





## Product Liability

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

Use only genuine parts.



## Produkthaftung

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



## Produktansvar

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



## Ответственность поставщика

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

## Caution

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

## Vorsicht

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

## Varning

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

## Осторожно

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

## Warning

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

## Warnung

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

## Varning

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

## Предупреждение

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

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# 1 Service and maintenance

Also read the "User's Manual". (list on page 89)

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Use only genuine parts.  
Wayne Parts Center (EPS), telephone number, see page 97.

**WARNING: Contains  
intrinsically safe equipment**

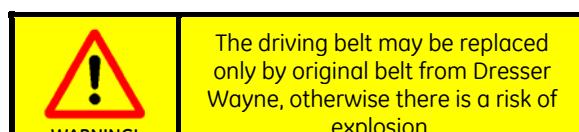
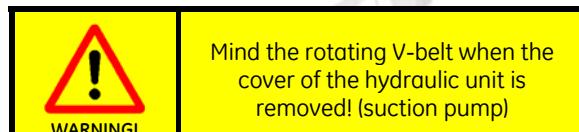
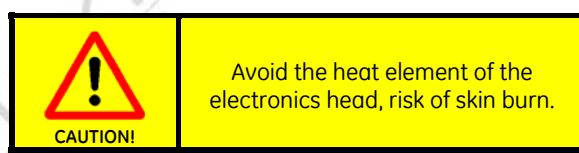
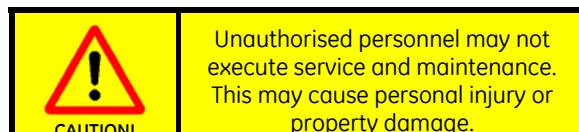
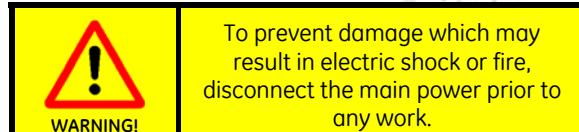
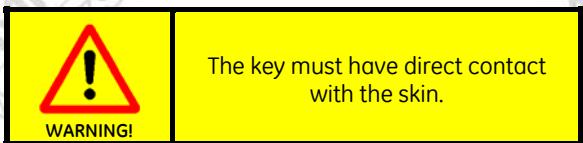
**Consider the environment. Please don't print  
this document unless you really need to.**

## 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.



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

## **2 Product History**

### **2.1 GS phase I**

The first HH model released in 2002.

Spare parts: 461293

Spare parts VR module: 461302

Spare parts hydraulic module (GHM): 461259



### **2.2 GS phase II**

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

Spare parts: 461362



### **2.3 GS phase III**

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

Spare parts LHR/HH: WM011948

Spare parts H: WM011950

Spare parts, electronic head: WM011946

Spare parts, LPG: WM011949

Spare parts, SCR (AdBlue®): WM011947

Spare parts, hydraulic unit: WM011952

Spare parts, VR module: WM011951



### **2.4 GS phase IV**

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

Unique spare parts, H, LHR, HH: WM023808

(See also phase III spare part lists)

Unique Flexi spare parts: WM022339



### **2.5 GS phase V**

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

Spare parts: WM029611 (this document)

Retrofit PT box on Global Star V: WM033692

## 3 Models



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



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



Global Star V LPG



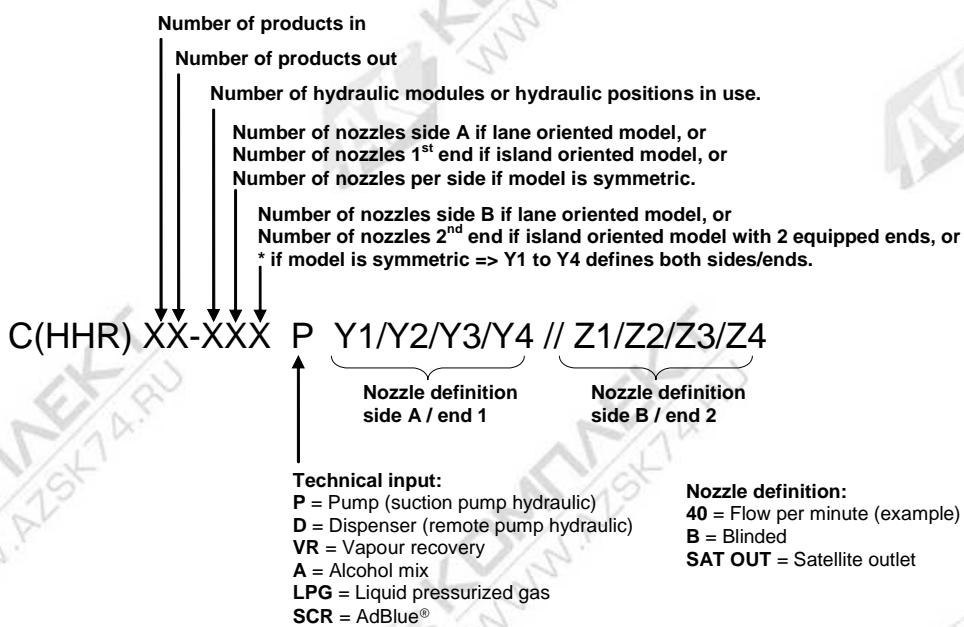
Global Star V B2B LPG



Global Star V AdBlue® (SCR)

(AdBlue® is a registered trademark of  
Verband der Automobilindustrie e.V.)

### 3.1 What does the denomination of the pump indicate



## 3.2 Side A / Side B



Global Star V is a C-style pump.

## 3.3 AdBlue®, DEF, SCR, urea

AdBlue®, generically known as DEF (Diesel Emission Fluid), is the registered trademark for AUS32 (32.5% urea and 67.5% demineralised water by weight).

AdBlue® is used in a process called Selective Catalytic Reduction (SCR) to reduce emissions of oxides of nitrogen from the exhaust of diesel engined motor vehicles.

The AdBlue® trademark is currently held by the German Association of the Automobile Industry (VDA), who ensure quality standards are maintained in accordance with ISO 22241 specifications.

AdBlue® is a very aggressive chemical fluid, however not flammable. Therefore it is extremely sensitive to contamination from other fluids, metals etc. The only approved testing liquid during production is distilled water that does not contaminate the urea product. There are always distilled water remaining in valves and other fragile parts and as distilled water have a freezing point of around 0° Celsius it means that **equipment for AdBlue® has to be kept above freezing point during all phases of the transportation between the factory and to the time of installation**, when it is put into operation and primed with AdBlue.

## 4 Contents

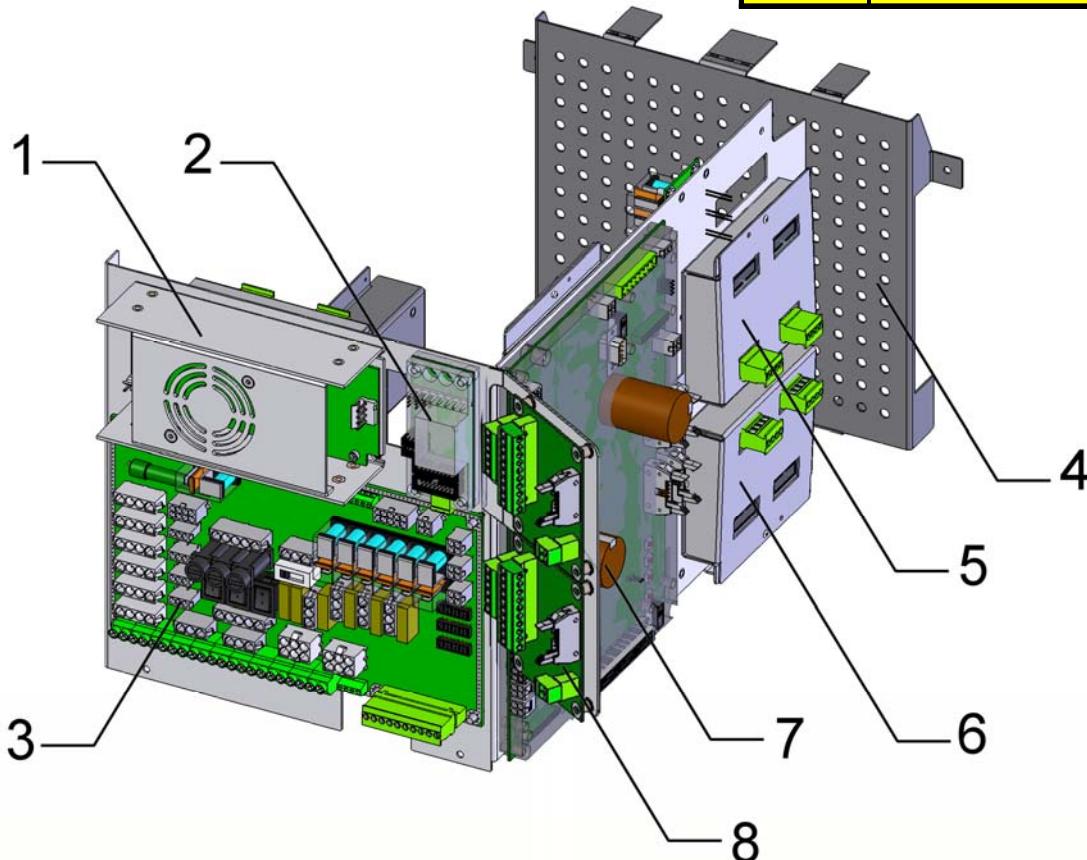
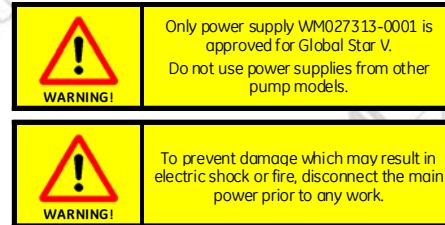
Contents - all levels, see page 91

Contents - alphabetical order, see page 95

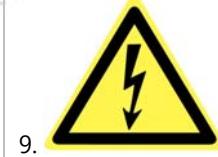
Please find connection Instructions and Installation Instructions on the ftp-server. Contact your dealer for login information.

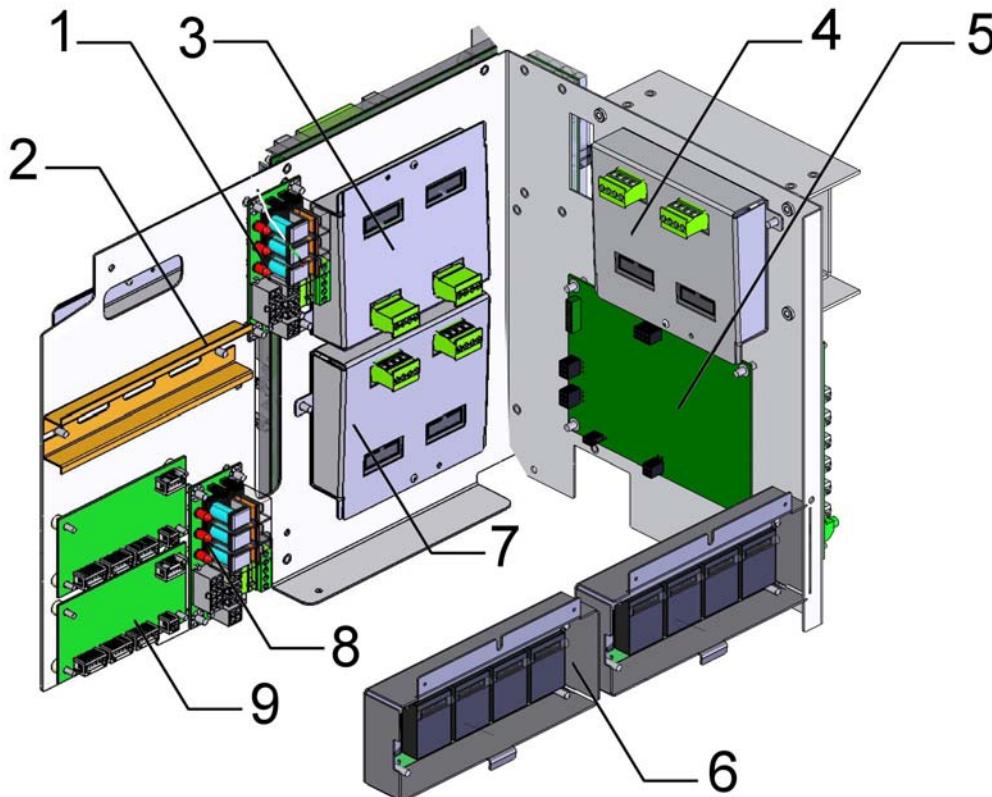
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## 5 Electronic head

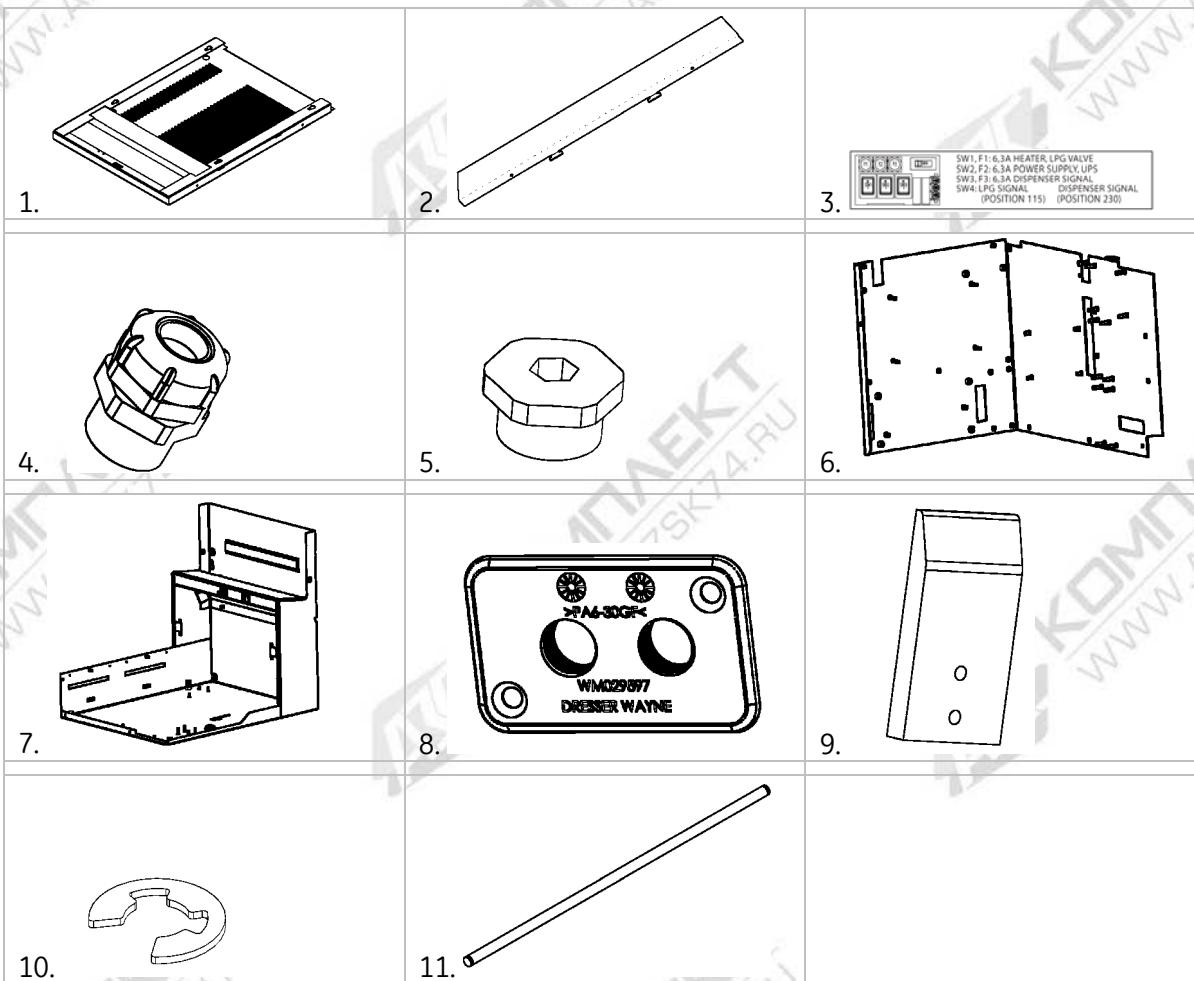


Cables, see page 91.

	Part number	Description	
1	WM027313-0001	Power supply 24V, 150W, UL/IEC <b>Note!</b> 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	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 Burkert	
	WM001825	Board, RS422	
	WM008766	Board, IFSF	
	WM004360	Board, isolated interface	
8	WM023331-0001	Board satellite receiver (satellite with display)	
	WM033329	Support, V-shape	
9	WM003332	Sticker high voltage	

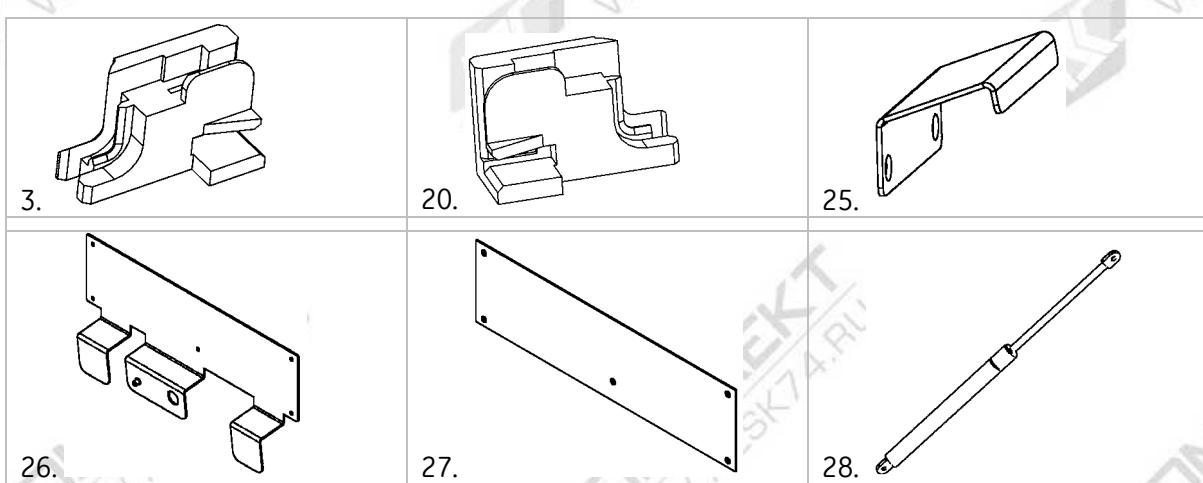
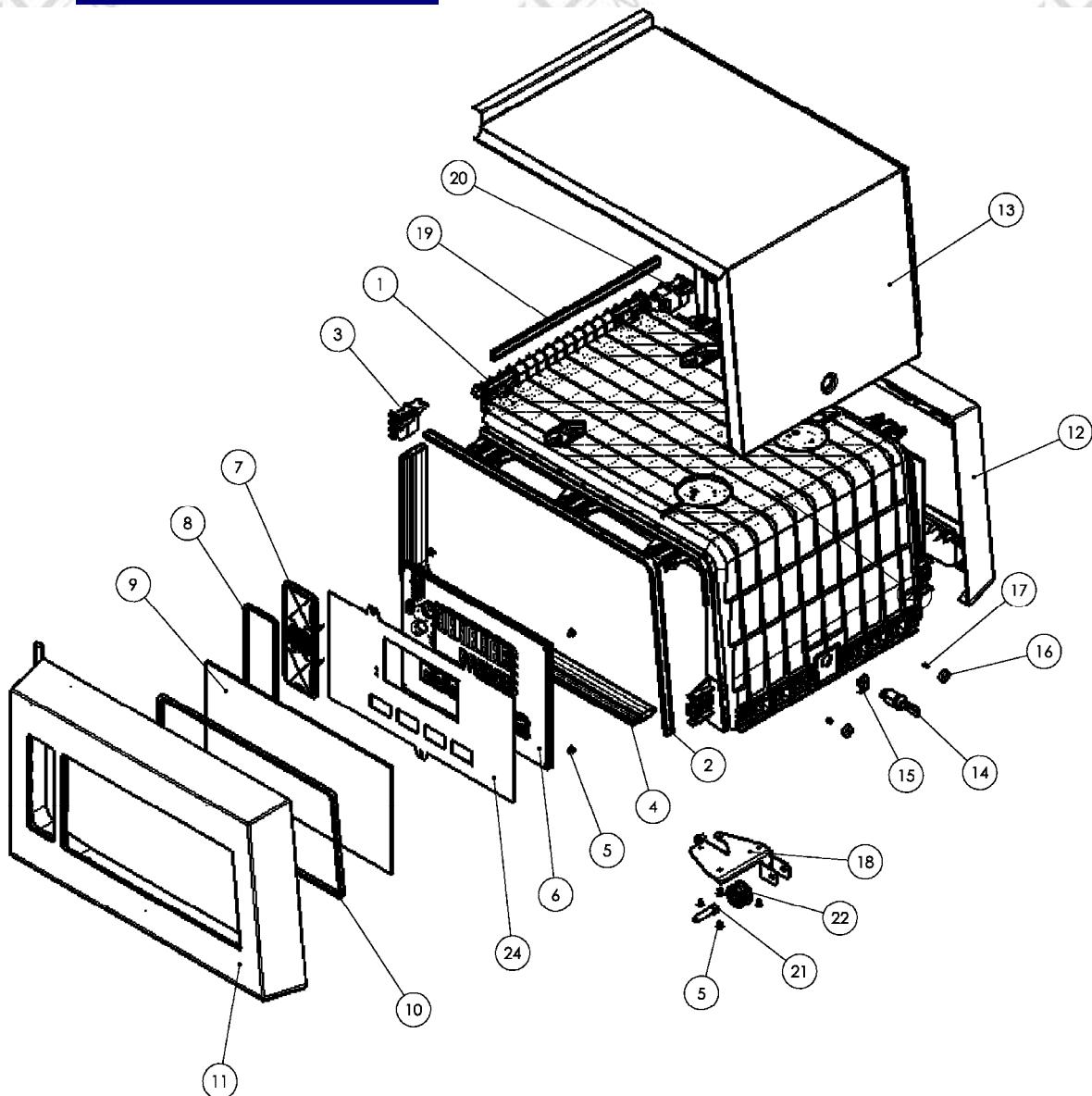


	Part number	Description
1	WM027195-0001 WM027195-0002	Board relay SAT Board for cash button/tank level
2	W006842	Rail, L=150
3	WM018523	Intrinsically safe barrier (ISB) and interface for vapour meter
4	WM002450	Intrinsic safe barrier (ISB) (Hydraulic no: 5)
5	WM026154	Board Cepsa voice synthesizer
6	WM002451-0001 WM002451-0002 WM002451-0003 WM002451-0004	Electromechanical totalizer x1 x2 x3 x4
7	WM019881	Intrinsically safe barrier (ISB), (ATC)
8	WM027195-0001 WM027195-0002	Board relay SAT Board for cash button/tank level
9	WM031733	Board IVGPL Tokheim (one for each side)



	Part number	Description
1	WM030143	Cable cover
	WM030142	Gasket L=368
2	WM028227	Support, Z-shape, for cable cover WM030143
3	WM028359	Sticker, switch and fuse T6,3A board power
4		<b>Grommet</b>
	WM029992	M20, Ø 7-12 mm
	WM029998	M20, Ø 10-14 mm
	WM029993	M25, Ø 13-18 mm
5		<b>Grommet, blind</b>
	WM001591	M20
	WM003241	M25
6	WM028304	Support, L-shape for components
7	WM028306	Support, L-shape
8		<b>Support, flat (for grommet)</b>
	WM029597	2 x M20
	WM029600	M20 + M25
	WM030531	Blind
9	WM031581	Support for wheel
10	WM031594	Retaining ring e-type, shaft=9-12 dia, id=4, t=1
11	WM033227	Pin

## 5.1 Cover - electronic head

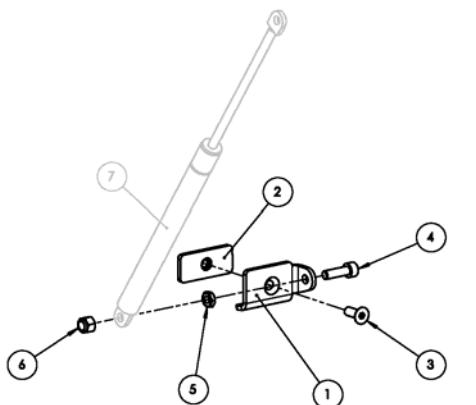


	<b>Part number</b>	<b>Description</b>
1	WM028160-0001	Support, L-shape midsection electronic head Std
	WM032818	Wincor/Nixdorf
2	WM028329	Gasket D-shape, l=760mm, h=15.1mm
3	WM028163	Gasket t-shaped for electronic head A-side
4	WM030653	Gasket d-list, l=688
5	WM014931-0001	Self tapping screw, poz, pan head 4 x 8, for plastic
6		<b>Display board double row</b>
	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
7	WM032102-0001	Support, flat for keyboard and speaker
8	WM029424	Gasket for keyboard adapter
	WM032140	Key pad 3x5 buttons std (
	WM032029	Key pad 3x5 buttons CEPSA
9	WM038365	Glass 383x193
10		<b>Gasket for glass front</b>
	WM029414	96°
	WM029415	90°
11		<b>Front panel, side A</b>
	WM028152-0001	96°
		96°, blind
	WM031301-0001	90°
		90°, blind
12		<b>Front panel, side B</b>
	WM028154-0001	96°
		96°, blind
	WM031302-0001	90°
		90°, blind
13		<b>Cover plate, top panel</b>
	WM028340-0001	96°
	WM030105-0001	90°
	WM028340-0002	96°, for indicator lamp
	WM030105-0002	90°, for indicator lamp
	WM031576	90°, Wincor/Nixdorf
14	WM001994-0001	Lock individually keyed
15	WM030100	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	WM028165	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		<b>Support, flat, dial face</b>
	WM038330-0001	1 UPD
	WM038330-0002	2 UPD
	WM038330-0003	3 UPD
	WM038330-0004	4 UPD
	WM038330-0005	5 UPD
	WM038330-0006	Blind
25	WM029267	Lock for hinge
26	WM032788	Support, flat, front, electronic head (Wincor/Nixdorf)
27	WM032794	Support, flat, back, electronic head (Wincor/Nixdorf)
28	WM029727	Spring, hydraulic

## 5.2 Repair kit - hinge electronic head

	Part number	Description
	W8-183586	Repair kit
1	WM043911	Support, L-shape
2	WM043909	Support, flat
3	WB000647-0001	Screw, CSK socket CAP, M6 x 16
4	WB000211-0003	Screw, hexagon socket CAP, M6 x 20
5	WM022839-0001	Nut, M6, thin
6	WB000229-0003	Lock nut, M6
7	WM029727	Spring, compression

See also document WM043967.



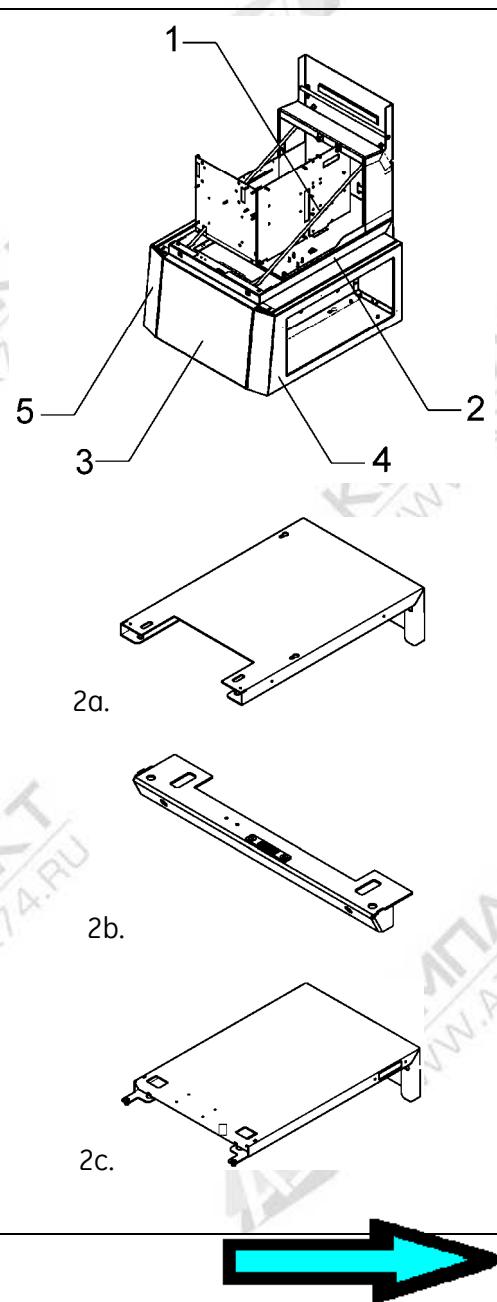
## 5.3 Keyboard label (3x5)

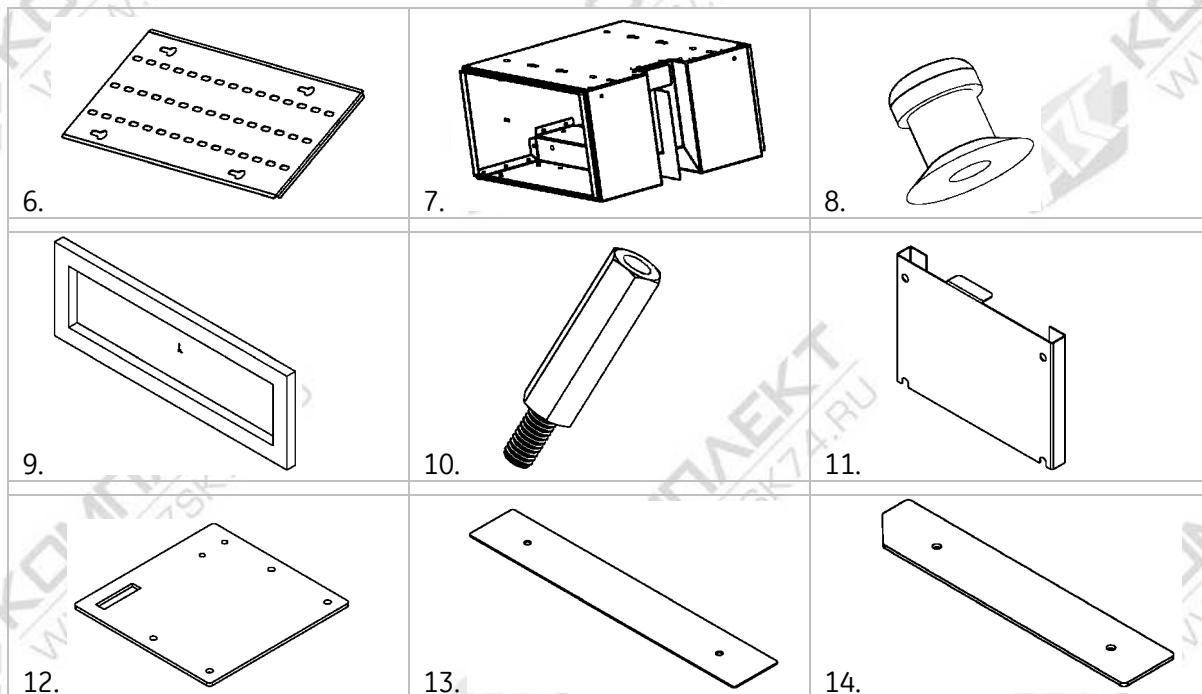
Vers.1	Vers.2	Description
---	WM032950	1, 5, 10, X with CEPSA V/S (EUR)
---	WM038336	1, 5, 10, X, high/low CEPSA V/S (EUR)
WM030867	WM038380	PIENO, 5, 10, 20, CANC. (EUR)
WM030868	WM038381	PIENO, 5, 10, 20, CANC. and SAT (EUR)
WM030874	WM038382	Blind
WM031133	WM038385	PIENO, 5, 10, 20, CANC. high/low (EUR)
WM031433	WM038386	SAT
WM031050	WM038387	STOP
WM031050 (2)	WM038388	STOP with speaker
WM031047	WM038389	STOP and high/low
WM031047 (2)	WM038390	STOP, speaker and high/low
WM031753	WM038391	1 zl, 5 zl, 10 zl, 25 zl, C
WM031851	WM038392	1, 5, 10, 25, C and high/low
WM031872	WM038393	1, 5, 10, X (EUR)
WM032056	WM038394	1, 5, 10, 25, C
WM032120	WM038395	1, 5, 10, X and high/low (EUR)
WM032145	WM038396	1, 5, 10, 25, C (EUR)
WM032220	WM038397	1, 5, 10, X and SAT (EUR)
WM032249	WM038398	High/low
WM032389	WM038399	Full, 500, 1000, 2000, cancel (LEK)
WM032459	WM038400	1, 5, 10, 20, CANC. (EUR)
WM032723	WM038401	50, 100, 500, 1000, X
WM032736	WM038402	50, 100, 500, 1000, X and high/low
WM032814	WM038403	1 LEU, 5 LEI, 10 LEI, 50 LEI, CANC.
WM032883	WM038404	STOP and SAT
WM032913	WM038405	5, 10, 20, CLEAR, STOP
WM033034	WM038406	Blind, RAL 5002, JET CONOCO
WM037462	WM038407	STOP and high/low
WM038008	WM038408	50, 100, 200, CLEAR, STOP
WM038109	WM038409	CANC., 1, 5, FULL (EUR)
WM038268	WM038410	1, 5, 10, 30, ANN. (EUR)
WM038361	WM038411	\$1, \$5, \$10, FILL, CLEAR
WM032715	WM038412	STOP and KASSA, SE
WM037353	WM038413	STOP and KASSA, OKQ8, SE
WM031872 (2)	WM038414	1, 5, 10, X with speaker (EUR)
WM032120 (2)	WM038415	1, 5, 10, X high/low, with speaker
WM032220 (2)	WM038416	1, 5, 10, X and SAT with speaker (EUR)

## 6 Terminal head

Rebuilding PT box on Global Star V, see document WM033692.

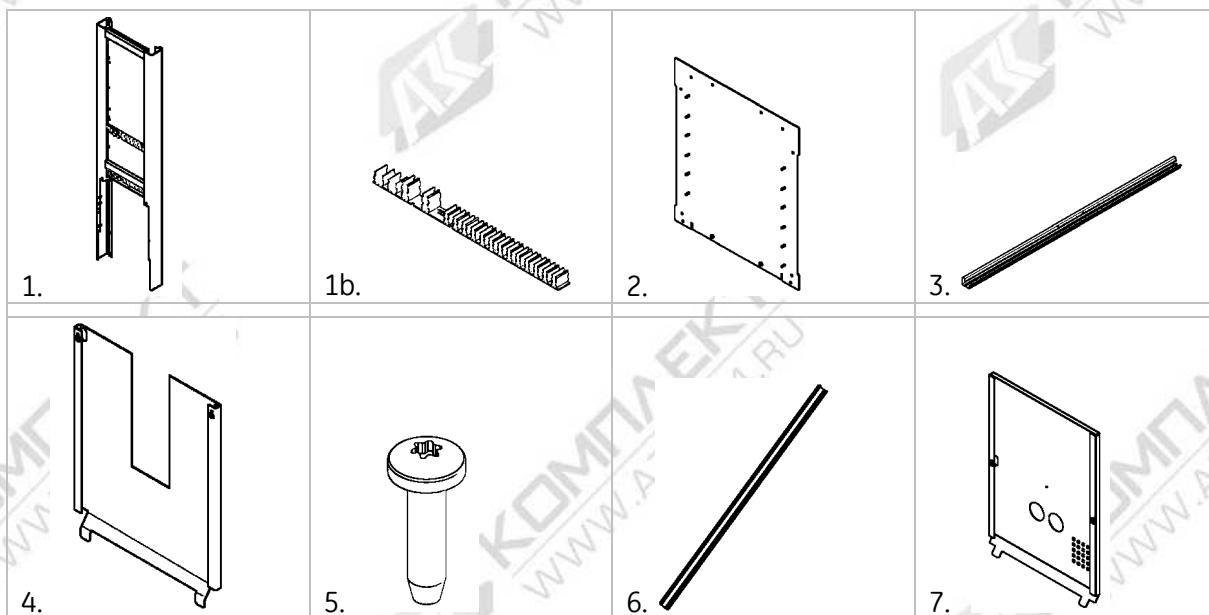
	<b>Part number</b>	<b>Description</b>
1	WM028365	Pin for PT support
		<b>Support, L-shape PT support</b>
2a	WM028237	Std (see also WM036690 below)
2b	WM036690	Front for support WM028237
2c	WM032806	For Wincor/Nixdorf (1 pc)
3		<b>Cover plate</b>
	WM030155	90°, H=275
	WM026144	90°, H=375
	WM026142	96°, H=275
	WM030164	96°, H=375
	WM032796	90°, Wincor/Nixdorf
4		<b>Front panel, side B</b>
	WM030411-0001	90°, H=275, iX-Pay
	WM030417-0001	90°, H=275, blind, iX-Pay
	WM030415-0001	90°, H=375, iX-Pay
	WM030419-0001	90°, H=375, blind, iX-Pay
	WM031262-0001	90°, H=375, PT4000
	WM030409-0001	96°, H=275, iX-Pay
	WM030421-0001	96°, H=275, blind, iX-Pay
	WM030413-0001	96°, H=375, iX-Pay
	WM030423-0001	96°, H=375, blind, iX-Pay
	WM032746-0001	96°, H=375, PT4000
	WM030873-0002	Lafon
	WM030317-0001	Tokheim
	WM030319-0001	Tokheim, blind
5		<b>Front panel, side A</b>
	WM030410-0001	90°, H=275, iX-Pay
	WM030416-0001	90°, H=275, blind, iX-Pay
	WM030414-0001	90°, H=375 iX-Pay
	WM030418-0001	90°, H=375, blind, iX-Pay
	WM031261-0001	90°, H=375, PT4000
	WM030408-0001	96°, H=275, iX-Pay
	WM030420-0001	96°, H=275, blind, iX-Pay
	WM030412-0001	96°, H=375, iX-Pay
	WM030422-0001	96°, H=375, blind, iX-Pay
	WM032729-0001	96°, H=375, PT4000
	WM030872-0002	Lafon
	WM030316-0001	Tokheim
	WM030318-0001	Tokheim, blind





	Part number	Description
6	WM017918	Cover plate with holes, 468 x 190
7	WM017916	<b>Support, box</b> 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	WM034875	Gasket L=83 H=29 hollow, sealing for socket (Wincor/Nixdorf)
10	WM036898-0001	Spacer, blind, M6x35, male/female hexagonal
11	WM033430	Support, box shape, for cables (Wincor/Nixdorf)
12	WM033389	Support, flat, extension, (Wincor/Nixdorf)
13	WM033432	Support, flat, for cables under PT (Wincor/Nixdorf)
14	WM033434	Side panel, barrier, plate, (Wincor/Nixdorf)

## 7 Hose handling



	Part number	Description
1	WM026564	Blind column
	WM028466	Gasket, L=366, H=50, W=25
	WM030188	Gasket, L=366, H=30, W=25
	WM015860	Decal for cable assembly
	WM038848	Gasket isolation 555x363 (AdBlue®)
	WM038933	Gasket isolation 1720x80 (AdBlue®)
	WM040469	Gasket isolation 500x80 (AdBlue® single sided)
1b	WM001061	Clamp
2		Top panel
	WM026693	1 module
	WM038916	Gasket isolation 448x223 (AdBlue®)
	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	WM038810	Blind panel (AdBlue®)

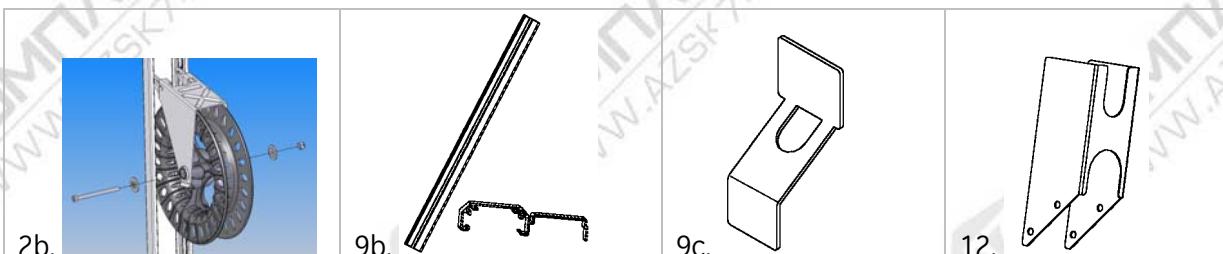
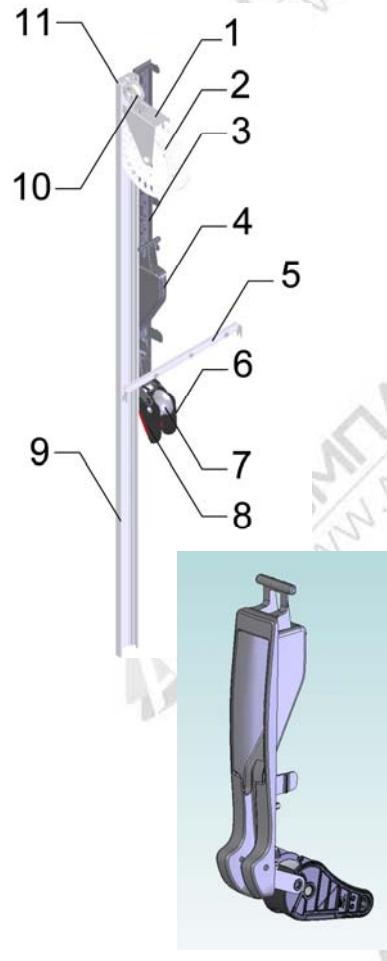
## 7.1 Push button and nozzle switch



	Part number	Description
1		<b>Push button</b>
	WM027750-0001	Red
	WM027750-0002	Green
	WM027750-0003	Black
	WM027750-0004	Yellow
	WM027750-0005	Blue
	WM027750-0006	White
2	WM027743	Black Mushroom (LPG)
3		<b>Switch</b>
	WM027741-0002	On/Off (LPG)
	WM027741-0001	On/Off spring back (LPG)
4		<b>Switch, magnetic reed, 2-wire, normally closed (nozzle switch)</b>
	WM009210-0002	3.0 m cable
5	WM028616	Emergency button, push - turn
6	WM029696-0001	Blanking plug (instead of emergency button), d=25,8, white

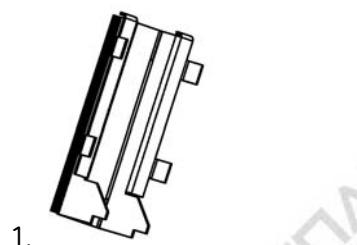
## 7.2 HHR

	Part number	Description
1	WM028902	Bracket, hose retraction
2	WM028140	Wheel, D=239
2b	Quick solution to reduce risk of wheel from falling off the trolley	
	WB000211-0014	Screw hexagon socket cap, M6x80 (1)
	WM043638	Washer, id= 6.5, od=24, t=4 (2)
	WB000229-0003	Nut M6 (1)
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
	WB000370-0001	Screw, hexagon socket button, M8x30, with tuflok locking patch
5		Support, U-shape
	WM028444	1 hose
	WM028395	2 hoses
	WM026491	3 hoses
	WM026487	4 hoses
6	WM028141	Bracket, wheel, nozzle boot
7	WM025573	Wheel, D=85
8	WM028145	Bushing, roller, L=66
9	WM026539	Column (L=1973, W=75)
9b	WM030779	Column (blind) (L=1973, W=139)
	W8-182878	Column (blind) WM030779 + WM028860 (9b + 12)
9c	WM030771	Clip, Z-Shape
10	WM028144	Wheel, D=55
11	WM029423	Support, box shape
	WM029945	Cord L=1150 mm
12	WM028860	Support, box shape, cover, hose connector

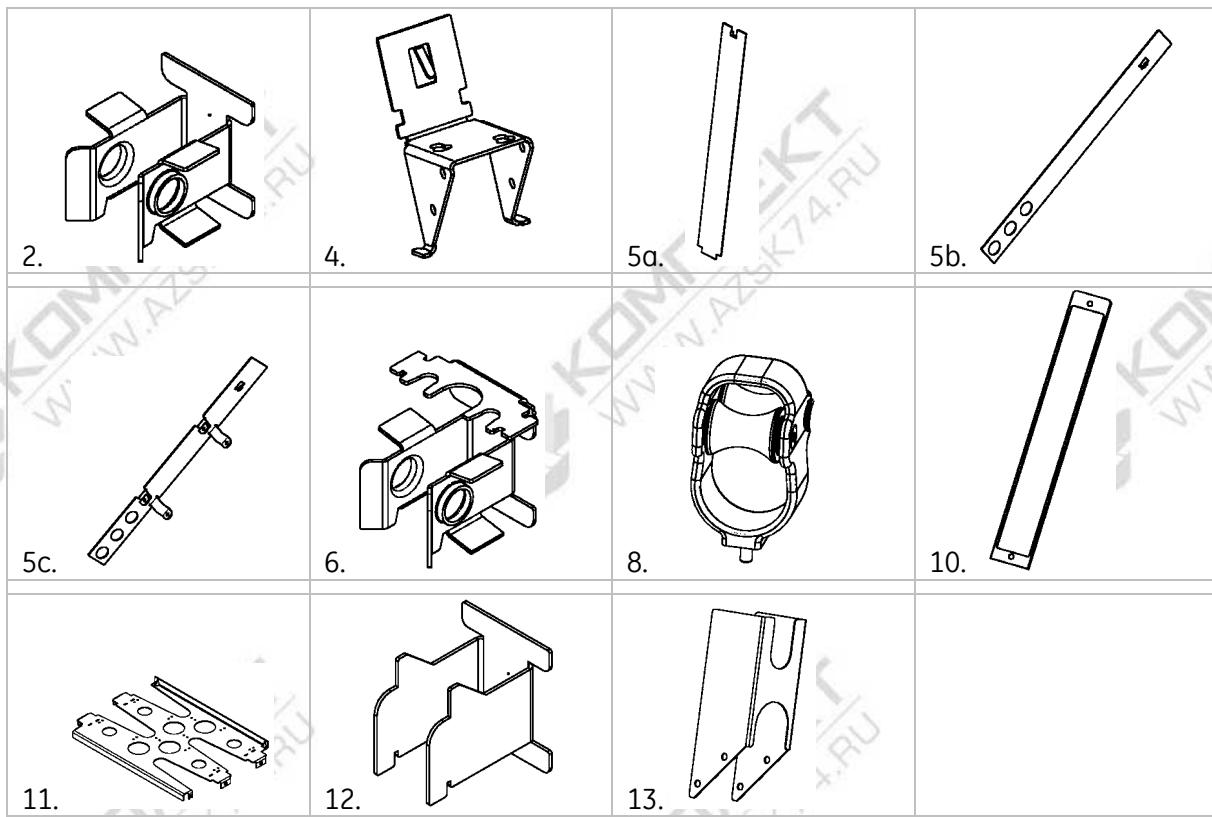
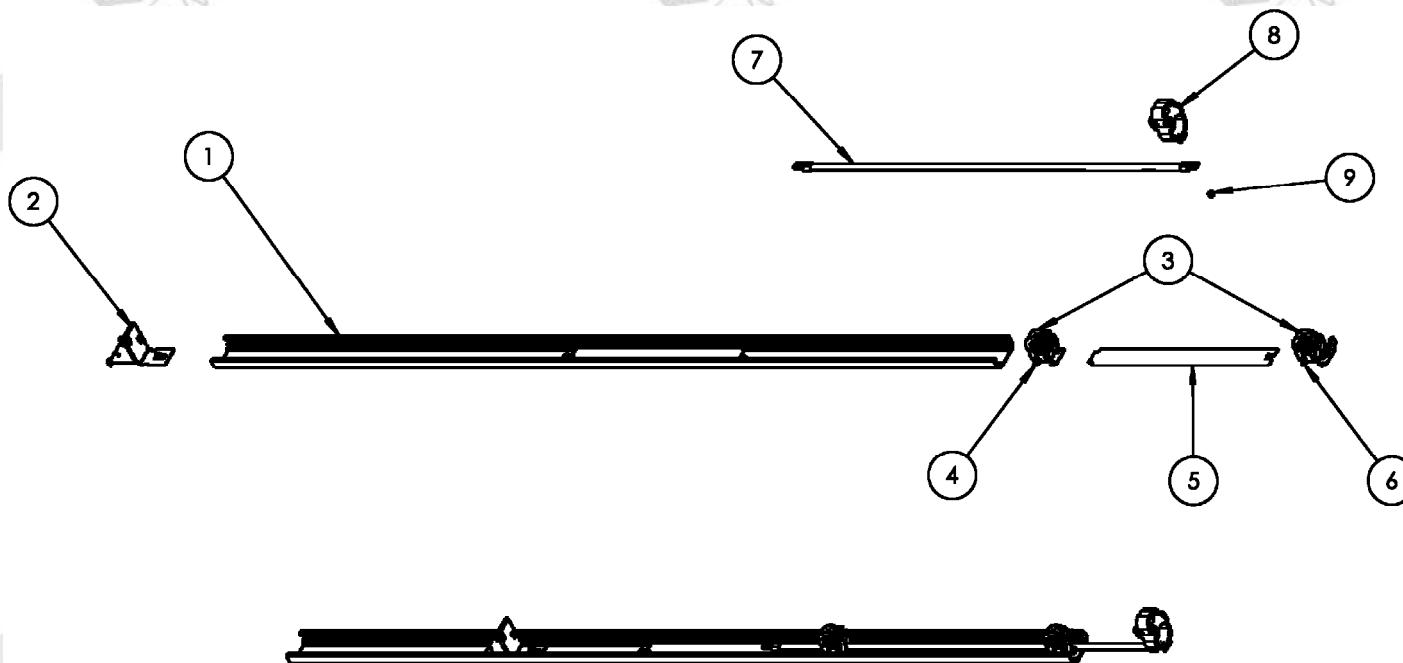


### 7.2.1 Hose shortening - HHR (Version 2)

	Part number	Description
1	WM036832	Hose reach 3.75 m
	WM036835	Hose reach 3.6 m
	WM036837	Hose reach 2.65 m



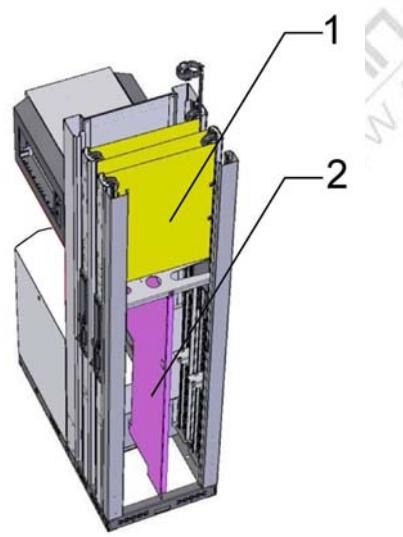
**7.3 HH**



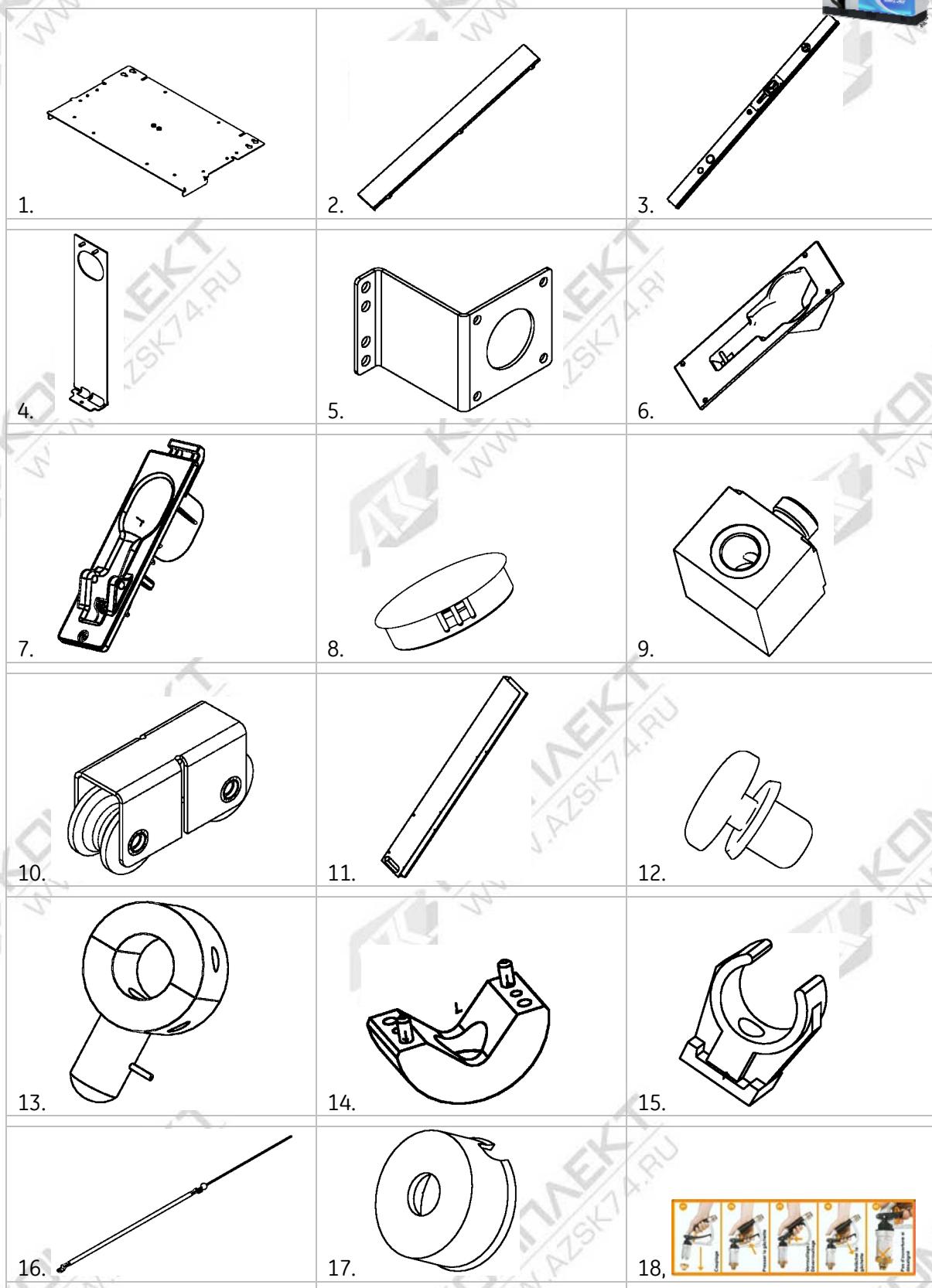
	<b>Part number</b>	<b>Description</b>
1	WM032767	Edge protector, grip range 1.0-2.0 mm, black
		<b>Column, hose handling</b>
	WM030000	Hole for nozzle boot, 0 button
	WM032374-0001	Hole for nozzle boot, 1 button
	WM032374-0002	Hole for nozzle boot, 2 buttons
	WM032374-0003	Hole for nozzle boot, 3 buttons (on picture)
2	WM029798	Support box-shape
3	WM028144	Wheel, D=55
4	WM032782	Support U-shape
5		Support, flat, L=458mm
a	WM032345 Rev 01	Old version
b	WM032345	Without divider panels
c	WM032345 Rev.03	With brackets for divider panels (WM036996)
6	WM029423	Support, box shape
7	WM032347	Cord L=1000mm
8	WM018918	Ring with pulleys
9	WB000229-0003	Lock nut, M6
10	WM031306	Column, L=472, W=67
11		<b>Support, flat</b>
	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
12	WM03244	Support (one for each column with button)
13	WM028860	Support, box shape, cover, hose connector

### 7.3.1 Divider panels HH

	<b>Part number</b>	<b>Description</b>
<b>Retrofit kit - Divider panel HH</b>		
	W8-182634	2 hoses
	W8-182635	4 hoses
	W8-182636	6 hoses
	W8-182637	8 hoses
1	WM036996	<b>Blind panel, 446 x 633 (1, 3, 5, or 7 pc on each pump)</b> (Note! You need Rev. 03 of WM032345 see page 19.)
	WB000339-0001	Plastic fastener, rivet, thickness range 2.5-4.0 thk (4 for each blind panel WM036996)
2		<b>Blind panel, hose handling</b> (fastend wit a screw (WB000211-0001) in support, flat)
	WM037832	2 hoses
	WM037828	4 hoses
	WM037824	6 hoses
	WM036993	8 hoses
	WB00211-0001	Screw, hexagon socket cap, M6 X 16



## 7.4 LPG



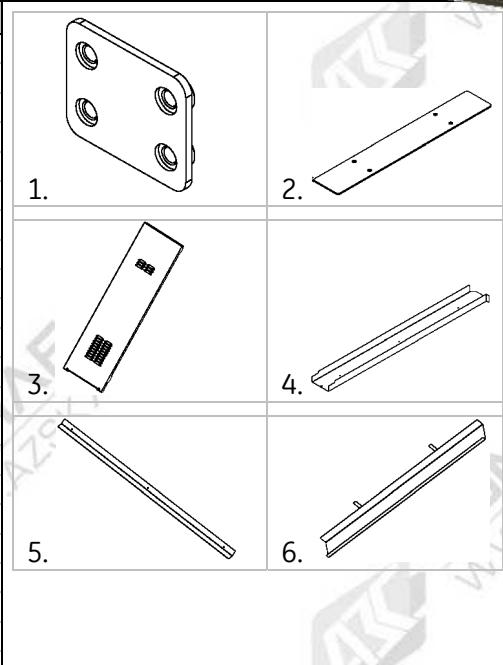


	<b>Part number</b>	<b>Description</b>
1	WM036833	Top panel hose handling, 1 module, LPG, umbra grey
2	WM036289	Side panel L=1976.5mm
3		<b>Corner column, LPG</b>
	WM036918	Corner column side A
	WM039474	Corner column side A (France)
	WM036924	Corner column side B
	WM039476	Corner column side B (France)
	WM027743	Push-button, mushroom black (see also page 16)
	WM028616	Emergency button, push - turn (see also page 16)
	WM029696-0001	Blanking plug (instead of emergency button), d=25,8, white (see also page 16)
4	WM034219	Support, L-shape
5	WM036684	Support, Z-shape
6	WM036885	Nozzle boot, LPG
	WB000210-0001	Screw, hexagon socket CAP, M5
	WB000229-0003	Lock nut, M6
	WB000652-0001	Screw, hexagon socket button, M6
	WE001168	Coupling, straight, gauge adapter DN 12
	WM000929	Pressure gauge
7	WM033667	Nozzle boot LPG
	WB000370	Screw, hexagon socket button, M8 X 20, with tuflok locking
8	WM036692	Plug
9	WT001124	Coupling, 90° (see also page 81)
10	WM029065	Support, U-shape assembly
11		<b>Support, box, L=1973</b>
	WM037502	A-side
	WM037504	B-side
12	WB000339-0001	Plastic fastener rivet
13	WM025975	Clamp
14	WM041859	Clamp, for 13-16 mm hose (FR)
15	WB000346-0002	Clip, for 24mm tube, M6 fixing
16	WM038374	Cord
17	WM004726	Bearing, knot, LPG
18	WM041737	Instruction label (FR)
19	WM041803	Instruction label, consignes de sécurité (FR)

## 7.5 B2B

See also LPG page 20.

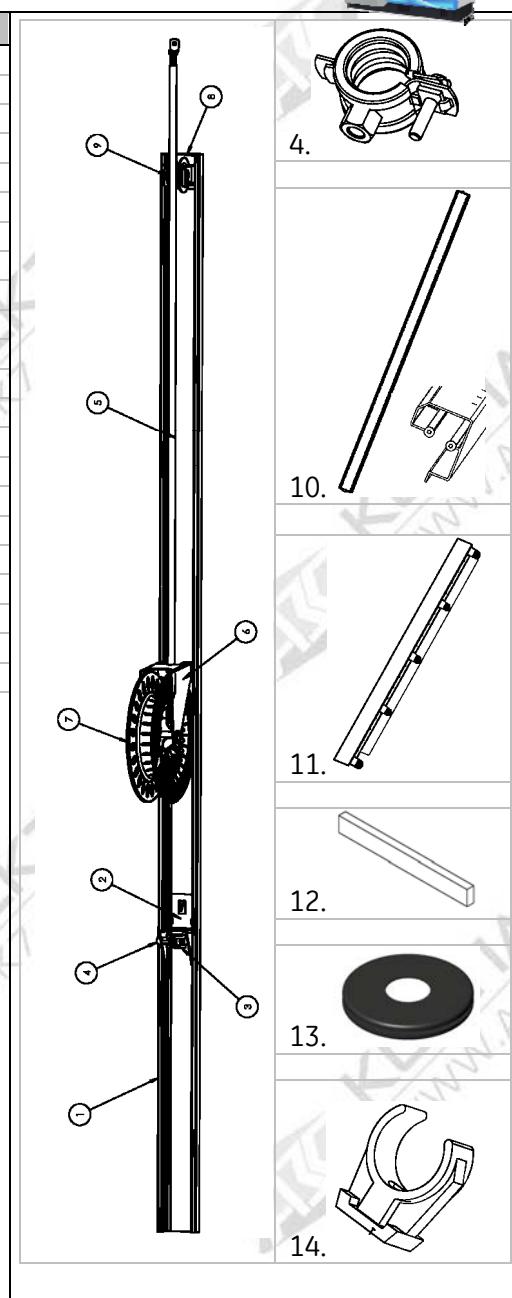
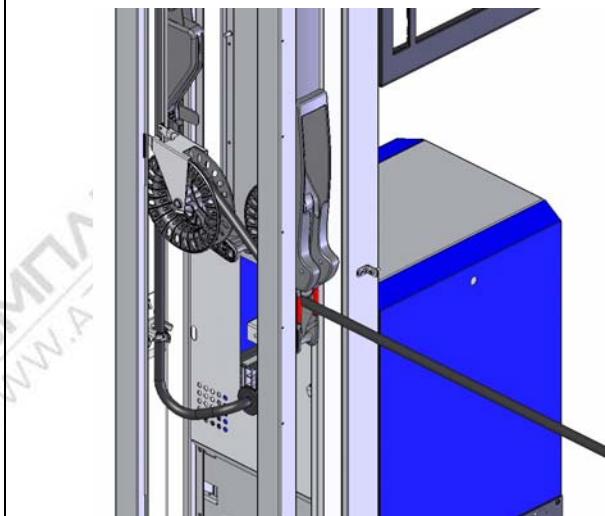
	<b>Part number</b>	<b>Description</b>
1	WM037868	Support, flat
2	WM037871	Support, flat
3	WM037875	Side panel, 1288,6x365, with gaskets
	WM028466	Gasket L=366, H=50, W=25
	WM030188	Gasket L=366, H=30, W=25
		<b>Cable holder, B2B, 1 hose</b>
4	WM038753-0004	Cable holder, bottom
5	WM038756-0004	Cable holder, inner wall
6	WM038758-0004	Cable holder, top
		<b>Cable holder, B2B, 2 hose</b>
4	WM038753-0003	Cable holder, bottom
5	WM038756-0003	Cable holder, inner wall
6	WM038758-0003	Cable holder, top
		<b>Cable holder, B2B, 3 hose</b>
4	WM038753-0002	Cable holder, bottom
5	WM038756-0002	Cable holder, inner wall
6	WM038758-0002	Cable holder, top
		<b>Cable holder, B2B, 4 hose</b>
4	WM038753-0001	Cable holder, bottom
5	WM038756-0001	Cable holder, inner wall
6	WM038758-0001	Cable holder, top



## 7.6 AdBlue®

### 7.6.1 Hose handling

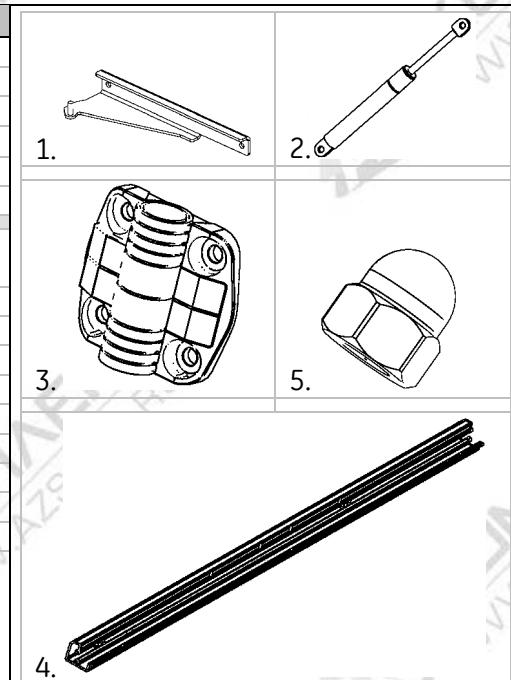
	Part number	Description
1	WM026539	Column hose handling, L=1973, W=75
	WM030779	Column L1973 W=139 (blindsight)
2	WM038807	Support, box shape hose clamp
3	WE000563	Clamp diameter 21-23, thread M8/M10
4	WB000212-0009	Screw, hexagon socket CAP, M8 x 10
5	WM029945	Cord L=1150
6	WM028902	Support, box shape assembly
7	WM028140	Wheel d=239
8	WM029423	Support, box shape h=64,5
9	WM028144	Wheel d=55
10		<b>Corner column</b>
	WM038813	Side A
	WM038814	Side B
	WM038934	Gasket isolation 1955x66
	WM039869	Gasket isolation 195x35*1
11		<b>Side panel, decal cover</b>
	WM028139	0 hole for button
	WM038856	Gasket isolation 570x55
12	WM038900	Gasket 1970x62 (blind single sided) *1
	WM038902	Gasket 475x55 (blind single sided) *1
13	WM010793-0002	Gasket, OD=67mm, ID=23mm
14	WB000346-0003	Clip for 28 tube, M6 fixing



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## 7.6.2 Front panel (AdBlue®)

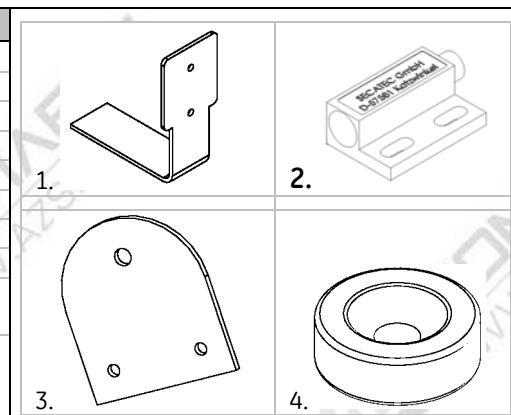
	Part number	Description
<b>Front panel</b>		
	WM043347-0001	Side A
	WM043347-0002	Side B
<b>Retrofit kit, AdBlue® door</b>		
	W8-184123	Side A
	W8-184124	Side B
<b>Gas spring fastening bracket on hose cabinet.</b>		
1	WM043759	Side A (shown)
	WM043762	Side B
2	WM043775	Spring, compression
3	WM043378	Hinge
4	<b>Corner columns</b>	
	WM043399	Side A (shown)
	WM043400	Side B
5	WM043991-0001	Nut, M6, domed cap
-	WB000232-0003	Washer, plain, M6, id=6.4, od=12, t=1.6



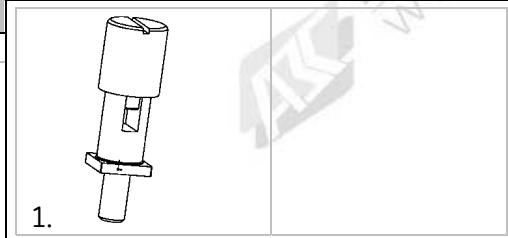
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## 7.6.3 Open hose door beeper (AdBlue®)

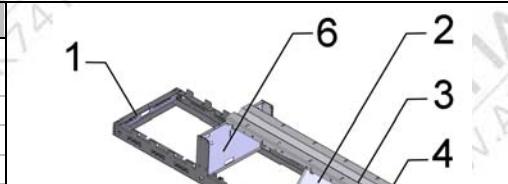
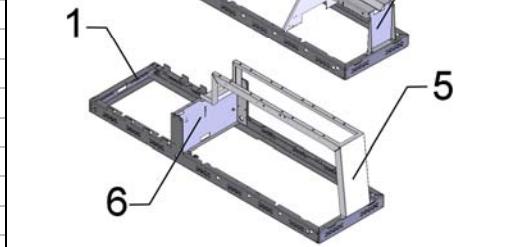
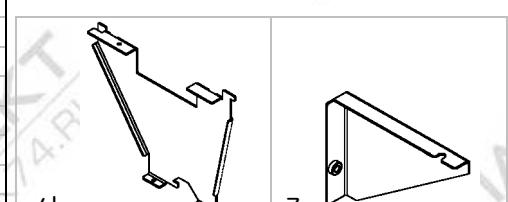
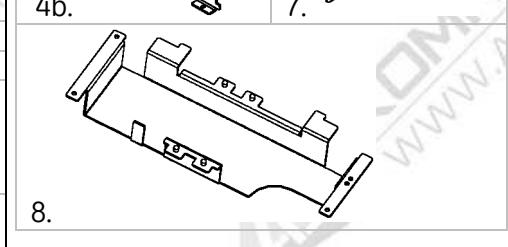
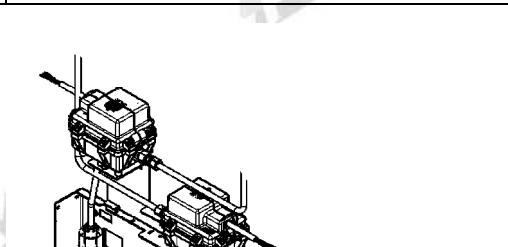
	Part number	Description
1	WM039773	Support, L-shape
2	WM001649-0002	Switch
3	WM020392	Support, flat
4	WM003859	Magnet
	WB000280-0002	Screw, CSK socket CAP, M4 X 12
	WB000229-0002	Lock nut, M4
	WM024723	Screw, CSK socket CAP, M3
	WB000396-0001	Self tapping screw, POZ, pan head, type C ST2,9 X 13



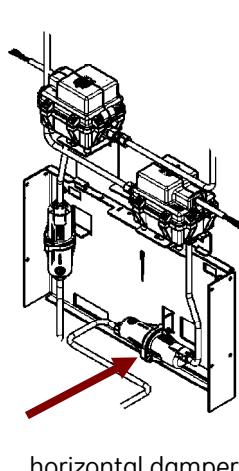
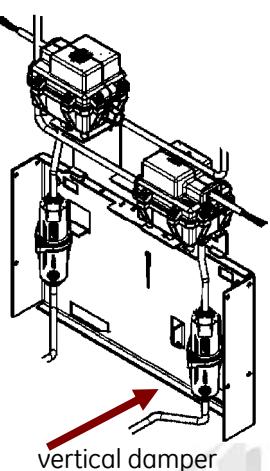
## 8 Hydraulic cabinet

	Part number	Description	
1	WB000273-0002	Grounding screw, M5	

### 8.1 HH & HHR

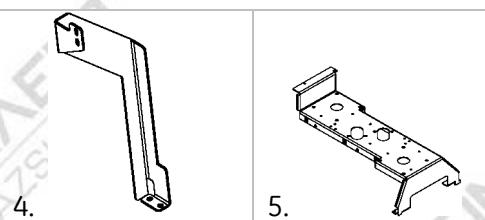
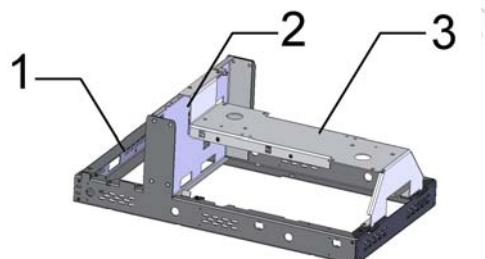
	Part number	Description	
1	WM028263-0001	Pop rivet, CSK head, 6.4 diameter x 13 mm grip range 3.8	
1	WM030805-0001	Base 2 hydraulic modules, 1 hose module	
	WM025391-0001	3 hydraulic modules, 1 hose module	
	WM025392-0001	3 hydraulic modules, 2 hose modules	
	WM025393-0001	3 hydraulic modules, 3 hose 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	WM028191	Support, suction hydraulic 3 modules	
	WM028193	4 modules	
4	WM028186	Support, flat, end support hydraulic shelf Std	
4b	WM030737	2 modules	
5	WM032317-0001	Support, remote hydraulics 3 modules, iMeter	
	WM032317-0002	4 modules, iMeter	
	WM028206	3 modules, Xflo™	
	WM028208	4 modules, Xflo™	
6	WM042813	Support, box shape	
7	WM037349	Rebuilding plate from horizontal* to vertical* damper on old support WM025409. Tubes see page 68 and page 72.	
8	WM028464	Shelf for VR module (VR module, see page 85)	

\*



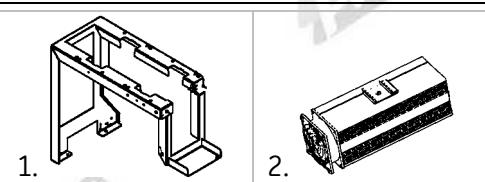
## 8.2 LPG

	<b>Part number</b>	<b>Description</b>
	WM002236	Seal screw, hexagon socket CAP, M6x16
1	WM030805-0001	Base 2 hydraulic modules, 1 hose module
2	WM025409	Support, box shape
3	WM032452	Support, LPG hydraulics
	WM032786	Support, LPG hydraulics, B2B and 96°
4	WM036404	Support, U-shape
5	WM043228	Support, hydraulics (AU, see also page 94)



## 8.3 AdBlue®

	<b>Part number</b>	<b>Description</b>
	WM030805-0001	Base 2 hydraulic modules, 1 hose module
1	WM036706	Support, 2 modules iMeter
2	WM008897	Heating element 400W, 230V

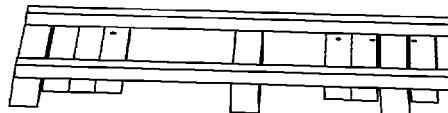


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## 9 Pallet, drip pan, ...

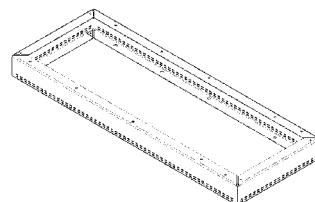
### 9.1 Pallet

	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)	



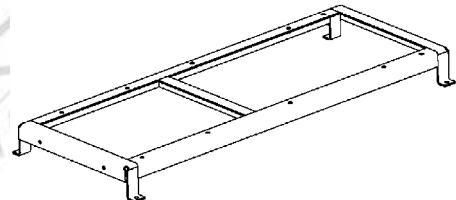
### 9.2 Extended base frame

	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

	Part number	Description	
		Foundation frame HH & HHR	Please, find the drawings on the ftp-server
	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	

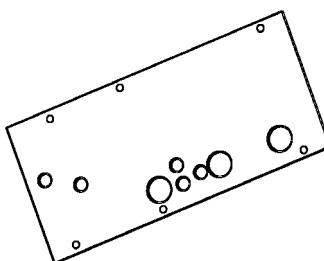


### 9.4 Drip pan (suction pump)

	Part number	Description	
	WM005290	Sikaflex TankL	
	WM037885	2 hydraulics + 1 nozzle module, L = 881, LPG	
	WM031497	2 hydraulics + 1 nozzle module, L = 881mm (Small cabinet)	
	WM031663	2 hydraulics + 2 nozzle modules, L = 1021mm (Small cabinet)	
	WM030157	3 hydraulics + 1 nozzle module, 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	

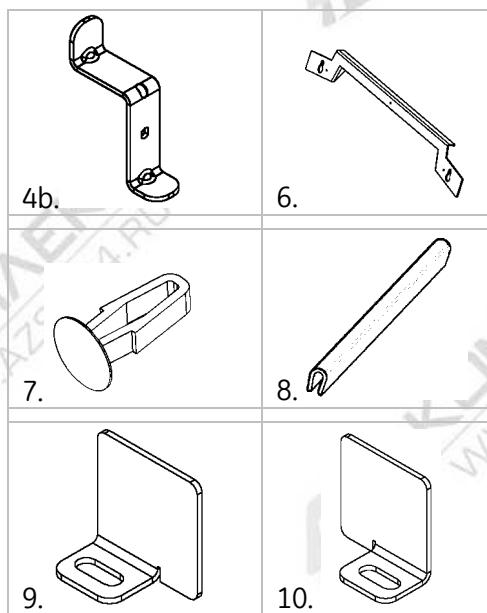
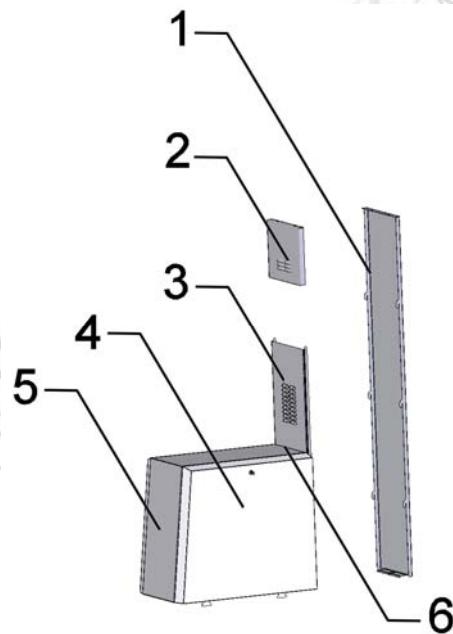


It is important that the pump is sealed from the ground.  
We recommend a "drip pan" and Sikaflex TankL,  
See User's Manual and installation drawings.



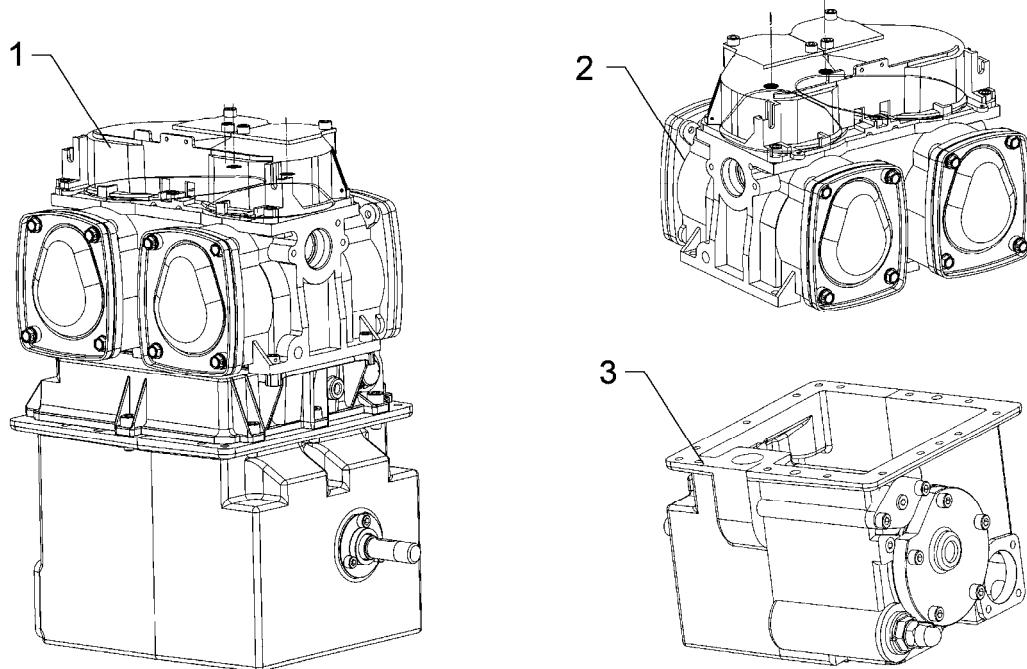
## 10 Exterior

	Part number	Description
1	WM036289	Side panel AL
	WM037892-0001	White
	WM025580	AL (for old base without mounting holes for side panel)
	WM037892	White (for old base without mounting holes for side panel)
	WM038914	Gasket isolation 1950x350 (AdBlue®)
2	WM025614	Side panel, upper barrier, with gaskets
	WM030188	Gasket L=366, H=30, W=25
3	WM025529	Side panel Std, with gaskets WM028466 and WM003175
	WM028719	Pay terminal H=275, with gaskets WM028466 and WM003175
	WM028720	Pay terminal H=375, with gaskets WM028466 and WM003175
	WM033404	Wincor/Nixdorf, with gaskets WM028466 and WM003175
	WM034870	Verifone
	WM032865	Gasket L=376, H=60, W=25
4	WM031488-0001	Front panel (Wayne std, pure white, RAL9010, gl. 70) A-side, 2 modules, 90°
	WM030053-0001	A-side, 3 modules, 96°
	WM030056-0001	A-side, 3 modules, 90°
	WM030058-0001	A-side, 4 modules, 96°
	WM030061-0001	A-side, 4 modules, 90°
	WM031489-0001	B-side, 2 modules, 90°
	WM030055-0001	B-side, 3 modules, 96°
	WM030057-0001	B-side, 3 modules, 90°
	WM030059-0001	B-side, 4 modules, 96°
	WM030062-0001	B-side, 4 modules, 90°
	WM003119	Key
	WM001994-0002	Lock
	WM026155-0001	Lock individually keyed (2 locks / 2 keys)
	<b>Gasket isolation front panel, 90°, 2 modules (AdBlue®)</b>	
	WM038817	Side A
	WM038822	Side B
4b	WM030097	Latch
5	WM030717	Top panel 2 module, 90°
	WM025304	3 module, 96°
	WM025302	3 module, 90°
	WM025309	4 module, 96°
	WM025307	4 module, 90 °
	<b>Gasket isolation (AdBlue®)</b>	
	WM038847	710x363
	WM038848	555x363
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
9	WM031703	Support, L-shape A-side
10	WM031705	B-side

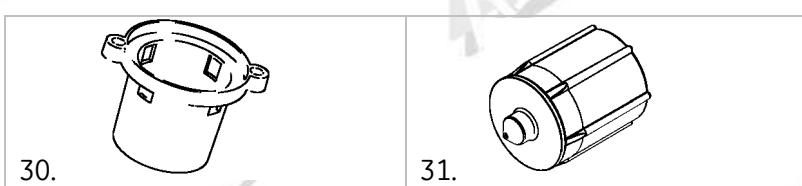
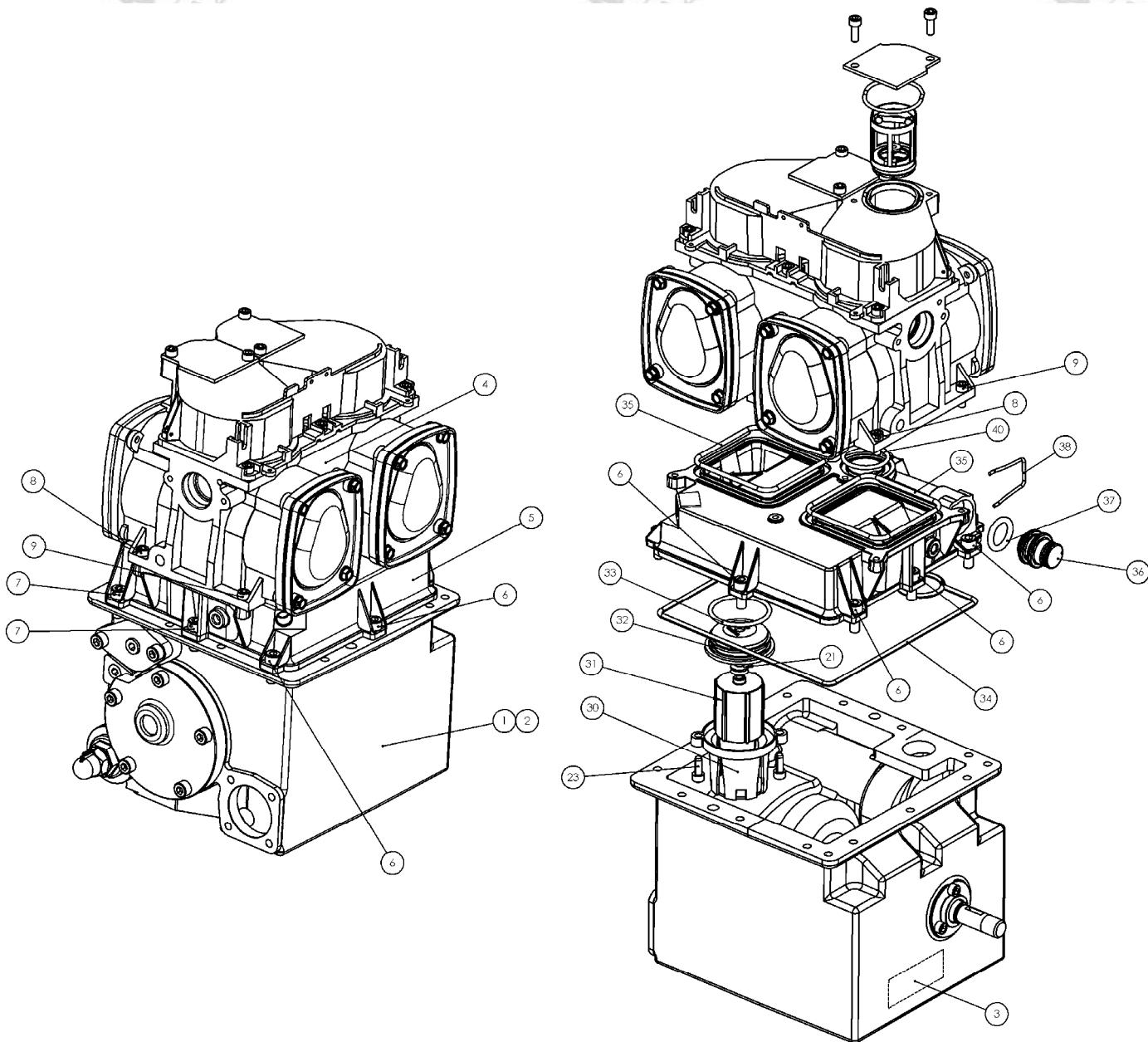


## 11 Hydraulic

### 11.1 Hydraulic module (suction pump)



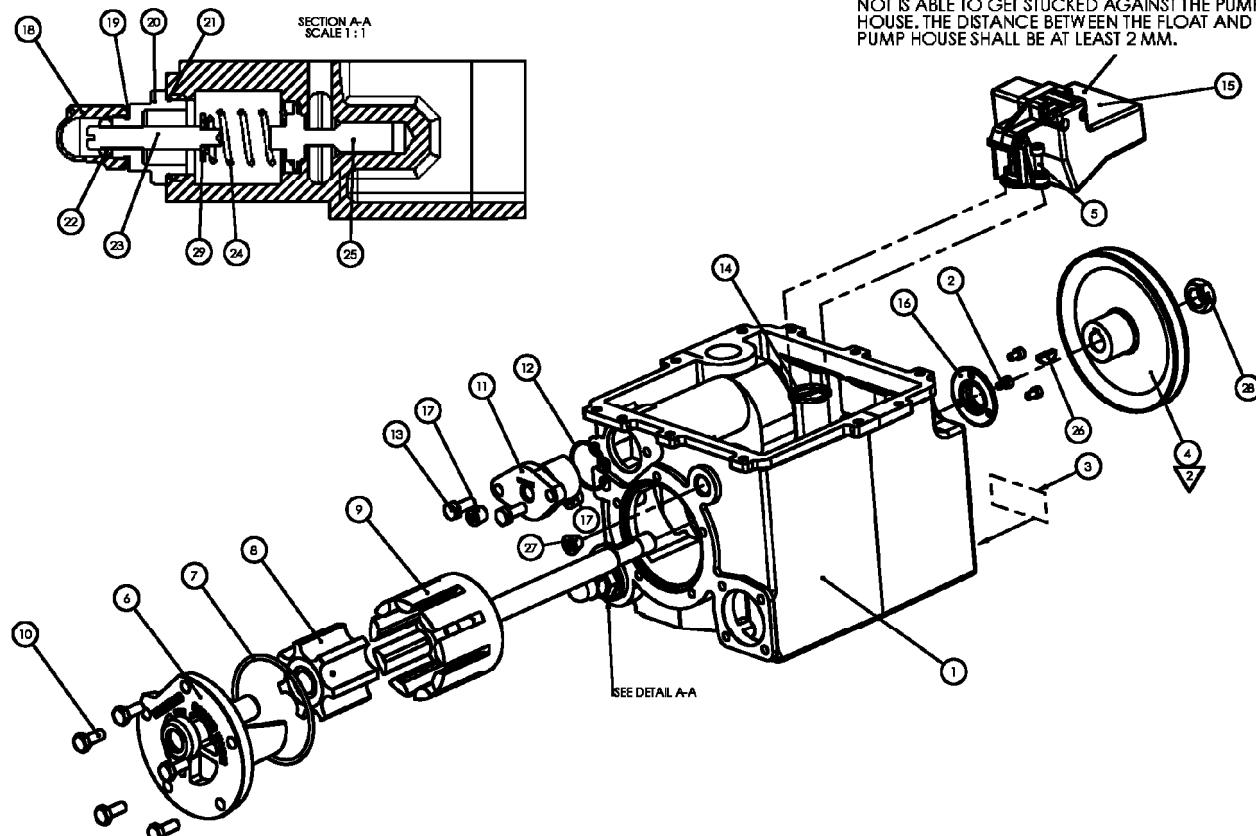
	Part number	Description
1		Pulser see page 36
		<b>Combined unit</b>
		With single bump connection for the air venting tube
	WM020553-0004	Compact pump
	WM020553-0001	Pump and meter diesel and gasoline 40 lpm & 70 lpm
	WM020553-0002	Pump and meter diesel and gasoline single sided side A 40 lpm & 70 lpm
	UWM009289-0004	Pump and meter diesel 70 lpm (only U)
	UWM009289-0001	Pump and meter gasoline 40 lpm (only U)
2		<b>Fuel meter</b>
	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
	WM002393-0004	Single sided side A, 70 lpm
3	WM018719-0001	<b>Fuel pump</b>
	WM002219-0001	Internal gear diesel
	WM002219-0002	Internal gear gasoline



	Part number	Description
	see page 34	Valve ass'y
1	WR000632	Housing, machined, pump
2	---	
3		<b>Identification label</b>
	WM021062-0004	Combined unit, compact pump
	WM021062-0002	Combined unit, pump & meter - single sided
	WM021062-0001	Combined unit, pump & meter - double sided
	WM022147-0001	Fuel pump, internal gear
4		Fuel meter see page 29 and page 34
5		<b>Cover, machined</b>
	WM009207-0001	With single bump connection for the air venting tube
6	WB000212-0001	Screw, hexagon socket cap, M8 x 20
7	WM002220-0001	Screw seal, 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	WM013808	Cover, moulded
33	WM001979	O-ring T=3.5, ID=47
34	WM000611	O-ring formed T=4
35	WM002986-0001	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 WM042967, page 47)
40	WM000612	O-ring T=3.5, ID=35

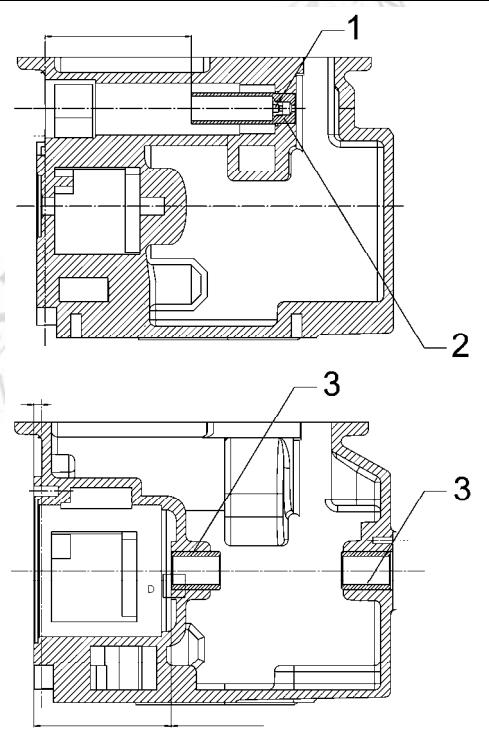
## 11.1.1 Pump internal gear

WHEN THE LOWER FLOAT, WM017958, IS ASSEMBLED IT SHALL BE CHECKED THAT THE BACK OF THE FLOAT NOT IS ABLE TO GET STUCK AGAINST THE PUMP HOUSE. THE DISTANCE BETWEEN THE FLOAT AND THE PUMP HOUSE SHALL BE AT LEAST 2 MM.

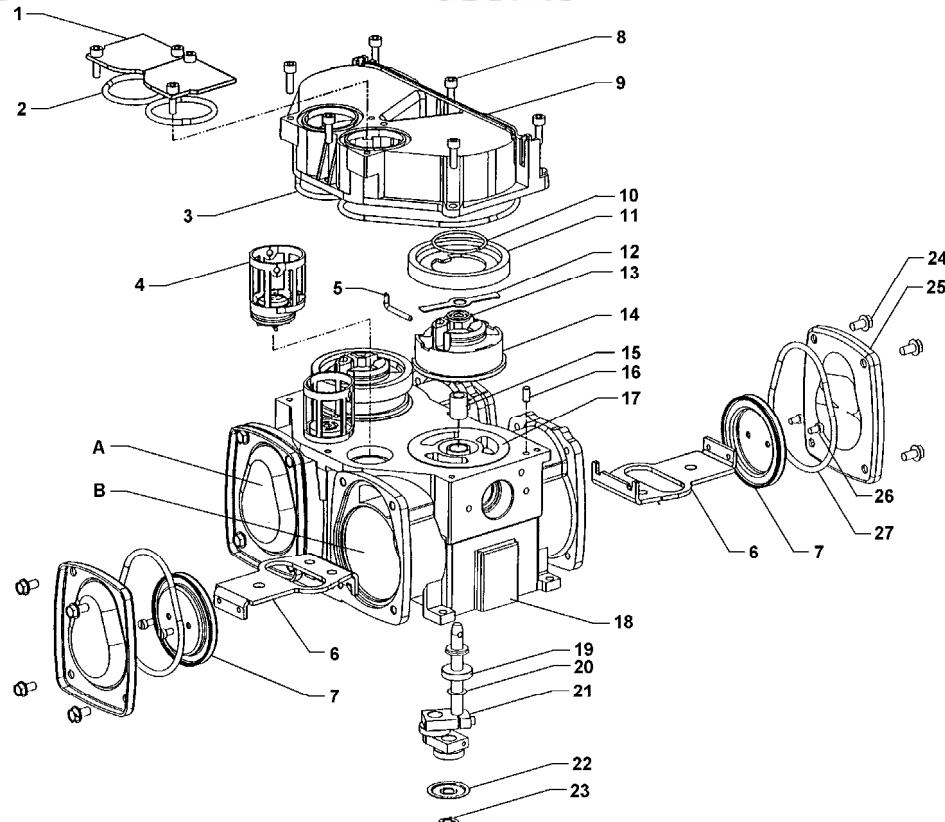


	Part number	Description
1	WR000632	Housing
2	---	---
3	WM022147	Identification label fuel pump, internal gear, EMEA/LA (see also page 31)
4	WM022270	Pulley, Z-profile
5	WB000211-0001	Screw, hexagon socket cap, M6 x 16
6	WM001387	Cover, flat head and shaft
7	WM001956	O-ring T=3.53, ID=85,32
8	WM001420	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	WM022112	Seal screw, hex head, M8 x 20
14	WM001953	O-ring T=3, ID=28
15	WM017958	Float (See "Service Info SI-06-003 2006-11-06.pdf") (Used in production on diesel units from 2007-03-01)
	WM001430	Float
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
26	WM001667	Key, woodruff D=19, T=4.75
27	WB000367-0002	Plug , hexagon socket pipe plug R3/8"
28	WB000341-0001	Nut, 5/8" UNF jam-nut
29	WM001422	Washer, plain ID=5, OD=10.5, T=1

	Part number	Description
1	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"
2	WM001078	Air separator
3	WM001424	Bushing L=31.8mm



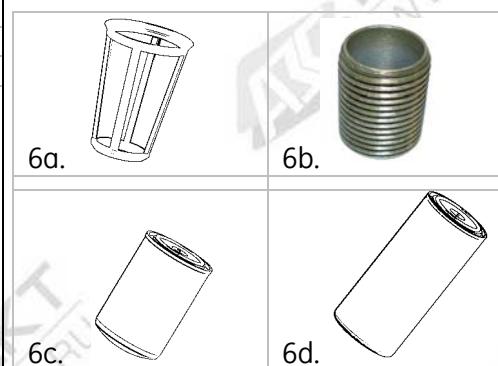
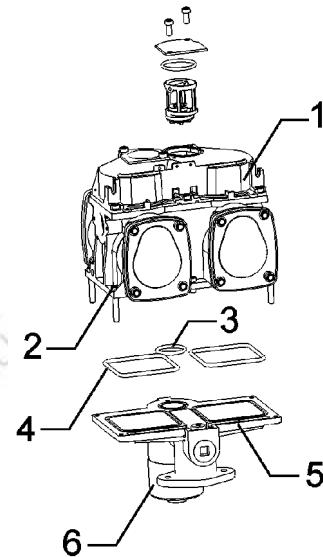
## 11.2 iMeter



	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	
	WM000667	O-ring	001-921074
	WM023021	Plug	
5		Pin, valve	001-201987
6		Yorke meter	001-201948
7	WM000516	Piston ass'y	-200040
8		SHCS	001-921053
9	WM020020-0001	Meter dome	001-047870
10	WM010860	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	
	WM020586	Pressed (std)	
	WM001425	Casting	
26		---	
27	WM001103	Gasket	

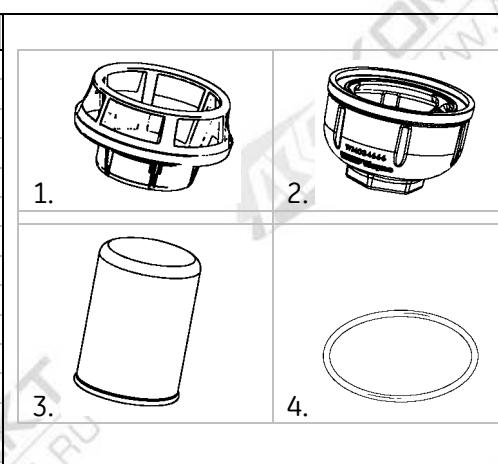
## 11.3 Hydraulic Dispenser

	Part number	Description
	see page 34	Valve ass'y
		<b>Hydraulic module for dispenser ass'y</b> (Combined unit, remote inlet and meter)
WM004740-0001	Std	
WM004740-0002	Use WM004740-0001	
WM004740-0003	Single side A	
WM004740-0004	Extra connection	
WM004740-0005	Use WM004740-0004	
WM004740-0006	Remote inlet with connection	
---	---	AdBlue® - see 11.3.2 page 36
1	---	
2	WM004596	Sealing screw, hexagon socket cap, M6X45
	WB000211-0001	Screw MC6S 6X16 8.8 FZB
3	WM000612	O-ring
4	WU002986-0001	O-ring T=4.0, ID=98
5		Dispenser bottom ass'y
6a	WB000382	Strainer
b	WM002000	Nipple adapter
		<b>Strainer</b>
c	WM002003	40-70L
d	WM002096	70-130L



### 11.3.1 iMeter - Dispenser - New 2010

	Part number	Description
1	WM031449	Strainer
2	WM034667	Cap
3		<b>Strainer</b>
4	WM011606-0001	1 1/2" 16 UNF, gasoline & diesel
5	WM011606-0002	1 1/2" 16 UNF, ethanol & bio diesel
6	WM000613	O-ring, T=4, ID=98
		<b>Combined unit, remote inlet and meter</b>
	WM032399-0001	Double sided
	WM032399-0002	Single sided A
	WM032399-0003	Double sided, urea
	WM032399-0004	Single sided a, urea
	WM032399-0005	Double sided with flange
	WM032399-0006	Single sided A with flange
	WM032399-0007	Double sided with flange, fluor silicon
	WM032399-0008	Single sided A with flange, fluor silicon

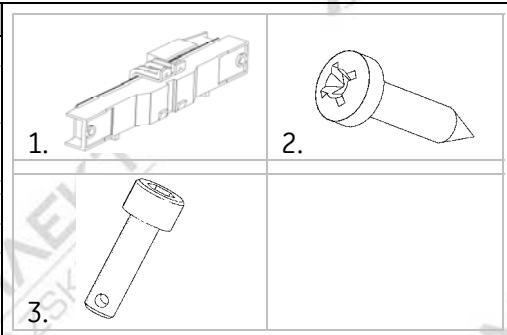


### 11.3.2 iMeter - AdBlue®

See spare part list WM011947

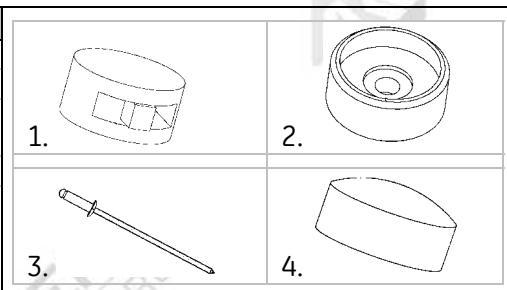
### 11.4 Pulser for iMeter

	Part number	Description
1	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



### 11.5 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



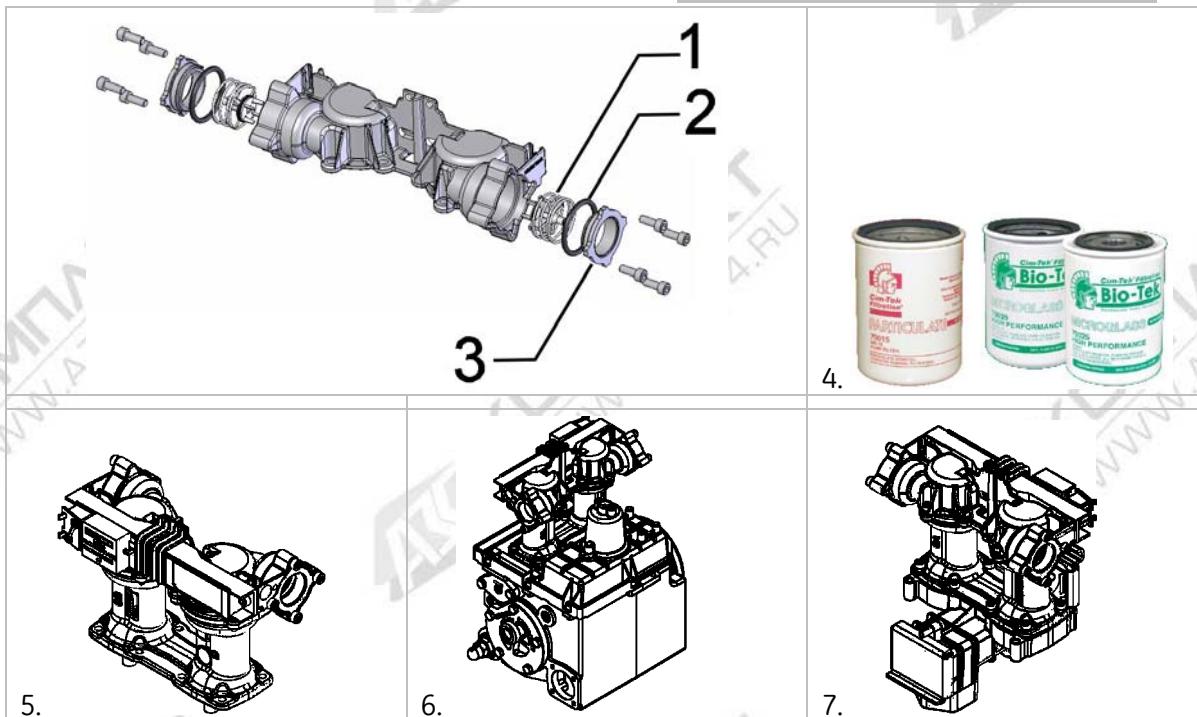
## 11.6 Xflo™ (low dome cover)

**Note!**

The XWIP is blue (not black)

**Note!**

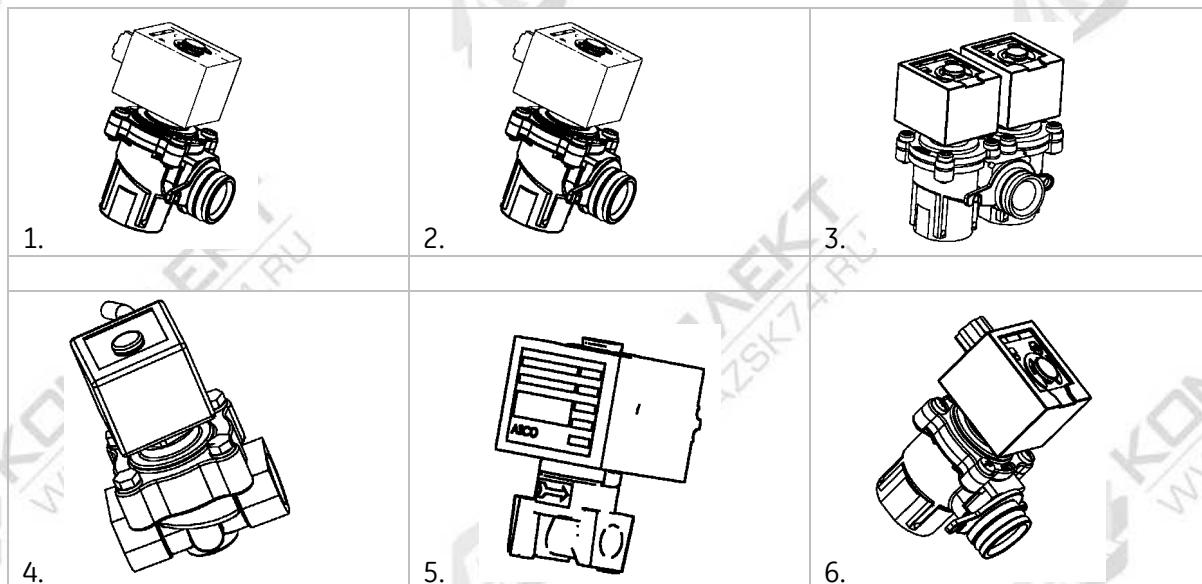
Always change the Xflo™ (meter) and the XWIP (pulser) as one unit.



	Part number	Description
		xWIP II
	WM019142-0001	Pulser comp xWIP II IEC EEXI
	WM015675-0001	Cable 4x0.34 zone SC Eexi L=3500
	WM015675-0002	Cable 4x0.34 zone SC Eexi L=2500
1	WM029220	Valve
2	WM022490	O-ring
3	WM018102	Coupling for dome low
4		Strainer for Xflo™
	WM011606-0001	Gasoline & diesel
	WM011606-0002	Ethanol & bio diesel
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

## 11.7 Valves

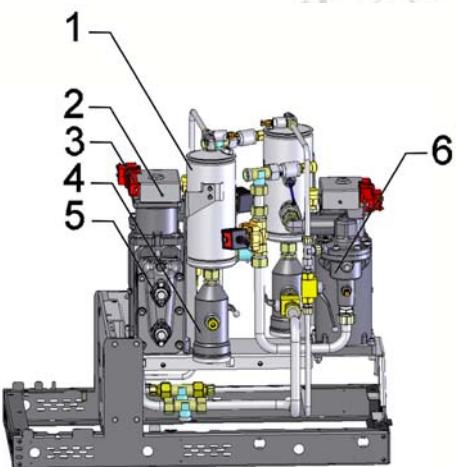
### 11.7.1 Petrol, diesel, AdBlue® & LPG



	Part number	Description
1	WM021181	Solenoid valve, proportional, single, AL
2	WM021182	Solenoid valve, on/off, single, AL
3	WM000340	Solenoid valve, proportional, duplex
4	WM002190	Solenoid valve, on/off LPG
5	WM021576-0001 WM021576-0002	Solenoid valve vapour, on/off, single Cable L=3m Cable L=5m
6	WM015630	Solenoid valve, proportional, single nickel plated (AdBlue®)

## 11.8 LPG

	Part number	Description
1		Air separator
	WM032474	Without temperature sensor
	WM032465	Plug G1/8"
	WM032467	Washer, sealing ID= 10.2, OD=13.9, T=1
	WM032475	With temperature sensor
	WM019643-0001	Temperature sensor
	WM032465	Plug G1/8"
	WM032467	Washer, sealing ID= 10.2, OD=13.9, T=1
2	WM021745	WIP box, LPG meter (see page 39)
3	WM031856-0001	Pulser, WIP (red)
4	WT000529	Filter
	WT000435	Filter cartridge
	WT000478	O-ring, T=3.53, ID=74.61
	WT000443	Plug hex. socket head, with gasket, G 3/8"
5	WM032471	Meter (see also page 41)
6	WT000555	Differential valve 3/8" (see page 40)

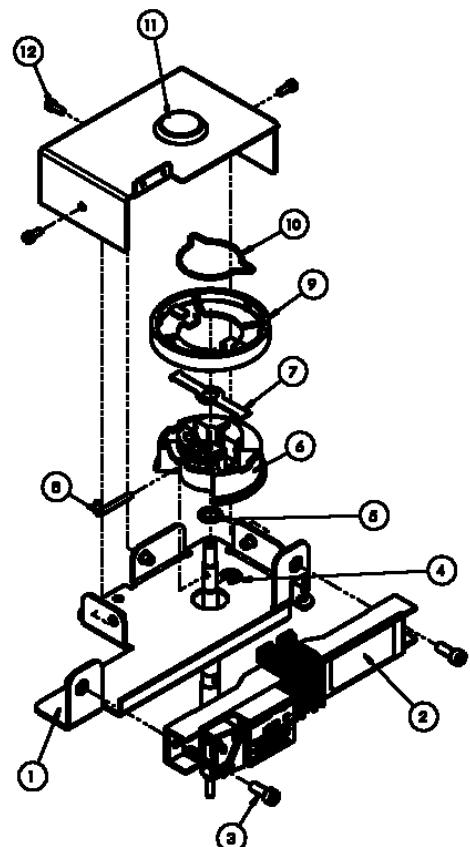


Tubes - see page 75.  
Solenoid valve - see page 38

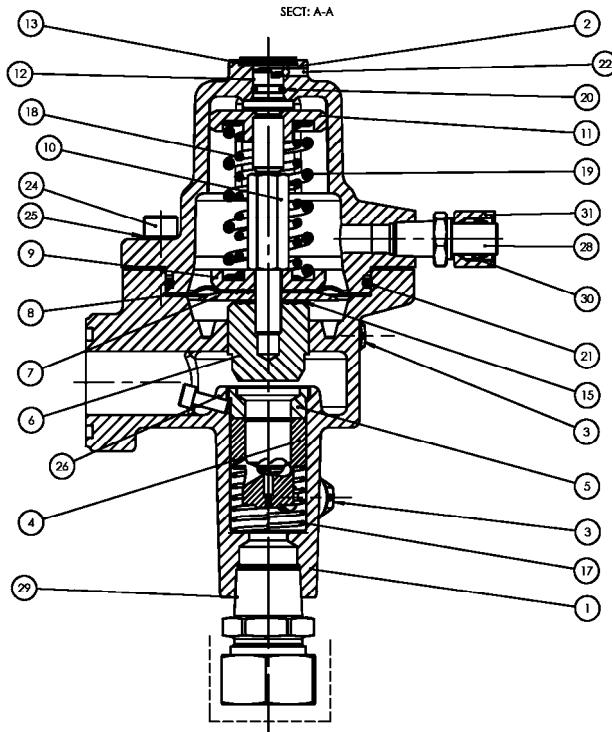
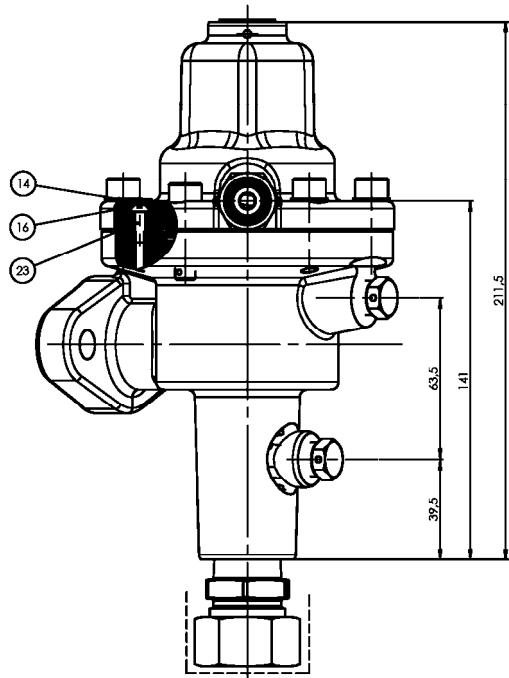
Unique parts for Global Star LPG AU - see page 94

### 11.8.1 WIP box

	Part number	Description
	WM021745	WIP box, LPG meter
	WM021728	Pin for rotating valve, L=196
1	WM021732	Support, box shape, WIP box
2	WM031856-0001	Pulser WIP LPG (red)
3	WM002236	Seal screw, hexagon socket CAP, M6x16
4	WB000404	Retaining ring, external e-type, shaft=9.5 dia, ID=7, T=0.9
5	WM000634	Washer, plain ID=9.72, OD=16.25 T=0.76
6	WM000495	Valve
7	WM000496	Spring, plain
8	WM000510	Pin
9	WM000502	Magnet, ring
10	WM010860	Spring, retainer
11	WM021730	Cover plate WIP box
12	WM003767	Seal screw, hexagon socket cap, M4 x 10



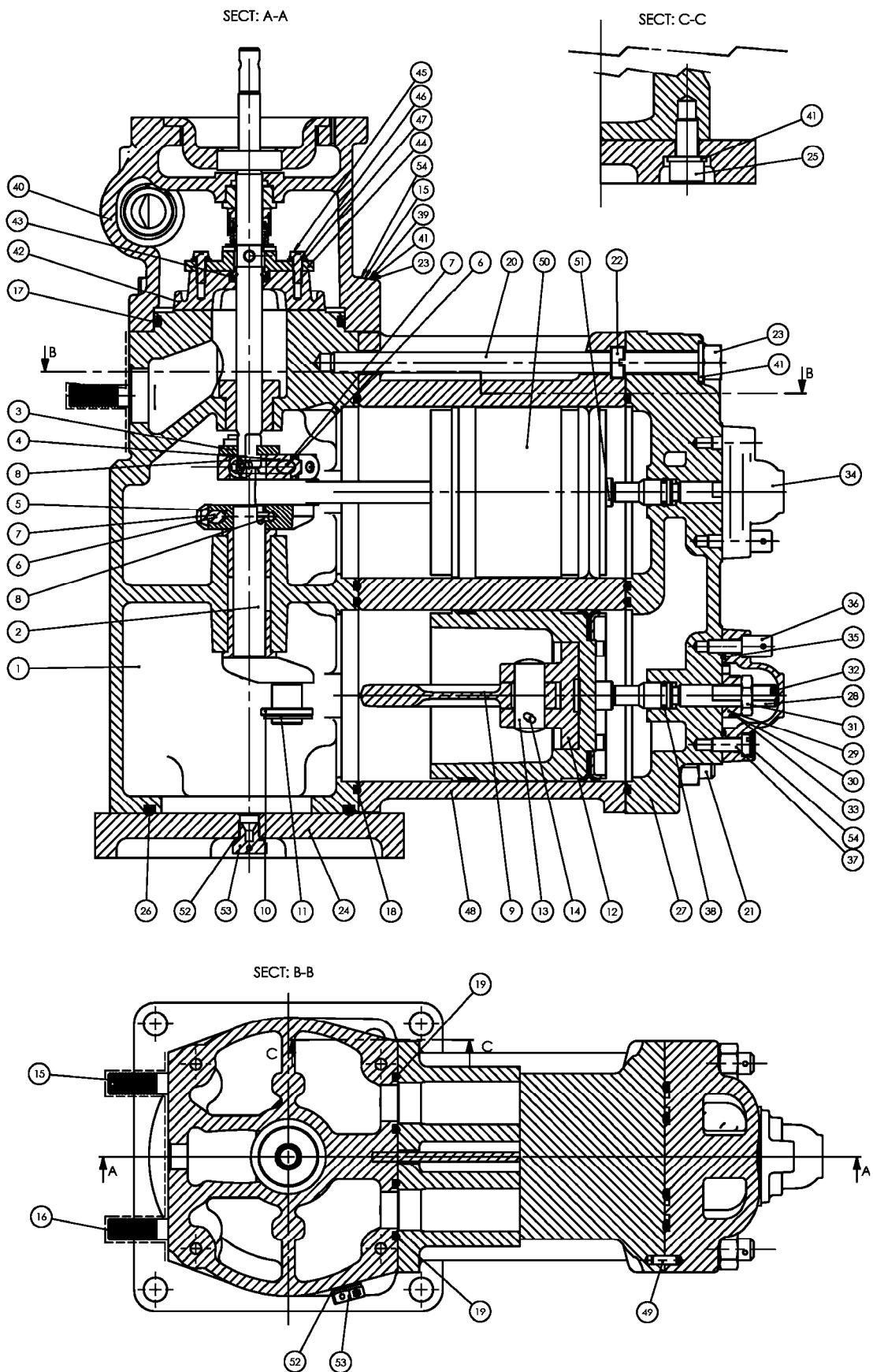
## 11.8.2 Differential control-valve - LPG



	<b>Part number</b>	<b>Description</b>
	WT000555	Differential valve 3/8" (see page 39)
1	WT000442	Housing machined
2	WT000485	Cover machined
3	WT000496	Plug, seal plug 1/4" NPT
4	WT000488	Bushing valve
5	WT000486	Bushing valve seat
6	WT000487	Valve
7	WT000494	Cap
8	WT000552	Gasket membrane
9	WT000489	Bushing spring seat
10	WT000491	Spacer, blind , M10
11	WT000490	Cap for spring
12	WT000492	Screw M12 x 40
13	WT000497	Sealing, lead OD= 22 T=3
14	WT000499	Seal cap
15	WT000493	Gasket ID=10, OD=28, T=1
16	WT000498	Sealing, lead
17	WT000513	Spring, compression OD=28.5, L=47
18	WT000512	Spring, compression OD=26, L=70

	<b>Part number</b>	<b>Description</b>
19	WT000511	Spring, compression OD=35, L=68
20	WT000554	O-ring T=2, ID=9
21	WT000478	O-ring T=3.53, ID=74.61
22	WB000684-0001	Locator pin, grooved, OD=3, L=28
23	WB000706	Screw , M4 x 12, slotted cheese head
24	WB000212-0005	Screw, hexagon socket cap, M8 x 25
25	WB000687	Washer, lock, M8 ID=8.1, OD=14.1, T=2
26	WB000210-0001	Screw, hexagon socket cap, M5 x 10
27	WT001039	Seal screw, hexagon socket cap, M8 x 30
28	WT001099	Coupling, straight male 1/4" NPT - DN:12
29	WB000726	Coupling, straight 22mm x 3/4" -14 NPT
30	WE001173	Ring progressive, DN 12
31	WE001172	Nut DN 12

### 11.8.3 LPG meter



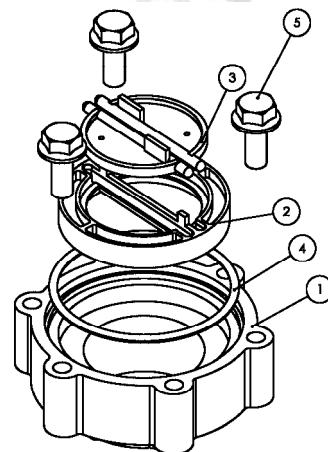
	<b>Part number</b>	<b>Description</b>
	WM032471	Meeter
1	WM032469	Housing assembly
2	WT000570	Shaft machined
3	WT000571	Washer with notch
4	WT000574	Clamp
5	WT000576	Crank arm machined
6	WB000211-0006	Screw, hexagon socket CAP, M6 x 35
7	WB000228-0003	Nut, M6
8	WB000718-0001	Locator pin ,grooved, L=30
9	WT000580	Lever connecting rod and bushing
10	WT000563	Washer OD=24 ID=14 TH=3.2
11	WM002070	Retaining ring, external e-type
12	WT000583	Support piston , machined
13	WT000584	Pin, piston
14	WB000732-0001	Cotter pin , split, L= 36
15	WT001038	Stud, M10 x 30, with sealing hole
16	WB000736-0001	Stud, M10 x 30
17	WT000585	O-ring, ID=82.14
18	WT000634	O-ring, ID=85
19	WT000635	O-ring, ID=22
20	WT000586	Stud, M10 x 182
21	WT000587	Stud, M10 x 179, with hole=2
22	WT000588	Nut, M10 with notch
23	WB000228-0006	Nut, M10
24	WM032456	Flange machined, base
25	WT000622	O-ring, ID=89
26	WT000594	Cover
27	WB000308-0003	Screw, hexagon socket cap, M10 x 20
28	WT000595	Screw calibration M10 x 76
29	WT000596	Nut calibration
30	WB000719-	Spring, pin slotted, L=8

	<b>Part number</b>	<b>Description</b>
	0001	
31	WB000228-0008	Nut, M10 , thin
32	WB000731-0001	Cotter pin , split, L=16
33	WB000719-0002	Spring, pin slotted, L=12
34	WT000597	Seal cap
35	WT000636	O-ring, ID=33.5
36	WT000598	Seal screw M6x16
37	WB000714-0001	Screw , M6 x 14, slotted cheese head
38	WT000554	O-ring, ID=9
39	---	---
40	WM032470	Housing with shaft, unit
41	WB000717	Washer, lock, M10 ID=10.2, OD=18.1, T=2.2
42	WT000624	Valve , rotary valve , machined
43	WT000602	Gasket lip seal
44	WT000629	Flange notched
45	WB000706	Screw , M4 x 12, slotted cheese head
46	WB000715	Washer, lock, M4 ID=4.1, OD=7.6, T=0.9
47	WB000232-0002	Washer, plain, M4 ID=4.3, OD=9, T=0.8
48	WT000592	Housing cylinders
49	WB000728-0001	Locator pin , straight, 4 x 12
50	WT000620	Piston unit
51	WB000212-0002	Screw, hexagon socket cap, M8 x 16
52	WM032467	Washer , sealing ID= 10.2, OD=13.9, T=1
53	WM033255	Plug G1/8", with sealing hole
54	WB000576-0001	Screw, hex head, M10 x 30
55	WT000621	Sealing, lead

## 12 Inlet

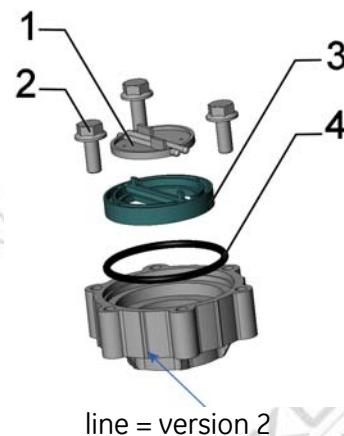
### 12.1 Valve non return (version 1)

	Part number	Description
	WM000449	Valve non return (version1)
1	WM013549	Flange machined
2	WM000440	Bracket
3	WM000441	Flap
4	WM024090	O-ring
5	WM009773-0001	Screw, hex head, M8 x 20, with flange



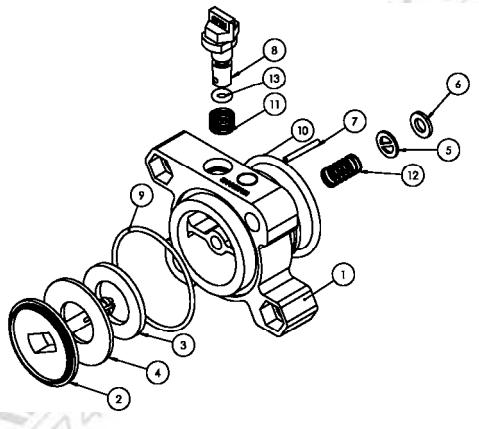
### 12.2 Valve non return (version 2)

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



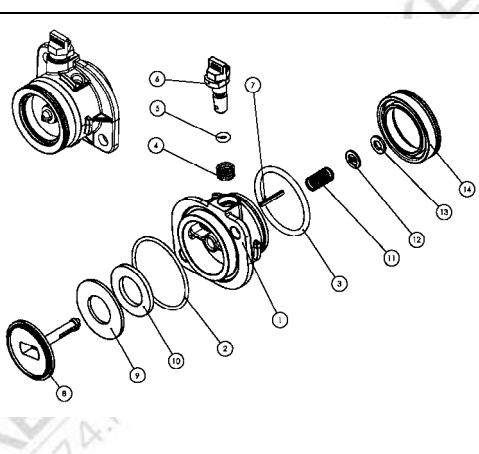
## 12.3 Check valve (version 1)

	Part number	Description
	WM000470	Check valve
1	WM000442	Housing, machined
2	WM000443	Valve
3	WM000469	Washer, plain ID=21.0, OD=36.0, T=3.0
4	WM000466	Gasket
5	WM000445	Washer, retaining ID=8.0, OD=12.5, T=1.0, with extra rib
6	WM000468	Washer, plain ID=6.4, OD=12.0, T=1.5
7	WM000467	Spring, PIN L=20, OD=2.5
8	WM000444	Knob
9	WM000464	O-ring T=2.0, ID=47
10	WM000462	O-ring T=3.5, ID=42
11	WM000454	Spring T=1, ID=10, C=2.54 N/mm
12	WM000456	Spring T=0.55, ID=7.95
13	WM000465	O-ring T=2.4, ID=4.3



## 12.4 Check valve (version 2)

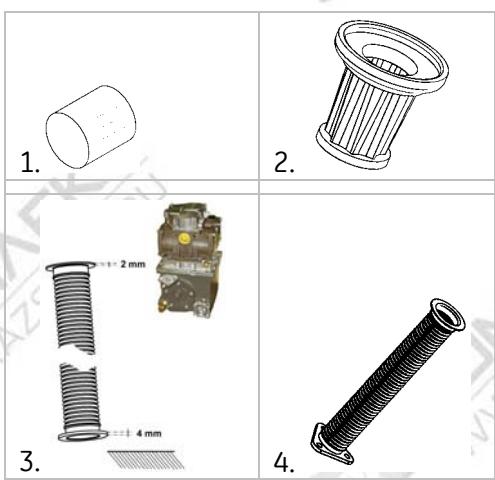
	Part number	Description
	WM026049	Check valve (version 2)
1	WM025955	Housing , check valve
2	WM000464	O-ring ID=47
3	WM000462	O-ring ID=42
4	WM000454	Spring T=1, ID=10
5	WM000465	O-ring ID=4.3
6	WM000444	Knob
7	WM000467	Spring, pin L=20
8	WM000443	Valve
9	WM000466	Gasket
10	WM000469	Washer, plain OD=36.0
11	WM000456	Spring
12	WM000445	Washer, retaining OD=12.5, with extra rib
13	WM000468	Washer, plain ID=6.4, OD=12.0
14	WM003152	Seal (rubber)



## 12.5 Global inlet

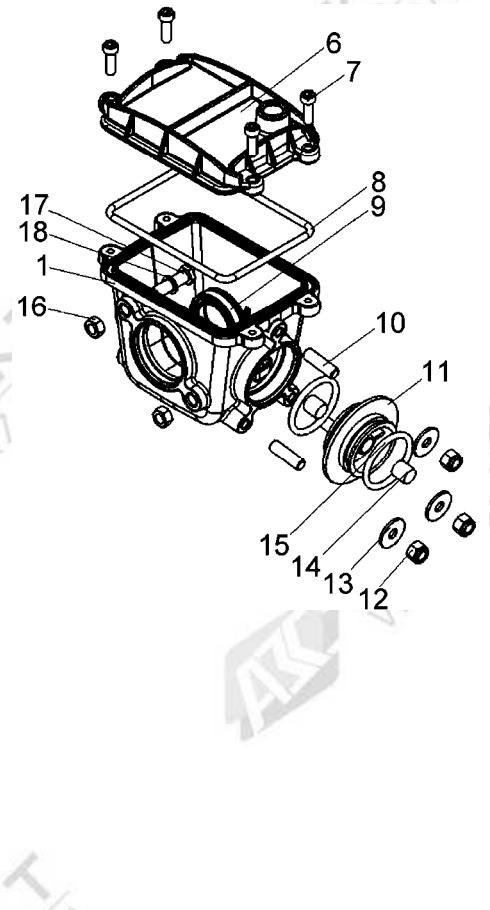
	Part number	Description
1	WM002209	Magnet, block OD=12, L=13
2	WM000436	Strainer
		Tube, flexible
3	WM000788-0001	350 mm (option)
	WM000788-0005	425 mm (standard)
	WM000788-0002	550 mm (option)
	WM000788-0003	625 mm (option)
	WM000788-0004	750 mm (option)
4		Tube, flexible - triangular flange (option)
	WM044091	Gasket
	WM029703-0001	350 mm (option)
	WM029703-0002	425 mm (option)
	WM029703-0003	650 mm (option)

**NOTE!**  
The magnets are powerful. Be careful not to get pinched when handling the magnets.



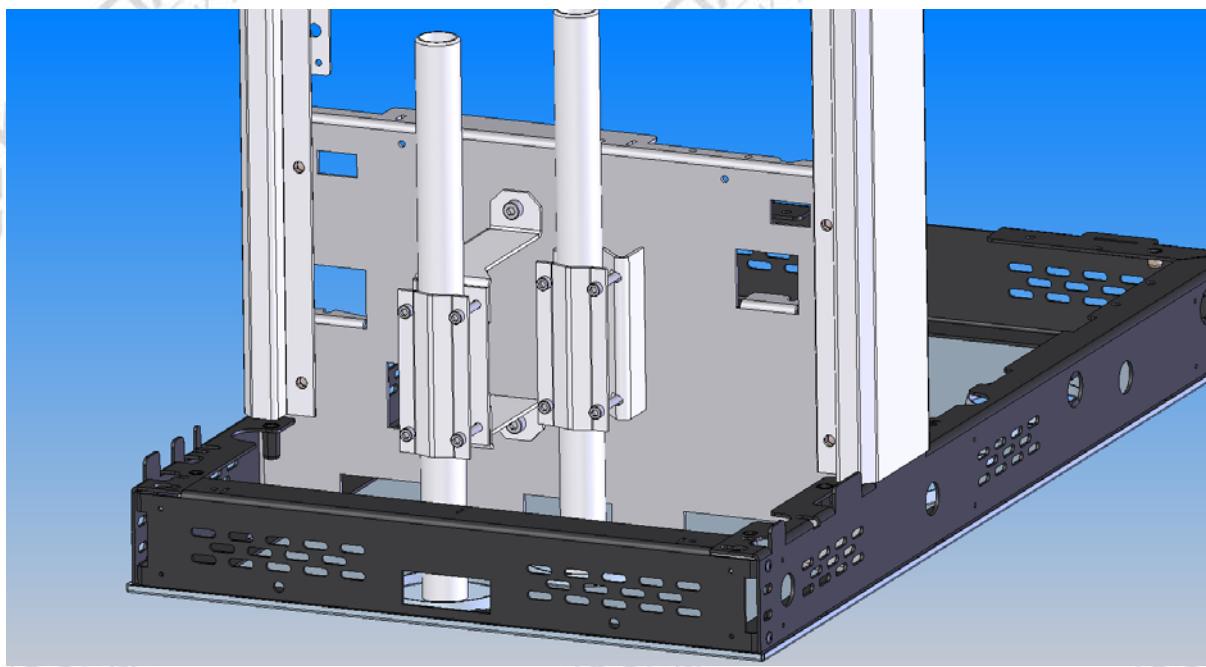
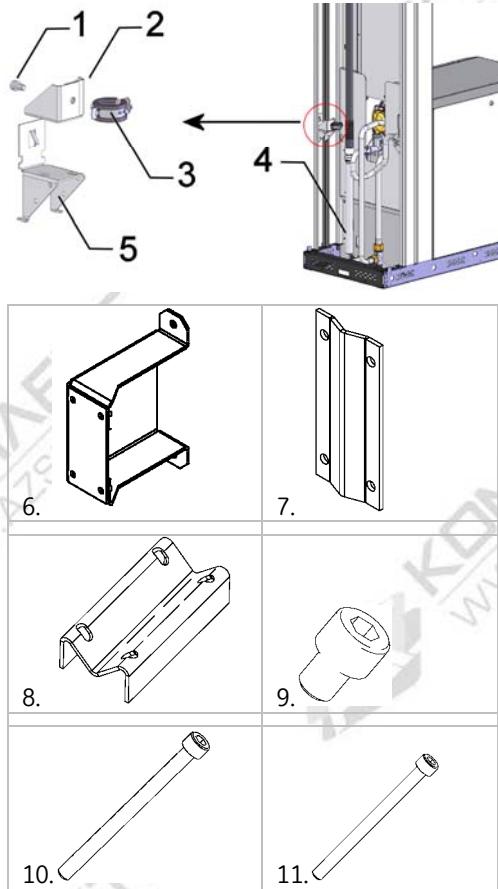
## 12.6 Filter pot

	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	Bio diesel, inlet left
	WM021502-0006	Bio diesel, 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	Bio diesel
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
		Lock nut, M8 (Do not tighten too hard, T=3 Nm) (for galvanic isolation use washer WM000627-001 and lock nut WB000229-0004)
12	WB000229-0004	Washer, plain, M8 , large ID=8.4, OD=24, T=2
13	WM002209	Magnet
14	WM020495	O-Ring T=3,65, ID=41,5
15	WB000228-0004	Nut, M8
16	WM017243	Seal ID=8,7, OD=14, T=1,5
17	WM009022-0001	Screw, hex head, M8 x32, low head, thread 12 MM
18		



## 12.7 Holder Slave/SAT

	Part number	Description
<b>Inlet Global Star V Slave/SAT</b>		
1	WB000212-0003	Screw, hexagon socket cap, M8 X 12
2	WM037779	Support, L-shape, for clamp
3	WM023073	Clamp, 32-35mm
4	WM037776	Steel tube
5	WM032782	Support U-shape
<b>SAT tube holder</b>		
6	WM042945	Box-shape support [1]
7	WM042949	V-shape support [2]
8	WM042954	Z-shape support [1]
9	WB000212-0002	M8x16 [2]
10	WB000211-0014	M6x80 [4]
11	WB000211-0002	M6x45 [4]
 <b>WARNING!</b>		<p>Dresser Wayne strongly recommends using emergency shut-off valves to prevent substantial fuel leakage (not supplied by Wayne). Observe strict compliance with local installation instructions, to avoid pipe/pump leakage that may result in substantial fuel leakage.</p>
 Emergency shut-off valve		



SAT tube holder

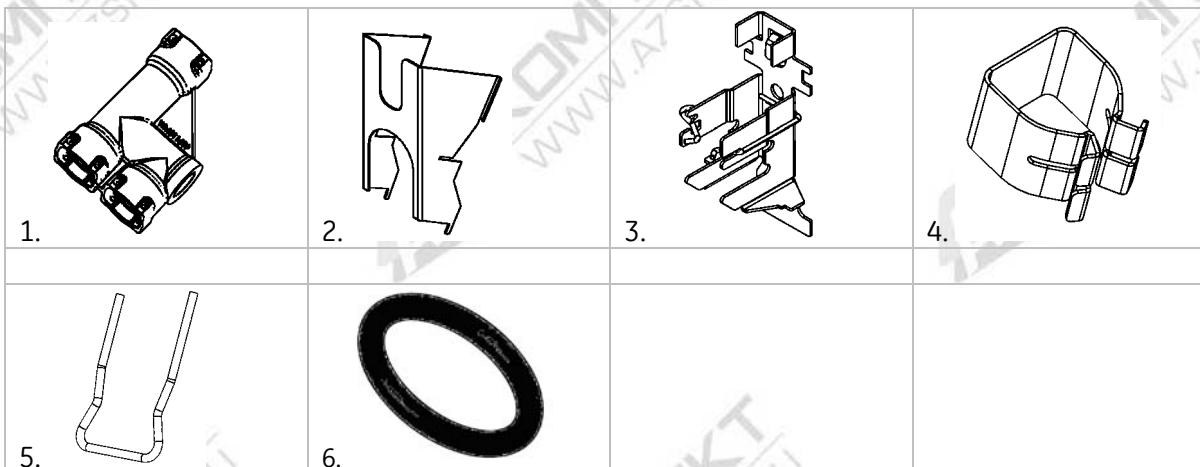
## 13 Tubes



You will find the tube number printed on the tube.



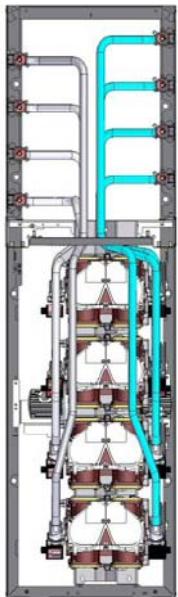
### 13.1 Misc.



	<b>Part number</b>	<b>Description</b>
1	WM011609	Coupling, female double bump, 2 inlet, 1 outlet
2	WM041139	Cover, hose connector
3	WM030445	Hose connector with pin
4	WM028990	Hose connector VR lock
5	WM042967	Lock pin for tube fitting
6	WM024393	O-ring T=4,2 id=23
	WM038241	Vapour tubes to hose connector, T=3,53, id=9,12
	WM041834	Vapour tubes, T=3,0, id=9,0

## Tubes - Fuel delivery

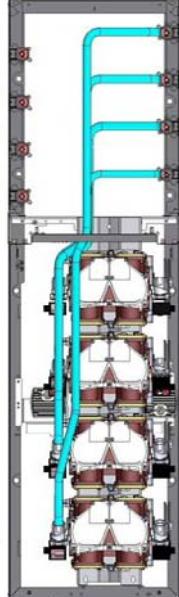
Nozzle 4A  
Nozzle 3A  
Nozzle 2A  
Nozzle 1A



A      B

Double sided

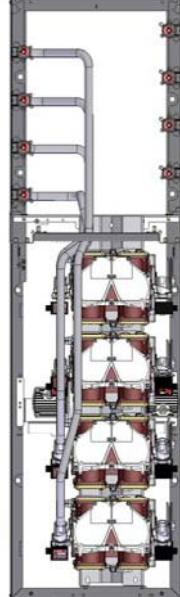
Nozzle 4A  
Nozzle 3A  
Nozzle 2A  
Nozzle 1A



A      B

Single A

Nozzle 4B  
Nozzle 3B  
Nozzle 2B  
Nozzle 1B

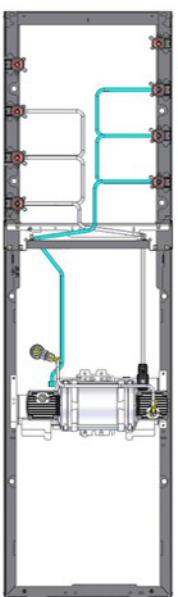


A      B

Single B

## Tubes - Vapour

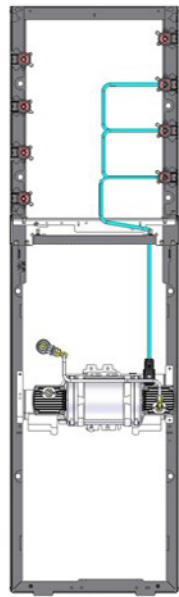
Nozzle 4A  
Nozzle 3A  
Nozzle 2A  
Nozzle 1A



A      B

Double sided

Nozzle 4A  
Nozzle 3A  
Nozzle 2A  
Nozzle 1A



A      B

Single A

Nozzle 4B  
Nozzle 3B  
Nozzle 2B  
Nozzle 1B



A      B

Single B

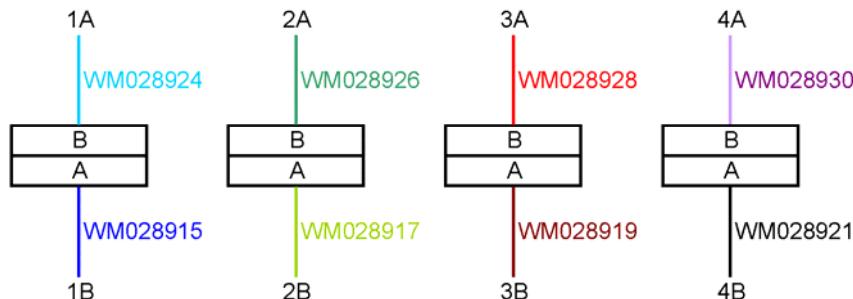
## 13.2 HH & HHR

### 13.2.1 Liquid tubes (HH & HHR)

#### STANDARD

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

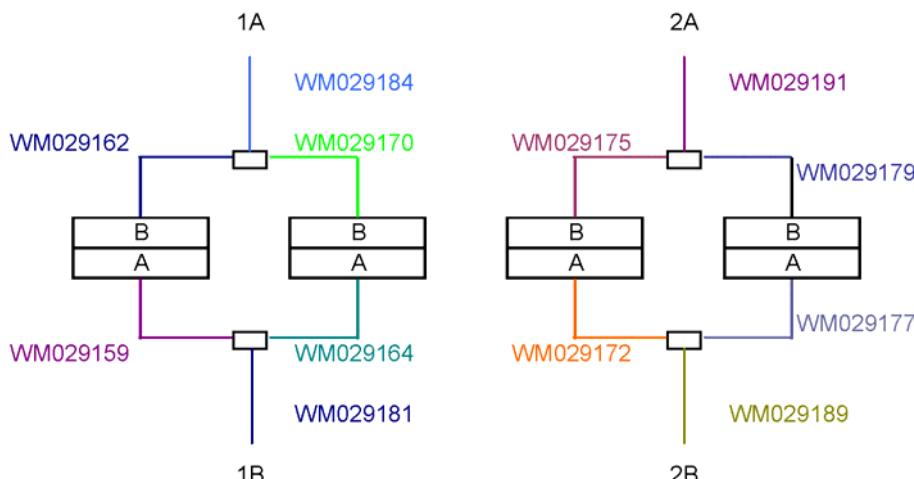
Flow rate  
 40 & 70 & 40-70



#### HIGH FLOW MODELS

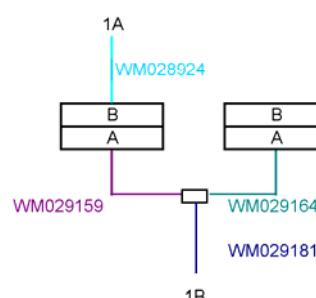
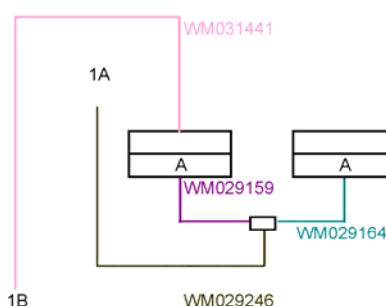
Style  
 11-21\*  
 22-42\*

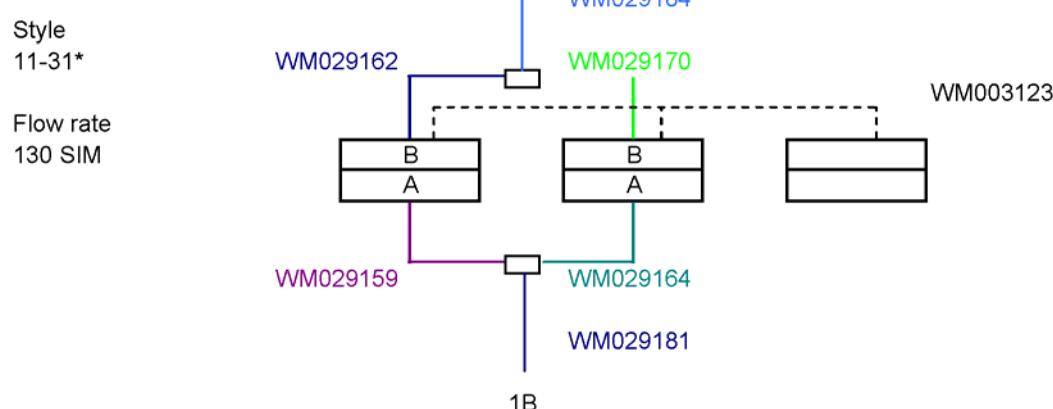
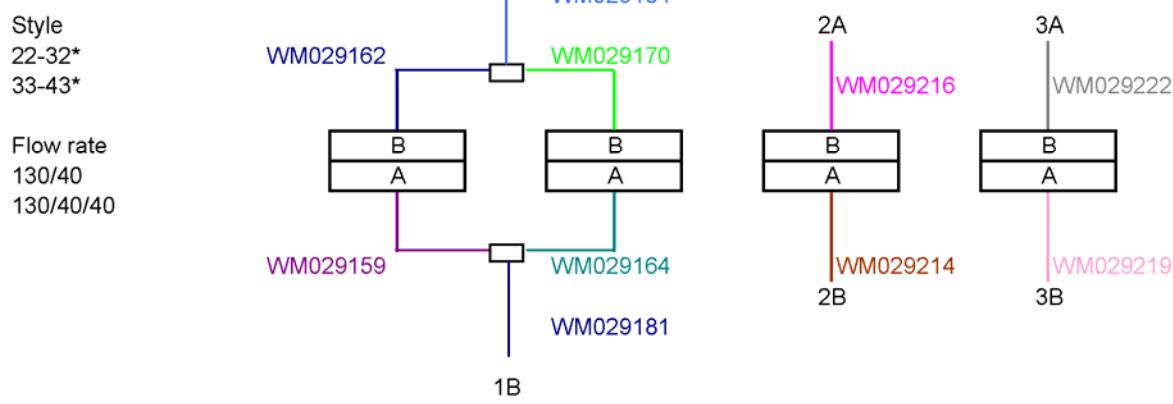
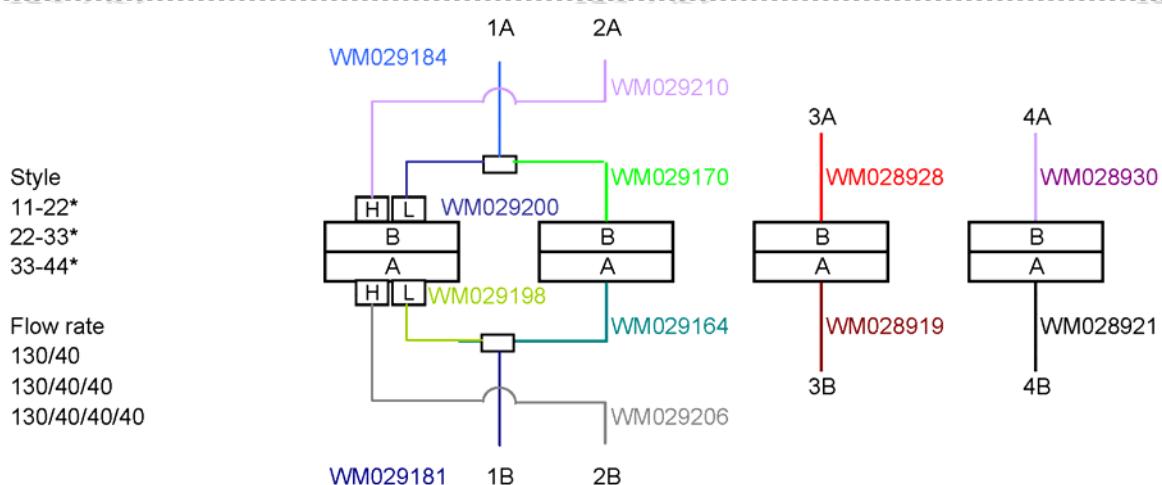
Flow rate  
 130



Style  
 11-211

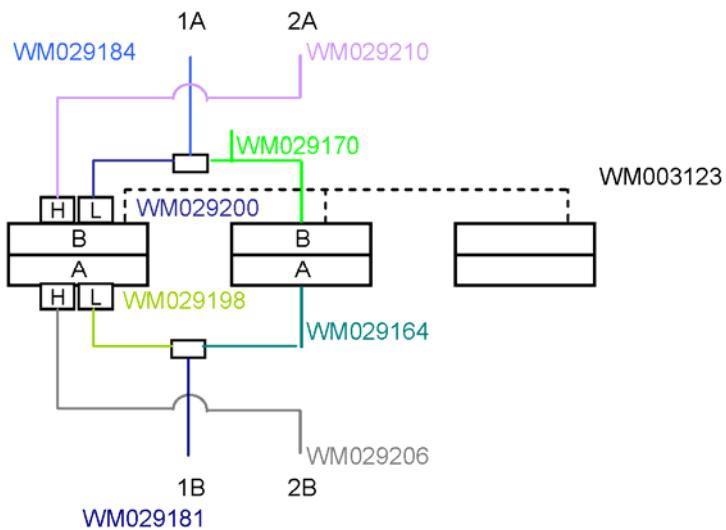
Flow rate  
 130/40





Style  
11-32\*

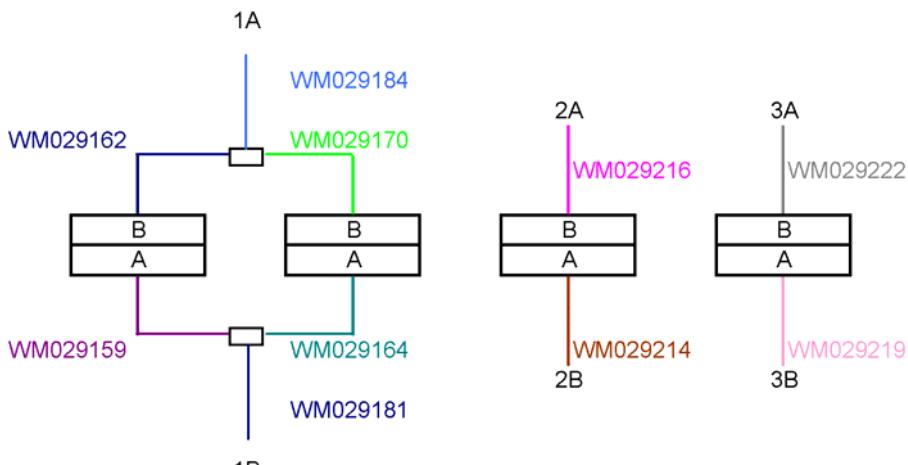
Flow rate  
130 SIM/40



## BLEND MODELS

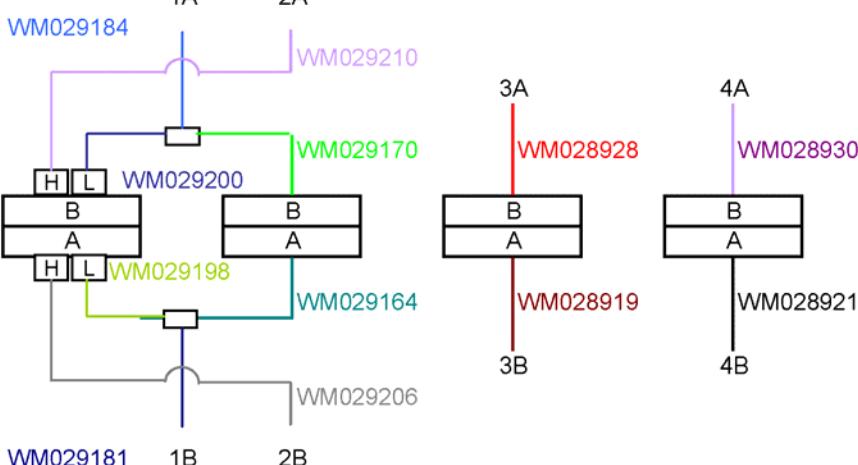
Style  
23-21\*  
34-32\*  
45-43\*

Flow rate  
40



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

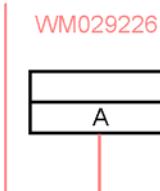
Flow rate  
40/40  
40/40/40  
40/40/40/40



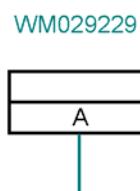
## SINGEL SIDE MODELS

1A

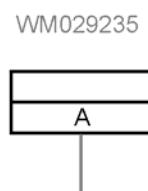
Style  
11-11 SA  
22-22 SA  
33-33 SA  
44-33 SA



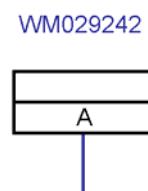
2A



3A



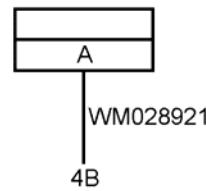
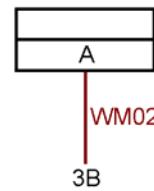
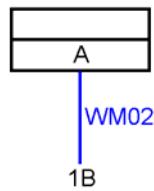
4A



Flow rate  
40 & 70 & 40-70

Style

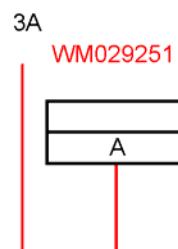
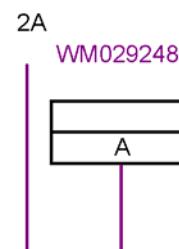
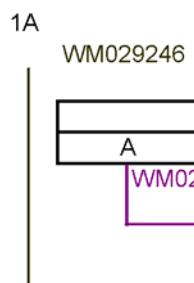
11-11 SB  
22-22 SB  
33-33 SB  
44-44 SB



Flow rate  
40 & 70 & 40-70

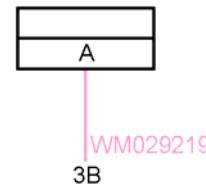
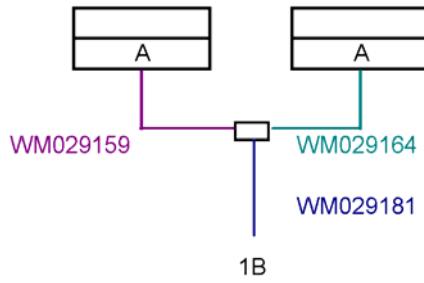
Style

11-21 SA  
22-32 SA  
33-43 SA



Flow rate  
130  
130/40  
130/40/40

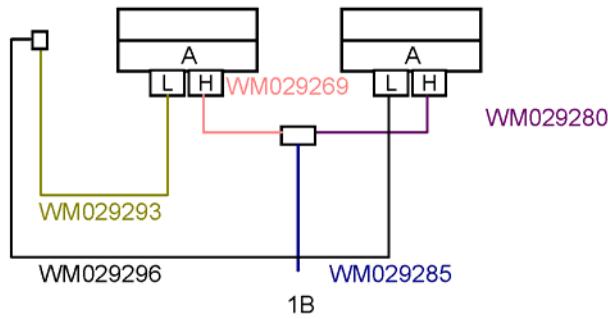
Style  
11-21 SB  
22-32 SB  
33-43 SB



Flow rate  
130  
130/40  
130/40/40

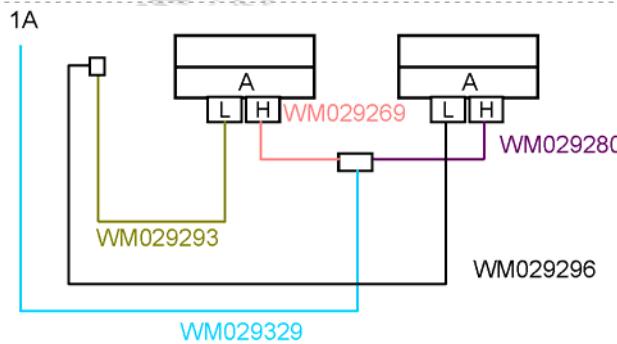
Style  
11-21 SB

Flow rate  
130 SAT



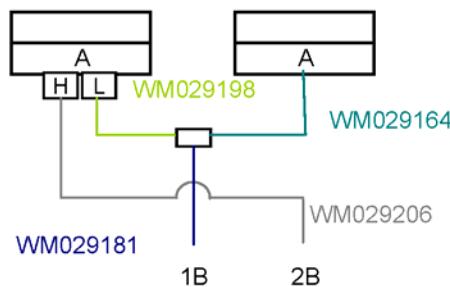
Style  
11-21 SA

Flow rate  
130 SAT



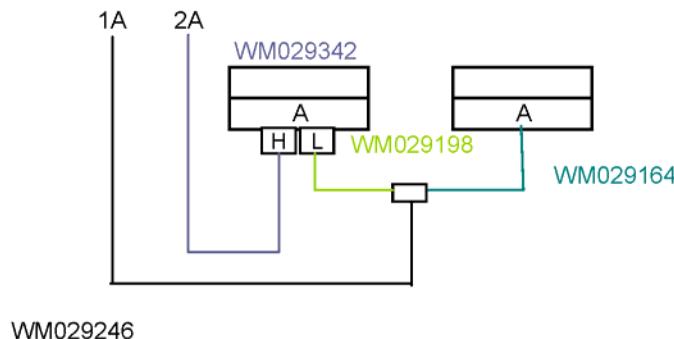
Style  
11-22 SB

Flow rate  
130/40



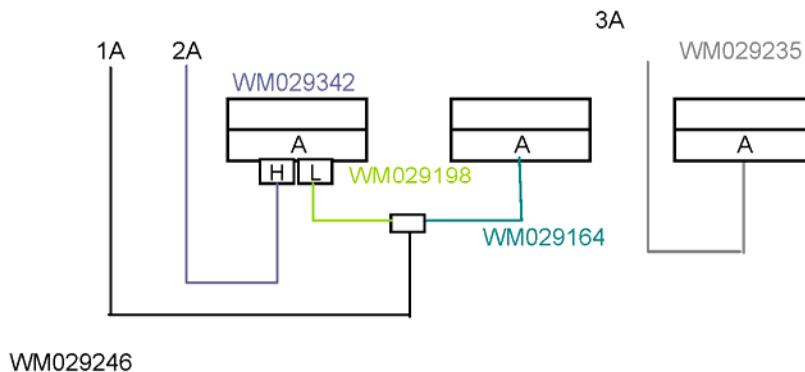
Style  
11-22 SA

Flow rate  
130/40



Style  
22-33 SA

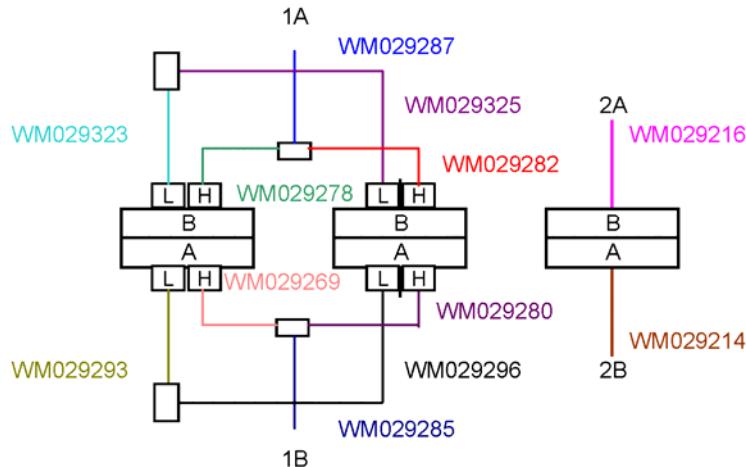
Flow rate  
130/40/40



## SAT MODELS

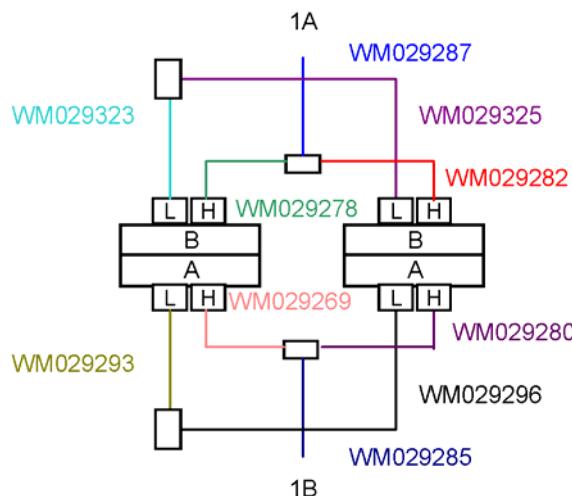
Style  
22-32\*

Flow rate  
130 SAT OUT/40



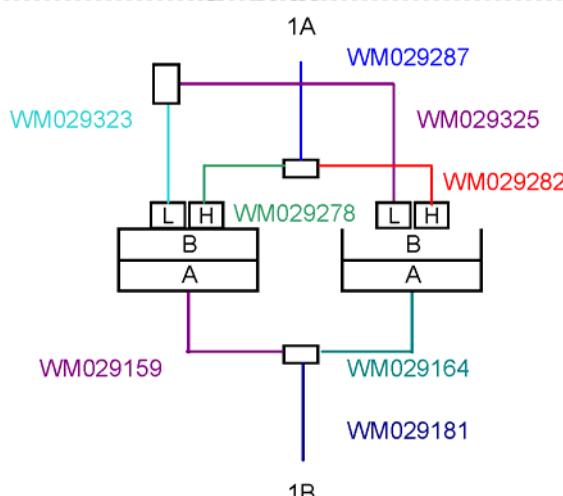
Style  
11-21\*

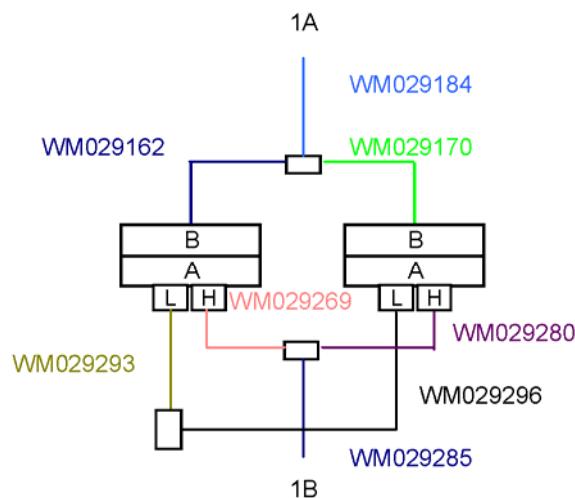
Flow rate  
130 SAT OUT//



Style  
11-211

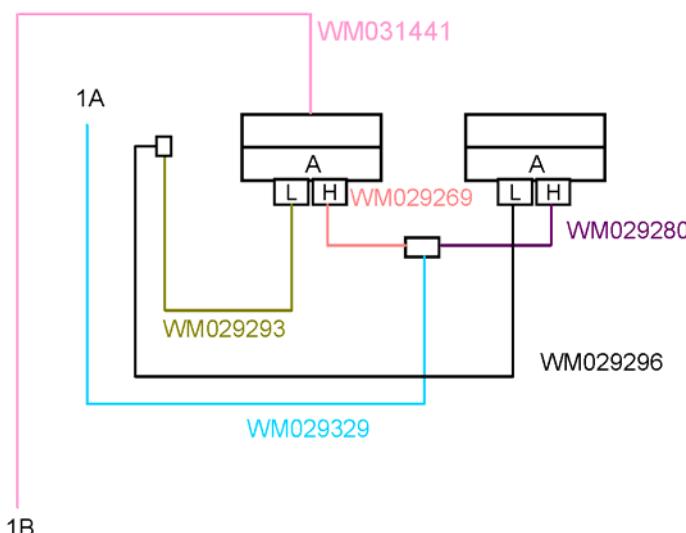
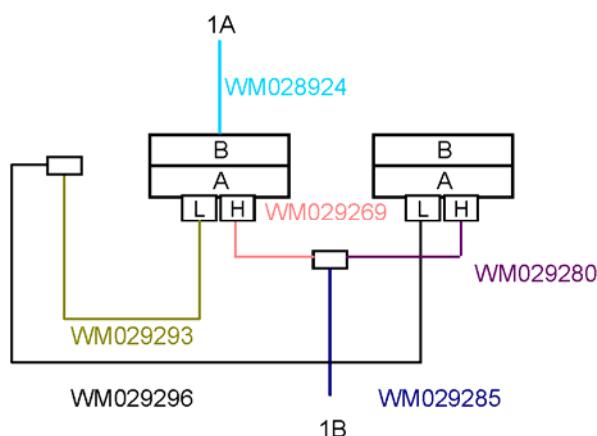
Flow rate  
130 SAT OUT//130





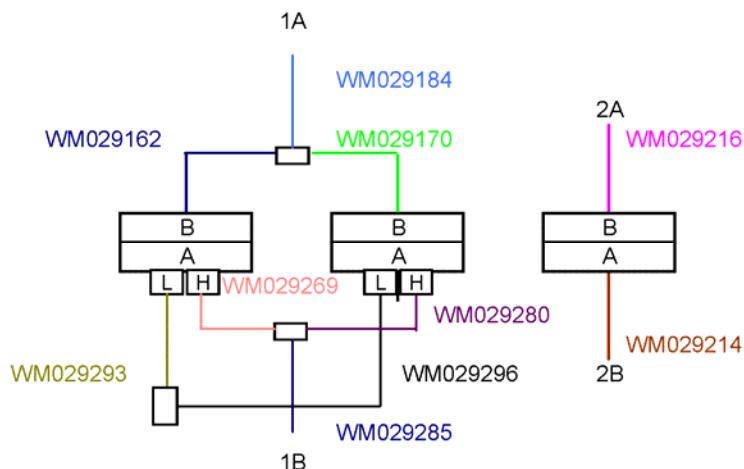
Style  
11-211

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.

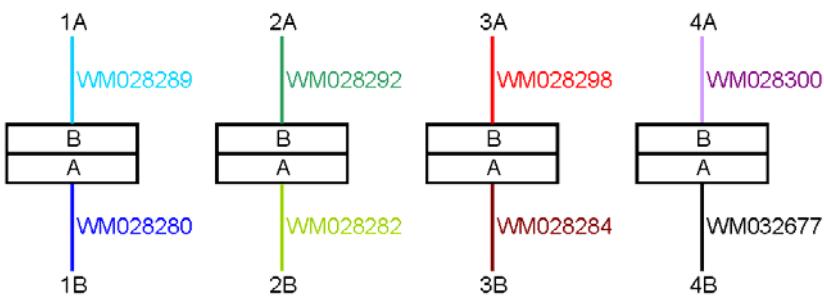
	Part number	Description
	WM011609	Coupling, female double bump, 2 inlet, 1 outlet
	WM028924	Side B, hydraulic 1, hose connection 1B
	WM028926	Side B, hydraulic 2, hose connection 2B
	WM028928	Side B, hydraulic 3, hose connection 3B
	WM028930	Side B, hydraulic 4, hose connection 4B
	WM028915	Side A, hydraulic 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
	WM041885	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
	WM036828	Side A, hydraulic 2, hose connection 1A
	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
	WM041888	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 tubes (HH & HHR) (first two years of production)

### STANDARD

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

Flow rate  
 40/40/40/40  
 40-70/40/40/40  
 70/40/40/40



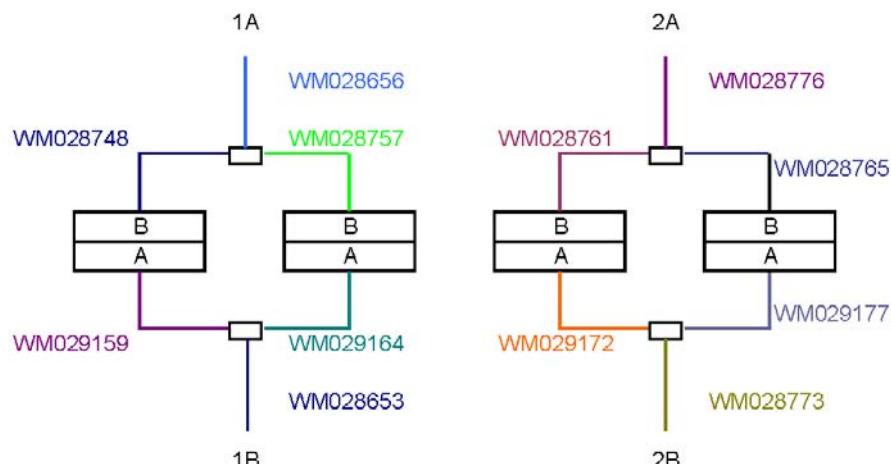
### HIGH FLOW MODELS

Style  
 11-21\*  
 22-42\*

Flow rate  
 130

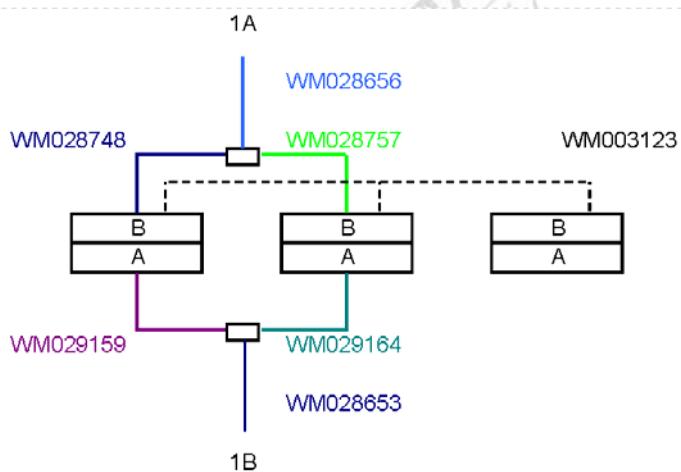
Style  
 23-21\*

Flow rate  
 40



Style  
 11-31\*

Flow rate  
 130 SIM



**Style**

22-32\*

33-43\*

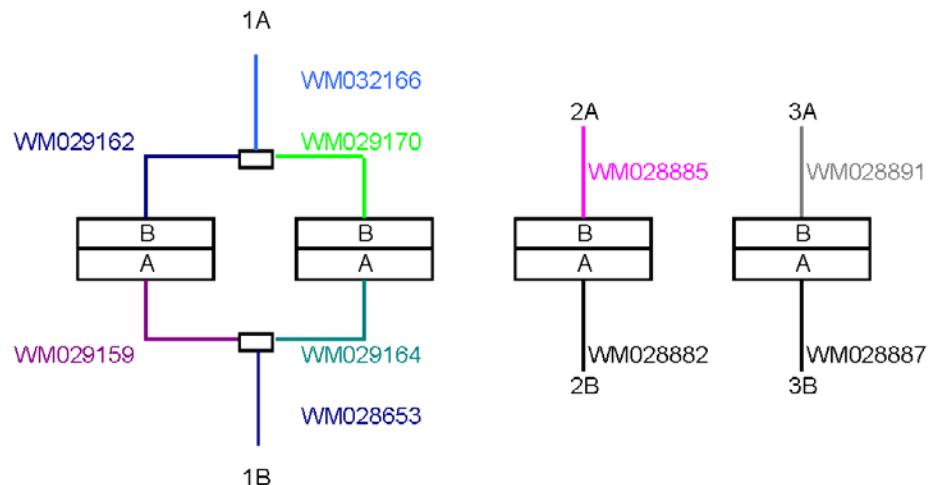
34-32\*

45-43\*

**Flow rate**

130/40

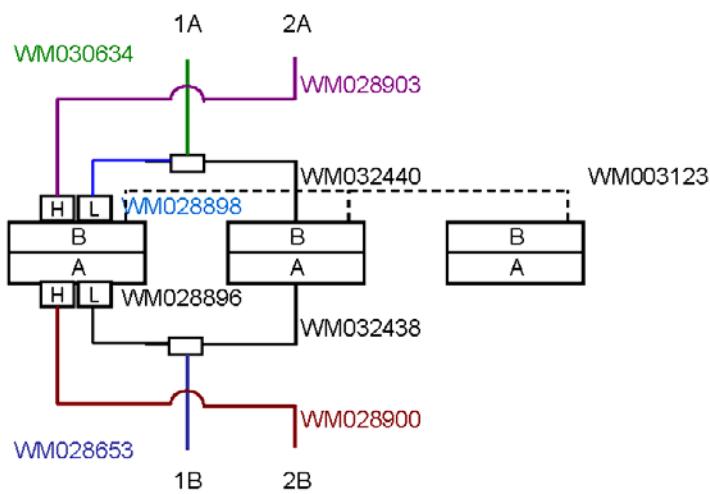
130/40/40



**Style**

11-32\*

**Flow rate**  
130 SIM/40



**Style**

11-22\*

22-33\*

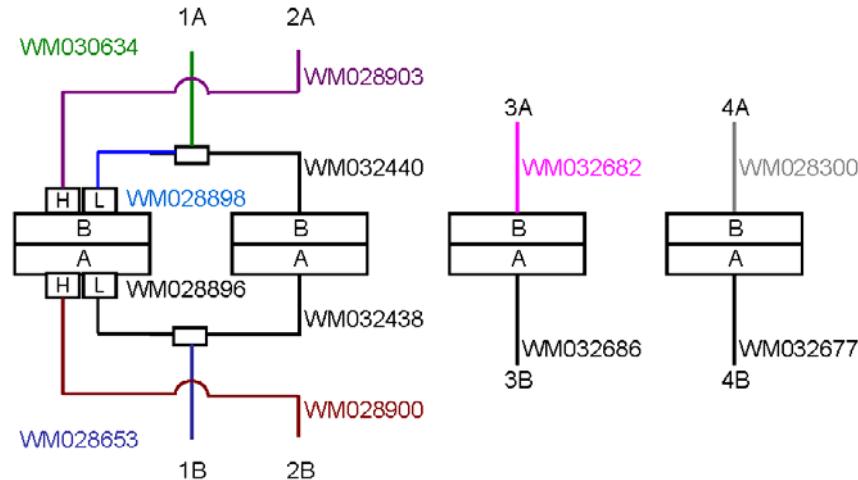
33-44\*

**Flow rate**

130/40

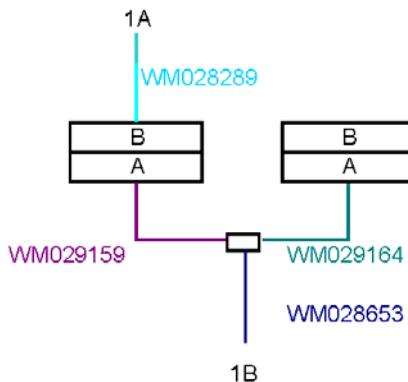
130/40/40

130/40/40/40



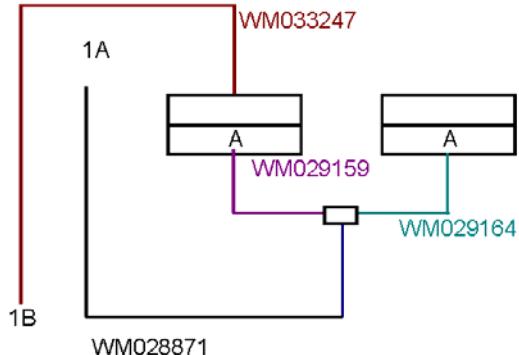
Style  
11-211

Flow rate  
40//130



Style  
11-211

130//40

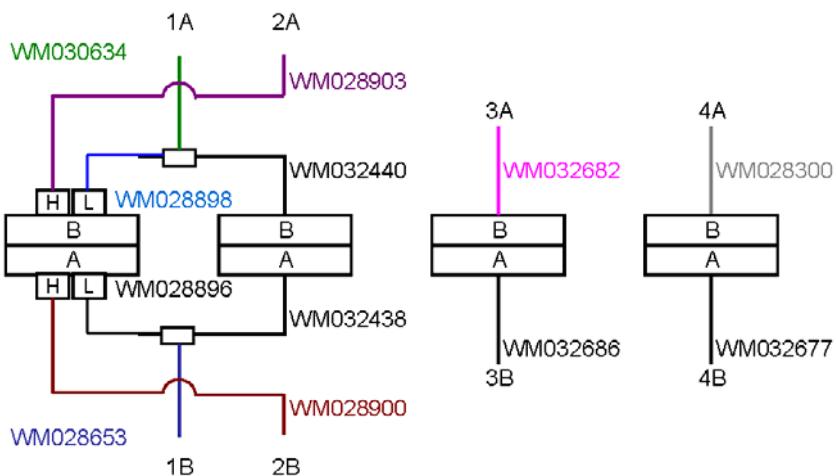


OBS!  
Divider panel can't be used on this model

## BLEND

Style  
23-22\*  
34-33\*  
45-44\*  
46-44\*

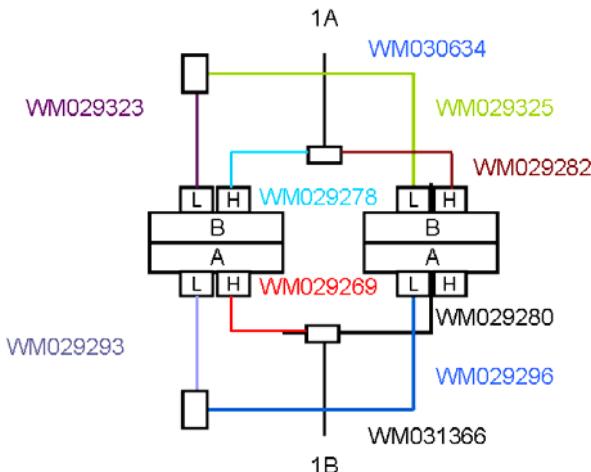
Flow rate  
40/40  
40/40/40  
40/40/40/40



SAT

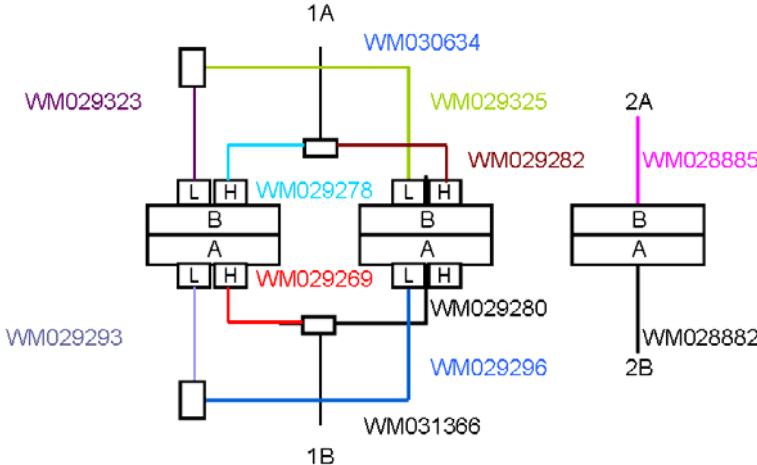
Style  
11-21\*

Flow rate  
SAT OUT 130



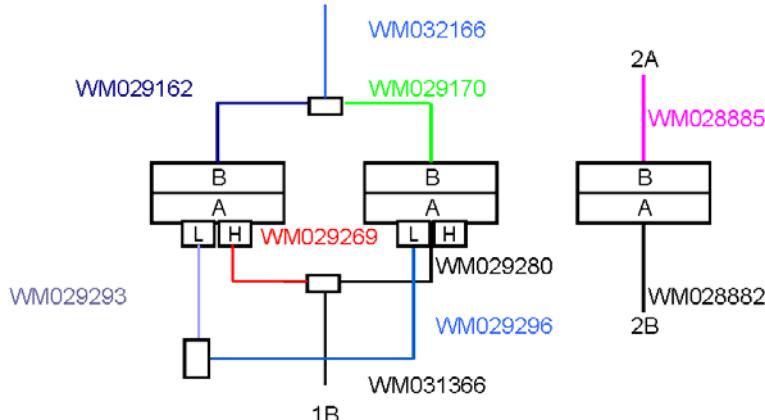
Style  
22-32\*

Flow rate  
130 SAT OUT/40



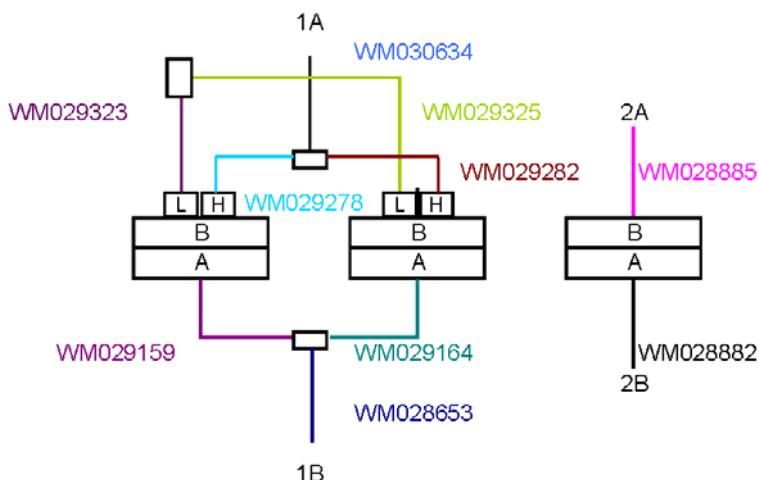
Style  
11-21  
22-32

130//130 SAT B  
130/40 SAT B



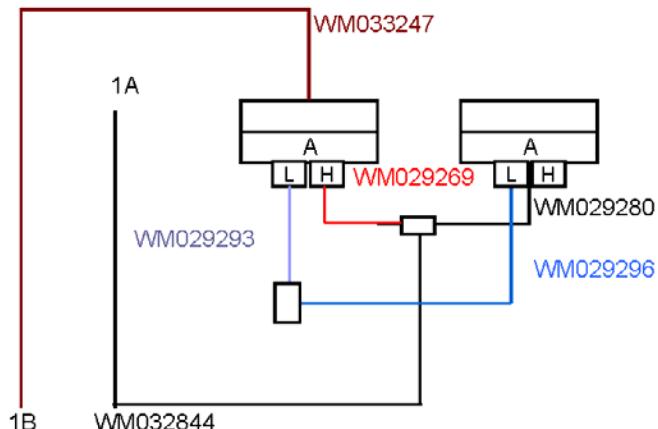
Style  
22-32

Flow rate  
130/40 SAT A



Style  
11-211

Flow rate  
130 SAT OUT//40



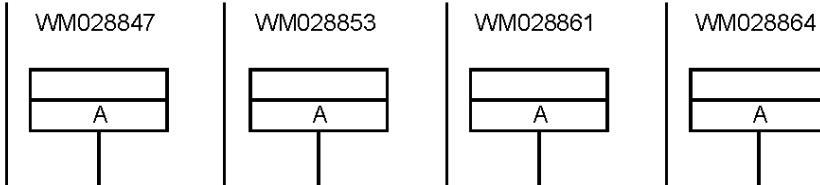
OBS!  
Divider panel can't be used on this model

## SINGEL

1A                  2A                  3A                  4A

Style  
11-11 SA  
22-22 SA  
33-33 SA  
44-33 SA

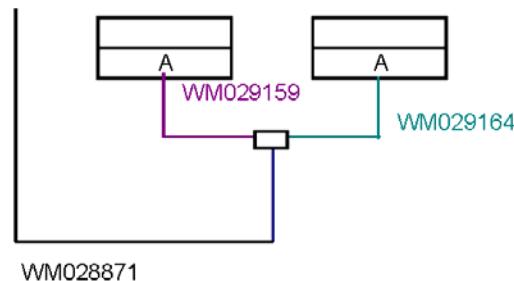
Flow rate  
40/40/40/40  
40-70/40/40/40  
70/40/40/40



Style  
11-21 SA  
23-21 SA

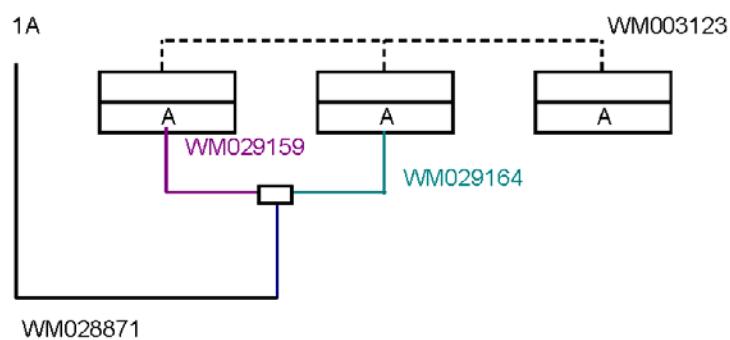
Flow rate  
130

1A



Style  
11-31 SA  
130 SIM

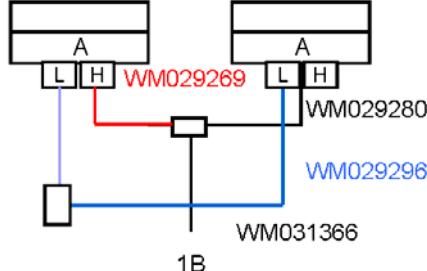
1A



Style  
11-21 SB

Flow rate  
130 SAT

WM029293



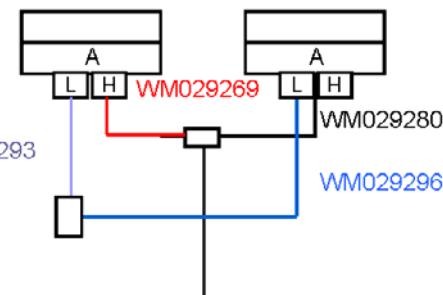
1B

Style  
11-21 SA  
Flow rate  
130 SAT

1A

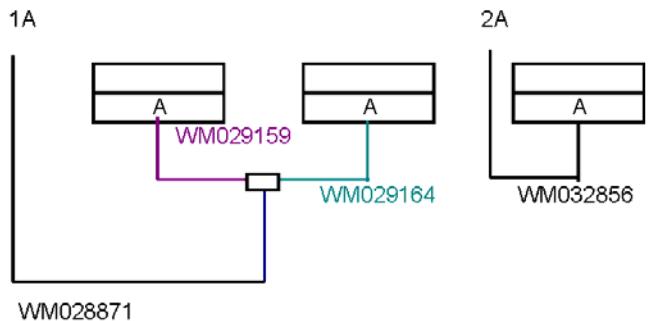
WM029293

WM032844



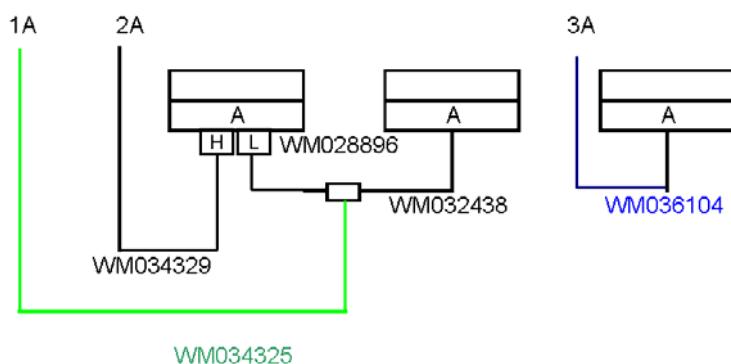
Style  
22-32 SA

Flow rate  
130/40



Style  
11-22 SA  
22-33 SA

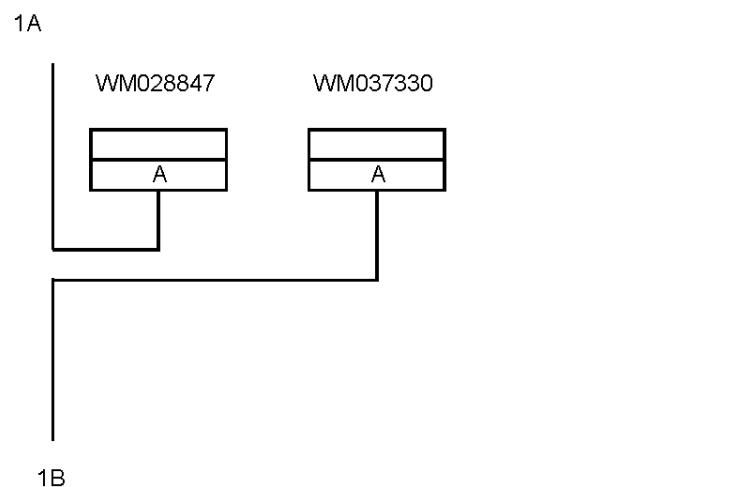
Flow rate  
130/40  
130/40/40



### SPECIAL

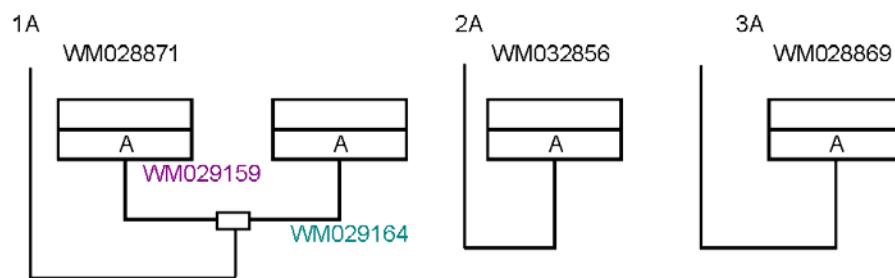
22-211

40//  
70//  
40-70//



Style  
11-21 SB  
22-32 SB  
33-43 SB

Flow rate  
130  
130/40  
130/40/40

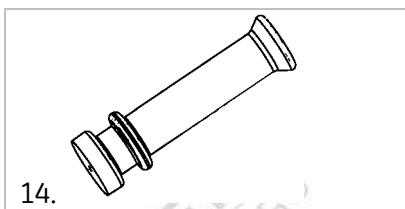
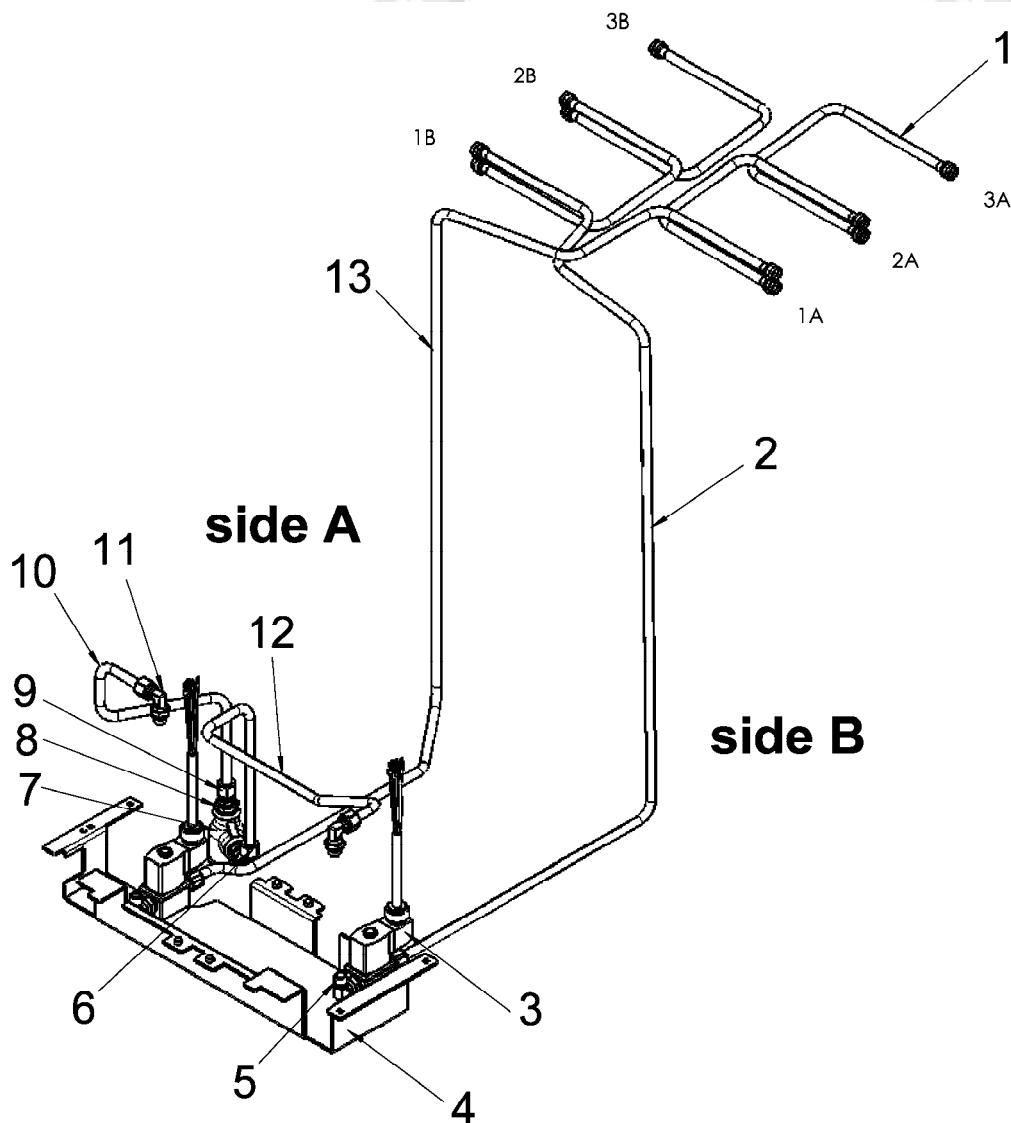


Liquid tubes (HH & HHR) (first two years of production)

	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)

Tubes vapour - suction (HH & HHR), first year of production, see page 70.

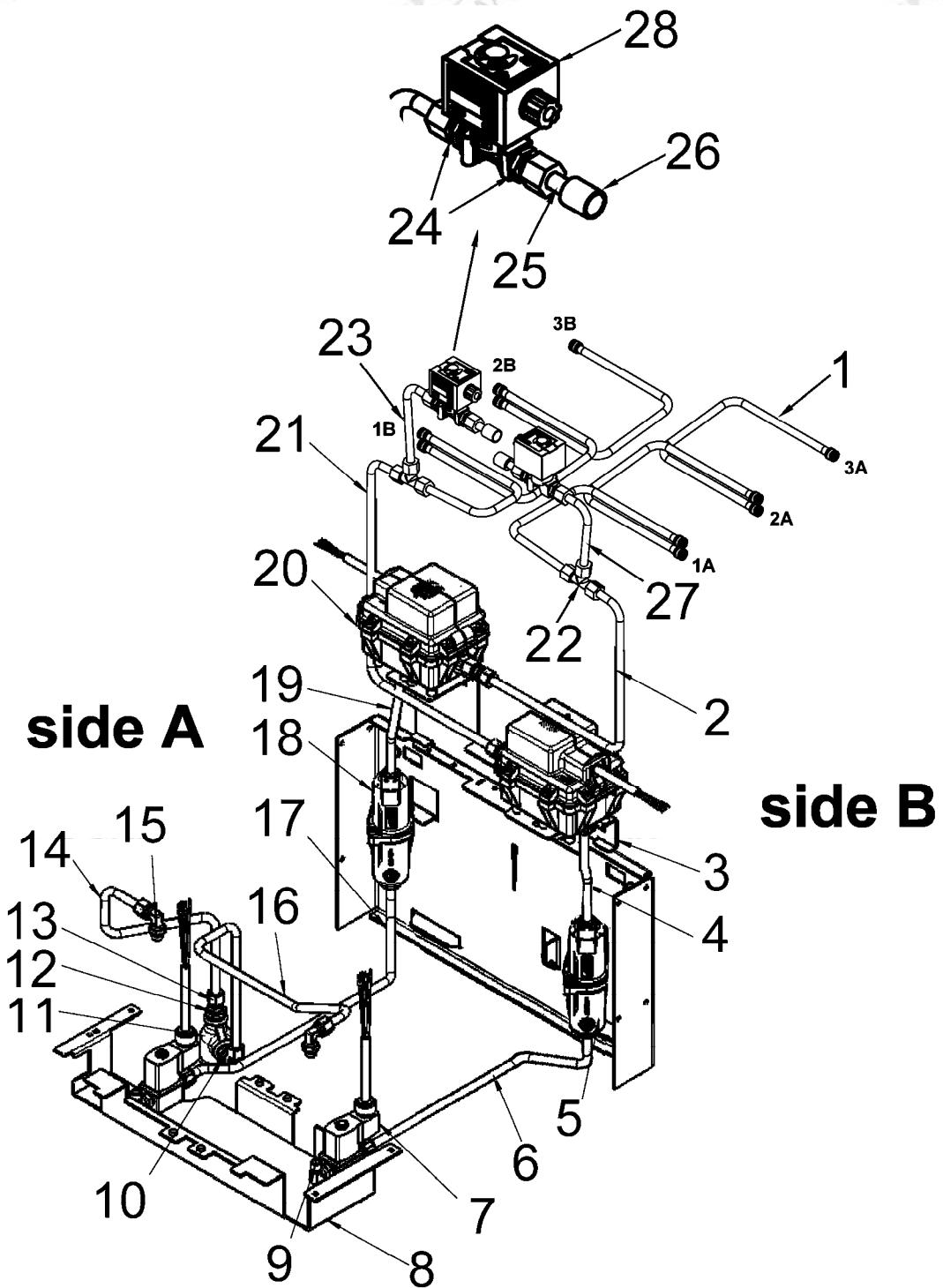


	Part number	Description			
1		<b>Tube, hose adapter - hose adapter</b>			
	WM028933	L=141 (each)			
	WM029405	L=281 (every two)			
	WM029407	L=420 (every third)			
2 13		<b>Pump - hose connection</b>			
		<b>Suction</b>		<b>Remote</b>	
	Hose connection	A side	B side	A side	B side
	1	WM028948	WM030601	WM028952	WM030667
	2	WM029432	WM029439	WM029451	WM029454
	3	WM029441	WM029444	WM029549	WM029552
	4	WM029446	WM029448	WM029555	WM029557
		<b>Pump - hose connection</b>			
		<b>Suction 1 phase</b>		<b>Remote 1 phase</b>	
	Hose connection	A side	B side	A side	B side
	1	WM030740	WM030601	WM030753	WM030677
	2	WM030746	WM029439	WM030758	WM029454
	3	WM030748	WM029444	WM030760	WM029552
	4	WM030750	WM029448	WM030762	WM029557
		<b>Pump - hose connection</b>			
		<b>Suction singel</b>		<b>Remote singel</b>	
		Singel A	Singel B	Singel A	Singel B
	1	WM028950	WM030601	WM028954	WM030677
	2	WM030697	WM029439	WM030679	WM029454
	3	WM030705	WM029444	WM030681	WM029552
	4	WM030710	WM029448	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		<b>Tube, vapour, side A, pump - outlet</b>			
	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		<b>Tube, vapour, side B, pump - outlet</b>			
	WM028536	Suction			
	WM028566	Remote			
13		see above			
14	WM031400	Plug, d=10, l=50 with O-ring (for quick hose connector - vapour)			

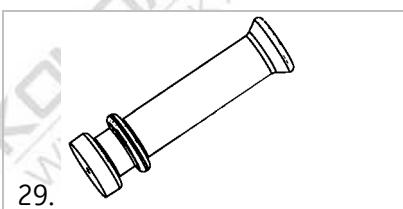
Vapour tubes from pump to outlet, see page 74

#### 13.2.4 Tubes vapour gate - suction (HH & HHR)

Tubes vapour gate - suction (HH & HHR), first year of production, see page 72.

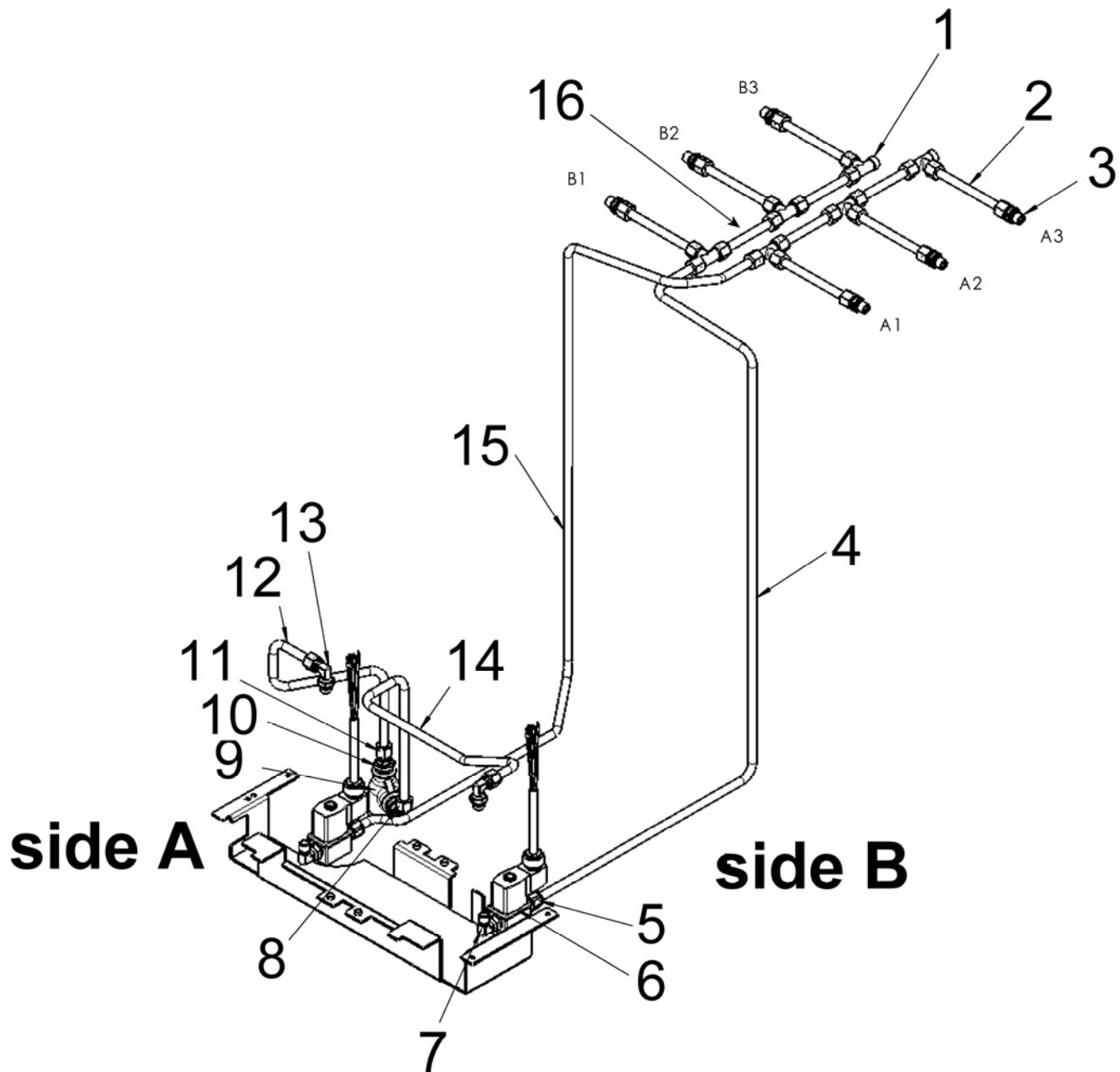


VRM system overview, see page 86.



	Part number	Description		
1		Tube, hose adapter - hose adapter		
	WM028933	L=141 (each)		
	WM029405	L=281 (every two)		
	WM029407	L=420 (every third)		
21		Vapour meter - hose connection		
	Hose connection	A side                          B side                          singel A		
	1	WM030595 (WM041640 + WM041577)	WM030599 (WM041605 + WM041614)	WM031380 (WM041640 + WM041577)
	2	WM031352 (WM041640 + WM041628)	WM031338 (WM041605 + WM041649)	WM031382 (WM041640 + WM041628)
	3	WM031354 (WM041640 + WM041631)	WM031347 (WM041605 + WM041660)	WM031384 (WM041640 + WM041631)
	4	WM031357 (WM041640 + WM041640)	WM031349 (WM041605 + WM041666)	WM031386 (WM041640 + WM041640)
		Tubes inside the parentheses is used when solenoid valves are used (option).		
3	WM028197	Support, L-shape		
4	WM038656	Tube, vapour meter - damper (for horizontal damper, on picture, WM028526 - see also figure on page 25)		
5	WM038082	Damper (quick hose connection)		
6		Tube, vapour, side B, damper - valve		
	WM038657	Suction (for horizontal damper, on picture, WM028532 - see also figure on page 25)		
	WM038660	Remote (for horizontal damper, on picture, WM028548 - see also figure on page 25)		
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		
	WM038646	Suction (3-phase)		
	WM038647	Remote (3-phase)		
	WM038649	Suction (1-phase)		
	WM038651	Remote (1-phase)		
18	WM038082	Damper (quick hose connection)		
19	WM038654	Tube, vapour meter - damper		
20	WM038133-0002	Vapour meter with cable 2,5m		
21		see above		
22	WM020460	T-coupling T D=10 (option)		
23	WM041620	Tube, vapour, T-coupling - check valve (option)		
24	WM020593	Coupling, straight male GE 1/4" D=10 (option)		
25	WM021787	Tube, vapour, vapour gate, prop valve to filter, side A, B (option)		
26	WM021571	Strainer 200 microns (option)		
27	WM041622	Tube, vapour, T-coupling - check valve (option)		
28		<b>Solenoid valve, on/off, single (option)</b>		
	WM021576-0001	Cable L=3m		
	WM021576-0002	Cable L=5m		
29	WM031399	Plug, d=10, l=50 (for quick hose connector - vapour)		

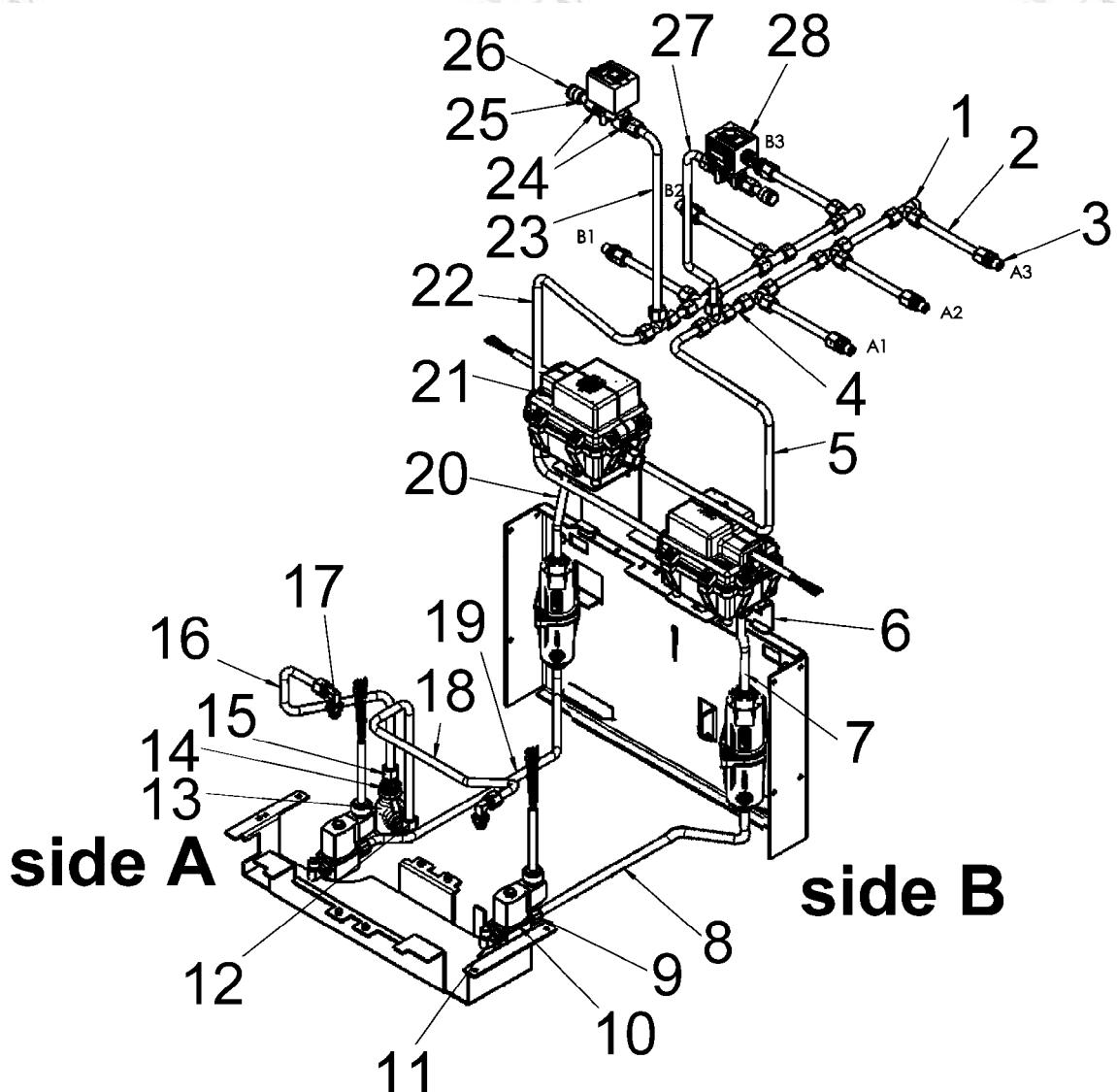
**13.2.5 Tubes vapour - suction (HH & HHR) (first year of production)**



	<b>Part number</b>	<b>Description</b>
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		<b>Tube, vapour, side A, T-coupling - pump side B</b>
	WM030383	Suction
	WM030427	Remote
5	WM002037	Coupling, straight 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		<b>Tube, vapour, side A, pump - outlet</b>
	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		<b>Tube, vapour, side B, pump - outlet</b>
	WM028536	Suction
	WM028566	Remote
15		<b>Tube, vapour, side B, T-coupling - pump side A</b>
	WM030380	Suction (3-phase)
	WM030425	Remote (3-phase)
	WM030429	Suction (1-phase)
	WM030431	Remote (1-phase)
16		<b>Tube, vapour</b>
	WM016719	L=110 mm (each)
	WM016790	L=250 mm (every two)
	WM016791	L=390 mm (every third)

Vapour tubes from pump to outlet, see page 74

**13.2.6 Tubes vapour gate - suction (HH & HHR) (first year of production)**

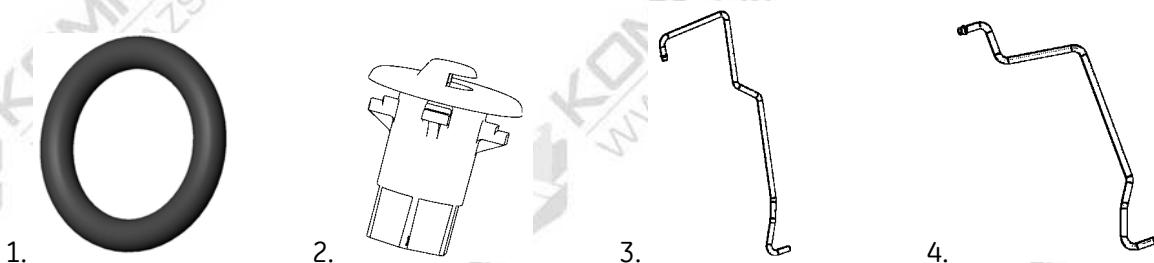


	<b>Part number</b>	<b>Description</b>
	WM018634	Damper
1	WM020460	T-coupling T D=10
2	WM028512	Tube, vapour, vapour gate adapter - T-coupling, L=142
3	WM020593	Coupling, straight male GE 1/4" D=10
4		<b>Tube, vapour</b>
	WM023557	L=51 mm
	WM016719	L=110 mm (each)
	WM016790	L=250 mm (every two)
	WM016791	L=390 mm (every third)
5		<b>Tube</b>
	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	WM037338	Tube, vapour meter - damper (for horizontal damper, on picture, WM028526 - see also figure on page 25)
8		<b>Tube, vapour, side B, damper - valve</b>
	WM037340	Suction (for horizontal damper, on picture, WM028532 - see also figure on page 25)
	WM037342	Remote (for horizontal damper, on picture, WM028548 - see also figure on page 25)
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		<b>Tube, vapour, side A, pump - outlet</b>
	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		<b>Tube, vapour, side B, pump - outlet</b>
	WM028536	Suction
	WM028566	Remote
19		<b>Tube, vapour, side A, damper - valve</b>
	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		<b>Tube, vapour, side A, T-coupling - vapour meter side B</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

### 13.2.7 Tubes vapour - from pump to outlet

	Part number	Description
	WM028534	Tube, vapour, side A, pump - outlet, suction, 3 phase
	WM028536	Tube, vapour, side B, pump - outlet, suction, 3 phase
	WM030080	Tube, vapour, side A, pump - outlet, suction, 1 phase
	WM028536	Tube, vapour, side B, pump - outlet, suction, 1 phase
	WM028560	Tube, vapour, side A, pump - outlet, dispenser, 3 phase
	WM028566	Tube, vapour, side B, pump - outlet, dispenser, 3 phase
	WM030082	Tube, vapour, side A, pump - outlet, dispenser, 1 phase
	WM028566	Tube, vapour, side B, pump - outlet, dispenser, 1 phase

### 13.3 Air venting (suction)



	Part number	Description
1.	WM006700	O-ring
2.	WM011355	Plug with strainer, for air venting
		Tube, air venting (with "single bump")
3.	WM031219	Xflo™
4.	WM031221	iMeter
	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

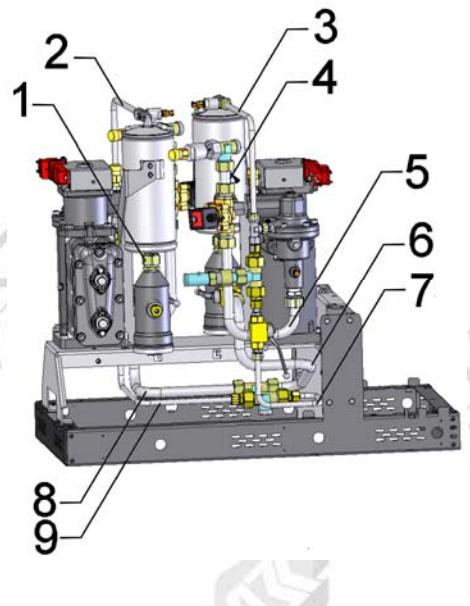
	Part number	Description
	WM021448	Kit, air venting tube connection for above ground tank
	WB000408-0002	Self tapping screw, Torx, pan head, type C ST4,8X13
	WM021446	Clamp sheet metal air venting tube
	WM006700	O-ring, T=2,62 Id=11,91, NBR, Nitrile (2 pc.)

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

## 13.4 Tubes - LPG

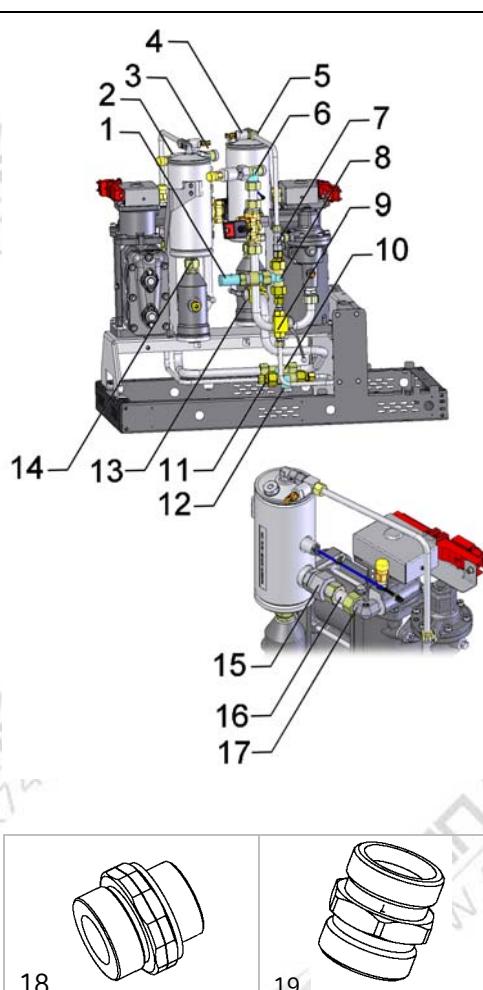
### 13.4.1 Tubes LPG module

	Part number	Description
	WM004190	Ring, cutting, DPR 22-L
	WM004189	Nut, M 22-L
	WE001173	Ring, progressive, DN 12
	WE001172	Nut, DN 12
	WM041913	Tube L=60 (to hose connector, see also coupling WM041879 kp 13.4.2 (FR))
1	WM032511	Tube fuel delivery, solenoid valve - differential valve
2	WM032490	Tube, T-coupling - T-coupling
3	WM032490	Tube, T-coupling - T-coupling
4	WM039535	Tube, L=70
5		Tube fuel delivery, solenoid valve - differential valve
	WM032511	Hydraulic A side
	WM039557	Hydraulic B side (on picture)
6	WM036037	Tube fuel delivery, inlet - filter, hydraulic A
7	WM036043	Tube outlet vapour phase, hydraulic A
5	WM036039	Tube fuel delivery, inlet - filter, hydraulic B
9	WM036045	Tube outlet vapour phase, hydraulic B

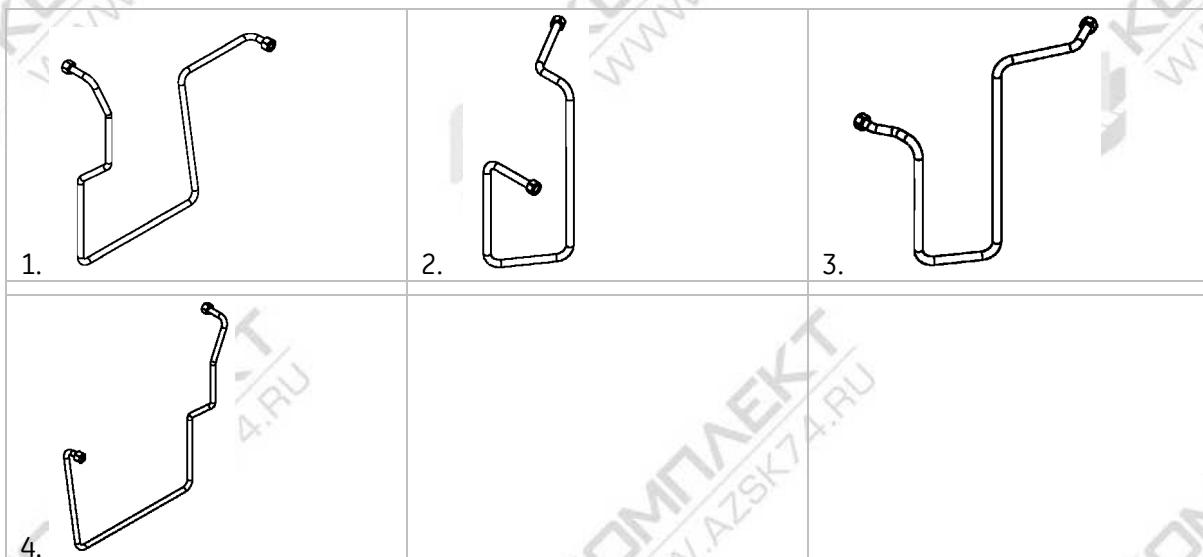


### 13.4.2 Couplings LPG module

	Part number	Description
	WM003160	Sealant Loxeal 58-11, thread sealant
1	see page 76	Fill up valve
2	see page 76	Coupling
3	WT001138	Coupling, 90°, male 3/8" TAPER - DN12
4	WM022758	Coupling, straight, female, 1/4NPTx 3/8NPT
	WM003981	Venting valve
5	WT001108-0001	T-coupling, female - DN12
	WM032482	Coupling, straight
6	see page 76	T-coupling
7	WT001108	T-coupling, female - DN12
8	WM000925	T-coupling, male T22-PL
9	see page 76	T-coupling
10		<b>Coupling</b>
	WM000925	T-coupling, male T22-PL
	WT001141	Coupling, 90°, DN 22
11	WM022693	Coupling, straight, kor 22-12-PL
12		<b>Coupling</b>
	WM000925	T-coupling, male T22-PL
	WT001141	Coupling, 90°, DN 22
13	WT001096	Ball valve, female 1/2"
14	WM001503	Coupling, straight, EGE22-LR-ED
15	WT001074	Check valve
16	WM039535	Tube, L=70
17	WM032461	Coupling, 90°, WE22L 3/4NPT
18	WM025974	Coupling, straight 3/4" x M30x1,5L, LPG hose
19	WM041879	Coupling, straight, M30x2 - M30x2 (see also tube WM041913 kp 13.4.1)
Solenoid valve - see page 38		



### 13.4.3 Tubes LPG



	Part number	Description
1	WM034196	Tube LPG inlet B - pressure gauge B
2	WM034200	Tube, fuel delivery LPG valve A - outlet A
3	WM034206	Tube, fuel delivery LPG valve B - outlet B
4	WM034192	Tube LPG inlet A - pressure gauge A

### 13.4.4 Coupling, straight return with fill up valve (LPG)

	Part number	Description
1	WM000925	Coupling, T-coupling male T22-PL
2	WM022693	Coupling, straight kor 22-12-PL
3	WM004189	Nut M 22-L
4	WM004190	Ring cutting, DPR 22-L
5	WM001468	Coupling, straight red. coupling 3/4NPTxD22
6	WM001480	Valve fill up valve
7	WM003160	Sealant Loxeal 58-11, thread sealant

### 13.4.5 Coupling, T-coupling adjustable, with safety valve D22 (LPG)

	Part number	Description
1	WM004952	T-coupling adjustable, ET22-PL
2	WM023275	Coupling, straight EGE22L 3/4NPT
3	WM022692	Coupling, straight female, 1/4NPTx 3/4NPT
4	WM002191	Valve safety 25BAR
5	WM003160	Sealant Loxeal 58-11, thread sealant

### 13.5 Tubes - AdBlue®

	Part number	Description
1	WE000571	Coupling, straight male r1"x10, Male double bump

AdBlue® is a registered trademark of Verband der Automobilindustrie e.V.

## 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, bio diesel, 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, bio diesel, 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 HHR (for quick hose connector)

Part number	Description
WM031128-0001	Hose, id=16, l=4,16m
WM031128-0002	Hose, LT, id=16, l=4,16m
WM031128-0003	Hose, biodiesel, id=16, l=4,16m
WM031129-0001	Hose, id=21, l=4,16m
WM031129-0002	Hose, LT, id=21, l=4,16m
WM031129-0003	Hose, biodiesel, id=21, l=4,16m
WM031135-0001	Hose, vr, l=4,16m
WM031135-0002	Hose, LT, vr, l=4,16m
WM031135-0005	Hose, vr, l=4,16m
WM031135-0006	Hose, LT, vr, l=4,16m



VR = Vapour Recovery

LT = Low Temperature

### 14.1.3 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, bio diesel, 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, bio diesel, black
	WM032000-0001	Hose id=25mm, l=4.32m, black
	WM032000-0002	Hose id=25mm, l=4.32m, bio diesel, black

VR = Vapour Recovery

LT = Low Temperature

### 14.1.4 HH (for quick hose connector)

	Part number	Description
	WM032867-0001	Hose, id=16, l=4,32m
	WM032867-0002	Hose, LT, id=16, l=4,32m
	WM032867-0003	Hose, biodiesel, id=16, l=4,32m
	WM032869-0001	Hose, id=21, l=4,32m
	WM032869-0002	Hose, LT, id=21, l=4,32m
	WM032869-0003	Hose, biodiesel, id=21, l=4,32m
	WM032875-0001	Hose, vr, l=4,32
	WM032875-0002	Hose, LT, vr, l=4,32
	WM032875-0005	Hose, vr, l=4,32
	WM032875-0006	Hose, LT, vr, l=4,32



VR = Vapour Recovery

LT = Low Temperature

### 14.1.5 LPG

	Part number	Description
	WM021821-002	Hose with break-away, Elaflex ARK 19.5, ID=16, L=5.6m
	WM041807-0001	Hose, ID 13, L=5.3m (France)

### 14.1.6 AdBlue®

	Part number	Description
	WM039970	Hose AdBlue®, 5.1m, black

AdBlue® is a registered trademark of Verband der Automobilindustrie e.V.

## 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.



**I 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 comfigrip stay clean and tidy.



**ECONOMIC COLOUR CODING**

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



**ACTIVE PRESSURE CONTROLLED SAFETY SHUT-OFF (DSA)**

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



**SENSITIVE CONTROL**

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



**ZVA SLIMLINE 2 GR: I INTEGRATED VAPOUR VALVES**

Not only the 'On/Off' vapour valve GRV, but also the proportional valve GRPV are fully integrated and do not add to the nozzle length. Dry testing with the GRPV 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
WM026220-0001	VR, 8D, spout od=21, green
WM026220-0003	VR, 8D, spout od=21, black
WM026220-0002	VR, 8D, spout od=21, blue ethanol
WM026221-0003	VR, id=16/od=21, green, with break-away
WM026221-0004	Id=21/od=25, black, with break, LT
WM026221-0005	Id=21/od=25, black, drip stop, with break, LT

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

#### **14.2.1 Cover- Elaflex Slimline 2**

	<b>Part number</b>	<b>Description</b>
	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

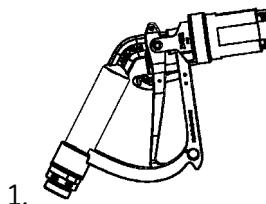
It's the same cover for nozzles with VR and without VR.

#### **14.2.2 Splash guard - Elaflex Slimline 2**

	<b>Part number</b>	<b>Description</b>
	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
	<b>BP</b>	
	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

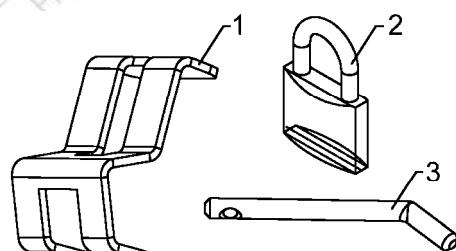
## 14.3 Nozzle - LPG

	Part number	Description	
1		Nozzle, Elaflex, ZVG2	
	WM029761-0001	DISH connection	
	WM029761-0002	ACME connection	



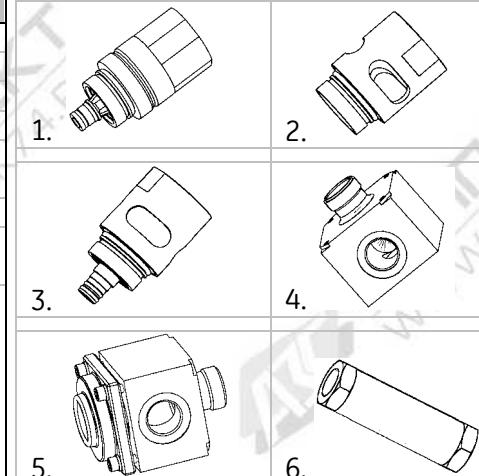
## 14.4 Padlock (HH & HHR)

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



## 14.5 Sight glass and break away

	Part number	Description	
1	WM002068	Break away	1.
		Sight glass	
2	WM002348	Without vapour (VR)	2.
3	WM002030	With vapour (VR)	
4	WT001124	Coupling, 90°, female G3/4", male M30x2 - LPG (see also page 20)	
5	WT001119	Sight glass - LPG	3.
6	WM002174	Valve break-away - LPG (Bearing, knot, LPG see page 20)	4.



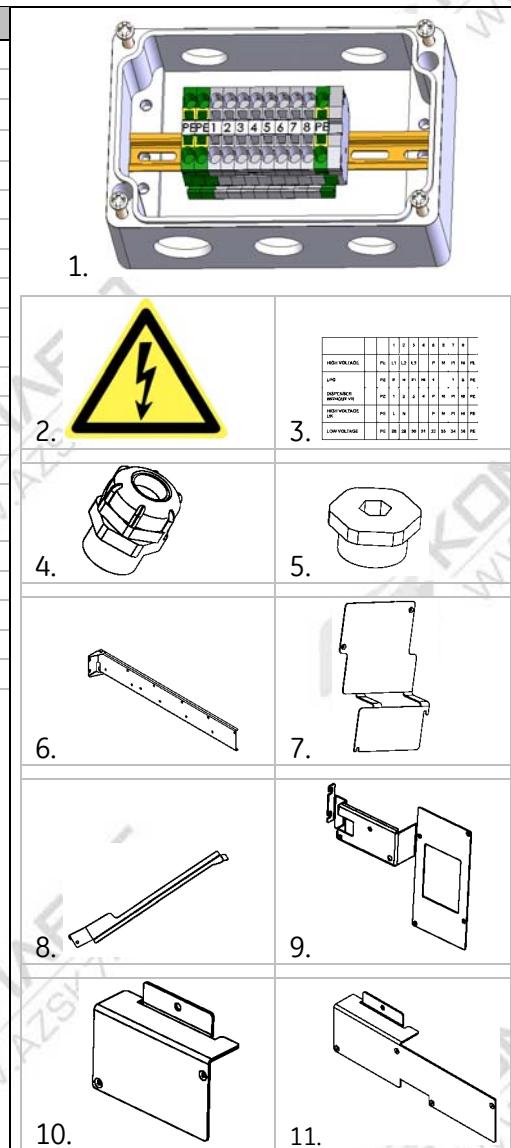
## 15 Junction box

	Part number	Description
1		Junction box
	WM026839	All round (on picture)
	WM008794	AdBlue®
	WM008789	Box with thermostat (AdBlue®)
	WM008787	Thermostat
2	WM003332	Sticker high voltage
3	WM026770	Sticker connection label
4		Grommet
	WM007146	M16, Ø 6-10 mm
	WM001540-0001	M20, Ø 8-12 mm
	WM001540-0002	M20, Ø 10-14 mm
	WM003257	M25, Ø 13-18 mm
5		Grommet blind
	WM001591	M20
	WM003241	M25
6	WM028376	Support, L-shape, junctions box, L=709mm
7	WM033178	Support, Z-shape, (junction boxes option)
8	WM028378	Support, Z-shape
9	WM038608	Support, box shape
10	WM038602	Support, Z-shape
11	WM039540	Support, Z-shape, L=305

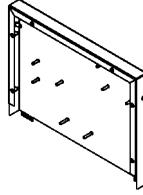
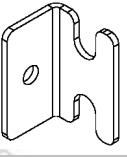
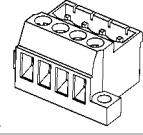
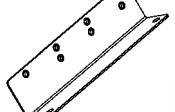
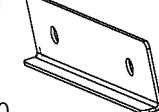
Cables, see page 91.

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

Please contact your dealer for login information.

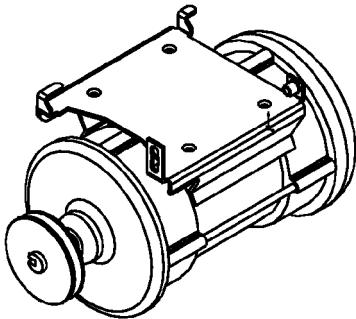


## 15.1 Electronic box, B2B

	Part number	Description		
1	WM038823	Support, box shape		1.
2	WM038984	Cover plate		2.
3	WM038952	Support, L-shape holder		3.
4	WM005260	Connector, panel terminal block 4 socket (1x4)		4.
5	WM038799	Board connection board B2B		
6	WM038826	Support, L-shape board holder, B2B		
7	WM038955	Support, L-shape holder		
8	WB000291-0003	Spacer ID=4.3, OD=8, L=6		
9	WM005074	Board B2B		
10	WM006081	Support, L-shape		
11	WM033333-0001	Plastic fastener spacer 4.8, D=3,18		
	WM007710-0001	Gasket L=322, H=8		
	WM007710-0002	Gasket L=211, H=8		
	WM007708	Gasket L=318, H=20		
	WB000209-0007	Screw, hexagon socket CAP, M4x5		5.
	WB000280-0001	Screw, CSK Socket CAP, M4x8		6.
	WB000334-0003	Screw, hexagon socket CAP, M3x12		7.
	WB000229-0002	Lock nut, M4		8.
				9.
				10.

## 16 Motor

	Part number	Description
		<b>Motor, 3-phase</b>
	WM022320-0008	0.75 kW, 230 V, 1430 rpm, 50 Hz
use WM022320-0007	WM022320-0007	0.75 kW, 400 V, 1430 rpm, 50 Hz
		0.75 kW, 400 V, (Croatia)
	WM022323-0007	1.1 kW, 230 V, 1400 rpm, 50 Hz
use WM022323-0006	WM022323-0006	1.1 kW, 400 V, 1400 rpm, 50 Hz
		1.1 kW, 400 V, (Croatia)
		<b>Motor, 1-phase</b>
	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

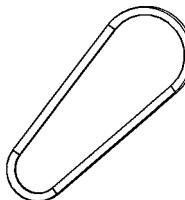
#### Belt, Z-profile

WM004363	SPZ 792
WM003055	SPZ 800



WARNING!

The driving belt may be replaced only by original belt from Dresser Wayne, otherwise there is a risk of explosion.



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## 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 66 and forwards.

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



1.



The flame arresters (and including components) are to be subjected to a visual check, above all for contamination and corrosion, at suitable intervals of time and to be cleaned or replaced if necessary.



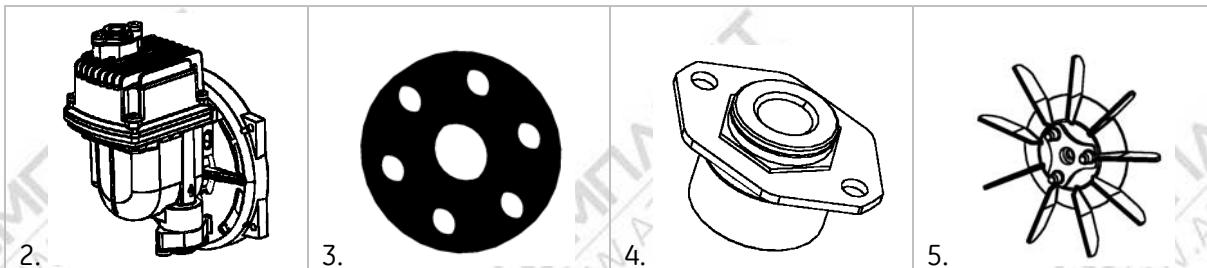
The machine starts running again automatically after cooling down.



The piston pump, for technical safety reasons, must not be operated without the flame arrester specified by the manufacturer.

#### NOTE!

The pump must by no means be operated without the rubber element.

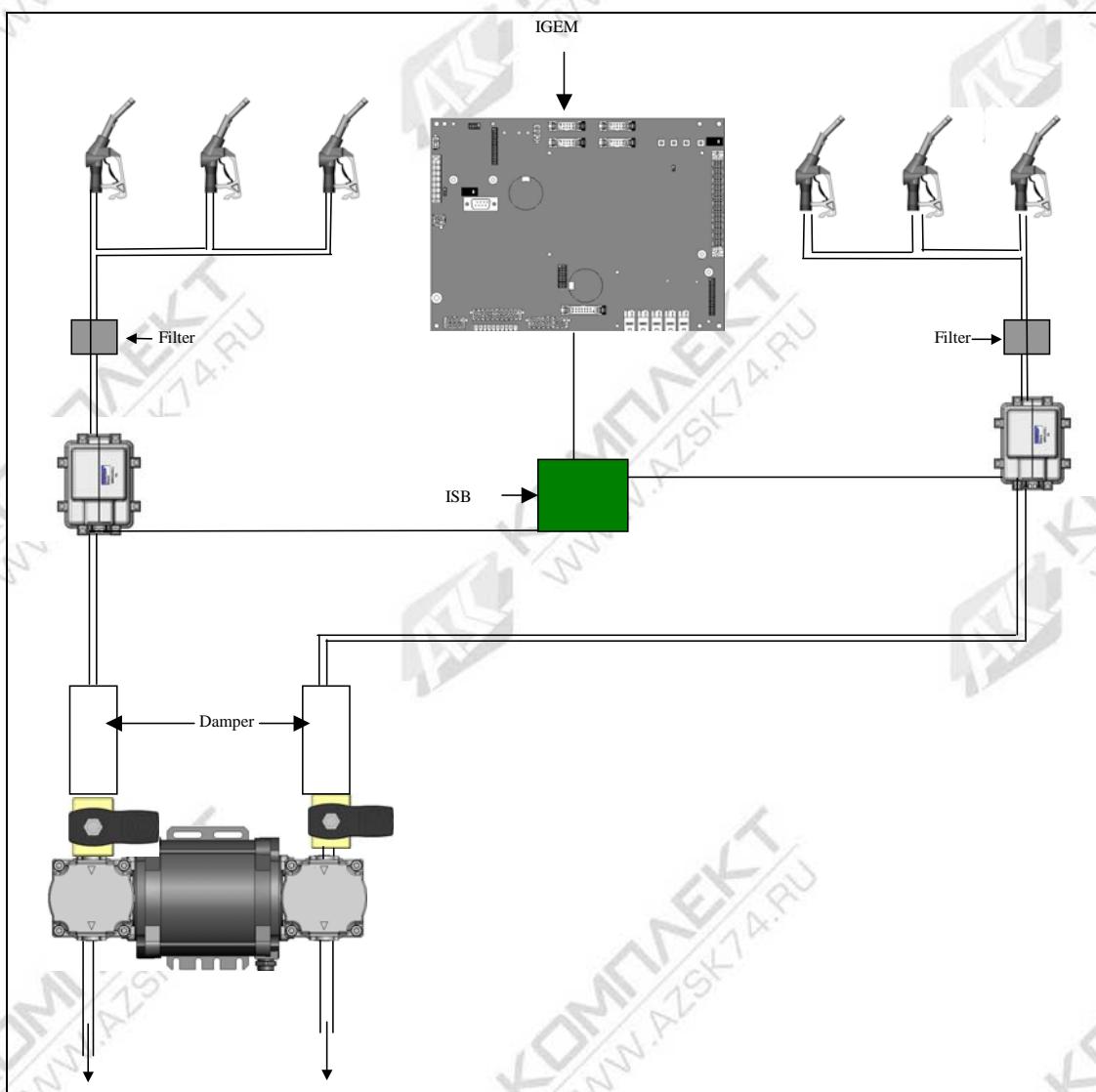


	Part number	Description
1	See page 25	Shelf for VR module
	WM029734	Vapour recovery module
	WM029735	Motor 1-phase 230V, 1 piston pump
	WM029736	Motor 1-phase 230V, 2 piston pumps
	WM029737	Motor 3-phase 230V, 1 piston pump
	WM029738	Motor 3-phase 230V, 2 piston pumps
	WM029739	Motor 3-phase 400V, 1 piston pump
		Motor 3-phase 400V, 2 piston pumps
		use WM029738
		use WM029739
2	WM029349	Vapour pump, complete
3	WM029343	Rubber coupling
4	WM029346	Flame arrester with O-ring
	xxxxxx	Cylindrical, before December 2010
		Conical, starting in December 2010
5	WM029340	Fan with coupling
	WM030532-0001	Taptite screw/ Torx pdn head, M5

Vapour tubes; see page 66 and forwards.  
Vapour tubes from pump to outlet, see page 74.

## 17.2 VR Monitoring

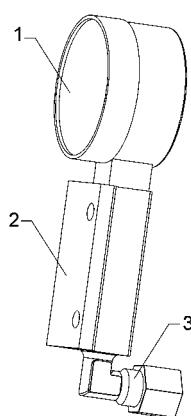
Spare parts, see page 68.



VRM system overview (without self check)

## 17.3 Pressure gauge

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



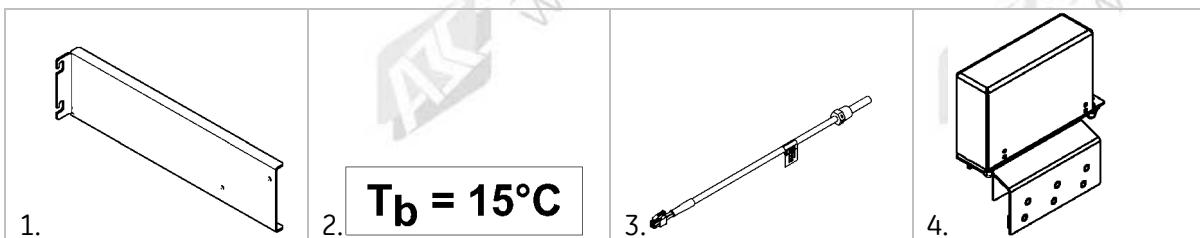
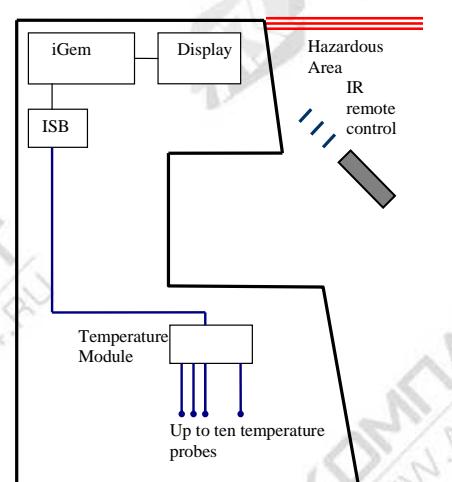
## 18 ATC

Automatic Temperature Compensation

	<b>Part number</b>	<b>Description</b>
1	WM028380	Support, I-shape, sensor, temperature module
2	WM013631	Grade sticker, Tb=15 °C, transparent
3	WM019643-0001	Temperature probes L=1050 mm
	WM019643-0002	L=3000 mm
4	WM020675-0011	Temperature Module (without probes)

**WARNING: Contains  
intrinsically safe equipment**

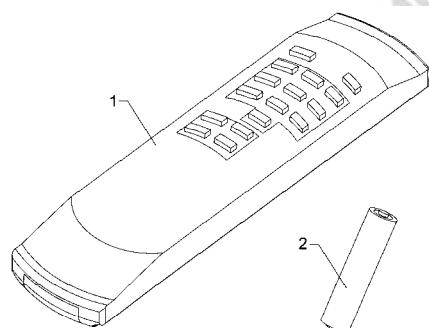
Cables see page 91.  
ISB see page 8.



## 19 Remote control

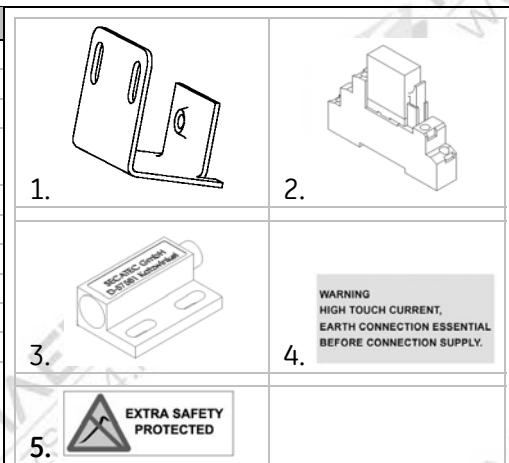
	<b>Part number</b>	<b>Description</b>
1	WM002290	Remote control with battery
2	WM002289	Battery LR03 size AAA 1.5V

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



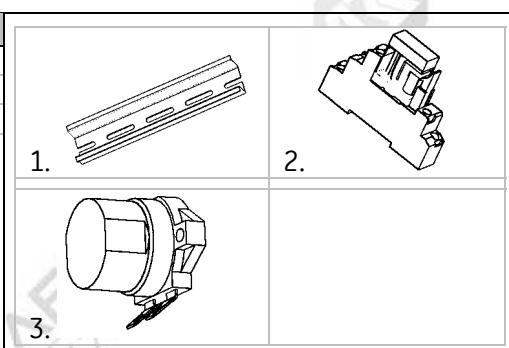
## 20 Anti burglary device

	Part number	Description
	W8-183580	Retrofit kit, shell protection
1	WM028381	Support, U-shape, anti-burglar switch
2	WM002399	Relay
		Switch, magnetic reed, 2-wire, normally open
	WM023586-0001	0.4 m cable
	WM023586-0002	1.5 m cable
	WM023586-0003	3.0 m cable
3	WM001649-0001	Switch
4	WE000544	Sticker
5	WM006679	Sticker



## 21 Tilt switch

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



## 22 Documents

Intelligent Global Electronics Module (iGEM) - Maintenance mode (eng).....WM023838

### 22.1 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.

### 22.2 Users Manual LPG

CZ	WM033046
DE	WM033047
EE	WM033048
eng	WM033049
FR	WM033050
IT	WM033051
NL	WM033052
PL	WM033053
PT	WM033054
RU	WM033055
SE	WM033056
SI	WM033057
UA	WM033058
YU (sr)	WM033059

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

### 22.3 Users Manual ADBlue®

CZ	WM033304
DE	WM033305
eng	WM033306
ES	WM033307
FR	WM033308
IT	WM033309
LV	WM034822
NL	WM033310
RO	WM033311
RU	WM033312
SE	WM033313
SI	WM033314
UA	WM033315

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

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## 22.4 Drawings

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

Approval drawing - zoning	WM027485
Approval drawing (with P&P) - zoning	WM027552
Wiring diagram	WM026113
Wiring diagram, B2B	WM038149
Installation wiring diagram / Connection Instruction	WM026636
Translation of text on the drawing (WM026636)	W8-461493

### Installation Instruction

Translation of text on the drawings below	W8-461496
Gobal Star V LPG	WM032722
B2B LPG	WM038659
B2B	WM038994
Global Star V AdBlue®	WM038959
Translation of text on the drawings below	W8-461494
CXX-11, CXX-21, Small cabinet, Suction pump	WM033015
CXX-22, Small cabinet, Suction pump	WM033016
XX-21, Small cabinet, master and slave (SAT), Suction pump	WM037512
CXX-11, CXX-21 & CXX-31, Suction pump	WM029083
CXX-32 & CXX-22, Suction pump	WM029084
CXX-33, Suction pump	WM029085
CXX-42, Suction pump	WM029087
CXX-43, Suction pump	WM029088
CXX-44, Suction pump	WM029089
CXX-11, CXX-21 & CXX-31, Centrally pump system / Dispenser	WM031420
CXX-32 & CXX-22, Centrally pump system / Dispenser	WM031421
CXX-33, Centrally pump system / Dispenser	WM031422
CXX-42, Centrally pump system / Dispenser	WM031424
CXX-43, Centrally pump system / Dispenser	WM031425
CXX-44, Centrally pump system / Dispenser	WM031426

SAT II	172342
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### 22.4.1 Foundation Frame

2 hydraulics + 1 nozzle module	WM031871
2 hydraulics + 2 nozzle module	WM031877
3 hydraulics 1 nozzle module	foundation_frames_c11-11
3 hydraulics 2 nozzle modules	foundation_frames_c22-22
3 hydraulics 3 nozzle modules	foundation_frames_c33-33
4 hydraulics 2 nozzle modules	foundation_frames_c44-42
4 hydraulics 3 nozzle modules	foundation_frames_c44-43
4 hydraulics 4 nozzle modules	foundation_frames_c44-44

## 23 Cables

See also wiring diagram WM026113.

You will find the diagram on the ftp server.

Please contact your dealer for login information.

	<b>Part number</b>	<b>Description</b>
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	WM036349-0001	Cable 2x0.5 L=500
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
42	WM010634-0001	Cable 2x0.5 zone L=250
43	WM010634-0002	Cable 2x0.5 zone L=800
44	WM038963-0001	Cable 2x0.5 L=250
45	WM032364-0001	Cable high voltage 5G2.5 zone L=2500

## 23.1 Cables B2B

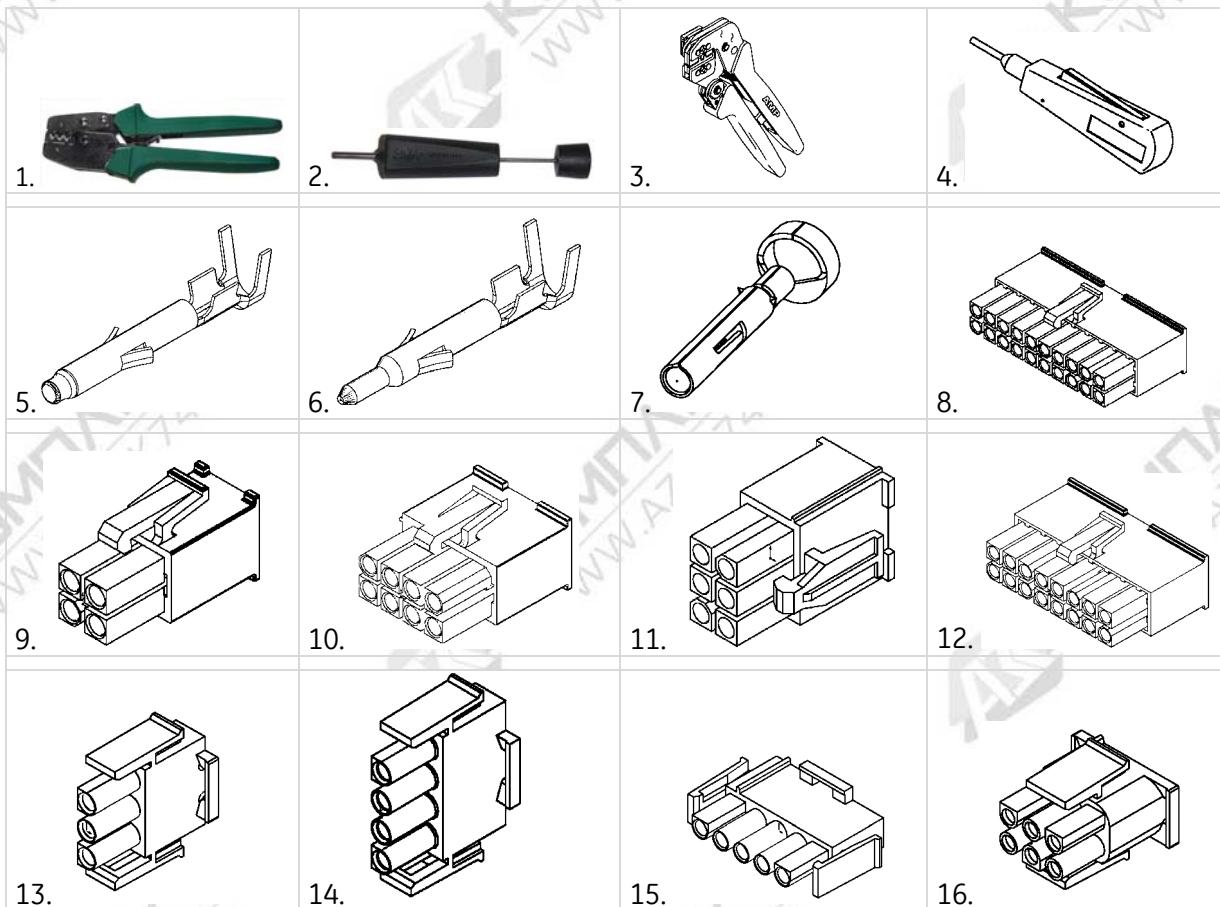
See also wiring diagram WM038149.

You will find the diagram on the ftp server.

Please contact your dealer for login information.

	<b>Part number</b>	<b>Description</b>
1	WM038145-0001	Cable multi 3 PC 2x0.5 , 3 PC 1x0.5 GR/YE L=200
2	WM038830-0001	Cable 7G0.75 ZONE SC L=5500
3	WM038835-0001	Cable 12G0.75 zone SC L=5500
4	WM006985-0001	Cable high voltage 3G1.5 zone L=3000
5	WM025845-0001	Cable high voltage 5G1.5 zone L=1800
6	WM005231-0001	Cable twisted pair 8x2x0.34 zone SC L=5500
7	WM025912-0001	Cable high voltage 5G1.5 zone L=1800
8	WM038156-0001	Cable high voltage 3G1.5 zone L=2000
9	WM031127-0001	Cable high voltage 4G2.5 zone L=2000
10	WM025759-0001	Cable 8x0.34 L=250
11	WM019845-0001	Cable 4x0.34 L=500
12	WM030812-0001	Cable 10x0.34 L=300
13	WM038832-0001	Cable twisted pair 8x2x0.34 zone SC L=5500
14	WM037854-0001	Cable high voltage 3G1.5 zone L=250
15	WM025811-0001	Cable multi 1x0.75 BU, 1x0.75 BN, 1x0.75 GR/YE L=300
16	WM003752-0002	Cable 4x0.34 zone SC Eexi L=2500
17	WM005234-0001	Cable 4x0.34 zone SC Eexi L=5000
18	WM003861-0003	Cable flat 16-position 1.27-pitch L=600
19	WM003760-0002	Cable flat 10-position 1.27-pitch L=520
20	WM005231-0002	Cable twisted pair 8x2x0.34 zone SC L=1500

## 23.2 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		<b>Socket, mini umnl</b>
	WM002694-0002	0.12-0.35 mm <sup>2</sup> (mini umnl)
	WM002694-0001	0.30-0.89 mm <sup>2</sup> (mini umnl)
6		<b>Pin, mini umnl</b>
	WM002693-0002	0.12-0.35 mm <sup>2</sup> (mini umnl)
	WM002693-0001	0.30-0.89 mm <sup>2</sup> (mini umnl)
		<b>Socket, umnl</b>
7	WM027773-0001	0.50-2.00 mm <sup>2</sup> (umnl)
		<b>Connector, mini umnl</b>
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)
		<b>Connector, umnl</b>
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

## Contents - all levels

Consider the environment.

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

Please find connection Instructions and Installation Instructions on the ftp-server. Contact your dealer for login information.

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FTP-server - Please contact your dealer for login information.

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Tel: +46 40 360960  
Fax: +46 40 150381  
E-mail: EPC@Wayne.com

## 28 Notes

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# More than a century of experience

## Über 100 Jahre Erfahrung

## Mer än 100 års erfarenhet

## Более, чем столетний опыт работы



**Wayne** 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** entwickelt, produziert und vermarktet komplett 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** utvecklar, tillverkar och marknadsför kompletta operativa system för drivmedelshantering på servicestationer. Under ett och samma tak rymmer allt från utveckling och konstruktion till rationell tillverkning och sammansättning av komponenter.

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

### Wayne'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** 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 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** 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** gör det lättare för bilisten att tanka och handla. Samtidigt tillgodosese stationsägares krav på en effektiv driftskontroll och myndighetskraven på mätongrannhet, miljövärlighet och driftssäkerhet.

### Действия Wayne 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** 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.