

Operation and Service Manual for HERMetric Sampler GT-Strd

Portable Closed Sampling Device



Note: before using the instrument
please read this book.



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Check updates on www.tanksystem.com or contact us at tanksystem@honeywell.com

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2 Recommendation for safe use

According to TSB_7031_E , Issue 3 of October 3, 2019

1. This Operation and Service Manual is a guide in order to help the user to operate the device safely and correctly.
2. Nevertheless the maker disclaims all responsibility and liability for damage resulting from the use of the equipment regardless of the cause of the damage.
3. The device may not be operated when damaged.
4. **Before using the device, ensure the tank is not empty and the sampler / bottle fits with the sampling conditions (tank pressure, product, temperature...). Refer to device specifications.**
5. **This device is certified to penetrate into a “Zone 0” (explosible area) when connected to a valve. The opening of the valve may generate risk of flammable gas release or flame entrance. Ensure safety conditions are met before use.**
6. **Attention is drawn to the possible hazard due to electrostatic charges which may be present in the tank.** This may happen in particular with static accumulator liquids, i.e. liquids which have low conductivity of 50 picoSiemens/metre (pS/m) or less.
7. **It is very important that the instrument is grounded to the tank before the probe is introduced into the tank and remains grounded until after complete withdrawal from the tank.**
 - 7.1. If the instrument is installed with the quick connect coupler, grounding is effected through the quick connect coupler and the mating nipple of the valve provided that these parts are kept clean and free from corrosion in order to guarantee electrical conductivity. If a grease is used for this purpose, it must be one which contains graphite.
 - 7.2. If the instrument is not connected to the mating deck valve, the instrument has to be also earthed by means of the grounding cable and clamp.
8. **It is anticipated that the user will have specific operating methods laid down to ensure safety when using this type of apparatus. In this case the user's instructions shall be strictly observed.**
9. **In the absence of such instructions the following should be noted:**
 - 9.1. If a metal sounding pipe is fitted beneath the deck valve or tank is inerted, then ullaging, etc. is permissible at any time with no restriction.
 - 9.2. If there is no sounding tube or tank is not inerted, the following precautions shall be taken:
 - 9.2.1. If the cargo is not a static accumulator liquid, i.e. its conductivity is more than 50 pS/m, then ullaging is permitted provided that the instrument is properly grounded and earthed before the probe is inserted into the tank and remains earthed until the probe has been removed from the tank.
 - 9.2.2. If the cargo is a static accumulator liquid, i.e. its conductivity is less than 50 pS/m, then ullaging is permitted provided that:

- 9.2.2.1. The instrument is properly grounded and earthed before the probe is inserted into the tank and remains earthed until the probe has been removed from the tank.
- 9.2.2.2. The apparatus is not introduced into a tank until at least 30 minutes have elapsed after completion of any loading operation or stopping the injection of inert gas.

9.3. For further guidance refer to the latest edition of International Safety Guide for Oil Tankers and Terminals (ISGOTT), or consult the appropriate Legislative Authority for the installation.

10.Warning:

- 10.1. **Substitution or modification of components may impair safety.** Only use the device for the intended purpose as described in this manual. For maintenance, use genuine spare-parts exclusively. Non genuine spare-parts may impair safety of the device.
 - 10.2. To prevent ignition hazard, avoid impact or friction of the device aluminum parts (where applicable).
 - 10.3. Before installing the sampler on the gauging point check the proper operating of the crank handle. Ensure the locking finger of the crank handle is operated freely by its spring and is placed in a locking position. Check the seals, if they are in the correct position and if they are in good shape.
11. **This product and his use is / may be related to international, national, local or company regulations or standards. It is the customer / user responsibility to ensure that the way to use the device complies with such applicable regulations or standards.**
12. **When the device is not in use while installed on the tank, the ball valve shall be closed.**

3 General information

3.1 Shipment note

The following parts should be included in the shipment:

- 1 instrument;
- 1 Allen key 1.3 mm;
- one or more bottles as ordered;
- 1 Operation and Service Manual.

3.2 Initial inspection

Check the contents of the shipment for completeness and note whether any damage has occurred during transport. Carry out the "Initial test before installing the instrument" to verify the good functioning. If the contents are incomplete, or if there is damage, not use the device. A claim should be filled with the carrier immediately, and Enraf Tanksystem SA Sales or Service organization should be notified in order to facilitate the repair or replacement of the instrument.

3.3 Documentation discrepancies

The design of the instrument is subject to continuous development and improvement. Consequently, the instrument may incorporate minor changes in detail from the information contained in the manual.

3.4 Warranty

12 months after installation but max. 18 months after delivery ex works.

The Vendor undertakes to remedy any defect resulting from faulty design materials or workmanship. The Vendor's obligation is limited to the repair or replacement of such defective parts by his own plant or one of his authorized service stations. The Purchaser shall bear the cost and risk of transportation of defective parts and repaired parts supplied in replacement of such defective parts.

When returned to Enraf Tanksystem SA or any of its agreed Service Stations equipment must be contamination-free. If it is determined that the Purchasers equipment is contaminated, it will be returned to the Purchaser at the Purchasers expense. Contaminated equipment will not be repaired, replaced, or covered under any warranty until such time that the said equipment is decontaminated by the Purchaser.

The Purchaser shall notify by fax, telex or in writing of any defect immediately upon discovery, specifying the nature of the defect and/or the extend of the damage caused thereby.

Where no other conditions have been negotiated between the Vendor and the Purchaser "General Conditions 188" of United Nations shall apply.

This equipment has been certified as non-electrical equipment for potentially explosive atmospheres for only those classes or categories of hazardous areas stated on the instrument label, bearing the mark of the applicable approval authority. No other usage is authorized.

Unauthorized repair or component replacement by non original spare parts by the Purchaser will void this guarantee and may impair the good functioning of the instrument.

In no event shall Enraf Tanksystem SA be liable for indirect, incidental or consequential loss or damage or failure of any kind connected with the use if its products or failure of its products to function or operate properly.

Enraf Tanksystem SA do not assume the indemnification for any accident or damage caused by the operation of its product and the warranty is limited to the replacement of parts or complete goods.

3.5 Certification



Enraf Tanksystem SA is an ISO 9001 certified company by Intertek and MED-D by Det Norske Veritas Certification GmbH.



The equipment has been approved as non-electrical equipment for potentially explosive atmospheres by the following authorities :

ATEX

KEMA 06ATEX0027

II 1 G Ex h IIB T6 Ga (Ta: -20°C to +80°C
Tp: -20°C to +80°C)

IECEX

NL/DEK/ExTR18.0009/00

Ex h IIB T6 Ga (Ta: -20°C to +80°C
Tp: -20°C to +80°C)

If you need a copy of any of this certificate please contact:

Enraf Tanksystem SA
Rue de l'industrie 2
1630 Bulle, SWITZERLAND

Telephone : +41-26-91 91 500
Telefax : +41-26-91 91 505
Web site : www.tanksystem.com
E-mail : Tanksystem@honeywell.com

3.6 Spare parts

Substitution of components may impact safety. Use only original spare parts.

When ordering spares identify the spare part by TS number and description. Refer to section "Drawings".

Some spares might be repairable; in this case send part to any authorized service center or to the factory.

In case of urgency replacement units can be available while stocks last.

3.7 Service and Repair

The customer should take care of the freight and customs clearance charges. If units are sent on "freight collect " the charges will be invoiced to the customer.

When returning units or parts for repair to the factory please fill out a service request form (see next page).

Traceability information are engraved on a plate fixed to the sampler. The serial number of the unit is as follows:

AV followed by a 4 digits number.

When returned to Enraf Tanksystem SA equipment must be contamination-free. If it is determined that the customers equipment is contaminated, it will be returned to the customer at the customers expense. Contaminated equipment will not be repaired until such time that the customer decontaminates the said equipment.

Service Request Form

Goal of this document: To give to the service team all information for a safe, fast and economical handling of your service request.

Please fill it out and join this document with the goods to repair.

RMA* n°: <i>Return Material Authorization</i>	QN n° (If any): <i>Quality Notification</i>
--	--

* A RMA is required and must be requested for any return at Enraf Tanksystem, Bulle, Switzerland.

Overall information:

Customer name:	Phone n°:
Email address:	Address:
After repair, the device must be sent back to the same address ☐ Yes / ☐ No	
If not, specify the address:	
Site / Vessel name n°:	IMO n°(If any):
Product(s) Description:	
Unit Serial Number:	
Last Liquid / Chemicals gauged:	
Please tick the applicable danger rating ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐  ☐ 	
Purchase Order n° to specify on our invoice (if any):	

Demand clarification:

☐ Test & Repair

☐ Other:

Do you want a quote before repair is started?

☐ Yes / ☐ No

Short description of the problem

1.
2.
3.

Other useful information:

Goods must be shipped to: See Service Station list

Please attach this document with the goods to repair.

COUNTRY	ADDRESS	TELEPHONE / FAX / E-MAIL
SWITZERLAND	HONEYWELL ENRAF TANKSYSTEM SA Rue de l'Industrie 2 1630 BULLE	Tel : +41-26-91 91 500 Fax : +41-26-91 91 505 E-mail : tanksystem@honeywell.com
BRAZIL	Tridente Brasil Rua Jeronimo de Mendonça, 186 Guaxindiba - São Gonçalo – RJ - 24722-040	Tel : +55 21 2233 1489 E-mail : services@tridente.com.br
CANADA	PYLON ATLANTIC (A Division of Pylon Electronics) 31 Trider Crescent DARTMOUTH, NS B3B 1V6	Tel : +1-902-4683344 Fax : +1-902-4681203 E-mail : halifax_csr@pylonelectronics.com
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5 Description

5.1 General

The **HERMetic Samplers** are designed for closed sampling of liquids or chemicals, which present a Fire-, Health- or Air pollution Hazard. The gas tight construction of these units avoids a pressure release from the tank and exposure to fumes during operation.

The equipment is designed and certified for use in potentially explosive atmospheres area.

5.2 Sampling types

Several kinds of samples can be realised with this sampler. To get different samples, 4 bottles are available: Zone bottle, Spot bottle, Running bottle and Bottom bottle.

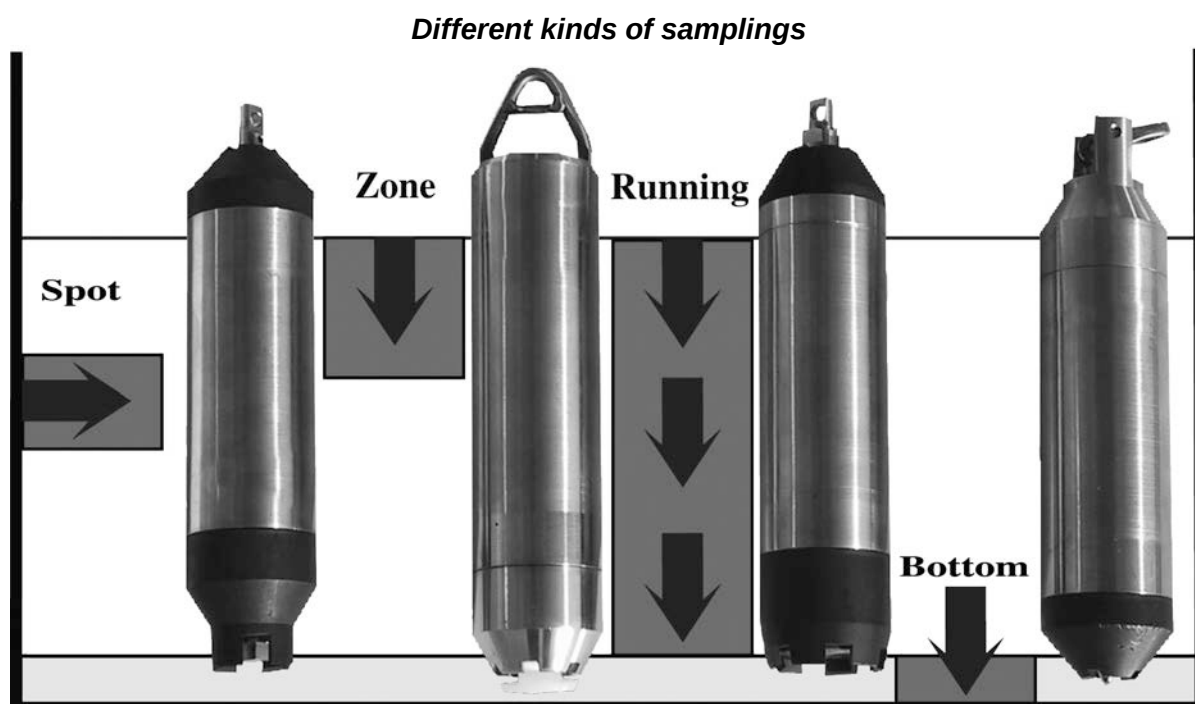
The Zone bottle allows sampling of the upper level inside the tank.

The Spot bottle allows sampling at a determinate height.

The running bottle allows sampling all along the displacement of the bottle inside the tank.

The Bottom bottle allows sampling of the tank bottom.

As far as the kinds of sampling are concerned, please refer to ISO 3170 "Petroleum liquids – Manual sampling".



All these bottle are interchangeable, please refer to § 6.1.

For specific application, other bottles exist. For further information, please contact.

The sampler is delivered as standard with zone sampling bottle. All other sampling bottle are available as option.

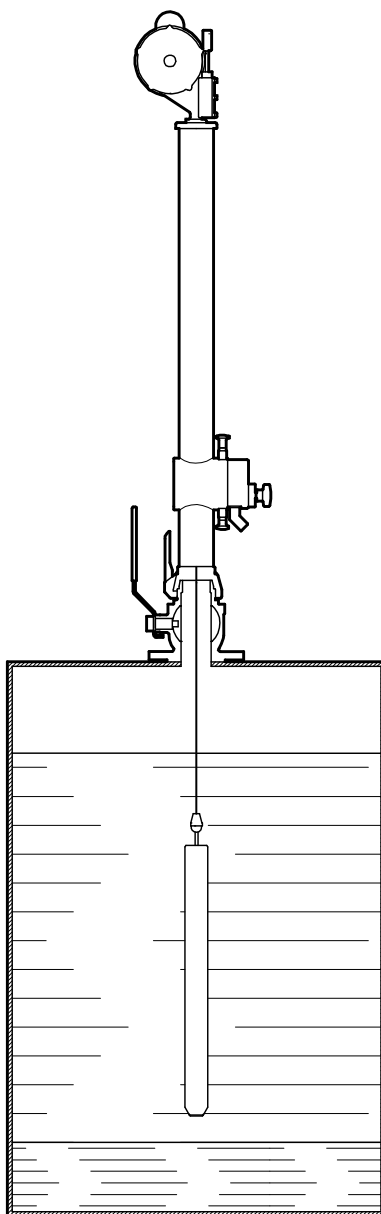
5.3 Sampling principle

5.3.1 Connection and grounding system

All HERMetric products are easy to connect. Indeed, all HERMetric devices are equipped with a quick coupler for connection on a HERMetric ball valve.

Place the unit on the appropriate valve and activate the locking system. Depending on the locking system, either rotate the collar and actuate the lever or pull on the sleeve.

If the instrument is connected to genuine HERMetric valve, grounding is effected through the quick connect coupler and the mating nipple of the valve. No additional grounding strap is necessary. For further information, please refer to §2 "Recommandation for safe use".



5.3.2 Sampling method

The sample is taken by a vertical move of the bottle inside the fluid.

The bottle is linked with a graduated tape. A reading window allows to monitor the bottle location.

For complete explanation of sampling procedures, please refer to §6 "Operation".

Important note: to avoid contamination of the sample taken by the sampler itself, check and clean the unit and the bottle prior to use. Clean the unit with an appropriate cleaner without impacting the unit or contamination risk of the next sample.

5.3.3 Liquid transfer

After sampling, the liquid can be transferred into a laboratory bottle through a transfer valve.

The transfer of the liquid from the sampling bottle to a laboratory bottle occurs by gravity.

The opening of the bottle valve is realized by unlocking the distribution block to its transfer position and by lowering the sampling bottle until its sitting on the ball of the valve.

A pump can be used to accelerate and complete the transfer of the fluid.

6 Operation

6.1 Checking before use

Before using the sampler :

- Check the good state of the device.
- Check the proper operating of the crank handle. Ensure the locking finger of the crank handle is operated freely by its spring and is placed in a locking position.
- Check the cleanliness of the unit (sampler and bottle) to prevent any contamination of the sample.
- Inspect the bottle tape end for breaks, kinks and wear. If there is some damage, replace the tape before use.
- Check of the attachment of the hook locking device on the tape.
- Check the closure of the hook locking device according to Fig. 1. The swivel hook has to be locked in use.

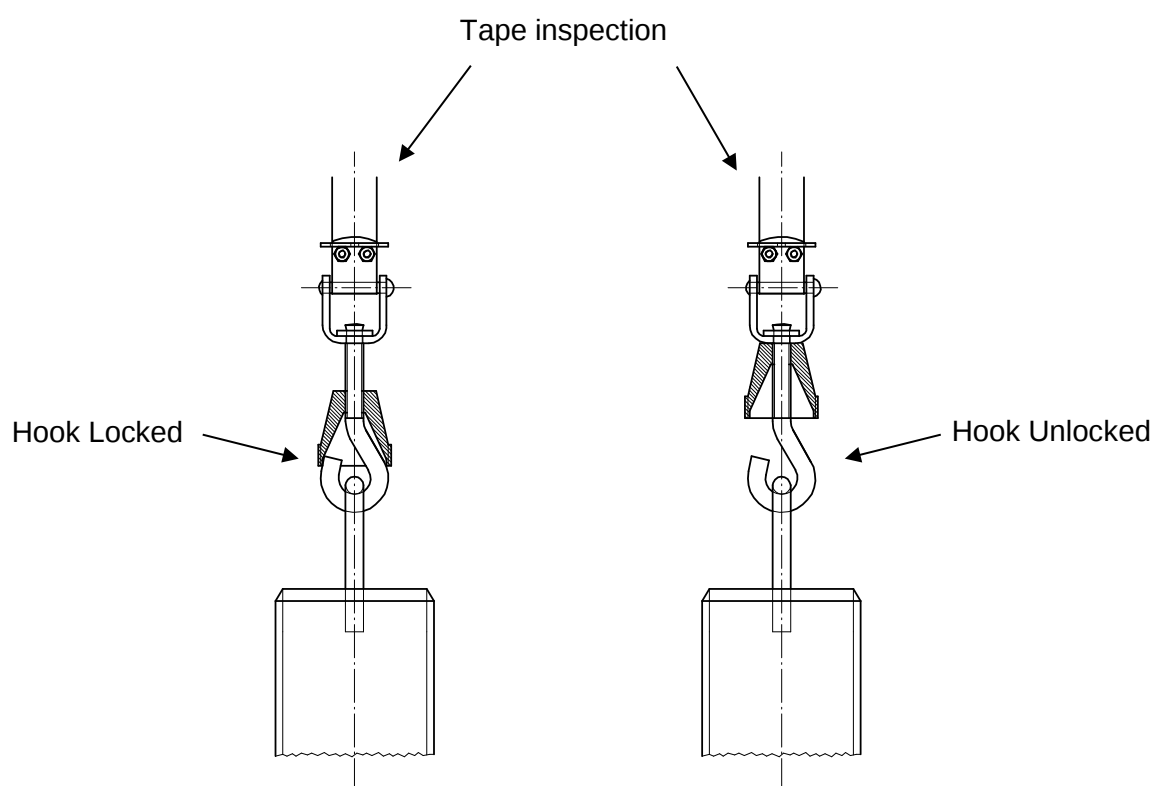


Fig. 1

Nota: Clean the instrument of any excess of liquid after use. Remove the carter winder and clean the storage tube. This cleaning must be done very properly, in particular when corrosive liquids are gauged, such as strong acids or caustic soda for instance.

Store the instrument in a dry location.

6.2 **OPERATING SAMPLER GT with ZONE SAMPLING BOTTLE :**

	ND	TS	DESCRIPTION
	30329	10380	Zone Bottle 0,43 l. Viton assy

1. Install sampler with sampling bottle on top of 2" valve by means of quick connect coupling. (In case air in sampler housing could cause contamination in tank it is recommended to purge sampler after it has been installed).
2. Prepare hose connection from distribution block to laboratory bottle.
3. Open 2" ball valve
4. Unlock distribution block by pulling stopper, turn and lock distribution block in sampling position (Sampling position is marked with one dot on distribution block).
5. Lower bottle at a speed of at least 0,5 m/sec.
If lowering speed is too low liquid will not flow through bottle as ball resistance to flowing has to be higher than ball weight to keep open bottom of container.
6. Stop bottle at level where sample is to be taken.
7. Lift bottle back into sampler housing; turn the crank until getting a catch that keeps the tape fully tight. Ensure the finger of the crank handle is in a locking position before releasing the knob.
8. Unlock distribution block and turn it by 90° and lock it in transfer position. (Transfer position is marked with 3 dots on distribution block).
9. Lower sampling bottle until it is sitting on distribution block. This will open valve of sampling bottle. Liquid will flow from sampling bottle into distribution block and sampler housing.
10. Pull handle of transfer valve and liquid will flow by gravity to laboratory bottle.
11. When laboratory bottle is full, close transfer valve, lift sampling bottle and turn the crank until getting a catch that keeps the tape fully tight, turn distribution block in drainage position and lower sampling bottle again. (Drainage position is marked with 2 dots on distribution block).
12. Close 2" ball valve.
13. Remove sampler from ball valve.
14. In order to clean sampling device distribution block can be removed by unlocking pin at bottom and at top of distribution block. Top part of sampler housing can be removed as well and sampling bottle detached from tape. If tape requires cleaning it has to be unwound, preferably on another reel.

Note: if the block in 8 or 11 does not turn, check that the bottle is lifted up totally.

6.3 **OPERATING SAMPLER GT with BOTTOM SAMPLING BOTTLE:**

	ND	TS	DESCRIPTION
O	20246	20124	Bottom bottle 0.40 l FKM assy

1. Install sampler with sampling bottle on top of 2" valve by means of quick connect coupling. (In case air in sampler housing could cause contamination in tank it is recommended to purge sampler after it has been installed).
2. Prepare hose connection from distribution block to laboratory bottle.
3. Open 2" ball valve
4. Unlock distribution block by pulling stopper, turn and lock distribution block in sampling position (Sampling position is marked with one dot on distribution block).
5. Lower bottom bottle to reach tank bottom.
6. When bottle bottom valve hits tank bottom bottle fills up automatically.
7. Lift bottle back into sampler housing; turn the crank until getting a catch that keeps the tape fully tight. Ensure the finger of the crank handle is in a locking position before releasing the knob.
8. Unlock distribution block and turn it by 90° and lock it in transfer position. (Transfer position is marked with 3 dots on distribution block).
9. Lower sampling bottle until it is sitting on distribution block. This will open valve of sampling bottle. Liquid will flow from sampling bottle in distribution block and sampler housing.
10. Pull handle of transfer valve and liquid will flow by gravity to laboratory bottle.
11. When laboratory bottle is full, close transfer valve, lift sampling bottle and turn the crank until getting a catch that keeps the tape fully tight, turn distribution block in drainage position and lower sampling bottle again. (Drainage position is marked with 2 dots on distribution block).
12. Close 2" ball valve.
13. Remove sampler from ball valve.
14. In order to clean sampling device distribution block can be removed by unlocking pin at bottom and at top of distribution block. Top part of sampler housing can be removed as well and sampling bottle detached from tape. If tape requires cleaning it has to be unwound, preferably on another reel.

Note: if the block in 8 or 11 does not turn, check that the bottle is lifted up totally.

6.4 OPERATING SAMPLER GT with SPOT SAMPLING BOTTLE:

	ND	TS	DESCRIPTION
O	20255	20137	Spot bottle 0.40 l. FKM

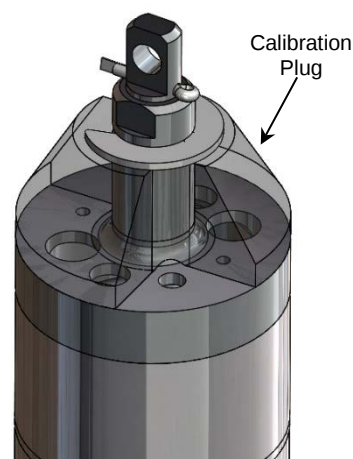
1. Install sampler with sampling bottle on top of 2" valve by means of quick connect coupling. (In case air in sampler housing could cause contamination in tank it is recommended to purge sampler after it has been installed).
2. Prepare hose connection from distribution block to laboratory bottle.
3. Open 2" ball valve
4. Unlock distribution block by pulling stopper, turn and lock distribution block in sampling position (Sampling position is marked with one dot on distribution block).
5. Lower spot bottle to the level where sample is to be taken.
6. Stop bottle at this level and shake it rapidly up and down about 10 times on a 200 mm stroke. This movement has a pumping effect as the ball opens and closes bottom of container.
7. Lift bottle back into sampler housing; turn the crank until getting a catch that keeps the tape fully tight. Ensure the finger of the crank handle is in a locking position before releasing the knob.
8. Unlock distribution block and turn it by 90° and lock it in transfer position. (Transfer position is marked with 3 dots on distribution block).
9. Lower sampling bottle until it is sitting on distribution block. This will open valve of sampling bottle. Liquid will flow from sampling bottle into distribution block and sampler housing.
10. Pull handle of transfer valve and liquid will flow by gravity to laboratory bottle.
11. When laboratory bottle is full, close transfer valve, lift sampling bottle and turn the crank until getting a catch that keeps the tape fully tight, turn distribution block in drainage position and lower sampling bottle again. (Drainage position is marked with 2 dots on distribution block).
12. Close 2" ball valve.
13. Remove sampler from ball valve.
14. In order to clean sampling device distribution block can be removed by unlocking pin at bottom and at top of distribution block. Top part of sampler housing can be removed as well and sampling bottle detached from tape. If tape requires cleaning it has to be unwound, preferably on another reel.

Note: if the block in 8 or 11 does not turn, check that the bottle is lifted up totally.

6.5 **OPERATING SAMPLER GT with RUNNING SAMPLING BOTTLE:**

	ND	TS	DESCRIPTION
O	20254	20138	Running bottle 0.40 l. FKM

0. Calibration plug on top of running bottle has to be adjusted according to liquid to be sampled. The plug is properly set up when the transferred quantity of liquid falls between 70 and 85% of the capacity of the sampling bottle, i.e. between 0.3 and 0.35 l (API MPMS Chapter 8.1, § 8.3.3.3).
1. Install sampler with sampling bottle on top of 2" valve by means of quick connect coupling.
(In case air in sampler housing could cause contamination in tank it is recommended to purge sampler after it has been installed).
2. Prepare hose connection from distribution block to laboratory bottle.
3. Open 2" ball valve
4. Unlock distribution block by pulling stopper, turn and lock distribution block in sampling position (Sampling position is marked with one dot on distribution block).
5. Lower running bottle regularly to appropriate depth but do not hit tank bottom to keep bottom plug closed all the time.
6. When appropriate depth has been reached lift running bottle back into Sampler housing at the same regular speed. Turn the crank until getting a catch that keeps the tape fully tight. Ensure the finger of the crank handle is in a locking position before releasing the knob.
7. Unlock distribution block and turn it by 90° and lock it in transfer position. (Transfer position is marked with 3 dots on distribution block).
8. Lower sampling bottle until it is sitting on distribution block. This will open valve of sampling bottle. Liquid will flow from sampling bottle into distribution block and sampler housing.
9. Pull handle of transfer valve and liquid will flow by gravity to laboratory bottle.
10. When the transfer is completed, check that the transferred liquid falls between the two marks 0.3 and 0.35 l in order to comply with API MPMS Chapter 8.1 requirements. Close the transfer valve. Lift sampling bottle and turn the crank until getting a catch that keeps the tape fully tight, turn distribution block in drainage position and lower sampling bottle again. (Drainage position is marked with 2 dots on distribution block).
11. Close 2" ball valve.
12. Remove sampler from ball valve.
13. In order to clean sampling device distribution block can be removed by unlocking pin at bottom and at top of distribution block. Top part of sampler housing can be removed as well and sampling bottle detached from tape. If tape requires cleaning it has to be unwound, preferably on another reel.



Note: if the block in 7 or 10 does not turn, check that the bottle is lifted up totally.

7 Care & Maintenance

7.1 Safety warning

As this equipment has been certified as non-electrical equipment for potentially explosive atmospheres. Specific precautions have to be taken regarding maintenance of the device. The user can exchange parts and modules if following points are observed :

1. Never carry out any repair or trouble shooting in an hazardous area.
2. Substitution of components may impact safety. Use only original spare parts.
3. Work shall be done only by maintenance personel who has experience with equipment certified for use in potentially explosive atmosphere.

The design of the equipment is modular, i.e. in case of damage, check which modules or spare parts have to be replaced. Order new parts according to enclosed drawings and specific item number TS -----. The instrument consists of the following modules:

- Mechanical parts
- Tape assembly
- Tape cleaner

7.2 Care

Clean the instrument of any excess of liquid after use. Remove the carter winder and clean the storage tube. This cleaning must be done very properly, in particular when corrosive liquids are sampled, such as strong acids or caustic soda for instance.

Store the instrument in a dry location.

Check periodically whether the general state of the device is still OK.

Check periodically whether all the sealings are still OK. O-rings of distribution block and 2" quick connect coupling are of first importance for gastightness.

Check periodically the gas-tightness of the unit up to 0.3 bars with an appropriate leak detector.

Check the tape wiper for wear. If necessary tighten it with the hexagonal key 1.3 mm.

Clean periodically the sampling bottle. Check the valves of sampling bottles for liquid leakage.

Check periodically the tape for kinks. Tape damage may result in its rupture and the lost of sampling bottle.

Check periodically the bearings state. Bearings have limited lifespan.

Check periodically (at least every 6 months) the continuity of grounding by measuring the electrical resistance between the hook lock (or the sampling bottle) and the quick connect coupler.

Resistance should not exceed 100 Ω .

7.3 Cleaning of the sampler

It is required to fit the cleanliness level with the sample goals.

Having friction between parts, metallic dust may be generated. Assess its potential impact on the sample taken. To limit it and ensure an easy winding/unwinding of the tape, consider the periodical maintenance operation of section 7.4 Winding action becoming stiff.

Where appropriate, dismantle the sampler and clean the parts with an appropriate cleaner to prevent any contamination of the sample by the sampler itself.

7.3.1 Carter winder

To clean HERMetric Sampler, carter winder can be easily removed as well and sampling bottle detached from tape.

7.3.2 Distribution bloc

In order to clean sampling device, distribution block can be removed by unlocking pin at bottom and at top of distribution block.

7.3.3 Tape cleaning

If tape requires cleaning it has to be unwound, Clean it during its winding-up operation on the winder.

7.4 Winding action becoming stiff

If after repeated use the winding action is becoming slightly stiff apply the following simple process.

- Pull out 2 meters of tape.
- With the device in horizontal position:
 - o Slacken the tape a few turns,
 - o Gently shake the instrument to free up the tape within the tape housing,
 - o Wind the tape again.

7.5 Tape wiper adjustment or replacement

Check the wear of the wiper. If necessary, adjust it or replace it.

- Unscrew the 2 wing screws to remove the carter winder.
- Dismantle the wiper holder by unscrewing the 2 screws.
- Remove the wiper of its box.
- Use the Allen key 1.3 mm to set the 2 wipers screws properly or exchange it.
- Put back the wiper holder and tighten the 2 screws.
- Reassemble the carter winder on the storage tube and tighten the 2 wing screws.

7.6 Tape replacement

- Remove the carter winder from the sampler (2 screws M5x20);
- Remove the tape wiper;
- Unwind totally the old tape;
- Remove the cover for winder (5 screws M4x10 side opposite to crank);
- Slacken the tape from the core;
- Remove it and unscrew the screw M4x30 tightening to the core;
- Put the new tape;
- Fasten the tape to the core with screw M4x30;
- Wind the new tape;
- Put back the cover for winder and tighten the 5 screws M4x10;
- Put back and adjust the tape wiper;
- Put back the carter winder and tighten the 2 screws M5x20;
- Check the tape winder for gas tightness (0.3 bar, 4.4 psi) before using again.

7.7 Bearings

Bearings are involved in the electrical safety of this device. In case of exchange, use only original spare parts.

7.8 Storage of HERMetric devices

For a proper storage of HERMetric products (UTImeter, Sampler, Thermometer and related spare-parts...), we recommend:

- Clean the devices after use,
- Remove batteries for prolonged storage,
- Store batteries in a dry and cold location,
- Store the goods in a safe, dry and dust free location with an ambient temperature between +5°C to +45°C.

7.9 Transportation of HERMetric devices

For transportation of the device, always stretch out the tape to avoid any move of the the bottle inside its storage tube.

7.10 Recycling of HERMetric devices

At delivery, equipment does not contain any dangerous materials inside which can harm the environment and people health during normal use or disposal. However the utilization and recycling of the equipment after the end of its life must be implemented by an authorized organization in accordance to local legislation.

Do not throw in rubbish but recycle wastes in accordance to environmental / local rules.



7.11 Installation & General care of HERMetric Valve

Refer to Recommendation for safe use, paragraph 2:

... grounding is effected through the quick connect coupler and the mating nipple of the **valve** provided that these parts are **kept clean and free from corrosion in order to guarantee electrical conductivity. If a grease is used for this purpose, it must be one which contains graphite.**

For a proper installation, please refer to the chosen sealing component manufacturer installation guide. In any case, tightening torque of valve fixing screws must not overtake 160 Nm (120 lbf.ft).

Inspect valves in regards to damage / marks / pollution preventing a proper connection and gastightness when connected with the HERMetric devices.

Ensure no damage impact the PTFE sealing of the ball valve.

Where appropriate, complete a leak test with a leak detector spray to confirm the valve tightness.

8 Specifications

General Specifications

Tape length	up to 35 m/115 ft
Tape graduation	Metric/English
Tape resolution	1 mm / 1/16"
Tape accuracy	±6.3mm/35 m (±1/4"/115 ft approx.)
Maximum tank pressure	Atmospheric pressure ±0.3 bar (4.4 psi)
Liquid density	up to 8kg/dm ³
Ambient temperature range	-20°C to 80°C (-4°F to 176°F)
Maximum liquid temperature	80°C (176°F)
Mechanical coupling	Q2 (2")
Weight	8.8 kg approx.
Dimensions	1016 x 118 x 238 mm approx.
Meets ISO 3170 "Petroleum liquids – Manual sampling"	

Hazardous environments approvals

ATEX	KEMA 06ATEX0027 II 1 G Ex h IIB T6 Ga (Ta: -20°C to +80°C Tp: -20°C to +80°C)
IECEX	NL/DEK/ExTR18.0009/00 Ex h IIB T6 Ga (Ta: -20°C to +80°C Tp: -20°C to +80°C)

Tape cleaning device	Adjustable tape cleaner
-----------------------------	-------------------------

Available bottles	Zone, bottom, spot, running sampling bottles
--------------------------	--

Maintenance	modular design / easy exchange of parts
--------------------	---

Specifications subject to change without notice.

9 Drawings & Declaration of Conformity

These documents are enclosed in following pages.

9.1 Sampler

O = Option, according to specific order.

	ND	TS	DESCRIPTION
	20189	10047	Sampler 2" GT Viton assy
	30235	10358	Plug Viton assy
	20280	10315	Carter winder FKM assy
	30592	10317	Body assy
	30544	10313	Crank assy FKM
	30237	10535	Wiper PTFE
	40796	10369	Tape assy w/o winder 30m
	40803	10389	Tape assy w/o winder 35m
	41022	20612	Kit inlet valve FKM
	30329	10380	Zone bottle 0,43 l. Viton assy
	20192	41736	Kit seat valve Zone bottle 0,43 l. FKM assy
O	20246	20124	Bottom bottle 0.40 l FKM assy
O	20255	20137	Spot bottle 0.40 l. FKM
O	20254	20138	Running bottle 0.40 l. FKM

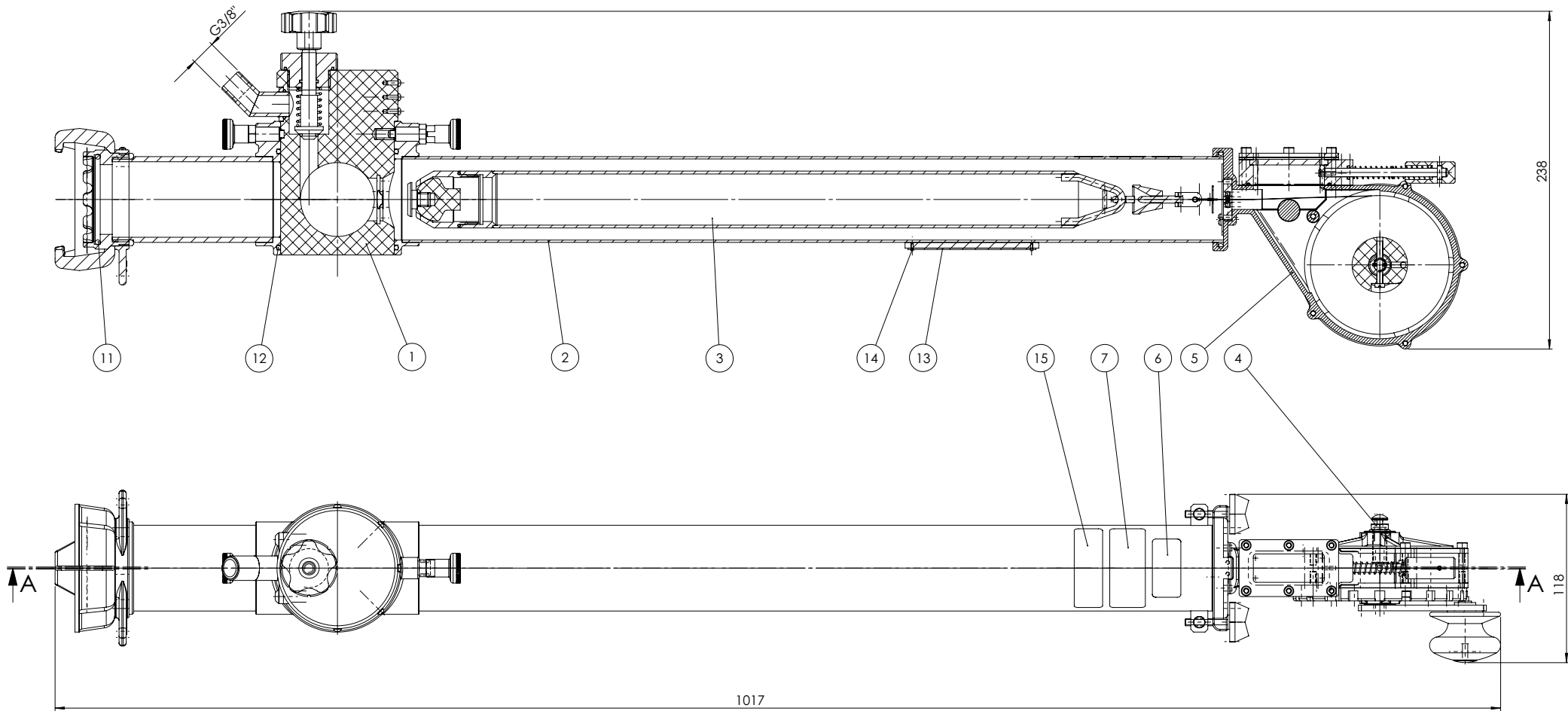
9.2 Valves

Important: Valves are supplied separately from Samplers. There are not included in Sampler scope of supply.

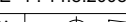
	ND	TS	DESCRIPTION
	20291	10083	Valve C2-SS-W, 2" flange DUJ, weather cap
	20287	10082	Valve C2-SS-SEC, 2" flange DUJ, security cover
	20288	10081	Valve C2-SS-BL, 2" flange DUJ, blind cover
	30391	10076	Valve C2-SS-W, 2" female, weather cap
	30374	10078	Valve C2-SS-SEC, 2" female, security cover
	30596	10085	Valve C2-SS-BL G2" Female, blind cover

9.3 Declaration of Conformity

COUPE A-A



Item	Qty	Weight	Description	Material	TS	ND	TOLERANCES UNLESS OTHERWISE SPECIFIED										Weight	14779.0 Eff.	ISSUE 4 : 14.8.2008								
							Norm size	Over	6	30	100	300	1000	2000	Angles												
1	1	1193.6	Plug Viton assy		10358	30235	Fit	To	6	30	100	300	1000	2000	0,1"												
2	1	3572.3	Body assy		10317	30592	Fine	±	0,05	0,1	0,15	0,2	0,3	0,5	0,1"												
3	1	983.4	Zone bottle 0.43l. Viton assy		10380	30329	REMOVE ALL BURRS AND SHARP EDGES																				
4	1	12.5	Kit inlet valve FKM		20612	41022	Drawn:	10.02.2009					Control:			1:2											
5	1	2356.7	Carter winder FKM assy		10315	20280	SAMPLER 2" GT																				
6	1	0.1	Label "Sampler"		50005	40344	SAMPLER 2" GT FKM assy																				
7	1	0.2	Label " Enraf Tanksystem"		50006	40343																					
8	1	6640.0	Carrying case S2GT	Wood	50338	30338																					
9	1	0.0	Sachet PEBD 90x75		50335																						
10	1	0.0	Hexagon key 1.3mm	Steel	50350	ISO2936																					
11	1	1.9	O-Ring ø 56.74 x 3.53	Viton	20541																						
12	2	1.8	O-Ring ø80x3	Viton	20522																						
13	1	14.4	Identification plate TS 10047 AV-nnnn	1.4301	50087	41314																					
14	2	0.1	Round head grooved pin 1.4x4	A2	40760	DIN1476																					
15	1	0.1	Sticker " Earth strap"	-	50072	41143																					

MPSA YYYN		
Replacement for: ND	Replaced by: ND	

TS 10047	
ND 20189	
REF ND	

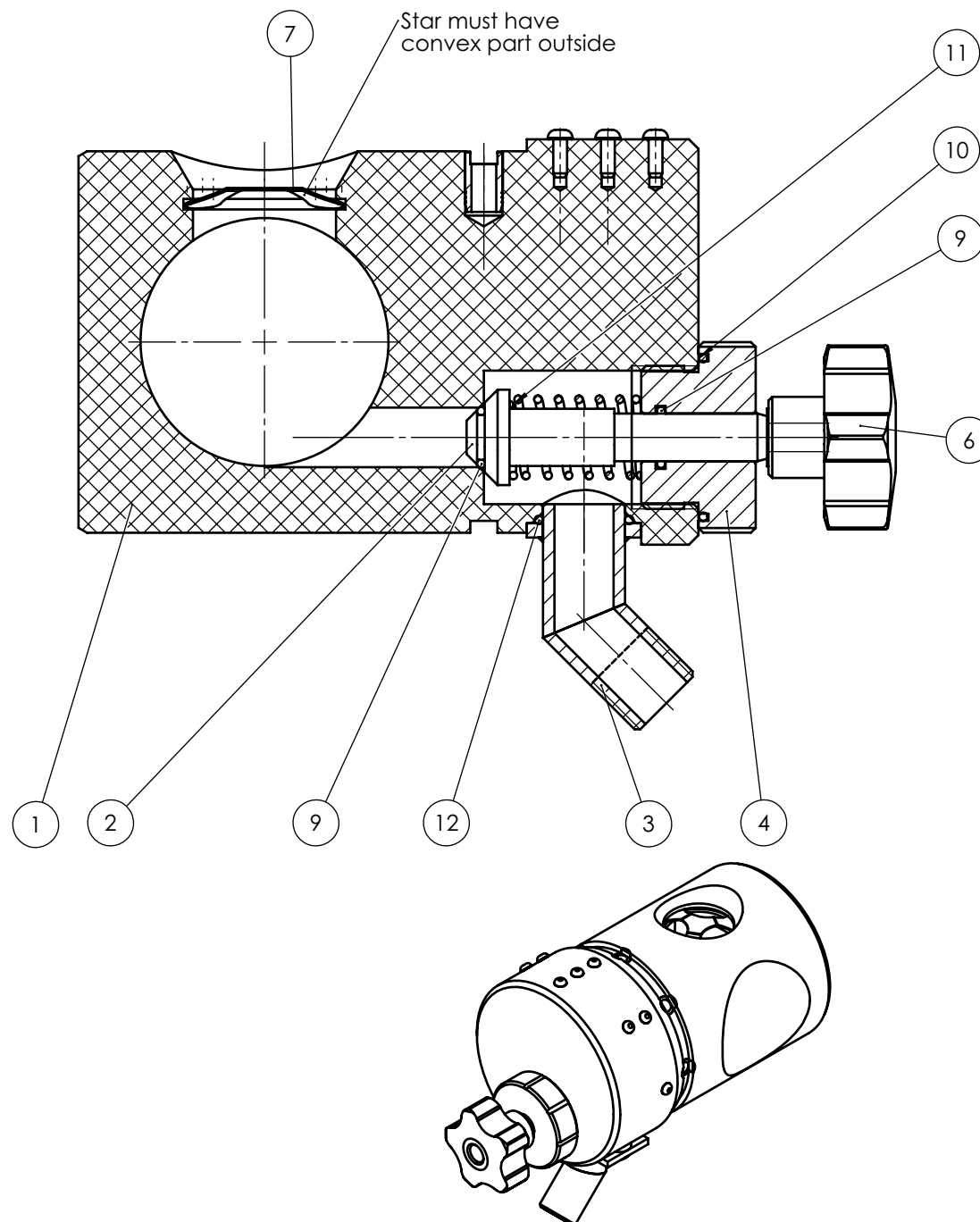
Enraf Tanksystem SA	
RUE DE L'INDUSTRIE 2 CH-1630 BULLE	
Tel. +41 26 91 91 500 - Fax +41 26 91 91 500	

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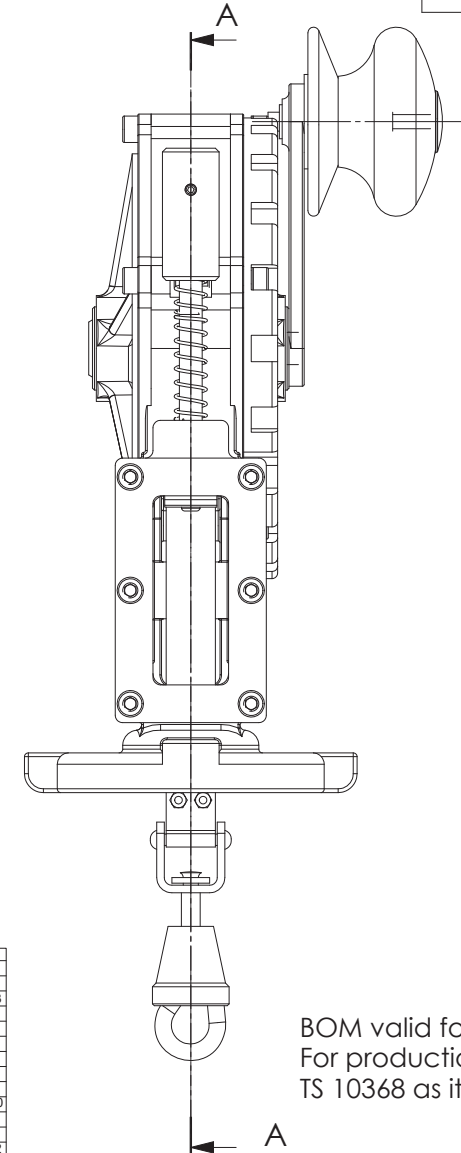
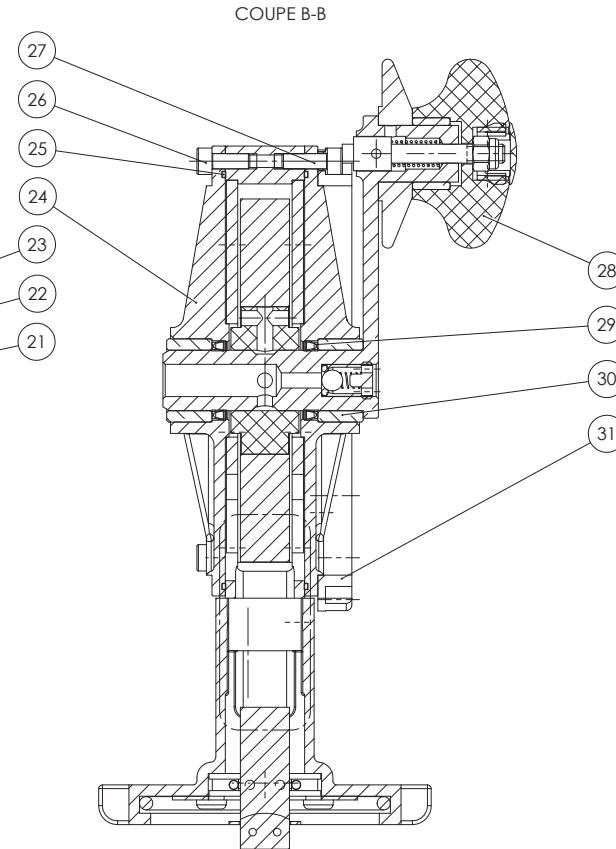
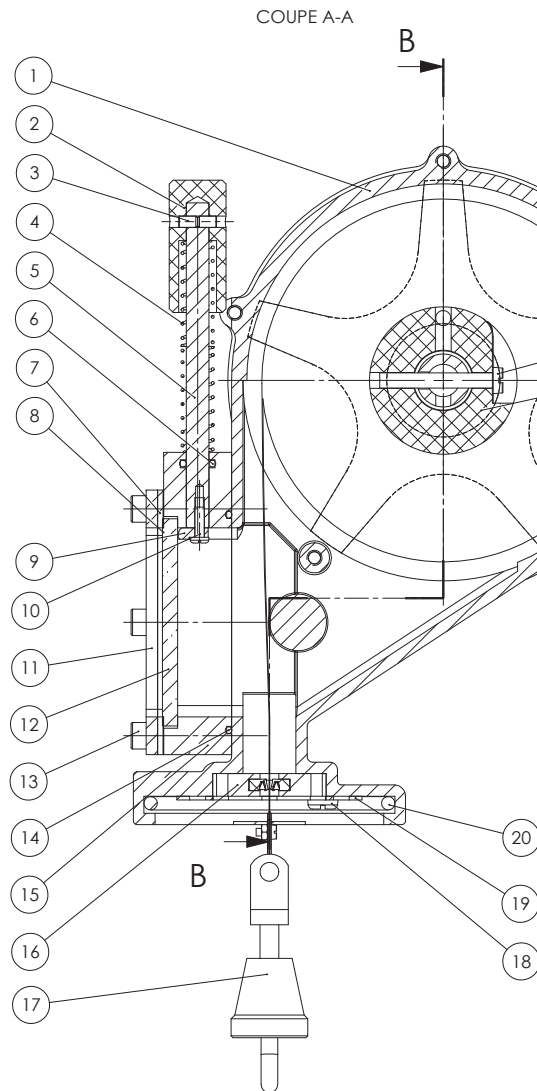
Item	Qty	Weight	Description	Material	TS	ND
1	1	992.0	Plug		20013	30234
2	1	55.7	Spindle	1.4435	20015	40445
3	1	63.4	Elbow G 3/8"	1.4435	20016	40446
4	1	43.4	Nut	PTFE 25% car	20017	40447
5	2	2.2	Spacer	1.4435	-	40448
6	1	24.0	Lobe knobs	-	20512	
7	1	3.2	Star	1.4301	20122	40939
8	2	3.0	Socket button head cap screw M5x20	A2	40756	ISO7380
9	2	0.1	O-Ring ø9.25x1.78	Viton	13505	
10	1	0.3	O-Ring ø31.47x1.78	Viton	20514	
11	1	5.8	Spring	1.4310	20515	
12	1	0.1	O-Ring ø17.17x1.78	Viton	20517	

TOLERANCES UNLESS OTHERWISE SPECIFIED										Weight: 1193.6 Eff.	ISSUE 2 : 7.8.2008		
Norm. Size	Over		6	30	100	300	1000	Angles					
Fit	To	6	30	100	300	1000	2000						
Fine	±	0,05	0,1	0,15	0,2	0,3	0,5		0,1"				
REMOVE ALL BURRS AND SHARP EDGES										1:1	MPSA YYYN		
Drawn:		Control:											
UPR 08.08.2008										Replacement for: ND		Replaced by: ND	
Sampler 2" GT Plug Viton assy										TS 10358			
										ND 30235			
										REF ND 20189			
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										RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505			

REVISIONS			
Is	Modification	Date	Visa
2	Add Security spacer	23.03.15	UPR
3	Removed Security spacer	06.02.18	upr

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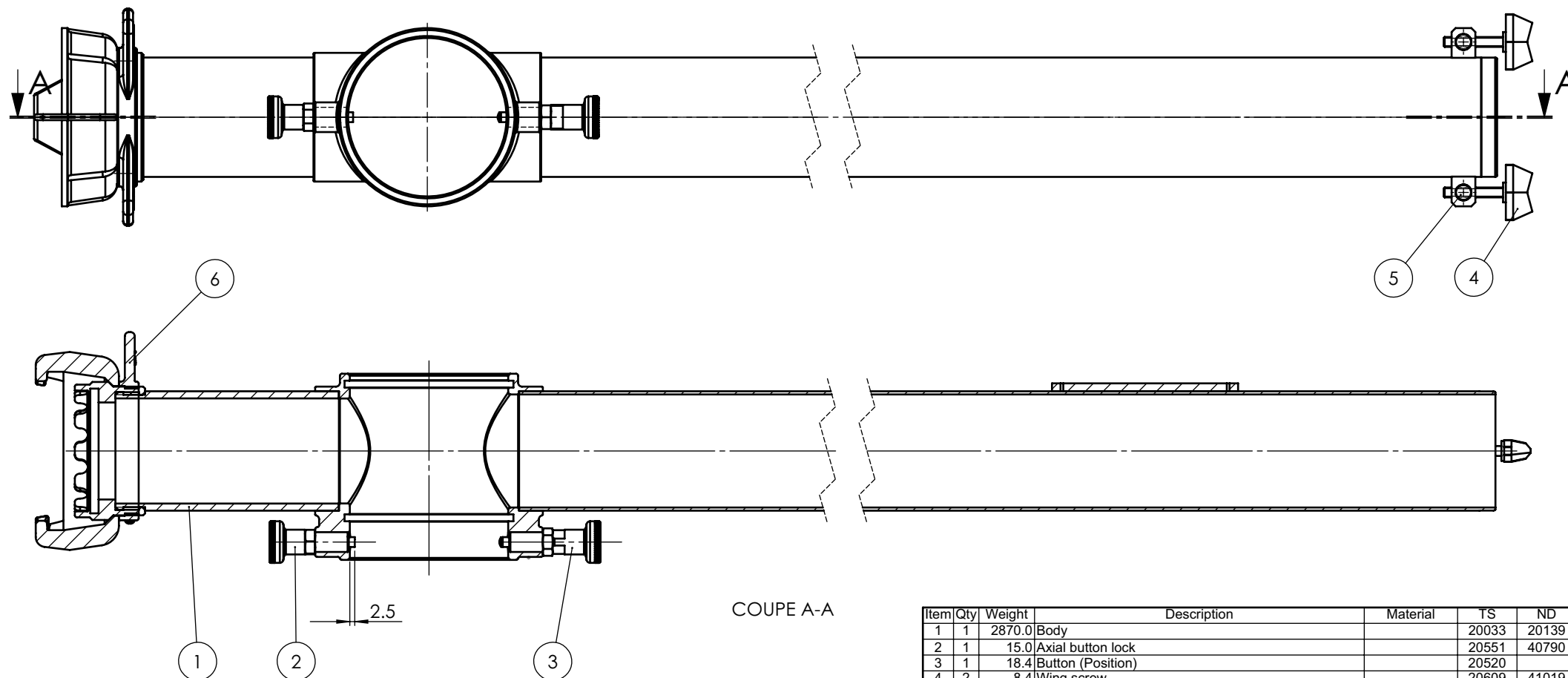
Item	Qty	Weight	Description	Material	TS	ND
1	1	578.8	Carter winder	CF8M	20602	20277
2	1	9.0	Push button	PTFE 25% car	20022	40452
3	2	1.0	Socket set screw M3x5	A2	40850	DIN 913
4	2	0.8	Spring of wiper	1.4310	12611	
5	1	18.2	Axle of wiper	1.4435	20023	40453
6	1	0.1	O-Ring ø 6.07 x 1.78	FKM	20513	
7	1	2.6	Gasket for sight & cover	FKM	20029	40459
8	1	0.2	Gasket for sight glass	FEP	21036	40985
9	1	0.6	Wiper	PTFE	12097	30700
10	1	2.0	Slotted pan head mach. screw M2.5x8	A2	40705	ISO1590
11	1	41.2	Frame of sightglass	1.4301	20024	40454
12	1	13.1	Sightglass	Verre	20026	40456
13	6	4.0	Socket head cap screw M4x30	A2	40310	DIN 912
14	1	0.7	O-Ring ø 44.17 x 1.78	FKM	20540	
15	1	57.2	Sightglass holder	PVDF	21046	30524
16	1	5.5	Wiper PTFE	10535	30237	
17	1	663.6	Tape assy w/o winder 30m	10369	40796	
18	2	1.0	Slotted pan head mach. screw M4x5	A2	40701	ISO1580
19	1	11.1	Wiper holder	1.4301	20028	40458
20	1	1.9	O-Ring ø 61.91 x 3.53	FKM	20519	
21	1	27.1	Tape holder	PTFE 25% car	21041	40989
22	1	3.0	Slotted cheese head mach. screw M4x30	A2	40800	ISO1207
23	2	75.6	Washer	1.4404	20607	41014
24	2	287.5	Cover	CF8M	20603	30539
25	2	1.1	Gasket	PTFE	20604	41012
26	5	2.0	Socket head cap screw M4x10	A2	40302	DIN 912
27	5	2.0	Socket head cap screw M4x12	A2	40303	DIN 912
28	1	200.1	Crank assy FKM	-	10313	30544
29	2	0.3	FOI Forseal ring ø16	PTFE 25% car	21059	-
30	2	17.6	Bearing 16x22x12	Bronze	21062	-
31	1	23.8	Washer assy	20606	30540	

BOM valid for After Sales.
For production use
TS 10368 as item 17

TOLERANCES UNLESS OTHERWISE SPECIFIED										Weight:		ISSUE 3 : 06.02.2018			
Norm.		Over		6	30	100	300	1000	Angles	2427.2 Eff.					
Fit		To		6	30	100	300	1000	2000						
Fine		±		0.05	0.1	0.15	0.2	0.3	0.5	0.1°					
REMOVE ALL BURRS AND SHARP EDGES										1:1		MPSA YYYN			
Drawn:		UPR 11.08.2008				Control:				Replacement for: ND		Replaced by: ND			
Sampler 2" GT												TS 10315			
Carter winder FKM assy												ND 20280			
												REF ND 20159/20189			
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Item	Qty	Weight	Description	Material	TS	ND
1	1	2870.0	Body		20033	20139
2	1	15.0	Axial button lock		20551	40790
3	1	18.4	Button (Position)		20520	
4	2	8.4	Wing screw		20609	41019
5	2	5.5	Pivot	A1	20605	41013
6	1	640.9	Female quick coupler		20537	30303

TOLERANCES UNLESS OTHERWISE SPECIFIED							Weight:	ISSUE 1 : 21.08.2008	
Norm. Size	Over	6	30	100	300	1000	3572.3 Eff.	MPSA YYYN	
Fit	To	6	30	100	300	1000			

REMOVE ALL BURRS AND SHARP EDGES		1:2	MPSA YYYN	
Drawn: UPR 21.08.2008	Control:		Replacement for: ND	Replaced by: ND

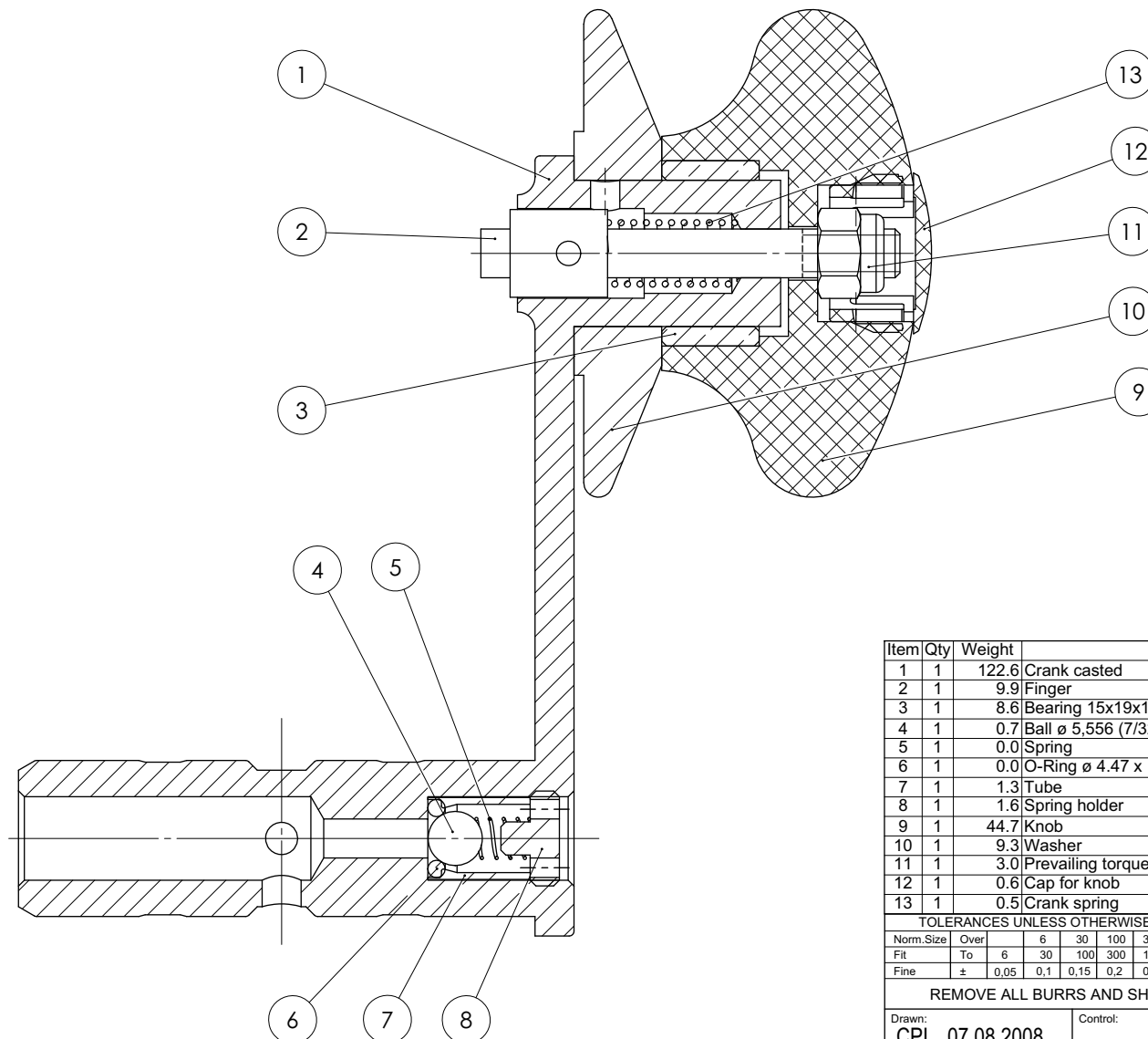
Sampler 2" GT Body assy				TS 10317	
				ND 30592	
				REF ND 20189/20190	

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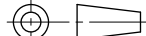
REVISIONS			
Is	Modification	Date	Visa
2	Mécano-soudé-> fonte inox	14.12.11	cpi

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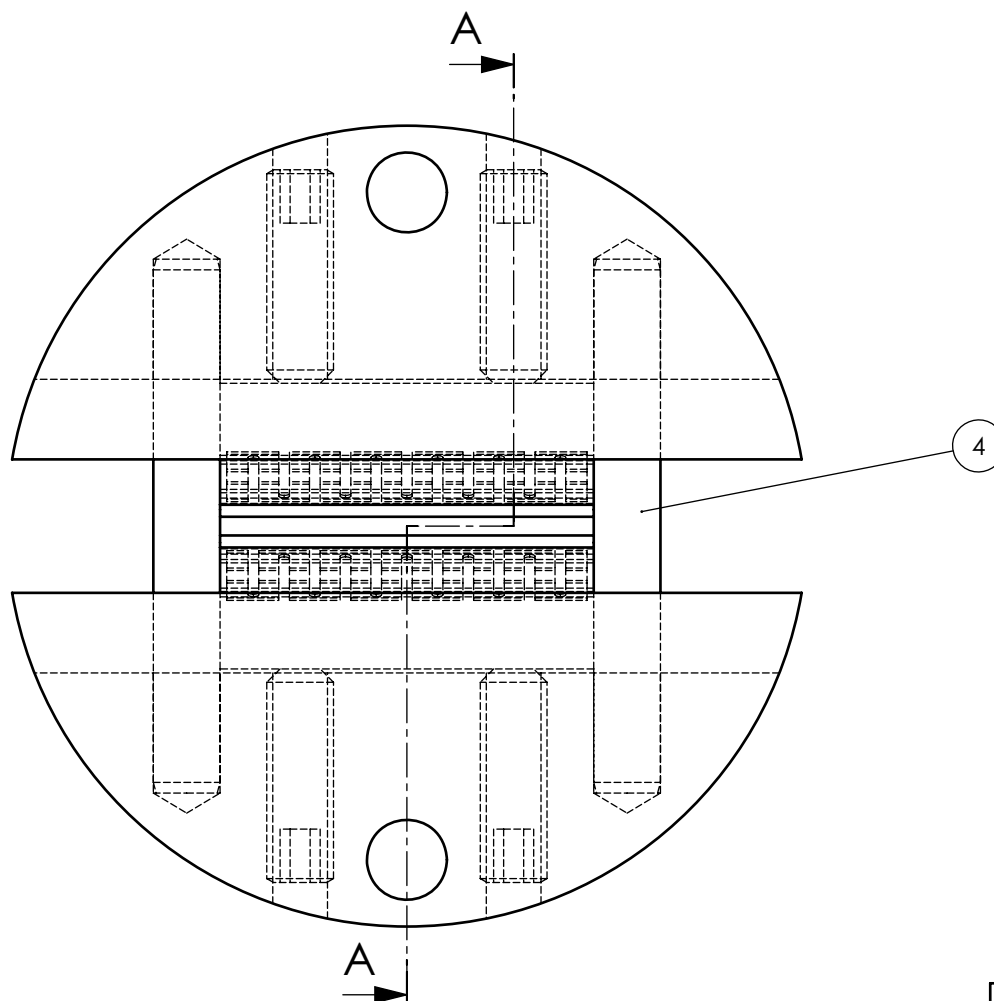


Item	Qty	Weight	Description	Material	TS	ND
1	1	122.6	Crank casted	CF8M	21034	30933
2	1	9.9	Finger	1.4401	21047	40991
3	1	8.6	Bearing 15x19x10	Bronze	21049	
4	1	0.7	Ball ø 5,556 (7/32")	1.4435	11129	
5	1	0.0	Spring	1.4310	20103	
6	1	0.0	O-Ring ø 4.47 x 1.78	FKM	20104	
7	1	1.3	Tube	1.4401	20099	40804
8	1	1.6	Spring holder	1.4401	20105	40808
9	1	44.7	Knob	PF 31	21048	40992
10	1	9.3	Washer	PE-HD	11052	40563
11	1	3.0	Prevailing torque hex nut M5	A2	40009	DIN 985
12	1	0.6	Cap for knob	PE-HD	11054	40182
13	1	0.5	Crank spring	1.4310	11500	

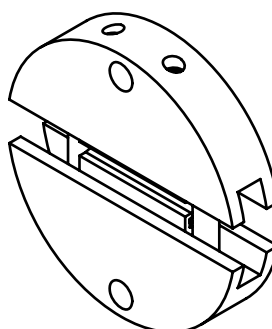
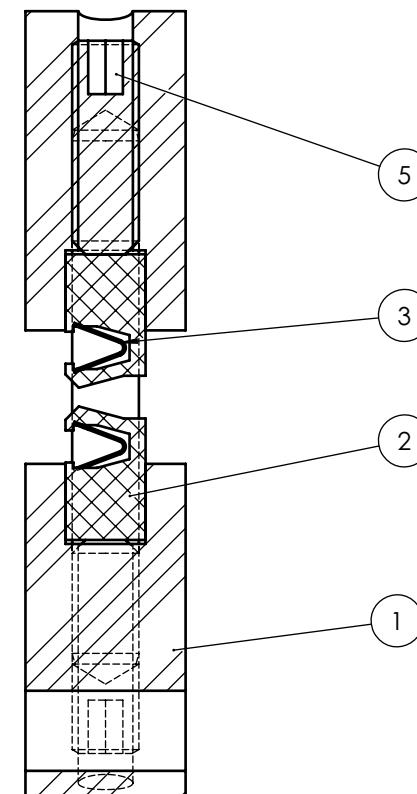
TOLERANCES UNLESS OTHERWISE SPECIFIED										Weight:	ISSUE 2 : 14.11.2011	
Norm. Size	Over		6	30	100	300	1000	Angles	2:1	200.1 Eff.	MPSA YYYN	
Fit	To	6	30	100	300	1000	2000					
Fine	±	0,05	0,1	0,15	0,2	0,3	0,5					
REMOVE ALL BURRS AND SHARP EDGES												
Drawn:			Control:							2:1	Replacement for: ND	Replaced by: ND
CPI 07.08.2008												
Sampler 2" GT										TS 10313		
Crank assy FKM										ND 30544		
										REF ND 20280		
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COUPE A-A



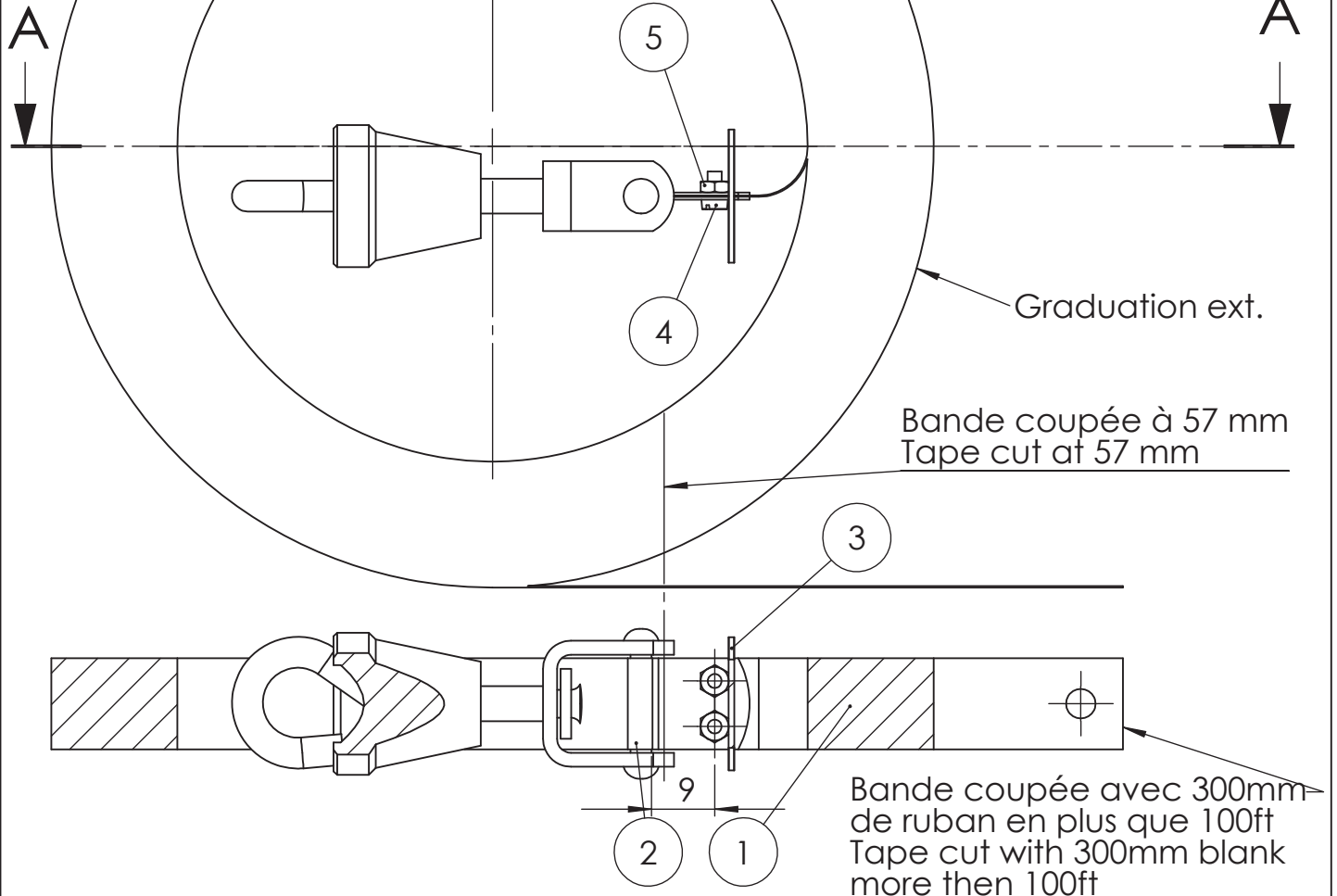
Item	Qty	Weight	Description	Material	TS	ND
1	2	2.3	Wiper holder	PVDF	12043	30236
2	2	0.3	Wiper	PTFE 25% car	12041	40424
3	2	0.0	Spring for wiper PTFE	1.4310	12042	41351
4	2	0.0	Rod 2.5x20	A2	40211	DIN 7
5	4	0.0	Socket set screw M2.5x8	A4	40858	DIN 913

TOLERANCES UNLESS OTHERWISE SPECIFIED				Weight:	ISSUE 1 : 8.8.2007	
Norm. Size	Over	6	30	100	300	1000
Fit	To	6	30	100	300	1000
Fine	±	0,05	0,1	0,15	0,2	0,3
REMOVE ALL BURRS AND SHARP EDGES				Angles	5.5 Eff.	
				5:1	MPSA 1000	
Drawn: UPR 08.08.2007				Control:	Replaced by: ND	Replaced by: ND
Sampler 2" GT				TS 10535		
Wiper PTFE				ND 30237		
				REF ND 20137/20152/20178		
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				RUE DE L'INDUSTRIE 2 CH-1630 BULLE		
				Tel. +41 26 91 91 500 - Fax +41 26 91 91 505		

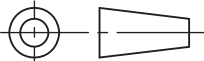
REVISIONS			
Is	Modification	Date	Visa
2	cut at 300mm after 100ft mark	22.4.15	UPR
3	Swivel in center, cut at 478	13.03.18	upr

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Item	Qty	Weight	Description	Material	TS	ND
1	1	625.5	Tape 30 m Metric/inch	1.4021	19503	
2	1	42.0	Swivel hook with clasp		20502	40793
3	1	1.7	Washer for tape connector	1.4301	11238	41200
4	2	1.0	Slotted cheese head mach. screw M2x4	A4	40811	ISO1207
5	2	0.0	Hex nut M2	A2	40006	ISO 4032

TOLERANCES UNLESS OTHERWISE SPECIFIED									Weight: 662.3 Eff.	ISSUE 3 : 13.03.2018	
Norm.Size	Over		6	30	100	300	1000	Angles			
Fit	To	6	30	100	300	1000	2000				
Fine	±	0,05	0,1	0,15	0,2	0,3	0,5	0,1°			
REMOVE ALL BURRS AND SHARP EDGES									1:1	MPSA 1000	
Drawn: UPR 23.06.2008			Control:							Replacement for: ND	Replaced by: ND
Sampler Tape assy w/o winder 30m									TS 10369		
									ND 40796		
									REF ND 30225/20319/20332		
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REVISIONS

ATEX Certified Product

Graduation ext.

Bande coupée à 57 mm
tape cut at 57 mm

Bande coupée à 35.3m
Tape cut at 35.3m

TOLERANCES UNLESS OTHERWISE SPECIFIED

Weight:

751.4 Eff.

ISSUE 3 : 13.03.2018

MPSA
1000

Control:

1:1

Replacement for:
ND

Replaced by:	ND
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Sampler 2" GT

Tape assy w/o winder 35m

TS 10389

ND 40803

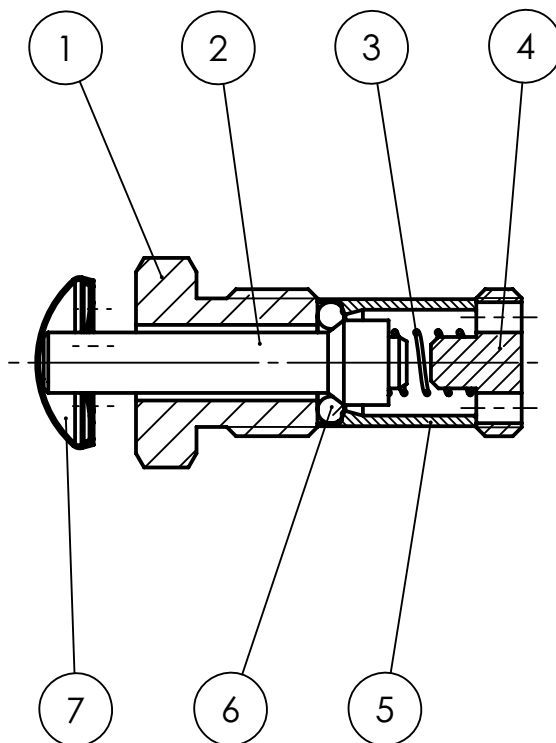
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The receiver is responsible for every misuse.

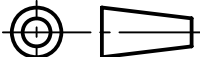
Enraf Tanksystem SA

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Tel. +41 26 91 91 500 - Fax +41 26 91 91 505

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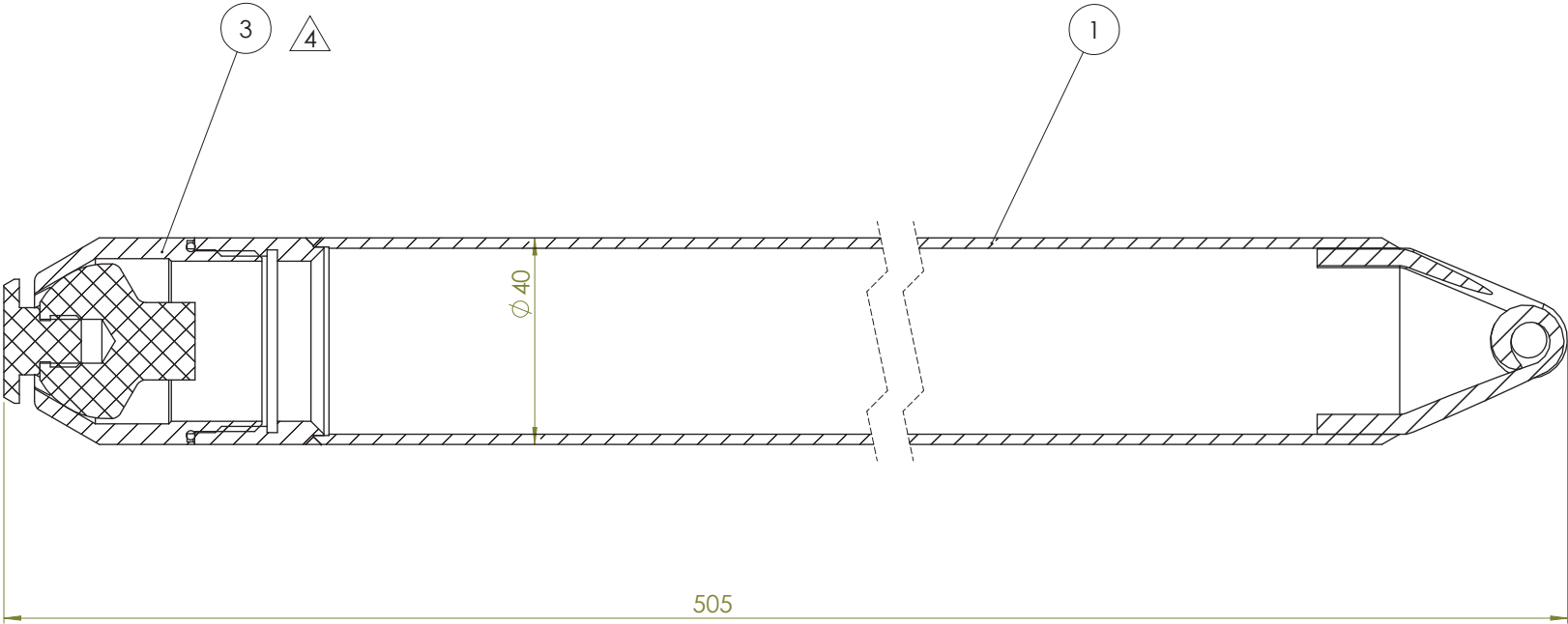
Item	Qty	Weight	Description	Material	TS	ND
1	1	6.5	Relief valve seat	1.4401	20101	40806
2	1	2.7	Valve rod	AISI 316	21035	40984
3	1	0.0	Spring	1.4310	20103	
4	1	1.6	Spring holder	1.4401	20105	40808
5	1	1.3	Tube	1.4401	20099	40804
6	1	0.0	O-Ring ø4.47x1.78	Viton	20104	
7	1	0.4	Starlock ø4	1.4310	40910	
8	1	6.0	Sachet PEBD 90x75		50335	

TOLERANCES UNLESS OTHERWISE SPECIFIED										Weight:		ISSUE 1 : 12.8.2008			
Norm.Size	Over		6	30	100	300	1000	Angles	12.5 Eff.						
Fit	To	6	30	100	300	1000	2000								
Fine	±	0,05	0,1	0,15	0,2	0,3	0,5				0,1°				
REMOVE ALL BURRS AND SHARP EDGES										2:1		MPSA YYYN			
Drawn: UPR 12.08.2008					Control:							Replacement for: ND		Replaced by: ND	
Sampler 2" GT Kit inlet valve FKM										2:1		TS 20612			
												ND 41022			
												REF ND 20189			
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REVISIONS			
Is	Modification	Date	Visa
3	Viton -> FKM	25.04.12	cpi
4	Change for Kit seat valve	11.10.2019	UPR

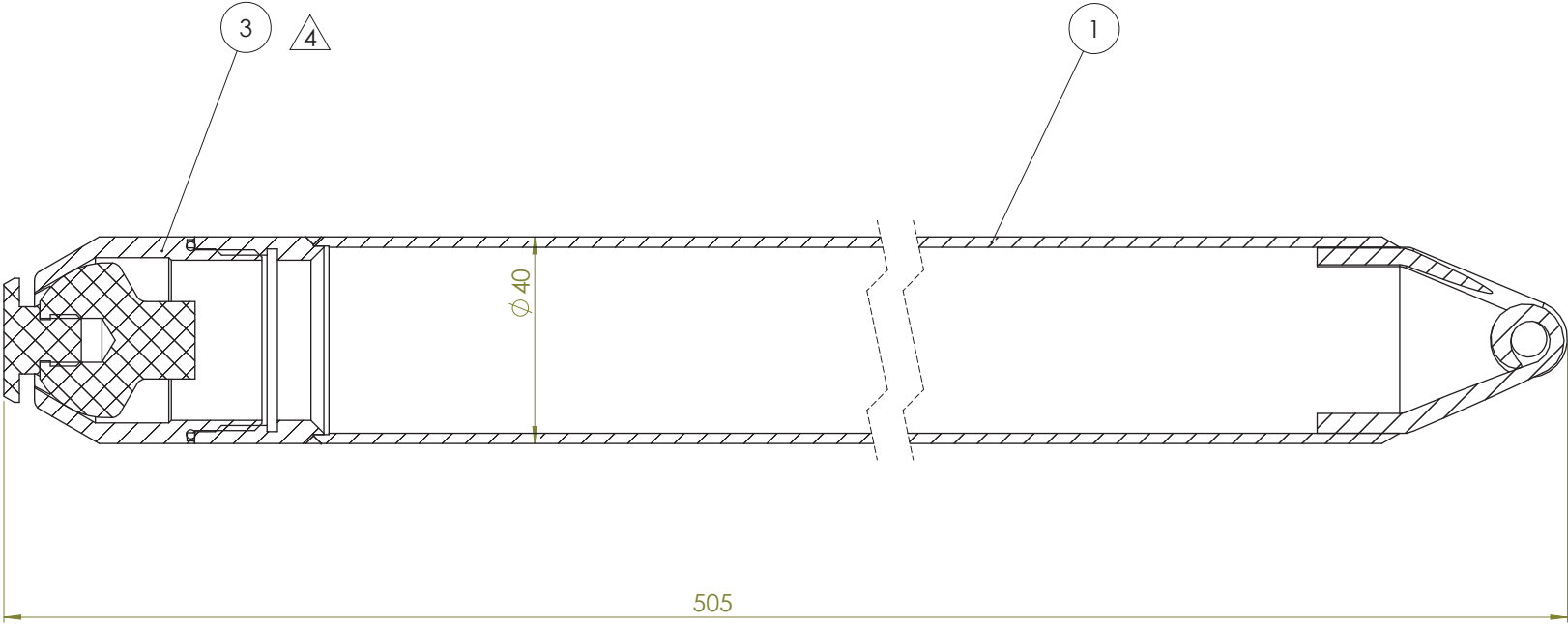


Item	Qty	Weight	Description							Material	TS	ND
1	1	869.5	Bottle 0,43 l.								20048	30294
3	1	142.3	Kit seat valve Zone bottle 0.43l. FKM								20192	41736
TOLERANCES UNLESS OTHERWISE SPECIFIED									Weight: 1011.8 Eff.	ISSUE 4 : 11.10.2019		
Norm. Size		Over	6	30	100	300	1000	Angles				
Fit		To	6	30	100	300	1000					2000
Fine		±	0,05	0,1	0,15	0,2	0,3	0,5	0,1°	1:1	MPSA YYYN	
REMOVE ALL BURRS AND SHARP EDGES									Replaced for: ND		Replaced by: ND	
Drawn:			Control:									
UPR 12.08.2008												
Sampler 2" GT Zone bottle 0.43l. FKM assy									TS 10380			
									ND 30329			
									REF ND 20159			
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									RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505			

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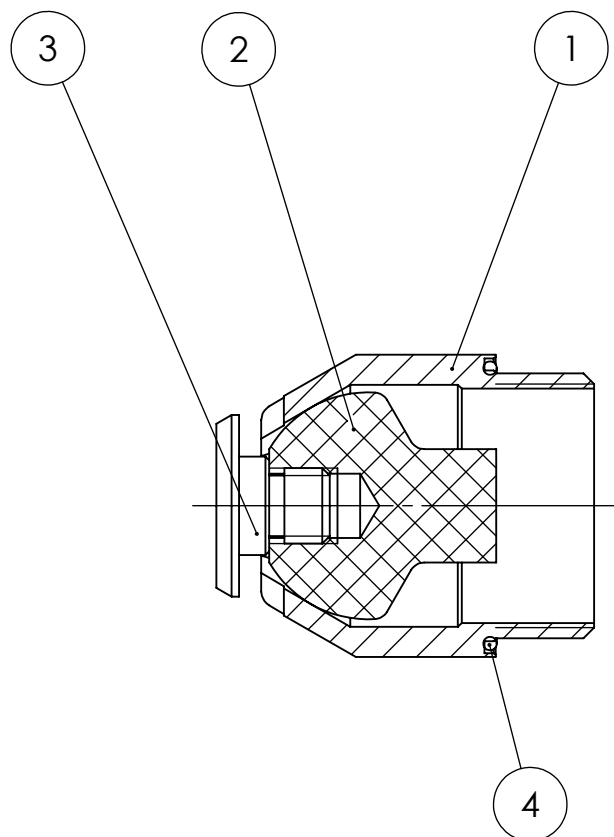
REVISIONS			
Is	Modification	Date	Visa
3	Viton -> FKM	25.04.12	cpi
4	Change for Kit seat valve	11.10.2019	UPR



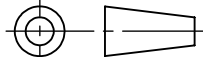
Item	Qty	Weight	Description	Material	TS	ND					
1	1	869.5	Bottle 0,43 l.		20048	30294					
3	1	142.3	Kit seat valve Zone bottle 0.43l. FKM		20192	41736					
TOLERANCES UNLESS OTHERWISE SPECIFIED				Weight: 1011.8 Eff.	ISSUE 4 : 11.10.2019						
Norm. Size	Over	6	30				100	300	1000	Angles	
Fit	To	6	30				100	300	1000	2000	
Fine	±	0,05	0,1	0,15	0,2	0,3	0,5	0,1°	1:1	MPSA YYYN	
REMOVE ALL BURRS AND SHARP EDGES										Replacement for: ND	Replaced by: ND
Drawn:		Control:									
UPR		12.08.2008									
Sampler 2" GT Zone bottle 0.43l. FKM assy											
This drawing is our property and must not without our permission be copied or made available to others. The receiver is responsible for every misuse.									TS 10380		
									ND 30329		
									REF ND 20159		
									Enraf Tanksystem SA		
									RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505		

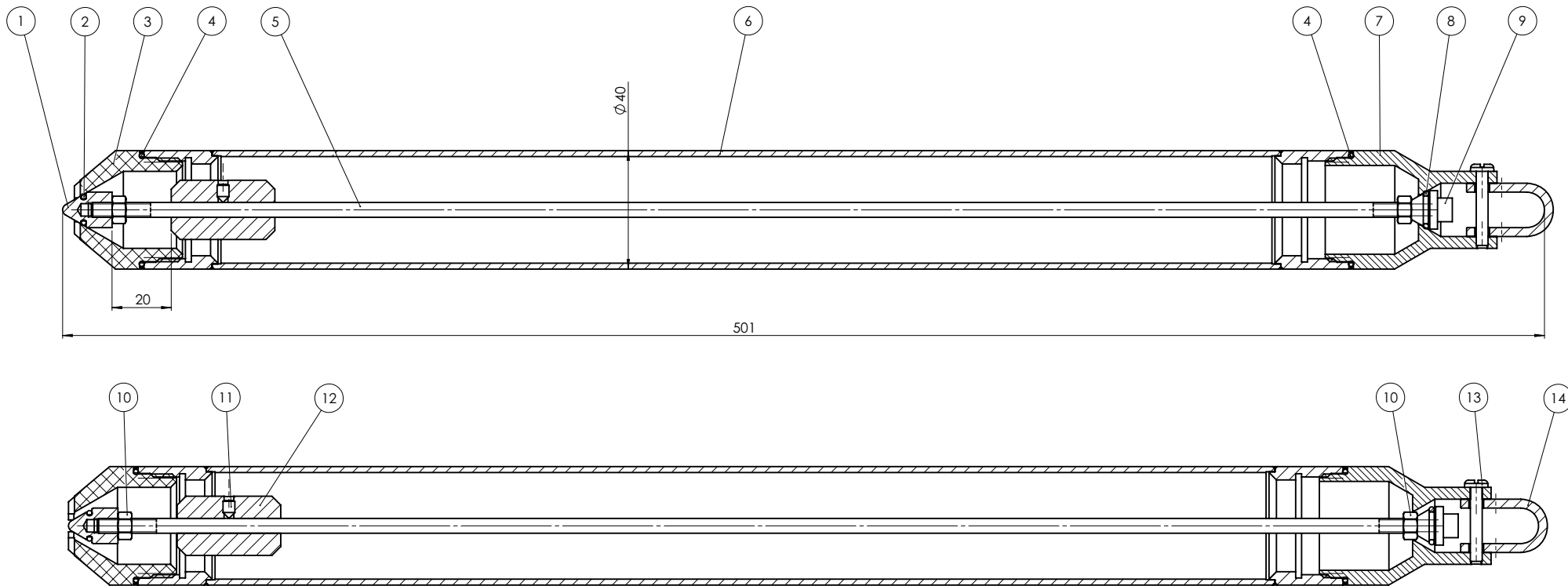
ATEX Certified Product

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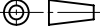


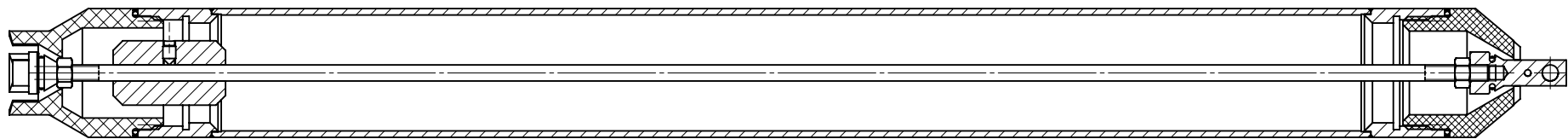
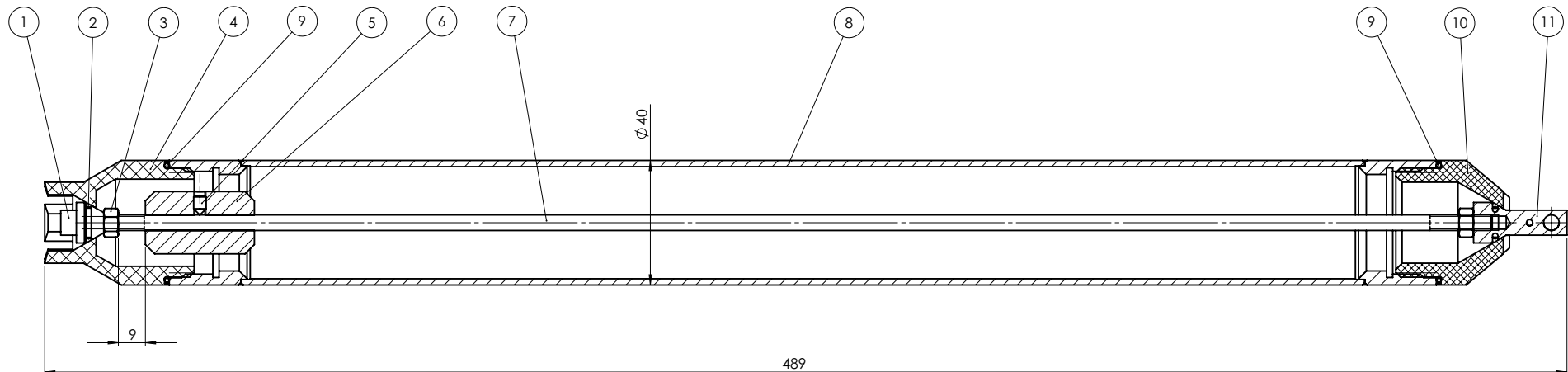
Item	Qty	Weight	Description	Material	TS	ND
1	1	113.1	Seat	1.4435	20049	40592
2	1	24.7	Bottom valve	PTFE	20050	41062
3	1	4.2	Valve screw	PVDF	20051	40593
4	1	0.3	O-Ring $\varnothing$ 34.65 x 1.78	FKM	20539	

TOLERANCES UNLESS OTHERWISE SPECIFIED									Weight: 142.3 Eff.	1:1	ISSUE 1 : 12.07.2019	
Norm.Size	Over	6	30	100	300	1000	Angles					
Fit	To	6	30	100	300	1000		2000				
Fine	±	0,05	0,1	0,15	0,2	0,3		0,5	0,1°			
REMOVE ALL BURRS AND SHARP EDGES												
Drawn: UPR 12.08.2008			Control:						MPSA YYYN			
									Replacement for: ND		Replaced by: ND	
Sampler 2" GT Kit seat valve Zone bottle 0.43l. FKM										TS 20192		
										ND 41736		
										REF ND		
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										RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505		

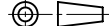


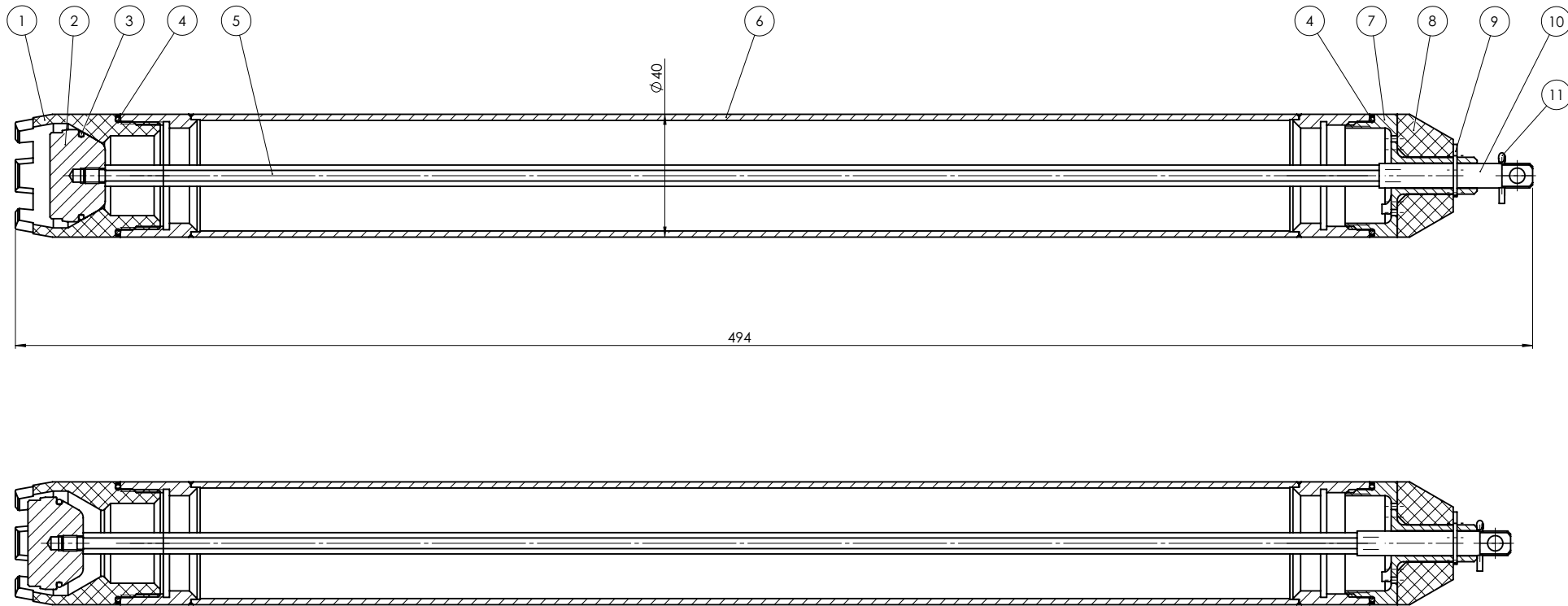
Item	Qty	Weight	Description	Material	TS	ND
1	1	8.8	Bottom valve	1.4401	20125	40962
2	1	0.1	O-Ring ø6.75x1.78	Viton	13508	
3	1	39.2	Seat	PTFE 25% car	20131	30495
4	2	0.3	O-Ring ø34.65x1.78	Viton	20539	
5	1	71.1	Rod	1.4401	20126	40963
6	1	806.7	Bottle 0.40 l.	1.4432	20112	30462
7	1	149.5	Top cover	1.4401	20128	30494
8	1	0.1	O-Ring ø9.25x1.78	Viton	13505	
9	1	7.5	Upper valve	1.4401	20130	40961
10	2	2.0	Hex nut M5	A2	40005	ISO4032
11	1	2.0	Socket set screw M4x6	A2	40862	DIN 914
12	1	77.9	Load	1.4401	20127	40964
13	1	3.0	Slotted pan head mach. screw M4x25	A2	40703	ISO1580
14	1	8.5	Clip	1.4301	20129	40965

TOLERANCES UNLESS OTHERWISE SPECIFIED							Weight:	ISSUE 1 : 05.09.2008	
Norm-Size	Over	6	30	100	300	1000	1170.8 Eff.	MPSA YYYN	
Fit	To	6	30	100	300	1000			
Fine		± 0.05	0.1	0.15	0.2	0.3			
REMOVE ALL BURRS AND SHARP EDGES							1:1	Replaced for: ND	
Drawn: UPR 05.09.2008		Control:		TS 20124					
Sampler 2" GTN Chem Bottom bottle 0.40l FKM assy							ND 20246		
							REF ND		
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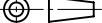


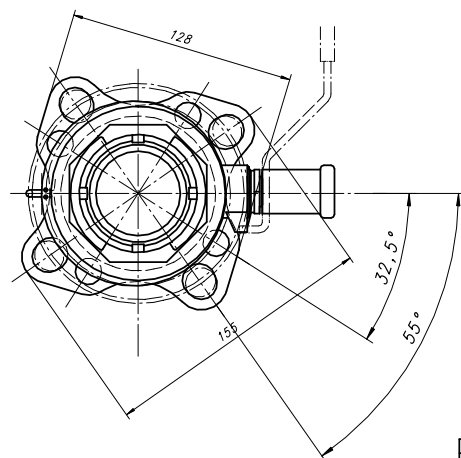
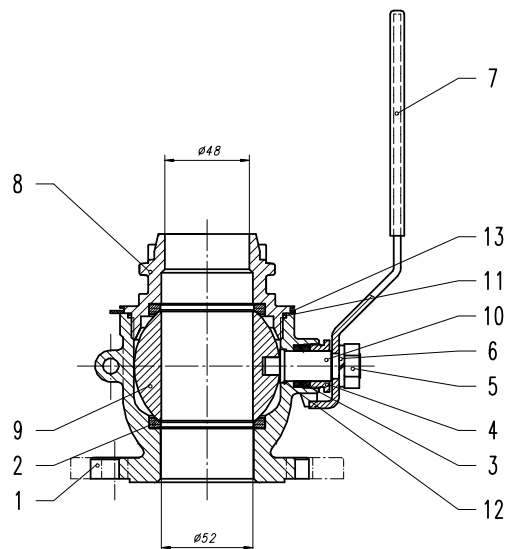
Item	Qty	Weight	Description	Material	TS	ND
1	1	7.5	Upper valve	1.4401	20130	40961
2	2	0.1	O-Ring ø6.75x1.78	Viton	13508	
3	2	2.0	Hex nut M5	A2	40005	ISO4032
4	1	43.5	Spot cover	PTFE 25% car	20135	30509
5	1	2.0	Socket set screw M4x6	A2	40862	DIN 914
6	1	77.9	Load	1.4401	20127	40964
7	1	71.1	Rod	1.4401	20126	40963
8	1	806.7	Bottle 0.40 l.	1.4432	20112	30462
9	2	0.3	O-Ring ø34.65x1.78	Viton	20539	
10	1	39.2	Seat	PTFE 25% car	20131	30495
11	1	13.2	Spot upper valve	1.4401	20136	40976

TOLERANCES UNLESS OTHERWISE SPECIFIED							Weight:		ISSUE 1 : 05.09.2008		
Norm. Size	Over	6	30	100	300	1000	1060.2 Eff.	MPSA YYYN			
Fit	To	6	30	100	300	1000					
Fine	±	0.05	0.1	0.15	0.2	0.3					
Angles											
REMOVE ALL BURRS AND SHARP EDGES							1:1		Replaced for: ND		
Drawn:		UPR 05.09.2008					Control:		Replaced by: ND		
Sampler 2" GTN Chem										TS 20137	
Spot bottle 0.40 l. FKM										ND 20255	
										REF ND	
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Item	Qty	Weight	Description	Material	TS	ND
1	1	46.0	Seat	PTFE 25% car	20114	30472
2	1	80.7	Bottom plug	1.4401	20115	40896
3	1	0.2	O-Ring ø25.12x1.78	Viton	13504	
4	2	0.3	O-Ring ø34.65x1.78	Viton	20539	
5	1	105.5	Stem	1.4401	20116	40897
6	1	806.7	Bottle 0,40 l.	1.4432	20112	30462
7	1	67.0	Calibration plug	1.4401	20118	30473
8	1	22.9	Cap	PTFE 25% car	20113	30463
9	1	3.0	Circlip ø10	AISI 431	40909	DIN6799
10	1	16.5	Coupling stem	1.4401	20119	40898
11	1	0.0	Cotter pin 2x10	A2	40218	DIN 94

TOLERANCES UNLESS OTHERWISE SPECIFIED								Weight:		ISSUE 2 : 04.09.2008		
Norm. Size	Over	6	30	100	300	1000	Angles	1146.3 Eff.		MPSA YYYN 		
Fit	To	6	30	100	300	1000	2000					
Fine	±	0.05	0.1	0.15	0.2	0.3	0.5					0.1°
REMOVE ALL BURRS AND SHARP EDGES								1:1		Replacement for:		Replaced by:
Drawn:		UPR 04.09.2008								ND		ND
Sampler 2" GTN Chem								TS 20138				
Running bottle 0.40 l. FKM								ND 20254				
								REF ND				
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								RUE DE L'INDUSTRIE 2 CH-1630 BULLE				
								Tel. +41 26 91 91 500 - Fax +41 26 91 91 505				



TS 10413
ND 20283

Valve fits on flange:

DIN PN10 DN50

DIN PN16 DN50

DIN PN25 DN50

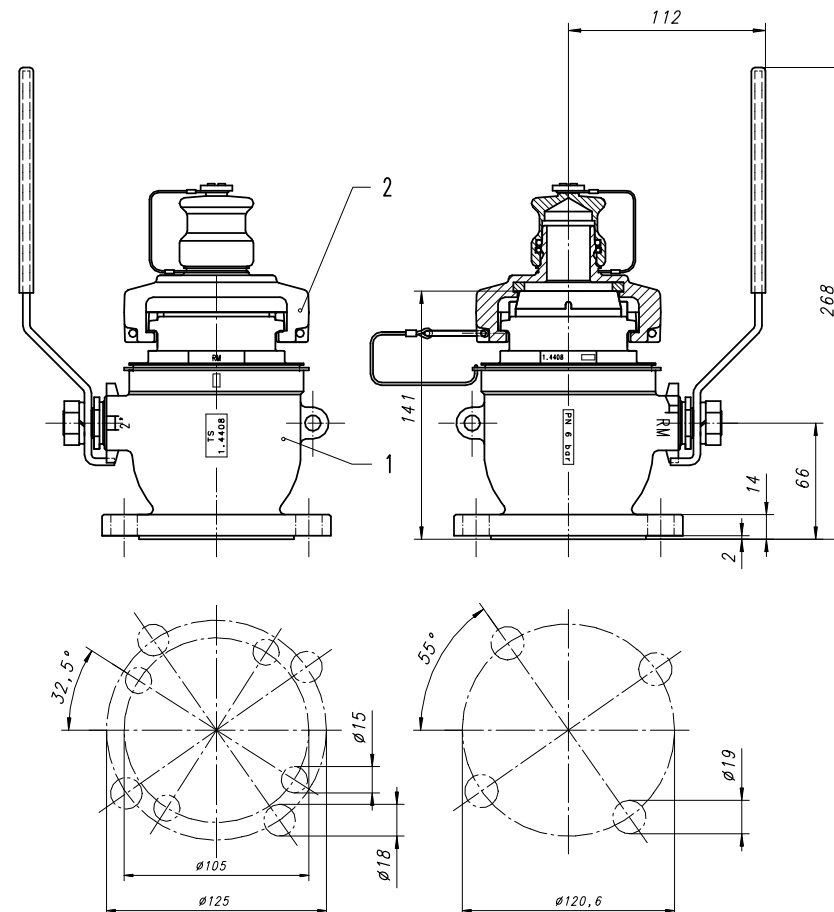
DIN PN40 DN50

JIS 5K 50

JIS 10K 50

ANSI 150lbs 2"

Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body DUJ	1.4408	22649	-
2	2	0	Seat # 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing # 17/23.9 x 8.5 (2pcs)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball DIN	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket # 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket # 17/19 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996



Item	Qt	Weight	Description	Material	TS #	ND #
1	1	4480	Compact valve C2 DUJ	-	10413	20283
2	1	590	Cover with weather cap	-	10415	41040

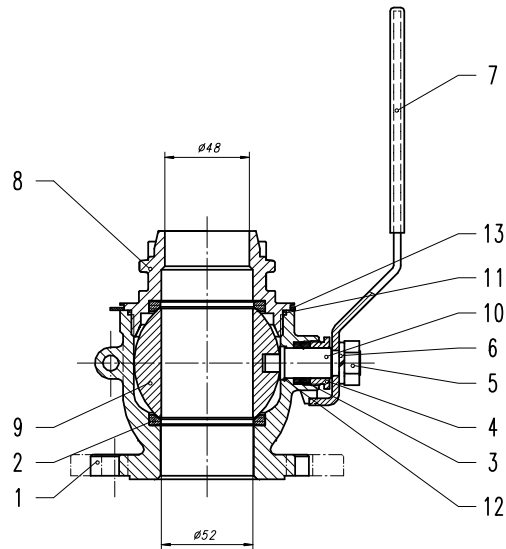
TOLERANCES UNLESS OTHERWISE SPECIFIED			Weight: 5070 Th. 0 Eff.	ISSUE 2 : 16.2.1999					
Norm. Size	Over	Under			Angles				
Fit	To	6			30	100	300	1000	2000
Fine	±	0.05			0.1	0.15	0.2	0.3	0.5

REMOVE ALL BURRS AND SHARP EDGES		1:2	MPSA 3110	
Drawn: UPR 27.11.1996	Control: CPI 06.01.1997			

Valves		TS 10083
HERMETIC Compact Valve C2-SS-W		ND 20291
2" flange DUJ		REF ND

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TS 10413
ND 20283



Valve fits on flange:

DIN PN10 DN50

DIN PN16 DN50

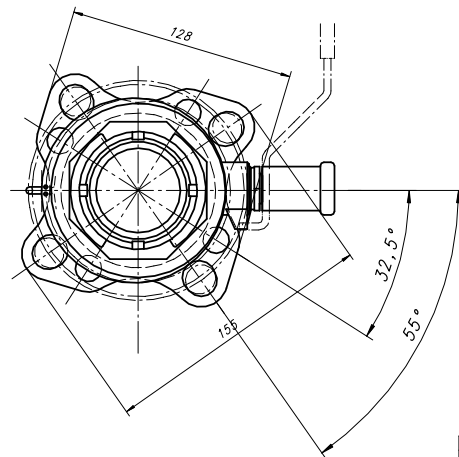
DIN PN25 DN50

DIN PN40 DN50

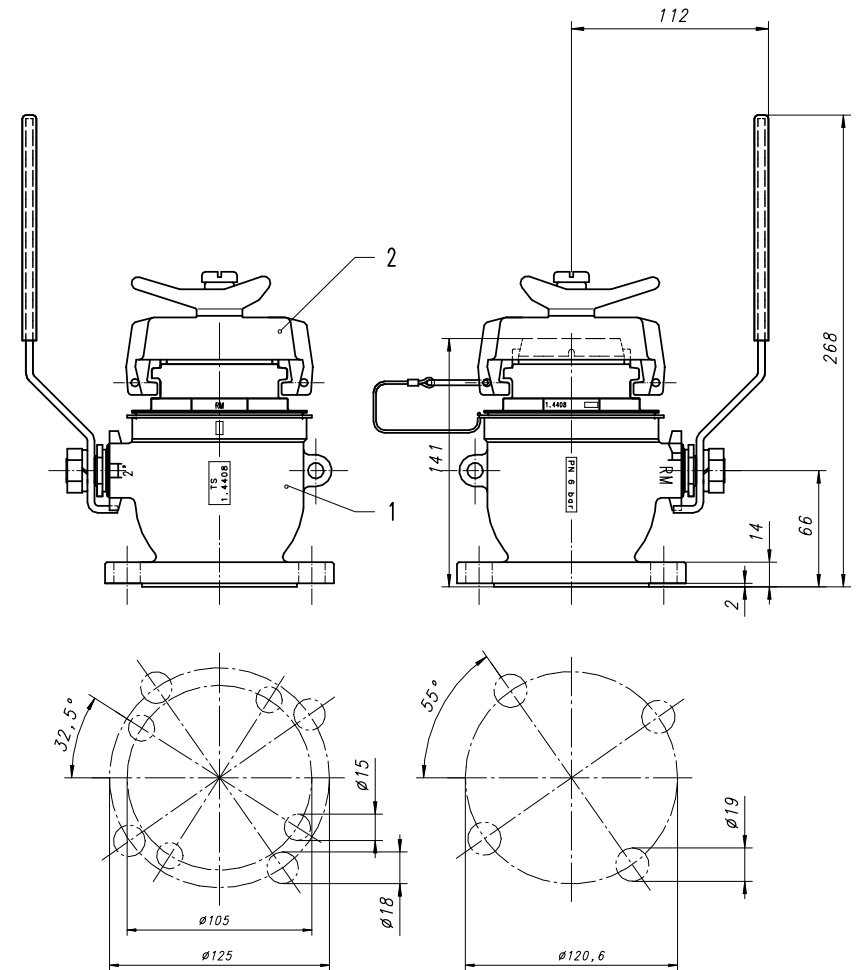
JIS 5K 50

JIS 10K 50

ANSI 150lbs 2"



Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body DUJ	1.4408	22649	-
2	2	0	Seat # 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing # 17/23.9 x 8.5 (2pcs)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball DIN	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket # 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket # 17/19 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996

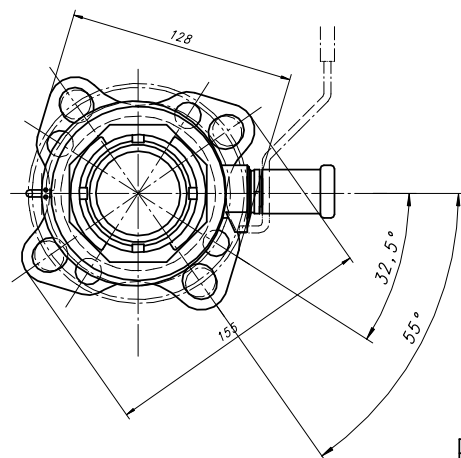
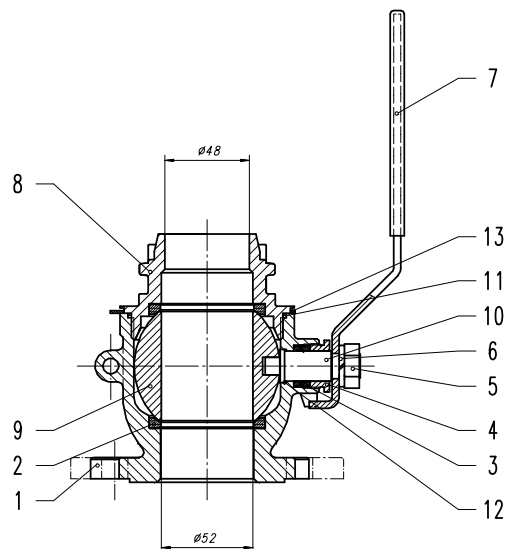


Item	Qt	Weight	Description	Material	TS #	ND #
1	1	4480	Compact valve C2 DUJ	-	10413	20283
2	1	957	Security cover w/lock	-	10408	40495

TOLERANCES UNLESS OTHERWISE SPECIFIED			Weight: 5437 Th. 0 Eff.	ISSUE 2 : 16.2.1999	
Norm. Size	Over	Under	Angles		
Fit	To	6	30	100	300
File	±	0.05	0.1	0.15	0.2
		0.3	0.5	0.5	0.1°

REMOVE ALL BURRS AND SHARP EDGES		1:2		MPSA 3110	
Drawn: UPR 27.11.1996	Control: CPI 06.01.1997	Replaced for: ND		Replaced by: ND	
Valves			TS 10082		
HERMeTic Compact Valve C2-SS-SEC			ND 20287		
2" flange DUJ			REF ND		

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TS 10413
ND 20283

Valve fits on flange:

DIN PN10 DN50

DIN PN16 DN50

DIN PN25 DN50

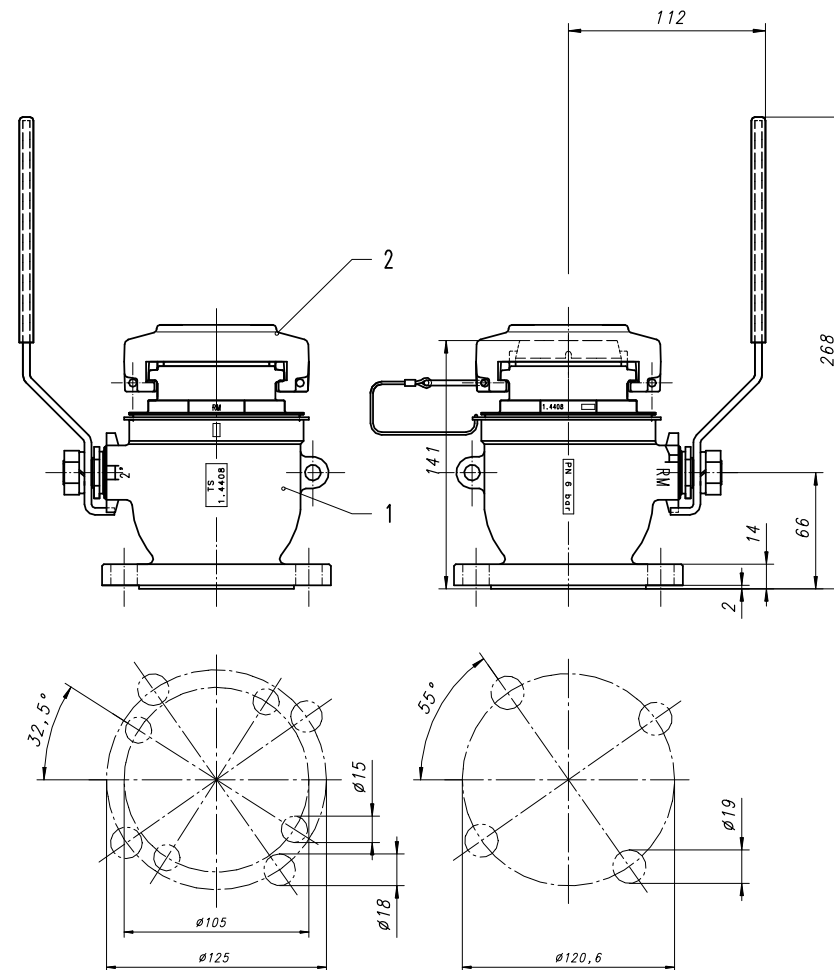
DIN PN40 DN50

JIS 5K 50

JIS 10K 50

ANSI 150lbs 2"

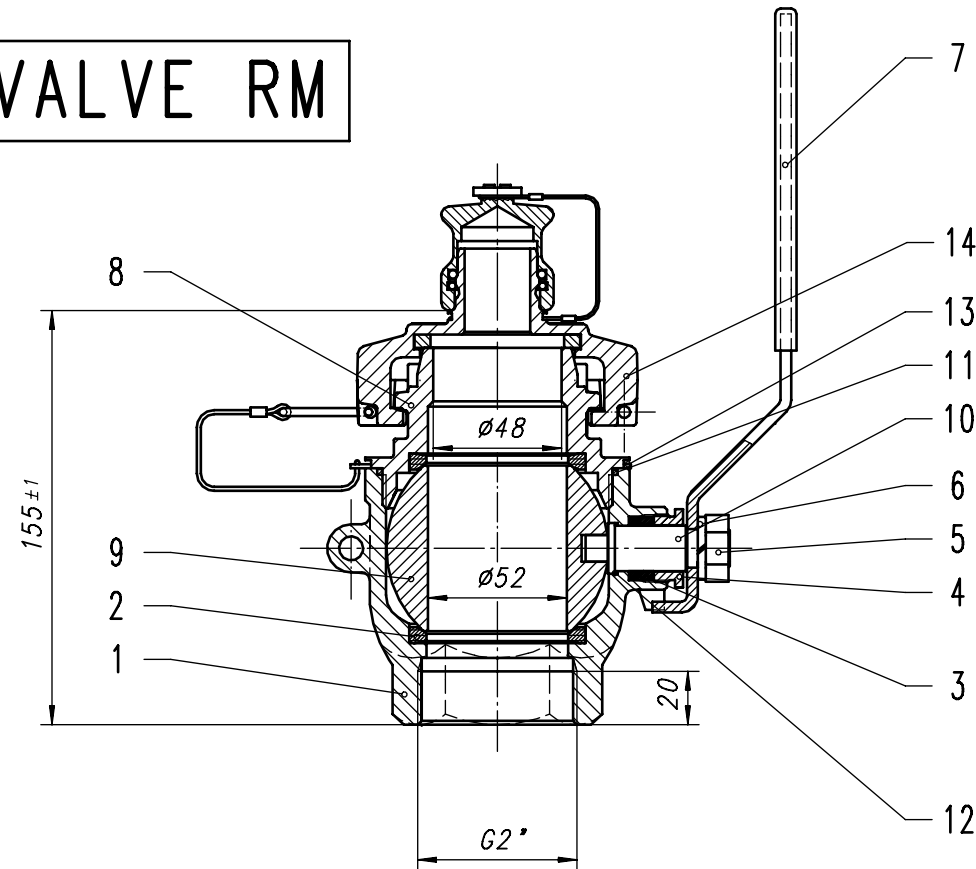
Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body DUJ	1.4408	22649	-
2	2	0	Seat # 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing # 17/23.9 x 8.5 (2pcs)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball DIN	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket # 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket # 17/19 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996



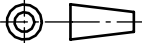
Item	Qt	Weight	Description	Material	TS #	ND #
1	1	4480	Compact valve C2 DUJ	-	10413	20283
2	1	370	Blind cover assy	-	10414	41034

TOLERANCES UNLESS OTHERWISE SPECIFIED				Weight: 4850 Th. 0 Eff.	ISSUE 2 : 16.2.1999	
Norm. Size	Over	Under	Angles			
Fit	To	6	30	100	300	1000
Fine	±	0.05	0.1	0.15	0.2	0.3
REMOVE ALL BURRS AND SHARP EDGES						
Drawn:	UPR 27.11.1996	Control:	CPI 06.01.1997	1:2	MPSA 3110	Replaced for: ND
Valves				TS 10081		
HERMeTic Compact Valve C2-SS-BL				ND 20288		
2" flange DUJ				REF ND		
This drawing is our property and must not without our permission be copied or made available to others. The receiver is responsible for every misuse.				Enraf Tanksystem SA RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505		

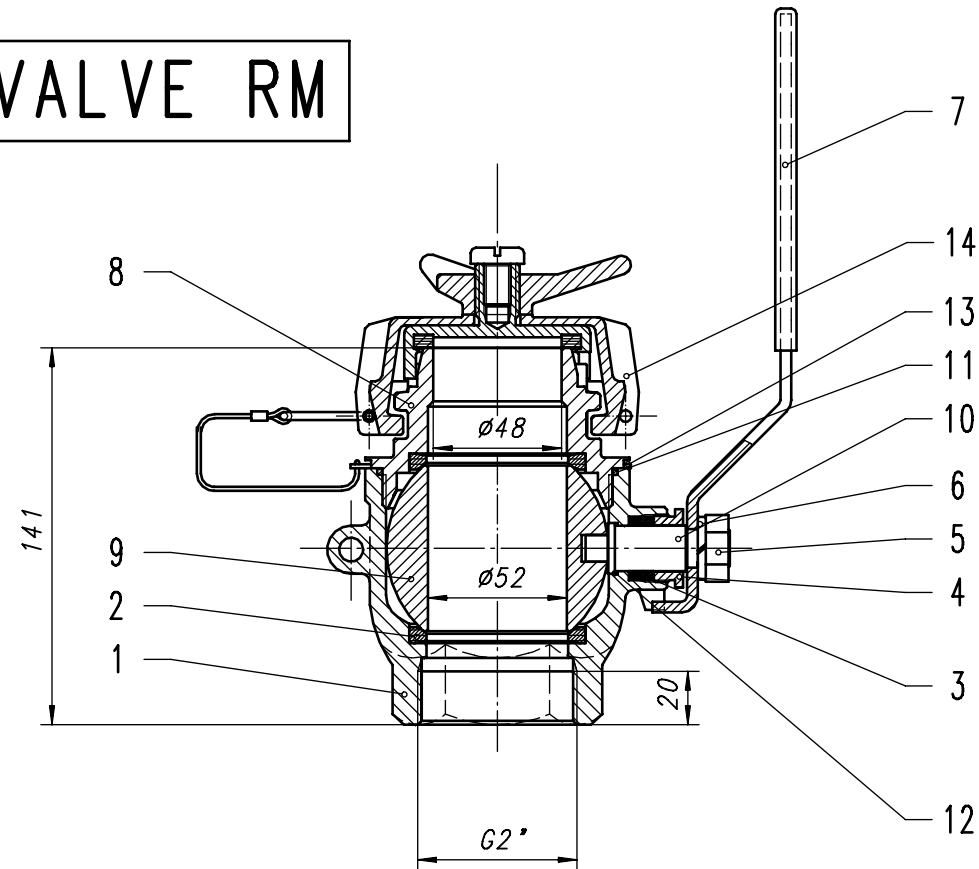
VALVE RM



Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body 2" female	1.4408	22646	-
2	2	0	Seat Ø 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing Ø 17/23.9 x 8.5 (2pces)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball 2"	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket Ø 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket Ø 17/19 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996

Item	Qt	Weight	Description	Material	TS #	ND #				
14	1	590	Cover with weather cap	-	10415	41040				
TOLERANCES UNLESS OTHERWISE SPECIFIED				Weight: 4390 Eff.	ISSUE 3 : 25.6.1999					
Norm. Size	Over	6	30				100	300	1000	
Fit	To	6	30				100	300	1000	2000
Fine	±	0,05	0,1				0,15	0,2	0,3	0,5
REMOVE ALL BURRS AND SHARP EDGES				1:2	MPSA 4110					
Drawn:	UPR 21.04.1994		Control:		Replacement for: ND	Replaced by: ND				
Valves HERMeTic Compact Valve C2SS 2" Female				TS 10076						
				ND 30391						
				REF ND						
This drawing is our property and must not without our permission be copied or made available to others. The receiver is responsible for every misuse.				Enraf Tanksystem SA RUE DE L'INDUSTRIE 2 CH-1630 BULLE Tel. +41 26 91 91 500 - Fax +41 26 91 91 505						

VALVE RM

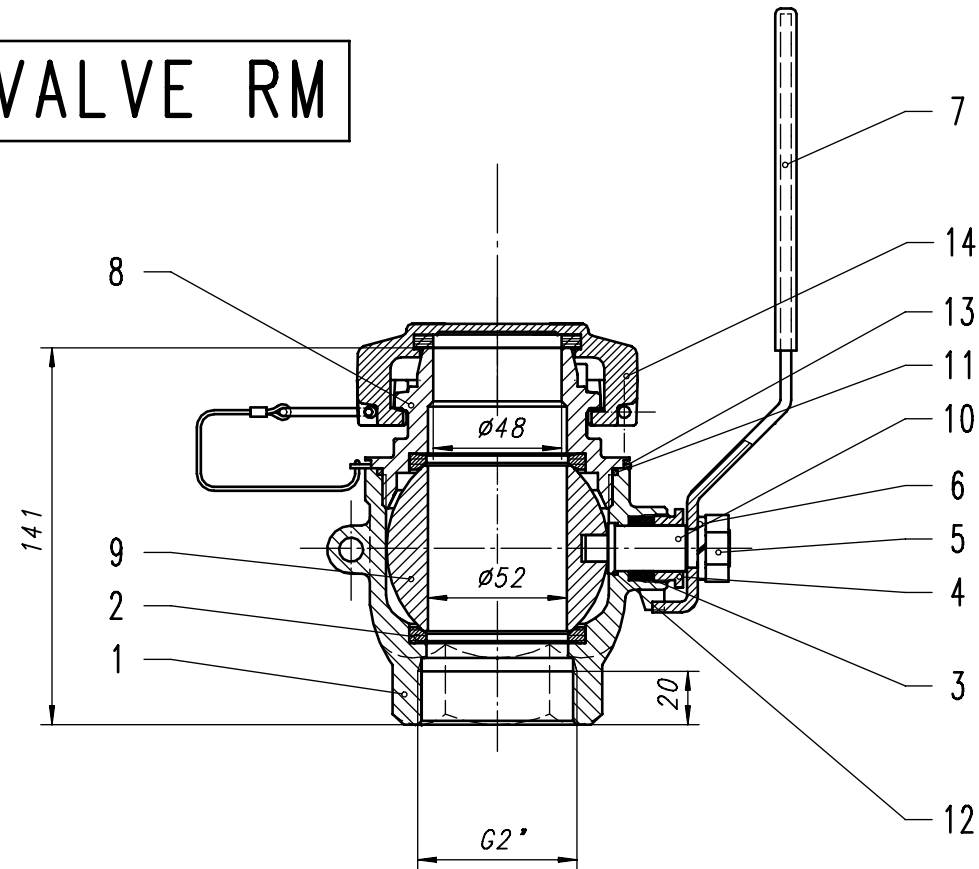


Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body 2" female	1.4408	22646	-
2	2	0	Seat Ø 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing Ø 17/23.9 x 8.5 (2pces)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball 2"	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket Ø 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket Ø 17/17 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996

Item	Qt	Weight	Description	Material	TS #	ND #
14	1	957	Security cover w/lock	-	10408	40495
			TOLERANCES UNLESS OTHERWISE SPECIFIED		Weight: 4746 Eff.	
Norm. Size	Over	6	30	100	300	1000
Fit	To	6	30	100	300	1000
Fine	±	0,05	0,1	0,15	0,2	0,3
			Angles		0,5	
					0,1°	
			REMOVE ALL BURRS AND SHARP EDGES		1:2	
			Drawn: UPR 21.04.1994		Control:	
			Valves		MPSA 4110	
			HERMetic Compact Valve C2-SS-SEC		Replacement for: ND	
			2" Female		Replaced by: ND	
					TS 10078	
					ND 30374	
					REF ND	
					Enraf Tanksystem SA	
					RUE DE L'INDUSTRIE 2 CH-1630 BULLE	
					Tel. +41 26 91 91 500 - Fax +41 26 91 91 505	

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VALVE RM



Item	Qt	Weight	Description	Material	TS #	ND #
1	1	0	Body 2" female	1.4408	22646	-
2	2	0	Seat 53/66 x 6	PTFE	22630	40772
3	1	0	Stem packing 17/23.9 x 8.5 (2pces)	PTFE	22631	40773
4	1	0	Gland	AISI 304	22632	40774
5	1	0	Nut	AISI 304	22633	-
6	1	0	Spring washer	AISI 304	22634	-
7	1	207	Handle	AISI304/PE	22635	40775
8	1	0	End cap	1.4408	22650	-
9	1	0	Ball 2"	1.4436	22645	40780
10	1	0	Stem	AISI 316	22638	40777
11	1	0	Gasket 86/90 x 2.5	PTFE	22640	40778
12	1	0	Gasket 17/19 x 1	PTFE	22641	40779
13	1	0	Washer for cable on valve	AISI 304	22648	40996

Item	Qt	Weight	Description	Material	TS #	ND #
14	1	370	Blind cover assy	-	10414	41034
			TOLERANCES UNLESS OTHERWISE SPECIFIED		Weight: Th. 4300 Eff.	
Norm. Size	Over		6	30	100	300
Fit	To		6	30	100	300
Fine	±		0,05	0,1	0,15	0,2
			Angles		1000	
					2000	
					0,1°	
			REMOVE ALL BURRS AND SHARP EDGES		1:2	
			Drawn: UPR 21.04.1994	Control:	MPSA 4110	
			Valves		Replacement for: ND	
			HERMetric Compact Valve C2-SS-BL		TS 10085	
			2" Female		ND 30596	
			This drawing is our property and must not without our permission be copied or made available to others.		REF ND	
			The receiver is responsible for every misuse.		Enraf Tanksystem SA	
					RUE DE L'INDUSTRIE 2 CH-1630 BULLE	
					Tel. +41 26 91 91 500 - Fax +41 26 91 91 505	

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EU DECLARATION OF CONFORMITY
EU-KONFORMITÄTSERKLÄRUNG / DÉCLARATION UE DE CONFORMITÉ

1	Product: <i>Produkt:</i> <i>Produit:</i>	HERMetric Sampler Type GT / GT Chem / GTX Chem / GTN Chem / A4 / GT4
2	Object of the declaration: <i>Gegenstand der Erklärung:</i> <i>Objet de la déclaration :</i>	
3	Name and address of the manufacturer: <i>Name und Anschrift des Herstellers:</i> <i>Nom et adresse du fabricant:</i>	ENRAF TANKSYSTEM SA Rue de l'Industrie 2 CH-1630 BULLE Switzerland
4	The object of the declaration described above is in conformity with the relevant Union harmonisation legislation: <i>Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:</i> <i>L'objet de la déclaration décrit ci-dessus est conforme à la législation d'harmonisation de l'Union applicable:</i>	2014/34/EU (ATEX)
5	References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared: <i>Angabe der einschlägigen harmonisierten Normen oder der anderen technischen Spezifikationen, die der Konformitätserklärung zugrunde gelegt wurden:</i> <i>Références des normes harmonisées pertinentes appliquées ou des autres spécifications techniques par rapport auxquelles la conformité est déclarée:</i>	ATEX: EN ISO 80079-36: 2016 EN ISO 80079-37: 2016
6	Notified body that performed EU Type Examination and issued the certificate (name, number): <i>Diese notifizierte Stelle hat die EU-Baumusterprüfung gemacht und folgende Bescheinigung ausgestellt (Name, Nummer):</i> <i>L'organisme notifié qui a effectué l'examen UE de type et a établi l'attestation (nom, numéro):</i> Notified Body that performed Conformity to type based on quality assurance of the production process in accordance with Annex IV of the directive and issued the QA Notification document: <i>Benannte Stelle, die die Konformität mit dem Typ auf der Grundlage der Qualitätssicherung des Produktionsprozesses gemäß Anhang IV der Richtlinie durchgeführt und das QS-Dokument ausgestellt hat:</i> <i>Organisme notifié qui a effectué la conformité de type sur la base de l'assurance de la qualité du processus de production conformément à l'annexe IV de la directive et a publié le document de notification d'assurance qualité:</i>	ATEX: DEKRA Certification B.V., 0344 QAN : Baseefa ATEX 1536 SGS FIMKO OY, 0598

Created / modified	Approved	Released	Remarks
4 2015/01/21	2015/01/21	2015/01/21	Update of the ATEX references
5 2019/10/15	2019/10/21	2019/10/21	Update according to new DEKRA Certificate + QAN NB added
6 2020/12/18	2020/12/18	2020/12/18	Update section 6 QAN (from 1180 to 0598 because Brexit) SGS FIMKO OY
The prints of this document are not controlled under the quality management system, unless printed on "ORIGINAL" paper			

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7	Certificate(s): Bescheinigung(en): Certificat(s):	ATEX: KEMA 06ATEX0027
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	Vertalingen	Traducciones
1	Product	Producto
2	Voorwerp van de verklaring	Objeto de la declaración
3	Naam en adres van de fabrikant	Nombre y dirección del fabricante
4	Het hierboven beschreven voorwerp is in overeenstemming de desbetreffende harmonisatiewetgeving van de Unie	El objeto de la declaración descrita anteriormente es conforme con la legislación de armonización pertinente de la Unión
5	Vermelding van de toegepaste relevante geharmoniseerde normen of van de overige technische specificaties waarop de conformiteitsverklaring betrekking heeft	Referencias a las normas armonizadas pertinentes utilizadas, o referencias a las otras especificaciones técnicas respecto a las cuales se declara la conformidad
6	De aangemelde instantie die de EU Type Examination uitgevoerd en het certificaat verstrekt heeft (naam, nummer)	Organismo notificado que realiza examen de tipo UE y expide el certificado (nombre, número)
7	Certificaten	Certificados
	μετάφραση	Traduzioni
1	προϊόν	Prodotto
2	Στόχος της δήλωσης	Oggetto della dichiarazione
3	Όνομα και διεύθυνση του κατασκευαστή	Nome e indirizzo del fabbricante
4	Ο στόχος της δήλωσης που περιγράφεται παραπάνω είναι σύμφωνος με τη σχετική ενωσιακή νομοθεσία εναρμόνισης	L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione
5	Παραπομπές στα σχετικά εναρμονισμένα πρότυπα που χρησιμοποιήθηκαν ή παραπομπές στις λοιπές τεχνικές προδιαγραφές σε σχέση με τις οποίες δηλώνεται η συμμόρφωση	Riferimento alle pertinenti norme armonizzate utilizzate o riferimenti alle altre specifiche tecniche in relazione alle quali è dichiarata la conformità
6	Κοινοποιημένο οργανισμό που πραγματοποιήθηκε ΕΕ Εξέταση τύπου και εξέδωσε το πιστοποιητικό (όνομα, αριθμός):	Organismo notificado che eseguito tipo UE Esame e rilasciato il certificato (nome, numero)
7	πιστοποιητικών	Certificati
	Tłumaczenia	Traduções
1	Produkt	Produto
2	Przedmiot deklaracji	Objeto da declaração
3	Nazwa i adres producenta	Nome e endereço do fabricante
4	Wymieniony powyżej przedmiot niniejszej deklaracji jest zgodny z odpowiednimi wymaganiami unijnego prawodawstwa harmonizacyjnego	O objeto da declaração acima descrito está em conformidade com a legislação aplicável de harmonização da União
5	Odniesienia do odpowiednich norm zharmonizowanych, które zastosowano, lub do innych specyfikacji technicznych, w stosunku do których deklarowana jest zgodność	Referências às normas harmonizadas aplicáveis utilizadas ou às outras especificações técnicas em relação às quais é declarada a conformidade
6	Notyfikowana, że wykonywane badania typu UE i wydała certyfikat (nazwa, numer)	Organismo notificado que realizou Exame de tipo da UE e emitiu o certificado (nome, número)
7	Certyfikaty	Certificados

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.

La présente déclaration de conformité est établie sous la seule responsabilité du fabricant.

Deze conformiteitsverklaring wordt verstrekt onder volledige verantwoordelijkheid van de fabrikant.

La presente declaración de conformidad se expide bajo la exclusiva responsabilidad del fabricante.

Η παρούσα δήλωση συμμόρφωσης εκδίδεται με αποκλειστική ευθύνη του κατασκευαστή.

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.

Niniejsza deklaracja zgodności wydana zostaje na wyłączną odpowiedzialność producenta.

A presente declaração de conformidade é emitida sob a exclusiva responsabilidade do fabricante:

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The Technical Construction File required by these Directives is maintained at: <i>Die von den Richtlinien erforderten technischen Dokumentation wird archiviert in:</i> <i>Le dossier technique de construction nécessaire pour ces directives est maintenue à:</i> <i>Het technisch constructie dossier vereist door deze richtlijnen wordt bewaard in:</i> <i>El expediente técnico de construcción requerido por dichas Directivas se mantiene a:</i> <i>Φάκελο τεχνικής κατασκευής που απαιτούνται από τις οδηγίες αυτές διατηρείται σε:</i> <i>Fascicolo tecnico previsto dalle suddette direttive è mantenuta a:</i> <i>Plik Budowa techniczne wymagane przez tych dyrektyw jest utrzymywana na:</i> <i>O dossier técnico de construção exigido por estas directivas é mantida em:</i>	ENRAF TANKSYSTEM SA Rue de l'Industrie 2 CH-1630 BULLE Switzerland
Signed for and on behalf of: <i>Unterzeichnet für und im Namen von:</i> <i>Signé par et au nom de:</i> <i>Ondertekend voor en namens:</i> <i>Firmado en nombre de:</i>	ENRAF TANKSYSTEM SA Rue de l'Industrie 2 CH-1630 BULLE Switzerland

Place and date of issue: <i>Ort und Datum der Ausstellung:</i> <i>Date et lieu d'établissement:</i> <i>Plaats en datum van afgifte:</i> <i>Lugar y fecha de expedición:</i>	<i>τόπος και ημερομηνία έκδοσης:</i> <i>Luogo e data del rilascio:</i> <i>Miejsce i data wydania:</i> <i>Local e data de emissão:</i>	Delft, 2020-12-18
Name: <i>Name:</i> <i>Nom:</i> <i>Naam:</i> <i>Nombre:</i>	<i>όνομα:</i> <i>Nome:</i> <i>Imię:</i> <i>Nome:</i>	Jan Bok
Function: <i>Funktion:</i> <i>Fonction:</i> <i>Functie:</i> <i>Cargo:</i>	<i>θέση:</i> <i>Funzione:</i> <i>i nazwisko:</i> <i>Cargo:</i>	Approval Engineer
Signature: <i>Unterschrift:</i> <i>Signature:</i> <i>Handtekening:</i> <i>Firma:</i>	<i>υπογραφή:</i> <i>Firma:</i> <i>Stanowisko:</i> <i>Assinatura:</i>	