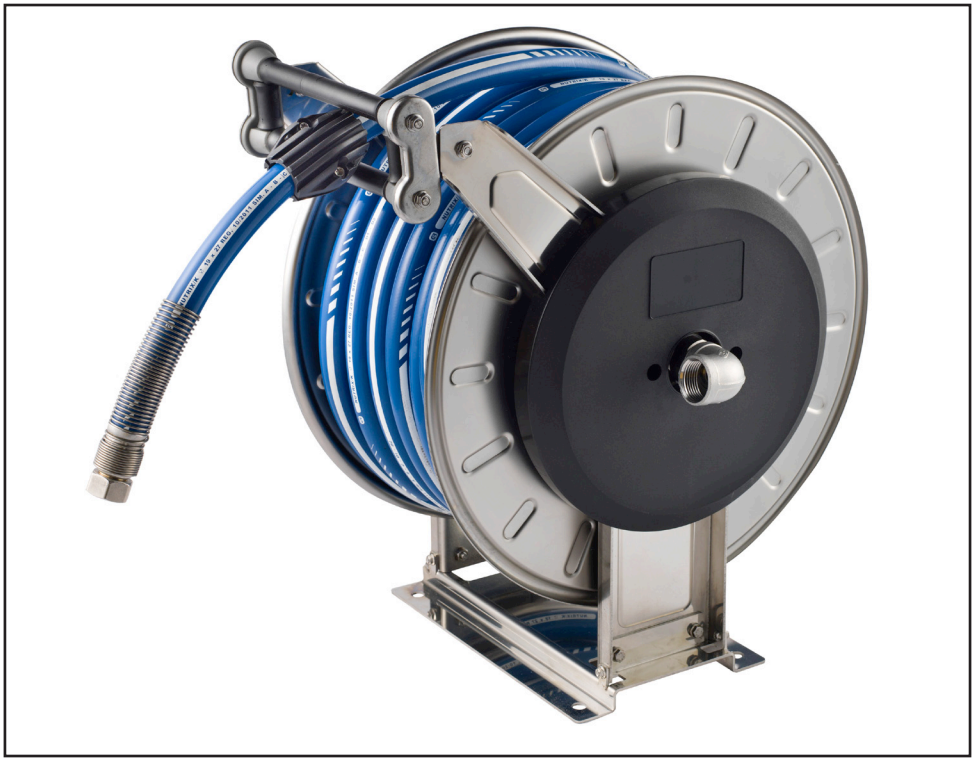
AUTOMATIC HOSE REELS

MODELS: VGM VGMX VGMTX



USE AND MAINTENANCE MANUAL

CE

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..... INDEX OF SUBJECT MATTERS .....

1 - GENERAL RULES APPLIED

This manual is giving information about a correct assembly, use and maintenance of the hose reels in order to prevent accidents.
The hose reel has been designed in conformity to the present EEC rules and namely:

- UNI EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction;
- UNI EN ISO 13857:2008 Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.

2 - WARRANTY

The equipment is guaranteed for a period of 18 months from date of purchase and must be used in accordance with the instructions contained in this manual. Warranty does not cover all parts which are faulty after incorrect use, incorrect installation or maintenance, maintenance carried out by unauthorized personnel, transport damages, or for circumstances not concerning manufacturing defects. The manufacturer disclaims any responsibility for any damage, that may directly or indirectly, derive to persons or property in consequence to the not observed requirements specified in this instruction manual and especially the warnings regarding installation, use and maintenance.

3 - DESCRIPTION

The hose reels models VGM are made of hot galvanized moulded steel and painted with electrostatic polyester powder system in order to guarantee a long life of the product. The hose reels models VGMX are made of stainless steel AISI 304 except for some parts made of nylon and aluminium.
The hose rolling is done automatically by a spring made of high quality iron, incorporated in the drum. The stop can be done at any desired length, through an automatic locking device.
The hose reels supplied without hose are provided with the unloaded spring. Follow the instructions described at the chapter "HOSE ASSEMBLY".

4 - OPERATION

The automatic device stopping the hose works on an area corresponding to 1/3 turn of the drum.
To release the hose, put a light traction on it.

It is important always to keep the hose back when you rewind it, in order to avoid damages to the machine, injuries to people or to surrounding things.

5 - INTENDED USE OF THE MACHINE

The hose reels of the painted series are suitable for distributing fluids like diesel fuel, oil, urea solutions, antifreeze, windshield liquid, water-based solutions of detergents or disinfectants. The stainless steel hose reels are suitable for washing at high or low pressure. Specific versions with food-quality hose are also suitable for the passage of drinking water. According to the EEC rules these hose reels have not to be placed in areas where they might be in contact with food products.
All the hose reels have to be used only for distributing fluids, at the pressures and temperatures indicated on the schedule. Every hose reel code is corresponding to a different kind of fluid. **It is forbidden to use the machine for any other kind of fluid.**
We decline any responsibility for anomalies or dangers which could arise by a hose assembly with characteristics and uses different from the ones described herein. Avoid to get on the machine or to lay any kind of material on it. Check periodically the correct operation of the hose reel, and control that the couplers are well locked and there are no fluid losses. Close the feeding of fluid at the shift end to avoid damages during non-working hours.
On request can be supplied in accordance with the Directive ATEX 2014/34/EU with the marking

II 2G h IIB T6 ... T4 Gb -20°C ≤ Ta ≤ +65°C
II 2D h IIIB 20°C ... 135°C Db -20°C ≤ Ta ≤ +65°C

for their use in potentially explosive atmospheres.

6 - MARKING AND IDENTIFICATION

We affix the CE marking as the manufacturer of this equipment. On the equipment is securely attached a tag with curing adhesive system on which are indicated in addition to the name of the manufacturer and the symbol "CE", all information necessary for good identification of the machine (model, duty, year of construction, weight, etc.).

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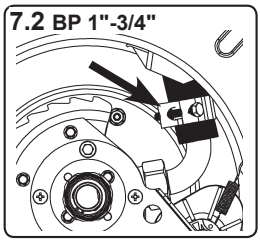
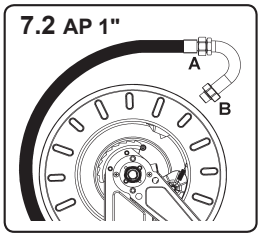
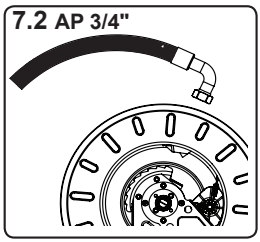
7 - MOUNTING OF THE HOSE (Models without hose)

WARNING! DO NOT PUT HANDS OR ANY OTHER THING INSIDE THE DRUM!

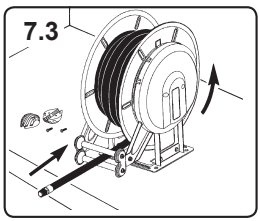


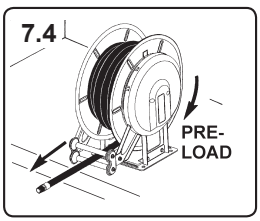


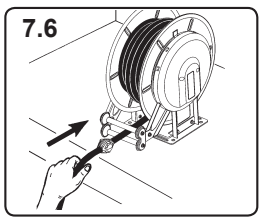


The hose reels without hose are supplied with the unloaded spring.
Use a hose with dimension and pressure characteristics suitable for use according to the hose reel model. Especially use hoses for each fluid as further described below:
Diesel fuel*: *antistatic hose (R<1 mΩ/m). Pipe without fitting.
***Urea* / Acqua fredda:** *Pipe without fitting.*
***60 bar (3/4")*):** *EN857 1SC hose with fitting F.90° 3/4"G.*
***60 bar (1")*:** *EN857 1SC hose with fitting F.S.1"G.*

7.1) Fix the hose reel to the bench and remove plastic protection.
7.2) Models Low Pressure 3/4"-1"(BP): Fix the hose clamp and adjust it so that during rotation the hose reel is free to turn.
Models High Pressure 1"(AP): connect the hose (A) to the curve, tightening with the suitable wrench. Tighten the nut (B) on the connection of the drum.
7.3) Mount the lateral carter and rotate manually the drum in order to rewind completely the hose.
7.4) Spring Preload: hold the hose-end and rotate the drum in the opposite direction for a few laps, refer to the tables p.34-35.
7.5) Insert the hose-end between the guide rollers and put the hose rubber stopper at the desired length.
7.6) Unwind the hose and rewind it completely, to check if the hose reel works properly.







8 - INSTALLATION

IMPORTANT! Any installation operation shall be carried out by a suitably trained staff, following carefully the information given in this manual.

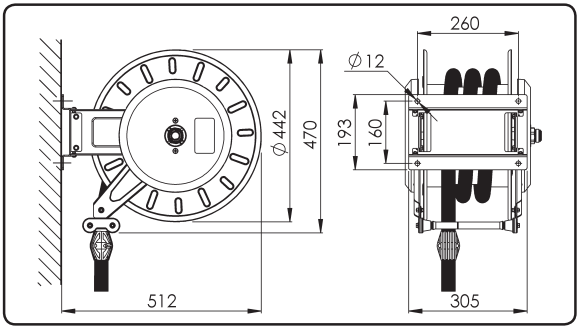
Check the packaging at the reception of the goods and store only at a dry place. Verify that the device has not been damaged during transport or storage operations. Make sure you receive all the components. Ask the manufacturer for any possible missing component.

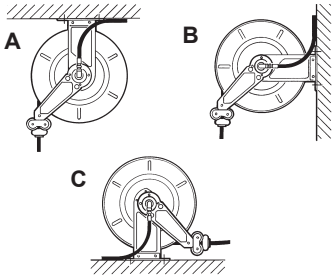
The hose reel has to be wall mounted at a minimum height of the floor of 2.50 m in order to prevent accidents during work operations. Considering the hose reel weight and dimensions, its movement requires the use of lifter devices.In particular cases it is possible to mount it on the floor or on other machines as accessory, only if complete with a fixed support. The hose-guide arms can be fixed in three different positions according to the hose reel installation (see pictures A-B-C).

IMPORTANT! Models for distribution of **Oil 60 bar (1")** only allow the installation on position A - B.

Mount the hose reel in fixed position on stiff and consistent walls using 4 dowels of 10 mm diameter.

WARNING! The manufacturer declines any responsibility for injuries to people or damages to things caused by a wrong assembly of the hose reel.





NOT POSSIBLE FOR VGM600115ST - VGM600115

9 - LINK

Always connect the hose reel to the line by the couplers and the flexible hose suitable for this use, above all in case of high pressure and temperature. To avoid consequent loss of fluid tighten the fittings using appropriate keys, keep back the swivel joints to avoid damaging them.

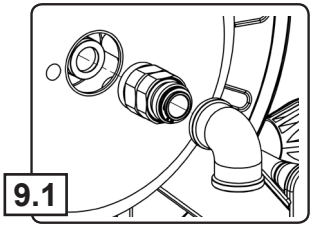
According to the rules, put a ball-tap on the feeding line of the hose reels in order to make the maintenance operations easier. The said ball-tap can be used as a safety valve for dangerous situations.

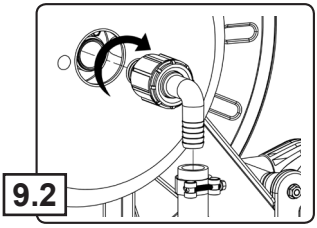
The connection hose is supplied as standard for models with swivel joint in composite materials.

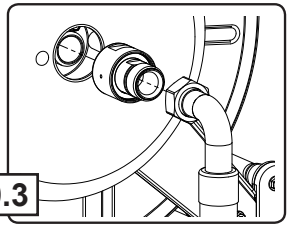
9.1) **Diesel fuel/Water 90°C (3/4"-1"):** Tighten the swivel joint on the hub, fit the lateral cover and tighten the elbow on the swivel joint using a suitable sealant.

9.2) **Urea/Water 50°C (3/4"-1"):** Mount the lateral cover and hand-tighten the swivel joint, insert the hose into the hose connector and fix it with the clamp.
IMPORTANT: Do not use sealants.

9.3) **Oil (3/4"-1"):** Tighten the swivel joint on the hub, fit the lateral cover and tighten the elbow 90° on the swivel connector.







IMPORTANT! For models suitable for potable water carry out an adequate flow of washing of parts in contact with the fluid before use.

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10 - MAINTENANCE

IMPORTANT: Any maintenance operation shall be carried out by a suitably trained staff, following carefully the information given in this manual. Ensure that there is no tension in the spring before starting any operations inside the hose reel.

Always close the feeding of fluid to the machine before carrying out any maintenance on it. Replace the flexible hose as soon as it shows any sign of wear and tear or of deterioration due to the different conditions of the labour environment. We advise you to replace it every year in case it is used for a few hours a week.

Replace the seal inside the revolving joint in case of losses due to wear and tear. Any replacement of hose reel parts has to be done using original spare parts (see the spare parts list). We advise you to contact the manufacturer for any possible anomaly and before replacing any part. After every maintenance operation, put again the eventual supports.

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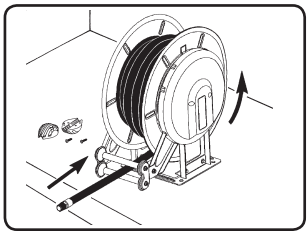
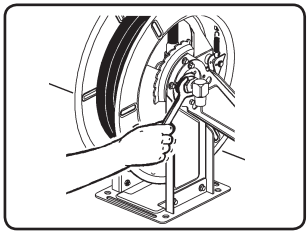
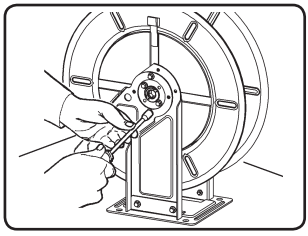
11 - REPLACEMENT OF THE HOSE



11.1



11.2



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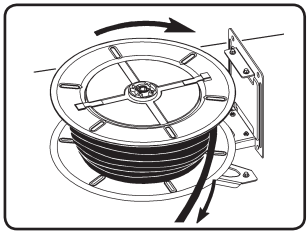
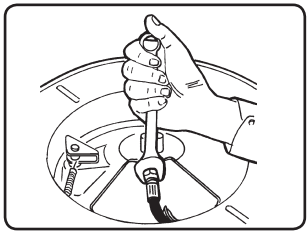


11.4

WARNING! For safety reasons, operations of hose replacement must be carried out at the bench.

Replace the hose with another one of the same dimensions and characteristics.

11.1) Remove the hose rubber stopper and release the hose slowly until the spring is completely unloaded.
11.2) Loosen the swivel joint.
11.3) Loosen the two screws of the spring likage shaft by a 10 wrench.
11.4) Disassemble the opening on the spring side and unwind completely the hose from the drum.
11.5) Take out the drum, unscrew the internal fitting with the suitable wrench and mount the new hose.
11.6) Assemble again the hose reel, by following the above steps in reverse order. If that is the case, grease the supports and the ratchet hook.
11.7) Go on as indicated at point 7.2 of the chapter: Mounting of the hose.



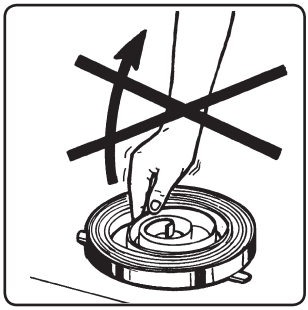
11.5

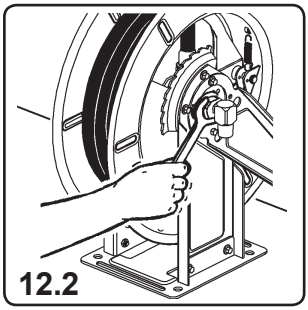
12 - REPLACEMENT OF THE SPRING

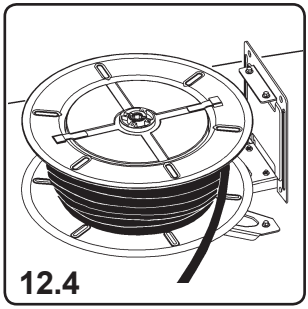
The spring which allows to rewind the hose is placed inside a proper housing centre which is joint to the drum.

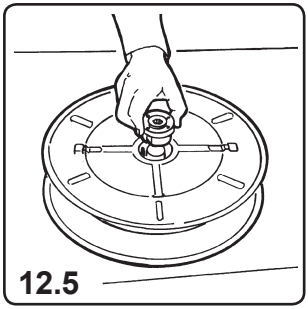
WARNING! The disassembly of the spring is only permitted to the staff authorized and suitably trained by the manufacturer. Handle with the greatest care the spring; serious accidents might occur.

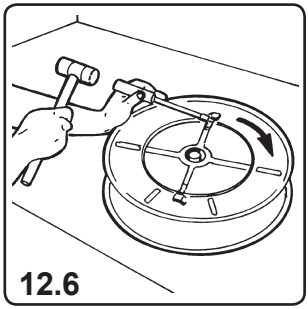
12.1) Make sure that the rewinding system is totally unloaded and that the drum is free (see point 11.1)
12.2) Loosen the swivel joint
12.3) Loosen the two screws of the spring linkage shaft by a 10 mm wrench (see point 11.3).
12.4) Disassemble the opening on the spring side by a 10 mm wrench and take out the drum.
12.5) Take out the shaft from the spring housing.
12.6) Lift the tangs on the drum by a screwdriver and rotate the spring housing centre in order to release it from the drum.
12.7) Turn upside down the drum and take out the spring housing centre paying the greatest care so that the spring does not go out of it.
12.8) Insert and hook the shaft into the new spring housing centre. Lubricate the spring and the shaft.
12.9) Put the drum straight and place the new spring housing centre with the utmost care. Block the tangs.
12.10) Assemble all the parts and go on as indicated at point 7.2 of the chapter "Mounting of the hose"

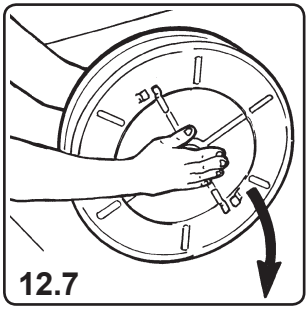


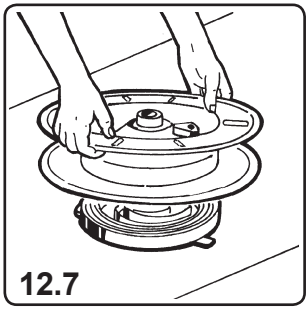


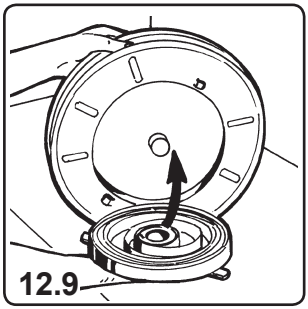












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13 - DISPOSING OF CONTAMINATED MATERIALS

In case of maintenance or demolition of the machine, the parts that make it up must be sent to companies that specialize in the disposal and recycling of industrial refuse and, in particular:

DISPOSAL OF PACKING MATERIAL

The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

DISPOSAL OF METAL COMPONENTS

Metal parts, whether paint-finished or in stainless steel, can be consigned to scrap metal collectors.

DISPOSAL OF OTHER PARTS:

Other components, such as hoses, rubber gaskets and plastic parts, must be disposed of by companies specialising in the disposal of industrial waste.

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14 - DECLARATION OF CE CONFORMITY

hereby states under its own responsibility that the hose reels model

VGM - VGMX

serie: refer to Serial Number (S.N.) shown on the label affixed to the product
year of production: refer to the year of production shown on the label affixed to the product

are in conformity with the Machinery directive 2006/42/CE

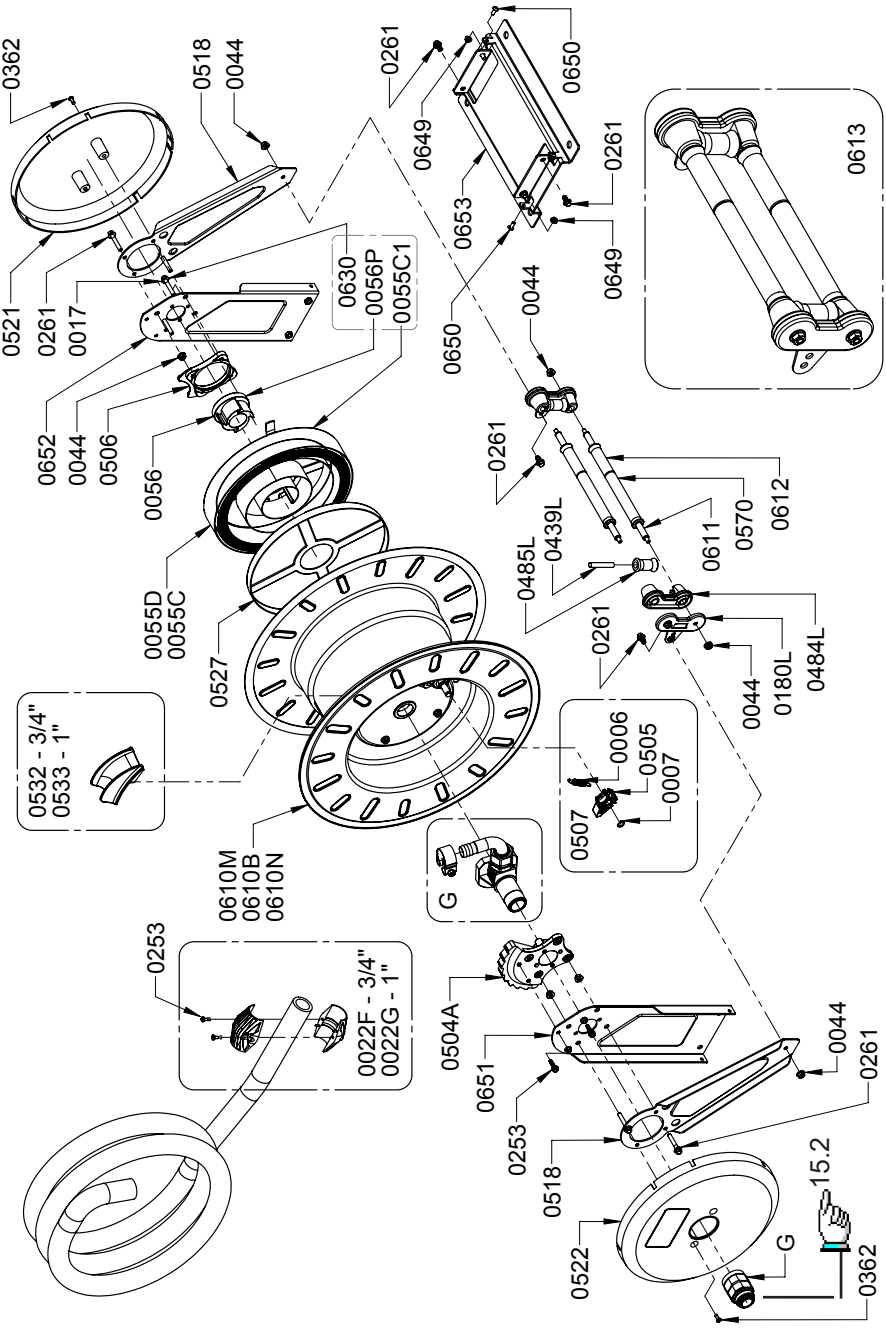
Besides, the following harmonized rules have been applied:

- UNI EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction;
- UNI EN ISO 13857:2008 Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.

ENCLOSURES:
- SPARE PARTS
- TECHNICAL DATA

15.1 SPARE PARTS

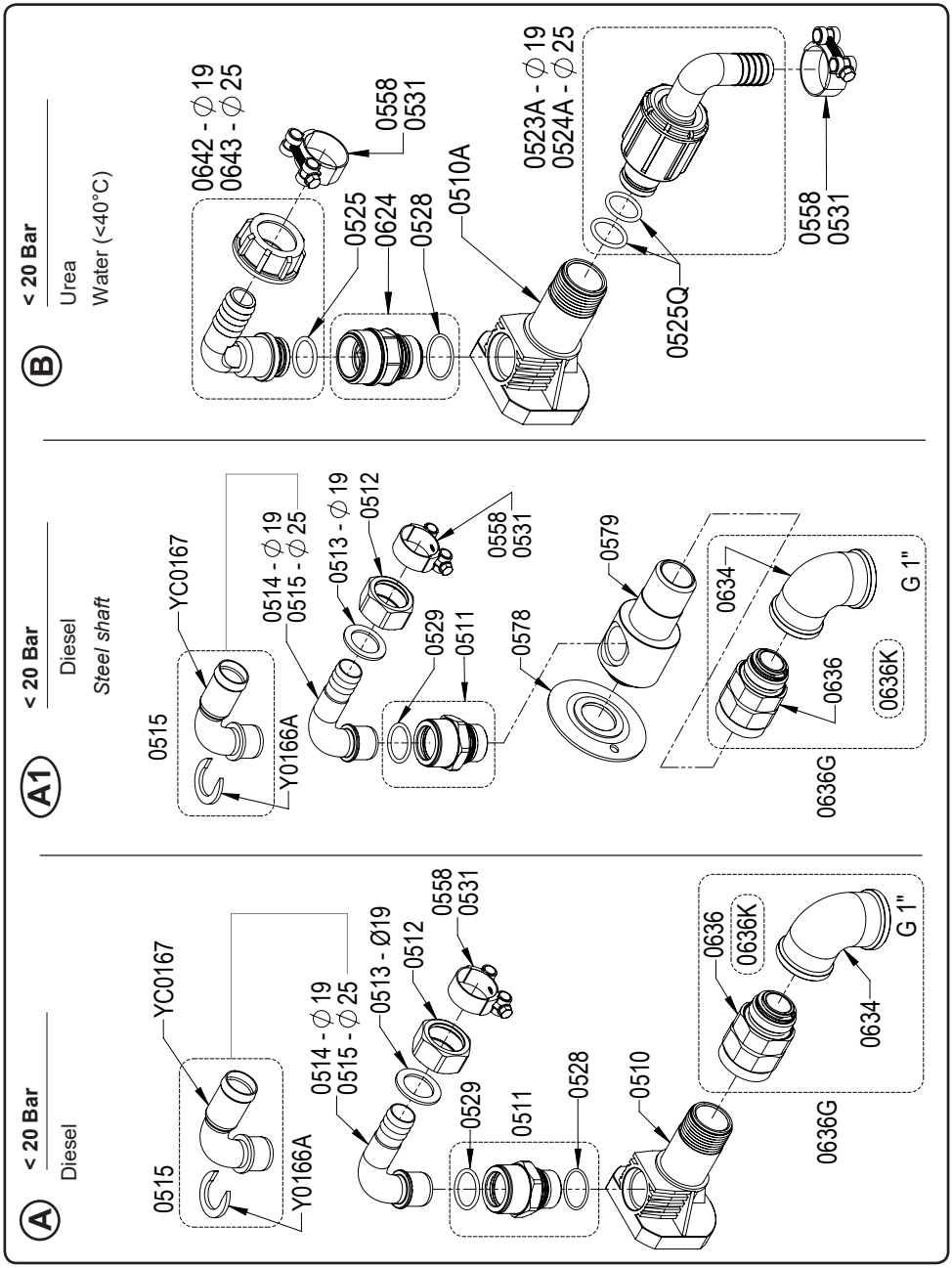
Mod. VGM-VGMX-VGMTX



To order the spare parts for a stainless steel or ATEX model, please add to the code the letter "X"/"TX" or "EX" as indicated between brackets.

CODE	ENGLISH
0006 (X)	SPRING FOR HOOK
0007 (X)(TX)	SEEGER D. 10
0017 (X)(TX)	SCREW TE M 6x16
0022F (X)(TX)	HOSE STOPPER D.27 (3/4")
0022G(X)(TX)	HOSE STOPPER D.33 (1")
0044 (X)(TX)	NUT M 6
0055C (X)(TX)	SPRING 15 m B.P.
0055C1(X)(TX)	SPRING 20 m
0055D	SPRING 15 m A.P.
0056	SPRING LINKAGE
0056P (EX)	LINKAGE PLASTIC SPRING
0180L(X)(TX)	ROLLERS SUPPORT
0253 (X)(TX)	SCREW TE 6x21 HILO
0261 (X)(TX)	SCREW TE M 6x12
0362 (X)(TX)	SCREW TC M 6x16
0439L	PIN D.8 L=47 mm
0484L	WIDE ROLLERS SUPPORT
0485L	ROLLER D.18 L=40 mm
0504A (EX)	RATCHET PLATE WHEEL
0505 (EX)	RATCHET HOOK
0506	COLLAR
0507(X)(TX)(EX)	RATCHET HOOK KIT
0518 (X)(TX)	LONG ARM
0521	COVER SPRING SIDE
0522	COVER SWIVEL SIDE
0527	SPRING SPACER
0532	HOSEGUIDE D.27 (3/4”)
0533	HOSEGUIDE D.35 (1”)
0570	ROLLER D.18 L=118 mm
0610B (X)(EX)	WHITE SHAFT DRUM
0610M(X)(TX)(EX)	METAL SHAFT DRUM
0610N (EX)	BLACK SHAFT DRUM
0611 (X)(TX)	TIE ROD L=248 mm
0612	ROLLER D.18 L=70 mm
0613 (X)(TX)	COMPLETE 4 ROLLERS SUPPORT
0630 (X)(TX)	SCREW TE M 5x11
0649 (X)(TX)	NUT M 5
0650 (X)(TX)	SCREW TBEI M 5x12
0651 (X)(TX)	LEFT BODY SIDE
0652 (X)(TX)	RIGHT BODY SIDE
0653 (X)(TX)	BASE PLATE
G	SWIVEL JOINT

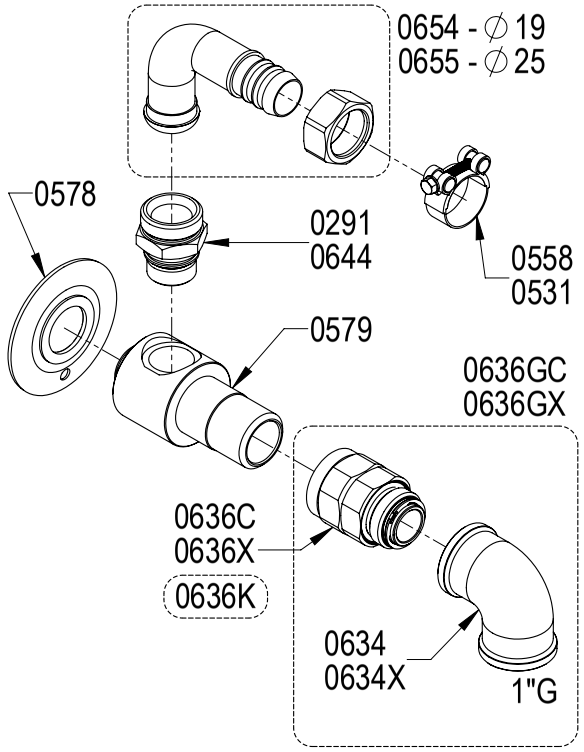
15.2 SWIVEL JOINTS SPARE PARTS



D **< 20 Bar**

Air

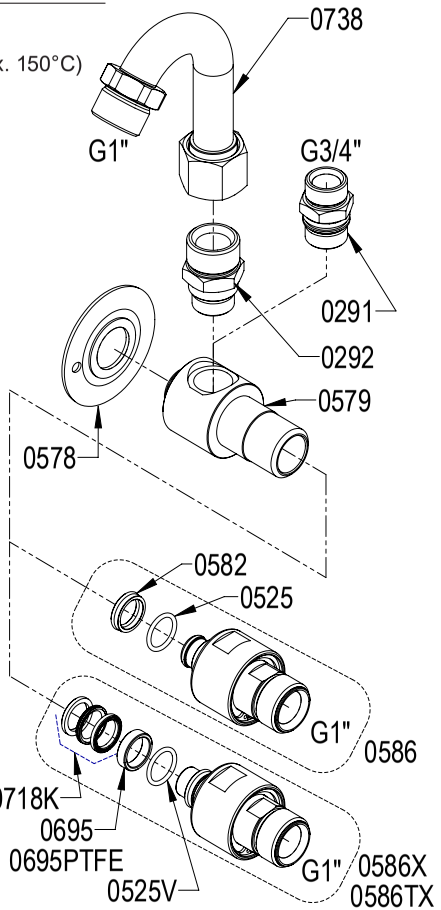
Water (Max. 100°C)



E **< 60 Bar - (40 Bar)**

Oil

Water (Max. 150°C)



CODE	ENGLISH
0291Z	GALVANISED DOUBLE SCREW 3/4"G
0291X	S/S DOUBLE SCREW 3/4"G
0292(TX)	DOUBLE SCREW 3/4"-1"G
0510	BLACK PLASTIC SHAFT
0510A	PLASTIC SHAFT
0511	DOUBLE SCREW M34x1-M.3/4"G
0512	RING M34x1
0513	WASHER D. 21x32,5 D. 19 mm
0514	CURVE 90° D. 19 mm
0515	CURVE 90° D. 25 mm+WASHER
0523A	SWIVEL JOINT D.19
0524A	SWIVEL JOINT D.25
0525	OR 3081 (20,24 x 2,62)
0525Q	QUAD-RING 20,30 x 2,62
0525V	OR 3081 (20,24 x 2,62) VITON
0528	OR 2100 (25,12 x 1,78)
0529	OR 3093 (23,47 x 2,62)
0531	CLAMP D. 34-37 mm
0558	CLAMP D. 27-29 mm
0578(X)(TX)	WASHER D. 80x28.5x2.5
0579(X)(TX)	STEEL SHAFT M.1”G.
0582	SEAL UP 19 25 6
0586(X)(TX)	STEEL JOINT M.1”G
0624	DOUBLE SCREW 3/4" G. - 1" G
0634 .	BRASS ELBOW 90° F.1" G.
0634X	S.S. ELBOW 90° F.1" G.
0636	BRASS JOINT M.F.1"G.
0636G	COMPLETE BRASS JOINT
0636C	BRASS JOINT/S.S. M.F.1"G.
0636GC	COMPLETE BRASS/S.S. JOINT
0636X	S.S. JOINT M.F.1" G.

To order the spare parts for a stainless steel or ATEX model, please add to the code the letter "X"/"TX" or "EX" as indicated between brackets.

CODE	ENGLISH
0636GX	S.S. COMPLETE JOINT 1" G.
0636K	KIT JOINT SEALS 1" G.
0642	PLASTIC CURVE D.19 + RING
0643	PLASTIC CURVE D.25 + RING
0644	DOUBLE SCREW 3/4"G - 1"G
0654	BRASS CURVE D.19 + RING
0654TP	CURVE D.19 +RING (MOD. VGMX)
0655	BRASS CURVE D.25 + RING
0655TP	CURVE D.25 +RING (MOD. VGMX)
0695	BUSH D.25x20 L=7 BRASS
0695PTFE.	BUSH D.25x20 L=7 PTFE
0718K	KIT OF SPARE SEALS
0738(X)	CURVE 140° M.F. REVOLVING 1"G
Y0166A	SHAPED WASHER
YC0167	CURVE 90° D. 25 mm

To order the spare parts for a stainless steel or ATEX model, please add to the code the letter "X"/"TX" or "EX" as indicated between brackets.

16.1 - TECHNICAL DATA VGM

Models without hose

FLUID	MAX.	CODE	INLET	OUTLET	HOSE LENGTH	kg	*G	PRE LOAD
DIESEL FUEL	20 Bar	VGM203420STO VGM200115STO	G 1" F G 1" F	Ø 19 mm Ø 25 mm	20 m 15 m	20 Kg 20 Kg	A	1 2
UREA SOLUTIONS WATER < 40°C	20 Bar	VGM203420ST VGM200115ST	Ø 19 mm Ø 25 mm	Ø 19 mm Ø 25 mm	20 m 15 m	20 Kg 20 Kg	B	1 2
AIR-WATER	20 Bar	VGM203420STA VGM200115STA	G 1" F	Ø 19 mm Ø 25 mm	20 m 15 m	20 Kg 20 Kg	D	1 2
WATER 100°C Max.	20 Bar	VGM203420STMX	G 1" F	Ø 19 mm	20 m	20 Kg	D	1

Models with hose

FLUID	MAX.	CODE	INLET	HOSE	HOSE LENGTH	kg	*G	PRE LOAD
DIESEL FUEL	10 Bar	VGM101920GO VGM102515GO	G 1" F G 1" F	19 x 27 25 x 35	20 m 15 m	25 Kg 25 Kg	A	1 2
UREA SOLUTIONS	10 Bar	VGM101920ADB	Ø 19 mm	19 x 27	20 m	25 Kg	B	1
WATER < 40°C	10 Bar	VGM101920T	Ø 19 mm	19 x 25	20 m	25 Kg	B	2
WATER 70°C Max	10 Bar	VGM101920KMX VGM102515KMX	G 1" F G 1" F	19 x 27 25 x 34	20 m 15 m	25 Kg 25 Kg	D	1 2
AIR	18 Bar	VGM181920 VGM182515	G 1" F G 1" F	19 x 27 25 x 34	20 m 15 m	25 Kg 25 Kg	A	1 2

*G *Swivel joints*

15.2

16.2 - TECHNICAL DATA VGMX

Models without hose

FLUID	MAX.	CODE	INLET	OUTLET	HOSE LENGTH	kg	*G	PRE LOAD
WATER 100°C Max. DIESEL FUEL	20 Bar	VGMX203420STMX VGMX200115STMX	G 1" F	Ø 19 Ø 25	20 m 15 m	22 kg	D	1
WATER 150°C Max.	40 Bar	VGMX403420ST VGMX400115ST	G 1" M	G 3/4" M G 1" M	20 m 15 m	22 kg	E	1

Models with hose

FLUID	MAX.	CODE	INLET	HOSE	HOSE LENGTH	kg	*G	PRE LOAD
DIESEL FUEL	10 Bar	VGMX101920GOMX VGMX102515GOMX	G 1" F G 1" F	19 x 27 25 x 35	20 m 15 m	30 kg 32 kg	D	1 2
WATER < 40°C	10 Bar	VGMX101920T	Ø 19 mm	19 x 25	20 m	29 kg	B	2
WATER 70°C Max.	10 Bar	VGMX101920KMX VGMX102515KMX	G 1" F G 1" F	19 x 27 25 x 34	20 m 15 m	30 kg 32 kg	D	1 2
WATER 90°C Max.	10 Bar	VGMX101920KR	G 1" F	19 x 28	20 m	30 kg	D	1 2

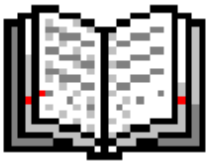
16.3 - TECHNICAL DATA VGMTX

Models without hose

FLUID	MAX.	CODE	INLET	OUTLET	HOSE LENGTH	kg	*G	PRE LOAD
WATER 150°C Max.	40 Bar	VGMTX403420ST VGMTX400115ST	G 1" M	G 3/4" M G 1" M	(3/4") 20 m (1") 15 m	22 kg	E	1

*G *Swivel joints*

15.2



Obligation to preserve the manual

This manual must be kept in an easily accessible place, available to all operators.