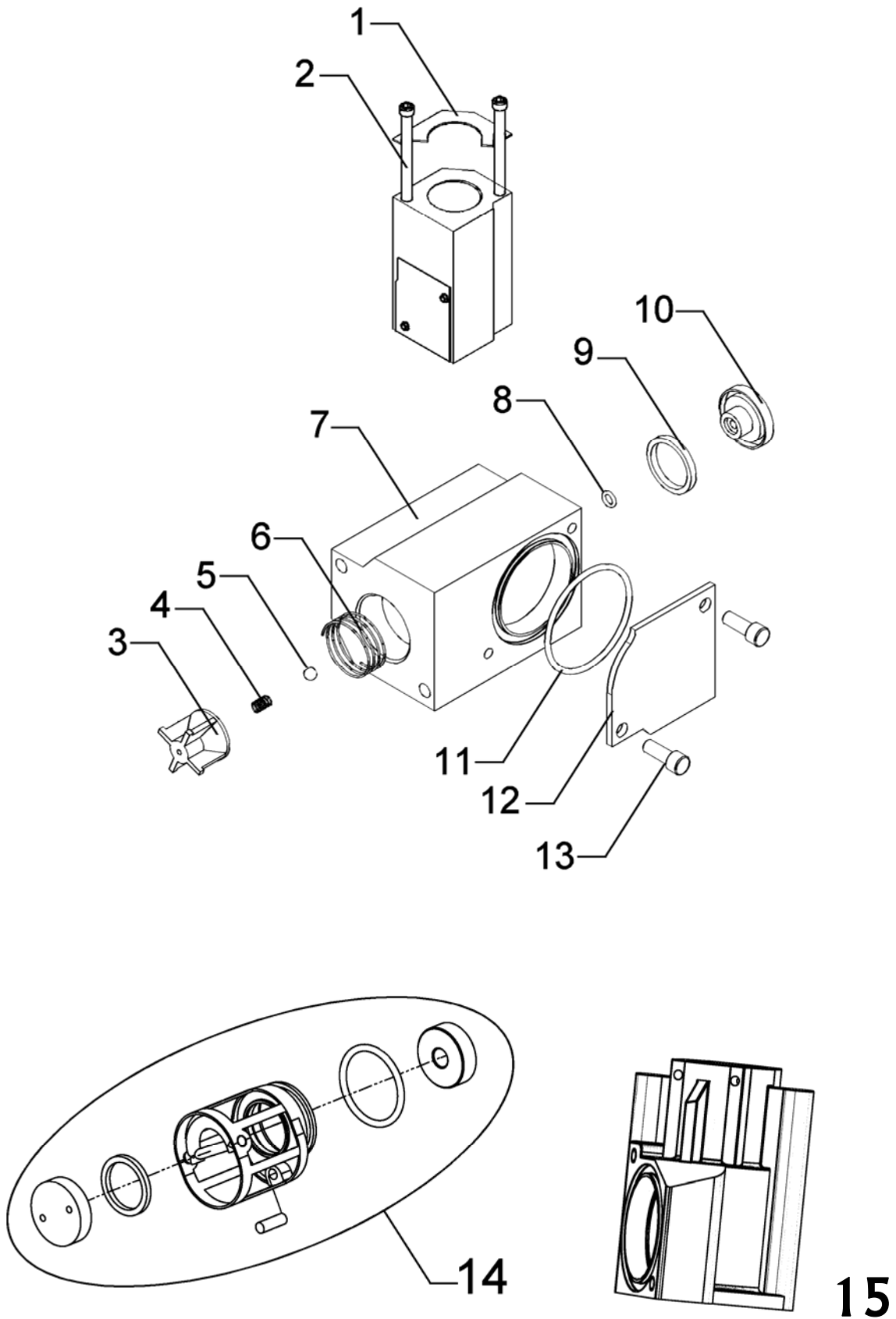
	Part number	Description
26	WM001961	Plug 1/8" NPTF L=6.35, hole=3.3 mm (wrench 3/16" see below)
	452971	Plug 1/8" NPTF L=6.35, hole=2,4 mm (wrench 3/16" see below)
	452882	Wrench (Allen key) 3/16"
27	WM001078	Air separator
28	WM001424	Bushing L=31.8mm

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11.1.2 Connection (Pump cover without meter)

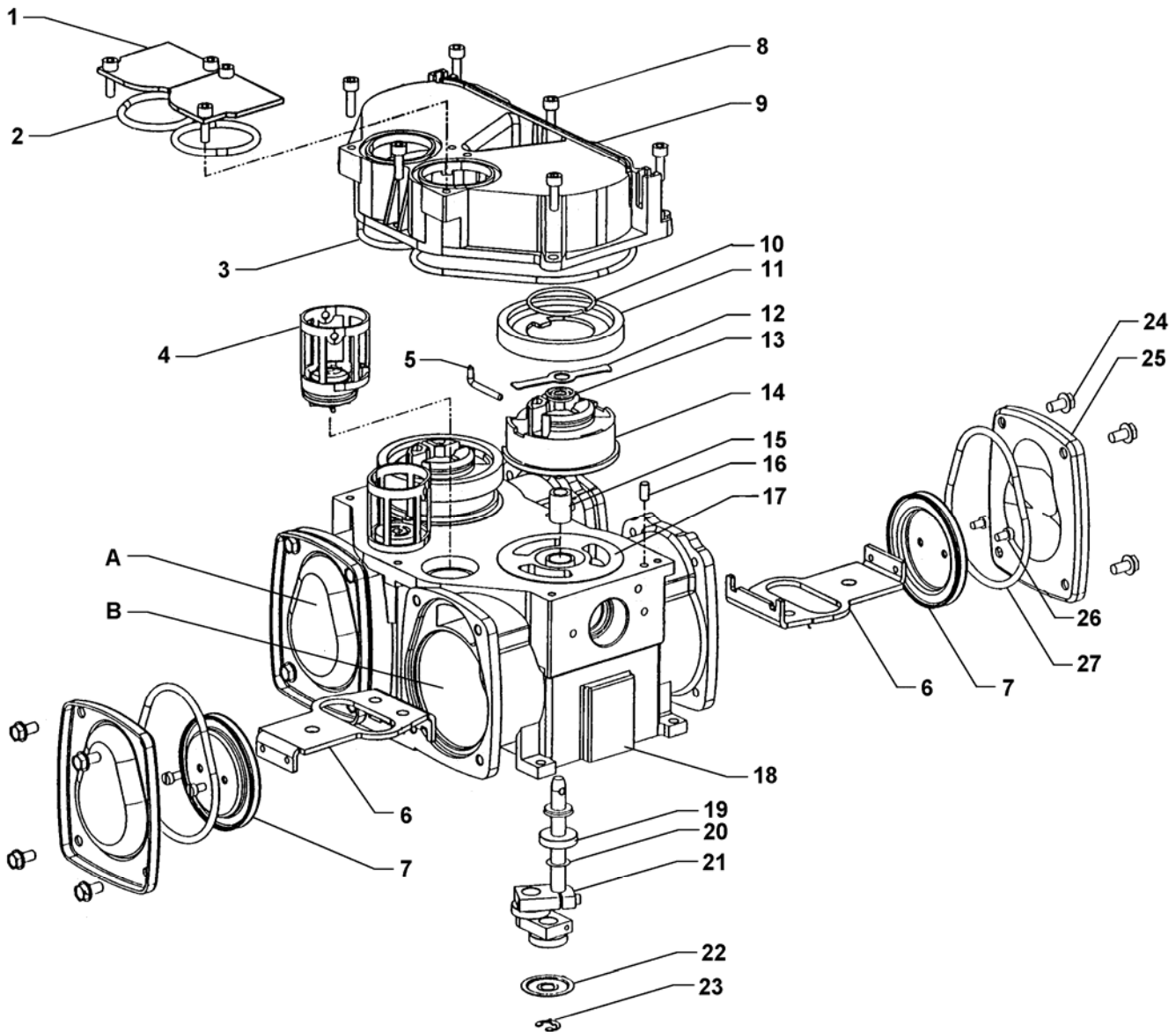


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	Part number	Description
	174306	Connector ass'y
1	WM004574	Bracket
2	WB000211-0005	Screw MC6S 6X100 8,8 A2
3	232368	Check valve
4	232367	Spring
5	232366	Ball
6	232365	Spring
		Connector
7	WM004573	Connector (old)
15	WM012266	Connector
8	232364	O-ring
9	171841	O-ring
10	232363	Check valve
11	WM004746	O-ring
12	WM000504	Plate cover
13	WB000211-0001	Screw MC6S 6X16 8.8 FZB
14	174307	Cage with plug ass'y
15	WM012266	Connector

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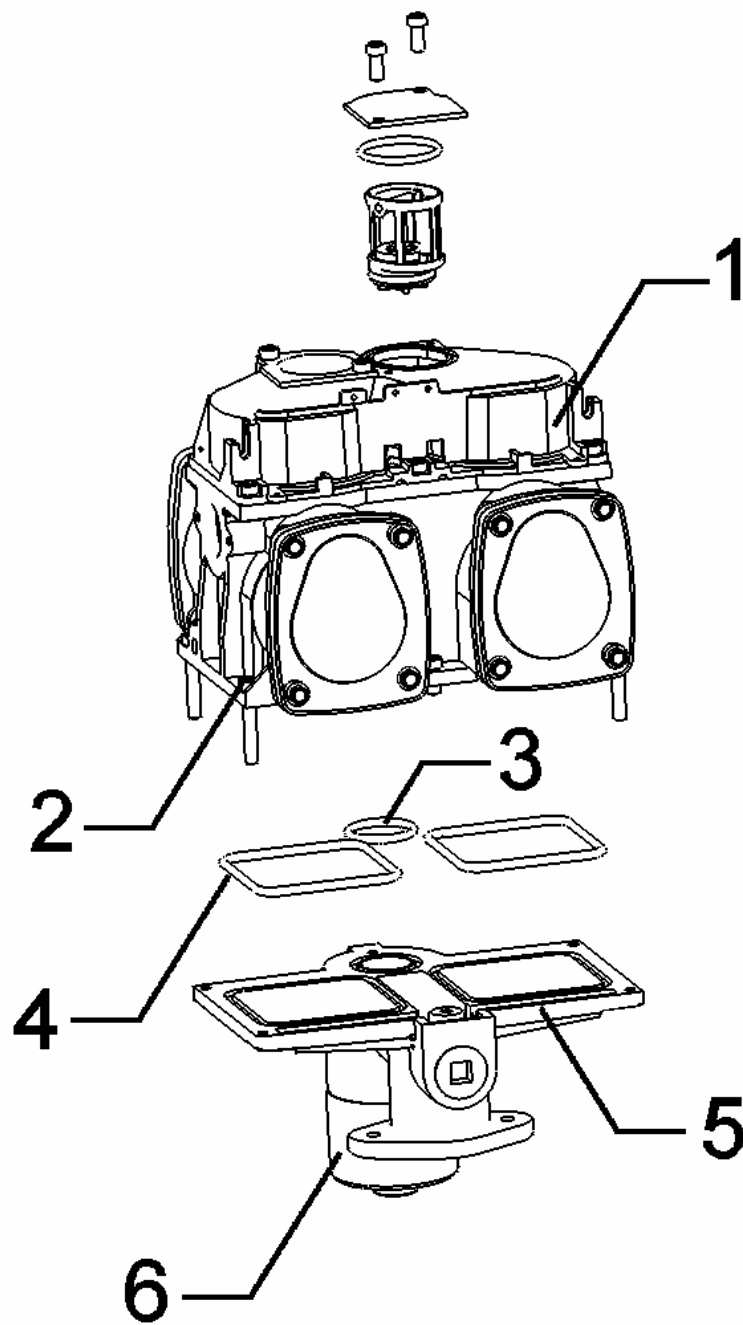
11.1.3 iMeter



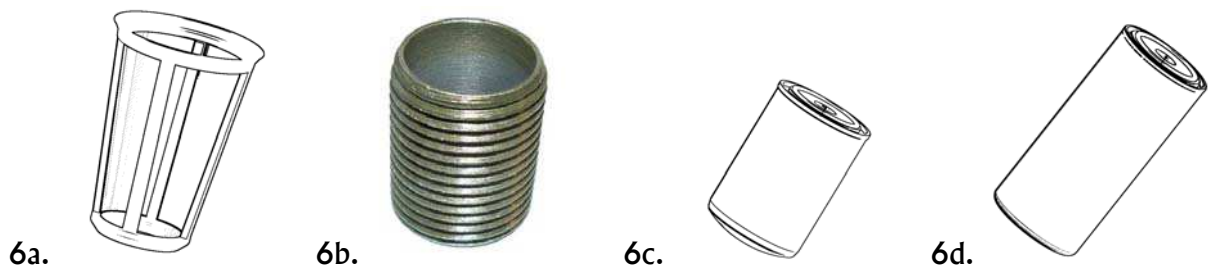
	Part number	Description	DWG
	WM002376-0001	Meter Duplex ass'y	001-047915
1	WM000504	Cover check	001-201943
2	WM001101	O-ring	001-921075
3	WM001102	O-ring	001-921076
4	WM000695-0002	Valve ass'y	
	WM003236	O-ring	001-921074
	WM001109	Plug, D = 38.0, L = 52.6	
5		Pin, valve	001-201987
6		Yorke meter	001-201948
7	WM000516	Piston ass'y	-200040
8		SHCS	001-921053
9	WM001100	Meter dome	001-047870
10	WM000497	C-spring	001-201956
11		Magnetic disc (see kit 174055 below)	001-301155
	174055	Modifying kit, WIP + magnetic wheel + O-rings	
12		Leaf spring	001-201947
13		Seal, V-pack	001-300983
14		Valve	001-201945
15	WM000509	Rulon bearing	001-921039
16		Locator pin	001-201944
17			
18		Meter body	004-047913
19		Bearing	-122552
20		Washer	001-921047
21		Crank ass'y	001-300955
22		Retaining washer	001-201957
23		Retaining ring	001-921072
24	WM000639	Taptite seal screw (hex head)	
	WM000638	Taptite screw, hex head, M6 L = 1/2" with washer	918452
	WM000638-0001	Taptite screw, hex head, M6 L = 3/4" with washer	.513710
25		Cover	
	WM000505	Pressed (std)	
	WM001425	Casting (70 l/min)	
26		---	
27	WM001103	Gasket	

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11.1.4 iMeter - Dispenser

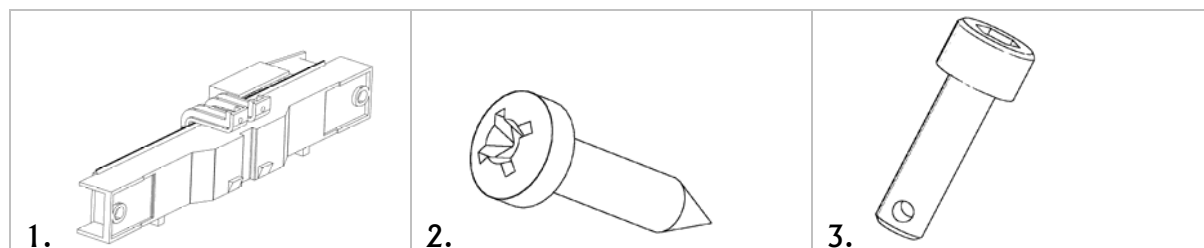


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	Part number	Description
	see page 37	Valve ass'y
		Hydraulic module for dispenser ass'y (Combined unit, remote inlet and meter)
	WM004740-0001	40 l/min
	WM004740-0002	70 l/min
	WM004740-0003	70 l/min single side A
	WM004740-0004	40 l/min extra connection
	WM004740-0005	70 l/min extra connection
	WM004740-0006	Remote inlet with connection
	---	UREA - see spare part list WM011947
1	---	
2	WM004596	Sealing screw, hexagon socket cap, M6X45
	WB000211-0001	Screw MC6S 6X16 8.8 FZB
3	WM000612	O-ring
4	WM000613	O-ring T = 4.0, ID = 98
5		Dispenser bottom ass'y
6a	WB000382	Strainer
b	WM002000	Nipple adapter
		Strainer
c	WM002003	40-70L
d	WM002096	70-130L

11.2 Pulser for iMeter



	Part number	Description
1	U WM001682-0001	Pulser
2	WB000396-0001	Self tapping screw, poz, pan head, type C ST2,9 x 13
3	WM008105	Seal screw, hexagon socket cap, M6X20
	WB000211-0001	Screw, hexagon socket cap, M6 x 16
	WB000228-0003	Nut, M6

11.3 Sealing



	Part number	Description
1	WM003776	Seal (lead)
2	WM005835	Holder for lead seal Ø= 10
3	WB000255-0001	Pop-rivet , dome head, 2.4 diameter, grip range 2.4-4.8
4	WM004069	Seal, lead, Ø= 10

11.4 Kit, air venting tube connection for above ground tank

	Part number	Description
	WM021448	Kit, air venting tube connection for above ground tank
	WB000408-0002	Self tapping screw, Torx, pan head, type C ST4,8X13
	WM021446	Clamp sheet metal air venting tube
	WM006700	O-ring, T=2,62 Id= 11,91, NBR, Nitrile (2 pc.)

See also document WM009812 " Above ground tanks and pipes".

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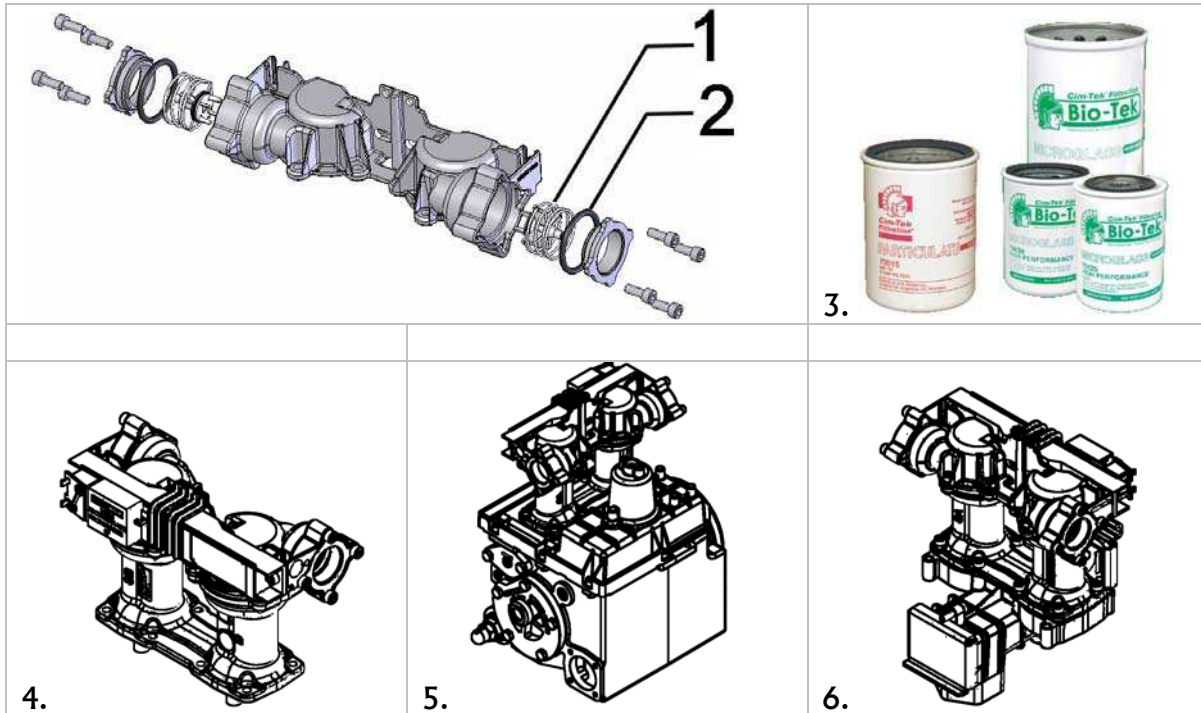
11.5 Xflo™ (low dome cover)

Note!

The XWIP is blue (not black)

Note!

Always change the Xflo™ (meter) and the XWIP (pulser) as one unit.

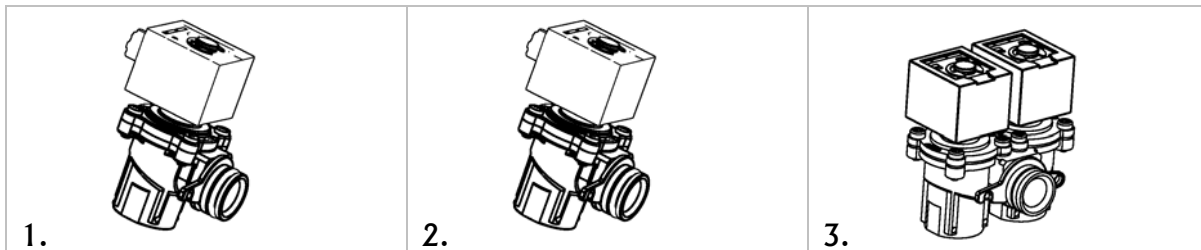


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	Part number	Description
1	WM029220	Valve
2	WM022490	O-ring
3		Strainer for Xflo™
	WM011606-0001	Gasoline & diesel 40-70 lpm
	WM011606-0002	Ethanol & biodiesel 40-70 lpm
	WM011606-0004	High capacity, gasoline & diesel 90-150 lpm
	WM011606-0005	High capacity, ethanol & biodiesel 90-150 lpm
4		Meter, dome low and XWIP
	WM028600-0001	Double sided
	WM028600-0003	Double sided, Ethanol
	WM028600-0005	Single A, Ethanol
	WM028600-0007	Single B, Ethanol
5		Combined unit, pump, meter, dome low and XWIP
	WM028603-0001	Double sided
	WM028603-0003	Double sided, Ethanol
	WM028603-0005	Single A, Ethanol
	WM028603-0007	Single B, Ethanol
6		Combined unit, remote inlet, meter, dome low and XWIP
	WM028606-0001	Double sided
	WM028606-0003	Double sided, Ethanol
	WM028606-0005	Single A, Ethanol
	WM028606-0007	Single B, Ethanol

11.6 Valves

11.6.1 Petrol, diesel



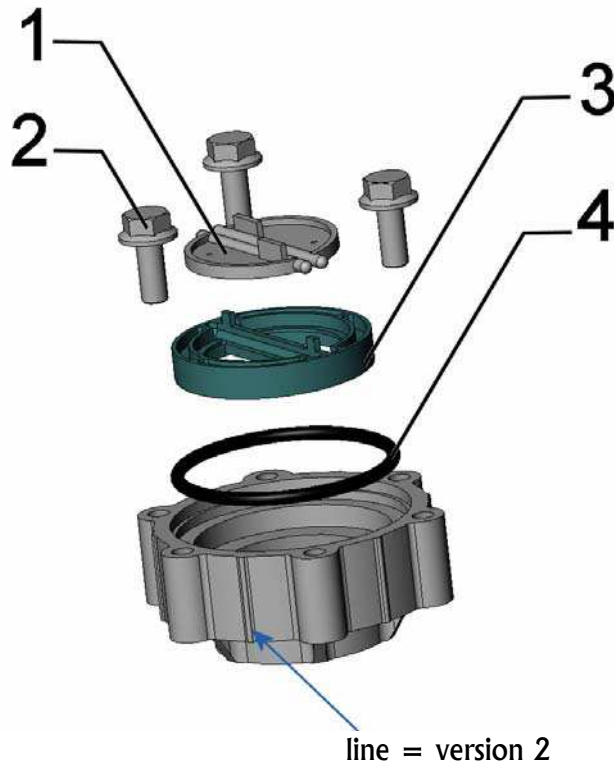
	Part number	Description
1	WM021181	Solenoid valve, proportional, single, al
2	WM021182	Solenoid valve, on/off, single, al
3	WM000340	Solenoid valve, proportional, duplex

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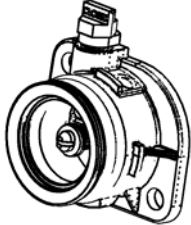
11.7 Inlet

11.7.1 Lower flange (version 2)



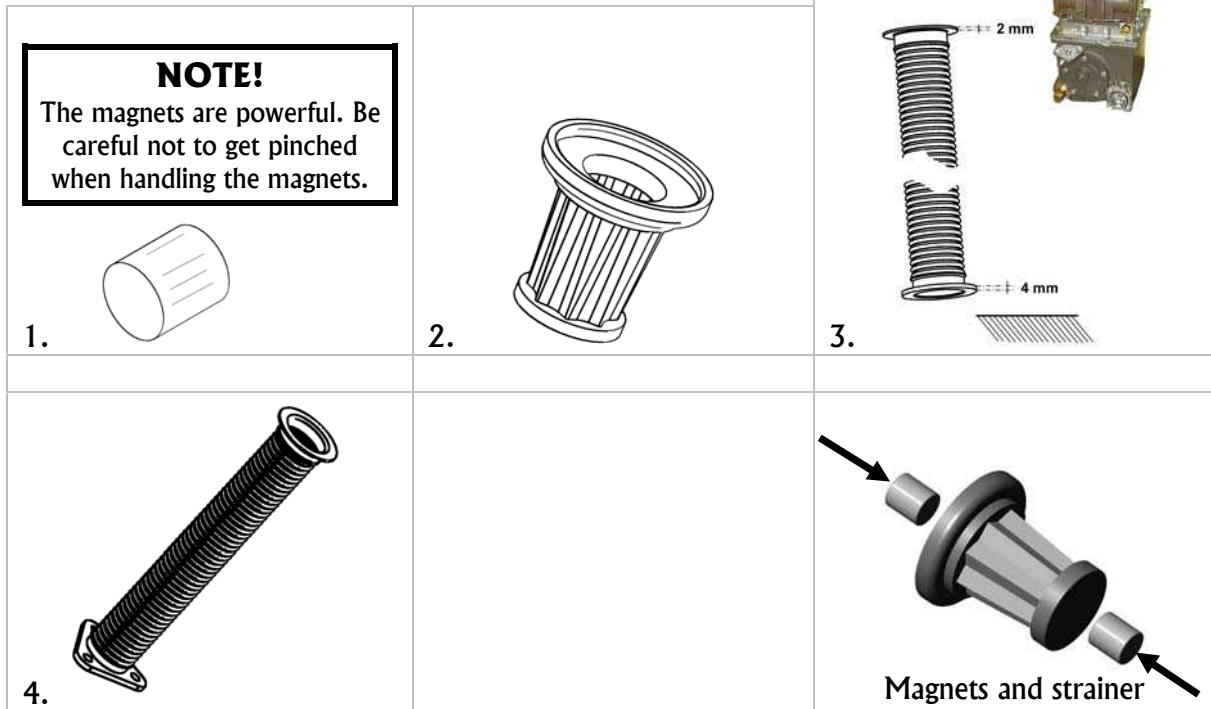
	Part number	Description
	WM027491	Valve, non return
1	WM027488	Flap
2	WM009773-0001	Screw, hex head, M8X20, with flange
3	WM027489	Bracket
4	WM027490	O-ring, ID=62;T=4.0

11.7.2 Check valve

1.		
----	---	--

	Part number	Description
	WM026049	Check valve

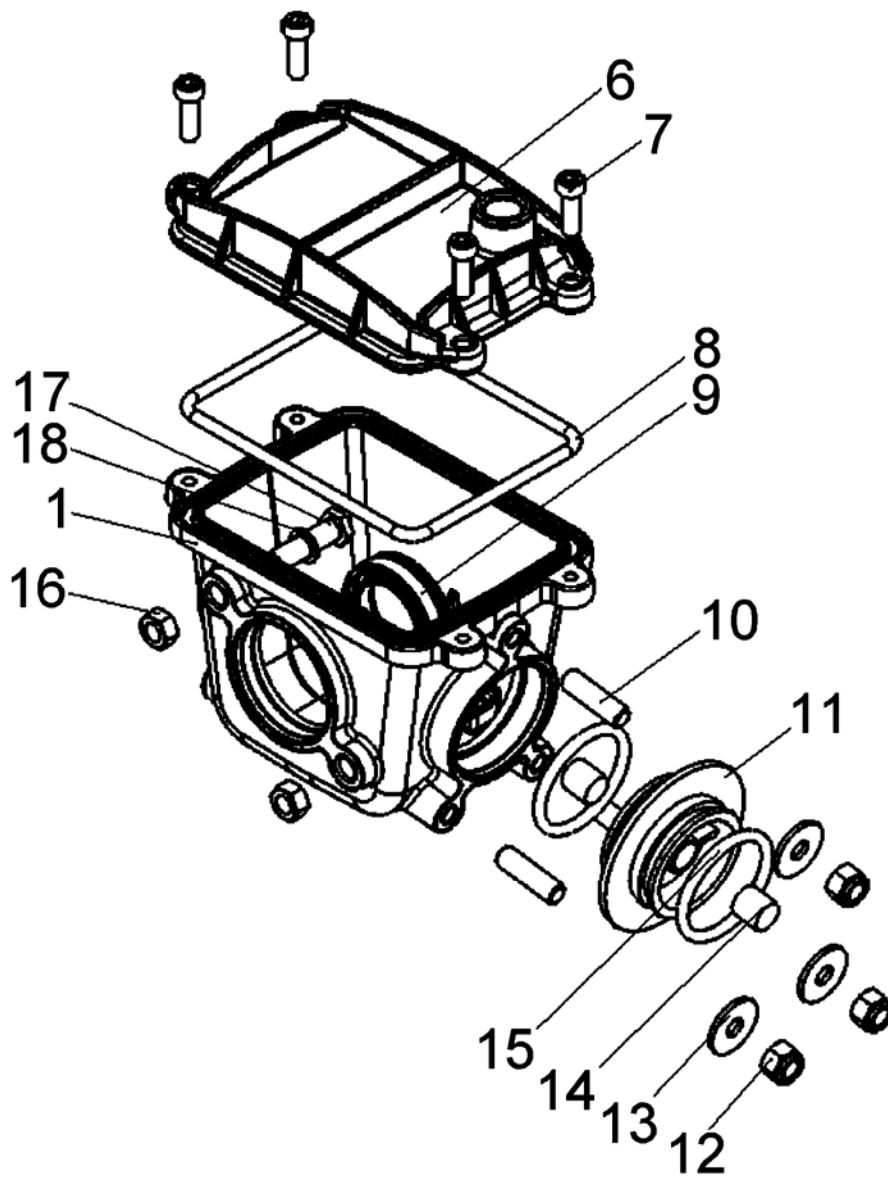
11.7.3 Global inlet



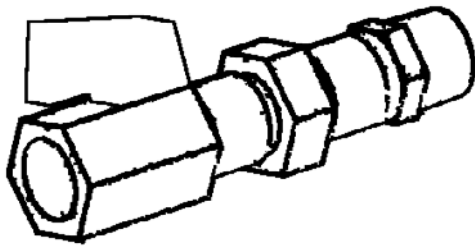
	Part number	Description
1	WM002209	Magnet, block OD = 12, L = 13
2	WM000436	Strainer
		Tube, flexible
3	WM000788-0001	350 mm (option)
3	WM000788-0005	425 mm (standard)
3	WM000788-0003	625 mm (option)
4	WM029703-0001	350 mm triangular flange (option)
	see page 46	Valve non return

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11.7.4 Filter pot



19.



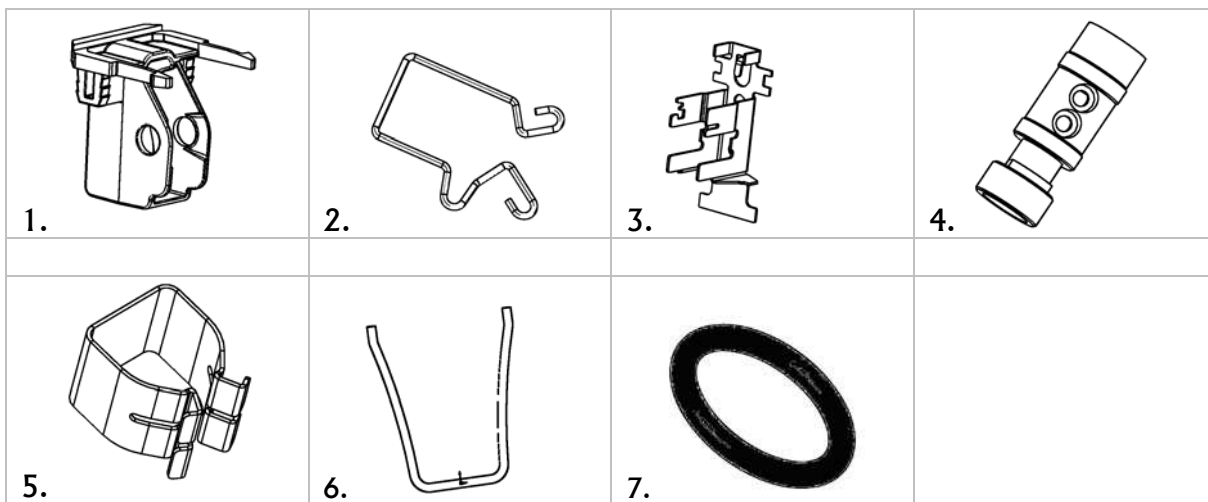
	Part number	Description
		Filter pot
	WM021502-0001	Standard, inlet left
	WM021502-0002	Standard, inlet right
	WM021502-0003	Hydro (indicates water), inlet left
	WM021502-0004	Hydro (indicates water), inlet right
	WM021502-0005	Biodiesel, inlet left
	WM021502-0006	Biodiesel, inlet right
1	WM020452-0001	Housing filter pot
2		Filter (When you opened the filter pot you need a new O-ring, WM021210)
	WM003157	Cellulose
	WM007580	Hydro (indicates water)
3	---	---
4	---	---
5	---	---
6	WM007307	Cover filter pot
7	WB000211-0003	Screw, hexagon socket cap, M6 X 20
8	WM021210	O-ring formed T= 4 mm
9	WM003152	Seal (rubber)
10	WB000375-0001	Stud, M8 x 30
11	WM005720	Coupling, straight filter pot
12	WB000229-0004	Lock nut, M8 (Do not tighten too hard, T= 3 Nm) (for galvanic isolation use washer WM000627-001 and lock nut WB000229-0004)
13	WB000627-0001	Washer, plain, M8 , large ID= 8.4, OD= 24, T= 2
14	WM002209	Magnet
15	WM020495	O-Ring T= 3,65, ID= 41,5
16	WB000228-0004	Nut, M8
17	WM017243	Seal ID= 8,7, OD= 14, T= 1,5
18	WM009022-0001	Screw, hex head, M8 x32, low head, thread 12 MM
19	WM022314	Valve, straight, 3/8' (W&M)

12 Tubes



You will find the tube number printed on the tube.

12.1 Misc.



	Part number	Description
1	WM028143	Bracket
2	WM028987	Pin hose connector pin lock HC
3	WM028988	Support hose connector support HC
4	WM028989	Hose connector with VR
5	WM028990	Hose connector VR lock
6	WM001925	Lock pin for tube fitting
7	WM024393	O-ring T=4,2 ID=23

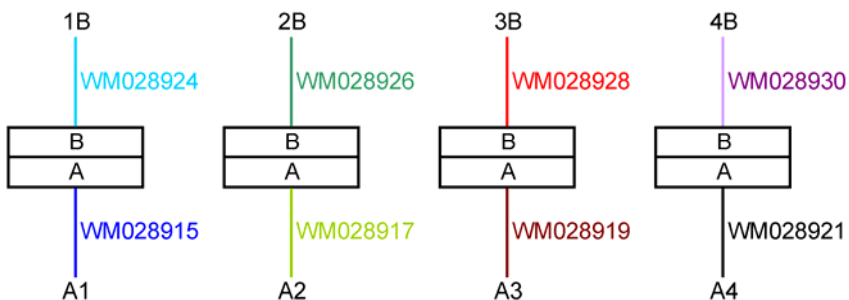
12.2 HHR

12.2.1 Liquid (HHR)

STANDARD

Style
11-11*
22-22*
33-33*
44-44*

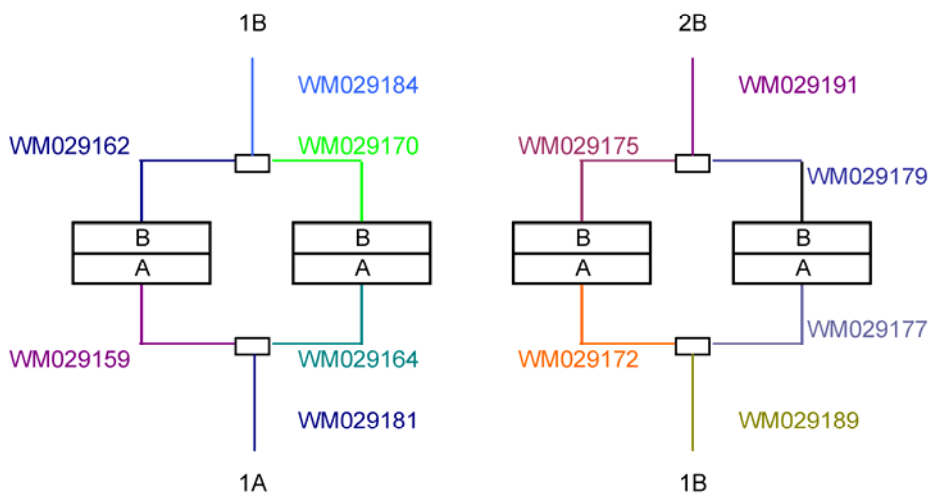
Flow rate
40 & 70 & 40-70



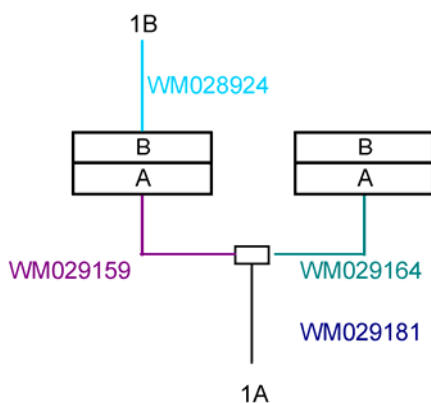
HIGH FLOW MODELS

Style
11-21*
22-42*

Flow rate
130



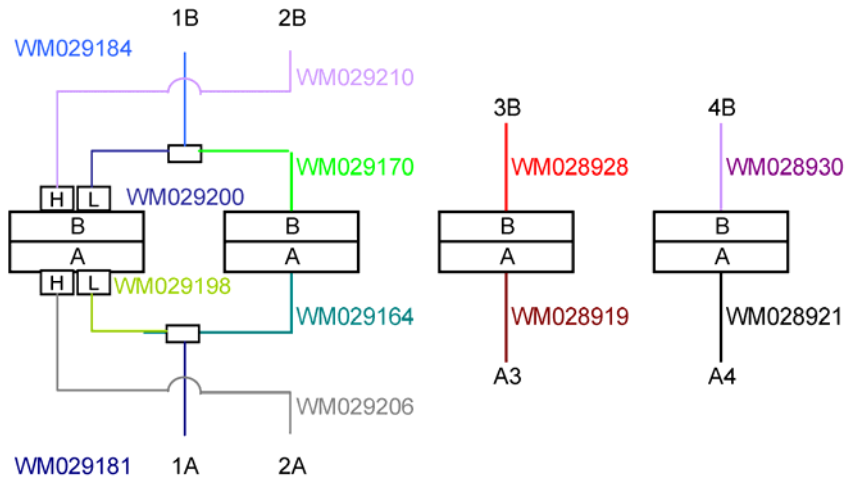
Style
11-211
Flow rate
130//40



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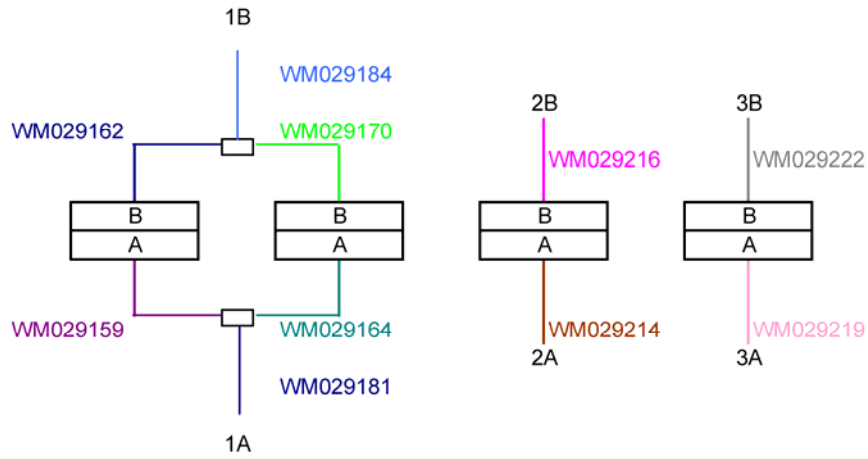
Style
11-22*
22-33*
33-44*

Flow rate
130/40
130/40/40
130/40/40/40



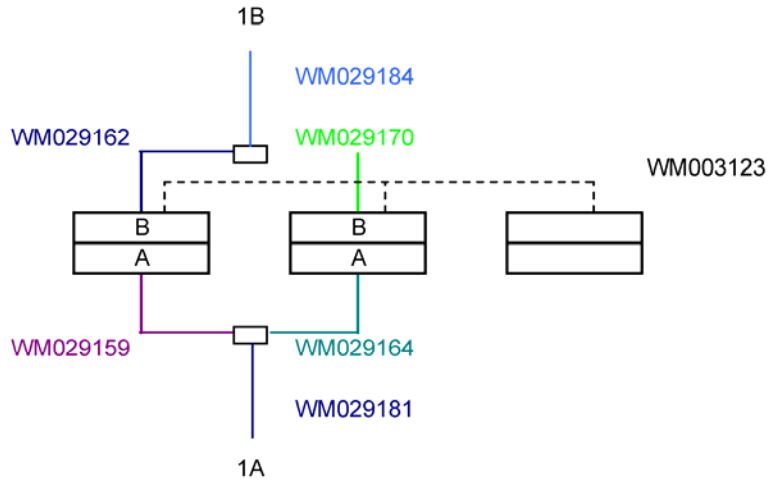
Style
22-32*
33-43*

Flow rate
130/40
130/40/40



Style
11-31*

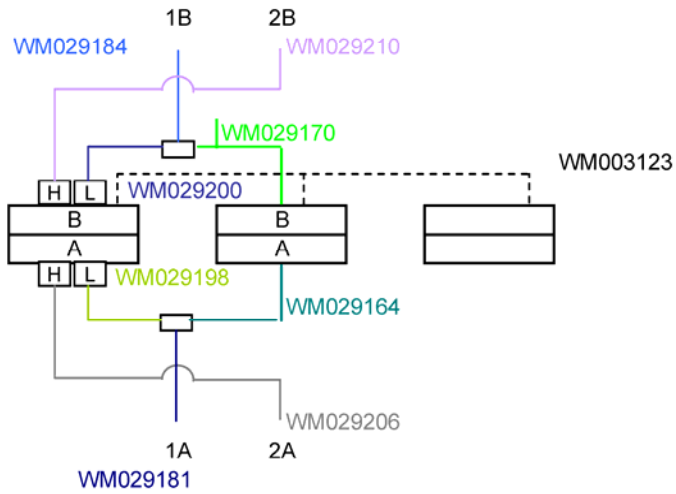
Flow rate
130 SIM



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Style
11-32*

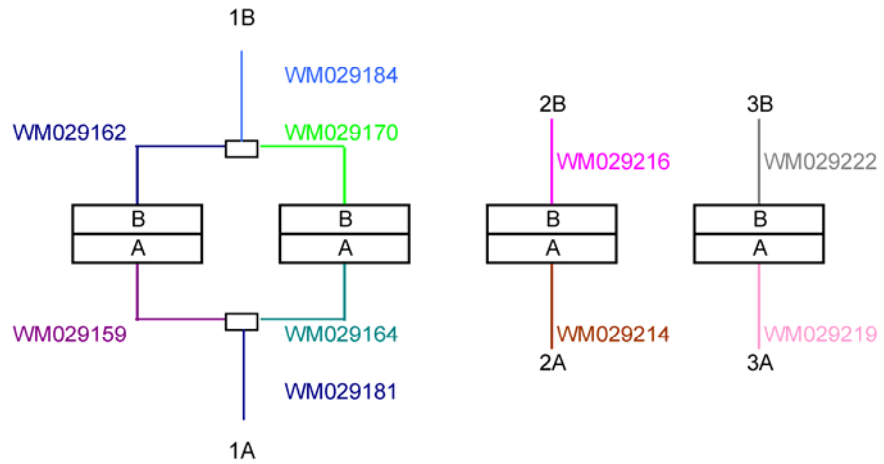
Flow rate
130 SIM/40



BLEND MODELS

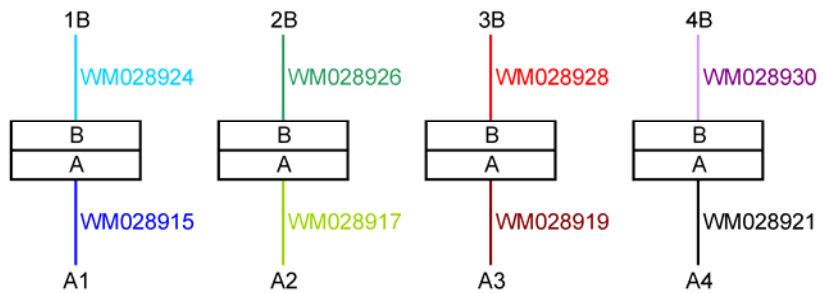
Style
23-21*
34-32*
45-43*

Flow rate
40



Style
23-22*
34-33*
45-44*

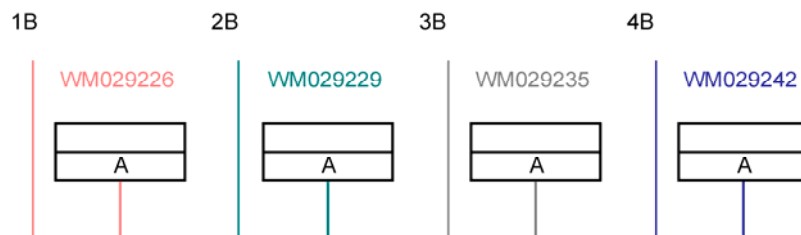
Flow rate
40



SINGEL SIDE MODELS

Style
11-11 SB
22-22 SB
33-33 SB
44-33 SB

Flow rate
40 & 70 & 40-70



DRAFT

Style

11-11 SA

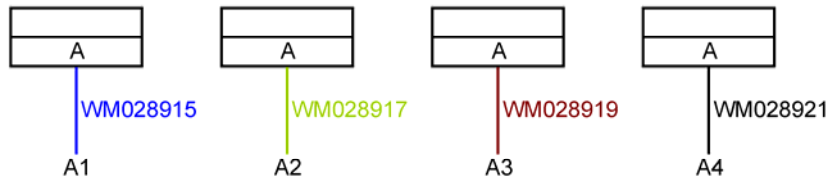
22-22 SA

33-33 SA

44-44 SA

Flow rate

40 & 70 & 40-70



Style

11-21 SB

22-32 SB

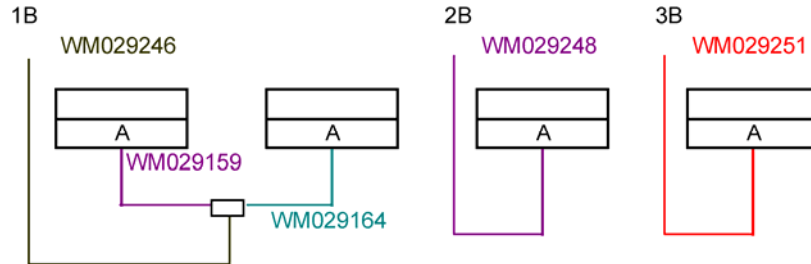
33-43 SB

Flow rate

130

130/40

130/40/40



Style

11-21 SA

22-32 SA

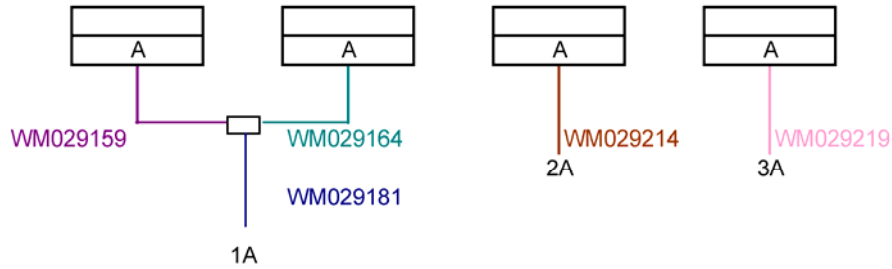
33-43 SA

Flow rate

130

130/40

130/40/40

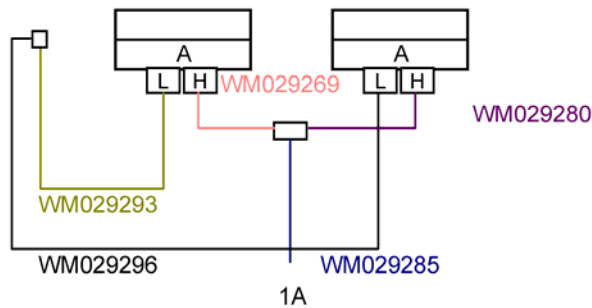


Style

11-21 SA

Flow rate

130 SAT

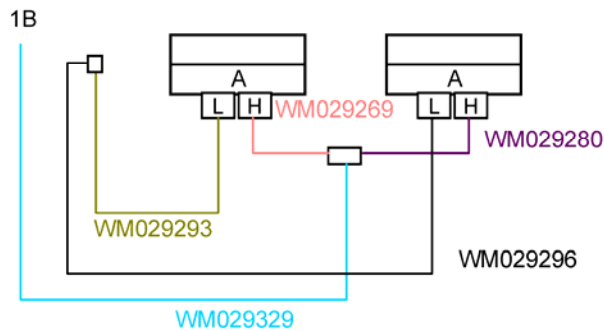


Style

11-21 SB

Flow rate

130 SAT



The diagram illustrates a 3D network topology with three nodes, each represented by a vertical stack of three rectangular blocks labeled 'L', 'H', and 'B' from top to bottom. The nodes are interconnected by a series of colored lines, each labeled with a unique identifier:

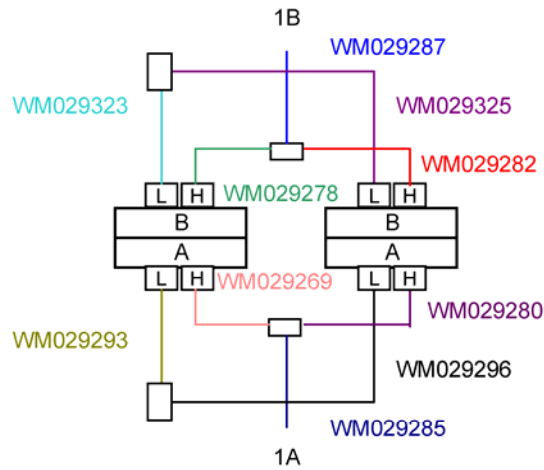
- Node 1 (Left):**
 - Top 'L' block is connected to a small white square via a cyan line labeled **WM029323**.
 - Top 'H' block is connected to a small white square via a green line labeled **WM029278**.
 - Bottom 'L' block is connected to a small white square via a yellow-green line labeled **WM029293**.
 - Bottom 'H' block is connected to a small white square via a red line labeled **WM029269**.
- Node 2 (Middle):**
 - Top 'L' block is connected to a small white square via a blue line labeled **WM029287**.
 - Top 'H' block is connected to a small white square via a red line labeled **WM029282**.
 - Bottom 'L' block is connected to a small white square via a purple line labeled **WM029280**.
 - Bottom 'H' block is connected to a small white square via a blue line labeled **WM029285**.
- Node 3 (Right):**
 - Top 'B' block is connected to a small white square via a magenta line labeled **WM029216**.
 - Bottom 'A' block is connected to a small white square via a brown line labeled **WM029214**.

Additionally, there are two vertical lines on the right side of the diagram, labeled **1B** (top) and **2A** (bottom), which appear to be part of the network structure.

DRAFT

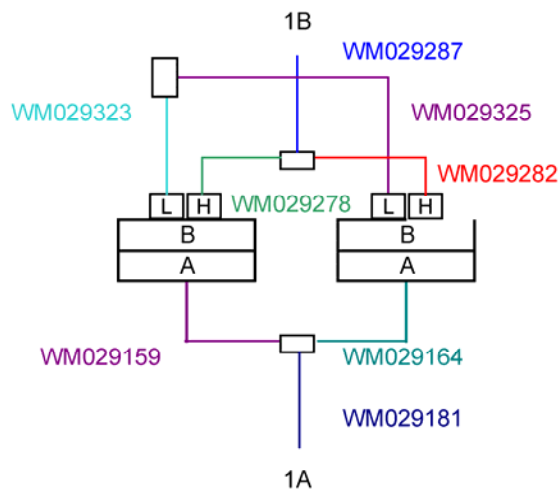
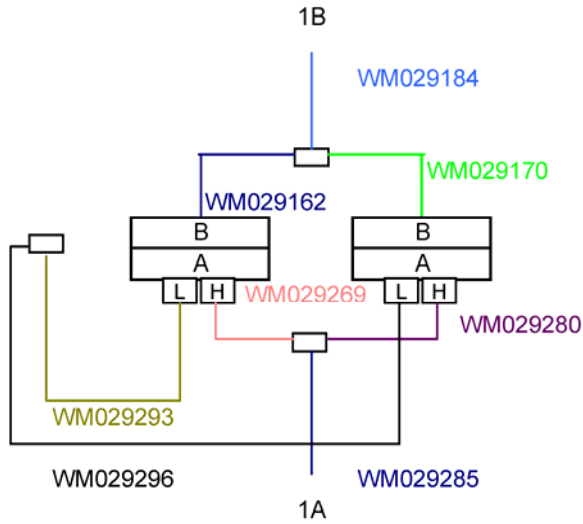
Style
11-21*

Flow rate
130 SAT OUT



Style
11-211

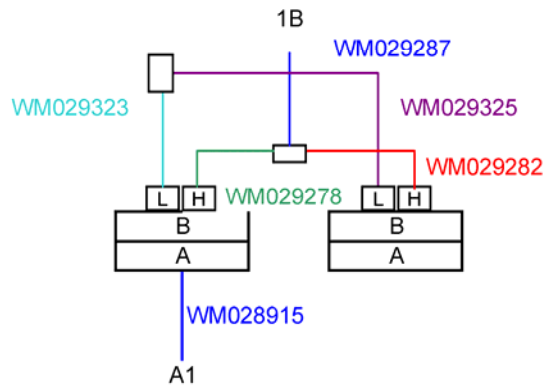
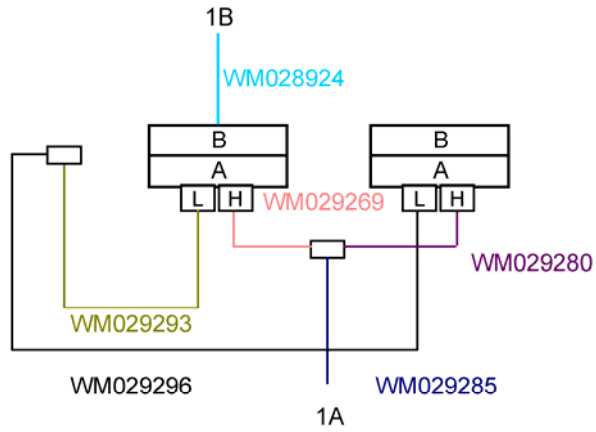
Flow rate
130 SAT OUT//130



DRAFT

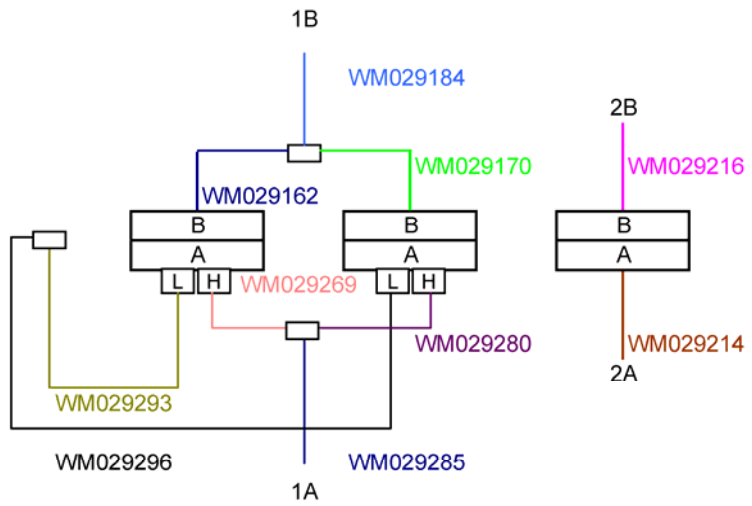
Style
11-211

Flow rate
130 SAT OUT//40

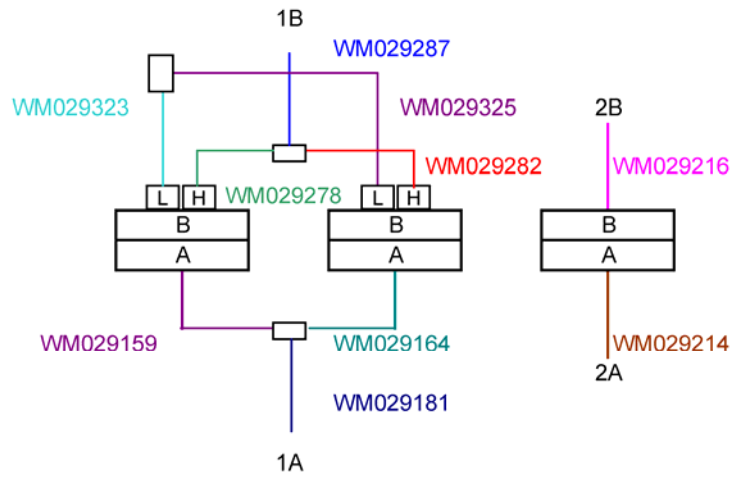


Style
22-322

Flow rate
130 SAT OUT/40//
130/40



DRAFT



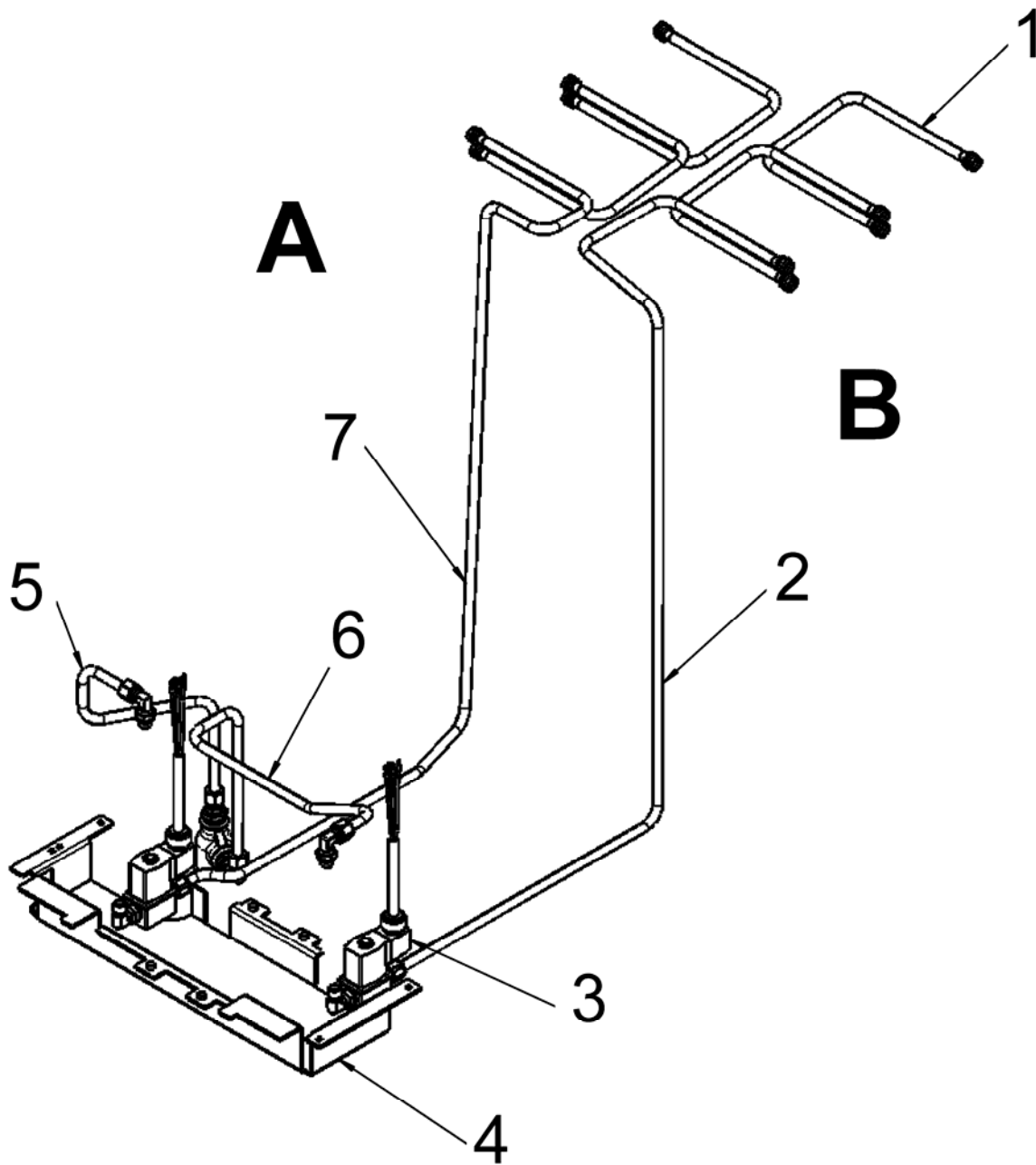
Liquid tubes Global Star V HHR

See also the drawings above.

Part number	Description
WM028915	Side A, hydraulic 1 - hose 1
WM028917	Side A, hydraulic 2 - hose 2
WM028919	Side A, hydraulic 3 - hose 3
WM028921	Side A, hydraulic 4 - hose 4
WM029159	Side A, hydraulic 1 - coupling
WM029164	Side A, hydraulic 2 - coupling
WM029172	Side A, hydraulic 3 - coupling
WM029177	Side A, hydraulic 4 - coupling
WM029181	Side A, hose 1 - from coupling
WM029189	Side A, hose 2 - from coupling
WM029198	Side A, hydraulic 1, duplex valve (L) - coupling
WM029206	Side A, hydraulic 1, duplex valve (U) - hose 2
WM029214	Side A, hydraulic 3 - hose 2
WM029219	Side A, hydraulic 4 - hose 3
WM029226	Side A, hydraulic 1 - Side B, hose 1
WM029229	Side A, hydraulic 2 - Side B, hose 2
WM029235	Side A, hydraulic 3 - Side B, hose 3
WM029242	Side A, hydraulic 4 - Side B, hose 4
WM029246	Side A, coupling - side B, hose 1
WM029248	Side A, hydraulic 3 - side B, hose 2
WM029251	Side A, hydraulic 3 - side B, hose 3
WM029269	Side A, hydraulic 1, duplex valve (U) - coupling
WM029280	Side A, hydraulic 2, duplex valve (U) - coupling
WM029285	Side A, hose 1 - from coupling, SAT
WM029293	Side A, hydraulic 1, duplex valve (L), SAT
WM029296	Side A, hydraulic 2, Duplex valve (L), SAT
WM029329	Side A, coupling - Side B, hose 1, SAT
WM029342	Side A, hydraulic 1, duplex valve (U) - side B, hose 2
WM028924	Side B, hydraulic 1 - hose 1
WM028926	Side B, hydraulic 2 - hose 2
WM028928	Side B, hydraulic 3 - hose 3
WM028930	Side B, hydraulic 4 - hose 4
WM029162	Side B, hydraulic 1 - coupling
WM029170	Side B, hydraulic 2 - coupling
WM029175	Side B, hydraulic 3 - coupling
WM029177	Side B, hydraulic 4 - coupling
WM029184	Side B, hose 1 - from coupling
WM029191	Side B, hose 2 - from coupling
WM029200	Side B, hydraulic 1, duplex valve (L) - coupling
WM029210	Side B, hydraulic 1, duplex valve (U) - hose 2
WM029216	Side B, hydraulic 3 - hose 2
WM029222	Side B, hydraulic 4 - hose 3
WM029278	Side B, hydraulic 1, duplex valve (U) - coupling
WM029282	Side B, hydraulic 2, duplex valve (U) - coupling
WM029287	Side B, hose 1 - from coupling, SAT
WM029323	Side B, hydraulic 1, duplex valve (L), SAT
WM029325	Side B, hydraulic 2, duplex valve (L), SAT

DRAFT

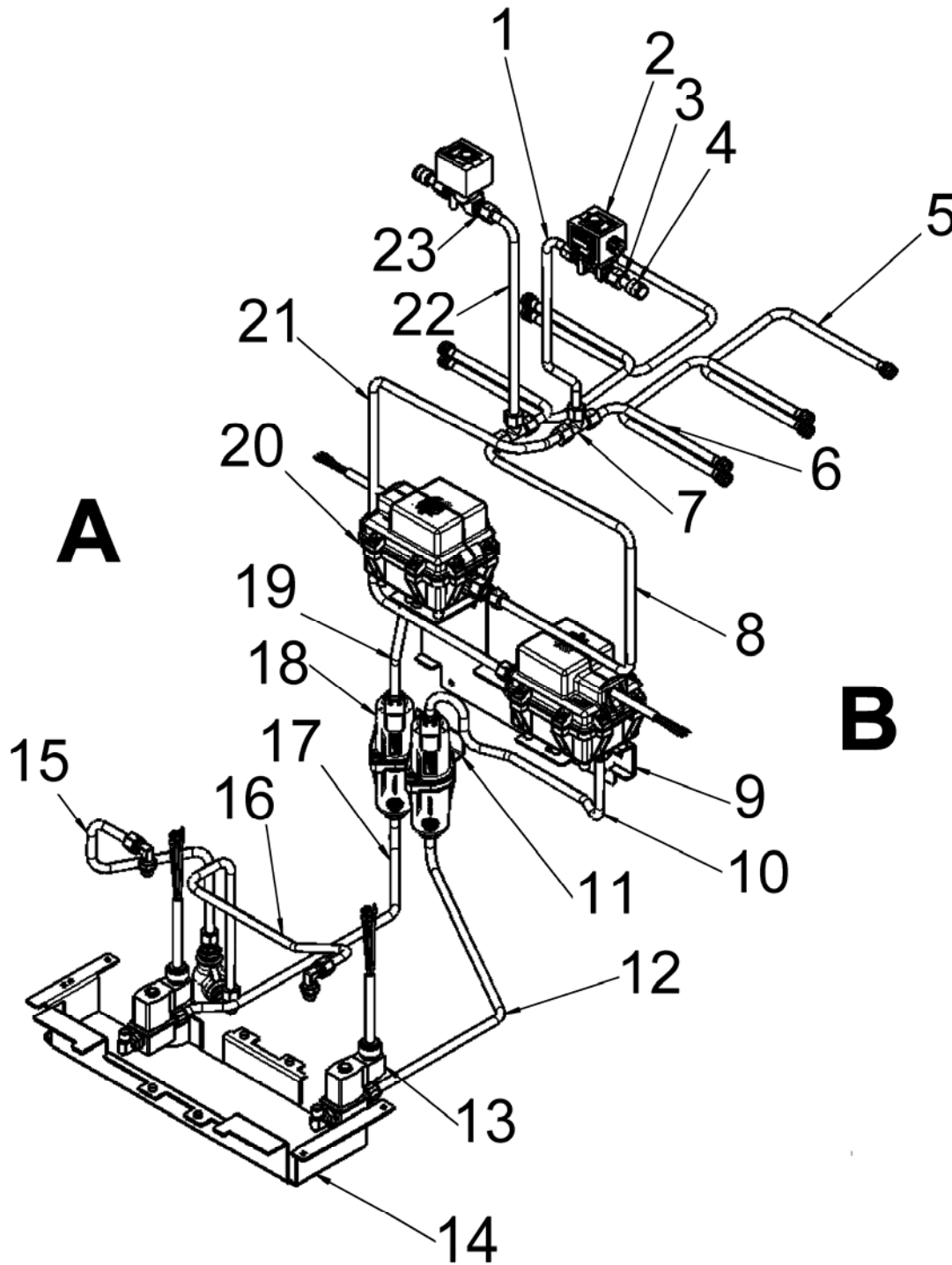
12.2.2 Tubes vapour - suction (HHR)



	Part number	Description
1		Tube, hose adapter - hose adapter
	WM028933	L = 141
	WM029405	L = 281
	WM029407	L = 420
2		Tube, side A
	WM028948	Pump - hose adapter A1, suction
	WM028952	Pump - hose adapter A1, remote
	WM029432	Pump - hose adapter A2, suction
	WM029451	Pump - hose adapter A2, remote
	WM029441	Pump - hose adapter A3, suction
	WM029549	Pump - hose adapter A3, remote
	WM029446	Pump - hose adapter A4, suction
	WM029555	Pump - hose adapter A4, remote
3	WM001267	Solenoid valve, proportional, single, cable 3m
4	WM028464	Shelf for VR module
5		Tube, side A, Pump - outlet
	WM028534	Suction
	WM028560	Remote
6		Tube, side B, Pump - outlet
	WM028536	Suction
	WM028566	Remote
7		Tube, side B
	WM028950	Pump - hose adapter B1, suction
	WM028954	Pump - hose adapter B1, remote
	WM029439	Pump - hose adapter B2, suction
	WM029454	Pump - hose adapter B2, remote
	WM029444	Pump - hose adapter B3, suction
	WM029552	Pump - hose adapter B3, remote
	WM029448	Pump - hose adapter B4, suction
	WM029557	Pump - hose adapter B4, remote

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12.2.3 Tubes vapour gate - suction (HHR)

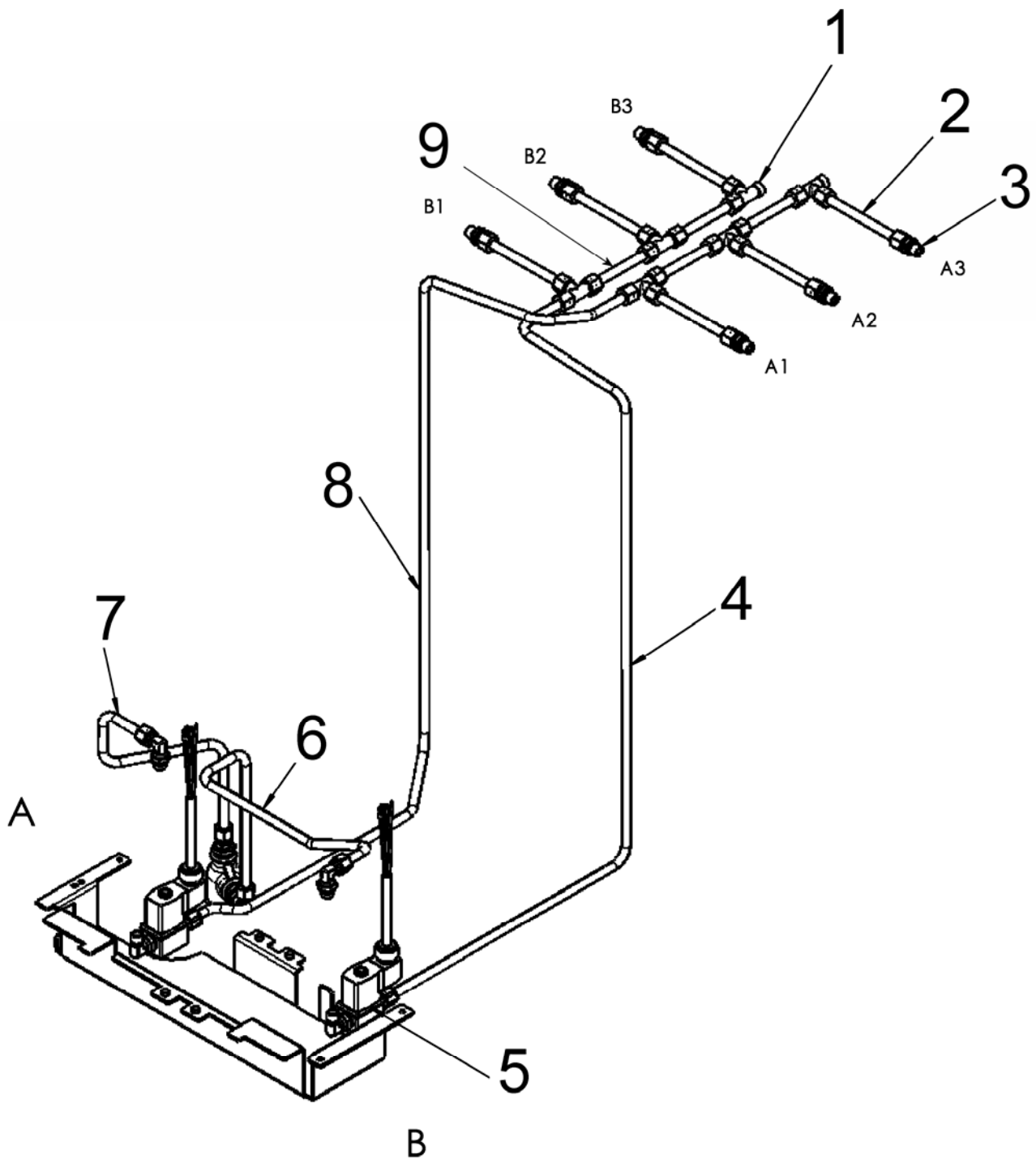


VRM system overview , see page 78.

	Part number	Description
1	WM028499	Tube, T-coupling - solenoid valve
2	WM021576	Solenoid valve, on/off, single
3	WM021787	Tube, proportional valve - filter, side A and B
4	WM021571	Strainer 200 microns
5		Tube, hose adapter - hose adapter
	WM028933	L = 141
	WM029405	L = 281
	WM029407	L = 420
6	WM029419	Tube, A- and B-Side, T-coupling - hose adapter
7	WM020460	T-coupling Ø = 10
8	WM029421	Tube, side A, T-coupling - vapour meter
9	WM028197	Support, L-shape
10	WM028526	Tube, vapour meter - damper
11	WM028439	Support, L-shape
12		Tube, side B, damper - valve
	WM028532	Suction
	WM028548	Remote
13	WM001267	Solenoid valve, proportional, single, cable 3m
14	WM028464	Shelf for VR module
15		Tube, side A, Pump - outlet
	WM028534	Suction
	WM028560	Remote
16		Tube, side B, Pump - outlet
	WM028536	Suction
	WM028566	Remote
17		Tube, side A, damper - valve, suction
	WM028528	Suction
	WM028546	Remote
18	WM018634	Damper
19	WM028524	Tube, side A, vapour meter - damper
20	WM019233-0001	Vapour meter with cable 2,5m
21	WM029426	Tube, side B, T-coupling - vapour meter
22	WM028496	Tube, side A, T-coupling - solenoid valve
23	WM020593	Coupling, straight male GE 1/4" D = 10

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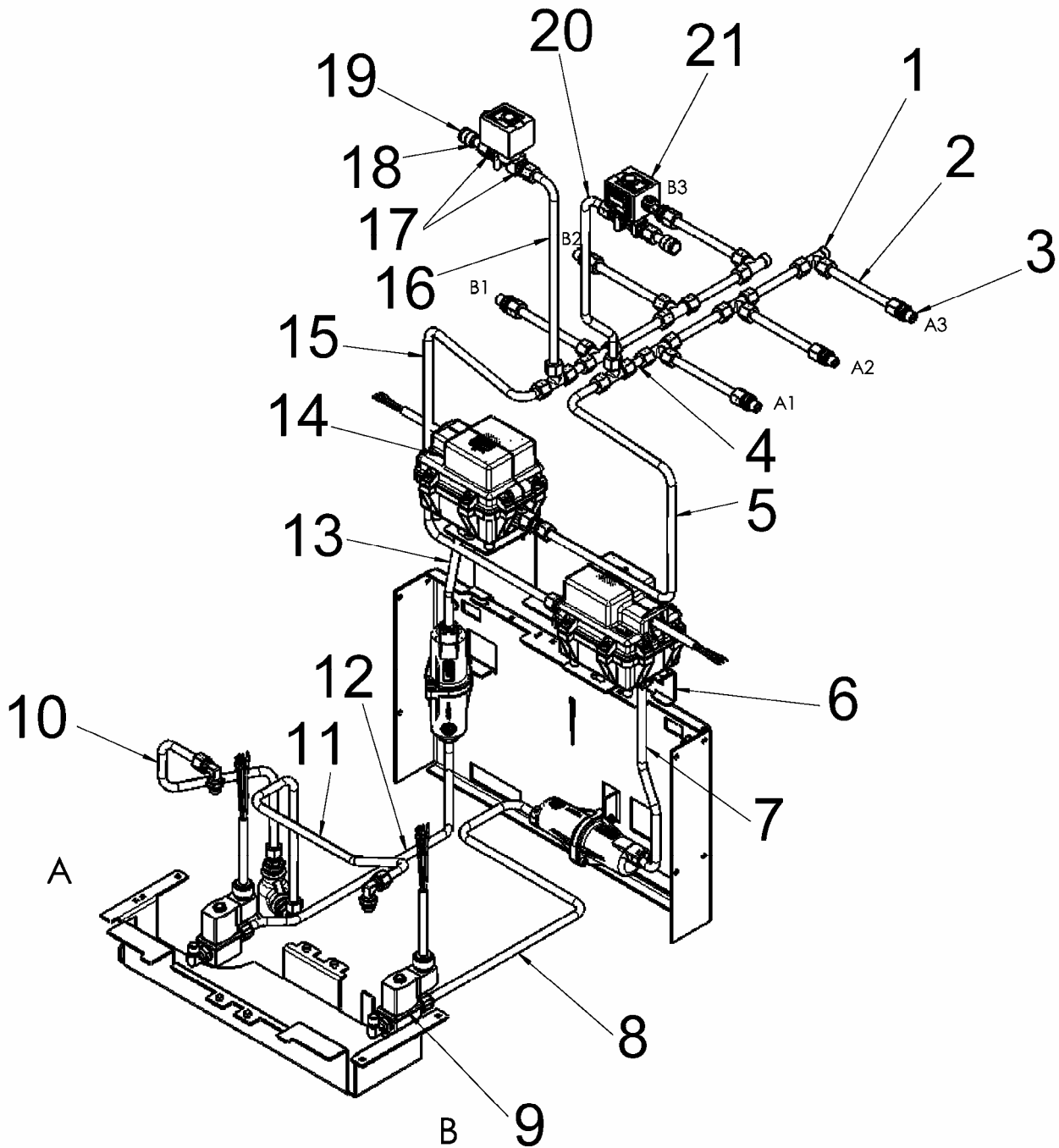
12.2.4 Tubes vapour - suction (HHR) (first month's production)



	Part number	Description
1	WM020460	T-coupling T D= 10
2	WM028512	Tube, vapour, vapour gate adapter - T-coupling, L = 142
3	WM020593	Coupling, straight male GE 1/4" D= 10
4		Tube, vapour, side A, T-coupling - pump side B
	WM030383	Suction
	WM030427	Remote
5	WM001267	Solenoid valve, proportional, single, cable 3m
6		Tube, vapour, side B, pump - outlet
	WM028536	Suction
	WM028566	Remote
7		Tube, vapour, side A, pump - outlet
	WM028534	Suction
	WM028560	Remote
8		Tube, vapour, side B, T-coupling - pump side A
	WM030380	Suction
	WM030425	Remote
9		Tube, vapour
	WM016719	L = 110 mm
	WM016790	L = 250 mm
	WM016791	L = 390 mm

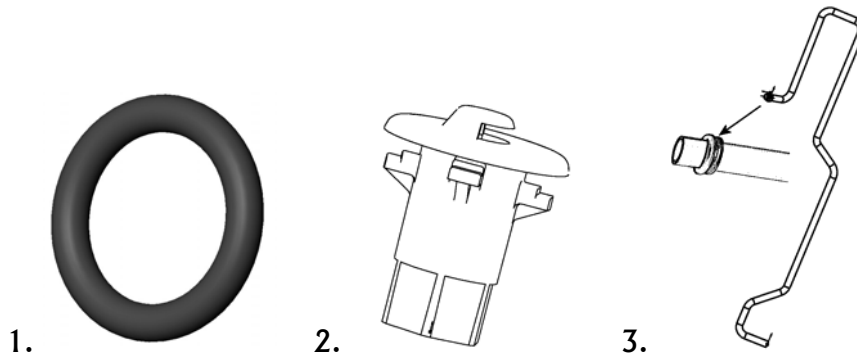
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12.2.5 Tubes vapour gate - suction (HHR) (first month's production)



	Part number	Description
1	WM020460	T-coupling T D= 10
2	WM028512	Tube, vapour, vapour gate adapter - T-coupling, L= 142
3	WM020593	Coupling, straight male GE 1/4" D= 10
4		Tube, vapour
	WM023557	L= 51 mm
	WM016719	L= 110 mm
	WM016790	L= 250 mm
	WM016791	L= 390 mm
5		Tube, vapour, side B, T-coupling - vapour meter side A
	WM030367	With solenoid valve
	WM030371	Without solenoid valve
6	WM028197	Support, L-shape, vapour recovery meter
7	WM028526	Tube, vapour meter - damper
8		Tube, vapour, side B, damper - valve
	WM028532	Suction
	WM028548	Remote
9	WM001267	Solenoid valve, proportional, single, cable 3m
10		Tube, vapour, side A, pump - outlet
	WM028534	Suction
	WM028560	Remote
11		Tube, vapour, side B, pump - outlet
	WM028536	Suction
	WM028566	Remote
12		Tube, vapour, side A, damper - valve
	WM028528	Suction
	WM028546	Remote
13	WM028524	Tube, vapour meter - damper
14	WM019233	Vapour meter with cable 2,5m
15		Tube, vapour, side A, T-coupling - vapour meter side B
	WM030364	With solenoid valve
	WM030369	Without solenoid valve
16	WM028496	Tube, vapour, side A, T-coupling - solenoid valve
17	WM020593	Coupling, straight male GE 1/4" D= 10
18	WM021787	Tube, vapour, vapour gate, prop valve to filter, side A, B
19	WM021571	Strainer 200 microns
20	WM028499	Tube, vapour, side B, T-coupling - solenoid valve,
21	WM021576	Solenoid valve, on/off, single

12.3 Air venting (suction)



	Part number	Description
1	WM006700	O-ring
2	WM011355	Plug with strainer, for air venting
3	WM007741	Tube, air venting (with "single bump")
	WB000408-0001	Self tapping screw, Torx, pan head, type C ST4,8 (for air venting tube with "single bump")
	WB000658-0001	Washer (for air venting tube with "single bump")

13 Hanging hardware

13.1 Hose

13.1.1 HHR

	Part number	Description
1	WM030362-0001	Hose VR, l= 4.06m, black
2	WM030362-0002	Hose VR LT, l= 4.06m, black
3	WM030213-0001	Hose id= 16mm, l= 4.16m, black
4	WM030213-0002	Hose id= 16mm, l= 4.16m, black LT
5	WM030214-0001	Hose id= 21mm, l= 4.16m, black
6	WM030214-0002	Hose id= 21mm, l= 4.16m, black LT
7	WM030215-0001	Hose id= 25mm, l= 4.16m, black
8	WM030215-0002	Hose id= 25mm, l= 4.16m, black LT

VR = Vapour Recovery

LT = Low Temperature

13.2 Nozzle - Elaflex Slimline 2

INNER VALUES - FEEL THE DIFFERENCE



STAINLESS STEEL TIPPED SPOUT

Enduring protection against wear and tear, even after long service life the fuel flows calm and linear. No spraying, no early shut-off.



INTEGRATED DIESEL DRIP CATCHER AS STANDARD

More cleanliness: Diesel is running down the spout and collected in the Drip Catcher when the nozzle is in the boot. Nozzle cover and configrip stay clean and tidy.



ECONOMIC COLOUR CODING

The easy to fit coloured Product Sleeve (EK 043) enables clear fuel grade identification or branding of the nozzle with company colours. Also available as Splashguard (EK 652).



ACTIVE PRESSURE CONTROLLED SAFETY SHUT-OFF (DSA)

Optional, for additional safety at prepay dispensers and unmanned petrol stations. The DSA shuts off the nozzle after each refuelling operation.



SENSITIVE CONTROL

Topping-off and to the penny dispensing made easy. The new intelligent valve poppet opens without effort, so it is still possible to round up - even with high petrol prices.



ZVA SLIMLINE 2 GR: INTEGRATED VAPOUR VALVES

Not only the 'On/Off' vapour valve GRV, but also the proportional valve GRVP are fully integrated and do not add to the nozzle length. Dry testing with the GRVP has been made even simpler.



Patents pending for new several constructions details.
Design protection for Europe/China.



CLEAN FOR DIESEL

The optional DRIP STOP spout for ZVA Slimline 2 stops dripping diesel and biodiesel within seconds. The dispenser area stays cleaner. Advantage - satisfied customers and a clean environment. Retrofitting possible.



IMPROVED DRAIN-OFF

Due to forward located components and an improved construction, the nozzle drains off fast. This speeds up refuelling and further helps for a clean environment.



CLEARLY LESS EFFORT

Better refuelling comfort, either with or without hold-open latch. The force to pull the lever has been reduced by more than 30 percent. This is appreciated in countries where a hold-open device is not allowed.



SELF EXPLANATORY HOLD OPEN SYSTEM

New easy to use hold-open latch. Simple disassembly after pulling out the latch pin.



COMFORTABLE LEVER

The composite contoured lever provides a comfortable experience for your hand - especially at low temperatures.



IMPROVED SHUT-OFF

The new 'intelligent valve poppet' minimizes pressure peaks and protects the dispensing system. The poppet also provides for an improved shut-off even under demanding operation conditions, such as vapourising or foaming fuels.

Part number	Description
WM026214-0001	19mm, 8D, spout id= 19/od= 25
WM026214-0003	19mm, 8D, spout id= 16/od= 21
WM026214-0004	19mm, 8, spout Id= 21/od= 25, drip stop
WM026214-0005	19mm, 8D, spout id= 16/od= 21, DSA
WM026214-0006	19mm, 8, spout id= 21/od= 25, drip stop UK
WM026214-0007	19mm, 8, spout id= 21/od= 25, drip stop, DSA
WM026214-0002	19mm, 8D, spout id= 16/od= 21, ethanol
WM026217-0002	19mm, 8D, spout id= 21/od= 25, black
WM026217-0003	19mm, 8D, spout id= 16/od= 21, green
WM026217-0001	19mm, 8D, spout id= 21/od= 25, black, drip stop
WM026217-0004	19mm, 8D, spout id= 16/od= 21, black DSA
WM026217-0006	19mm, 8D, spout id= 21/od= 25, black, drip stop, UK
WM026217-0007	19mm, 8D, spout id= 21/od= 25, black, drip stop, DSA
WM026217-0002	19mm, 8D, spout id= 21/od= 25, black
WM026219-0003	VR, 8D, spout od= 25
WM026219-0002	VR, 8D, spout od= 21
WM026219-0004	VR, 8D, spout od= 21, DSA
WM026219-0001	VR, 8D, spout od= 21, ethanol

	Part number	Description
	WM026220-0001	VR, 8D, spout od = 21, green
	WM026220-0003	VR, 8D, spout od = 21, black
	WM026220-0002	VR, 8D, spout od = 21, blue ethanol
	WM026221-0003	VR, id = 16/od = 21, green, with break-away
	WM026221-0004	Id = 21/od = 25, black, with break, LT
	WM026221-0005	Id = 21/od = 25, black, drip stop, with break, LT
	WM026221-0002	Id = 21/od = 25, black, with break, std
	WM026221-0006	Id = 21/od = 25, black, drip stop, with break, std
	WM026221-0002	Id = 21/od = 25, black, with break, std
	WM026221-0004	Id = 21/od = 25, black, with break, IT
	WM026221-0008	Id = 16/od = 21, with break, std
	WM026221-0007	Id = 16/od = 21, with break, LT
	WM026221-0001	VR, id = 16/od = 21, with break-away
	WM026221-0009	Id = 21/od = 25, black, with break, DSA
	WM026221-0010	Id = 21/od = 25, black, with break, LT, DSA
	WM026221-0011	Id = 21/od = 25, black, drip stop, with break, LT, DSA
	WM026221-0012	Id = 21/od = 25, black, drip stop, with break, DSA
	WM026221-0013	Id = 16/od = 21, with break, LT, DSA
	WM026221-0014	Id = 16/od = 21, with break, DSA
	WM026221-0015	VR, id = 16/od = 21, with break-away, DSA
	WM026221-0016	Id = 21/od = 25, black, drip stop, with break-away, UK DSA
	WM026221-0017	Id = 21/od = 25, black, drip stop, with break-away, LT, UK
	WM026221-0018	Id = 21/od = 25, black, drip stop, with break-away, std, UK
	WM026221-0019	Id = 21/od = 25, black, drip stop, with break-away, LT, DSA, UK
	WM026484-0001	BP VR, light blue
	WM026485-0001	BP light blue
	WM026485-0002	BP dark blue

13.3 Cover- Elaflex Slimline 2

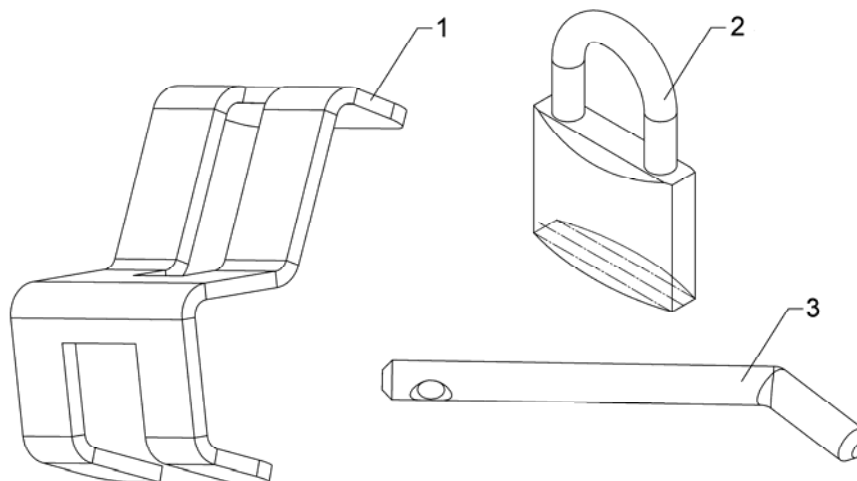
	Part number	Description
	WM026428-0001	Orange
	WM026428-0002	Black
	WM026428-0003	White
	WM026428-0004	Yellow
	WM026428-0005	Blue
	WM026428-0006	Red
	WM026428-0007	Green
	WM026428-0008	Light green
	WM026428-0009	Light yellow
	WM026428-0010	BP dark blue
	WM026428-0011	BP light blue

It's the same cover for nozzles with VR and without VR.

13.4 Splash guard - Elaflex Slimline 2

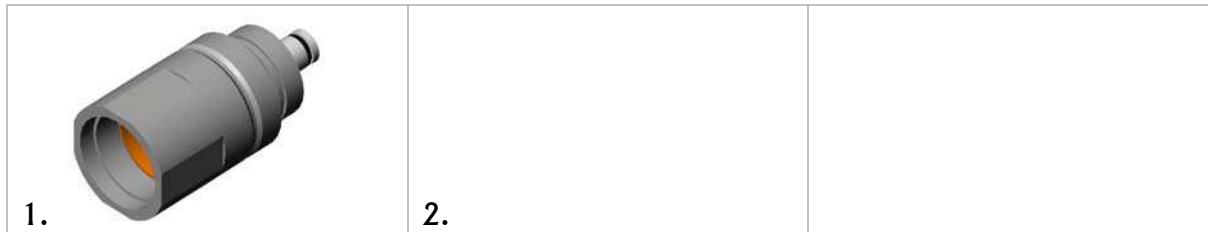
Part number	Description
WM026471-0002	Id = 24, od = 82, green
WM026471-0005	Id = 24, od = 82, black
WM026471-0006	Id = 24, od = 82, green, text UK
WM026471-0003	Id = 24, od = 82, blue
WM026471-0004	Id = 24, od = 82, red
WM026471-0001	Id = 24, od = 82, yellow
	BP
WM026471-0007	Id = 24, od = 82, BP light blue, text NL
WM026471-0009	Id = 24, od = 82, BP Light blue, text PT
WM026471-0010	Id = 24, od = 82, BP Light blue, text ES
WM026471-0019	Id = 26, od = 92, BP light blue, AT
WM026471-0017	Id = 26, od = 92, BP dark blue, AT
WM026471-0018	Id = 26, od = 92, BP dark blue, UK
WM026471-0008	Id = 26, od = 92, BP light blue, PL
WM026471-0016	Id = 26, od = 92, BP dark blue, FR
WM026471-0011	Id = 26, od = 92, BP light blue, FR
WM026471-0012	Id = 26, od = 92, BP dark blue, NL
WM026471-0013	Id = 26, od = 92, BP dark blue, PL
WM026471-0015	Id = 26, od = 92, BP dark blue, ES
WM026471-0014	Id = 26, od = 92, BP dark blue, PT

13.5 Padlock



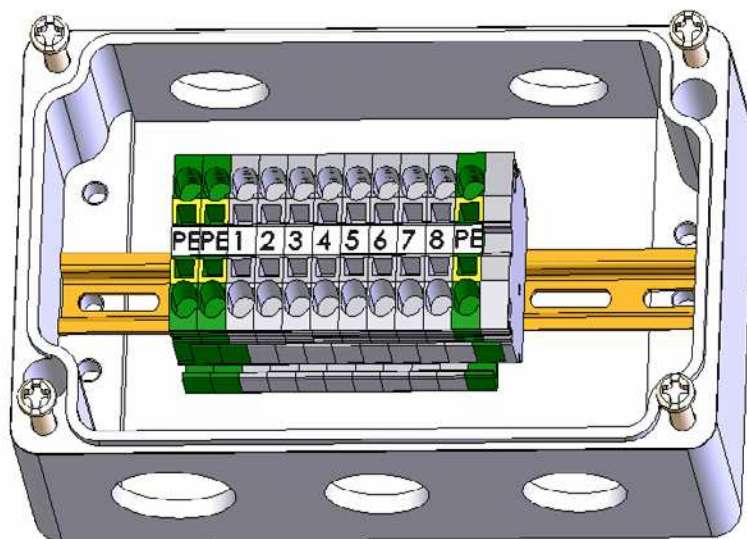
	Part number	Description
1	WM004686	Lock LPG nozzle
2	WM003189	Padlock
3		Pin
	WM002518-0001	1 nozzle
	WM002518-0002	2 nozzles
	WM002518-0003	3 nozzles
	WM002518-0004	4 nozzles
	WM002518-0005	5 nozzles
	WM002518-0006	6 nozzles

13.6 Sight glass and break away



	Part number	Description
1	WM002068	Break away
2		Sight glass

14 Junction box



Cables and wiring diagram, see page 84.

Connection Instruction - Installation wiring diagram, see User's Manual. (list on page 83)

1.

2.

3.

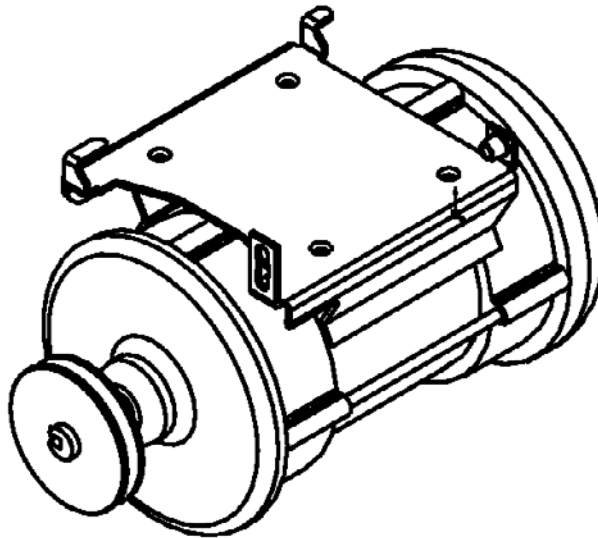
4.

		1	2	3	4	5	6	7	8
HIGH VOLTAGE	PE	L1	L2	L3	P	N	PI	NI	PE
LPG	PE	P	N	PI	NI	1	7	8	PE
DISPENSER WITHOUT VR	PE	1	2	3	4	P	N	PI	NI
HIGH VOLTAGE UK	PE	L	N			P	N	PI	NI
LOW VOLTAGE	PE	28	29	30	31	32	33	34	35

5.

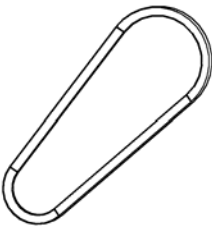
	Part number	Description
1	WM028375	Support, L-shape, junctions box, L=709mm
2	WM026839	Junction box, all round
3		Grommet
	WM001540-0001	M20, Ø 8-12 mm
	WM001540-0002	M20, Ø 10-14 mm
	WM003257	M25, Ø 13-18 mm
4		Grommet blind
	WM001591	M20
	WM003241	M25
5	WM026770	Sticker connection label

15 Motor



Part number	Description
	Motor, 3-phase
WM022320-0008	0.75 kW, 230 V, 1430 rpm, 50 Hz
WM022320-0007	0.75 kW, 400 V, 1430 rpm, 50 Hz
WM022320-0010	0.75 kW, 400 V, 1430 rpm, 50 Hz (Croatia)
WM022323-0007	1.1 kW, 230 V, 1400 rpm, 50 Hz
WM022323-0006	1.1 kW, 400 V, 1400 rpm, 50 Hz
WM022323-0009	1.1 kW, 400 V, 1400 rpm, 50 Hz (Croatia)
	Motor, 1-phase
WM028249-0001	0.75 kW, 230 V, 1450 RPM, 50 Hz
WM028248-0001	1.1 kW, 230 V, 1400 RPM, 50 Hz

15.1 Driving belt

 WARNING! The driving belt may be replaced only by original belt from Dresser Wayne, otherwise there is a risk of explosion.	 1.	
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Part number	Description
1	Belt, Z-profile
WM004363	SPZ 792
WM003055	SPZ 800

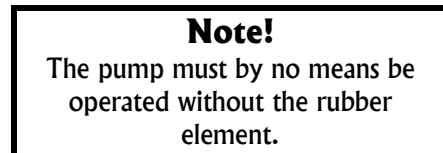
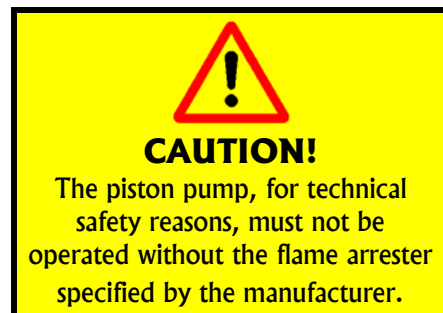
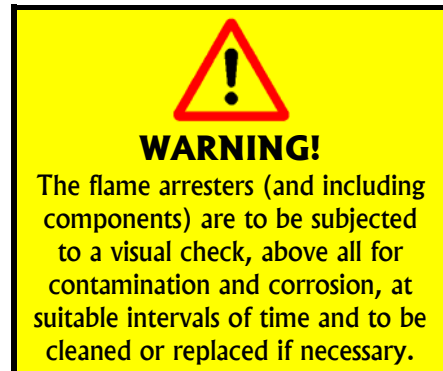
16 Vapour recovery

16.1 Vapour recovery module - Dürr

MEX 0544 1000K up to 0544 2999K
MEX 0544 1000G up to 0544 2999G

Tubes for Global Star V HHR; see page 60

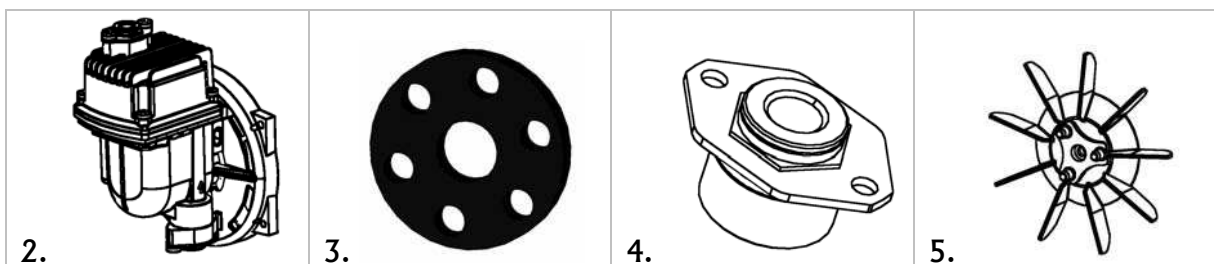
To protect the machines from high ambient temperature a temperature switch is build in. This prevents an over-heating of the motor winding. The temperature switch turns off the machine at undue high ambient temperatures.



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1.



	Part number	Description
1		Vapour recovery module
	WM029734	Motor 1-phase 230V, 1 piston pump
	WM029735	Motor 1-phase 230V, 2 piston pumps
	WM029736	Motor 3-phase 230V, 1 piston pump
	WM029737	Motor 3-phase 230V, 2 piston pumps
	WM029738	Motor 3-phase 400V, 1 piston pump
	WM029739	Motor 3-phase 400V, 2 piston pumps
	WM029740	Motor 3-phase (Croatia) 400V, 1 piston pump
	WM029741	Motor 3-phase (Croatia) 400V, 2 piston pumps
2	WM029349	Vapour pump, complete
3	WM029343	Rubber coupling
4	WM029346	Flame arrester with O-ring
5	WM029340	Fan with coupling
	WM030532-0001	Taptite screw, Torx, pan head, M5

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16.2 VR Monitoring

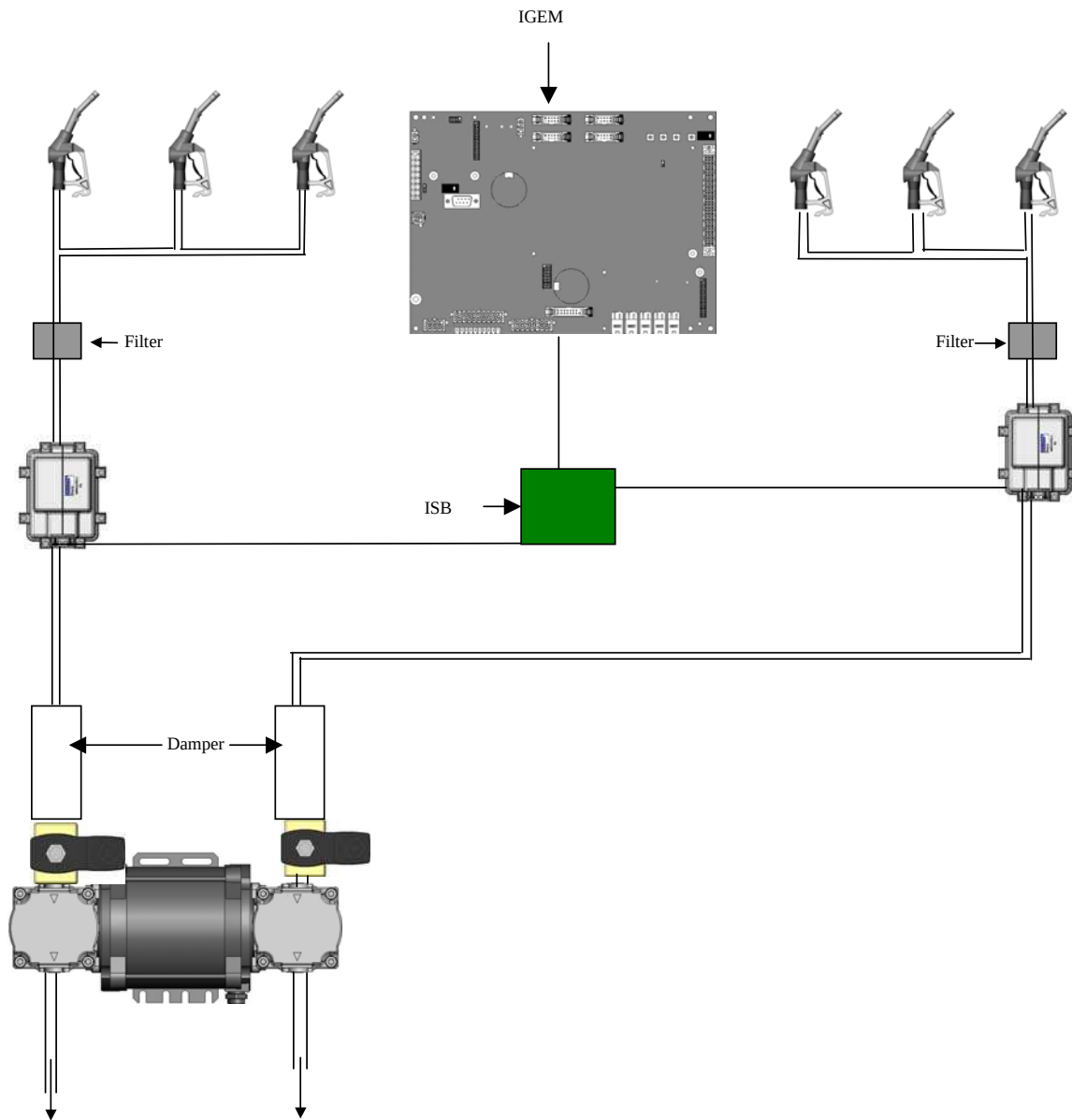
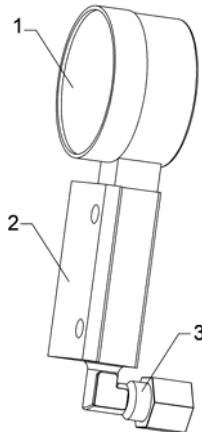


Figure 1 VRM system overview (without self check)

Spare parts, see page 62.

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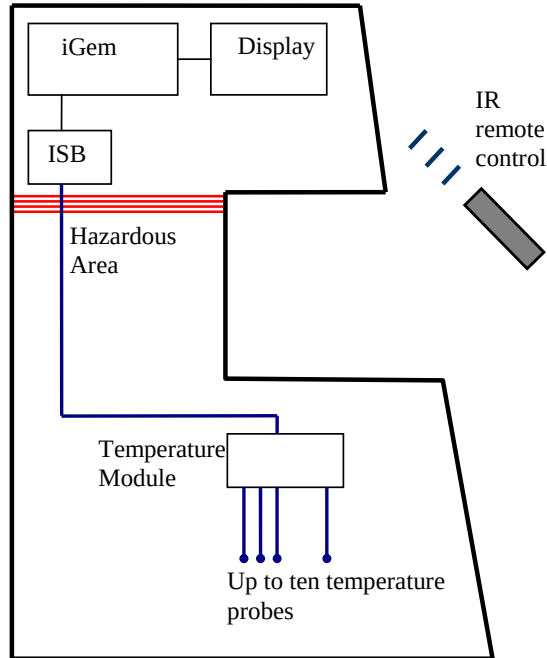
16.3 Pressure gauge



	Part number	Description
	WM001545	Pressure gauge ass'y
	WM001544	Pressure gauge
	WM001812	Coupling 90 degree
	WM002449	Coupling straight
	WM003160	Sealant Loxeal 58-11, thread sealant

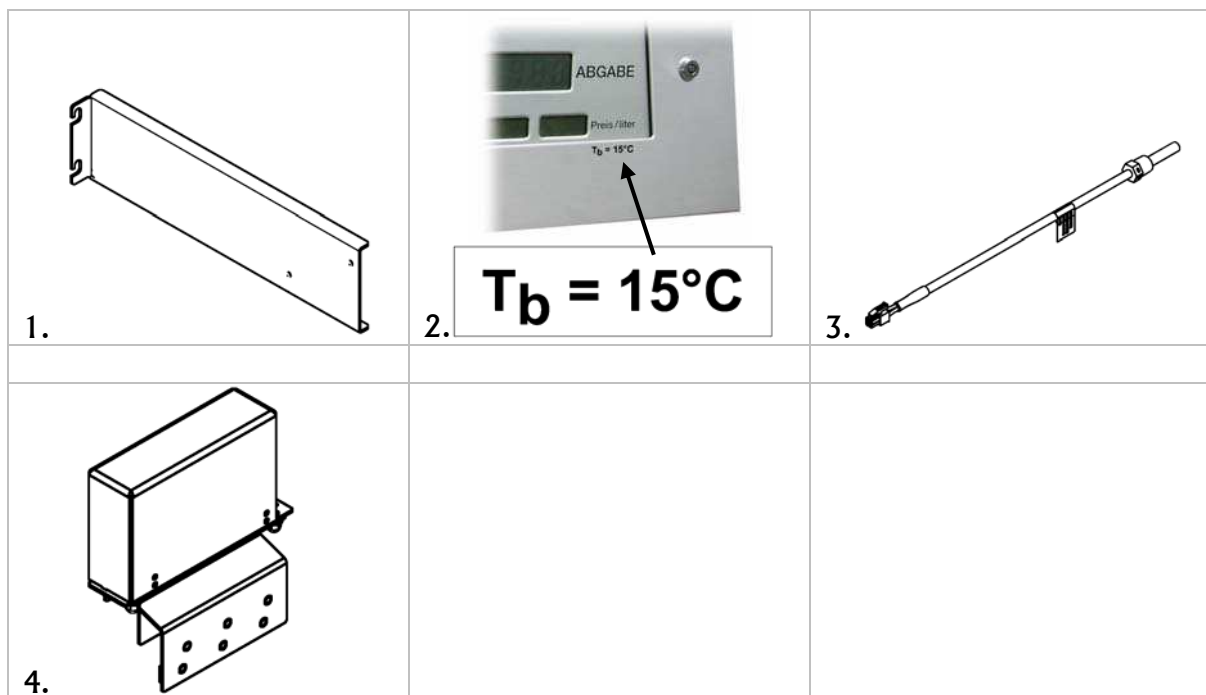
17 ATC

Automatic Temperature Compensation



WARNING: Contains intrinsically safe equipment

Figure 2 The ATC system

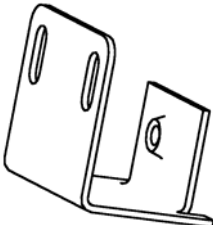
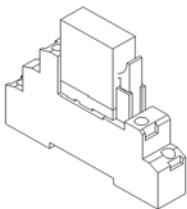


	Part number	Description
1	WM028379	Support, I-shape, sensor, temperature module
2	WM013631	Grade sticker, Tb = 15 °C, transparent
3		Temperature probes
	WM019643-0001	L = 1050 mm
	WM019643-0002	L = 3000 mm
4	WM020675-0011	Temperature Module (without probes)

Cables see page 84.

ISB see page 8.

18 Anti burglary device

1.		2.		3.	
4.	WARNING HIGH TOUCH CURRENT, EARTH CONNECTION ESSENTIAL BEFORE CONNECTION SUPPLY.	5.	 EXTRA SAFETY PROTECTED		

	Part number	Description
1	WM028381	Support, U-shape, anti-burglar switch
2	WM002399	Relay
3	WM001649-0001	Switch
4	WE000544	Sticker
5	WM006679	Sticker

19 Documents

19.1 Users Manual HHR

CZ	WM027785
DE	WM027786
eng	WM027787
ES	WM027788
FI	WM027789
FR	WM027790
GR	WM027791
IT	WM027792
LV	WM029460
NL	WM027793
PL	WM027794
PT	WM027795
RO	WM027796
RU	WM027797
SE	WM027798
SI	WM027799
UA	WM028984
sr (YU)	WM027800

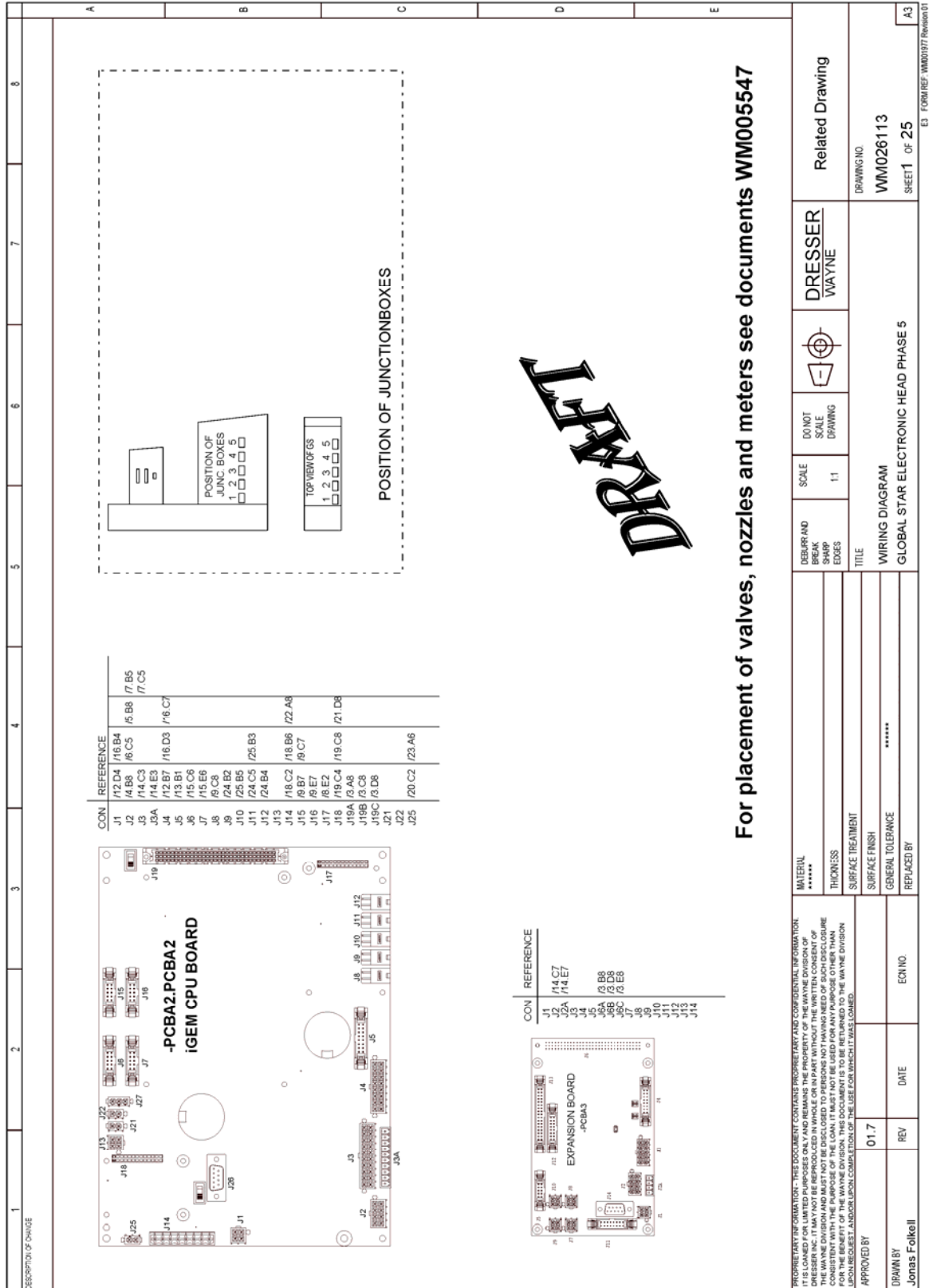
You will find the manuals on our FTP server.

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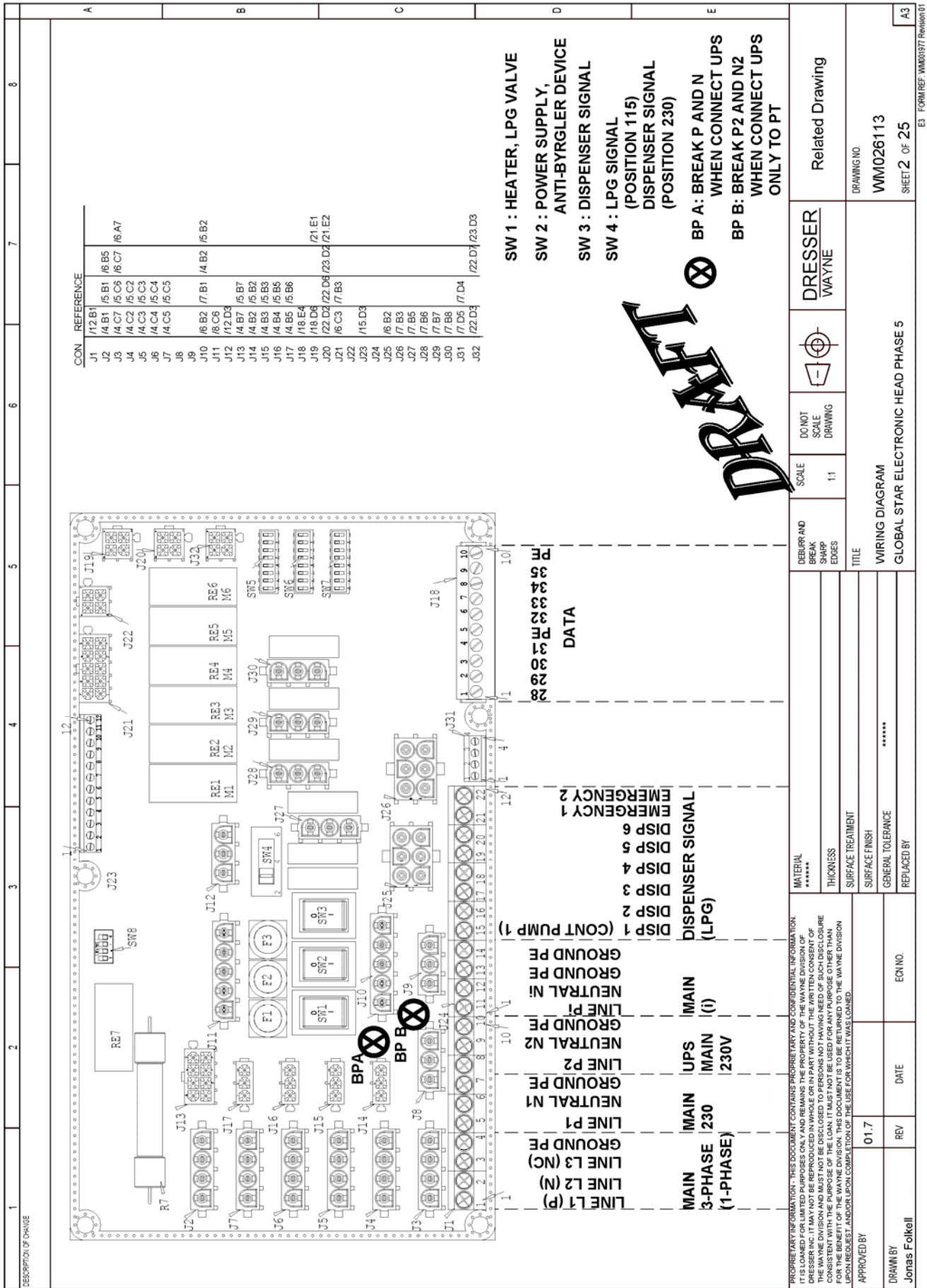
20 Wiring diagram (with cable numbers)

Cable list see page 109.

Connection Instruction and Installation instructions, see the User's Manual or ftp-server. (list on page 83)



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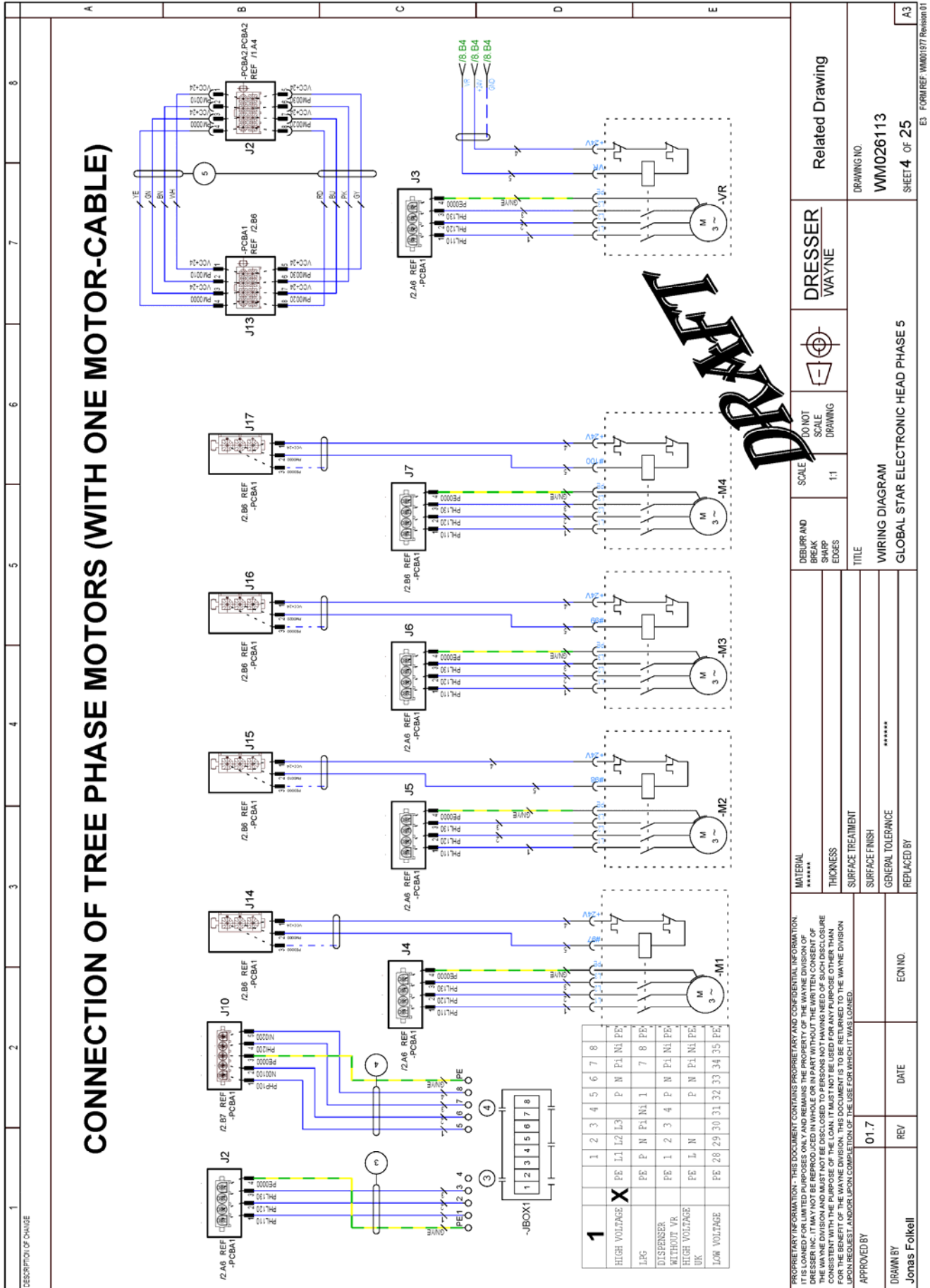
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CONNECTION OF TREE PHASE MOTORS (WITH ONE MOTOR-CABLE)



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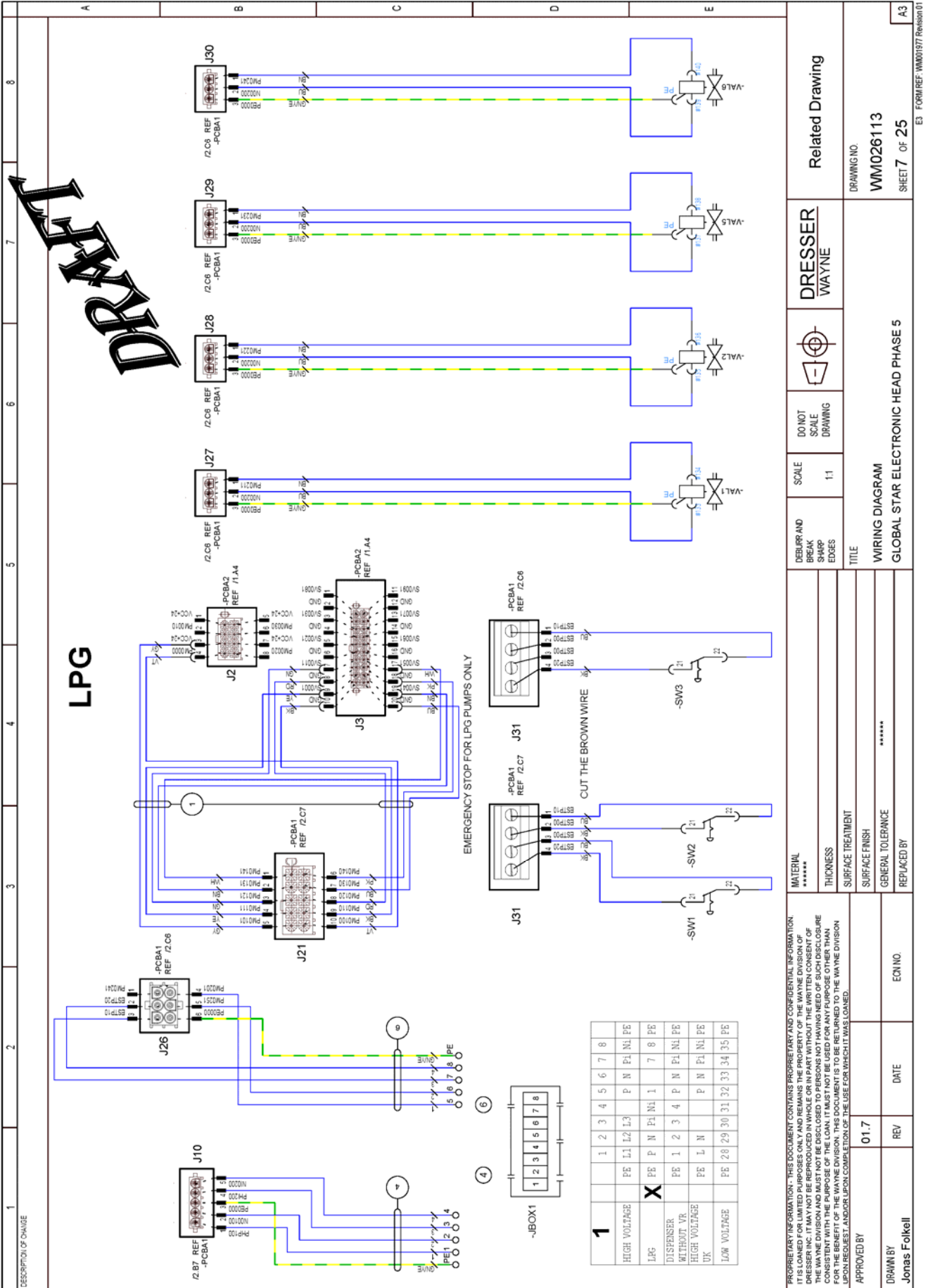
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SHEET 4 OF 25					
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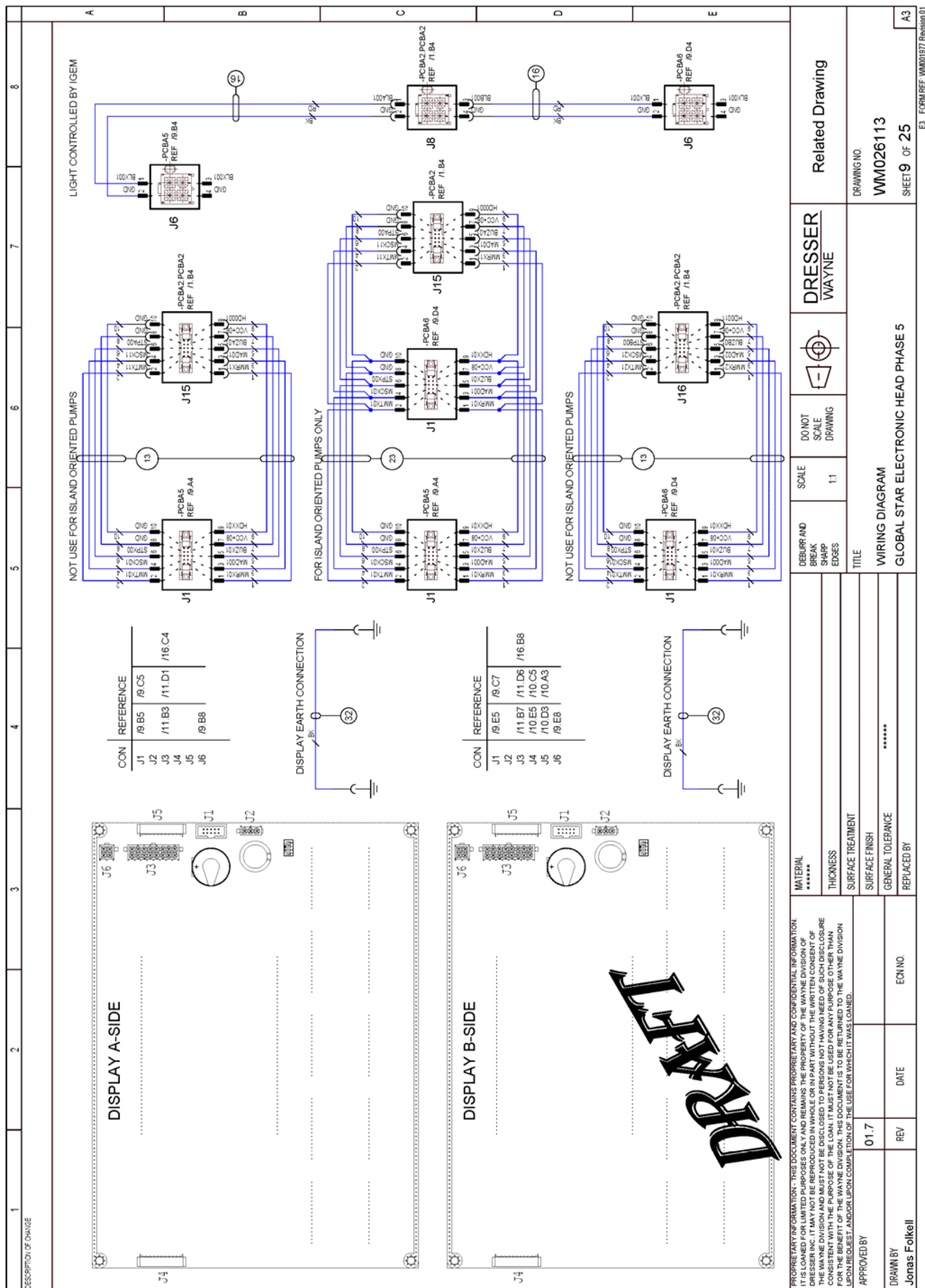


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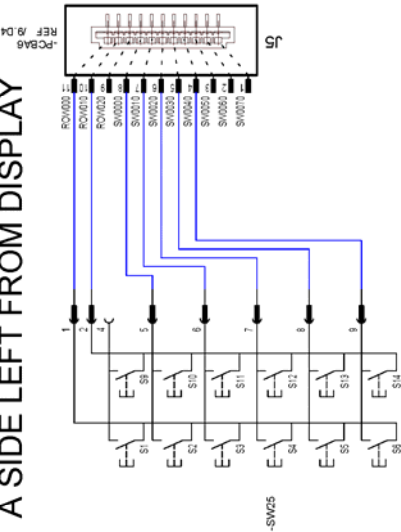
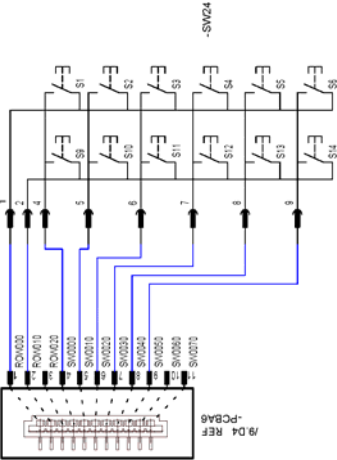
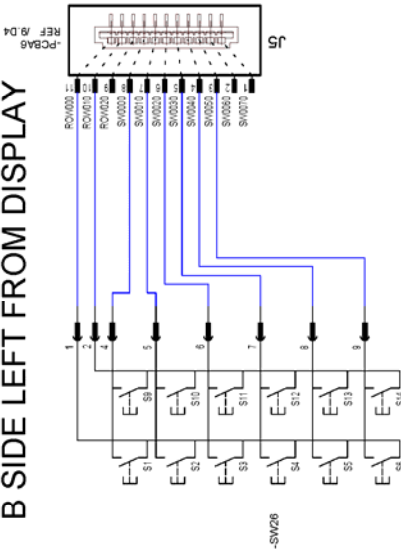
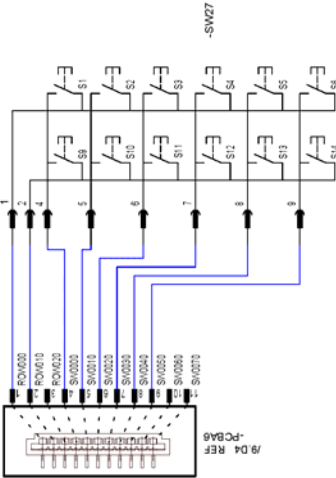




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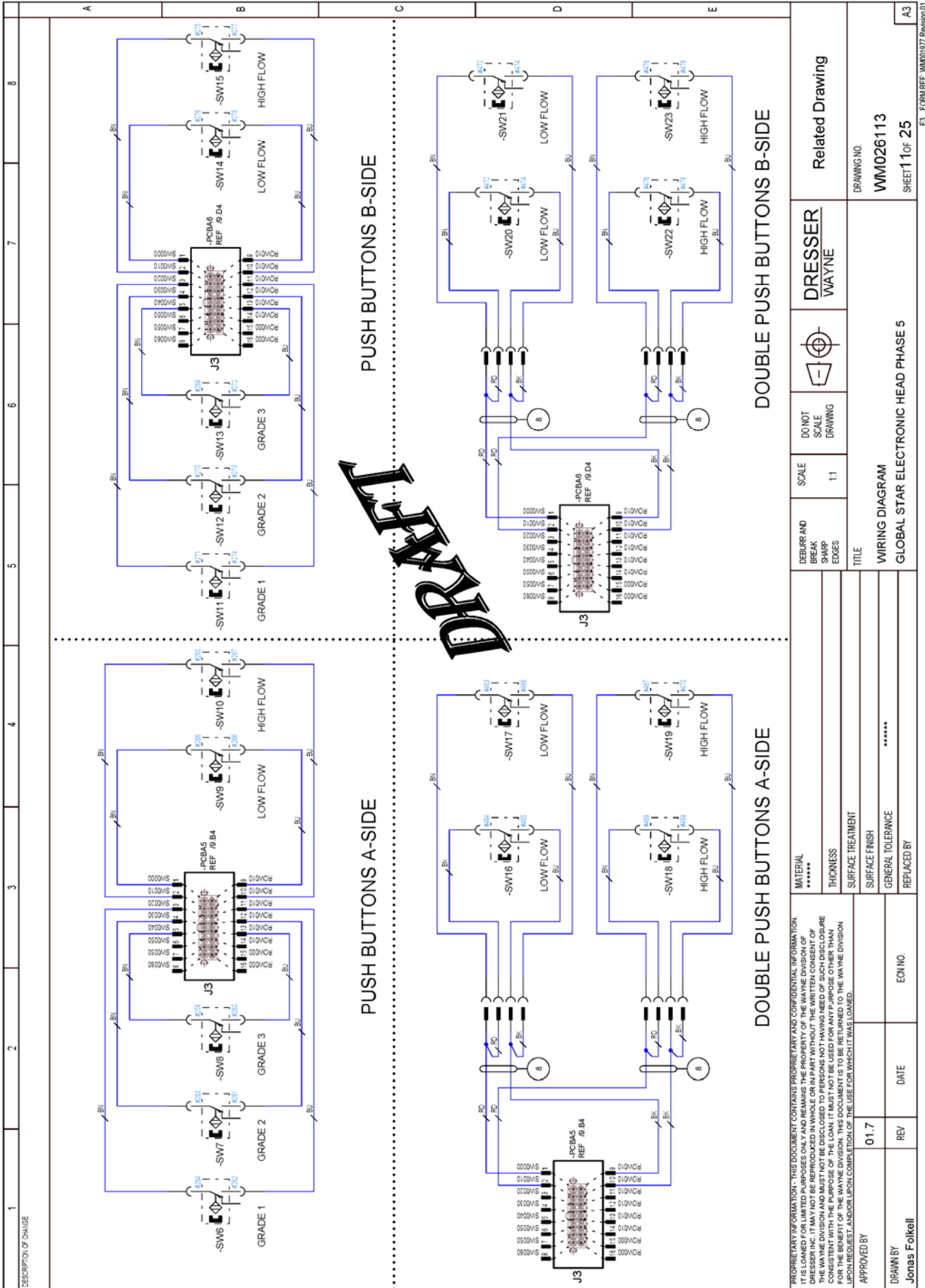
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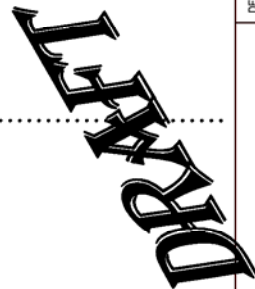
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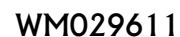
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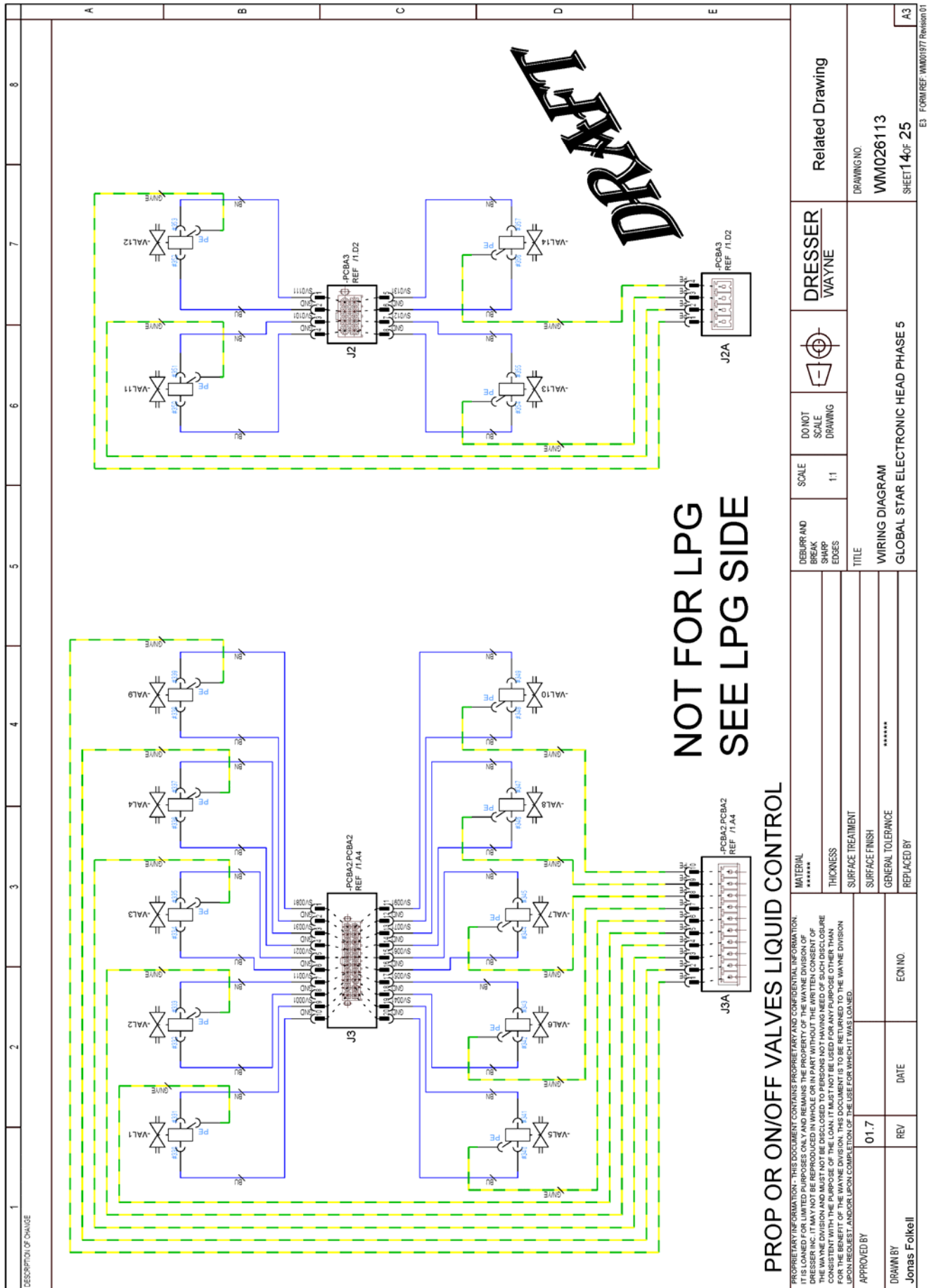
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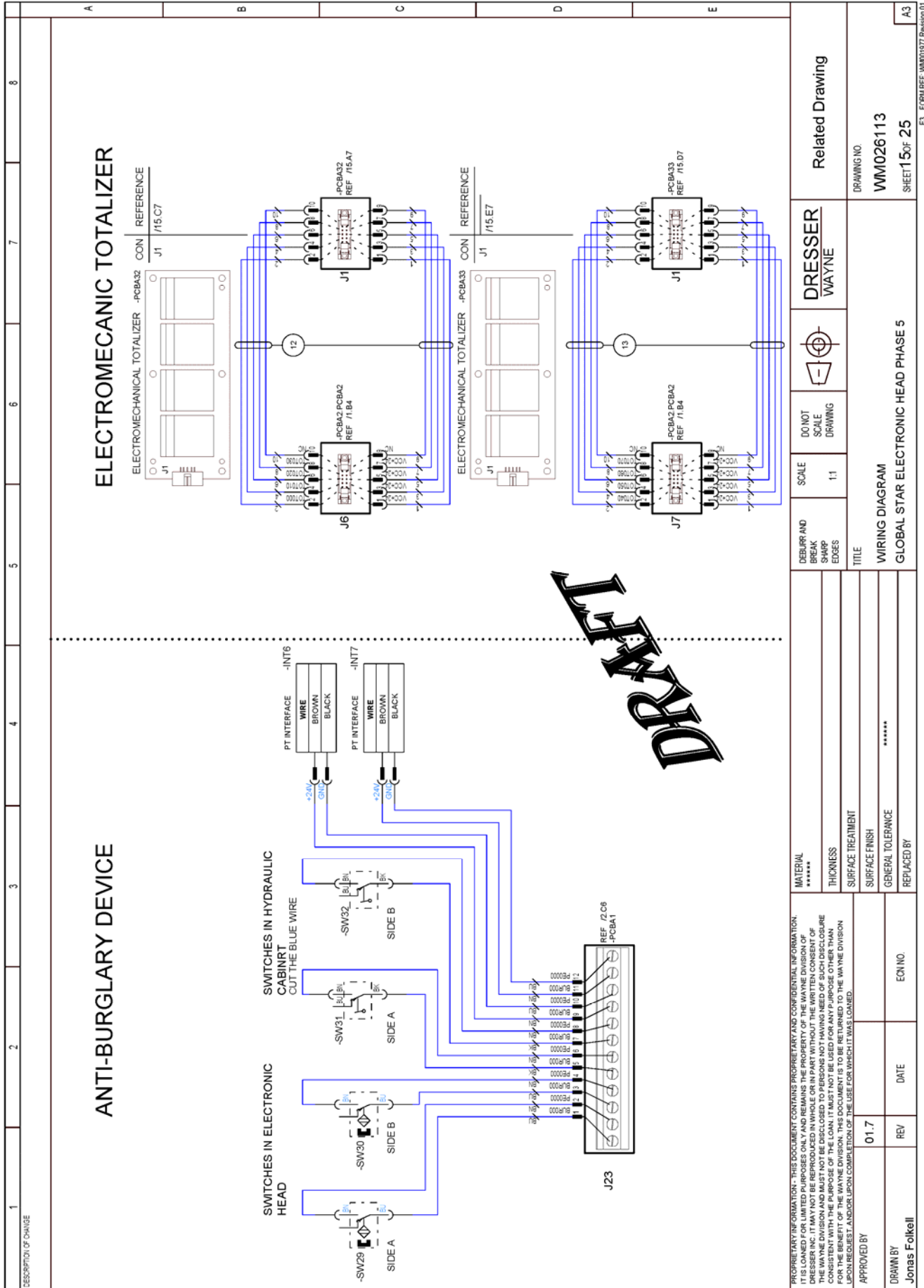




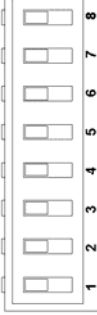
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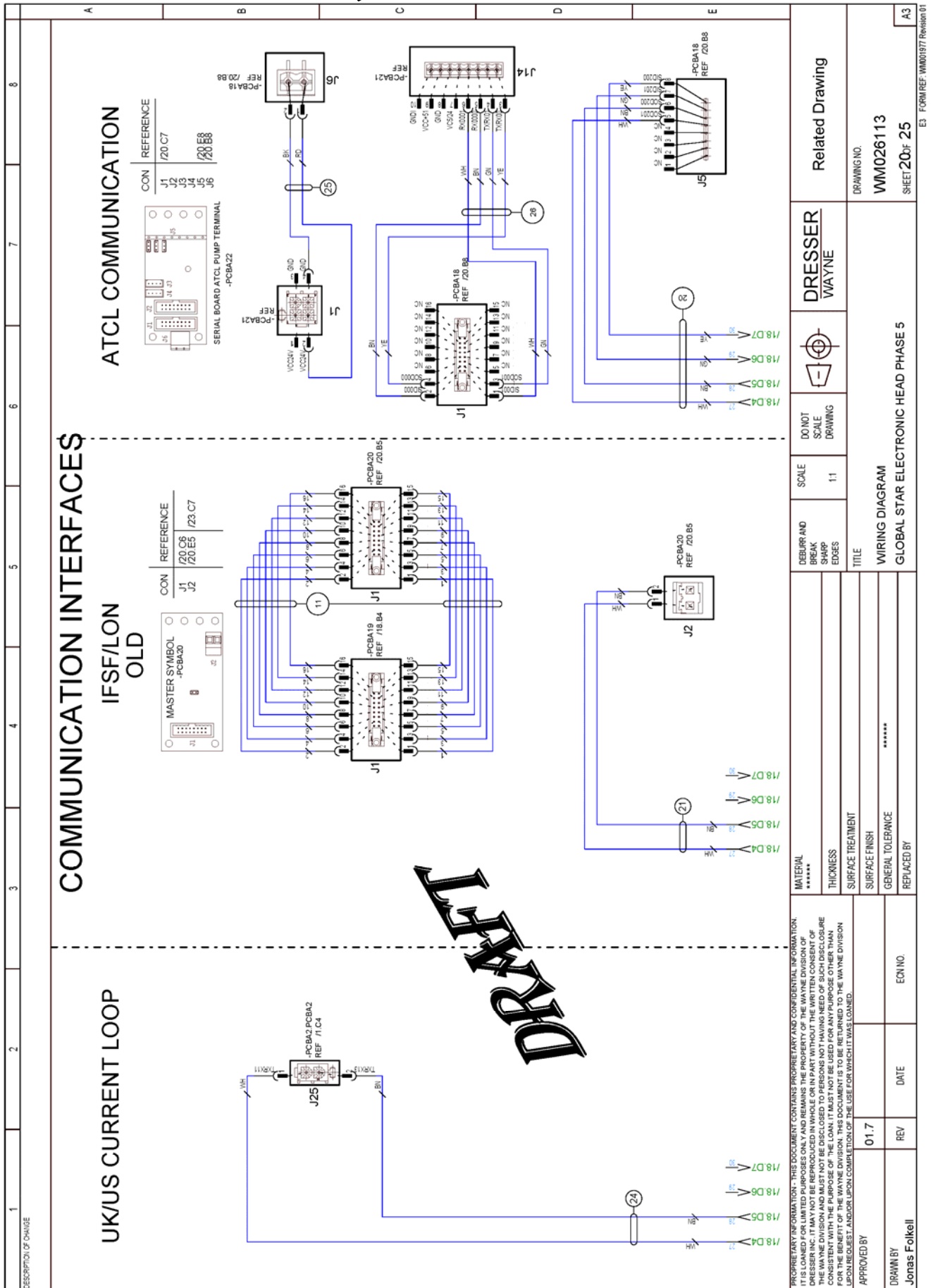
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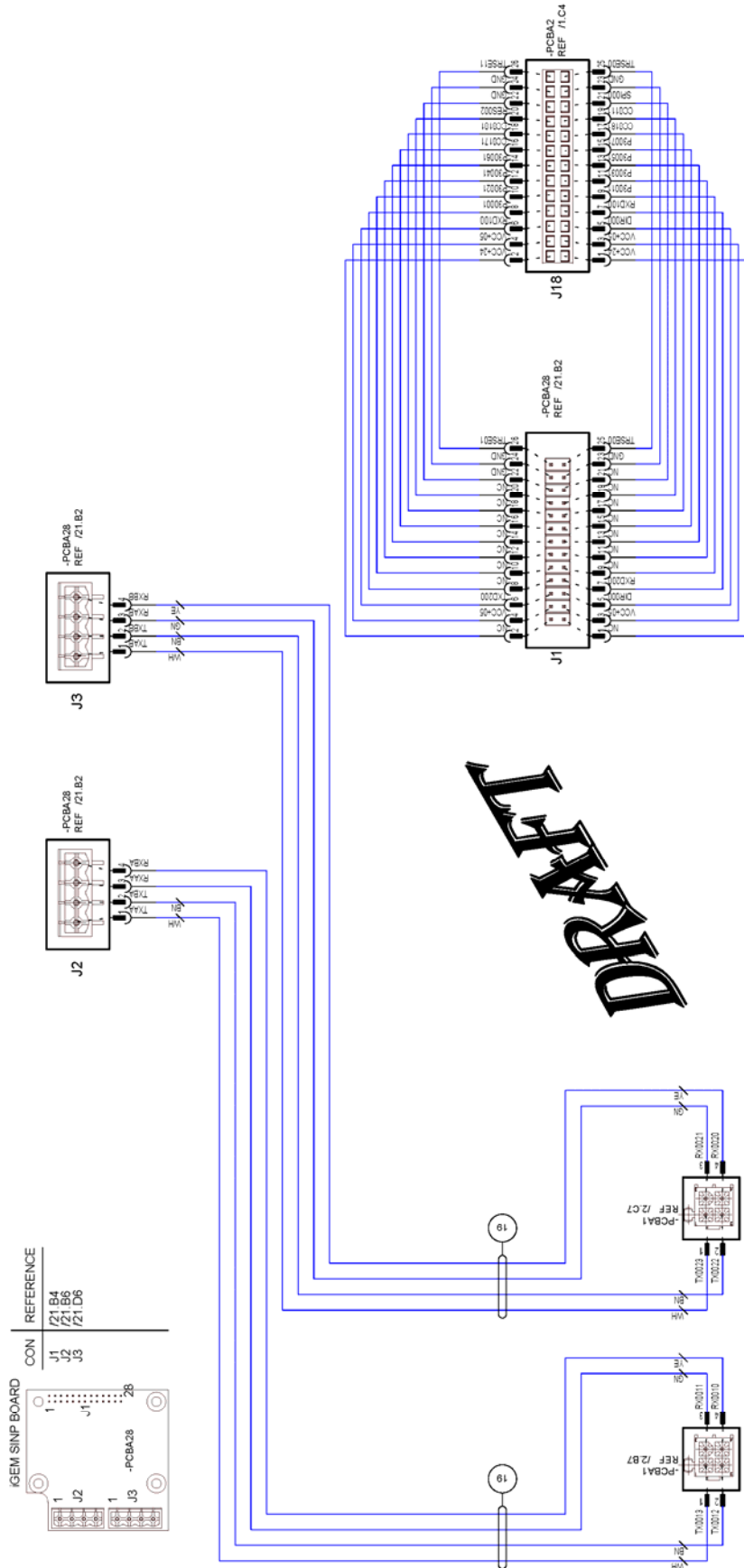


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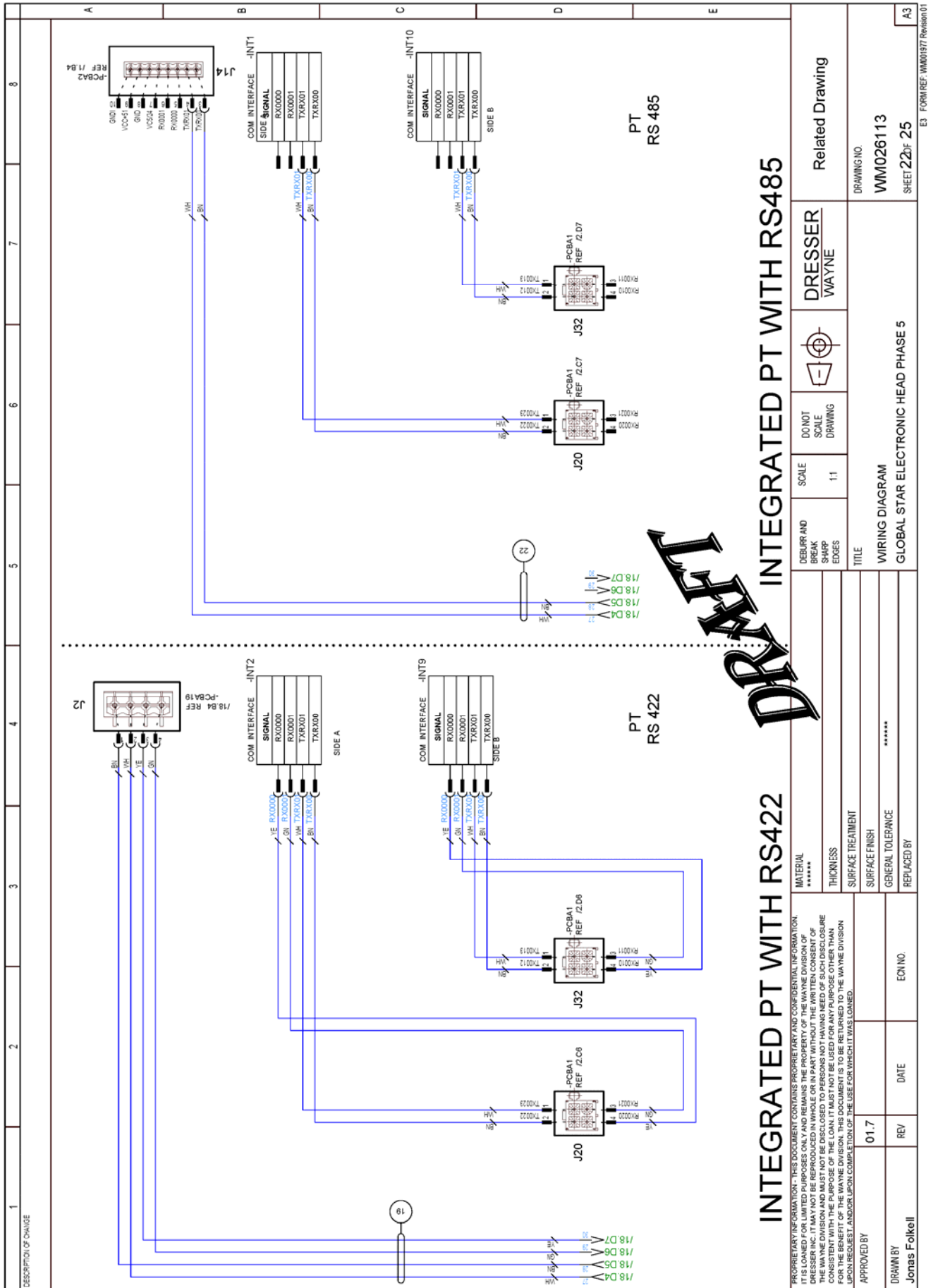
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TITLE		WIRING DIAGRAM		GLOBAL STAR ELECTRONIC HEAD PHASE 5		DRAWING NO.		WM026113	
								SHEET 21 OF 25	
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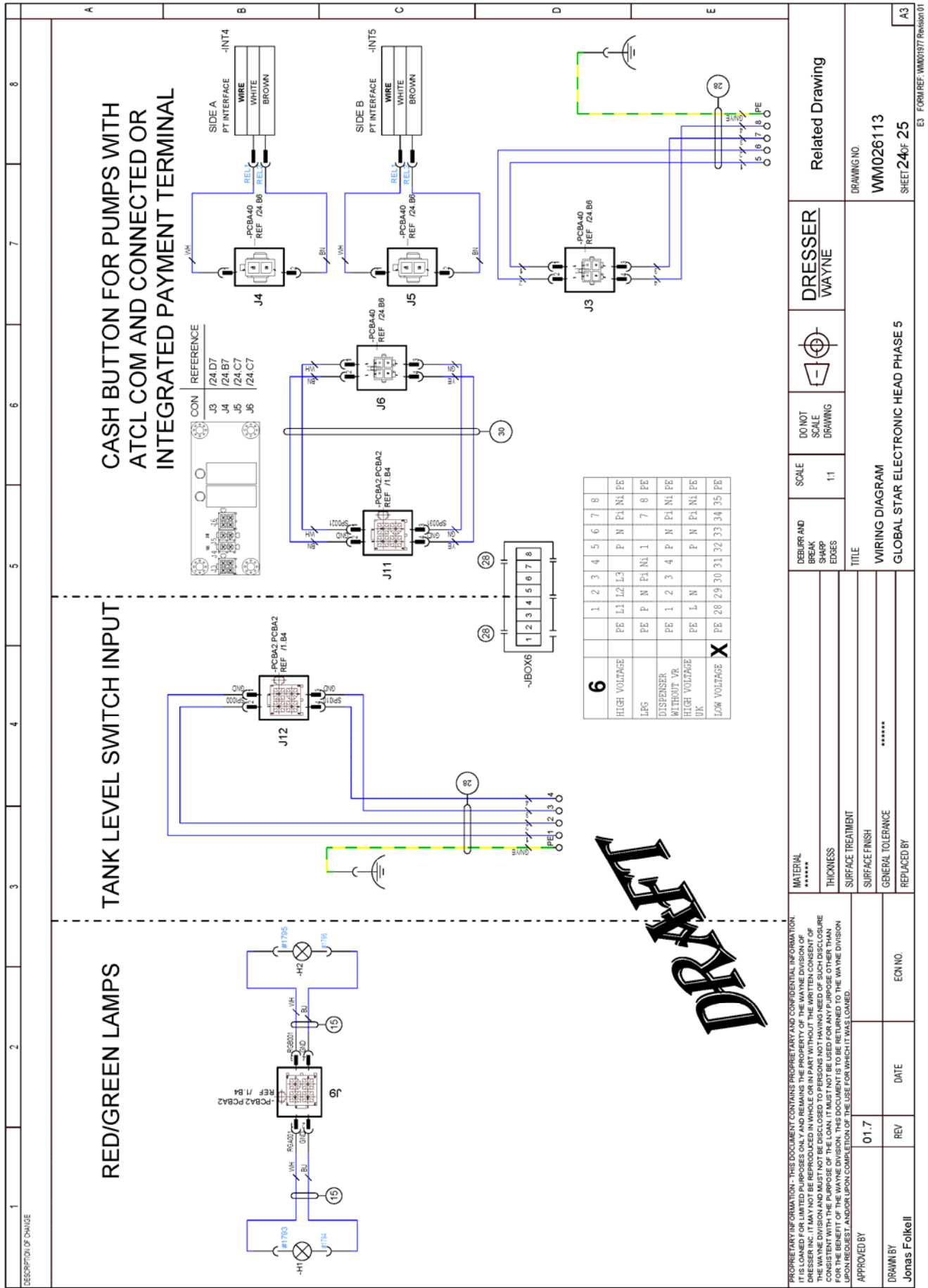
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DEBURR AND BREAK SHARP EDGES	SCALE 1:1	DO NOT SCALE DRAWING	
TITLE	WIRING DIAGRAM GLOBAL STAR ELECTRONIC HEAD PHASE 5		

Related Drawing	DRESSER WAYNE	DRAWING NO.	WM026113
		SHEET 22 OF 25	A3



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20.1 Cables

See also drawing WM026113 page 84

	Part number	Description
		CAT 5e cable (Belcom)
1	WM025766-0001	Cable 10x0.34 L=250
2	WM025759-0001	Cable 8x0.34 L=250
3	WM025846-0001	Cable high voltage 4G1.5 zone L=2000
4	WM025845-0001	Cable high voltage 5G1.5 zone L=1800
5	WM025757-0001	Cable 8x0.34 L=400
6	WM025912-0001	Cable high voltage 5G1.5 zone L=1800
7	WM025904-0001	Cable multi 3G0.5 zone L=250, 1x0.5 RD L=100
8	WM004092-0001	Cable multi 1x0.5 RD L=100, 30 1x0.5 BK L=100, 30
9	WM025818-0001	Cable multi 1x0.5 RD L=300, 1x0.5 BK L=300
10	WM025811-0001	Cable multi 1x1.5 BU, 1x1.5 BN, 1x1.5 GR/YE L=300
11	WM003861-0002	Cable flat 16-position 1.27-pitch L=400
12	WM003760-0002	Cable flat 10-position 1.27-pitch L=520
13	WM003760-0003	Cable flat 10-position 1.27-pitch L=900
14	WM027179-0001	Cable multi 4x0.5 , 2x0.5 L=800, 1x0.5 RD, 1x0.5 BK L=400
15	WM003980-0005	Cable 2x0.34 L=1300
16	WM021915-0002	Cable multi 1x0.5 RD L=1500, 1x0.5 BK L=1500
17	WM003984-0001	Cable 5G0.5 zone SC L=10000
18	WM004105-0001	Cable single wire 1x0.75 BK L=75
19	WM006833-0003	Cable 4x0.5 L=350
20	WM006833-0002	Cable 4x0.5 L=200
21	WM027757-0001	Cable 2x0.5 L=200
22	WM027757-0002	Cable 2x0.5 L=350
23	WM026329-0001	Cable flat 10-position 1.27-pitch L=900+900
24	WM027756-0001	Cable 2x0.5 L=400
25	WM003722-0001	Cable multi 1x0.5 RD L=280,130,30; 1x0.5 BK L=280,130,30
26	WM003736-0003	Cable 4x0.34 L=300
27	WM025854-0001	Cable 5G0.75 zone L=2500
28	WM026331-0001	Cable 5G0.75 zone L=2500
29	WM004087-0002	Cable high voltage 4G1.5 zone L=2000
30	WM019845-0001	Cable 4x0.34 L=500
31	WM028743-0001	Cable multi 5G0.75 L=2500, 2x0.5, 2x0.5 L=800
32	WM030107-0001	Cable single wire 1x0.75 BK L=800
33	WM025854-0002	Cable 5G0.75 zone L=3000

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More than a century of experience Über 100 Jahre Erfahrung Mer än 100 års erfarenhet Более, чем столетний опыт работы



Wayne Dresser develops, manufactures and markets complete operative systems for fuel handling at service stations. Everything from development and design to efficient production and assembly of components is pursued under one roof.

Wayne Dresser entwickelt, produziert und vermarktet komplette funktionierende Systeme für die Abgabe von Kraftstoffen an Tankstellen. Von der Entwicklung über das Design bis zur Herstellung und Installation liefern wir alles aus einer Hand.

Wayne Dresser utvecklar, tillverkar och marknadsför kompletta operativa system för drivmedelshantering på servicestationer. Under ett och samma tak ryms allt från utveckling och konstruktion till rationell tillverkning och sammansättning av komponenter.

Wayne Dresser разрабатывает, производит и продает совершенные оперативные системы для торговли топлива на станциях обслуживания. Все начиная от разработок и конструкции до эффективного производства и сборки компонентов происходит в пределах одного предприятия.

Wayne Dresser's operations comprise four interdependent functions:

- Equipment such as petrol pumps, payment terminals, point-of-sale terminals and service station operative systems.
- Software for recording and for internal communication at the station, as well as between the station and the oil company, banks and credit institutes.
- Project design with overall responsibility to the customer.
- Field service, technical support and supply of spare parts.

Wayne Dresser makes it easier for the motorist to fill up and make his motoring purchases, while effectively meeting the needs of the service station owner for operating supervision and for conforming to the demands of the authorities for measurement accuracy, minimising pollution and ensuring safety.

Die Niederlassungen von Wayne Dresser umfassen vier ineinander greifende Bereiche:

- Ausrüstungen wie Zapfsäulen, Zahlterminals, Kassenterminals und Tankstellensysteme
- Software für Registrierung und Kommunikation auf der Tankstelle u. zwischen Station und Mineralölfirma sowie Banken und Kreditinstituten.
- Projektgestaltung mit umfassender Verantwortlichkeit dem Kunden gegenüber.
- Service, technische Unterstützung und Lieferung von Ersatzteilen.

Wayne Dresser erleichtert dem Fahrer die Betankung und damit verbundene Einkäufe, unterstützt gleichzeitig den Stationär bei der übersichtlichen Führung seines Betriebes unter Berücksichtigung der behördlichen Vorschriften hinsichtlich Messgenauigkeit, Umwelt- und Sicherheitsauflagen.

Verksamheten omfattar fyra samverkande delar:

- Utrustning som bensinpumpar, betalterminaler, butiksterminaler och stationsdatorer.
- Programvara för registrering och kommunikation internt på stationen samt mellan stationen och oljebolaget, banker och kreditinstitut.
- Projektering med totalansvar gentemot uppdragsgivaren.
- Service på fältet, teknisk support och reservdelsförsörjning.

Wayne Dresser gör det lättare för bilisten att tanka och handla. Samtidigt tillgodoses stationsägarens krav på en effektiv driftskontroll och myndighetskraven på måtnoggrannhet, miljövänlighet och driftssäkerhet.

Действия Wayne Dresser включают четыре взаимосвязанных направления:

- Оборудование, например, топливораздаточные колонки, платежные терминалы, терминалы точек продажи и системы управления АЗС.
- Программное обеспечение для регистрации и для внутренней связи на АЗС, а также между АЗС и нефтяной компанией, банками и институтами кредитов.
- Проектирование с полной ответственностью к клиенту.
- Обслуживание на местах, техническая поддержка и поставка запасных частей.

Wayne Dresser упрощает процесс заправки и приобретения покупок при эффективном согласовании потребностей владельца АЗС для оперативного управления и для соблюдения требований государственных и метрологических служб, а также уменьшения загрязнения окружающей среды и обеспечения безопасности.