





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.

Caution

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

Warning

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



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.

Vorsicht

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

Warnung

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



Produktansvar

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

Varning

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

Varning

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



Ответственность поставщика

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

Осторожно

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

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.

The contents of this publication may not be copied either wholly or in part without the consent of Dresser Wayne AB.

Dresser Wayne AB reserves the right to change specifications contained in the text and illustrations without notice.

Der Inhalt dieses Handbuches darf ohne die Erlaubnis von Dresser Wayne AB weder ganz noch teilweise kopiert werden.

Dresser Wayne AB behält sich das Recht vor, textliche oder bildliche Inhalte ohne besondere Mitteilung zu ändern.

Innehållet i denna publikation får ej helt eller delvis kopieras utan medgivande från Dresser Wayne AB.

Dresser Wayne AB förbehåller sig rätten att utan särskilt meddelande ändra specifikationer givna i text och bild.

Не разрешается копировать полностью или частично содержание настоящей публикации без разрешения фирмы Dresser Wayne AB.

Dresser Wayne AB оставляет за собой право вносить изменения в спецификации, содержащиеся в тексте и иллюстрациях, без предварительного уведомления.

1 Service and maintenance

See also the "Users Manual". (list on page 95)

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.

WARNING: Contains intrinsically safe equipment

Consider the environment. Please don't print this document unless you really need to.

1.1 Separation of power supply

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

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!

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.)



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.

Unicue spar 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

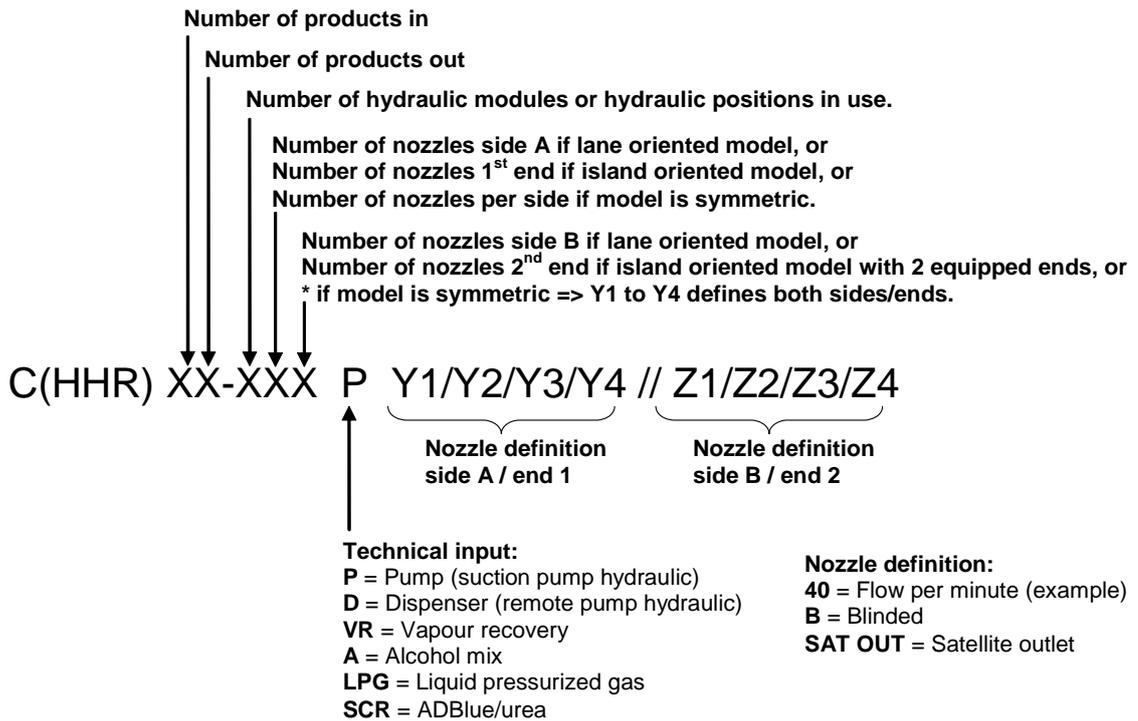


Global Star V HH
(GS V HH)
(High Hose)

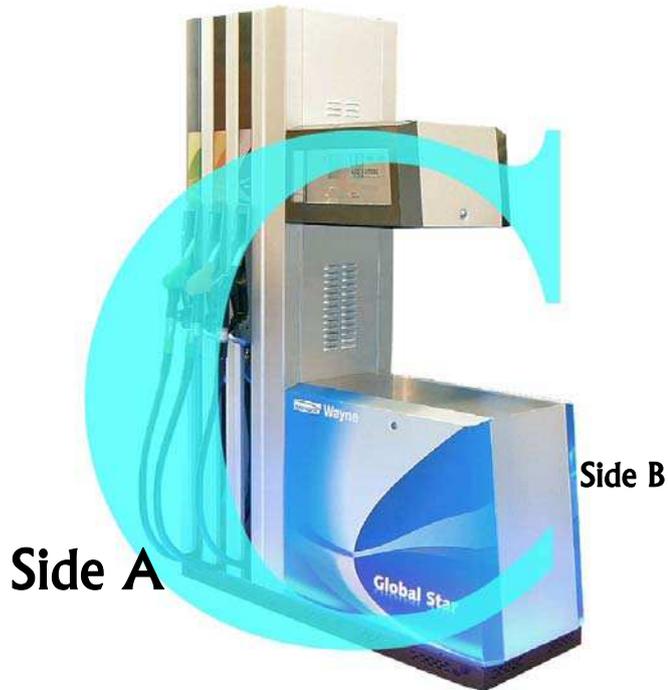


Global Star V HHR
(GS V HHR)
(High Hose Retraction)

3.1 What does the denomination of the pump indicate



3.2 Side A / Side B



Global Star V is a C-style pump.

See also tubes page 59.

4 Contents

Consider the environment. Please don't print this document unless you really need to.

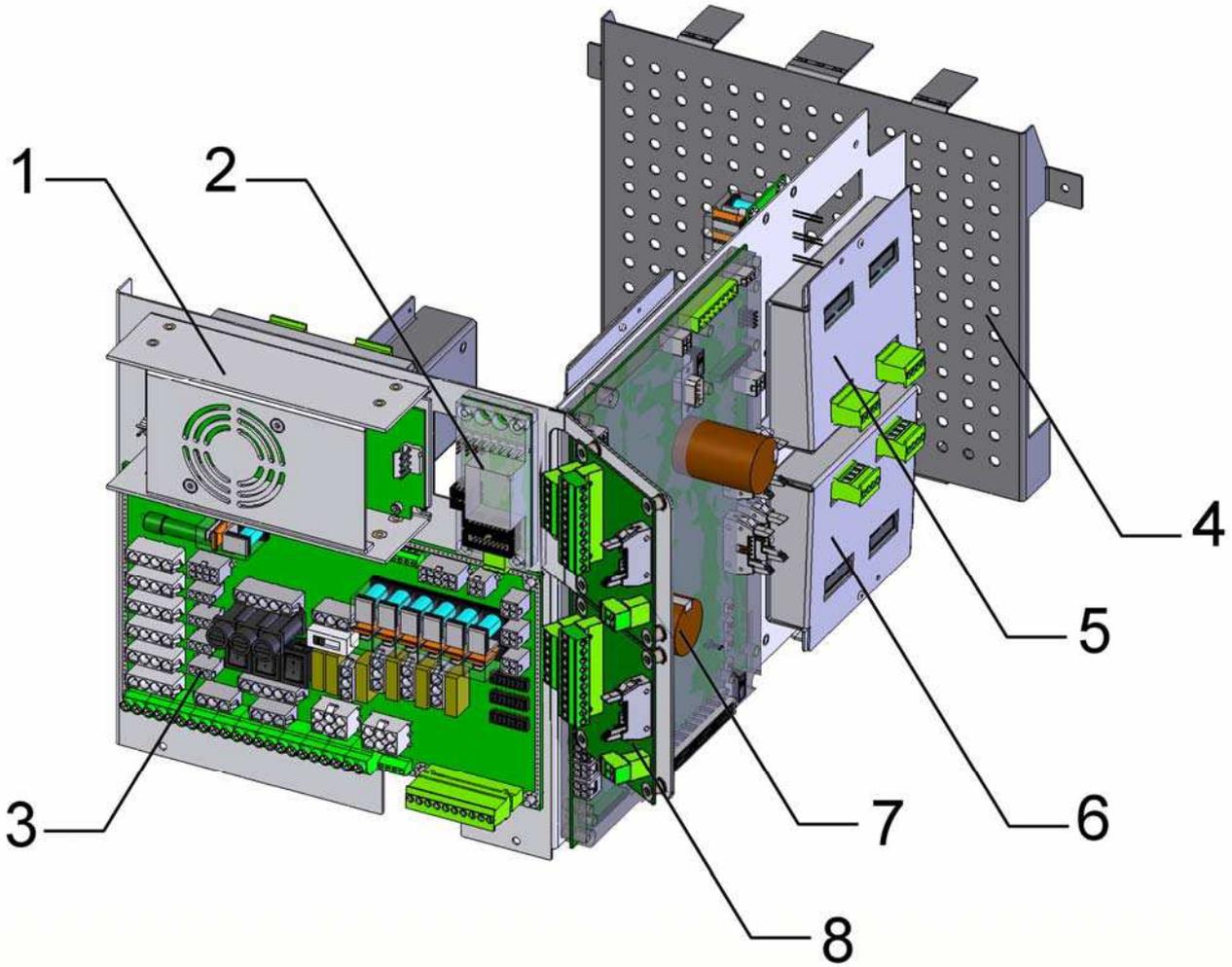
Contents - all levels, see page 96

Contents - alphabetical order, see page 99

Connection Instruction and Installation instructions, see the ftp-server.
Please contact your dealer for login information.

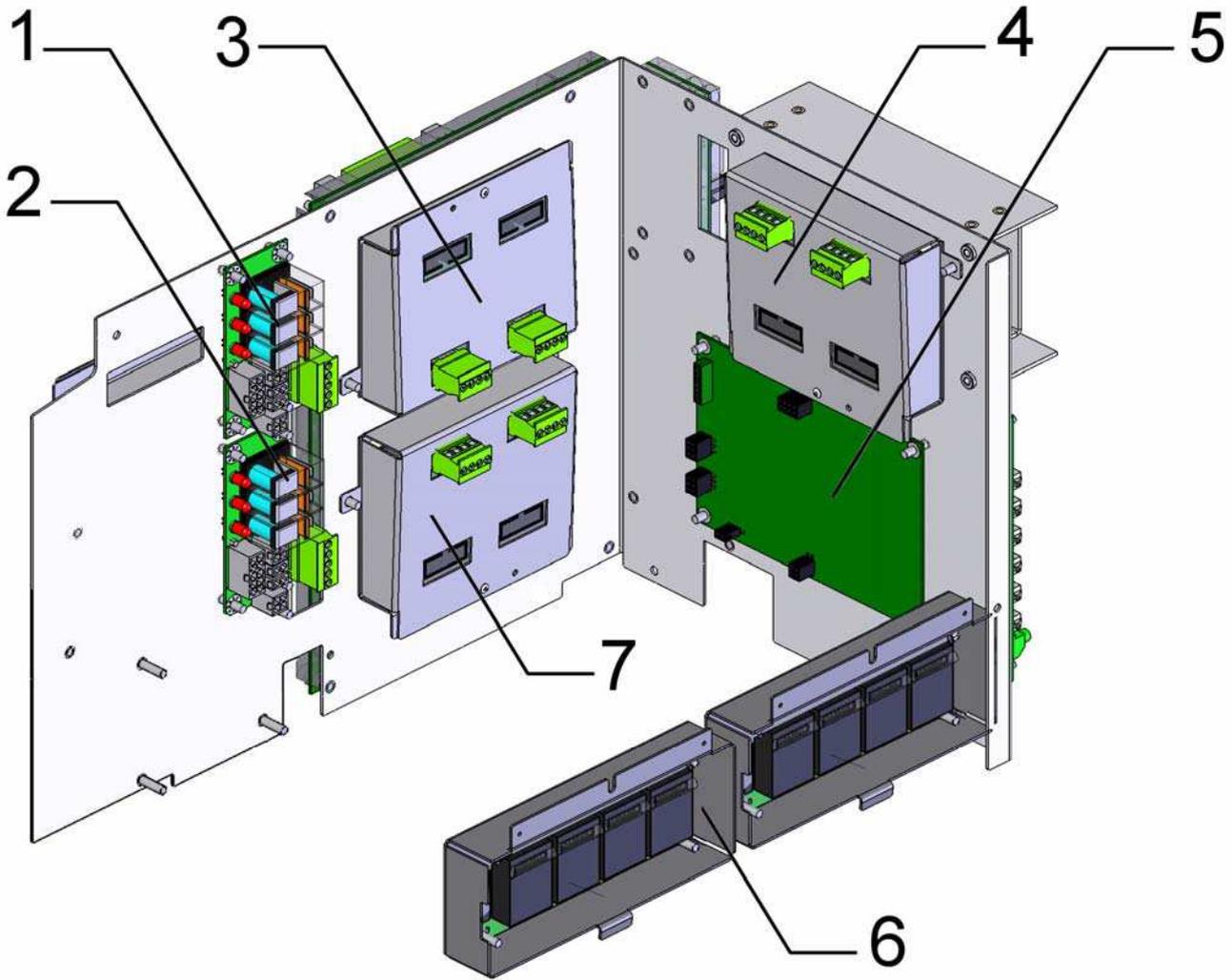
1	Service and maintenance.....	3
2	Product History.....	4
3	Models.....	5
4	Contents.....	7
5	Electronic head.....	8
6	Terminal head.....	18
7	Hose handling.....	21
8	Hydraulic cabinet.....	28
9	Pallet / drip pan / foundation frame.....	30
10	Exterior.....	32
11	Hydraulic.....	35
12	Inlet.....	54
13	Tubes.....	58
14	Hanging hardware.....	81
15	Junction box.....	86
16	Motor.....	87
17	Vapour recovery.....	88
18	ATC.....	92
19	Anti burglary device.....	94
20	Tilt switch.....	94
21	Documents.....	95
22	Cables.....	96
23	Contents - all levels.....	97
24	Contents - alphabetical order.....	99
25	Market & Service.....	101
26	Notes.....	101

5 Electronic head

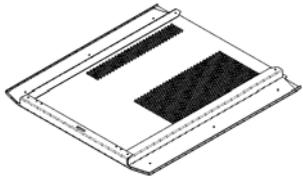
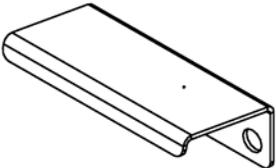
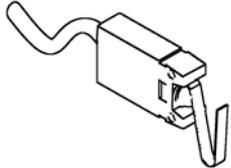
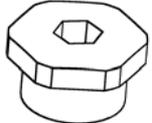
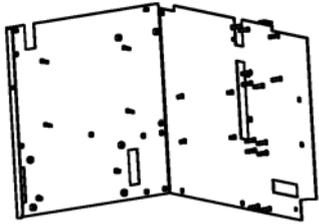
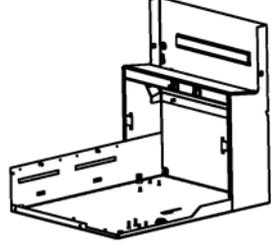
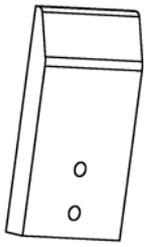


Cables, see page 96.

	Part number	Description
1	WM027313-0001	Power supply 24V, 150W, UL/IEC Note! Only this power supply is approved for Global Star V. Do not use power supplies from other pump models.
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
8	WM023331-0001	Board satellite receiver (satellite with display)
	WM033329	Support, V-shape

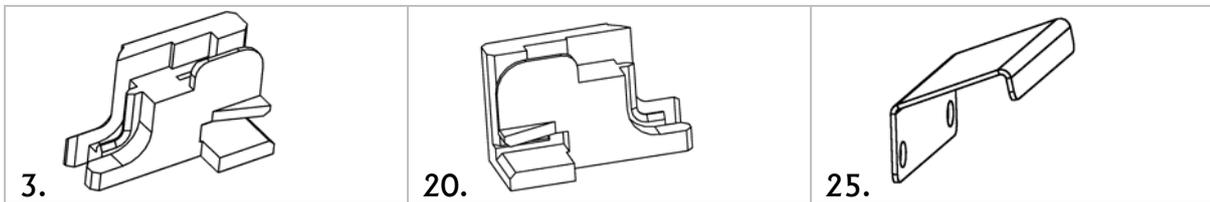
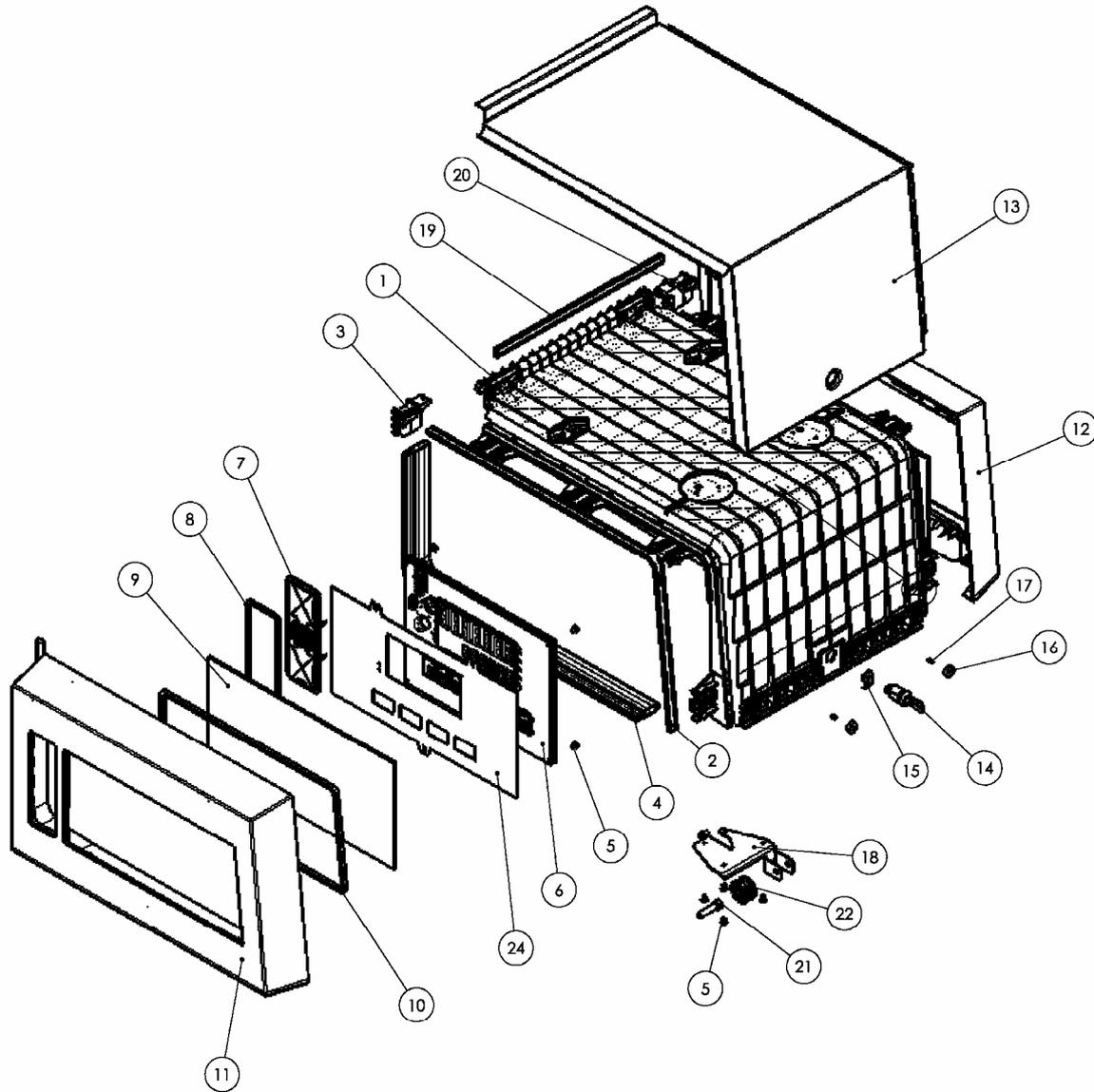


	Part number	Description
1	WM027195-0001	Board relay SAT side A
	WM027195-0002	Board for cash button/tank level
2	WM027195-0001	Board relay SAT side B
	WM027195-0002	Board for cash button/tank level
3	WM018523	Intrinsically safe barrier (ISB) and interface for vapour meter
4	WM002450	Intrinsic safe barrier (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)

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4.</p>  <p>SW1, F1: 6.3A HEATER LPG VALVE SW2, F2: 6.3A POWER SUPPLY UPS SW3, F3: 6.3A DISPENSER SIGNAL SW4, LPG SIGNAL DISPENSER SIGNAL (POSITION 115) (POSITION 238)</p>	<p>5.</p> 	<p>6.</p> 
<p>7.</p> 	<p>8.</p> 	<p>9.</p> 
<p>10.</p> 		

	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
	WM029992	M20, Ø 7-12 mm
	WM029998	M20, Ø 10-14 mm
	WM029993	M25, Ø 13-18 mm
6		Grommet, blind
	WM001591	M20
	WM003241	M25
7	WM028304	Support, L-shape for components
8	WM028306	Support, L-shape
9		Support, flat (for grommet)
	WM029597	2 x M20
	WM029600	M20 + M25
	WM030531	Blind
10	WM031581	Support for wheel

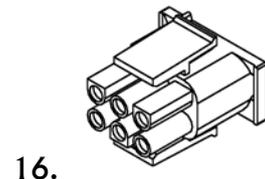
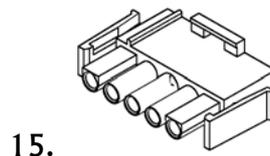
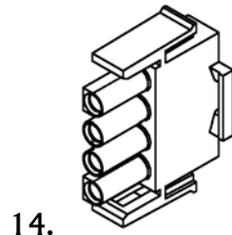
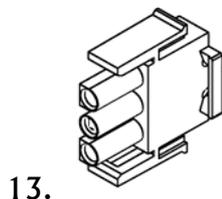
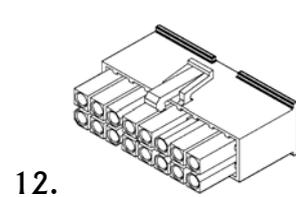
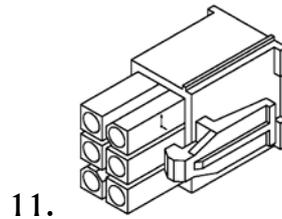
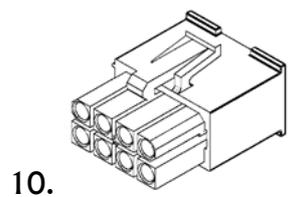
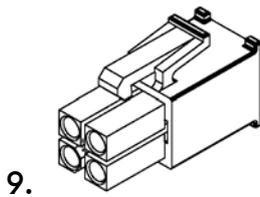
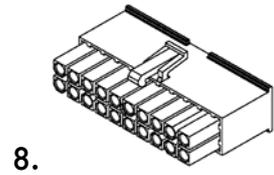
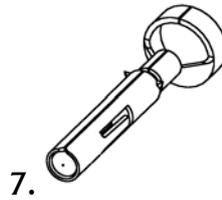
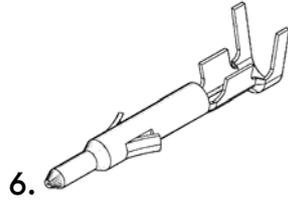
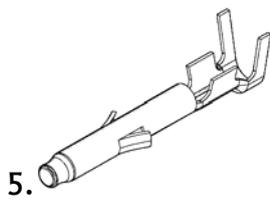
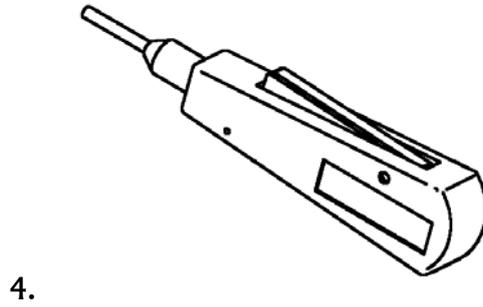
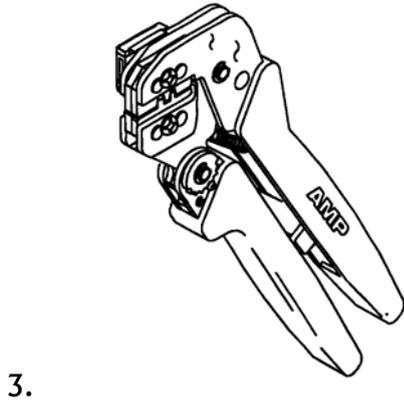
5.1 Cover - electronic head



	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

	Part number	Description
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	WM028161	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
	WM031301-0001	90°
		90°, blind
12		Front panel, side B
	WM028154-0001	96°
		96°, blind
	WM031302-0001	90°
		90°, blind
13		Cover plate, top panel
	WM028340-0001	96°
	WM030105-0002	90°
	WM028340-0002	96°, for indicator lamp
	WM030105-0002	90°, for indicator lamp
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
21	WB000212-0008	Screw, hexagon socket CAP, M8 x 35
22	WM001402	Wheel
23	WB000229-0004	Lock nut, M8
24		Support, flat, dial face
	WM030389-0004	4 UPD
	WM030389-0005	5 UPD
	WM030389-0006	Blind
25	WM029267	Lock for hinge

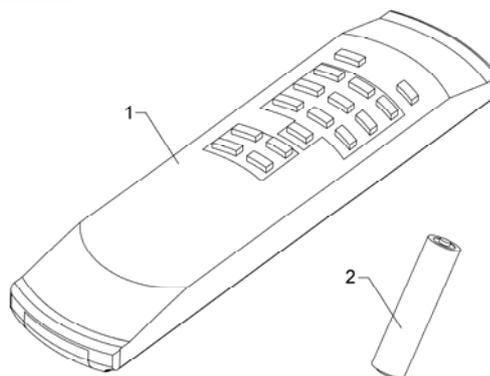
5.2 Crimp tools and connectors



	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

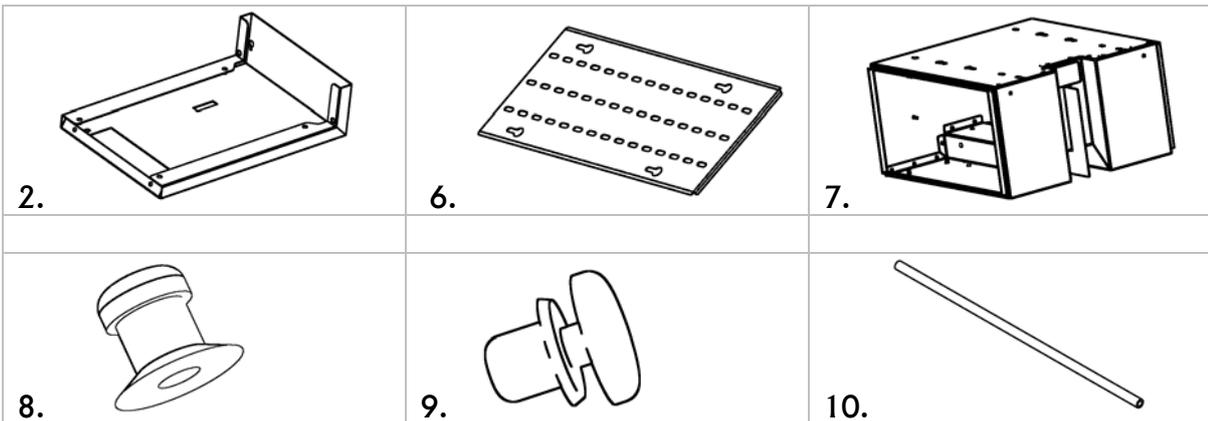
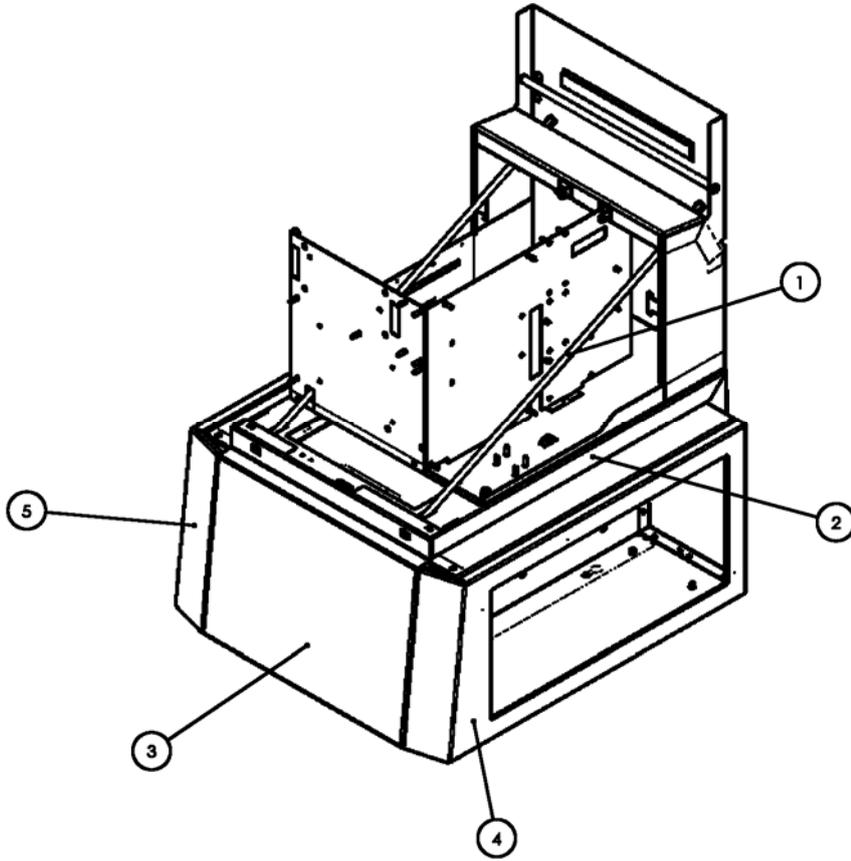
5.3 Remote control



	Part number	Description
1	WM002290	Remote control with battery
2	WM002289	Battery LRO3 size AAA 1.5V

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

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
	WM030411-0001	90 °C, H = 275, iX-Pay
	WM030417-0001	90 °C, H = 275, blind, iX-Pay
	WM030415-0001	90 °C, H = 375, iX-Pay
	WM030419-0001	90 °C, H = 375, blind, iX-Pay
	WM031262-0001	90 °C, H = 375, PT4000
	WM030409-0001	96 °C, H = 275, iX-Pay
	WM030421-0001	96 °C, H = 275, blind, iX-Pay
	WM030413-0001	96 °C, H = 375, iX-Pay
	WM030423-0001	96 °C, H = 375, blind, iX-Pay
	WM032746-0001	96 °C, H = 375, PT4000
	WM030873-0002	Lafon
	WM030317-0001	Tokheim
	WM030319-0001	Tokheim, blind
5		Front panel, side A
	WM030410-0001	90 °C, H = 275, iX-Pay
	WM030416-0001	90 °C, H = 275, blind, iX-Pay
	WM030414-0001	90 °C, H = 375 iX-Pay
	WM030418-0001	90 °C, H = 375, blind, iX-Pay
	WM031261-0001	90 °C, H = 375, PT4000
	WM030408-0001	96 °C, H = 275, iX-Pay
	WM030420-0001	96 °C, H = 275, blind, iX-Pay
	WM030412-0001	96 °C, H = 375, iX-Pay
	WM030422-0001	96 °C, H = 375, blind, iX-Pay
	WM032729-0001	96 °C, H = 375, PT4000
	WM030872-0002	Lafon
	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



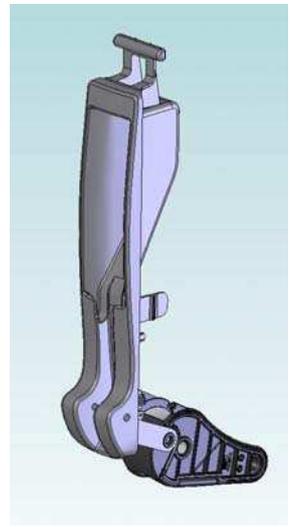
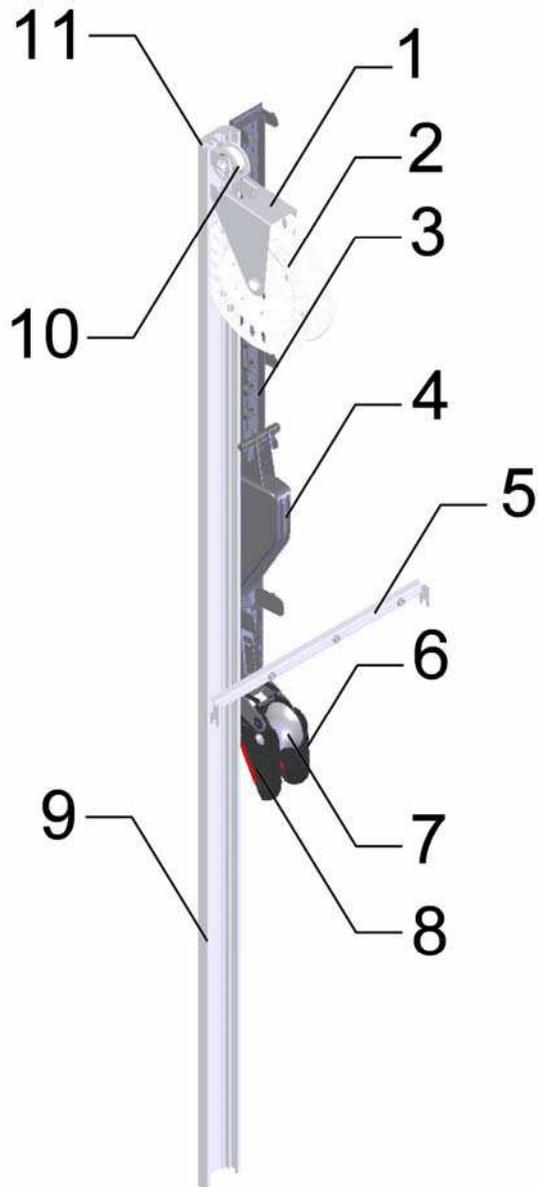
7 Hose handling

7.1 Push button and nozzle switch



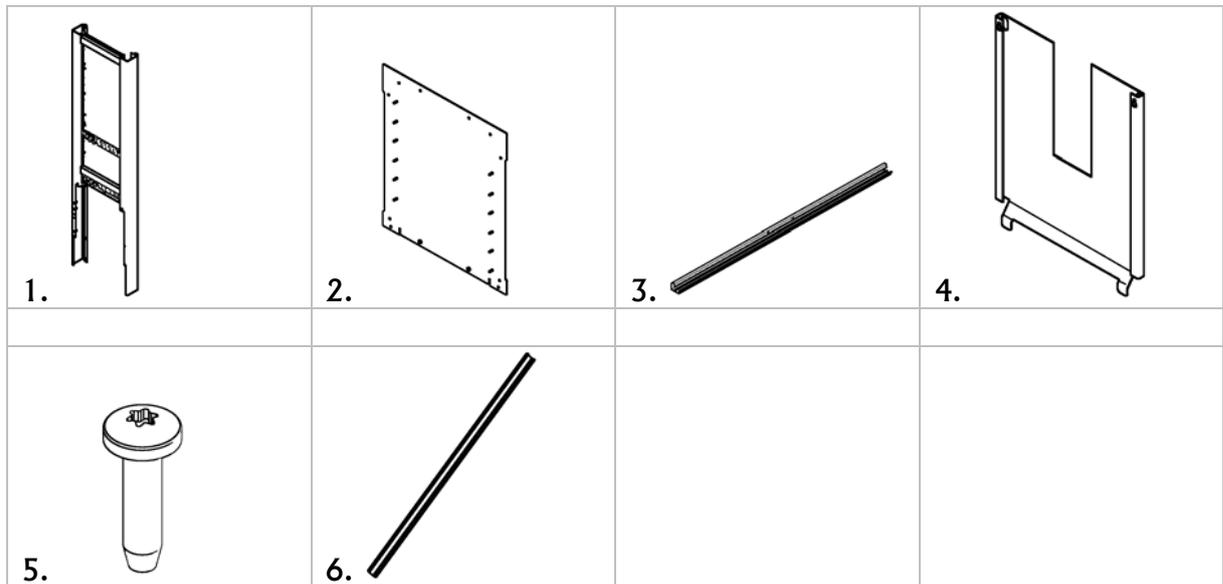
	Part number	Description
1		Push button
	WM027750-0001	Red
	WM027750-0002	Green
	WM027750-0003	Black
	WM027750-0004	Yellow
	WM027750-0005	Blue
	WM027750-0006	White
2	WM027743	Black Mushroom (LPG)
3		Switch
	WM027741-0002	On/Off (LPG)
	WM027741-0001	On/Off spring back (LPG)
4	WM015970-0001	Switch, magnetic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

7.2 HHR



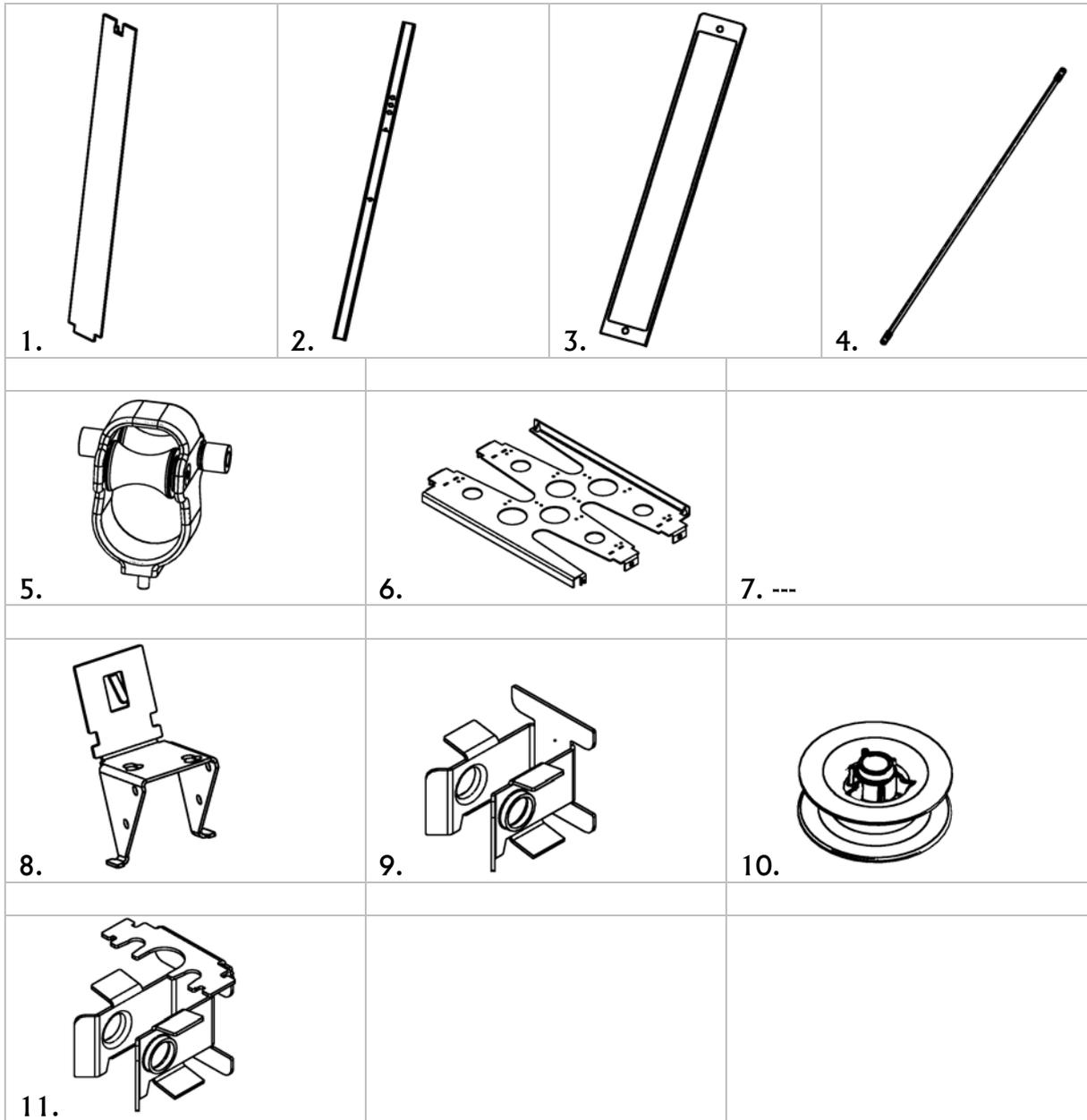
	Part number	Description
1	WM028902	Bracket, hose retraction
2	WM028140	Wheel, D = 239
3		Side panel, decal cover
	WM028139	0 hole for button
	WM031313-0001	1 hole for button
	WM031313-0002	2 hole for buttons
	WM031313-0003	3 hole for buttons
4	WM025564	Nozzle boot
5		Support, U-shape
	WM026491	3 hose
	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
	WM033196	Cord L = 1000mm





	Part number	Description
1	WM026564	Blind column
2		Top panel
	WM026693	1 module
	WM026692	2 modules
	WM026526	3 modules
	WM026694	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

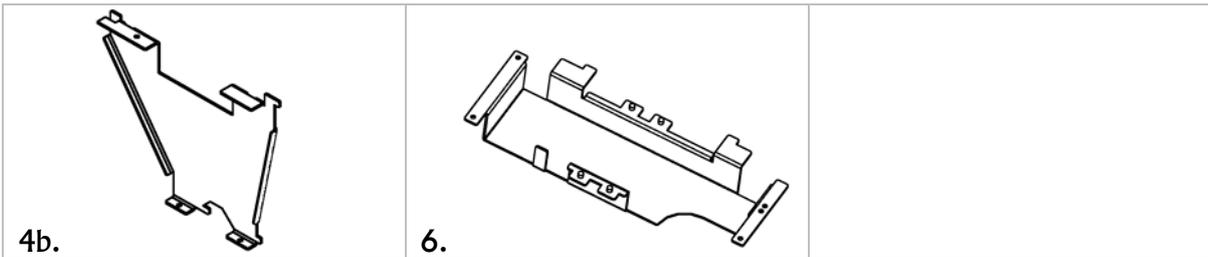
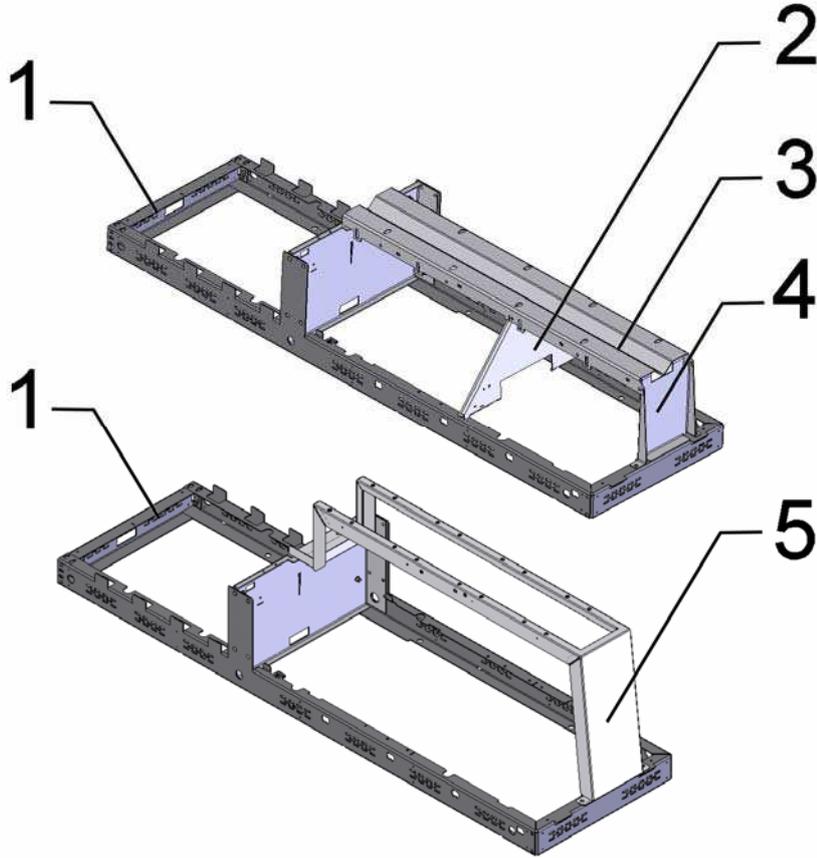
7.3 HH



	Part number	Description
1	WM032345	Support, flat, L = 458mm
2		Column, hose handling
	WM030000	Hole for nozzle boot, 0 button
	WM032374-0001	Hole for nozzle boot, 1 button
	WM032374-0002	Hole for nozzle boot, 2 buttons
	WM032374-0003	Hole for nozzle boot, 3 buttons (on picture)
3	WM031306	Column, L = 472, W = 67
4	WM032347	Cord L = 1000mm
5	WM018918	Ring with pulleys
6		Support, flat
	WM032367-0001	L = 193mm, 2 hose
	WM032368-0001	L = 333mm, 4 hose (on picture)
	WM032369-0001	L = 473mm, 6 hose
	WM032372-0001	L = 613mm, 8 hose
7	WM032767	Edge protector, grip range 1.0-2.0 mm, black
8	WM032782	Support U-shape
9	WM029798	Support box-shape
10	WM028144	Wheel, D = 55
11	WM029423	Support, box shape

8 Hydraulic cabinet

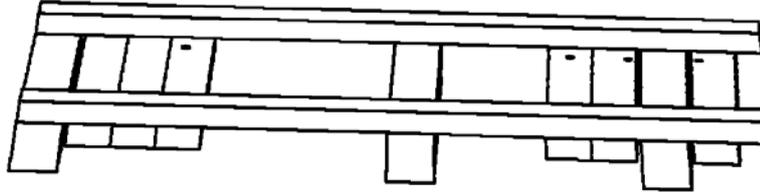
8.1 HH & HHR



	Part number	Description
	WM028263-0001	Pop rivet, CSK head, 6.4 diameter x 13, grip range 3.8
1		Base
	WM030805-0001	2 hydraulic modules, 1 hose module
	WM025391-0001	3 hydraulic modules, 1 hose module
	WM025392-0001	3 hydraulic modules, 2 hose modules
	WM025393-0001	3 hydraulic modules, 3 hose modules
	WM025394-0001	4 hydraulic modules, 2 hose modules
	WM025395-0001	4 hydraulic modules, 3 hose modules
	WM025396-0001	4 hydraulic modules, 4 hose modules
2	WM028189	Support, flat, middle, hydraulic shelf
3		Support, suction hydraulic
	WM028191	3 modules
	WM028193	4 modules
4		Support, flat, end support hydraulic shelf
	WM028186	Std
4b	WM030737	2 modules
5		Support, remote hydraulics
	WM032317-0001	3 modules, iMeter
	WM032317-0002	4 modules, iMeter
	WM028206	3 modules, Xflo™
	WM028208	4 modules, Xflo™
6	WM028464	Shelf for VR module (VR module, see page 88)

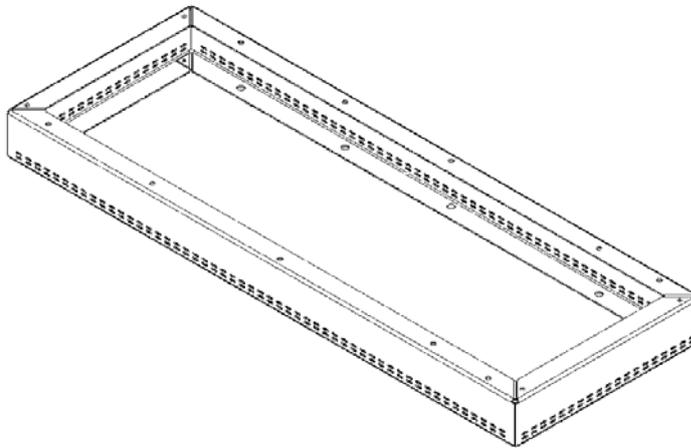
9 Pallet / drip pan / foundation frame

9.1 Pallet



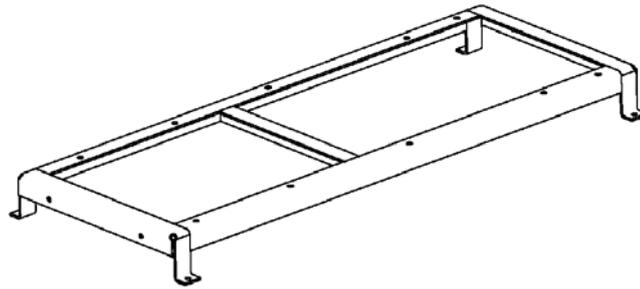
Part number	Description
	Pallet HH & HHR
WM007471	L = 1360 mm (CXX-32, CXX-22, CXX-31, CXX-11, CXX-21)
WM007466	L = 1630 mm (CXX-33)
WM007470	L = 1895 mm (CXX-42, CXX-43, CXX-44)

9.2 Extended base frame



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

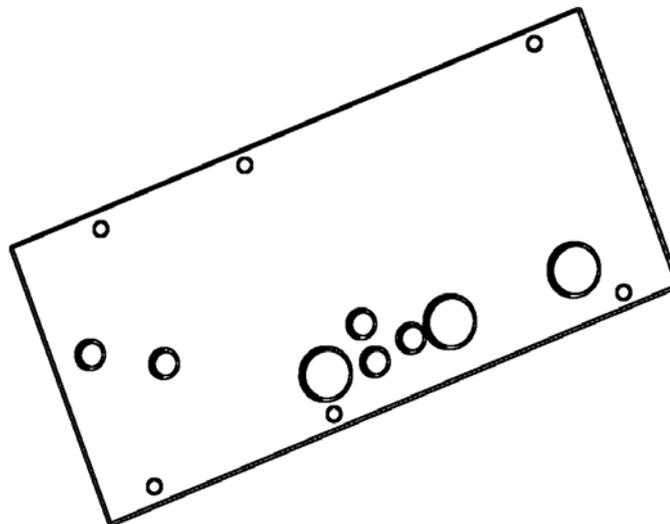
9.3 Foundation frame



Please, see the drawings on the ftp-server

Part number	Description
	Foundation frame HH & HHR
WM031871	2 hydraulics + 1 nozzle module
WM031877	2 hydraulics + 2 nozzle module
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

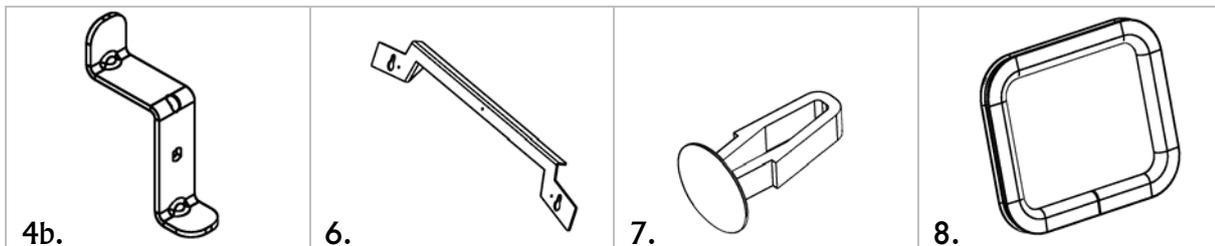
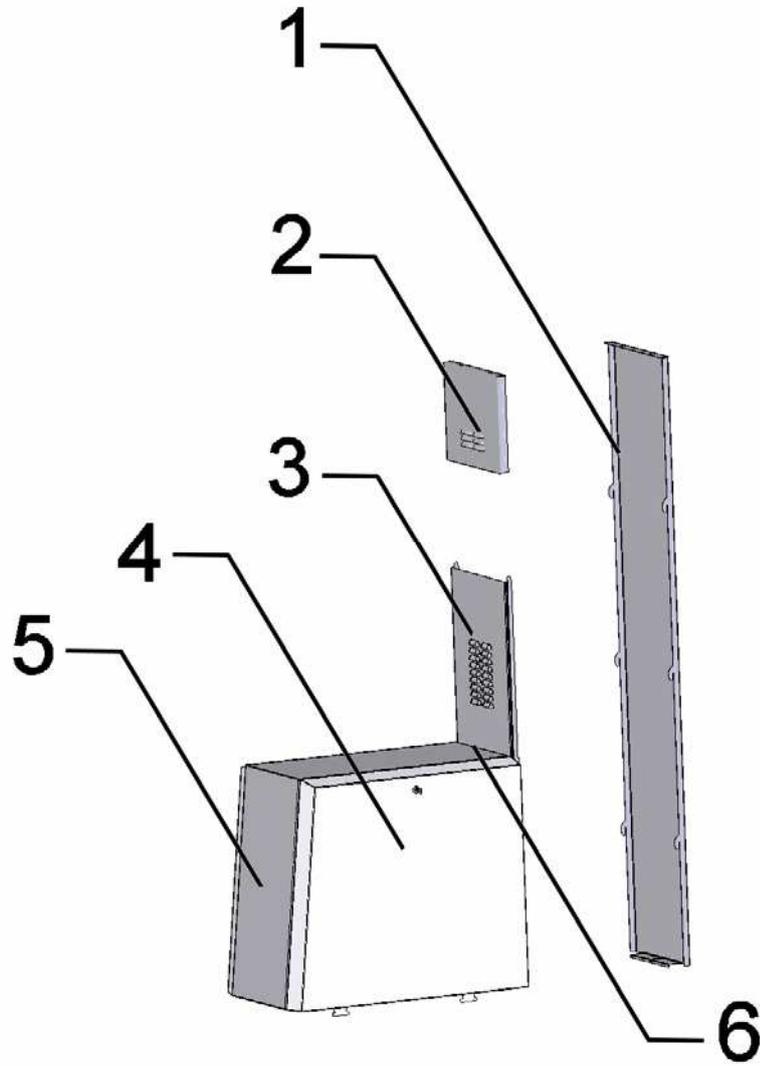
9.4 Drip pan (suction pump)



Part number	Description
WM031497	2 hydraulics + 1 nozzle modules, l=881mm (Small cabinet)
WM031663	2 hydraulics + 2 nozzle modules, l=1021mm (Small cabinet)
WM030157	3 hydraulics + 1 nozzle modules, l=1100mm, HH & HHR
WM030158	3 hydraulics + 2 nozzle modules, l=1240mm, HH & HHR
WM030159	3 hydraulics + 3 nozzle modules, l=1380mm, HH & HHR
WM030160	4 hydraulics + 2 nozzle modules, l=1500mm, HH & HHR
WM030161	4 hydraulics + 3 nozzle modules, l=1640mm, HH & HHR
WM030162	4 hydraulics + 4 nozzle modules, l=1780mm, HH & HHR

10 Exterior

10.1 HH & HHR

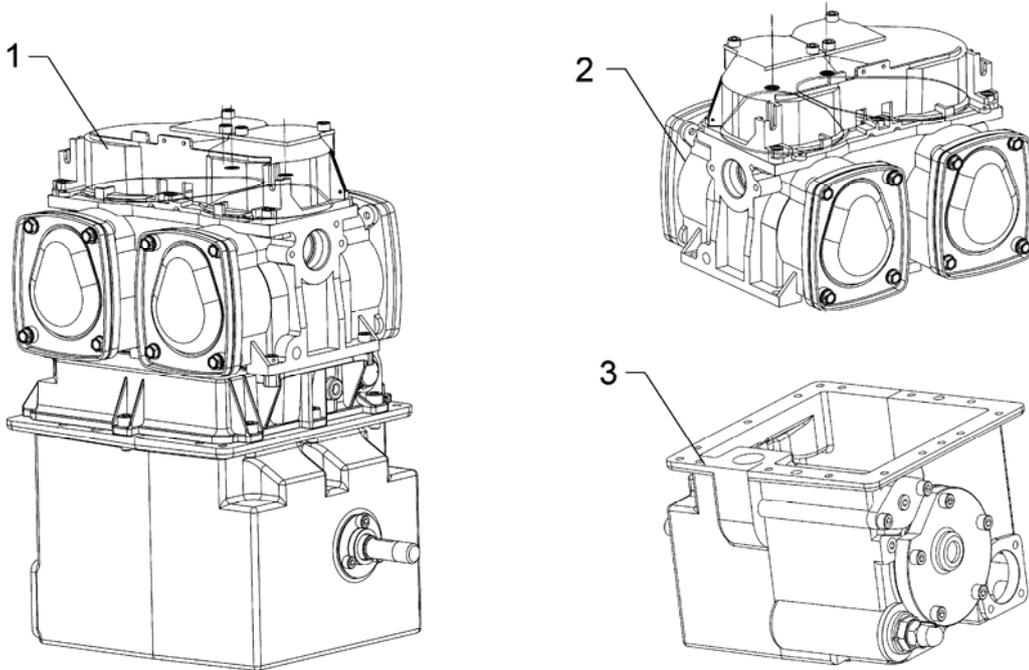


	Part number	Description
1		Side panel
	WM025580	AL
	WM030028-0001	White
2	WM025614	Side panel, upper barrier, with gaskets
3		Side panel
	WM025529	Std, with gaskets WM031844
	WM028719	Pay terminal H=275, with gaskets WM031844
	WM028720	Pay terminal H=375, with gaskets WM031844
	WM032865	Gasket U-shape
4		Front panel
	WM031488-0001	A-side, 2 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM030053-0001	A-side, 3 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM030056-0001	A-side, 3 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM030058-0001	A-side, 4 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM030061-0001	A-side, 4 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM031489-0001	B-side, 2 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM030055-0001	B-side, 3 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM030057-0001	B-side, 3 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM030059-0001	B-side, 4 modules, 96°, Wayne std, pure white, RAL9010, gl. 70
	WM030062-0001	B-side, 4 modules, 90°, Wayne std, pure white, RAL9010, gl. 70
	WM003119	Key
	WM001994-0002	Lock
4b	WM030097	Latch
5		Top panel
	WM030717	2 module, 90°
	WM025304	3 module, 96°
	WM025302	3 module, 90°
	WM025309	4 module, 96°
	WM025307	4 module, 90 °
6	WM031694	Support, U-shape, for top panel
	WM031844	Gasket EPDM expanding rubber self-adhering
7	WB000264-0001	Plastic fastener
8	WB000267-0001	Edge protector grip range 1.0 - 2.0 THK

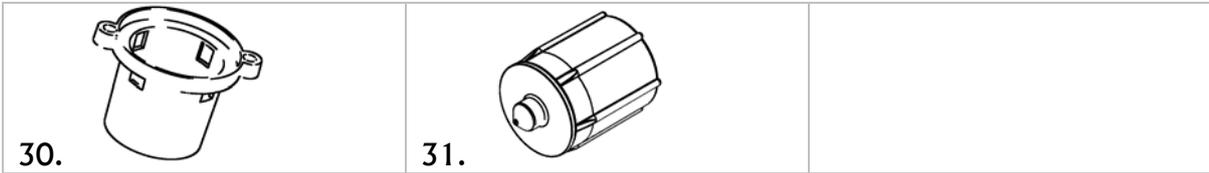
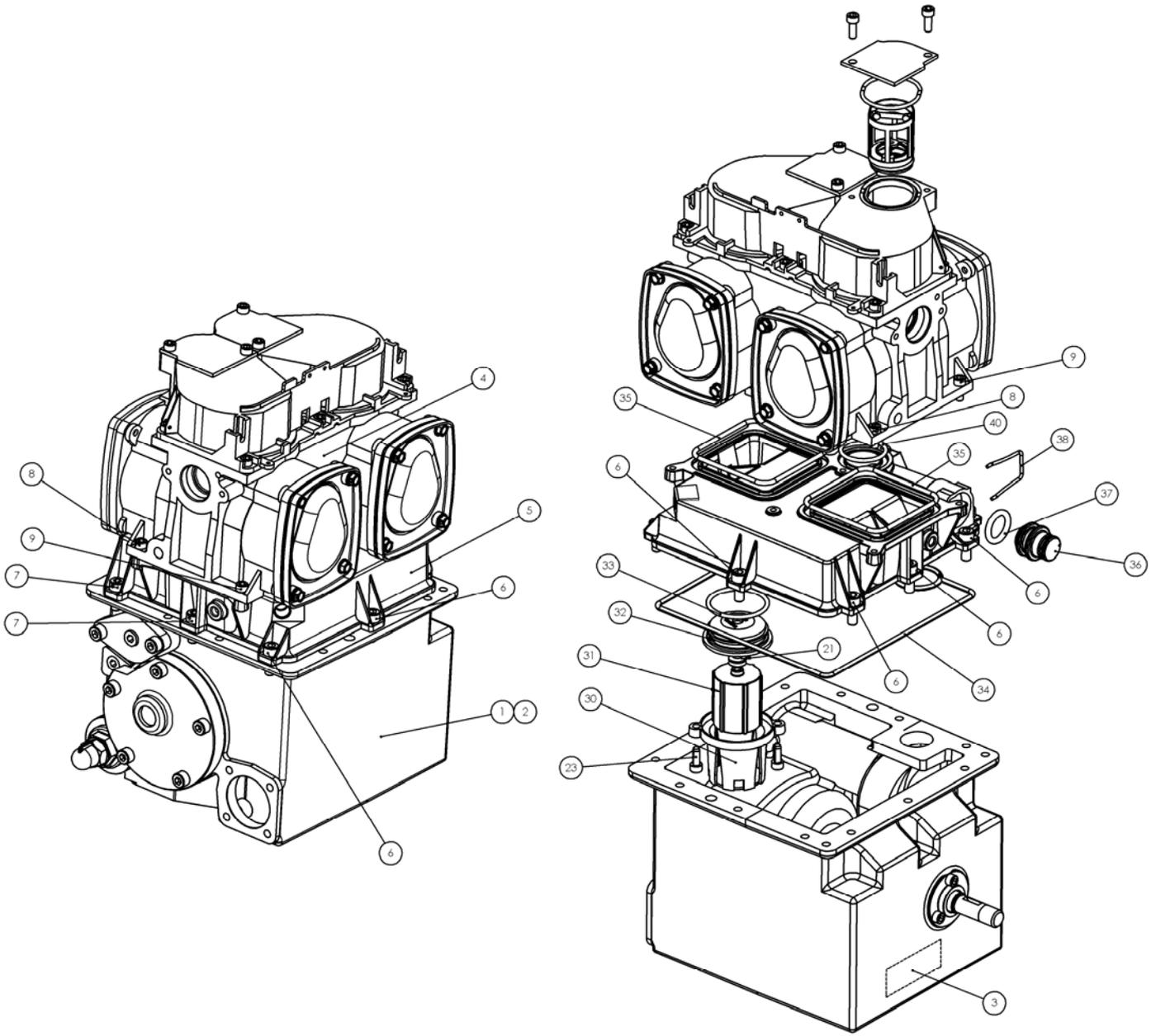


11 Hydraulic

11.1 iMeter (Petrol, diesel)

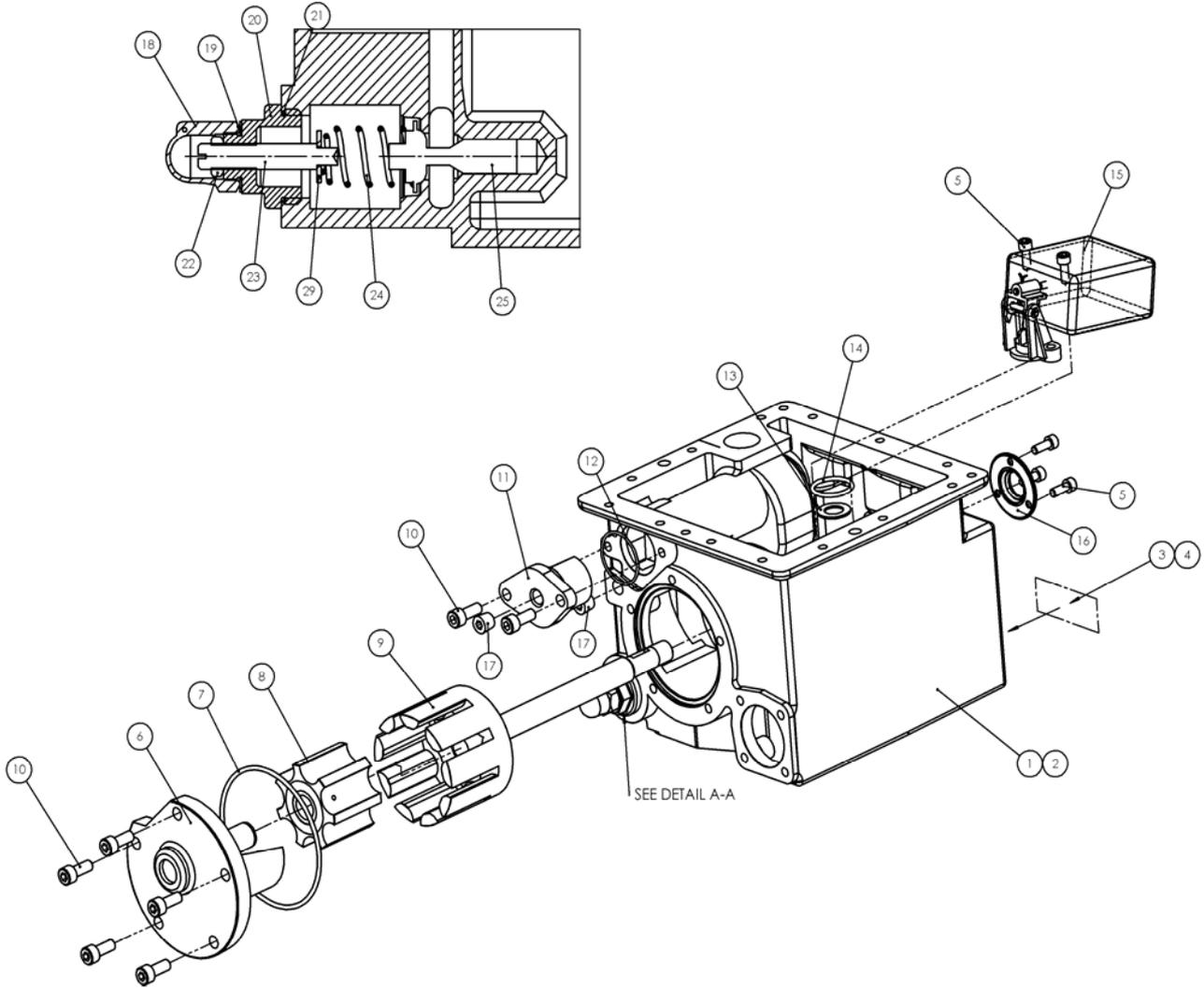


	Part number	Description
1		Pulser see page 48
		Combined unit With single bump connection for the air venting tube
	WM020553-0004	Compact pump
	WM020553-0001	Pump and meter diesel and gasoline 40 lpm & 70 lpm
	WM020553-0002	Pump and meter diesel and gasoline single sided side A 40 lpm & 70 lpm
	UWM009289-0004	Pump and meter diesel 70 lpm (only U)
2	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
	WM002393-0002	Single sided side A, 40 lpm
3	WM002393-0004	Single sided side A, 70 lpm
	WM018719-0001	Fuel pump
	WM002219-0001	Internal gear diesel
	WM002219-0002	Internal gear gasoline



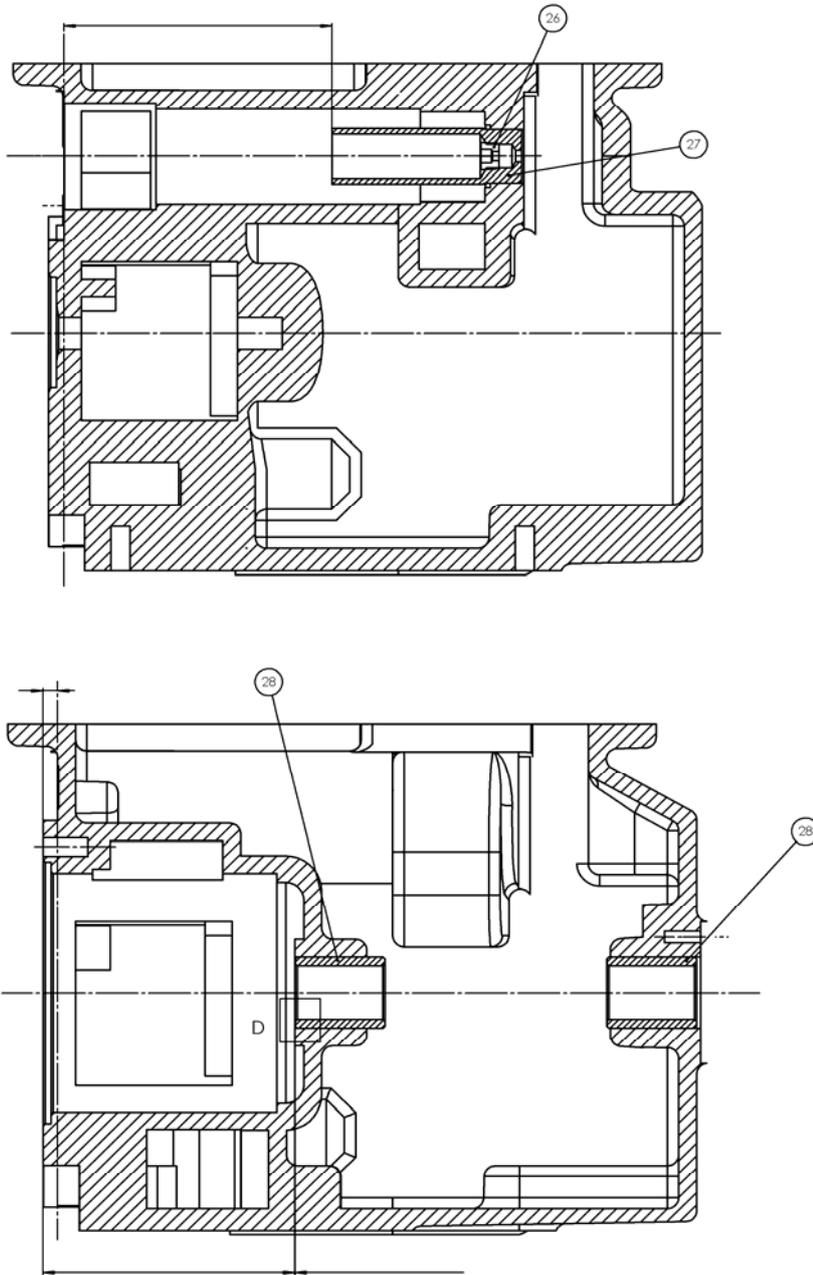
	Part number	Description
	see page 45	Valve ass'y
1	WM011353	Housing, machined, pump
2		---
3		Identification label
	WM004739-0007	Combined unit, compact pump
	WM004739-0002	Combined unit, pump & meter gasoline s a 40 lpm
	WM004739-0003	Combined unit, pump and meter diesel 40 lpm
	WM004739-0004	Combined 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 35 and page 44
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 58)
40	WM000612	O-ring T= 3.5, ID= 35

11.1.1 Pump internal gear



r

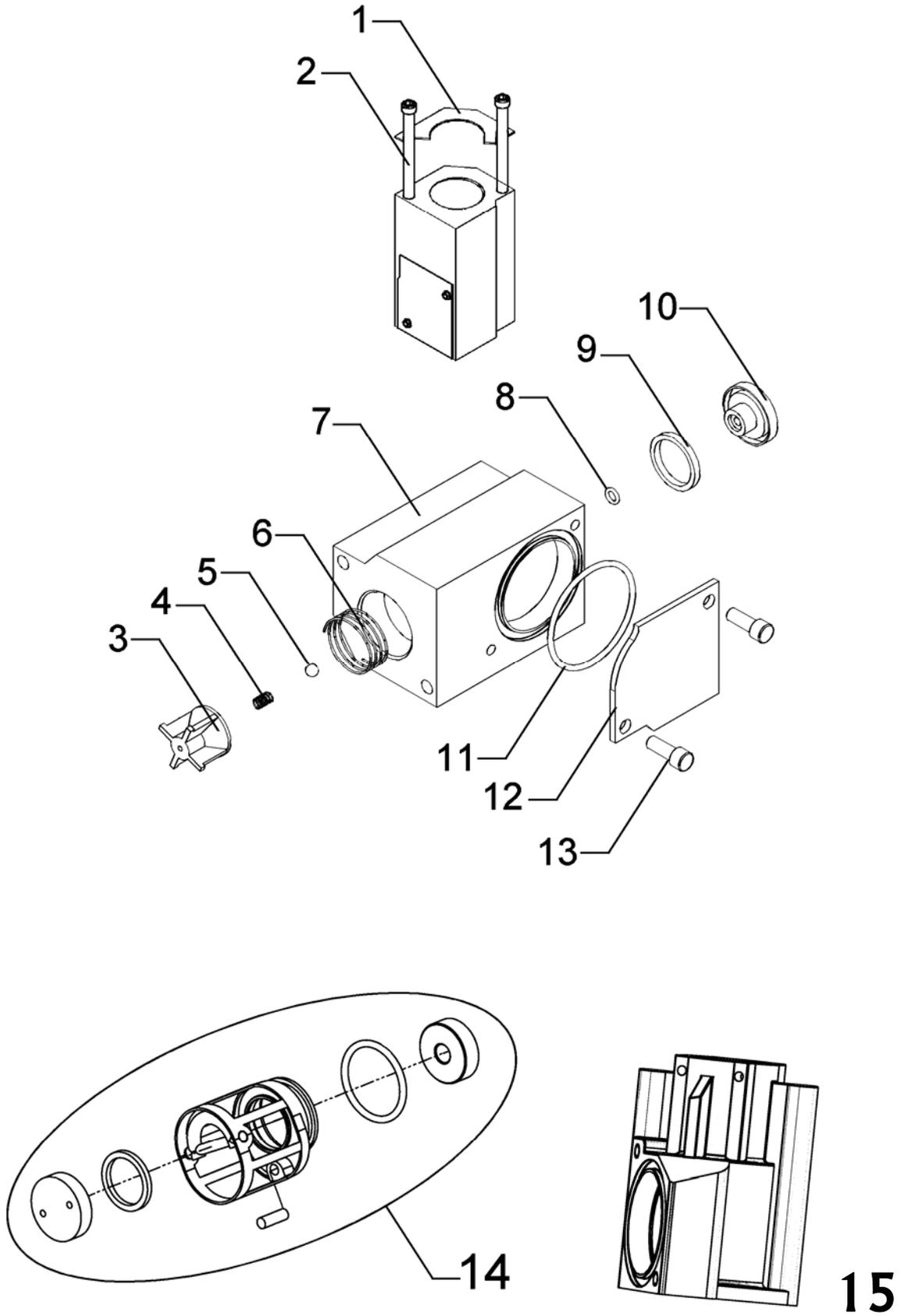
	Part number	Description
1	WM011353	Housing, machined, pump
3		see page 37
4	WM004736	Sealant Loctite 603
5	WB000211-0001	Screw, hexagon socket cap, M6 x 16
6	WM001387	Flat head and shaft
7	WM001956	O-ring T = 3.53, ID = 85,32
8	WM001420	Idler
9	WM001426	Rotor
10	WB000212-0001	Screw, hexagon socket cap, 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



	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

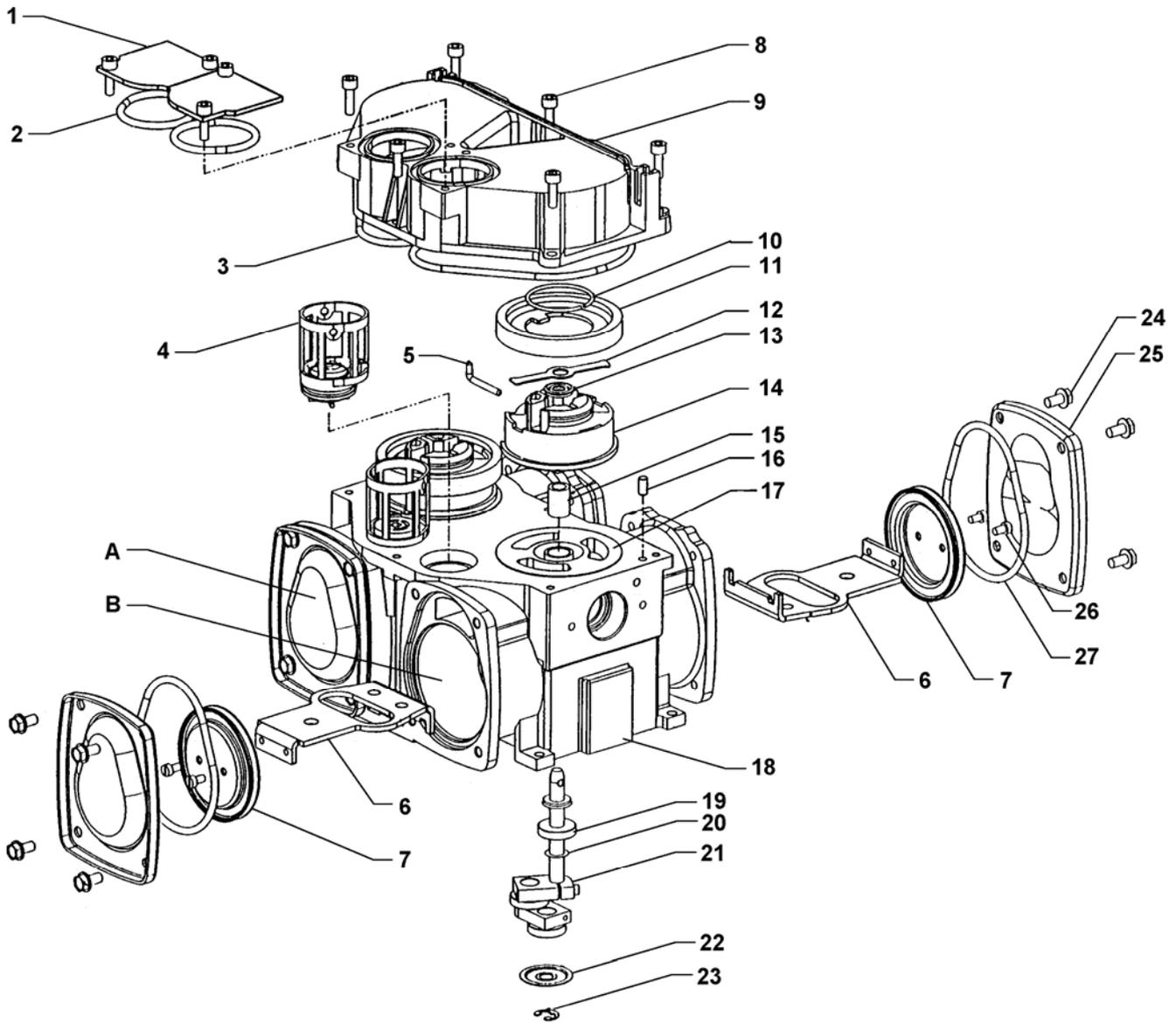


11.1.2 Connection (Pump cover without meter)



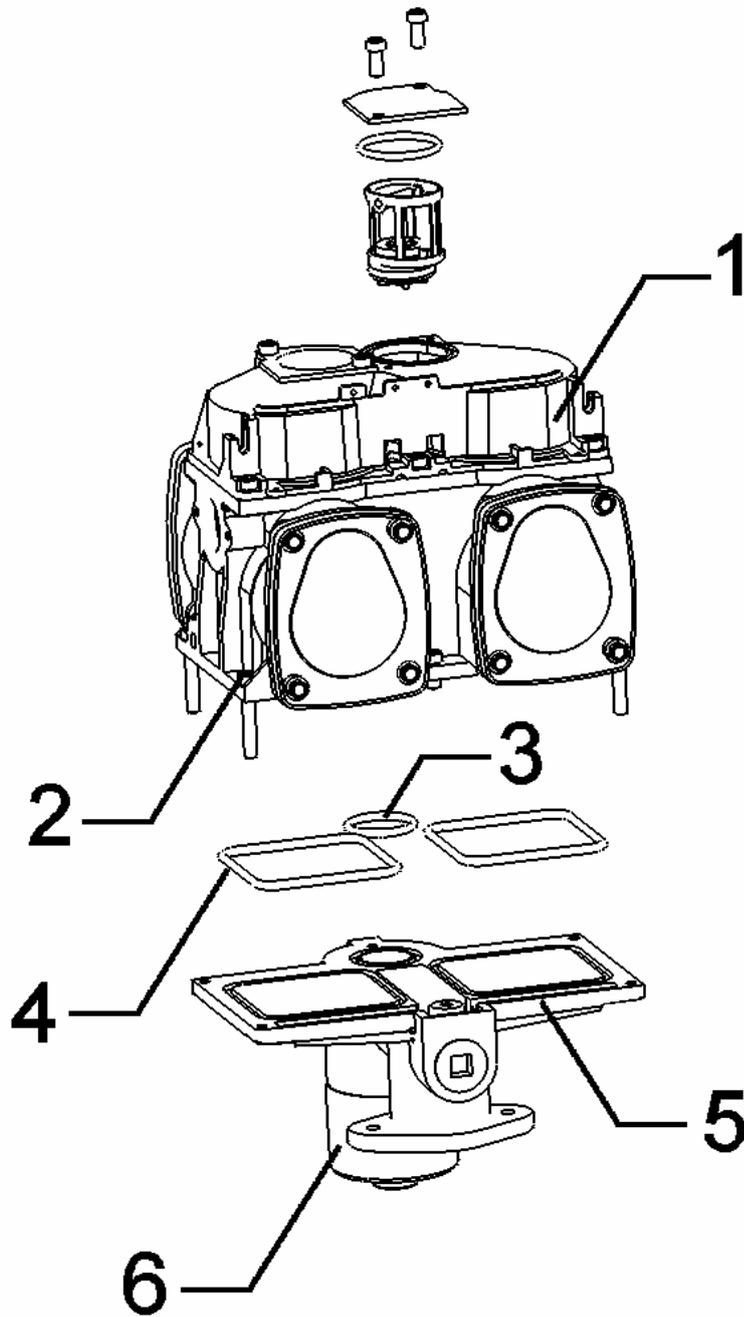
	Part number	Description
	174306	Connector ass'y
1	WM004574	Bracket
2	WB000211-0005	Screw MC6S 6X100 8,8 A2
3	232368	Check valve
4	232367	Spring
5	232366	Ball
6	232365	Spring
		Connector
7	WM004573	Connector (old)
15	WM012266	Connector
8	232364	O-ring
9	171841	O-ring
10	232363	Check valve
11	WM004746	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

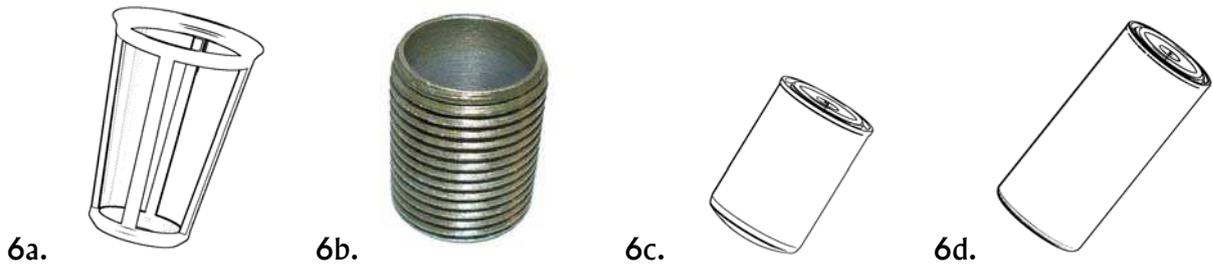
11.1.3 iMeter



	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	

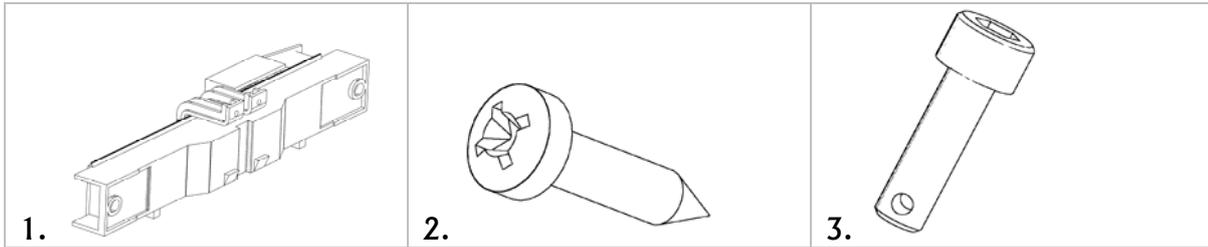
11.1.4 iMeter - Dispenser





	Part number	Description
	see page 45	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



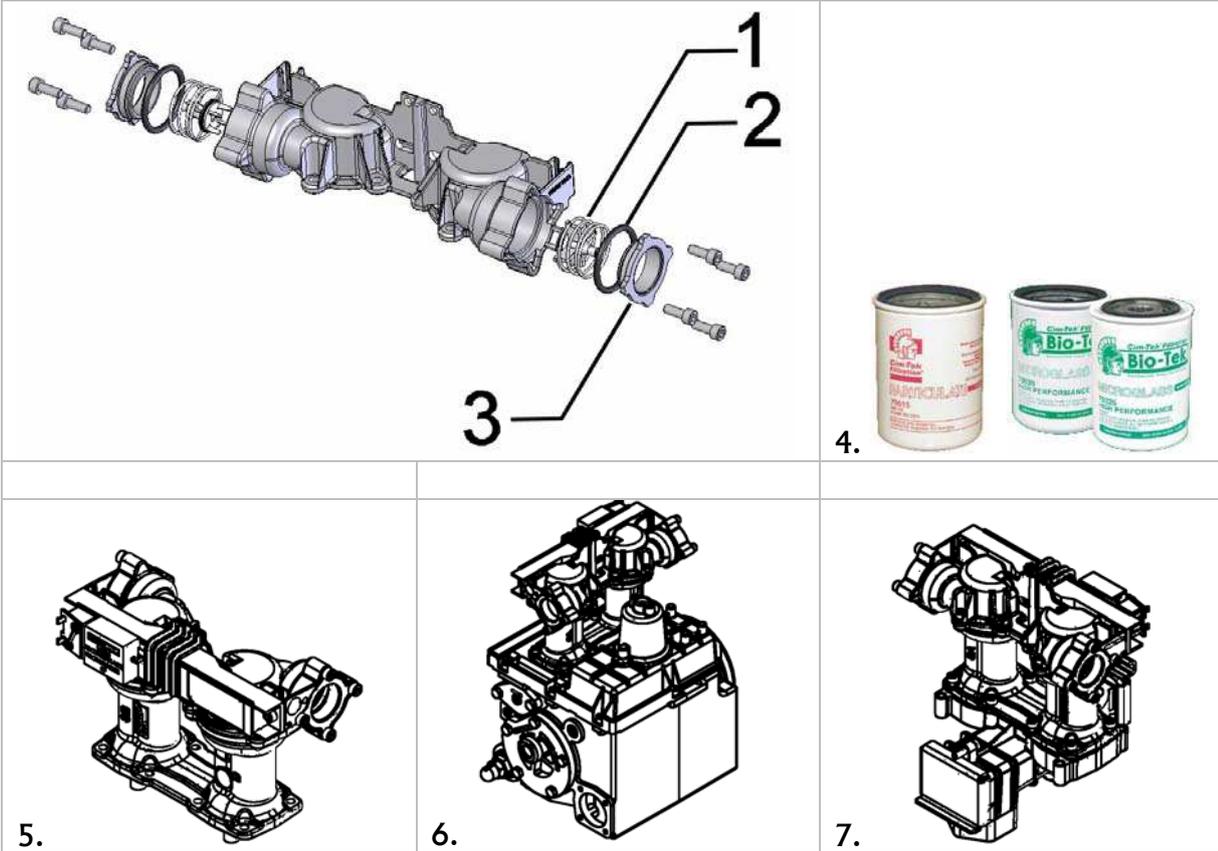
	Part number	Description
1	WM003776	Seal (lead)
2	WM005835	Holder for lead seal Ø= 10
3	WB000255-0001	Pop-rivet , dome head, 2.4 diameter, grip range 2.4-4.8
4	WM004069	Seal, lead, Ø= 10



11.4 Xflo™ (low dome cover)

Note!
The XWIP is blue (not black)

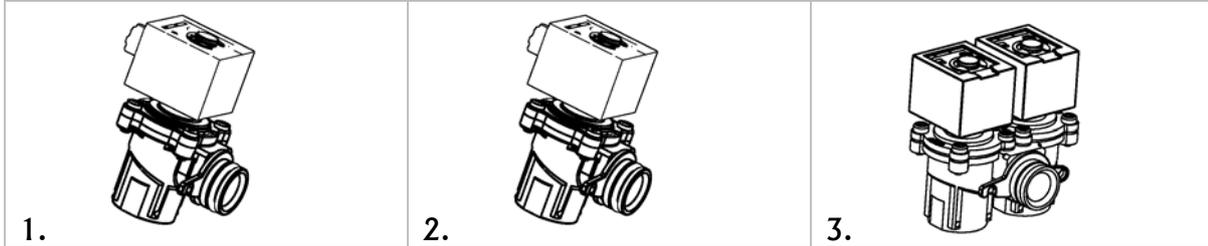
Note!
Always change the Xflo™
(meter) and the XWIP (pulser)
as one unit.



	Part number	Description
1	WM029220	Valve
2	WM022490	O-ring
3	WM018102	Coupling for dome low
4		Strainer for Xflo™
	WM011606-0001	Gasoline & diesel
	WM011606-0002	Ethanol & biodiesel
5		Meter, dome low and XWIP
	182107	Double sided
	182117	Double sided, Ethanol
	182127	Single A, Ethanol
	182137	Single B, Ethanol
6		Combined unit, pump, meter, dome low and XWIP
	182105	Double sided
	182115	Double sided, Ethanol
	182106	Double sided, W&M
	182116	Double sided, Ethanol W&M
	182125	Single A, Ethanol
	182135	Single B, Ethanol
	182126	Single A, Ethanol, W&M
	182136	Single B, Ethanol, W&M
7		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

11.5 Valves

11.5.1 Petrol, diesel

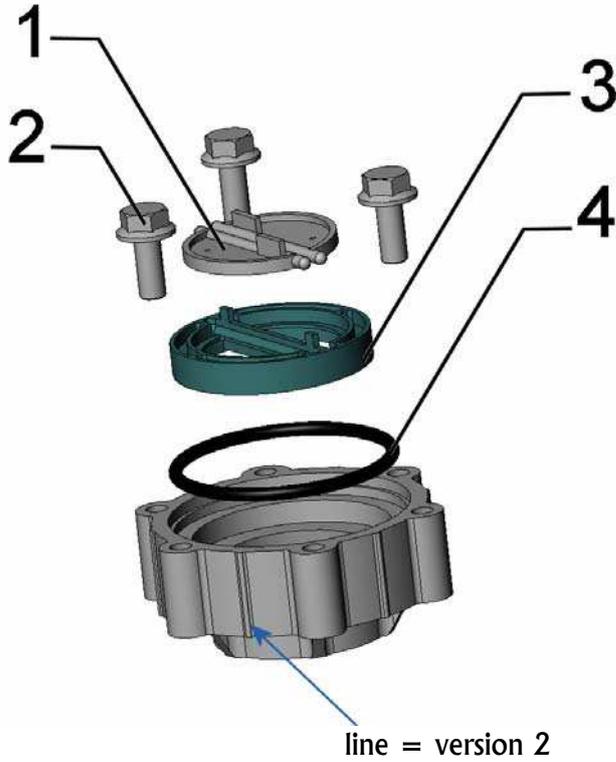


	Part number	Description
1	WM021181	Solenoid valve, proportional, single, al
2	WM021182	Solenoid valve, on/off, single, al
3	WM000340	Solenoid valve, proportional, duplex



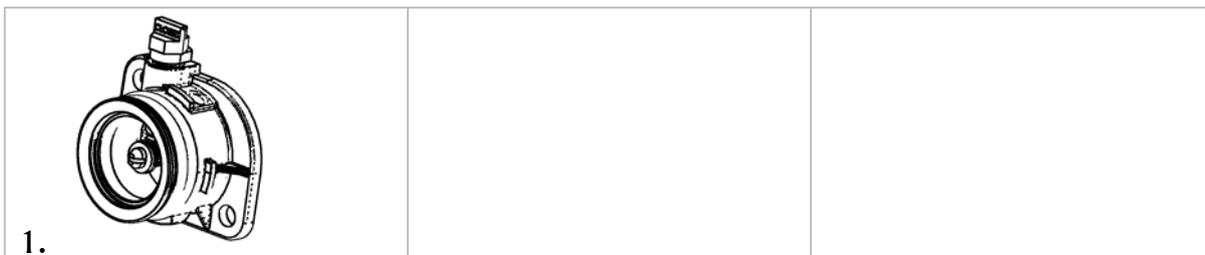
12 Inlet

12.1 Lower flange (version 2)



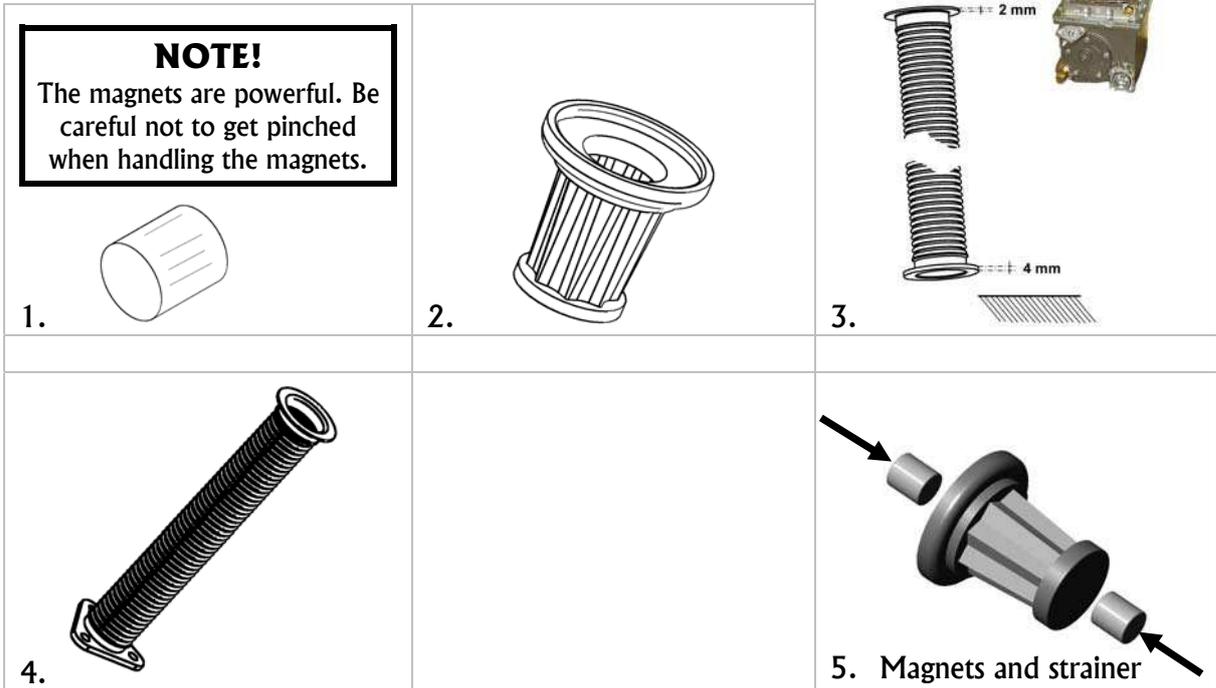
	Part number	Description
	WM027491	Valve, non return
1	WM027488	Flap
2	WM009773-0001	Screw, hex head, M8X20, with flange
3	WM027489	Bracket
4	WM027490	O-ring, ID = 62; T = 4.0

12.2 Check valve



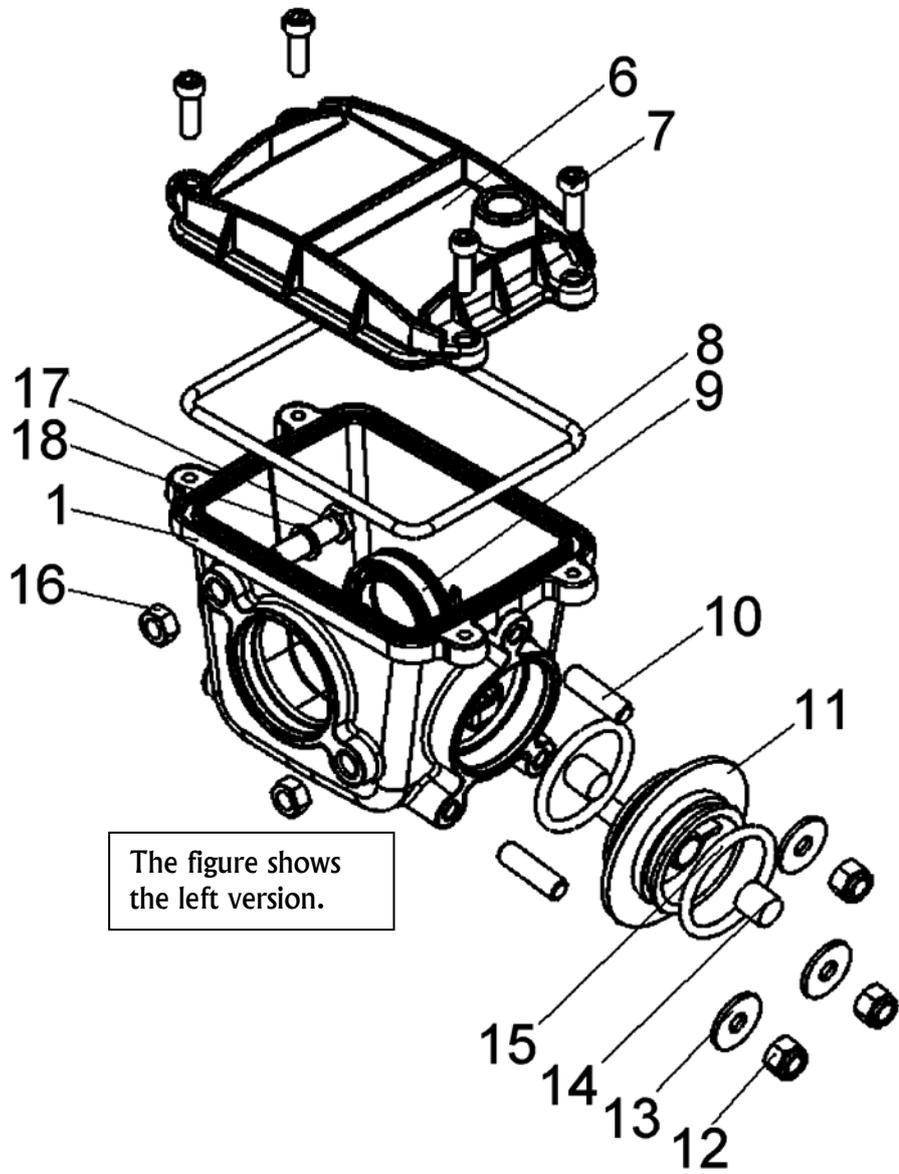
	Part number	Description
	WM026049	Check valve

12.3 Global inlet

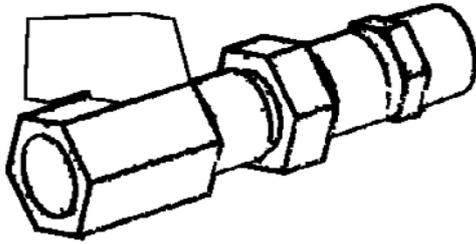


	Part number	Description
1	WM002209	Magnet, block OD = 12, L = 13
2	WM000436	Strainer
		Tube, flexible
3	WM000788-0001	350 mm (option)
	WM000788-0005	425 mm (standard)
	WM000788-0003	625 mm (option)
4		Tube, flexible - triangular flange (option)
	WM029703-0001	350 mm (option)
	WM029703-0002	425 mm (option)
5	see page 54	Valve non return

12.4 Filter pot



19.

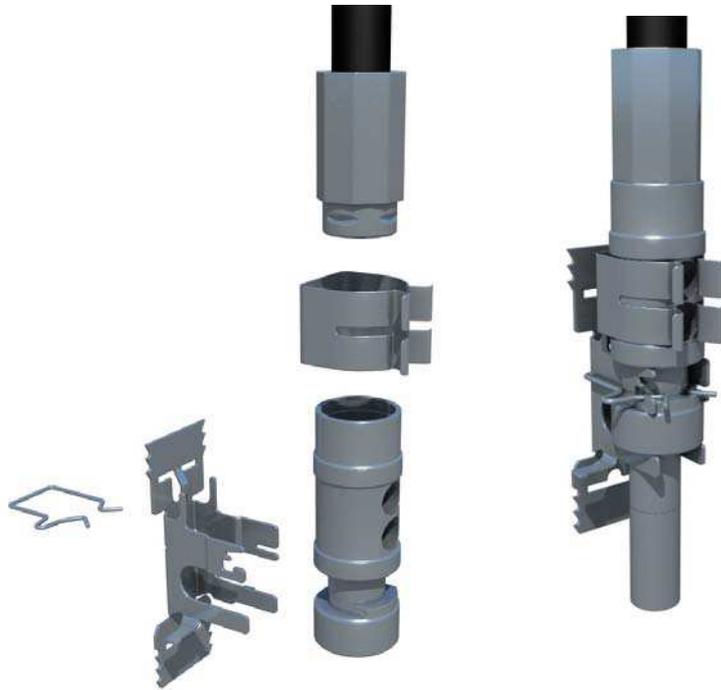


	Part number	Description
		Filter pot
	WM021502-0001	Standard, inlet left
	WM021502-0002	Standard, inlet right
	WM021502-0003	Hydro (indicates water), inlet left
	WM021502-0004	Hydro (indicates water), inlet right
	WM021502-0005	Biodiesel, inlet left
	WM021502-0006	Biodiesel, inlet right
1	WM020452-0001	Housing filter pot
2		Filter (When you opened the filter pot you need a new O-ring, WM021210)
	WM003157	Cellulose
	WM007580	Hydro (indicates water)
	WM021247	Biodiesel
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	WM020485	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)

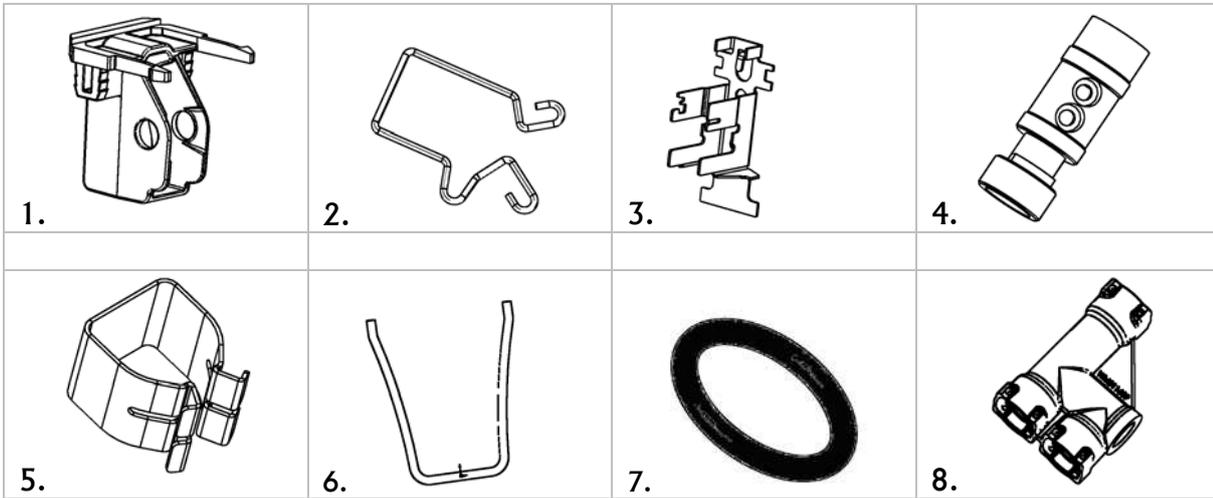
13 Tubes



You will find the tube number printed on the tube.

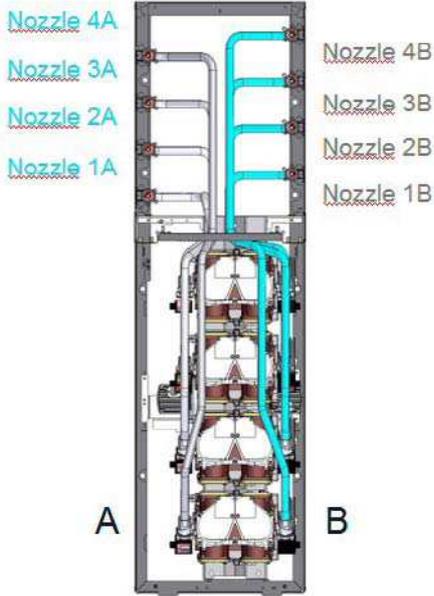


13.1 Misc.

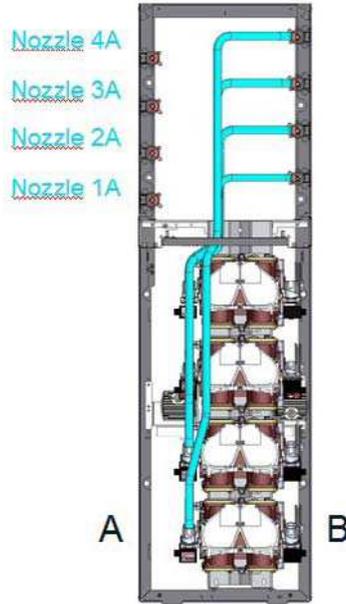


	Part number	Description
1	WM028143	Bracket
2	WM028987	Pin hose connector pin lock HC
3	WM028988	Support hose connector support HC
4	WM028989	Hose connector with VR
5	WM028990	Hose connector VR lock
6	WM001925	Lock pin for tube fitting
7	WM024393	O-ring T= 4,2 ID= 23
8	WM011609	Coupling, female double bump, 2 inlet, 1 outlet

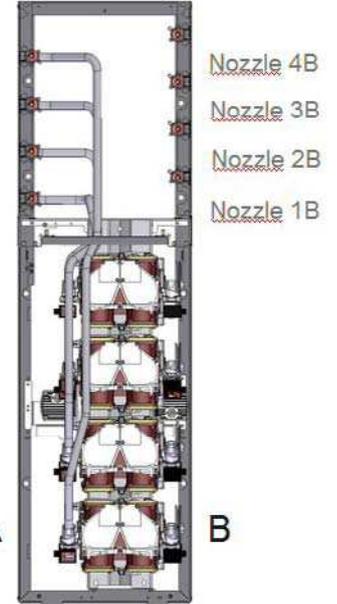
Tubes - Fuel delivery



Double sided

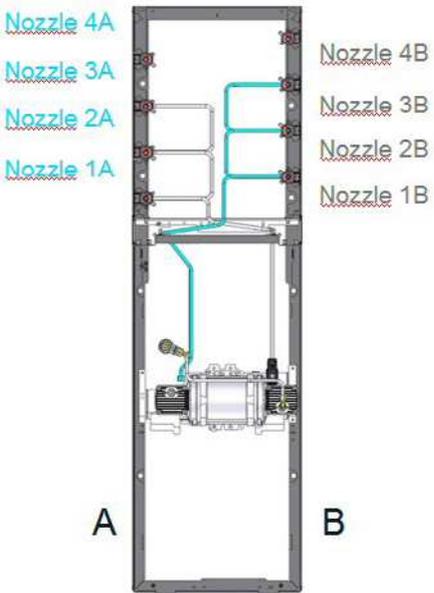


Single A

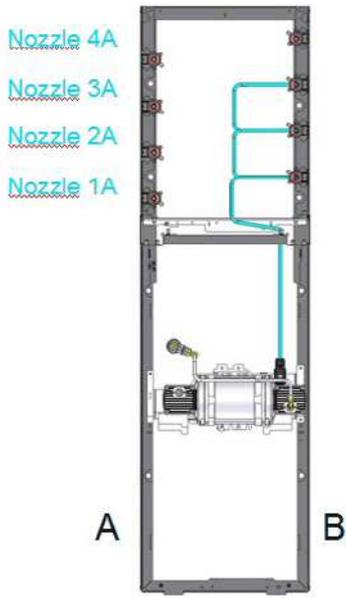


Single B

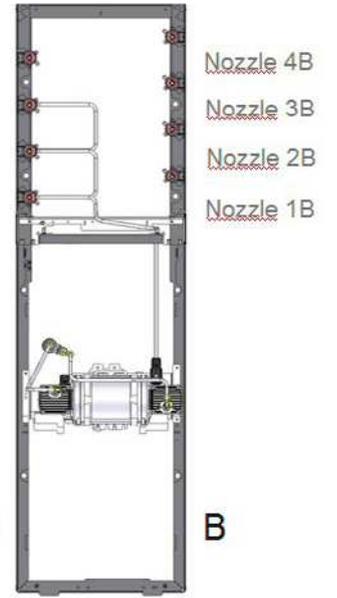
Tubes - Vapour



Double sided



Single A



Single B



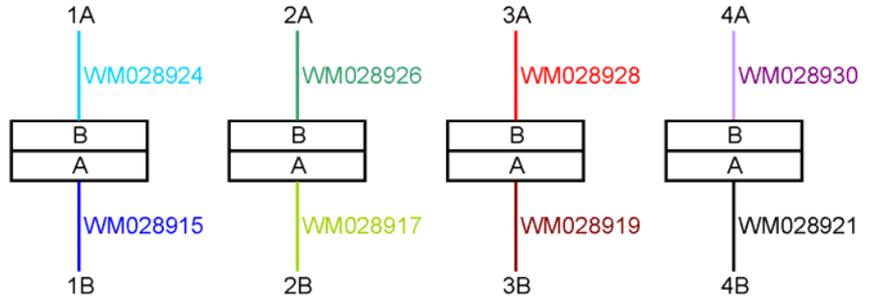
13.2 HH & HHR

13.2.1 Liquid (HH & HHR)

STANDARD

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

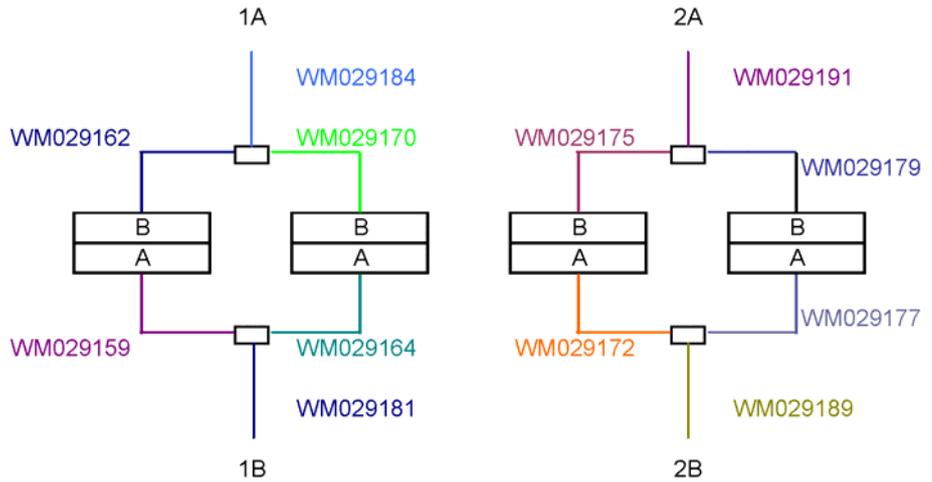
Flow rate
40 & 70 & 40-70



HIGH FLOW MODELS

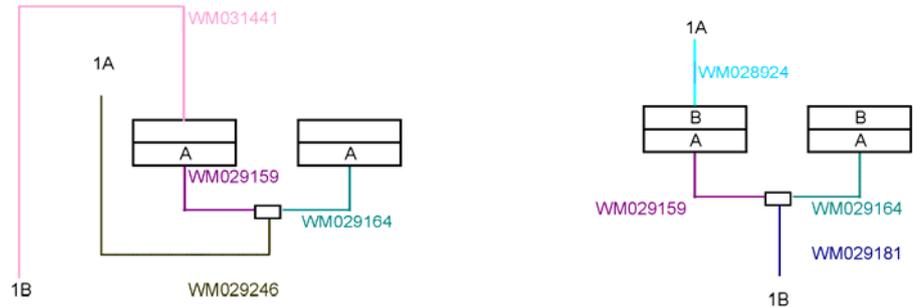
Style
11-21*
22-42*

Flow rate
130



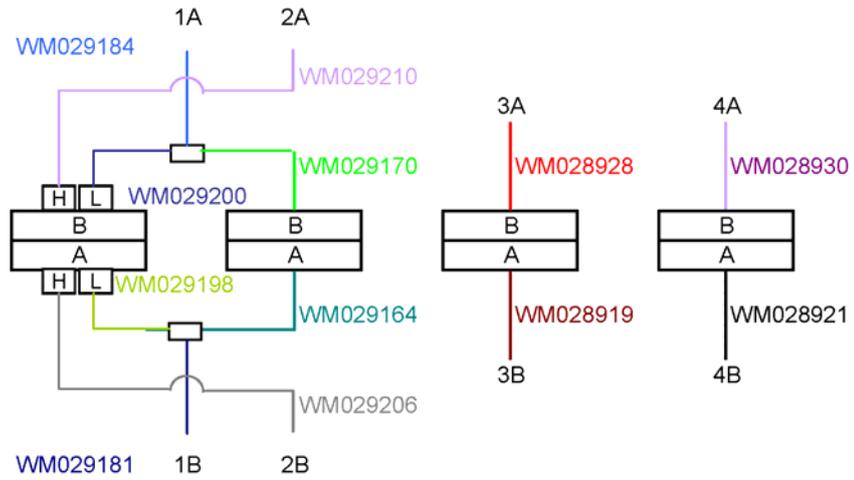
Style
11-211

Flow rate
130//40



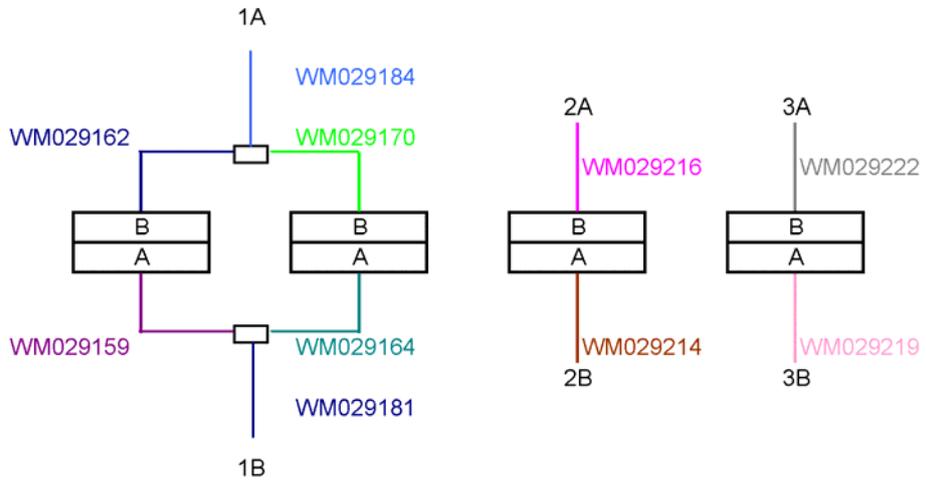
Style
 11-22*
 22-33*
 33-44*

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



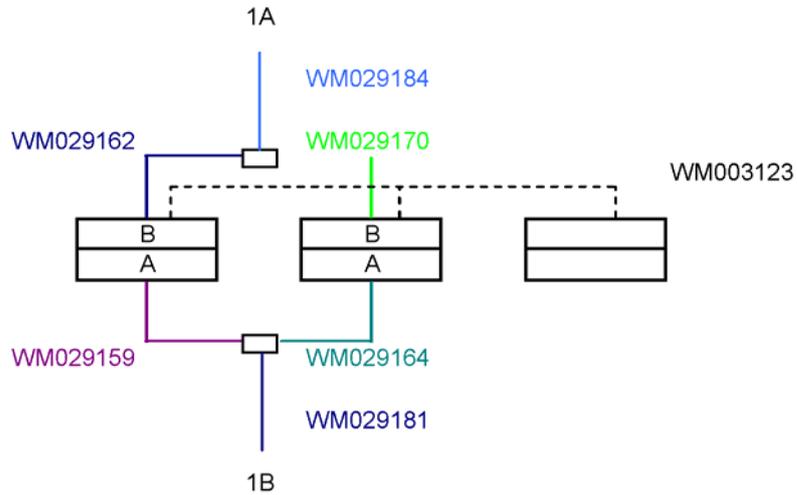
Style
 22-32*
 33-43*

Flow rate
 130/40
 130/40/40



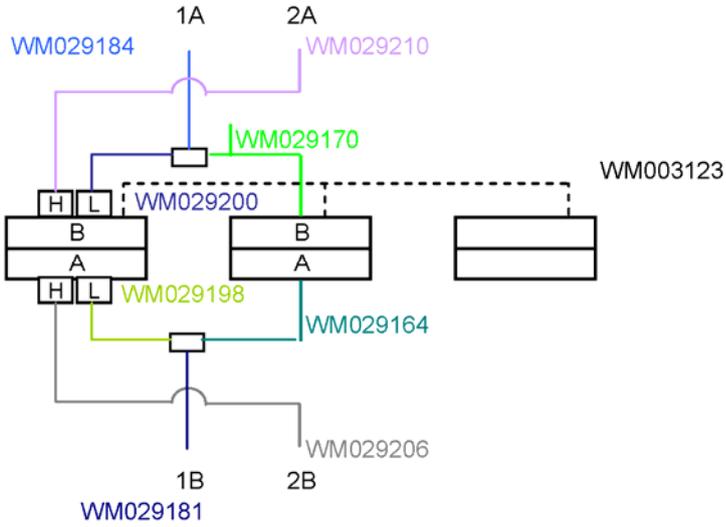
Style
 11-31*

Flow rate
 130 SIM



Style
11-32*

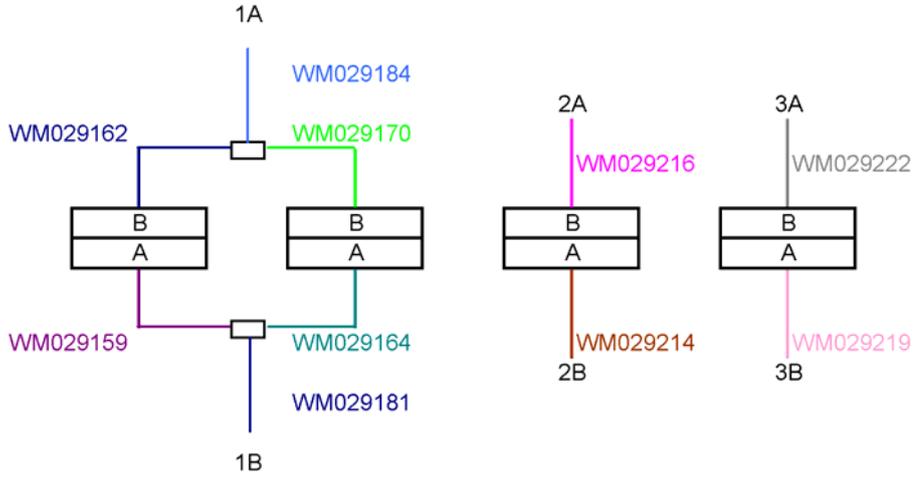
Flow rate
130 SIM/40



BLEND MODELS

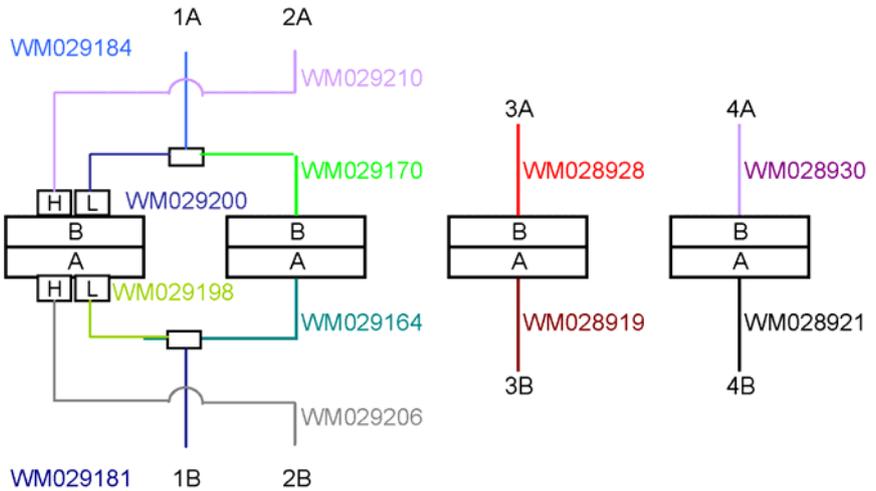
Style
23-21*
34-32*
45-43*

Flow rate
40

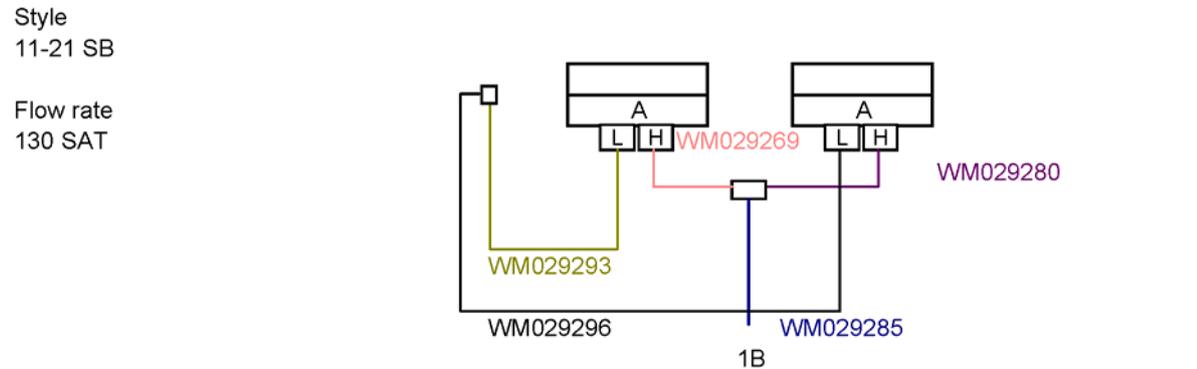
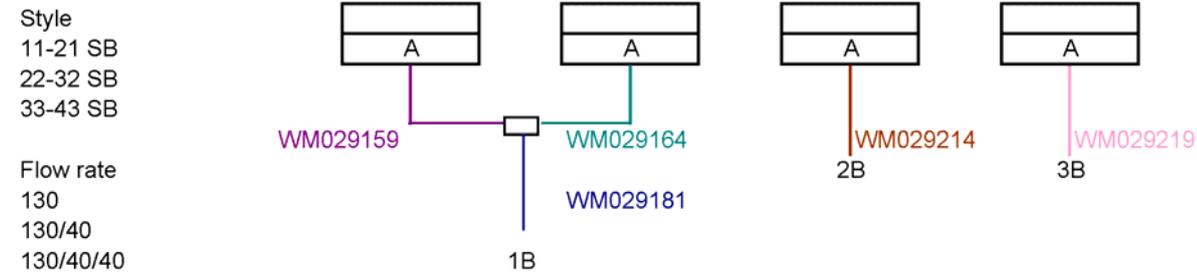
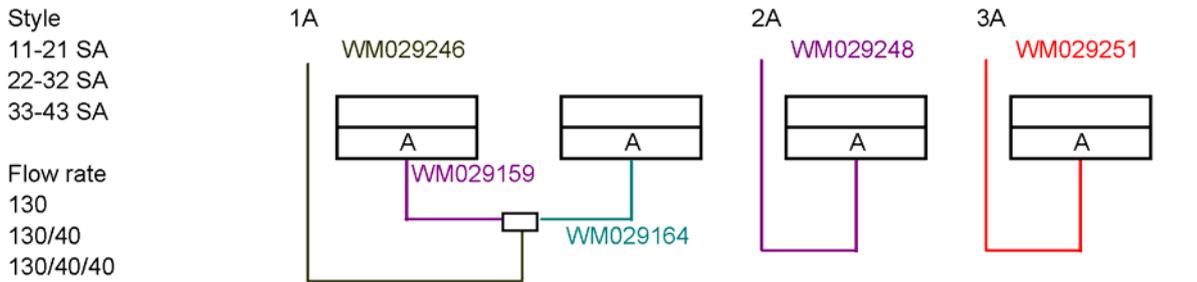
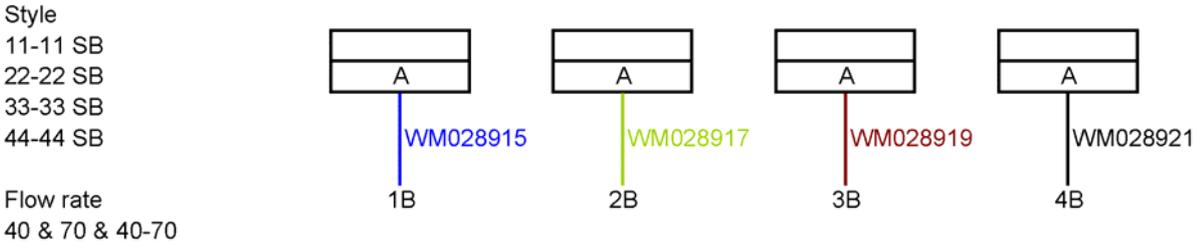
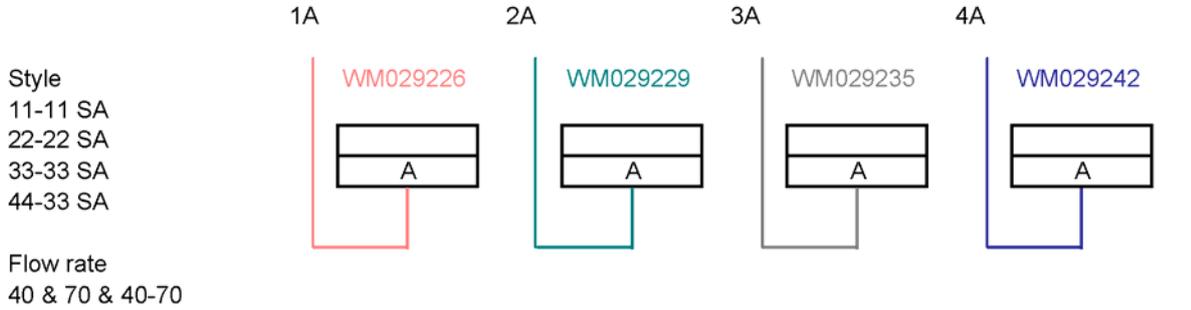


Style
23-22*
34-33*
45-44*

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

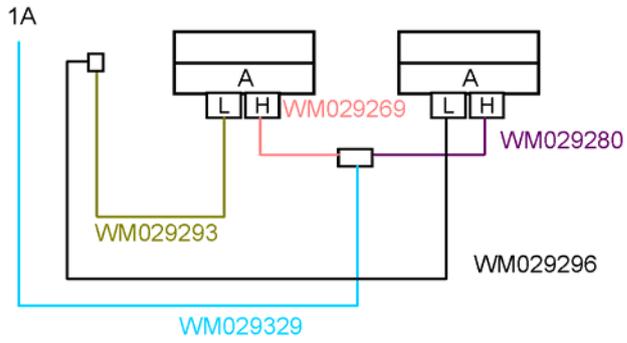


SINGEL SIDE MODELS



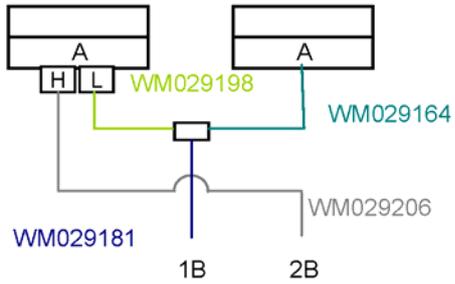
Style
11-21 SA

Flow rate
130 SAT



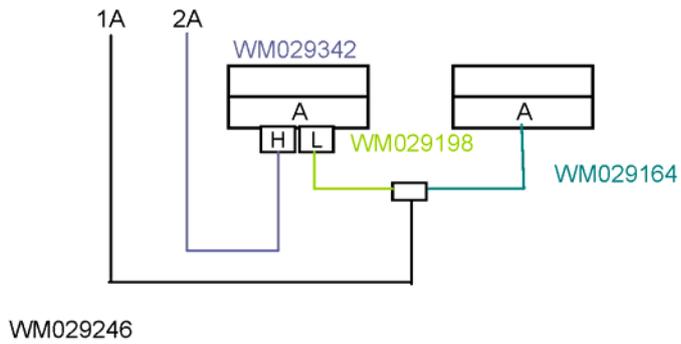
Style
11-22 SB

Flow rate
130/40



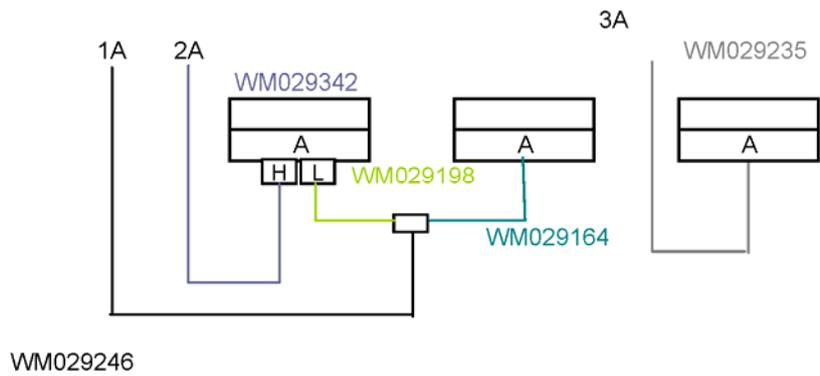
Style
11-22 SA

Flow rate
130/40



Style
22-33 SA

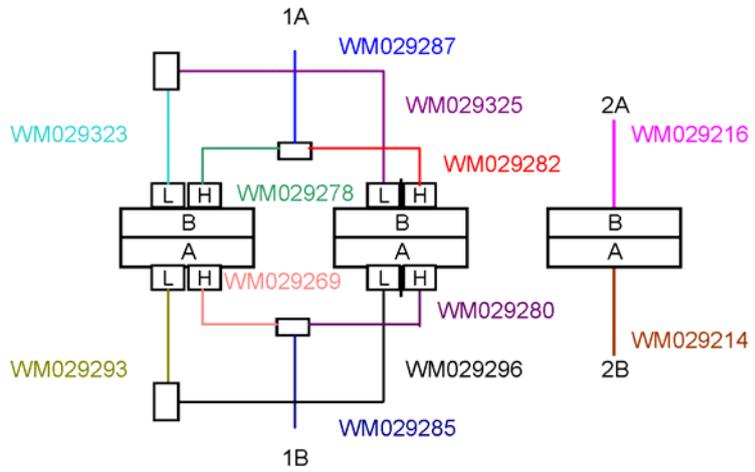
Flow rate
130/40/40



SAT MODELS

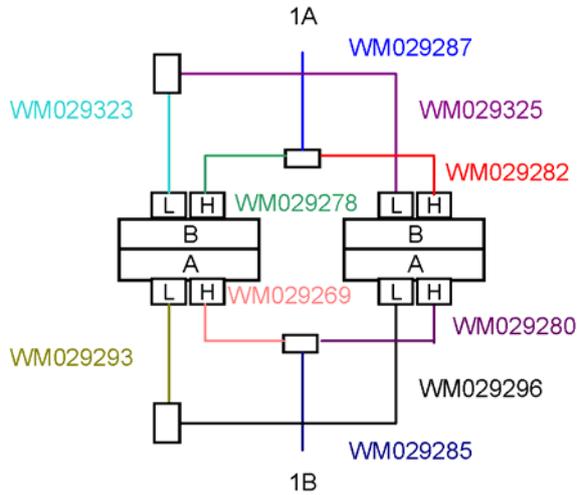
Style
22-32*

Flow rate
130 SAT OUT/40



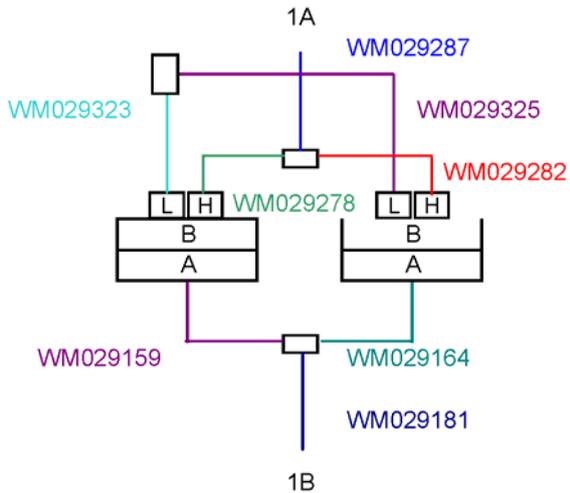
Style
11-21*

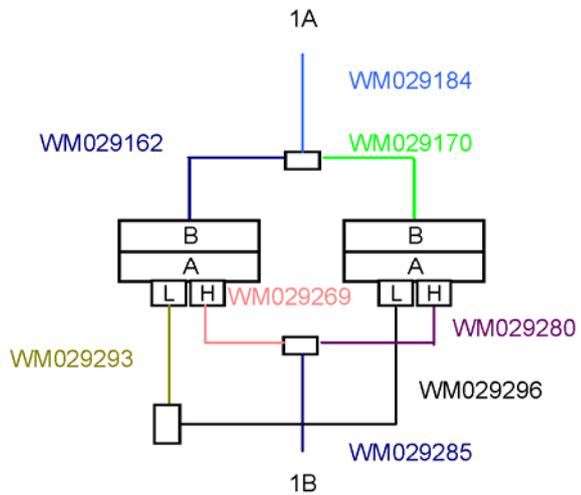
Flow rate
130 SAT OUT//



Style
11-211

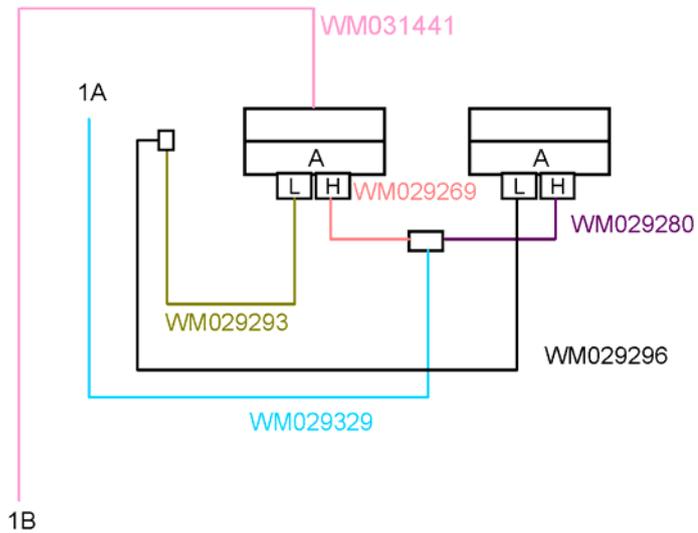
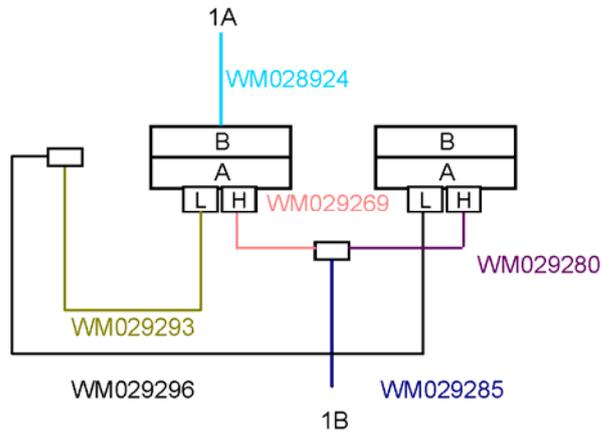
Flow rate
130 SAT OUT//130





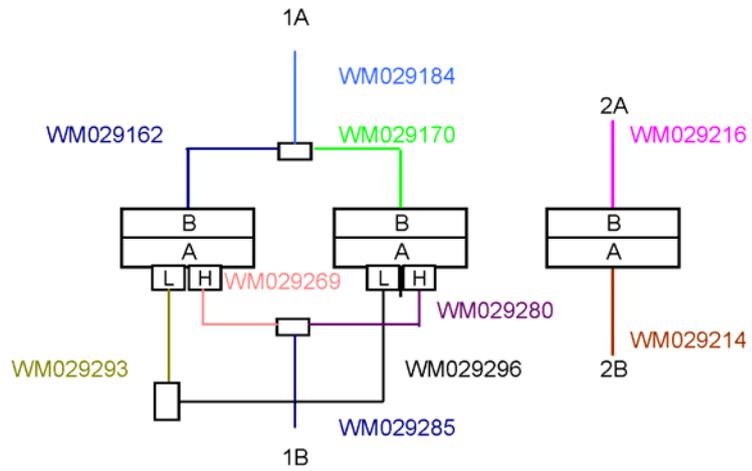
Style
11-211

Flow rate
130 SAT OUT//40



Style
22-322

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



Liquid tubes Global Star V HH & HHR

See also the drawings above.

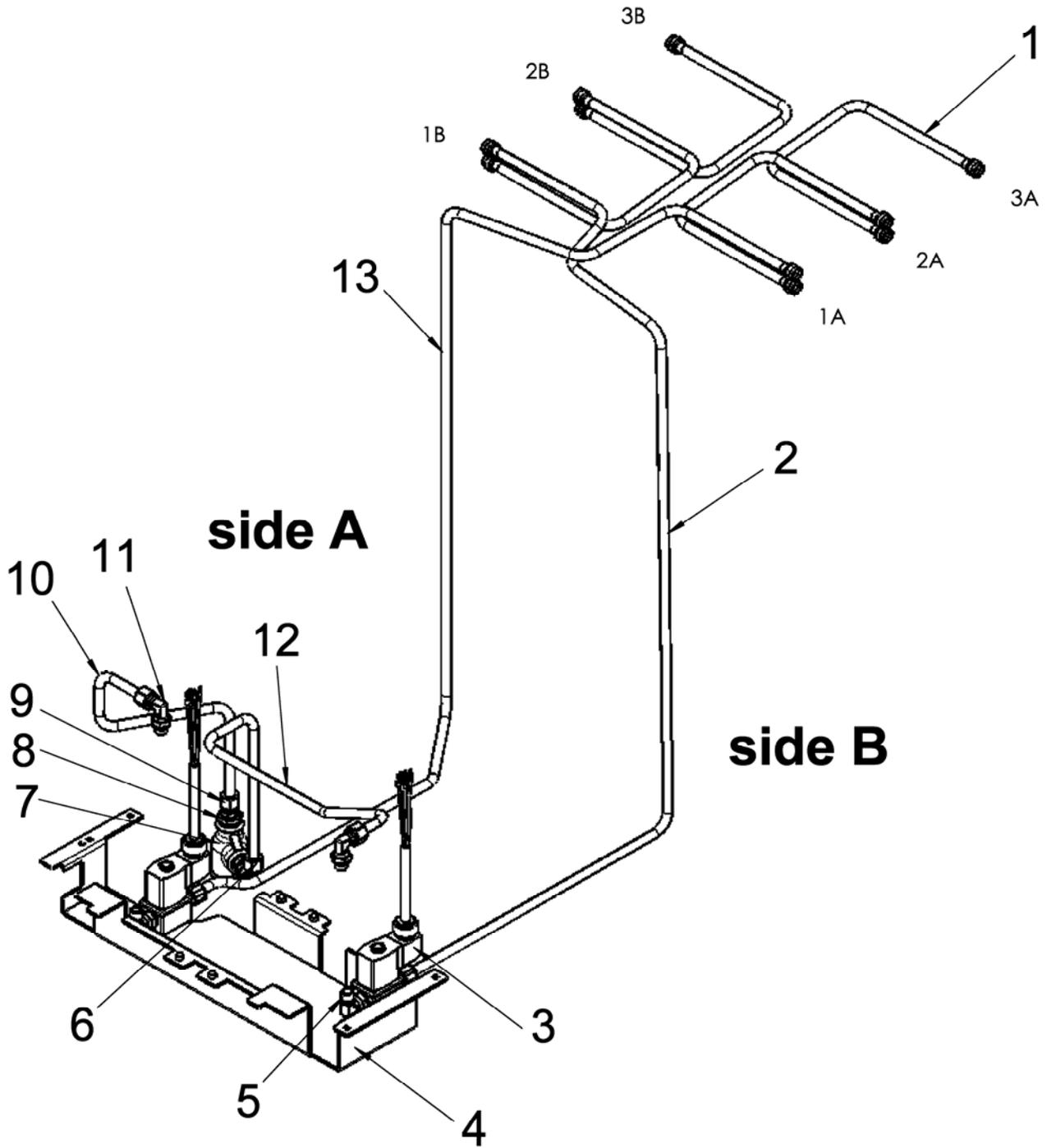
Part number	Description
WM011609	Coupling, female double bump, 2 inlet, 1 outlet
WM028924	Side B, hydraulic 1, hose connection 1B
WM028926	Side B, hydraulic 2, hose connection 2B
WM028928	Side B, hydraulic 3, hose connection 3B
WM028930	Side B, hydraulic 4, hose connection 4B
WM028915	Side A, hydraulic 1, hose connection 1A
WM028917	Side A, hydraulic 2, hose connection 2A
WM028919	Side A, hydraulic 3, hose connection 3A
WM028921	Side A, hydraulic 4, hose connection 4A
WM029162	Side B, hydraulic 1, to coupling
WM029170	Side B, hydraulic 2, to coupling
WM029175	Side B, hydraulic 3, to coupling
WM029179	Side B, hydraulic 4, to coupling
WM029159	Side A, hydraulic 1, to coupling
WM029164	Side A, hydraulic 2, to coupling
WM029172	Side A, hydraulic 3, to coupling
WM029177	Side A, hydraulic 4, to coupling
WM029184	Side B, Coupling - hose connection 1B
WM029181	Side A, coupling - hose connection 1A
WM029191	Side B, coupling - hose connection 2B
WM029189	Side A, coupling - hose connection 2A
WM029210	Side B, hydraulic 1, duplex valve (U) - hose connection 2B
WM029206	Side A, hydraulic 1, duplex valve (U) - hose connection 2A
WM029200	Side B, hydraulic 1, duplex valve (L) - coupling
WM029198	Side A, hydraulic 1, duplex valve (L) - coupling
WM029216	Side B, hydraulic 3, hose connection 2B
WM029214	Side A, hydraulic 3, hose connection 2A
WM029222	Side B, hydraulic 4, hose connection 3B
WM029219	Side A, hydraulic 4, hose connection 3A
WM029226	Side A, hydraulic 1, hose connection 1B
WM029229	Side A, hydraulic 2, hose connection 2B
WM029235	Side A, hydraulic 3, hose connection 3B
WM029242	Side A, hydraulic 4, hose connection 4B
WM029248	Side A, hydraulic 3, hose connection 2B
WM029251	Side A, hydraulic 4, hose connection 3B
WM029246	Side B, coupling - hose connection 1B
WM029293	Side A, hydraulic 1, duplex valve (L), SAT
WM029296	Side A, hydraulic 2, duplex valve (L), SAT
WM029269	Side A, hydraulic 1, duplex valve (U) - coupling
WM029280	Side A, hydraulic 2, duplex valve (U) - coupling
WM029285	Side A, coupling - hose connection 1A, SAT model
WM029329	Side A, coupling - hose connection 1B, SAT model
WM029342	Side A, Hydraulic 1, duplex valve (U) - hose connection 2B
WM029323	Side B, hydraulic 1, duplex valve (L), SAT
WM029325	Side B, hydraulic 2, duplex valve (L), SAT
WM029278	Side B, hydraulic 1, duplex valve (U) - coupling
WM029282	Side B, hydraulic 2, duplex valve (U) - coupling
WM029287	Side B, Coupling - hose connection 1B, SAT model
WM031441	Side B, hydraulic 1, hose connection 1A

13.2.2 Liquid (HH & HHR) (first months production)

Part number	Description
WM028289	Side B, hydraulic 1, nozzle 1
WM028292	Side B, hydraulic 2, nozzle 2
WM028298	Side B, hydraulic 3, nozzle 3
WM028300	Side B, hydraulic 4, nozzle 4
WM028280	Side A, hydraulic 1, nozzle 1
WM028282	Side A, hydraulic 2, nozzle 2
WM028284	Side A, hydraulic 3, nozzle 3
WM028286	Side A, hydraulic 4, nozzle 4
WM028748	Side B, hydraulic 1, to coupling
WM029159	Side A, hydraulic 1, to coupling
WM028757	Side B, hydraulic 2, to coupling
WM029164	Side A, hydraulic 2, to coupling
WM028761	Side B,
WM029172	S A, hydraulic 3, to coupling
WM028765	Side B, hydraulic 4, to coupling
WM029177	Side A, hydraulic 4, to coupling
WM028656	Side B, hose 1, coupling - hose 1
WM028653	Side A, hose 1, coupling - hose 1
WM028776	Side B, coupling - hose 2
WM028773	Side A, Coupling - hose 2
WM029323	Side B, hydraulic 1, duplex valve (L), SAT
WM029325	Side B, hydraulic 2, duplex valve (L), SAT
WM029293	Side A, hydraulic 1, duplex valve (L), SAT
WM029296	Side A, hydraulic 2, duplex valve (L), SAT
WM029278	Side B, hydraulic 1, duplex valve (U) - coupling
WM029282	Side B, hydraulic 2, duplex valve (U) - coupling
WM029269	Side A, hydraulic 1, duplex valve (U) - coupling
WM029280	Side A, hydraulic 2, duplex valve (U) - coupling
WM030634	Side B, hose 1, from coupling
WM031366	Side A, coupling - hose connection 1A
WM028847	Side A, hydraulic 1, side b, hose connection 1
WM028853	Side A, hydraulic 2, side b, hose connection 2
WM028861	Side A, hydraulic 3, side B, hose connection 3
WM028864	Side A, hydraulic 4, side B, hose connection 4

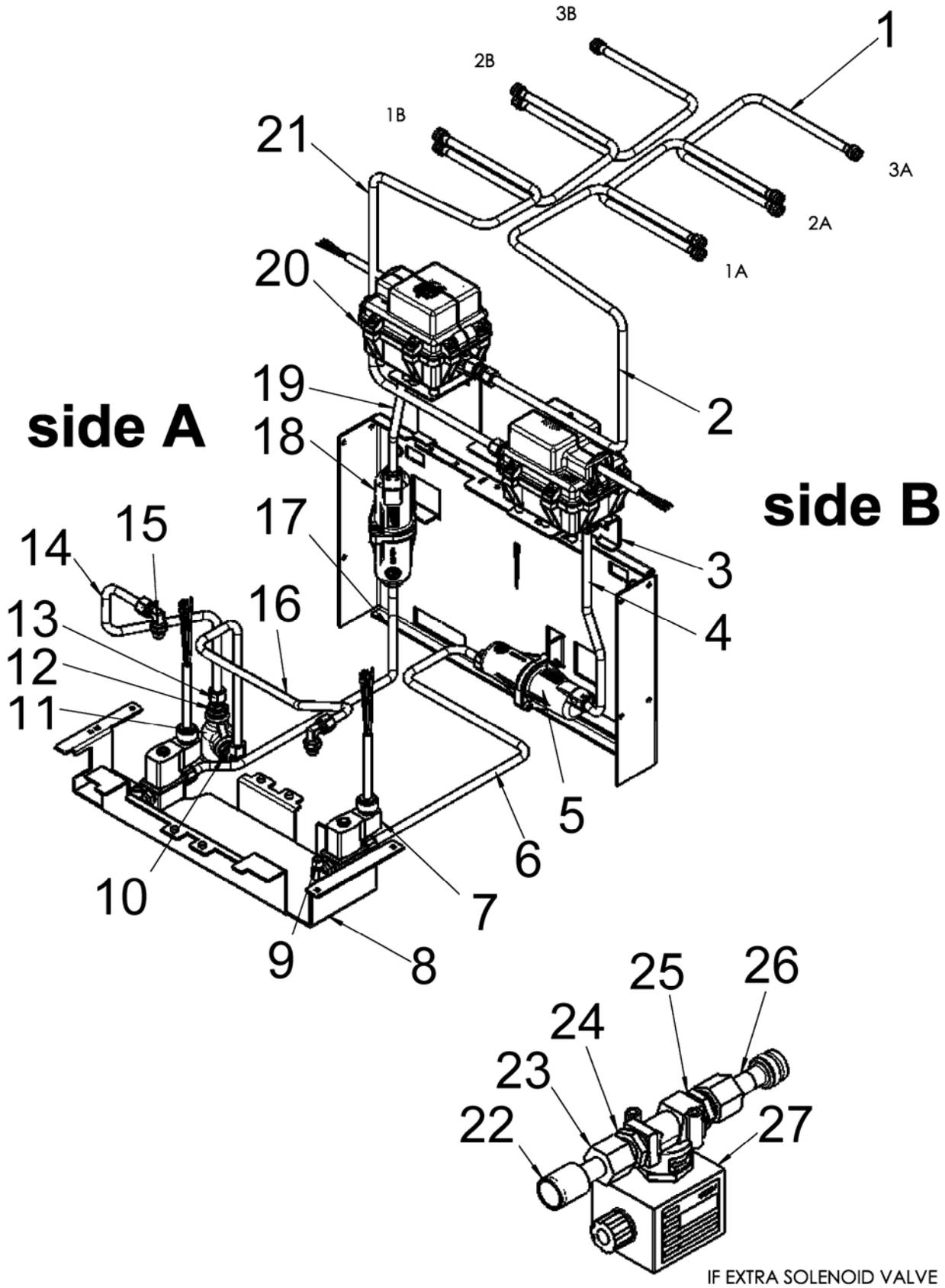


13.2.3 Tubes vapour - suction (HH & HHR)



	Part number	Description	
1		Tube, hose adapter - hose adapter	
	WM028933	L = 141 (each)	
	WM029405	L = 281 (every two)	
	WM029407	L = 420 (every third)	
2	PUMP - HOSE CONNECTION		
13	SUCTION		
	REMOTE		
	HOSE CONNECTION	A SIDE	B SIDE
	1	WM028948	WM030601
	2	WM029432	WM029439
	WM029441	WM029444	
	WM029446	WM029448	
	WM028952	WM030677	
	WM029451	WM029454	
	WM029549	WM029552	
	WM029555	WM029557	
	PUMP - HOSE CONNECTION		
	SUCTION 1 PHASE		
	REMOTE 1 PHASE		
	HOSE CONNECTION	A SIDE	B SIDE
	1	WM030740	WM030601
	2	WM030746	WM029439
	3	WM030748	WM029444
	4	WM030750	WM029448
	WM030753	WM030677	
	WM030758	WM029454	
	WM030760	WM029552	
	WM030762	WM029557	
	PUMP - HOSE CONNECTION		
	SUCTION SINGEL		
	REMOTE SINGEL		
	HOSE CONNECTION	SINGEL A	SINGEL B
	1	WM028950	WM030601
	2	WM030697	WM029439
	3	WM030705	WM029444
	4	WM030710	WM029448
	WM028954	WM030677	
	WM030679	WM029454	
	WM030681	WM029552	
	WM030693	WM029557	
3	WM001267	Solenoid valve, proportional, single, cable 3m	
4	WM028464	Shelf for VR module	
5	WM028456	Coupling, 90° male G 1/4, male G 1/4 adj	
6	WM002055	Coupling, 90° male G 3/8, D = 10	
7	WB000344-0001	T-coupling, female Rp1" x Rp1/2" x Rp1/2"	
8	WB000343-0001	Bushing, male R1/2" x female Rp3/8"	
9	WM002041	Coupling, straight male G 3/8, D = 10	
10		Tube, vapour, side A, pump - outlet	
	WM028534	Suction (3-phase)	
	WM028560	Remote (3-phase)	
	WM030080	Suction (1-phase)	
	WM030082	Remote (1-phase)	
11	WM002051	Coupling, 90 ° male G 1/4, D = 10	
12		Tube, vapour, side B, pump - outlet	
	WM028536	Suction	
	WM028566	Remote	
13		see above	

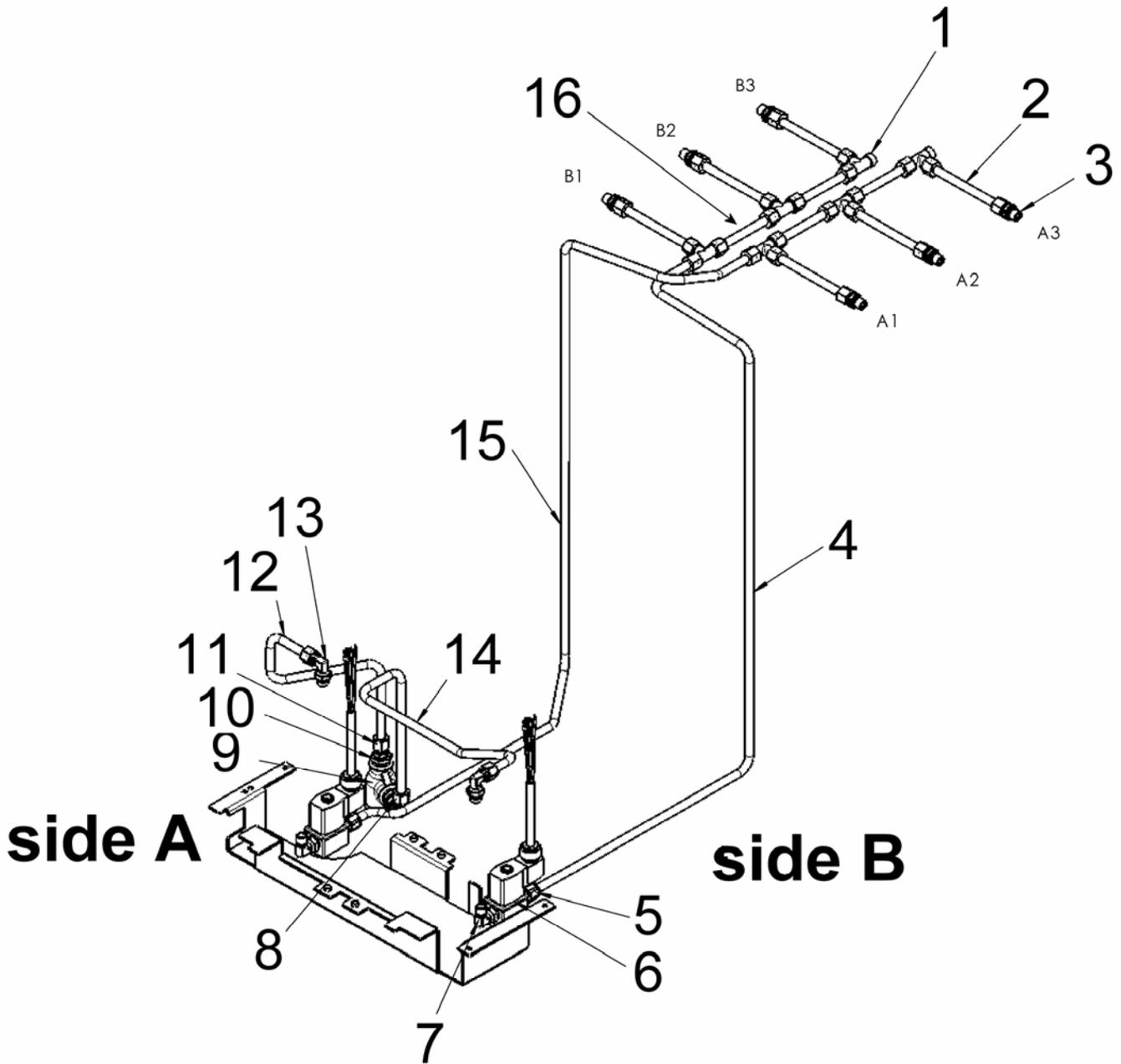
13.2.4 Tubes vapour gate - suction (HH & HHR)



VRM system overview , see page 90.

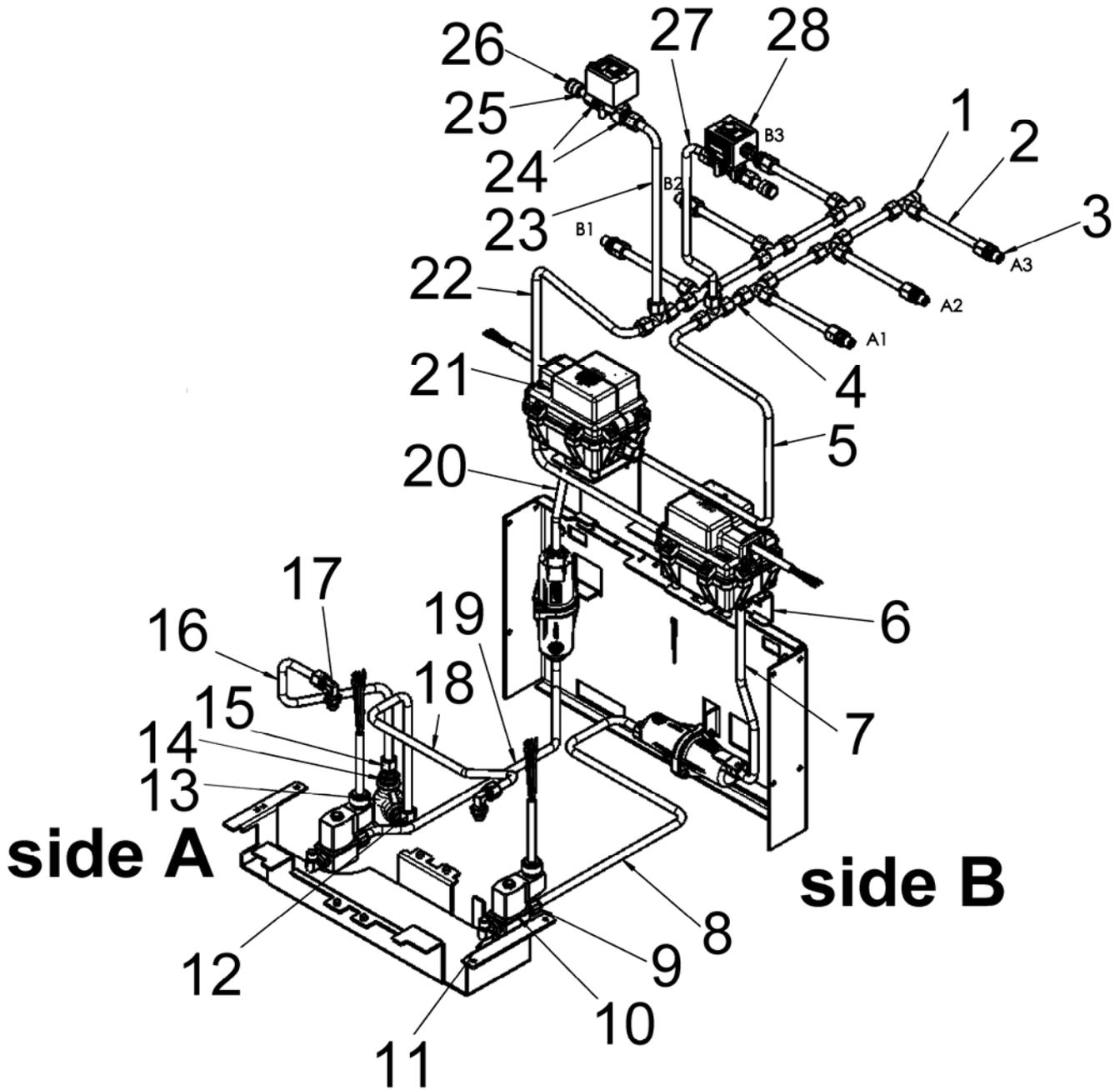
	Part number	Description
1		Tube, hose adapter - hose adapter
	WM028933	L = 141 (each)
	WM029405	L = 281 (every two)
	WM029407	L = 420 (every third)
2 21	VAPOUR METER - HOSE CONNECTION	
	HOSE CONNECTION	A SIDE
	1	WM030595
	2	WM031352
	3	WM031354
	4	WM031357
	B SIDE	SINGEL A
		WM030599
		WM031338
		WM031347
		WM031349
		WM031380
		WM031382
		WM031384
		WM031386
3	WM028197	Support, L-shape
4	WM028526	Tube, vapour meter - damper
5	WM028439	Support, L-shape
6		Tube, vapour, side B, damper - valve
	WM028532	Suction
	WM028548	Remote
7	WM001267	Solenoid valve, proportional, single, cable 3m
8	WM028464	Shelf for VR module
9	WM028456	Coupling, 90° male G 1/4, male G 1/4 adj
10	WM002055	Coupling, 90° male G 3/8, D = 10
11	WB000344-0001	T-coupling, female Rp1" x Rp1/2" x Rp1/2"
12	WB000343-0001	Bushing, male R1/2" x female Rp3/8"
13	WM002041	Coupling, straight male G 3/8, D = 10
14		Tube, vapour, side A, pump - outlet
	WM028534	Suction (3-phase)
	WM028560	Remote (3-phase)
	WM030080	Suction (1-phase)
	WM030082	Remote (1-phase)
15	WM002051	Coupling, 90 ° male G 1/4, D = 10
16		Tube, vapour, side B, pump - outlet
	WM028536	Suction
	WM028566	Remote
17		Tube, vapour, side A, damper - valve
	WM028528	Suction (3-phase)
	WM028546	Remote (3-phase)
	WM030076	Suction (1-phase)
	WM030078	Remote (1-phase)
18	WM018634	Damper
19	WM028524	Tube, vapour meter - damper
20	WM019233	Vapour meter with cable 2,5m
21		see above
22	WM021571	Strainer 200 microns
23	WM021787	Tube, vapour, vapour gate, prop valve to filter, side A, B
24	WM020593	Coupling, straight male GE 1/4" D = 10
25	WM020593	Coupling, straight male GE 1/4" D = 10
26	WM031461	Tube, vapour, hose connection - proportional valve
27		Solenoid valve, on/off, single
	WM021576-0001	Cable L = 3m
	WM021576-0002	Cable L = 5m

13.2.5 Tubes vapour - suction (HH & HHR) (first months production)



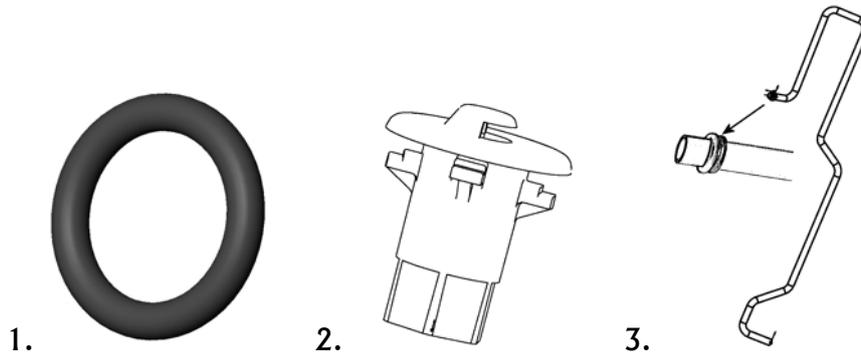
	Part number	Description
1	WM020460	T-coupling T D= 10
2	WM028512	Tube, vapour, vapour gate adapter - T-coupling, L= 142
3	WM020593	Coupling, straight male GE 1/4" D= 10
4		Tube, vapour, side A, T-coupling - pump side B
	WM030383	Suction
	WM030427	Remote
5	WM002037	Coupling, straight male male G 1/4, D= 10
6	WM001267	Solenoid valve, proportional, single, cable 3m
7	WM028456	Coupling, 90° male G 1/4, male G 1/4 adj
8	WM002055	Coupling, 90° male G 3/8, D= 10
9	WB000344-0001	T-coupling, female Rp1" x Rp1/2" x Rp1/2"
10	WB000343-0001	Bushing, male R1/2" x female Rp3/8"
11	WM002041	Coupling, straight male G 3/8, D= 10
12		Tube, vapour, side A, pump - outlet
	WM028534	Suction (3-phase)
	WM028560	Remote (3-phase)
	WM030080	Suction (1-phase)
	WM030082	Remote (1-phase)
13	WM002051	Coupling, 90 ° male G 1/4, D= 10
14		Tube, vapour, side B, pump - outlet
	WM028536	Suction
	WM028566	Remote
15		Tube, vapour, side B, T-coupling - pump side A
	WM030380	Suction (3-phase)
	WM030425	Remote (3-phase)
	WM030429	Suction (1-phase)
	WM030431	Remote (1-phase)
16		Tube, vapour
	WM016719	L= 110 mm (each)
	WM016790	L= 250 mm (every two)
	WM016791	L= 390 mm (every third)

13.2.6 Tubes vapour gate - suction (HH & HHR) (first months 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 (each)
	WM016790	L= 250 mm (every two)
	WM016791	L= 390 mm (every third)
5		Tube
	WM030367	With extra valve
	WM030371	Without extra valve
	WM028507	With extra valve, single A
	WM029777	Without extra valve, single A
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	WM002037	Coupling, straight male male G 1/4, D= 10
10	WM001267	Solenoid valve, proportional, single, cable 3m
11	WM028456	Coupling, 90° male G 1/4, male G 1/4 adj
12	WM002055	Coupling, 90° male G 3/8, D= 10
13	WB000344-0001	T-coupling, female Rp1" x Rp1/2" x Rp1/2"
14	WB000343-0001	Bushing, male R1/2" x female Rp3/8"
15	WM002041	Coupling, straight male G 3/8, D= 10
16		Tube, vapour, side A, pump - outlet
	WM028534	Suction (3-phase)
	WM028560	Remote (3-phase)
	WM030080	Suction (1-phase)
	WM030082	Remote (1-phase)
17	WM002051	Coupling, 90 ° male G 1/4, D= 10
18		Tube, vapour, side B, pump - outlet
	WM028536	Suction
	WM028566	Remote
19		Tube, vapour, side A, damper - valve
	WM028528	Suction (3-phase)
	WM028546	Remote (3-phase)
	WM030076	Suction (1-phase)
	WM030078	Remote (1-phase)
20	WM028524	Tube, vapour meter - damper
21	WM019233	Vapour meter with cable 2,5m
22		Tube, vapour, side A, T-coupling - vapour meter side B
	WM030364	With solenoid valve
	WM030369	Without solenoid valve
23	WM028496	Tube, vapour, side A, T-coupling - solenoid valve
24	WM020593	Coupling, straight male GE 1/4" D= 10
25	WM021787	Tube, vapour, vapour gate, prop valve to filter, side A, B
26	WM021571	Strainer 200 microns
27	WM028499	Tube, vapour, side B, T-coupling - solenoid valve,
28	WM021576	Solenoid valve, on/off, single

13.3 Air venting (suction)



	Part number	Description
1	WM006700	O-ring
2	WM011355	Plug with strainer, for air venting
3	178369	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")

13.3.1 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".

14 Hanging hardware

14.1 Hose

14.1.1 HHR

	Part number	Description
	WM030362-0001	Hose VR, l= 4.06m, black
	WM030362-0002	Hose VR LT, l= 4.06m, black
	WM030213-0001	Hose id= 16mm, l= 4.16m, black
	WM030213-0002	Hose id= 16mm, l= 4.16m, LT, black
	WM030213-0003	Hose id= 16mm, l= 4.16m, biodiesel, black
	WM030214-0001	Hose id= 21mm, l= 4.16m, black
	WM030214-0002	Hose id= 21mm, l= 4.16m, LT, black
	WM030214-0003	Hose id= 21mm, l= 4.16m, biodiesel, black
	WM030215-0001	Hose id= 25mm, l= 4.16m, black
	WM030215-0002	Hose id= 25mm, l= 4.16m, LT, black

VR = Vapour Recovery

LT = Low Temperature

14.1.2 HH

	Part number	Description
	WM031996-0001	Hose VR, l= 4.22m, black
	WM031996-0002	Hose VR, l= 4.22m, LT, black
	WM031997-0001	Hose id= 16mm, l= 4.32m, black
	WM031997-0002	Hose id= 16mm, l= 4.32m, LT, black
	WM031997-0003	Hose id= 16mm, l= 4.32m, biodiesel, black
	WM031999-0001	Hose id= 21mm, l= 4.32m, black
	WM031999-0002	Hose id= 21mm, l= 4.32m, LT, black
	WM031999-0003	Hose id= 21mm, l= 4.32m, biodiesel, black
	WM032000-0001	Hose id= 25mm, l= 4.32m, black
	WM032000-0002	Hose id= 25mm, l= 4.32m, biodiesel, black

VR = Vapour Recovery

LT = Low Temperature

14.2 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 GRV 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	ld=21/od=25, black, with break, LT
WM026221-0005	ld=21/od=25, black, drip stop, with break, LT
WM026221-0002	ld=21/od=25, black, with break, std
WM026221-0006	ld=21/od=25, black, drip stop, with break, std
WM026221-0002	ld=21/od=25, black, with break, std
WM026221-0004	ld=21/od=25, black, with break, IT
WM026221-0008	ld=16/od=21, with break, std
WM026221-0007	ld=16/od=21, with break, LT
WM026221-0001	VR, id=16/od=21, with break-away
WM026221-0009	ld=21/od=25, black, with break, DSA
WM026221-0010	ld=21/od=25, black, with break, LT, DSA
WM026221-0011	ld=21/od=25, black, drip stop, with break, LT, DSA
WM026221-0012	ld=21/od=25, black, drip stop, with break, DSA
WM026221-0013	ld=16/od=21, with break, LT, DSA
WM026221-0014	ld=16/od=21, with break, DSA
WM026221-0015	VR, id=16/od=21, with break-away, DSA
WM026221-0016	ld=21/od=25, black, drip stop, with break-away, UK DSA
WM026221-0017	ld=21/od=25, black, drip stop, with break-away, LT, UK
WM026221-0018	ld=21/od=25, black, drip stop, with break-away, std, UK
WM026221-0019	ld=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

14.3 Cover- Elaflex Slimline 2

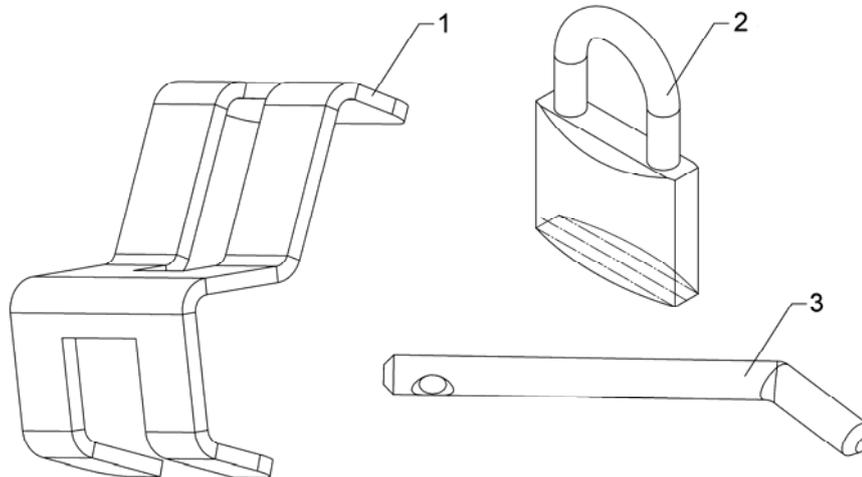
Part number	Description
WM026428-0001	Orange
WM026428-0002	Black
WM026428-0003	White
WM026428-0004	Yellow
WM026428-0005	Blue
WM026428-0006	Red
WM026428-0007	Green
WM026428-0008	Light green
WM026428-0009	Light yellow
WM026428-0010	BP dark blue
WM026428-0011	BP light blue

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

14.4 Splash guard - Elaflex Slimline 2

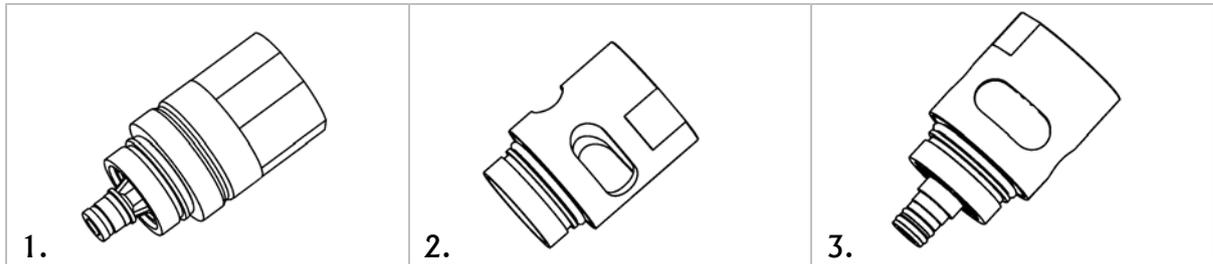
Part number	Description
WM026471-0002	Id= 24, od= 82, green
WM026471-0005	Id= 24, od= 82, black
WM026471-0006	Id= 24, od= 82, green, text UK
WM026471-0003	Id= 24, od= 82, blue
WM026471-0004	Id= 24, od= 82, red
WM026471-0001	Id= 24, od= 82, yellow
	BP
WM026471-0007	Id= 24, od= 82, BP light blue, text 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

14.5 Padlock (HH & HHR)



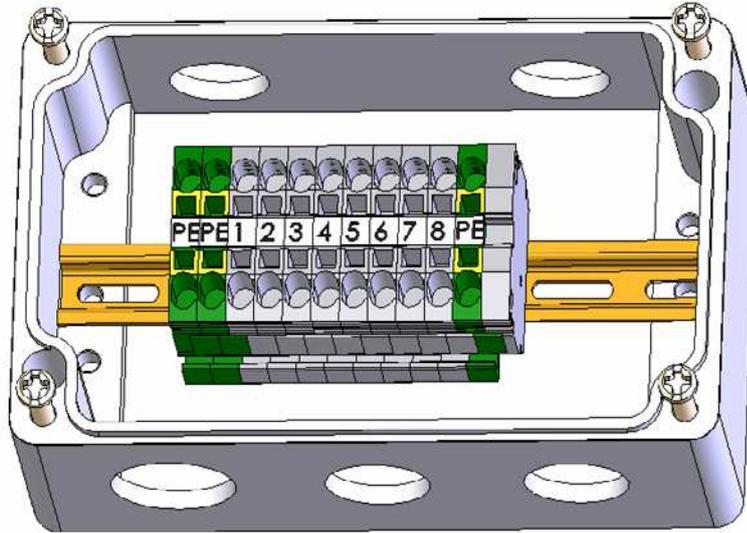
Part number	Description
1 WM004686	Lock LPG nozzle
2 WM003189	Padlock
3	Pin
WM002518-0001	1 nozzle
WM002518-0002	2 nozzles
WM002518-0003	3 nozzles
WM002518-0004	4 nozzles
WM002518-0005	5 nozzles
WM002518-0006	6 nozzles

14.6 Sight glass and break away



	Part number	Description
1	WM002068	Break away
		Sight glass
2	WM002348	Without vapour (VR)
3	WM002030	With vapour (VR)

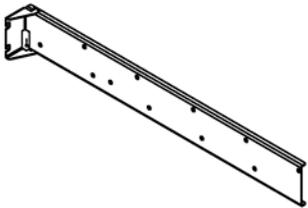
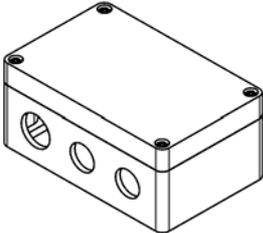
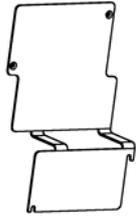
15 Junction box



Cables and wiring diagram, see page **Error! Bookmark not defined.**

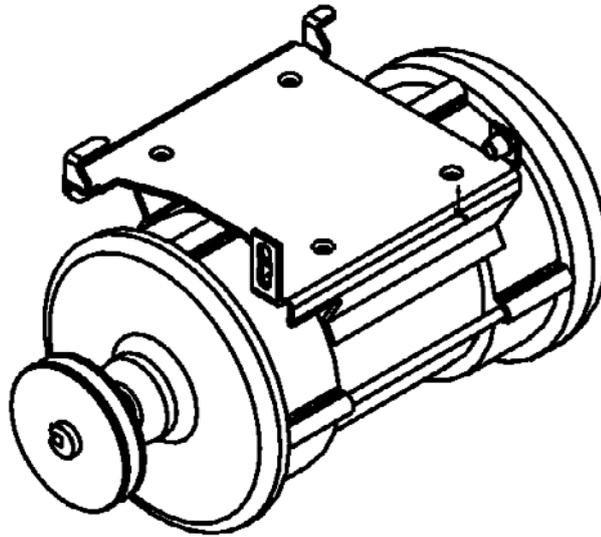
Connection Instruction and Installation instructions, see the ftp-server.

Please contact your dealer for login information.

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 																																																																								
<p>4.</p> 	<p>5.</p> <table border="1" data-bbox="614 1355 938 1572"> <tr> <td></td> <td></td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td></td> </tr> <tr> <td>HIGH VOLTAGE</td> <td>PE</td> <td>L1</td> <td>L2</td> <td>L3</td> <td></td> <td>P</td> <td>N</td> <td>PI</td> <td>NI</td> <td>PE</td> <td></td> </tr> <tr> <td>LPG</td> <td>PE</td> <td>P</td> <td>N</td> <td>PI</td> <td>NI</td> <td>1</td> <td></td> <td>7</td> <td>8</td> <td>PE</td> <td></td> </tr> <tr> <td>DISPENSER WITHOUT VR</td> <td>PE</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>P</td> <td>N</td> <td>PI</td> <td>NI</td> <td>PE</td> <td></td> </tr> <tr> <td>HIGH VOLTAGE UK</td> <td>PE</td> <td>L</td> <td>N</td> <td></td> <td></td> <td>P</td> <td>N</td> <td>PI</td> <td>NI</td> <td>PE</td> <td></td> </tr> <tr> <td>LOW VOLTAGE</td> <td>PE</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> <td>32</td> <td>33</td> <td>34</td> <td>35</td> <td>PE</td> <td></td> </tr> </table>				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	PE		HIGH VOLTAGE UK	PE	L	N			P	N	PI	NI	PE		LOW VOLTAGE	PE	28	29	30	31	32	33	34	35	PE		<p>6.</p> 
			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	PE																																																																
HIGH VOLTAGE UK	PE	L	N			P	N	PI	NI	PE																																																																
LOW VOLTAGE	PE	28	29	30	31	32	33	34	35	PE																																																																

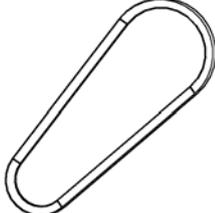
Part number	Description
1	WM028375 Support, L-shape, junctions box, L= 709mm
2	WM026839 Junction box, all round
3	Grommet
WM001540-0001	M20, Ø 8-12 mm
WM001540-0002	M20, Ø 10-14 mm
WM003257	M25, Ø 13-18 mm
4	Grommet blind
WM001591	M20
WM003241	M25
5	WM026770 Sticker connection label
WM033178	Support, Z-shape, (junction boxes option)

16 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

16.1 Driving belt

 <p>WARNING! The driving belt may be replaced only by original belt from Dresser Wayne, otherwise there is a risk of explosion.</p>	 <p>1.</p>	
---	---	--

Part number	Description
1	Belt, Z-profile
WM004363	SPZ 792
WM003055	SPZ 800

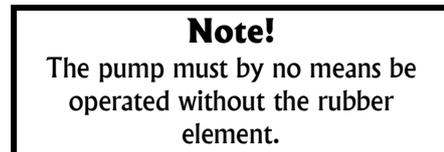
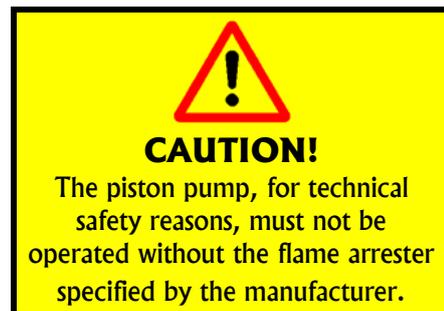
17 Vapour recovery

17.1 Vapour recovery module - Dürr

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

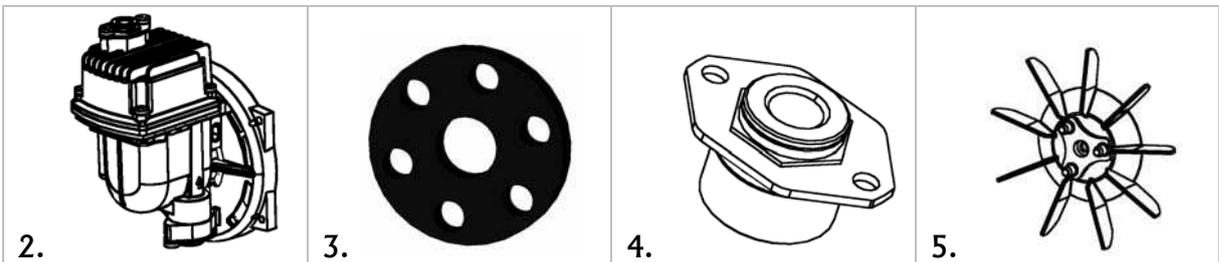
Tubes for Global Star V HHR; see page 71

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.





1.



	Part number	Description
	See page 28	Shelf for VR module
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

17.2 VR Monitoring

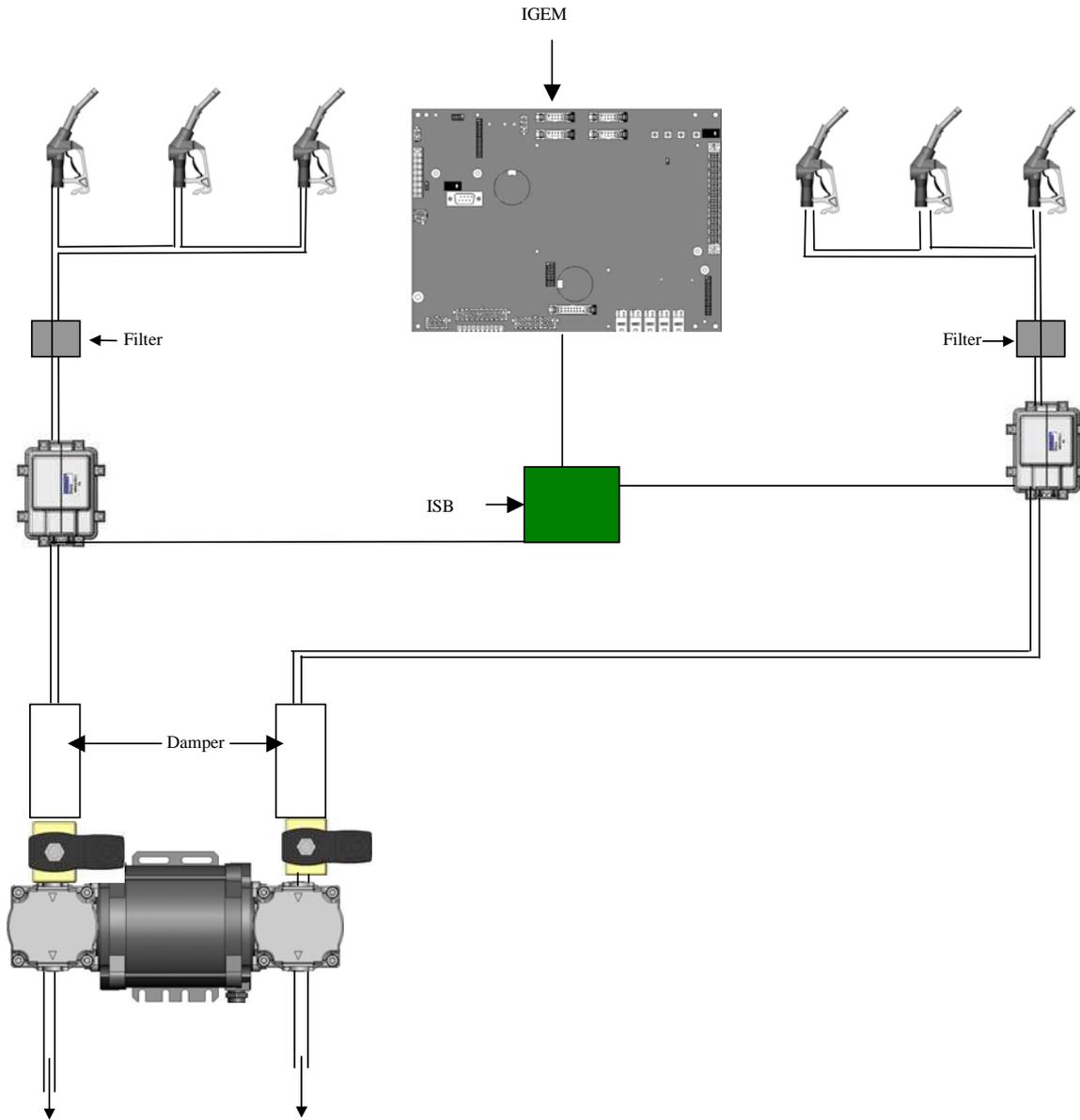
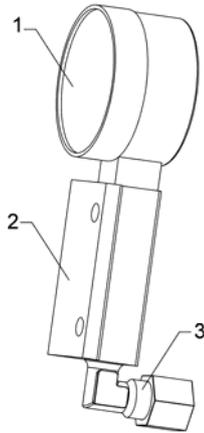


Figure 1 VRM system overview (without self check)

Spare parts, see page 74.

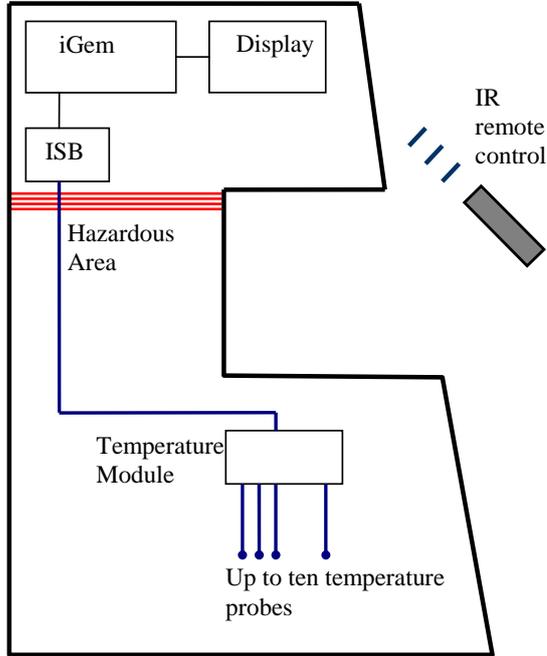
17.3 Pressure gauge



	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

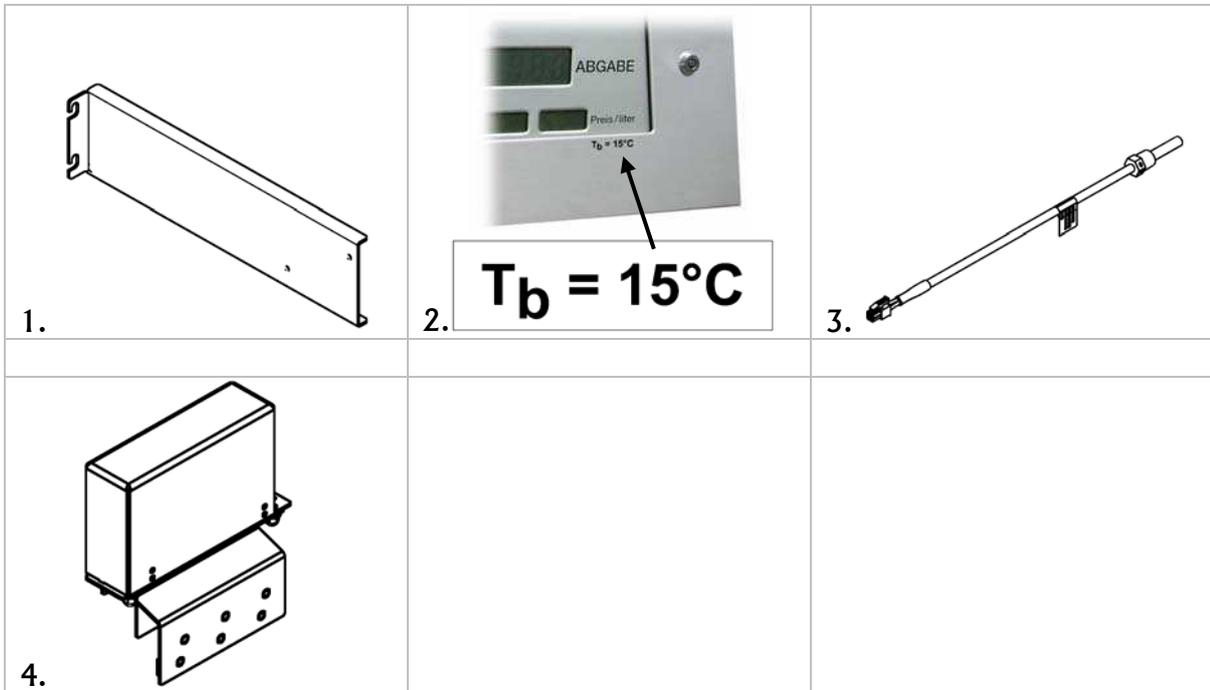
18 ATC

Automatic Temperature Compensation



WARNING: Contains intrinsically safe equipment

Figure 2 The ATC system

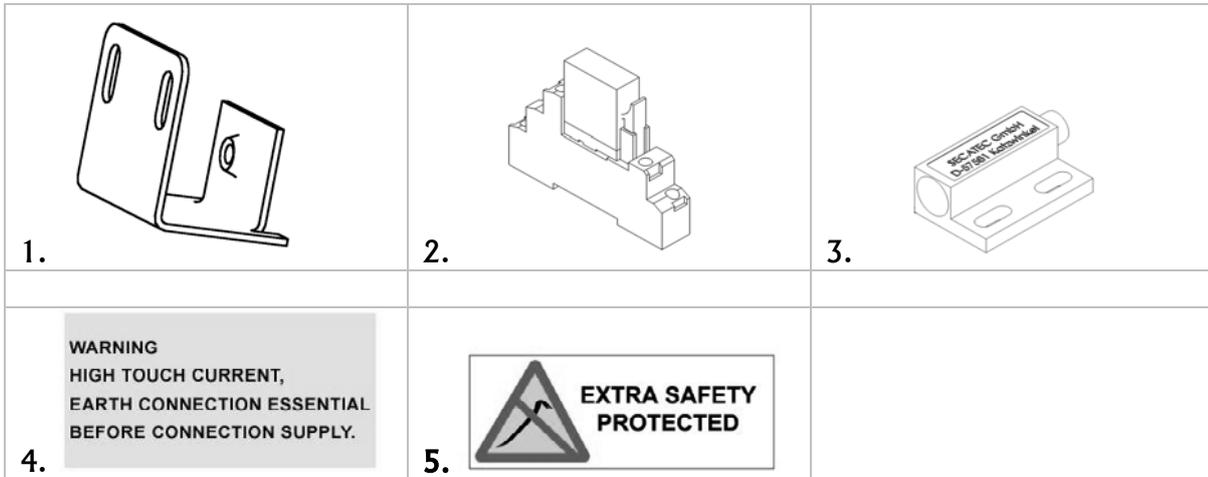


	Part number	Description
1	WM028379	Support, l-shape, sensor, temperature module
2	WM013631	Grade sticker, Tb = 15 °C, transparent
3		Temperature probes
	WM019643-0001	L = 1050 mm
	WM019643-0002	L = 3000 mm
4	WM020675-0011	Temperature Module (without probes)

Cables see page **Error! Bookmark not defined..**

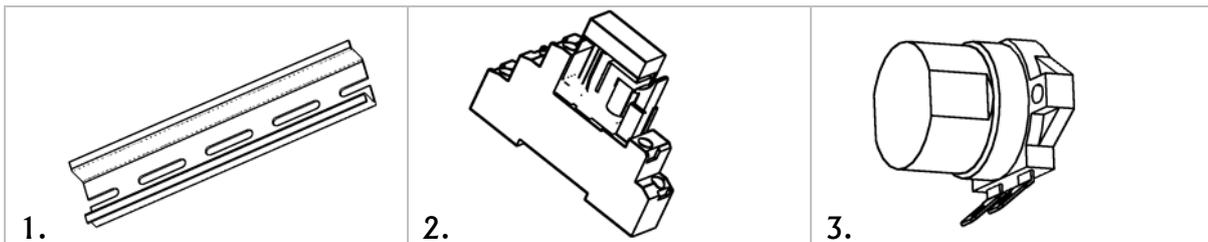
ISB see page 10.

19 Anti burglary device



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

20 Tilt switch



	Part number	Description
1	WM006842	Rail TS35, L=80
2	WM002399	Relay RT114024 with socket and led
3	WM032909	Vibration detection switch

21 Documents

21.1 Users Manual HH & 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
YU (sr)	WM027800

You will find the manuals on our FTP server.
Please contact your dealer for login information.

22 Cables

See also wiring diagram WM026113 (You will find the diagram on the ftp server).

Please contact your dealer for login information.

	Part number	Description
1	WM025766-0001	Cable 10x0.34 L=250
2	WM025759-0001	Cable 8x0.34 L=250
3	WM031127-0001	Cable high voltage 4G2.5 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
34	WM003760-0004	Cable flat 10-position 1.27-pitch L=1400
35	WM031341-0001	Cable high voltage 5G2.5 zone L=1800
36	WM004126-0001	Cable single wire 1x10 gn/ye L=10000
37	WM032894-0001	Cable multi 1x0.5 rd L=300, 1x0.5 bk L=700
38	WM032896-0001	Cable single wire 1x0.5 rd L=800
39	WM006828-0001	Cable high voltage 3G1.5 zone L=2500
40	WM005466-0001	Cable 12x0.34 L=800
41	WM032916-0001	Cable 2x0.5 L=1000

23 Contents - all levels

Consider the environment. Please don't print this document unless you really need to.

Connection Instruction and Installation instructions, see the ftp-server.
Please contact your dealer for login information.

1	Service and maintenance.....	3
1.1	Separation of power supply	3
1.2	Electrostatic discharge (ESD)	3
2	Product History.....	4
2.1	GS phase I	4
2.2	GS phase II	4
2.3	GS phase III	4
2.4	GS phase IV	4
2.5	GS phase V	4
3	Models	5
3.1	What does the denomination of the pump indicate	5
3.2	Side A / Side B	6
4	Contents	7
5	Electronic head	8
5.1	Cover - electronic head.....	14
5.2	Crimp tools and connectors.....	16
5.3	Remote control.....	17
6	Terminal head.....	18
7	Hose handling.....	21
7.1	Push button and nozzle switch.....	21
7.2	HHR	22
7.3	HH	26
8	Hydraulic cabinet	28
8.1	HH & HHR.....	28
9	Pallet / drip pan / foundation frame	30
9.1	Pallet.....	30
9.2	Extended base frame	30
9.3	Foundation frame	31
9.4	Drip pan (suction pump)	31
10	Exterior.....	32
10.1	HH & HHR	32
11	Hydraulic	35
11.1	iMeter (Petrol, diesel).....	35
11.1.1	Pump internal gear	38
11.1.2	Connection (Pump cover without meter)	42
11.1.3	iMeter.....	44
11.1.4	iMeter - Dispenser	46
11.2	Pulser for iMeter	48
11.3	Sealing	48

11.4	Xflo™ (low dome cover).....	50
11.5	Valves.....	52
11.5.1	Petrol, diesel	52
12	Inlet.....	54
12.1	Lower flange (version 2)	54
12.2	Check valve	54
12.3	Global inlet.....	55
12.4	Filter pot.....	56
13	Tubes.....	58
13.1	Misc.	58
13.2	HH & HHR	61
13.2.1	Liquid (HH & HHR).....	61
13.2.2	Liquid (HH & HHR) (first months production)	70
13.2.3	Tubes vapour - suction (HH & HHR)	72
13.2.4	Tubes vapour gate - suction (HH & HHR)	74
13.2.5	Tubes vapour - suction (HH & HHR) (first months production).....	76
13.2.6	Tubes vapour gate - suction (HH & HHR) (first months production)	78
13.3	Air venting (suction)	80
13.3.1	Kit, air venting tube connection for above ground tank.....	80
14	Hanging hardware	81
14.1	Hose.....	81
14.1.1	HHR.....	81
14.1.2	HH.....	81
14.2	Nozzle - Elaflex Slimline 2	82
14.3	Cover- Elaflex Slimline 2	83
14.4	Splash guard - Elaflex Slimline 2	84
14.5	Padlock (HH & HHR)	84
14.6	Sight glass and break away	85
15	Junction box	86
16	Motor	87
16.1	Driving belt.....	87
17	Vapour recovery.....	88
17.1	Vapour recovery module - Dürr	88
17.2	VR Monitoring.....	90
17.3	Pressure gauge.....	91
18	ATC.....	92
19	Anti burglary device	94
20	Tilt switch.....	94
21	Documents.....	95
21.1	Users Manual HH & HHR.....	95
22	Cables	96
23	Contents - all levels.....	97
24	Contents - alphabetical order.....	99
25	Market & Service.....	101
26	Notes.....	101

24 Contents - alphabetical order

	page		page
Air venting tube	80	Heating element.....	9
Anti burglary device.....	94	HHR	1
ATC.....	92	History	4
Automatic Temperature		Hose	81
Compensation (ATC)	92	Hydraulic cabinet	26
Base frame.....	26	Hydraulic.....	34
Battery LRO3 (AAA).....	17	iGEM CPU board.....	9
Beak away	85	Inlet	54
Belt, driving belt.....	87	Installation wiring diagram ...	FTP-server
Blind column HHR.....	25	ISB (Intrinsically safe barrier)	9, 10
Board		Junction box.....	86
Cepsa voice synthesizer ..	10	Models	1
Board, display	14	Motor	87
Board, power 400/230V	9	Nozzle boot.....	22
Board, relay SAT/cash button	10	Nozzle cover	83
Board, satellite receiver.....	10	Nozzle switch.....	21
Burglary - se		Nozzle	82
"Anti burglary device" ...	94	Padlock.....	84
Button, push button	21	Pallet.....	30
Cables.....	96	Power board.....	9
Cepsa voice synthesizer,		Power supply 24V, 150W ...	9
board	11	Pressure gauge	91
Connection Instruction	FTP-server	Product history	4
Connector	16	Pulser for iMeter	48
Contents	1, 97	Push button.....	21
CPU board	9	Remote control.....	17
Crimp tool.....	16	Satellite receiver.....	9
Damper.....	74	Sealing.....	48
Display board.....	14	Separation of power supply...	3
Documents (User's Manual) ..	95	Side A / Side B.....	6
Drip pan.....	31	Solenoid valve	52
Driving belt.....	87	Strainer for Xflo™	50
Electromechanical totalizer ...	10	Tilt switch	94
Electronic head.....	8	Tools.....	16
Electrostatic discharge (ESD) .	3	Totalizer	10
Extended base frame	30	Tubes	58
Exterior.....	30	Umnl	16
Extraction tool	16	User's Manual.....	95
Filter pot	56	Valve	52
Foundation frame	31	Vapour meter.....	74
Front panel.....	32	Vapour recovery module	88
Glass.....	14	Xflo™	50
Global inlet.....	55		
Grommet	13		





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 drivmedelshandling 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 mått noggrannhet, 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 институциями 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.