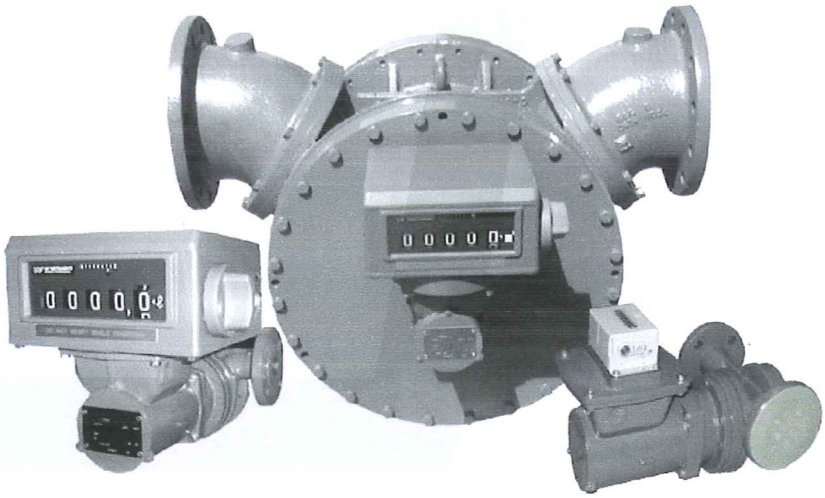
Technical Manual

129

MIDFLOW®, HIFLOW®

Series 'J' Vane meters

Instructions
for
installation,
operation
and
maintenance



for latest information Visit www.vaf.nl on products, sales and service points

Publ. Nr. TIB-129-GB-0608
Supersedes TIB-129-GB-1106

VAF INSTRUMENTS

for quality and innovation

TO BE REALLY SURE

CONTENTS

1. PREFACE

1.1 GENERAL

This manual contains installation, operation and maintenance instructions for VAF liquid flowmeters model Series 'J' MidFlow® and HiFlow® with connection sizes DN 25 mm (1") to DN 300 mm (12").

This manual contains important information for the installer, the operator and for your maintenance department.

To ensure safe and correct installation and operation of your VAF Flowmeter study this manual carefully before starting operations.

For associated equipment supplied by VAF Instruments B.V. separate instruction manuals are included with those products.

For any additional information contact:

VAF Instruments B.V.
Vierlinghstraat 24, NL-3316 EL Dordrecht
P.O. Box 40, NL-3300 AA Dordrecht
The Netherlands
Or your local authorized VAF dealer.
Their addresses can be found on www.vaf.nl

Tel. +31 78 618 3100
Fax +31 78 617 7068
E-mail: sales@vaf.nl
Internet: www.vaf.nl

1.2 SYMBOLS

The symbols below are used to call attention to specific types of information.

A warning to use caution! In some instances, personal injury or damage to the flowmeter or control system may result if these instructions are not followed properly.

An explanation or information of interest.

1.3 COPYRIGHT

2. PRODUCT DESCRIPTION

The MidFlow® and HiFlow® flowmeter is used to measure the flow of a liquid. The read out of the flowmeter is a resetable register.
The flowmeter can be equipped with optional pulse transmitter(s), LCD counter, batch counter, ticket printer

2.1 PRODUCT DESCRIPTION “J” MIDFLOW® AND HIFLOW® SERIES FLOWMETERS

Series 'J' MidFlow® and HiFlow® meters operate on the sliding vane principle. The meters consist of a specially shaped housing in which a rotor can rotate freely. Two pairs of vanes are fitted into four slots in the rotor. Each pair is positioned by a rod and can move in and out of the rotor. The radial vane movement is guided by the special inner shape of the housing. This patented construction provides a dynamic seal between the inlet and the outlet of the flowmeter. The incoming liquid forces the rotor to rotate. A magnetic coupling transmits the rotor rotations to a mechanical counter and/or to a pulse transmitter. The pulse transmitter allows remote flow monitoring or process control.

Note:
These flow meters are subject to P.E.D. (Pressure Equipment Directive) cat 3.3

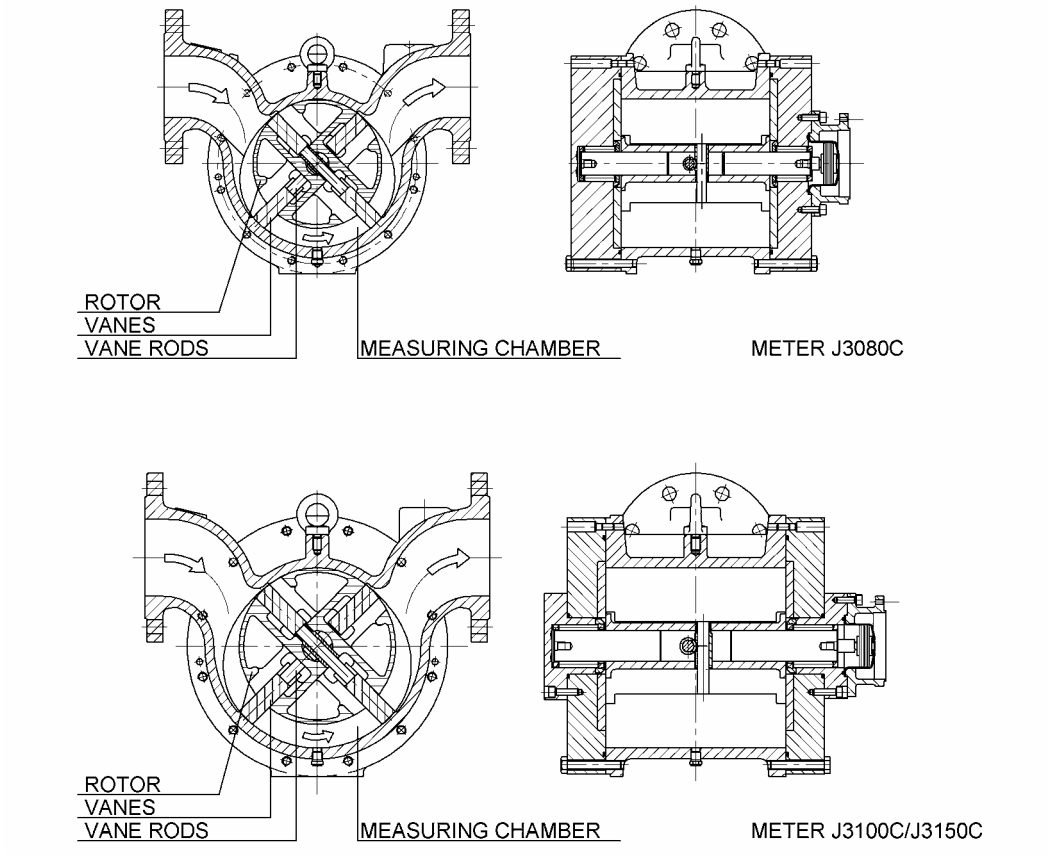


Figure 1 Sectional view of VAF vane meter

3. TECHNICAL SPECIFICATIONS

3.1 FLOWMETER

The technical specification of the flow meter can be found on the instrument text plate.

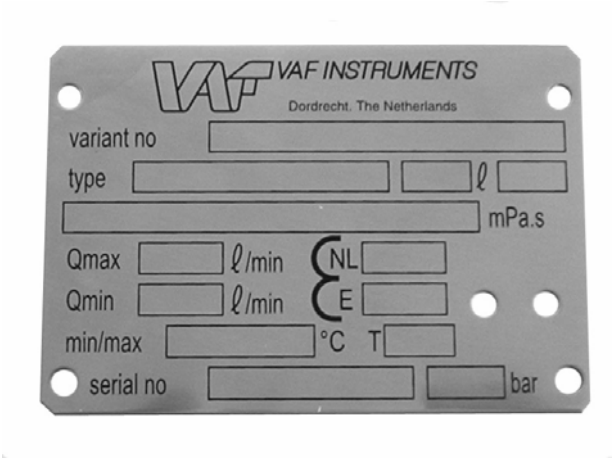


Figure 2 Text plate

3.2 OPTIONAL PULS TRANSMITTER

If the flowmeter is equipped with a pulse transmitter for remote flow indication or control, the number of generated output pulses is stamped on a text plate near the pulse output connector (Figure 3) or on the pulse transmitter box. If the meter is equipped with a totaliser, the pulse output information is printed on the data plate of the totaliser.

Figure 3 Dataplate with pulse frequency information

3.2.1 Technical specification pulse transmitters

Inductive type: 1, 2 or 3 passive proximity switches according DIN 19234 (NAMUR). Protection class IP55; intrinsically safe acc. PTB No. 99 ATEX 2219X and CENELEC EEx/ia IIC T6…T4, if used with a suitable zener-barrier. Supply voltage 8.2 V (+0.8V - 0.5V). T6…T4 depending on process fluid temperature with an ambient temperature of -20°C…+40°C.

Incremental type: 1 per flowmeter, incl. pulse discriminator. Not available in combination with built-on counter. Max. frequency 5 kHz. Supply voltage 12-35 VDC. Protection class IP42. Max. operating temperature 120°C.

3.2.2 Intrinsically safe operation

To meet the standards for intrinsically safe operation according DIN 19234 (NAMUR), zener-barrier(s) (Stahl 9001/3-158-150/00, Pepperl & Fuchs type EGT-101-0, or equivalent) must be installed between the flowmeter and the associated data processing instrumentation. Consult VAF Instruments B.V. if further information on zener-barriers is required.

3.3 OPTIONAL PULSE DISCRIMINATOR

The discriminator is used in situations where, as a result of vibrations or pulsations in the liquid piping, it is possible for the flowmeter to rotate in the reverse direction. This may result in the generation of spurious pulses by the electric transmitter. By using two pulse transmitters in the flowmeter, generating two identical pulse signals with a phase shift of 90 degrees, these measurement errors will be eliminated by means of the pulse discriminator.
The discriminator is housed in a box fitted to the flowmeter and comprises a small printed circuit board which also contains a pulse amplifier. This makes the device suitable for direct connection to, for instance, an electromechanical counter or to a relay for further pulse processing.

Electric connections	3-wire screw terminal.
Supply voltage	12 - 35 VDC
Power consumption	2 VA at 35 VDC (no load)
Input signal	2 NAMUR pulse transmitters or incremental encoders
Pulse memory	Up to 15 error pulses
Connections	6-pin connector or cable gland PG 13.5
Max. working temp.	55°C
Output signal	Open collector, current sink. I_{max} 100 mA, U_{max} 35 VDC
Protection class	IP55, DIN 40050
Approved	CE

3.4 LIQUID FILTER

The liquid to be measured must be clean and free from air, gas or dirt. Solid particles may cause excessive wear. It is recommended to install a VAF liquid filter with the following mesh width at the inlet of the flowmeter:

Meter size	Mesh width - Standard
DN 25 to 50 (1” to 2”)	0.05 mm (280 mesh)
DN 25 to DN 80 (1”to 3”)	0.10 mm (150 mesh)
DN 80 & DN 100 (3” & 4”)	0.20 mm (80 mesh)
DN 150 (6”) and larger	0.40 mm (60 mesh)

VAF Instruments B.V. will not be responsible for any damage to flowmeters and accessories caused by foreign particles in the process liquid.

3.5 WEIGHT OF FLOWMETERS AND COUNTERS

3.5.1 Weight of Flowmeters

Flowmeters without counter	Approx. net weight (kg)
DN 25 mm	13
DN 40 mm	16
DN 50 mm	24
DN 80 mm	78
DN 100 mm	108
DN 150 mm - ductile iron	230
DN 150 mm - steel & stainless steel	320
DN 200 mm - ductile iron	460
DN 200 mm - steel & stainless steel	500
DN 250 mm - ductile iron	1020
DN 250 mm - steel & stainless steel	1100
DN 300 mm - ductile iron	1100
DN 300 mm - steel & stainless steel	1300

3.5.2 Weight of counters

Counters	Approx. net weight (kg)
Totaliser	1
FlowCount rate totaliser	0,5
Resetable register	7
Ticket printer	7
Mechanical batch counter	14

4. SAFETY INSTRUCTIONS

- Some calibration fluid can be left in the flow meter. This is Shellsol-T or water in case of stainless steel 316 flowmeter. See chapter 6.4 for more information.
- Be careful, the flow meter can be heavy, and difficult to handle with one person.

5. UNPACKING

The flow meter is a precision instrument and should be treated with care.
The two yellow protection caps on the in and outlet of the meter should be left in place as long as possible
Be careful not to put any force on the electrical connection box.

6. INSTALLATION AND FIRST USE

6.1 BEFORE INSTALLING FLOWMETER

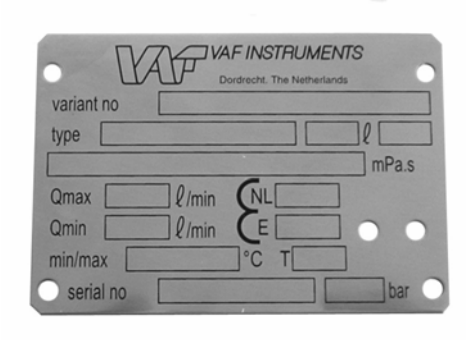
1. Identify your flowmeter by comparing the type number on the instrument text plate with the description on the packing list.

Always quote type and serial numbers when contacting the factory.

2. Record data on text plate of flowmeter in the space below, by filling in the text plate (figure 4).
3. Ensure that the flowmeter is suitable for your process conditions.

Never exceed the capacity, temperature and pressure limits specified on the nameplate of the flowmeter. Consult the factory if the flowmeter must be used for a different process liquid than originally ordered.

4. Store the flowmeter in a safe place. Do not remove dust caps until just before installation.



Please fill in the details of your flowmeter here.

Figure 4 Text plate on flowmeter body

6.2 GENERAL

Read this section carefully before starting the installation work.

1. A VAF flowmeter is a precision instrument. Handle it with care.
2. No special tools are required to install the flowmeter. Ensure that your standard tools are fit for the job.
3. Use the lifting eye, when present, when moving the flowmeter.
4. Make sure the working environment is clean. Ensure that no dirt can enter the flowmeter.
5. Always use personal protective means when working with hot, aggressive and toxic process liquids.
6. Ensure that local safety regulations are met when installing and operating the flowmeter.
7. The sound level of a working flowmeter will always be lower than 70 dB(A).

6.3 SYSTEM LAYOUT RECOMMENDATIONS

Warning

The flowmeter body will maintain the same temperature as the process liquid.
Take measures to avoid personal injury from touching a hot or cold flowmeter.

6.3.1 Supporting the flowmeter

The flowmeter must never be used to support the piping or other system components. The flowmeter and its connecting flanges must be protected against strain or mechanical vibrations. Either the flowmeter must be supported by the process piping, or both the pipeline and the flowmeter must be supported.

1. Install suitable pipe brackets at each side of flowmeter (Figure 5).
2. If the flowmeter is equipped with a 'long neck' extension between meter body and counter, support brackets must be placed around the extension pipe and/or underneath the extension's mounting console.

The flowmeter should be accessible from all sides for easy inspection and servicing.

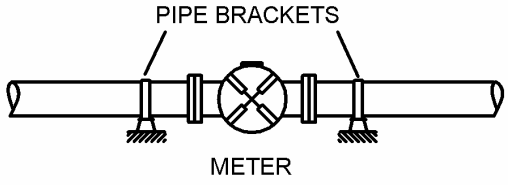


Figure 5 Supporting the flowmeter

6.3.2 Bypass piping arrangement

A bypass with manual block valves is recommended so that the meter can be serviced without interrupting the flow in the system (Figure 6).

☞ A bypass may not be allowed when the flowmeter is used for custody transfer purposes.

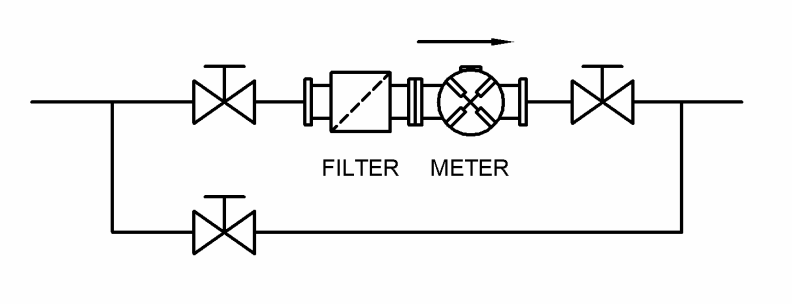


Figure 6 Bypass piping arrangement

6.3.3 To prevent the flowmeter from emptying

To prevent the flowmeter from emptying or siphoning, maintain a back-pressure downstream of the meter so that it always remains full of liquid. This can be done by raising the pipe line downstream of the flowmeter, by installing a back-pressure valve or by other suitable method.

6.3.4 To prevent measuring air

Accurate measurement is only possible if it is not influenced by the presence of gas or air. When the process liquid contains gas or air a deaerator should be fitted upstream of the flowmeter.

6.4 TO INSTALL FLOWMETER

1. Remove dust caps from inlet and outlet connections of flowmeter.

☞ Note that some Shellsol-T calibration liquid may be left in the flowmeter. Shellsol-T is a flammable liquid (hydrocarbons, liquid, N.O. S (solvent naphtha)); EEG No. 265-067-2, MITI No. 9-1699, CAS No. 64741-65-7

2. Install flowmeter to process piping in accordance with the relevant figure 7

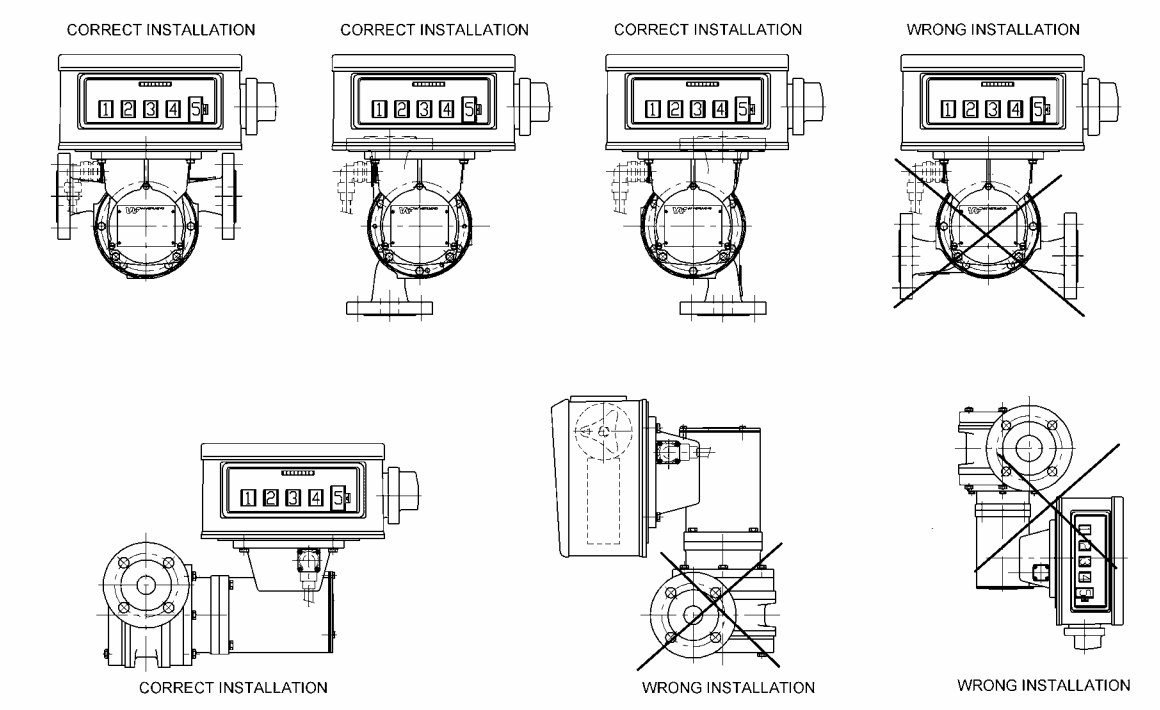


Figure 7

Note that:
- The back cover of the flowmeter must always be in vertical position.
- An arrow on the flowmeter body indicates the direction of the flow.

If desired the counter may be turned in 90° increments to facilitate reading.

6.5 ELECTRICAL CONNECTIONS

The electrical connections of the pulse transmitter and the pulse discriminator are as shown in figures 8 through 15. For electrical connections between flowmeter and associated electronic processing instrumentation reference is made to the separate technical manuals of these electronic instruments.

6.5.1 Connection cables

Each pair of leads between the pulse transmitter and the connected signal processing instrumentation must be screened separately, as otherwise false pulses might be induced by external electromagnetic fields.
Use shielded cable with a diameter of 6 to 8 mm and a wire diameter of max. 0.8 mm. The screen must NOT come into contact with the flowmeter. In the connected instrument the screen must be connected to the system earth or, in absence of the latter, to the zero connection of the pulse input terminals.

6.5.2 Connections at 6-pole connector

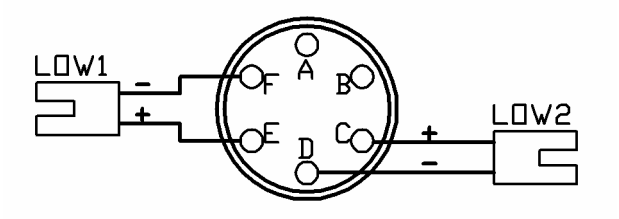


Figure 8 Internal connections of low speed pulse transmitter(s)

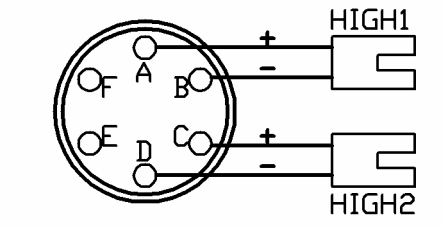


Figure 9 Internal connections of high speed pulse transmitter(s)

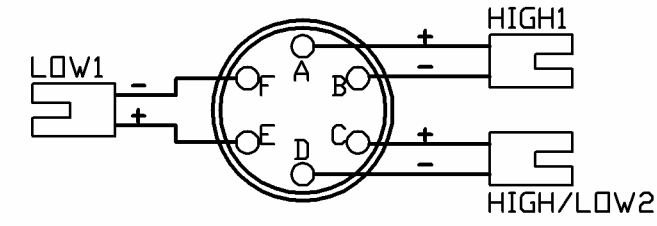


Figure 10 Internal connections of a combination of low and high speed pulse transmitters

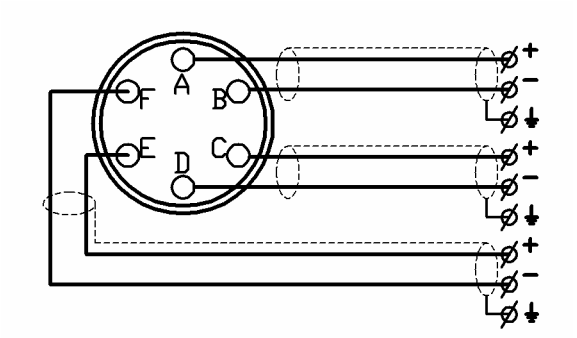


Figure 11 External connections

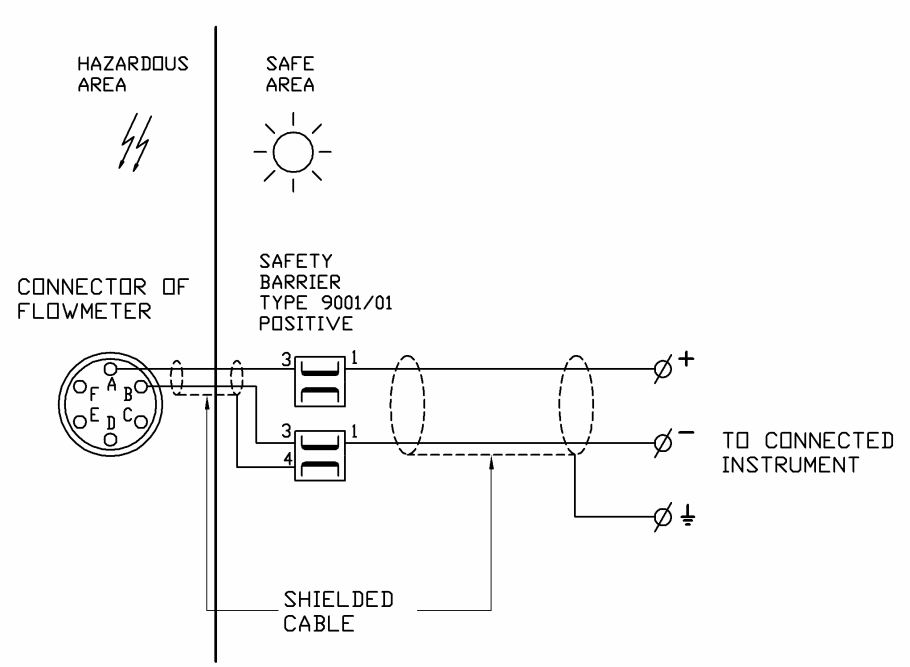


Figure 12 External connections to safety barrier

6.5.3 Inductive pulse transmitter in totalising counter

Figure 13 shows how the pulse generator(s), when installed, is/are internally wired.
When the pulse output cable from the totaliser is provided with a 6-pole connector, the internal wiring is as shown in figure 14.

Wiring of pulse generators:	Brown Yellow	White Green
Connections of pulse transmitter		
1 low frequency pulse transmitter *	low: ●	
1 high frequency pulse transmitter *		high: ●
2 low frequency pulse transmitters	low: ●	low: ●
2 high frequency pulse transmitters	high: ●	high: ●
1 low + 1 high frequency pulse transmitter	low: ●	high: ●

* Low frequency pulse rates include 1 & 10 pulses/litre (meter models JX025 & JX040), and 0.1 & 1 pulse/litre (meter models JX050). Other pulse rates are high frequency type.

Figure 13 Wiring of pulse generators inside totaliser

	6-pole connector	Cable
High 1 +	A	White
-	B	Green
High 2 +	C	Brown
-	D	Yellow
Low 1 +	E	Brown
-	F	Yellow
Low 2 +	C	White
-	D	Green

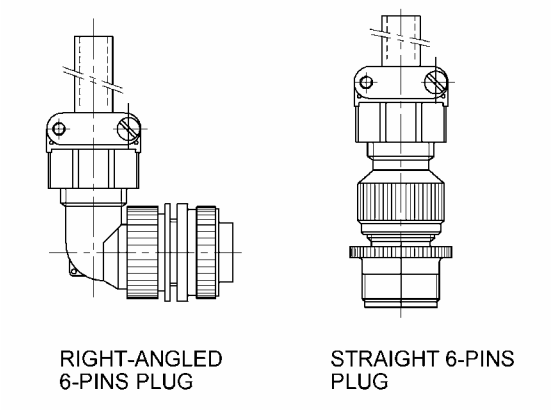
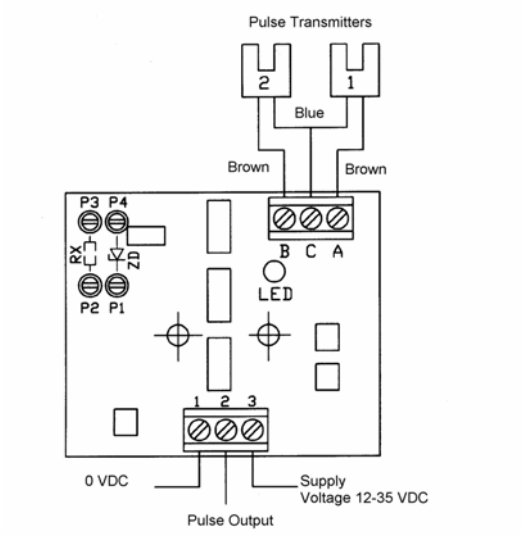


Figure 14 Internal wiring of connector plug

6.5.4 External connections at pulse transmitter box



Pulse output	Load (Rx)	Zener diode (Zd)
Open-Collector	-	-
5 V puls	* 2k4	4,7 V - 0,4 W
12 v puls	* 1k4	12 V - 0,4 W

* supply voltage 24 VDC

Calculation Rx $\frac{\text{supply voltage - required voltage}}{0{,}008}$

Figure 15 External connections of flowmeter with pulse discriminator and inductive or incremental pulse transmitters in pulse box with Pg 13,5 cable gland

6.5.5 External pulse transmitter

Veeder Root type reset counters and batch counters can optionally be equipped with a side-mounted pulse transmitter housed in an explosion-proof box. The box contains an SPDT reed switch.

Technical specification

Pulse rate	1 or 10 pulses per revolution of the right-hand figure wheel.
Contact rating	Max. 50 VA non-inductive, not to exceed 250 V or 3 A.
Operating temperature	-40 to 70°C
Electric cable	45 cms long AWG wire, internally soldered to terminals.
Housing	EEx-d IIA T6. For use in hazardous locations, Class 1, Groups C and D.
Conduit connector	½”-14 NPT female

6.5.6 Electrical connections of external pulse transmitter

An electrical connection diagram is supplied with the Veeder Root counter

The green earth wire must not be connected to any point at the flowmeter side, but must be connected to the earting point of the connected pulse signal processing instrument.

7. OPERATING INSTRUCTIONS

7.1 START UP PROCEDURES

Before initial start-up of a flowmeter system, or when taking the installation again into use after a major repair or revision of the piping system, the following procedures are recommended.

1. Remove filter element of liquid filter installed ahead of flowmeter.
2. Remove flowmeter from liquid system and replace it by a pipe piece.
3. Flush entire liquid system to ensure that all dirt and other foreign matter that could damage the flowmeter have been removed.

CAUTION

- Do not flush ductile iron and steel flowmeters with water.
- NEVER exceed maximum flowrate (Q_{max},, see textplate of flowmeter)
- When re-starting the flowmeter measures must be taken to avoid the presence of solidified or cured liquids inside the flowmeter. Failure to do so may result in breaking of the magnet or magnet shaft.

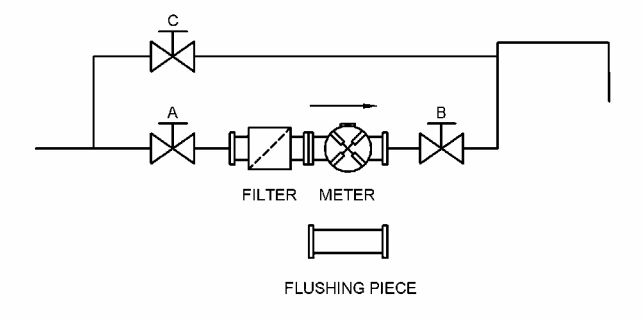


Figure 16 Flowmeter system with bypass

7.1.1 Initial start-up of a flowmeter system with bypass

1. Close valves A, B and C (Figure 16).
2. Remove flushing pipe piece. Re-install flowmeter and filter element.
3. Start pump and/or open storage tank valve.
4. Slowly open bypass valve C completely.
5. Open valve A slightly (5-10%).
6. Slowly open valve B. Dependent on the internal resistance in the system, the flowmeter may start running. If it does, limit the flow to approx. 20% of its capacity.
7. Slowly close bypass valve C until flowmeter just starts running. Let the flowmeter run on this limited flow for a couple of minutes, to ensure that no air or gas will be left in the flowmeter.
8. Slowly open valve A, and if necessary also valve B, completely.
9. Slowly close valve C completely.

7.1.2 Initial start-up of a flowmeter system without bypass

1. Close valves A and B (Figure 17).
2. Remove flushing pipe piece. Re-install flowmeter and filter element.
3. Start pump and/or open storage tank valve.
4. Open valve A slightly (5-10%).
5. Slowly open valve B until flowmeter just starts running. Let the meter run on this limited flow for a couple of minutes, to ensure that no air or gas will be left in the flowmeter.
6. Slowly open valve B completely.
7. Slowly open valve A completely.

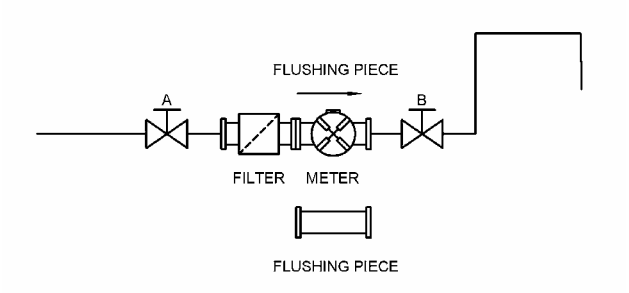


Figure 17 Flowmeter system without bypass

7.2 OPERATING OF COUNTERS

This section only contains concise operating procedures. For additional functional description of counters, separate technical manuals can be ordered from the Literature Department of VAF Instruments B.V.

7.2.1 Totalisers

The resetable totaliser is supplied with a separate reset key.

Figure 18 Resetable totaliser

7.2.2 FlowCount rate totaliser

Figure 19 FlowCount rate totaliser

The Model E200 FlowCount Rate Totaliser is fully programmed in the factory, in accordance with the flow data supplied by the customer. The instrument will display rate, resetable total and accumulated total.
FlowCount is an indicating instrument and may optionally be equipped with a 4-20 mA output, or a DC power input and flow alarm.

1. The accumulated total is displayed by pressing the [ACCUM TOTAL] key.
2. The resetable total can be reset at any time by pressing the [RESET] key.
3. The flow rate is continuously displayed.

The instrument also has a display test mode which can be entered by simultaneously pressing all three front panel keys, followed by pressing the [PROGRAM] key. All segments of the display will then show.

To exit the test mode, press the [ACCUM TOTAL] key and while still holding, simultaneously press the [RESET] and [PROGRAM] keys.

☞ A technical manual with more details is supplied with each instrument.

7.2.3 Resetable flowmeter register

Figure 20 Resetable register

1. To reset indicating wheels to zero, turn reset knob, on right-hand side of register, clockwise.

Do not turn reset knob counter clockwise.
Do not reset register while counting.

2. Do not start delivery unless shutter is in full open position. If numerals on indicating wheels are not in full view, resetting operation has not been completed, in which case turn reset knob clockwise until shutter disappears and reset knob returns to its normal position.

7.2.4 Mechanical batch counter (preset counter)

Figure 21 Mechanical batch counter

The batch quantity can only be set when the flowmeter is not running.

1. Reset upper register, if required, as described in paragraph 7.2.3.
2. Hold the white 'set' button (left-hand button) pressed in and set the batch quantity using the black selection buttons.
3. Start the fluid flow by moving the lever to its extreme right position.
4. To interrupt flow in case of emergency, press the red 'stop' button.
5. After the trouble has been corrected continue batching by operating the start lever again.

7.2.5 Ticket printer

Figure 22 Dual handle reset ticket printer mounted to resetable flowmeter register

Tickets are not supplied by VAF Instruments B.V. A dimensional drawing showing the positions of the start and finish readings and of the pin-hole is available on request.

To operate ticket printer:

1. Lift cover and insert ticket until it bottoms out.
2. Turn crank to secure ticket and print starting amount.
3. After delivery turn crank again to print final amount and to release ticket.

Before delivery the **accumulative model** prints the total remaining from the previous delivery. After delivery it prints the total accumulated at that point. The amount just delivered is found by subtracting the previous total from the accumulated total.

The **zero start model** first prints zeros. The total printed after delivery is the actual amount of the transaction.

The crank on the **dual handle reset** ticket printer operates only the ticket printer. To reset the flowmeter register the handwheel of that register has to be turned separately.

The crank on the **single handle reset** ticket printer operates both printer and flowmeter register.

Do <u>not</u> pull out ticket unless handle is in release position. Torn tickets will damage the print mechanism.

8. MAINTENANCE

8.1 GENERAL

Under normal operating conditions the flowmeter requires no maintenance other than:
* Periodic accuracy check. Refer to section 8.2;

For flowmeters that are running continuously, we recommend to replace bearings every two years as a preventive measure to keep the flowmeter in the best possible condition.

* Check of the totaliser (if this option is supplied). Refer to section 8.3.
* Check of calibration adapter. Refer to section 8.4.

8.2 ACCURACY CHECK

The calibration interval will depend on the nature of the process liquid and the operating conditions. The table below applies if:-
* The process liquid is clean and non-abrasive.
* A liquid filter with correct mesh width has been installed at the flowmeter inlet.

Meter type	Connention size	Calibration interval (litres)
JX025	DN 25 mm (1”)	5×10^6
JX040	DN 40 mm (1.5”)	55×10^6
JX050	DN 50 mm (2”)	110×10^6
JX080	DN 80 mm (3”)	415×10^6
JX100	DN 100 mm (4”)	600×10^6
JX150	DN 150 mm (6”)	10×10^8
JX200	DN 200 mm (8”)	18×10^8
JX250	DN 250 mm (10”)	28×10^8
JX300	DN 300 mm (12”)	35×10^8

8.3 CHECK OF TOTALISERS

8.3.1 Resetable totaliser

Under normal operating conditions the resetable totaliser requires no maintenance.

8.3.2 Resetable register, mechanical batch counter and ticket printer

For maintenance of resetable register, mechanical batch counter and ticket printer check the manuals supplied with each instrument.

8.4 CHECK OF CALIBRATION ADAPTER

The calibration adapter, inside the counter mounting console, should be inspected:
* Every two years when the flowmeter is installed in a normal environment.
* Every year when the flowmeter is installed in a hot, humid or dusty environment.

8.4.1 To check calibration adapter

1. Remove counter from mounting console.
2. Inspect internal calibration adapter parts for wear.

Take care not to damage any pulse generators and pulse discs.

3. Lubricate shafts and bearings using one of the following oils (or equivalent):-
   Triflon
   Anderol L-401D
   Aeroshell Fluid No. 12
   Castrol Hyspin 40

4. Apply one of the following greases (or equivalent) to the teeth of the gearwheels:-
   Anderol L-795
   Aeroshell No. 14
   Esso Beacon 40
   Molykote White Lube

5. Re-install counter on mounting console.

Figure 23 Calibration adapter with pulse transmitter

9. SERVICE AND REPAIR INSTRUCTIONS

9.1 GENERAL

This chapter describes the procedures to be followed when a flowmeter must be removed from the process line for service or repair.

9.2 TO REMOVE FLOWMETER FROM PIPING SYSTEM

When removing a flowmeter from the piping system precautions must be taken to prevent personal injuries and damage to the flowmeter and process control installation.

* Always wear protective clothing when the flowmeter contains a toxic or aggressive fluid.
* Use a hoist or other lifting device and the lifting eye on top of the flowmeter to support the flowmeter when removing from the process piping.

9.2.1 General procedure

1. Shut off flow through flowmeter.
2. Remove any electrical connections from flowmeter. Record connections, if necessary.
3. Empty piping system, in accordance with chapter 9.2.2.
4. Drain flowmeter, in accordance with chapter 9.2.3.
5. Remove flowmeter from piping system, as described in chapter 9.2.4.

9.2.2 To empty piping system

Emptying a piping system is often done by blowing through with steam or air. This practise is not recommended when a vane type flowmeter is installed, because it will be overspeeded.

9.2.3 To drain flowmeter

1. If the flowmeter is fitted with a drain plug, remove plug to empty flowmeter.
2. When the flowmeter is not fitted with a drain plug, remove flowmeter as described under chapter 9.2.4.

9.2.4 To remove flowmeter from piping system

1. Ensure that flow through flowmeter has been shut off. Ensure that electric connections have been removed.

Although the flow has been shut off, the flowmeter can still be under pressure. Be careful when loosening bolts on inlet and outlet flanges.

2. Use a lifting device and the lifting eye on top of the flowmeter to hold flowmeter in position.
3. Remove flowmeter from piping system.

When the flowmeter has been removed from the piping system there will still be some liquid left in its measuring chamber.

4. Hold meter outlet in downward position and let flowmeter leak out for approximately ten minutes. High viscosity liquids will perhaps require more time. Rinsing with a suitable solvent may be of help.
5. Place flowmeter on a dry and clean workbench.
6. If flowmeter must be returned to VAF Instruments or local service representative, follow instructions under chapter 12

9.3 DISMANTLING

The following procedures are recommended if the flow meter must be dismantled for overhaul or repair.
Certain procedures require the use of accurate measuring tools. If these tools are not available it is advisable to return the flow meter to VAF or local service representative.

9.3.1 To remove flow meter from liquid piping

Follow instructions on paragraphs 9.2.1 through 9.2.4.

9.3.2 To remove counter from flow meter

1. Remove pulse box (Figure 24), or (p)reset counter (Figure 25) from meter body.
2. With a flow meter with (p)reset counter rotate counter drive shaft (Figure 26) and observe if counter drive shaft and figure wheels can move smoothly. Refer to instruction manual of counter if device is not functioning properly.

Figure 24

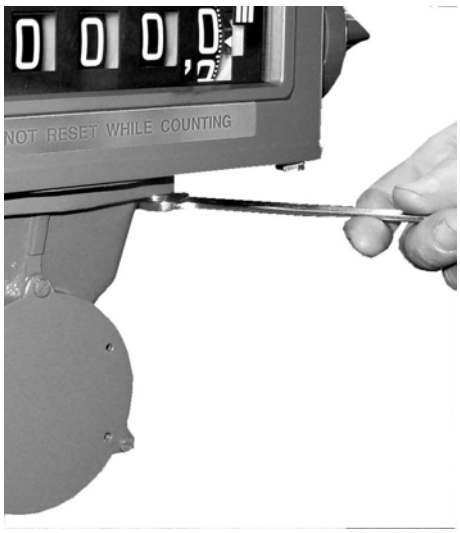


Figure 25

Figure 26

9.3.3 To disassemble non-resetable totaliser

To disassemble the totaliser for seasonal maintenance or repair the following order must be followed:

1. Unscrew window retaining ring. Remove window, scale plate and counter.
2. Loosen and slide aside any pulse generators in the counter head. Remove any pulse disc.
3. Record mounting positions of gear wheels to facilitate later installation. Remove gears.

9.3.4 To remove calibration adapter

1. Loosen 4 bolts M10 (Figure 27). Remove calibration adapter from magnet cap holder (Figure 28).
2. Rotate outer magnet with finger (Figure 29) and check shafts, calibration gears and bearings for wear and excessive slackness of the counter drive.
3. Ensure that the outer magnet is clean and that none of the magnets are missing or damaged. Check centering of outer magnet.

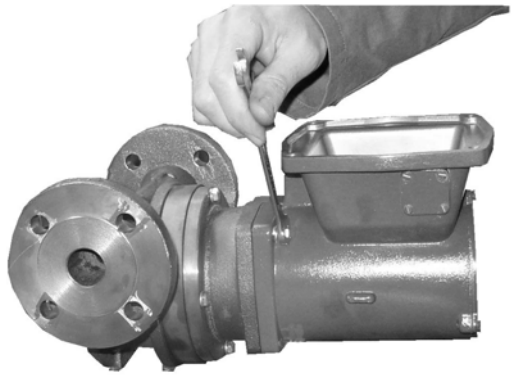


Figure 27

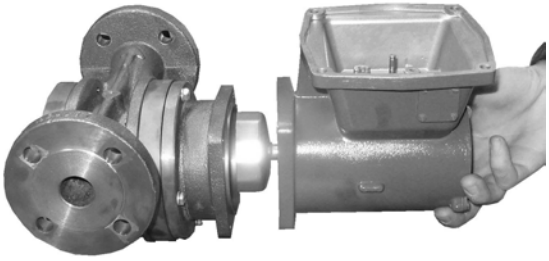


Figure 28

Figure 29

9.3.5 To remove magnet cap and magnet

1. Remove magnet cap holder by loosening 4 x M10 bolts (Figure 30 & 31).
2. Remove magnet cap, inner magnet and sealing ring, as shown in Figures. 32, 33 and 34.
3. Check inside of magnet cap and outside of inner magnet for grooves. If any grooves are found, the magnet shaft is probably bent and must be replaced. Replace magnet cap if too heavily grooved.

Figure 30

Figure 31

Figure 32

Figure 33

Figure 34

9.3.6 To remove front cover

Register the flowdirection before dismantling the flowmeter; look from counter side to arrow marked at the flowmeter for flowdirection. Standard flowdirection is left to right.

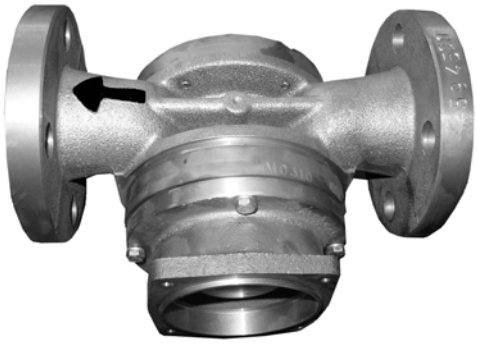


Figure 35 Flowdirection right to left

Figure 36 Flowdirection left to right

Check for any signs of bearing wear by 'wiggling' meter shaft.

1. Remove the front cover mounting bolts and lockwashers (Figure 38).
2. Install the bolts which were removed in step 1, above, in the jacking positions of the front cover (Figure 39). Tighten these bolts evenly and alternately until the cover frees. Ensure cover is lifted equally to protect the locating pins from being damaged.

Figure 37

3. Lift off cover and remove bolts and O-ring. Visually inspect inside surface and bearing cavity for grooves and other signs of wear, indicating that bearing(s) or vanes are damaged.

Figure 38

Figure 39

9.3.7 To remove rotor/vanes assembly

1. Before taking the rotor out of the meter body, visually inspect the inside of the body to find possible cause of damage. If vanes appear to be broken, ensure that the vane push rods (Figure 49) will not scratch against the inner wall of the meter body, when the rotor is pulled out.
2. Record how vanes are installed in the rotor (Figure 51). Remove rotor from body by gently pulling at the rotor shaft and supporting the rotor/vane assembly with the other hand (Figure 40).

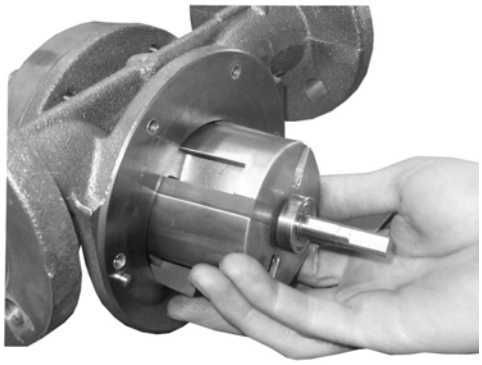


Figure 40

Caution:
Be careful not to drop or damage the four loose vanes and the two loose vane push rods when removing the rotor from the meter body. Keep both pairs of vanes together.

9.3.8 To remove back cover

1. Remove the back cover mounting bolts and lockwashers (Figure 41).
2. Install the bolts which were removed in step 1, above, in the jacking positions of the back cover (Figure 42). Tighten these bolts evenly and in turn until cover frees. Ensure cover is lifted equally to protect the locating pins from being damaged.
3. Lift off cover and remove bolts and O-ring. Visually inspect inside surface and bearing cavity for grooves and other signs of wear, indicating that bearing or vanes are damaged.

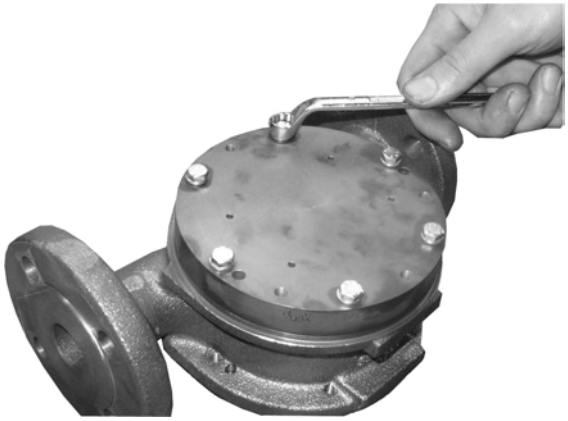


Figure 41

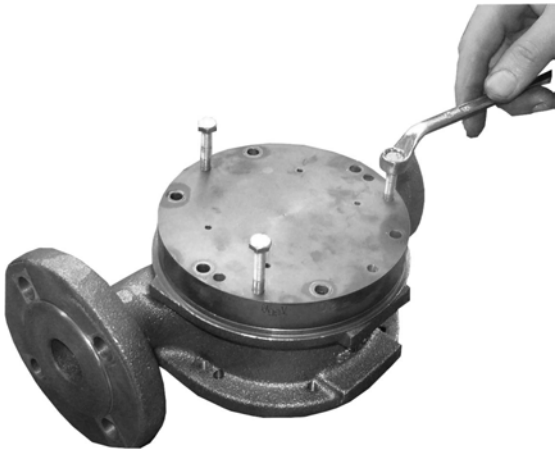


Figure 42

9.3.9 To inspect inside of meter body

1. Visually inspect inner surface of meter body for grooves. Minimal grooving due to small impurities in the process liquid requires no further action, provided that the original shape of the metering chamber is not disturbed. Grooving caused by course particles in the process liquid, or by a vane push rod when a vane is broken, will upset material. Such obstructions may result in uneven running of the flow meter and/or premature vane wear affecting the performance of the flow meter.
2. Remove any surface roughness with fine emery cloth.

☞ If the meter wall was heavily scored no guarantee can be given that after this polishing action the flow meter will still be able to operate within its specified limits of accuracy.

3. Degrease meter body in a suitable solvent.

9.3.10 To inspect rotor and vanes

1. Visually inspect for chipped vanes. Replace vanes if necessary.
2. Measure height of vanes. Replace vanes if height is less than height of rotor.
3. Measure the vane/slot clearance using a feeler gauge (Figure 43). For correct measurement the gauge must be bottomed out in the slot. If the tolerance shown below is exceeded, the vane(s) must be replaced.

Meter model	Standard vane - slot clearance [mm]
JX025 (1”)	0.040 - 0.070
JX040 (1.5”)	0.040 - 0.070
JX050 (2”)	0.045 - 0.080
JX080 (3”)	0.055 - 0.100
JX100 (4”)	0.070 - 0.120
JX150 (6”)	0.080 - 0.130
JX200 (8”)	0.090 - 0.150
JX250 (10”)	0.090 - 0.150
JX300 (12”)	0.090 - 0.150

4. Check that the vane rods can slide freely in and out of the rotor. If the rods can not move freely this may be caused by dirt, worn out bores, bent push rods or scored vanes. Any defective parts must be replaced.

Figure 43

9.3.11 To inspect bearings and rotor shaft

1. Visually inspect bearings, bearing cages, bearing cavities in covers and rotor shaft for excessive wear or other damage. The maximum runout tolerance for rotor shafts is 0.01 mm dial gauge reading.
2. Replace defective bearings in accordance with section 9.4.12.

9.3.12 To replace bearings

Ductile iron and steel flow meters

1. Remove old bearing from rotor shaft using a suitable bearing puller (Figure 44).

Because the space between bearings and rotor is approximately 2 mm, this operation requires a puller with thin blades.

2. Press new bearing vertically on rotor shaft using an arbor press.

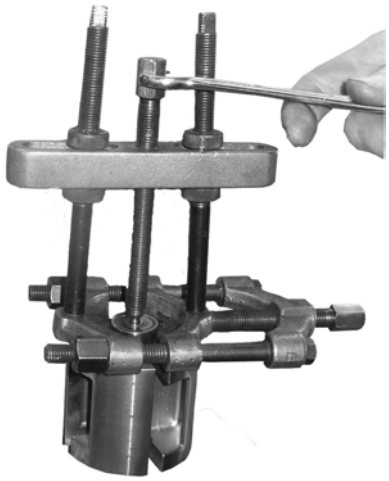


Figure 44

Stainless steel flow meters

1. Pull bearing from shaft (Figure 45) or cover (Figure 46). (It is a loose fit).
2. Install new bearing.

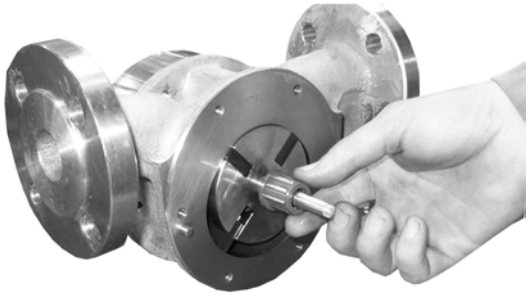


Figure 45

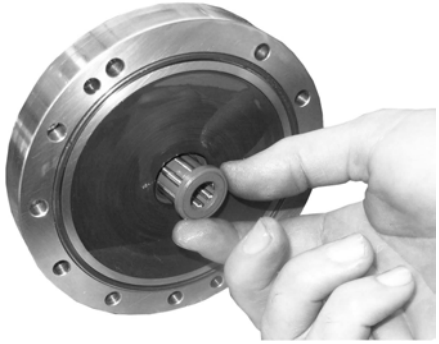


Figure 46

9.4 TO RE-ASSEMBLE A FLOWMETER

9.4.1 General

1. If there is any doubt about the condition of a particular flow meter component, replace it when the meter is still dismantled. This is more economical than having to strip the flow meter down again after a short period of time.
2. Once the flow meter has been dismantled it is recommended that the O-rings for the covers and the O-ring for the magnet cap are replaced.
3. Metal and carbon parts must be degreased before assembly. O-rings should only be wiped dry with a clean cloth.

9.4.2 To install back cover

1. Clean O-ring groove and install new O-ring (Figure 47).
2. Position back cover over locating pins of meter body. Gently tap the cover evenly down with a soft hammer, until it backs out on the meter body.

Do not yet install bearing in back cover.

Take utmost care not to damage the locating pins. Ensure that the O-ring remains in place and is not damaged while tapping down cover.

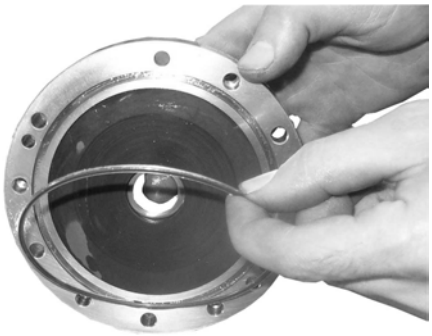


Figure 47

3. Install cover to meter body using bolts (and lockwashers if originally provided). Lubricate bolt threads with 'Never Seez'. Tighten bolts alternately and evenly to the torque value specified on next page.
4. Slide bearing into back cover. Shoulder of bearing cage must face upwards.

Torque values (Nm) – Covers				
Meter Model	No. Of bolts	Stainless Steel	Steel	Ductile iron
JZ(B5)025/JZ(B5)040	6x M6	11 - 11.5	8.5 - 9	8.5 - 9
JZ(B5)050	6x M8	23.5 - 25	16 - 17	16 - 17
JZ080	12x M10	52 - 55	34 - 36	34 - 36
JZ100	12x M12	90 - 95	60 - 63	60 - 63
JZ150	16 x M12	95 - 100	82 - 86	82 - 86
JZ200/JZ250/JZ300	24x M12	95 - 100	85 - 90	85 – 90
Flange adapters for				
JZ200/JZ250/JZ300	8x M12	90 - 95	60 - 63	60 - 63

9.4.3 To install rotor and vanes

1. Place the two vane push rods through the drilled and reamed holes in the rotor (Figure 48).
2. Place rotor with installed vane push rods into flow meter body, with magnet shaft facing up (Figure 49).

Take care not to damage the bearing in the back cover.

3. Place two opposite slots in rotor in line with inlet and outlet flange connections of flow meter.

Figure 48

Figure 49

4. Insert the four (4) vanes one by one into the slots of the rotor, starting with the vane nearest to the inlet connection. Continue with the opposite vane. Then rotate the rotor 1/4 turn and insert the other vanes in the same order (Figure 50). The chamfered edge of each vane must be in the rotating direction of the rotor, as shown in Figure 51 for flow meters with flow direction from left to right and from right to left. The top of the vanes must be flush with the upper surface of the rotor.

Take care not to damage the vanes.

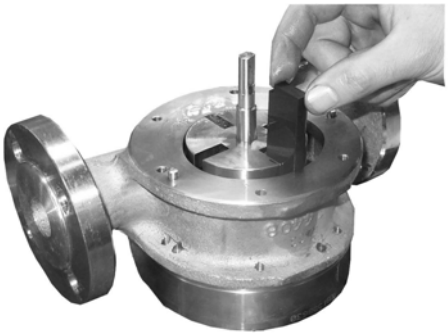


Figure 50

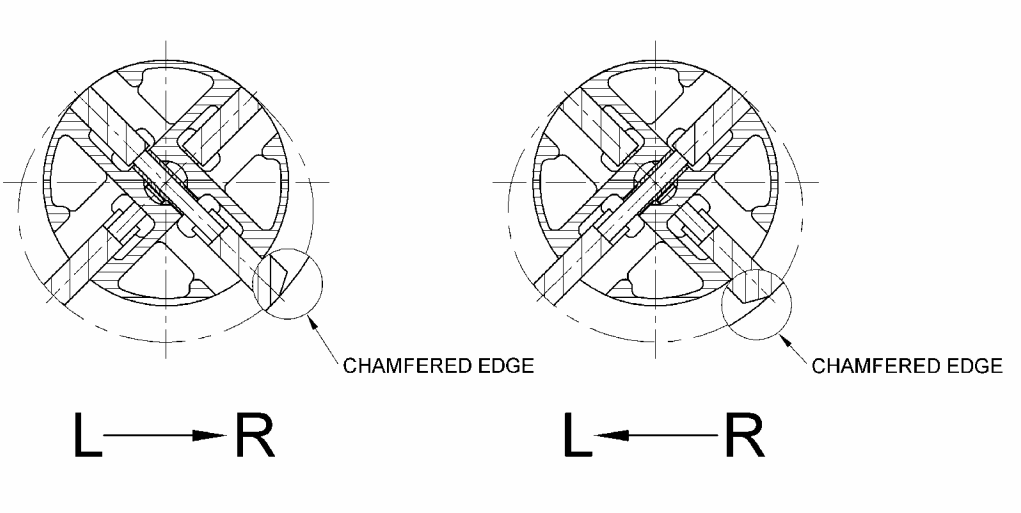


Figure 51

5. Measure the radial vane clearance with a feeler gauge. Measurement should be taken as shown in Figure 52. For correct measurement the gauge must be bottomed out in the slot. If the tolerance is in excess of the value mentioned in the table on next page, replace vane(s) or grind to size with fine emery cloth.

Figure 52

Vane-to-meter body clearance				
Model No.	Tolerance (mm)		Model No.	Tolerance (mm)
JX025 (1”)	0.040 - 0.090		JX150 (6”)	0.080 - 0.180
JX040 (1.5”)	0.040 - 0.090		JX200 (8”)	0.090 - 0.205
JX050 (2”)	0.050 - 0.100		JX250 (10”)	0.100 - 0.200
JX080 (3”)	0.060 - 0.140		JX300 (12”)	0.100 - 0.200
JX100 (4”)	0.070 - 0.165			

6. Rotate the rotor with finger to ensure that it will run smoothly.

9.4.4 To install front cover to meter body

1. Clean O-ring groove and install new O-ring.
2. Slide bearing on rotor shaft. Shoulder of bearing cage must face rotor.
3. Tilt meter body, so that the rotor shaft is in horizontal position.
4. Position front cover over locating pins on meter body.
5. Using a rubber or plastic hammer gently tap on cover until it backs out against the meter body.

When installing front cover to meter body take utmost care not to damage bearing and locating pins. Ensure that the O-ring remains in place and is not damaged.

6. Lubricate threads of cover mounting bolts with 'Never Seez'. Install bolts (and lockwashers if originally provided). Tighten bolts equally and in turn (Figure 53), in accordance with the torque value table of section 9.5.2.

Figure 53

9.4.5 To install inner magnet

1. Place inner magnet on rotor shaft (Figure 54). The flat on the magnet boss must face upwards. The magnet must be flush with the shaft.
2. With the rotor shaft in horizontal position, rotate the rotor shaft by hand using the magnet, to check that the rotor runs smoothly.

Figure 54

Figure 55

9.4.6 To install magnet cap

1. Clean O-ring groove in front cover and install new O-ring (Figure 56).
2. Clean inner magnet with compressed air.
3. Place magnet cap over magnet (Figure 55)
4. Place magnet cap holder on front cover (Figure 57).
   Install M6 x 20 bolts and lockwashers.
   Tighten bolts to the following torque value:
   - stainless steel flow meters: 9 - 9.5 Nm
   - steel and ductile iron flow meters: 5 - 5.5 Nm

Figure 56

Figure 57

5. For a final check that the rotor runs smoothly after assembling covers and magnet cap, the flow meter may be blown through with compressed air at **low** pressure. The rotor must then be able to make a few obstructionless rotations. If the rotor does not run smoothly, disassemble the flow meter and repeat the assembly procedures.

Extreme care should be taken not to overspeed the rotor to avoid damage to the internal meter parts. Just apply enough air that the rotor starts running.

9.4.7 To install counter or pulse transmitter box

Flow meters with Veeder Root type (p)reset counter.

1. Clean outer magnet of calibration adapter with compressed air. Install calibration adapter to magnet cap holder using M6x25 bolts and lockwashers (Figure 58).
2. Install counter on top of calibration adapter (Figure 59). Fork drive of counter must engage holes in centre calibration gear or pulse disc.

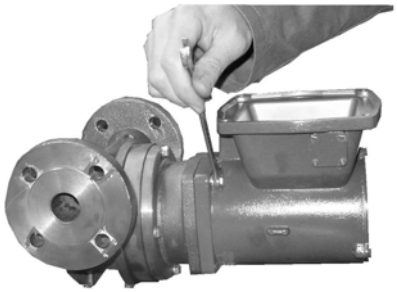


Figure 58

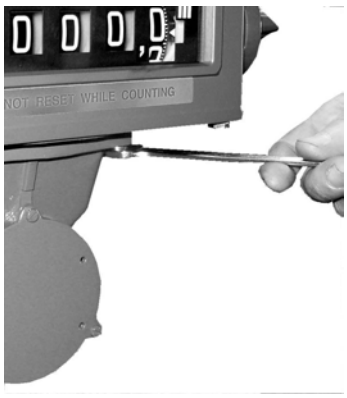


Figure 59

Flow meters with pulse transmitter box

Clean outer magnet of pulse transmitter box.
Place box on front cover.
Install and tighten nuts with lockwashers on M6x20 studs (Figure 60).

The pulse transmitter box must be installed in such a way that, when the flow meter is installed in the liquid piping, the cable gland will point downwards or sidewards, but never upwards.

9.5 FINAL PERFORMANCE CHECK

If the flow meter is recalibrated during a maintenance check or after replacement of major parts, the highest measuring accuracy should be within the operating flow range of the flow meter.

Figure 60

If the calibration curve shows that this is not the case and the application of the flow meter requires optimal accuracy, the tolerances may be improved by changing the internal calibration gears. Consult the factory on application.

9.6 CHANGING THE FLOW DIRECTION

9.6.1 Introduction

Unless otherwise specified VAF Series MidFlow® and HiFlow® meters are delivered for a flow direction from left to right.
If for some reason the direction of flow must be reversed, this can be done in the field by an authorized VAF service engineer, or by your own service personnel, using the following instructions.

If the change in flow direction must be made during the warranty period contact the factory or your local VAF distributor, because unauthorized servicing will void the warranty.

If a change in flow direction is made, the code number as stamped on the identification plate of the flow meter is no longer valid. Therefore please keep record of the changes to avoid difficulties when ordering replacement parts.

9.6.2 Changing flow direction from horizontal to vertical or vice versa

When the flow direction must be changed from left-to-right into bottom-to-top or top-to-bottom, this can easily be done by removing the mounting bolts between calibration adapter and magnet cap holder and rotating the calibration adapter 90 degrees clockwise or counter clockwise (Figure 61)

Also the counter can be rotated in 90° increments to suit the reading position (Figure 62).

If after the change as described above the arrow on the meter body is NOT showing the correct direction of flow, the procedures in the following sections must be followed to correct this.

Figure 61

Figure 62

9.6.3 Changing flow direction from left –to-right into right-to-left

9.6.3.1 Flow meters with a 5- or 6-digit serial number NOT starting with 5

1. Dismantle the flow meter body as described in chapter 9.4

On meter Models J3150, J3200, J3250 and J3300 it is not necessary to remove the back cover. See note under step 4, below.

2. Unscrew rotor shaft from rotor (Figure 63) and install shaft in the tapped hole in opposite side of rotor (Figure 64).

The shape of the vane slots (see arrows in Figure 64) will aid to identify the correct installation position of the rotor shaft.

3. Secure rotor shaft with Loctite ‘Nutlock’ in the position 'left-to-right'. For 'right-to-left‘ the rotor shaft must be secured with Loctite No. 222.
4. Reinstall back cover to meter body in such a position that the red arrow on the body will point in the desired direction of flow. If this is correctly done, the back cover is now in the former position of the front cover (Figure 66). In comparison figure 64 shows the mounting arrangement of the back cover for flow direction from left -to- right.

As indicated under step 1, above, meter Models J3150, J3200, J3250 and J3300 do not require the back cover to be removed. Instead of this the bearing holders from front and back covers must be exchanged (Figure 65). Tighten bearing holders to the following torque value:
Model J3100 : 10.5 - 11 Nm
Model J3150 : 23 - 24.5 Nm
Models J3200/J3250/J3300: 26.6-28 Nm

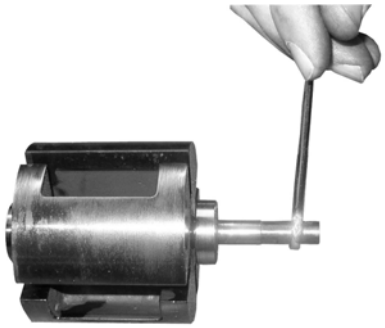


Figure 63

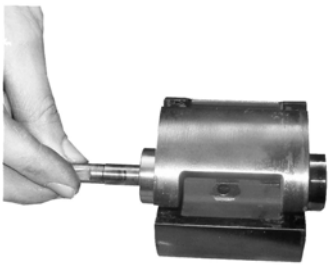


Figure 64

5. Reassemble flow meter body as described in paragraphs 9.4.2 through 9.4.6.
6. Reverse direction of rotation of the counter drive shaft in the calibration adapter, as described in section 9.6.3.
7. Install calibration adapter and counter or transmitter box to meter body, as described in paragraph 9.4.7.

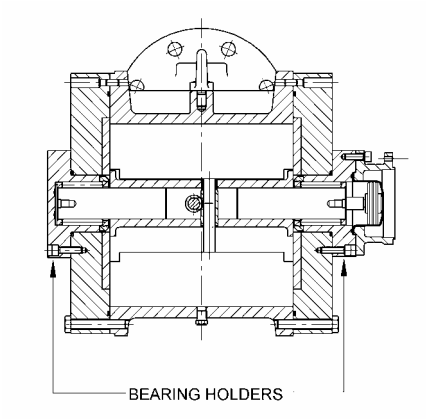


Figure 65

9.6.3.2 Flow meters with a 6-digit serial number starting with 5

1. Order new rotor shaft from the factory, specifying type and serial number of the flow meter, as well as current and desired flow direction.
   A flow direction from left-to-right requires a rotor shaft with right-hand screw thread.
   A flow direction from right-to-left requires a rotor shaft with left-hand screw thread.
2. Dismantle the flow meter body as described in paragraph 1 of section 9.6.3.1.
3. Unscrew existing rotor shaft from rotor (Figure 63) and install new shaft in opposite side of rotor.

☞ The shape of the vane slots (see arrows in Figure 64) will aid to identify the correct installation position of the rotor shaft.

4. Re-assemble flow meter as described from paragraph 4 of section 9.6.3.1.

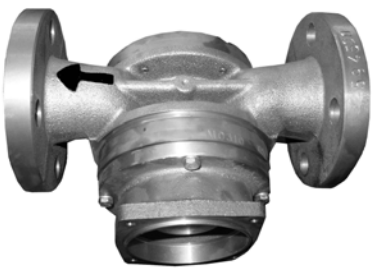


Figure 66 Flow direction right-to-left

Figure 67 Flow direction left-to-right

9.6.4 Reversing of rotation direction of the counter drive shaft

If the flow direction of the meter must be changed from left-to-right into right-to-left, also the direction of rotation of the counter drive shaft in the calibration adapter must be changed.
This is achieved by installing an extra gearwheel kit, Part No. 0390-0208. The kit must be separately ordered from VAF Instruments.
If the flow direction must be changed from right-to-left into left-to-right this gearwheel kit must be removed.

The procedures below apply for installing the extra gearwheel kit in the calibration adapter.

1. If the calibration adapter is provided with a pulse disc and one or more pulse generators, loosen the mounting screw(s) of the pulse generator support(s) a few turns (Figure 65). Move each green pulse generator aside so that it will be free from the pulse disc.
2. Remove retaining circlip of pulse disc and lift off pulse disc. The underlying gearwheel may remain in place.
3. Loosen the bolt which holds the centre gearwheel assembly (Figure 69) approximately one (1) turn.
4. Remove the two lever retaining screws (Figure 70) and remove lever and gearwheel assembly.

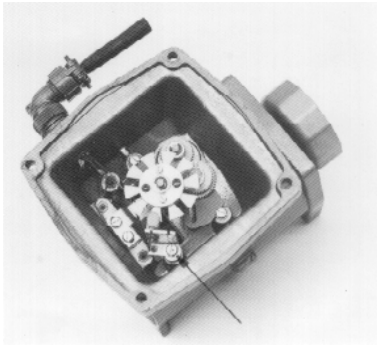


Figure 68

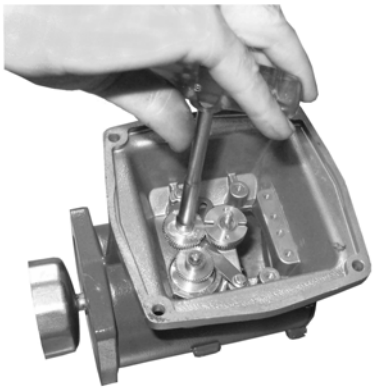


Figure 69

Figure 70

5. Install extra gearwheel kit, Part No. 0390-0208, as shown in Figure 69. Finger tighten nuts on top of gears.

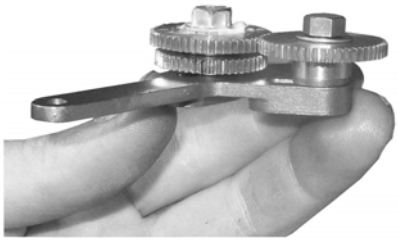


Figure 71

6. Reinstall lever/gearwheel assembly in calibration adapter, carefully engaging gears. Hand-tighten screws.
7. Check for smooth and correct operation by rotating outer magnet counter clockwise. The magnet must run very lightly, while the counter drive shaft should rotate counter clockwise. If the gear mechanism is running jerkily, reposition gearwheel assemblies until magnet and gears are running smoothly.
8. Tighten bolts and screws.
9. Apply grease to the gearwheels and lubricate shafts with oil, as specified in paragraph 8.4.1
10. Reinstall any pulse disc and pulse generators, which were removed in step 1.

Ensure that the pulse generator is mounted as close as possible to the pulse disc, without touching disc.

When a double pulse generator and pulse discriminator are installed in the calibration adapter, care must be taken not to disturb the factory adjusted phase shift of the pulse signals. Refer to the checking procedure in section 2 of Technical Manual No. 246 'Totaliser and Pulse Transmitter for MidFlow®/HiFlow® Meters'.

11. Reinstall calibration adapter and counter or transmitter box to the flow meter body.

When the direction of flow must be changed from right-to-left into left-to-right, the above steps must be performed in reverse order.

10. TAKE OUT OF SERVICE

If the flowmeter has to be taken out of service follow the instructions in chapter 9 (repair) to remove the flow meter from the system. Flush the flow meter with a clean non corrosive fluid, like light diesel oil, or kerosene. The flow meter should than be emptied as much as possible. The inlet and outlet must be closed off to prevent dirt or other particals entering the flow meter. This can damage the flow meter.

11. REMOVAL AND STORAGE OF EQUIPMENT

Follow the instruction in chapter 9 (repair) to remove the flow meter from the system. Flush the flow meter with a clean non corrosive fluid, like light diesel oil, or kerosene. The flow meter should than be emptied as much as possible. The inlet and outlet must be closed off to prevent dirt or other particals entering the flow meter. This can damage the flow meter. It should be stored and secured in a save place. If the flow meter is stored for a longer period of time, it should be treated inside with a corrosion prevention liquid.

12. MALFUNCTION AND SEND FOR REPAIR

In case the flow meter stops working and can not be repaired on site, it should be send back for repair.
Follow the instructions in Chapter 11 (Removal and storage of equipment).
The shipping container or wooden box must be strong enough to protect the flow meter during transport.
The flow meter should be packed with soft material to protect it against shock's.
A fault report should accompany the flow meter, stating the fault, which fluid the meter was used for and all other information that is important to speed up the repair.

Example of sheet to accompany a return shipment to factory or service agent.
Sheet to be filled out in English language

Sender

Company Name		Contact Person	
Street		Department	
Postal Code		Telephone	
City		Fax	
Country		E-mail	

Shipping address for return of goods to user (if different from above mentioned)

Reason for return

[ ] Repair [ ]Warranty Claim [ ] Calibration
[ ] Other:

Type of flow meter *(see nameplate on instrument)*

Code / Type:
Serial Number:

Liquid Data

Process Liquid (trade name or chemical composition):

Liquid properties:

[ ] harmless [ ] toxic [ ] explosion dangerous [ ] inflammable

Flow rate [l/min]	minimal	nominal	maximum
Operating pressure:		Operating temperature:	
Specific gravity:		Viscosity:	

Description of Complaint / Work to be performed

Safety Precautions

[ ] The flow meter has been emptied
[ ] The flow meter has been internally cleaned and preserved using
[ ] Inlet- and outlet ports have been plugged

Recommended cleaning fluid:
Recommended safety precautions before opening of flow meter:

Installation date:		Failure date:	
Date & Signature		Name & Title:	

13. ENVIRONMENT

The flow meter has no negative influence on the environment it is placed in.
The noise the meter is producing in normal circumstances is below 70 dB (A).

14. DISPOSAL

Laws and restrictions for disposal of equipment will be different in most counties. If in doubt or unable to dispose the equipment it can be send back to VAF Instruments.
VAF Instruments will dispose the equipment in a correct way.

Main materials:

Body	Ductile iron, steel, stainless steel 316
Rotor	Ductile iron, stainless steel 316
Vanes	Carbon

15. TROUBLE SHOOTING

15.1 TROUBLE SHOOTING CHART

Problem:
The flowmeter does not indicate any flow, although the liquid is flowing.

Possible cause (Perform a check in the following order)	Solution
1. The valve in the bypass line is still open.	Close bypass valve.
2. The counter is malfunctioning.	Remove counter from flowmeter. Rotate counter drive shaft with finger to see if counter runs smoothly. If counter is functioning well, proceed with next step.
3. A gear is disengaged or damaged, or a shaft is stuck in the calibration adapter.	Remove counter mounting console from flowmeter body. Check for disengaged or damaged gears inside calibration adapter. Also check that small magnets in outer magnet ring of counter mounting console are in place and are not damaged. If magnet shaft is stuck inside calibration adapter, due to dirt, remove any electric puls generators from adapter and clean bearings of magnet shaft in suitable solvent. If this does not solve the problem, proceed with next step.
4. Inner parts of flowmeter may be stuck or broken.	Return flowmeter to factory or authorised local VAF Instruments service representative.

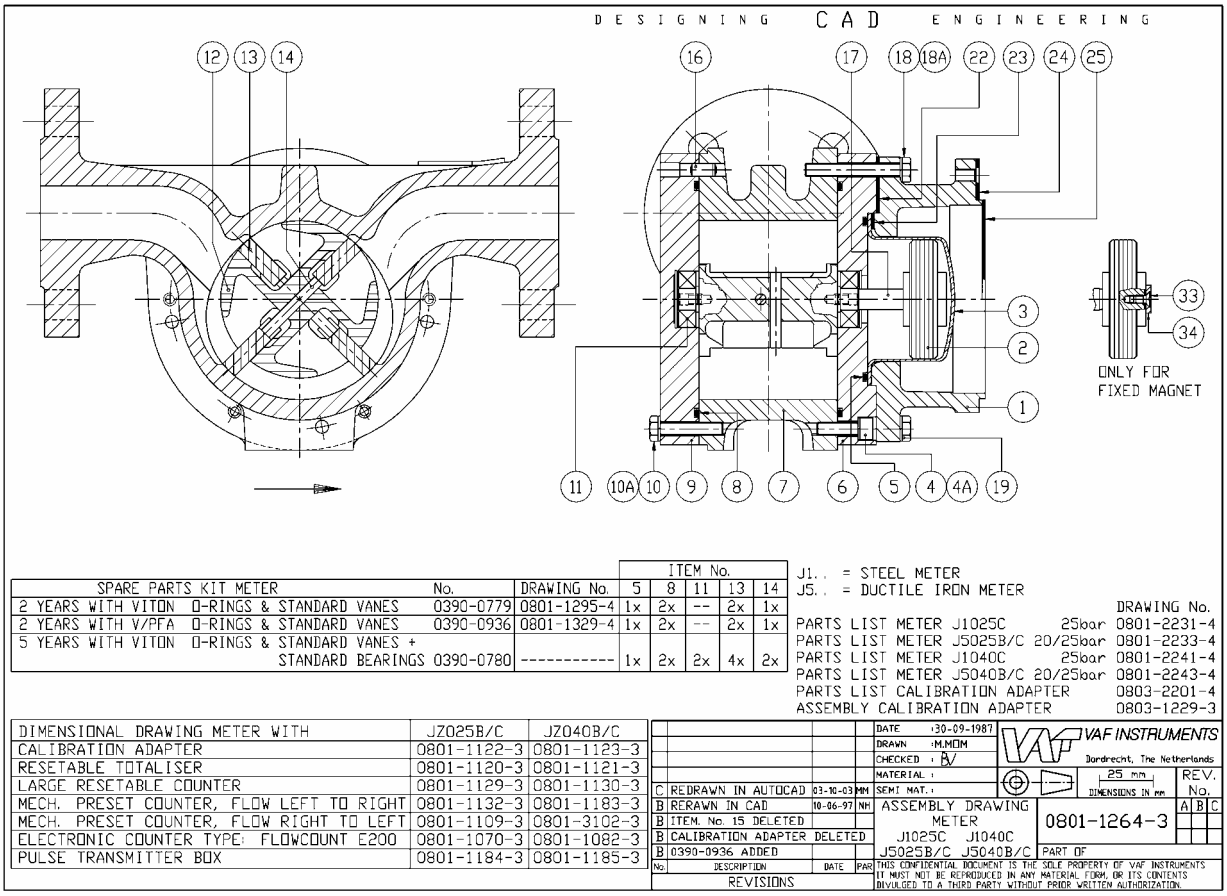
Problem:
The flowmeter does not indicate any flow and no liquid is passing through the flowmeter.

Possible cause (Perform a check in the following order)	Solution
1. Obstructions in the liquid piping, blocking the flow.	Check for obstructions, e.g. closed valves. If this does not solve the problem, proceed with next step.
2. The dust cap in the inlet and/or outlet connection of the flowmeter was not removed when the flowmeter was installed in the process line.	Remove dust cap(s) and check the flowmeter for damage. If there are no visible signs of damage, proceed with next step.
3. Dirt is blocking the vanes and/or the rotor of the flowmeter.	Flush the flowmeter with a suitable solvent. If this does not solve the problem, return flowmeter to factory or nearest authorized VAF Instruments service representative.
4. Inner parts of flowmeter may be stuck or broken.	Return flowmeter to factory or nearest authorized VAF Instruments service representative.

16. CERTIFICATES

Certificates are delivered separately.

17. DRAWINGS



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0780	----------	1x	2x	2x	4x	2x

J1.. = STEEL METER
J5.. = DUCTILE IRON METER

	DRAWING No.
PARTS LIST METER J1025C 25bar	0801-2231-4
PARTS LIST METER J5025B/C 20/25bar	0801-2233-4
PARTS LIST METER J1040C 25bar	0801-2241-4
PARTS LIST METER J5040B/C 20/25bar	0801-2243-4
PARTS LIST CALIBRATION ADAPTER	0803-2201-4
ASSEMBLY CALIBRATION ADAPTER	0803-1229-3

DIMENSIONAL DRAWING METER WITH	JZ025B/C	JZ040B/C
CALIBRATION ADAPTER	0801-1122-3	0801-1123-3
RESETABLE TOTALISER	0801-1120-3	0801-1121-3
LARGE RESETABLE COUNTER	0801-1129-3	0801-1130-3
MECH. PRESET COUNTER, FLOW LEFT TO RIGHT	0801-1132-3	0801-1183-3
MECH. PRESET COUNTER, FLOW RIGHT TO LEFT	0801-1109-3	0801-3102-3
ELECTRONIC COUNTER TYPE: FLOWCOUNT E200	0801-1070-3	0801-1082-3
PULSE TRANSMITTER BOX	0801-1184-3	0801-1185-3

No.	DESCRIPTION	DATE	PAR
C	REDRAWN IN AUTOCAD	03-10-03	MM
B	RERAWN IN CAD	10-06-97	NH
B	ITEM. No. 15 DELETED		
B	CALIBRATION ADAPTER DELETED		
B	0390-0936 ADDED		

REVISIONS

DATE :30-09-1987
DRAWN :M.MOM
CHECKED : BV
MATERIAL :
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

25 mm
DIMENSIONS IN mm

REV. No. A B C

ASSEMBLY DRAWING METER J1025C J1040C J5025B/C J5040B/C

0801-1264-3

PART OF

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0705-0612	4	PIN, DOWEL, ø6m6 x 12 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	STEEL
	0404-0090		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=50mm	
	0404-0367		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=50mm	
	0404-0340		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=48mm	
	0404-0371		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=48mm	
18		2	MOUNTING PART	
	0732-0645		STANDARD: BOLT, HEX. HEAD, M6x45 mm, DIN931	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0635		SCREW, HEX. SOCKET HEAD CAP, M6x35mm, DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: SPRING WASHER, M6, DIN127	SPRING STEEL
19		2	MOUNTING PART	
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6x20 mm, DIN 933	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0612		SCREW, HEX. SOCKET HEAD CAP, M6x12mm, DIN 912	STEEL 8.8
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø 80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø 92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0780	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1264-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	0728-0635 (ST. 8.8)	20-08-03	BV
B	WAS 2728-0635 (ST. 12.9)		
B	0728-0612 (ST. 8.8)		
B	WAS 2728-0612 (ST. 12.9)		
A	REDRAWN IN CAD	10-06-97	NH
A	ITEM No. 15 DELETED		
A	WHOLE CHANGED		

REVISIONS

DATE :06-06-1989
DRAWN :N.Hatunic
CHECKED : BV
MATERIAL : DUCTILE IRON

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER
J5025B DN25 PN20
J5025C DN25 PN25

0801-2233-4

REV. No. A B C

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0083		TEMP. < 120°C, ø132 x 53 mm	DUCTILE IRON
	0408-0087		TEMP. > 120°C, ø132 x 50 mm	DUCTILE IRON
	0408-0148		FLOWCOUNT E200, TEMP. -15°/+75°, ø135x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/ FERROXDURE
	0313-0077		OVERSIZED, ø53 x 20 mm	
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, ø57.5/ø80 x 41 mm	AISI 316
4	0728-0625	4	SCREW, HEX. SOCKET HEAD CAP, M6x25mm, DIN912	STEEL 8.8
4A	0741-0600	4	SPRING WASHER M6 DIN7980	SPRING STEEL
5		1	O-RING,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6		1	COVER, FRONT, ø135 x 18 mm	
	0402-0115		PN20	DUCTILE IRON
	0402-0125		PN25	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	DUCTILE IRON
	0401-0559		FLANGE, DIN PN6	
	0401-0057		FLANGE, DIN PN10/16/25/40	
	0401-0390		FLANGE, ANSI CLASS 150RF	
	0401-0391		FLANGE, ANSI CLASS 300RF	
	0401-0432		FLANGE, JIS 5K	
	0401-0392		FLANGE, JIS 10/16/20K	
8		2	O-RING ,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9		1	COVER, BACK, ø135 x 18 mm	
	0402-0116		PN20	DUCTILE IRON
	0402-0126		PN25	STEEL
10	0733-0630	6	SCREW, HEX. HEAD, M6 x 30 mm, DIN 933	STEEL 8.8
10A	0718-0600	6	SPRING WASHER M6, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 26 x ID 10 x 8 mm	
	2601-6000		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6000		OVERSIZED	STEEL
	1601-6000		STAINLESS STEEL	STAINLESS STEEL
	4601-6000		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 73/10 x 64/84 mm	DUCTILE IRON
	0403-0138		STANDARD	
	0403-0001		OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1264-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	REDRAWN IN AUTOCAD	20-08-03	BV
A	REDRAWN IN CAD	21-04-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :06-06-1989
DRAWN :N.Hatunic
CHECKED : BV
MATERIAL :DUCTILE IRON

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER
J5025B DN25 PN20
J5025C DN25 PN25

0801-2233-4

REV. No. A B

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	STEEL
	0404-0090		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=50mm	
	0404-0367		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=50mm	
	0404-0340		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=48mm	
	0404-0371		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=48mm	
18		2	MOUNTING PART	
	0732-0645		STANDARD: BOLT, HEX. HEAD, M6x45 mm, DIN931	STEEL 8.8
	0728-0635		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x35mm, DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: SPRING WASHER, M6, DIN127	SPRING STEEL
19		2	MOUNTING PART	
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6x20 mm, DIN 933	STEEL 8.8
	0728-0612		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x12mm, DIN 912	STEEL 8.8
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø 80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø 92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0780	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1264-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	0728-0635 (ST. 8.8)	20-08-03	BV
B	WAS 2728-0635 (ST. 12.9)		
B	0728-0612 (ST. 8.8)		
B	WAS 2728-0612 (ST. 12.9)		
A	REDRAWN IN CAD	10-06-97	NH
A	ITEM No. 15 DELETED		
A	WHOLE CHANGED		

REVISIONS

DATE :13-06-1989
DRAWN :N.Ha tunic
CHECKED : BV
MATERIAL :STEEL

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER J1025C DN25 PN25

0801-2231-4

REV. No. A B C

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0084		TEMP. < 120°C, ø132 x 53 mm	AISI 316
	0408-0093		TEMP. > 120°C, ø132 x 50 mm	AISI 316
	0408-0148		FLOWCOUNT E200, TEMP. -15°/+75°, ø135x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/ FERROXDURE
	0313-0077		OVERSIZED, ø53 x 20 mm	
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, ø57.5/ø80 x 41 mm	AISI 316
4	0728-0625	4	SCREW, HEX. SOCKET HEAD CAP, M6x25mm, DIN912	STEEL 8.8
4A	0741-0600	4	SPRING WASHER M6 DIN7980	SPRING STEEL
5		1	O-RING .	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6	0402-0125	1	COVER, FRONT, ø135 x 18 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0451		FLANGE, DIN PN10/16/25/40	
	0401-0470		FLANGE, ANSI CLASS 150RF	
	0401-0471		FLANGE, ANSI CLASS 300RF	
	0401-0644		FLANGE, JIS 5K	
	0401-0472		FLANGE, JIS 10/16/20K	
	0401-0469		FLANGE, DIN PN10/16/25/40, WITH GROOVE DIN2512N	
8		2	O-RING ,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9	0402-0126	1	COVER, BACK, ø135 x 18 mm	STEEL
10	0733-0630	6	SCREW, HEX. HEAD. M6 x 30 mm, DIN 933	STEEL 8.8
10A	0718-0600	6	SPRING WASHER M6, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 26 x ID 10 x 8 mm	
	2601-6000		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6000		OVERSIZED	STEEL
	1601-6000		STAINLESS STEEL	STAINLESS STEEL
	4601-6000		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 73/10 x 64/84 mm	DUCTILE IRON
	0403-0138		STANDARD	
	0403-0001		OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1264-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	REDRAWN IN AUTOCAD	20-08-03	BV
A	REDRAWN IN CAD	21-04-97	NH
A	WHOLE CHANGED		

REVISIONS

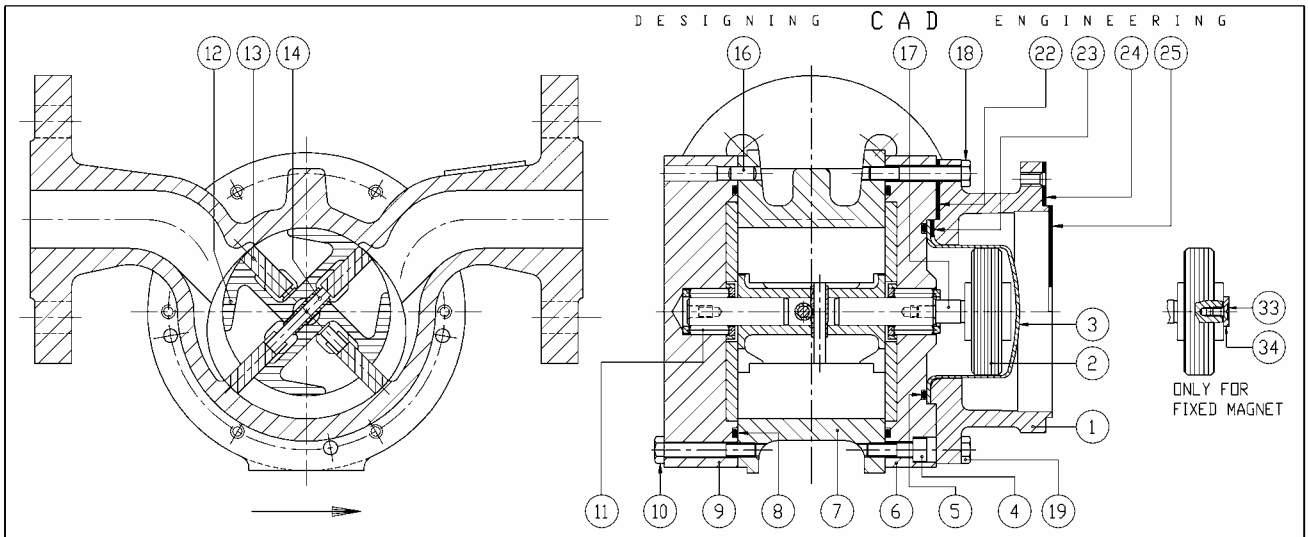
DATE :13-06-1989
DRAWN :N.Ha tunic
CHECKED : BV
MATERIAL :STEEL

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER J1025C DN25 PN25

0801-2231-4

REV. No. A B



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0937	----------	1x	2x	2x	4x	2x

	DRAWING No.
PARTS LIST METER J3025C	0801-2232-4
PARTS LIST METER J3040C	0801-2242-4
PARTS LIST CALIBRATION ADAPTER	0803-2201-4
ASSEMBLY CALIBRATION ADAPTER	0803-1229-2

DIMENSIONAL DRAWING METER WITH	J3025C	J3040C
CALIBRATION ADAPTER	0801-1122-3	0801-1123-3
RESETABLE TOTALISER	0801-1120-3	0801-1121-3
LARGE RESETABLE COUNTER	0801-1129-3	0801-1130-3
MECH. PRESET COUNTER, FLOW LEFT TO RIGHT	0801-1132-3	0801-1183-3
MECH. PRESET COUNTER, FLOW RIGHT TO LEFT	0801-1109-3	0801-3102-3
ELECTRONIC COUNTER TYPE: FLOWCOUNT E200	0801-1070-3	0801-1082-3
PULSE TRANSMITTER BOX	0801-1184-3	0801-1185-3

No.	DESCRIPTION	DATE	PAR
C	REDRAWN IN AUTOCAD	03-10-03	MM
B	REDRAWN IN CAD	10-06-97	NH
B	ITEM. No. 15 DELETED		
B	BUSHINGS IN ROTOR ADDED		
B	0390-0937 WAS 0390-0772		
B	CALIBRATION ADAPTER DELETED		
B	0390-0936 WAS 0390-0771		

REVISIONS

DATE :24-07-1987
DRAWN :M.MOM
CHECKED :BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

25 mm
DIMENSIONS IN mm

REV. No. A B C

ASSEMBLY DRAWING METER J3025C/J3040C DN25/40 PN25

0801-1266-3

PART OF

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0084		TEMP. < 120°C, ø132x53 mm	
	0408-0093		TEMP. > 120°C, ø132x50 mm	
	0408-0185		FLOWCOUNT E200, TEMP. -15/+75°C, ø135x14 mm	
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55x20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53x20 mm	FERROXDURE
	0313-0036		CLOSED, ø55x18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	5728-0620	4	SCREW, HEX. SOCKET HEAD CAP, M6x20mm, DIN 912	AISI 316 A4-80
5		1	O-RING,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6		1	ASSY COVER, FRONT, ø135 x 22 mm	AISI 316/CARBON
	0302-0001		STANDARD	
	0302-0007		WITH SCAVENGING PORT	
	0302-0022		HIGH TEMP. MAX. 250°C	
	0302-0039		LOOSE CARBON PLATE AND LOW TEMP. -35°C	
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0451		FLANGE, DIN PN10/16/25/40	
	0401-0470		FLANGE, ANSI CLASS 150RF	
	0401-0471		FLANGE, ANSI CLASS 300RF	
	0401-0644		FLANGE, JIS 5K	
	0401-0472		FLANGE, JIS 10/16/20K	
	0401-0469		FLANGE, DIN PN10/16/25/40, WITH GROOVE DIN 2512N	
8		2	O-RING,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9		1	ASSY COVER, BACK, ø135 x 32 mm	AISI 316/CARBON
	0302-0002		STANDARD	
	0302-0011		WITH SCAVENGING PORT	
	0302-0023		HIGH TEMP. MAX. 250°C	
	0302-0040		LOOSE CARBON PLATE AND LOW TEMP. -35°C	
10	5733-0640	6	SCREW, HEX. HEAD, M6 x 40 mm, DIN 933	AISI 316 A4-80
11	0329-0035PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY, ROTOR, OD 73/12 x 64/108 mm	AISI 316/RULON
	0303-0001		STANDARD	
	0303-0006		OVERSIZED	
	0303-0005		POCKETLESS	
	0303-0026		POCKETLESS, OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1266-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
C	A4-80 ADDED	20-08-03	MM
C	5733-0640 WAS 1733-0640		
C	5728-0620 WAS 1728-0620		
B	REDRAWN IN CAD	21-04-97	NH
B	0630-4901 WAS 0630-7147		
B	0630-4902 WAS 0630-7155		

REVISIONS

DATE :25-05-1989
DRAWN :M.MOM
CHECKED :BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

PARTS LIST METER J3025C DN25 PN25

0801-2232-4

REV. No. A B C

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0083		TEMP. < 120°C, ø132 x 53 mm	DUCTILE IRON
	0408-0087		TEMP. > 120°C, ø132 x 50 mm	DUCTILE IRON
	0408-0148		FLOWCOUNT E200, TEMP. -15°/+75°, ø135x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, ø57.5/ø80 x 41 mm	AISI 316
4	0728-0625	4	SCREW, HEX. SOCKET HEAD CAP, M6x25mm, DIN912	STEEL 8.8
4A	0741-0600	4	SPRING WASHER M6 DIN7980	SPRING STEEL
5		1	O-RING,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6		1	COVER, FRONT, ø135 x 18 mm	
	0402-0115		PN20	DUCTILE IRON
	0402-0125		PN25	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	DUCTILE IRON
	0401-0352		FLANGE, DIN PN10/16/25/40	
	0401-0353		FLANGE, ANSI CLASS 150RF	
	0401-0354		FLANGE, ANSI CLASS 300RF	
	0401-0431		FLANGE, JIS 5K	
	0401-0396		FLANGE, JIS 10/16/20K	
8		2	O-RING ,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9		1	COVER, BACK, ø135 x 18 mm	
	0402-0116		PN20	DUCTILE IRON
	0402-0126		PN25	STEEL
10	0733-0630	6	SCREW, HEX. HEAD, M6 x 30 mm, DIN 933	STEEL 8.8
10A	0718-0600	6	SPRING WASHER M6, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 26 x ID 10 x 8 mm	
	2601-6000		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6000		OVERSIZED	STEEL
	1601-6000		STAINLESS STEEL	STAINLESS STEEL
	4601-6000		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 73/10 x 64/84 mm	DUCTILE IRON
	0403-0138		STANDARD	
	0403-0001		OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1264-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	REDRAWN IN AUTOCAD	20-08-03	BV
A	REDRAWN IN CAD	21-04-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :06-06-1989
DRAWN :N.Hatunic
CHECKED : BV
MATERIAL : DUCTILE IRON

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER
J5040B DN40 PN20
J5040C DN40 PN25

0801-2243-4

REV. No. A B

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	AISI 316
	0404-0123		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=42mm	
	0404-0368		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=42mm	
	0404-0341		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=40mm	
	0404-0372		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=40mm	
18		2	MOUNTING PART	
	5733-0640		STANDARD: SCREW, HEX. HEAD, M6 x 40 mm, DIN 933	AISI 316 A4-80
	5728-0635		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6 x 35 mm, DIN 912	AISI 316 A4-80
19		2	MOUNTING PART	
	5733-0620		STANDARD: SCREW, HEX. HEAD, M6 x 20 mm, DIN 933	AISI 316 A4-80
	5728-0612		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6 x 12 mm, DIN 912	AISI 316 A4-80
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0936	0801-1329-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0779	0801-1295-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0937	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1266-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
D	0411-0268 ADDED	01-12-03	BV
C	A4-80 ADDED	20-08-03	MM
C	5728-0635 WAS 1728-0635		
C	5728-0612 WAS 1728-0612		
C	5733-0620 WAS 1733-0620		
C	5733-0640 WAS 1733-0640		

REVISIONS

DATE :25-05-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

PARTS LIST METER J3025C DN25 PN25

0801-2232-4

REV. No. A B C D

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0084		TEMP. < 120°C, ø132 x 53 mm	AISI 316
	0408-0093		TEMP. > 120°C, ø132 x 50 mm	AISI 316
	0408-0148		FLOWCOUNT E200, TEMP. -15°/+75°, ø135x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/ FERROXDURE
	0313-0077		OVERSIZED, ø53 x 20 mm	
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, ø57.5/ø80 x 41 mm	AISI 316
4	0728-0625	4	SCREW, HEX. SOCKET HEAD CAP, M6x25mm, DIN912	STEEL 8.8
4A	0741-0600	4	SPRING WASHER M6 DIN7980	SPRING STEEL
5		1	O-RING .	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6	0402-0125	1	COVER, FRONT, ø135 x 18 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0452		FLANGE, DIN PN10/16/25/40	
	0401-0473		FLANGE, ANSI CLASS 150RF	
	0401-0474		FLANGE, ANSI CLASS 300RF	
	0401-0475		FLANGE, JIS 10/16/20K	
	0401-0490		FLANGE, DIN PN10/16/25/40, WITH GROOVE DIN2512N	
8		2	O-RING ,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9	0402-0126	1	COVER, BACK, ø135 x 18 mm	STEEL
10	0733-0630	6	SCREW, HEX, HEAD. M6 x 30 mm, DIN 933	STEEL 8.8
10A	0718-0600	6	SPRING WASHER M6, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 26 x ID 10 x 8 mm	
	2601-6000		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6000		OVERSIZED	STEEL
	1601-6000		STAINLESS STEEL	STAINLESS STEEL
	4601-6000		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 73/10 x 64/84 mm	DUCTILE IRON
	0403-0138		STANDARD	
	0403-0001		OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1264-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	REDRAWN IN AUTOCAD	20-08-03	BV
A	REDRAWN IN CAD	21-04-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :13-06-1989
DRAWN :N.Hatunic
CHECKED : BV
MATERIAL :STEEL

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER J1040C DN40 PN25

0801-2241-4

REV. No. A B

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0705-0612	4	PIN, DOWEL, ø6m6 x 12 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	STEEL
	0404-0090		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=50mm	
	0404-0367		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=50mm	
	0404-0340		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=48mm	
	0404-0371		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=48mm	
18		2	MOUNTING PART	
	0732-0645		STANDARD: BOLT, HEX. HEAD, M6x45 mm, DIN931	STEEL 8.8
	0728-0635		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x35mm, DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: SPRING WASHER, M6, DIN127	SPRING STEEL
19		2	MOUNTING PART	
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6x20 mm, DIN 933	STEEL 8.8
	0728-0612		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x12mm, DIN 912	STEEL 8.8
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø 80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø 92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0780	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1264-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	0728-0635 (ST. 8.8)	20-08-03	BV
B	WAS 2728-0635 (ST. 12.9)		
B	0728-0612 (ST. 8.8)		
B	WAS 2728-0612 (ST. 12.9)		
A	REDRAWN IN CAD	10-06-97	NH
A	ITEM No. 15 DELETED		
A	WHOLE CHANGED		

REVISIONS

DATE :06-06-1989
DRAWN :N.Hatunic
CHECKED : BV
MATERIAL :DUCTILE IRON

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER J5040B DN40 PN20 J5040C DN40 PN25

0801-2243-4

REV. No. A B C

D E S I G N I N G **C A D** E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0084		TEMP. < 120°C, ø132 x 53 mm	
	0408-0093		TEMP. > 120°C, ø132 x 50 mm	
	0408-0185		FLOWCOUNT E200, TEMP. -15/+75°C, ø135 x 14 mm	
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	5728-0620	4	SCREW, HEX. SOCKET HEAD CAP, M6x20mm, DIN 912	AISI 316 A4-80
5		1	O-RING,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6		1	ASSY COVER, FRONT, ø135 x 22 mm	AISI 316/CARBON
	0302-0001		STANDARD	
	0302-0007		WITH SCAVENGING PORT	
	0302-0022		HIGH TEMP. MAX. 250°C	
	0302-0039		LOOSE CARBON PLATE AND LOW TEMP. -35°C	
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0452		FLANGE, DIN PN10/16/25/40	
	0401-0473		FLANGE, ANSI CLASS 150RF	
	0401-0474		FLANGE, ANSI CLASS 300RF	
	0401-0475		FLANGE, JIS 10/16/20K	
	0401-0490		FLANGE, DIN PN10/16/25/40, WITH GROOVE DIN 2512N	
8		2	O-RING,	
	0630-3155		ID 101.27 x ø2.62 mm	VITON
	0630-4902		ID 104.30 x ø2.62 mm	VITON/PFA
	0630-9155		ID 101.27 x ø2.62 mm	KALREZ
9		1	ASSY COVER, BACK, ø135 x 32 mm	AISI 316/CARBON
	0302-0002		STANDARD	
	0302-0011		WITH SCAVENGING PORT	
	0302-0023		HIGH TEMP. MAX. 250?C	
	0302-0040		LOOSE CARBON PLATE AND LOW TEMP. -35°C	
10	5733-0640	6	SCREW, HEX. HEAD, M6 x 40 mm, DIN 933	AISI 316 A4-80
11	0329-0035PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY, ROTOR, OD 73/12 x 64/108 mm	AISI 316/RULON
	0303-0001		STANDARD	
	0303-0006		OVERSIZED	
	0303-0005		POCKETLESS	
	0303-0026		POCKETLESS, OVERSIZED	
13		4	VANE, 64 x 24 x 8 mm	CARBON
	0405-0029		STANDARD	
	0405-0041		OVERSIZED	
	0405-0034		HIGH TEMP. MAX. 250°C	
	0405-0198		LOW TEMP. -35°C	
	0405-0189		SPECIAL FOR FOOD	
	0405-0194		SPECIAL FOR POLYOL	
14	0404-0126	2	ROD, VANE, ø5 x 35 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1266-3 — SHEET 1 OF 2

				DATE : 25-05-1989	VAF INSTRUMENTS
				DRAWN : M.MOM	Dordrecht, The Netherlands
				CHECKED : BV	
B	A4-80 ADDED	20-08-03	MM	MATERIAL : AISI 316	DIMENSIONS IN mm — REV. No.
B	5733-0640 WAS 1733-0640			SEMI MAT. :	
B	5728-0620 WAS 1728-0620			PARTS LIST METER J3040C DN40 PN25	0801-2242-4 — A B
A	REDRAWN IN CAD	21-04-97	NH		
A	0630-4901 WAS 0630-7147				
A	0630-4902 WAS 0630-7155				

No.	DESCRIPTION	DATE	PAR

REVISIONS

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	STEEL
	0404-0090		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=50mm	
	0404-0367		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=50mm	
	0404-0340		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=48mm	
	0404-0371		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=48mm	
18		2	MOUNTING PART	
	0732-0645		STANDARD: BOLT, HEX. HEAD, M6x45 mm, DIN931	STEEL 8.8
	0728-0635		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x35mm, DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: S PRING WASHER, M6, DIN127	SPRING STEEL
19		2	MOUNTING PART	
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6x20 mm, DIN 933	STEEL 8.8
	0728-0612		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6x12mm, DIN 912	STEEL 8.8
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø 80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0780	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1264-3 — SHEET 2 OF 2

C	0411-0268 ADDED	01-12-03	BV	DATE : 13-06-1989	VAF INSTRUMENTS
B	0728-0635 (ST. 8.8)	20-08-03	BV	DRAWN : N.Hatunic	Dordrecht, The Netherlands
B	WAS 2728-0635 (ST. 12.9)			CHECKED : BV	
B	0728-0612 (ST. 8.8)			MATERIAL : STEEL	REV. No.
B	WAS 2728-0612 (ST. 12.9)			PARTS LIST METER J1040C DN40 PN25	0801-2241-4 — A B C
A	REDRAWN IN CAD	10-06-97	NH		
A	ITEM No. 15 DELETED				
A	WHOLE CHANGED				

No.	DESCRIPTION	DATE	PAR

REVISIONS

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 10/M5 x 0.5 mm	AISI 316
	0404-0123		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=42mm	
	0404-0368		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=42mm	
	0404-0341		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=40mm	
	0404-0372		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=40mm	
18		2	MOUNTING PART	
	5733-0640		STANDARD: SCREW, HEX. HEAD, M6 x 40 mm, DIN 933	AISI 316 A4-80
	5728-0635		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6 x 35 mm, DIN 912	AISI 316 A4-80
19		2	MOUNTING PART	
	5733-0620		STANDARD: SCREW, HEX. HEAD, M6 x 20 mm, DIN 933	AISI 316 A4-80
	5728-0612		FLOWCOUNT E200: SCREW, HEX. SOCKET HEAD CAP, M6 x 12 mm, DIN 912	AISI 316 A4-80
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0936	0801-1329-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0779	0801-1295-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0937	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1266-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
D	0411-0268 ADDED	01-12-03	BV
C	A4-80 ADDED	20-08-03	MM
C	5728-0612 WAS 1728-0612		
C	5728-0635 WAS 1728-0635		
C	5733-0620 WAS 1733-0620		
C	5733-0640 WAS 1733-0640		

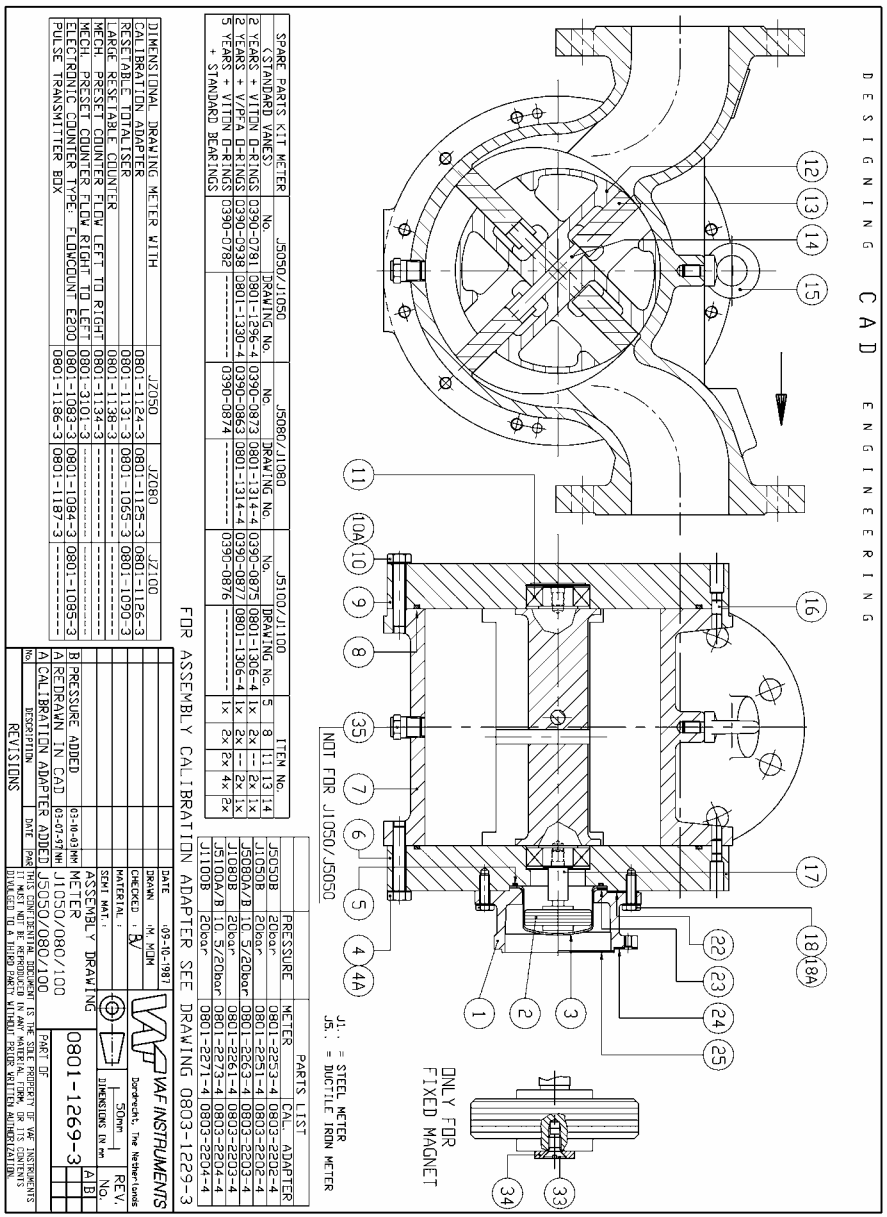
REVISIONS

DATE :25-05-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands
DIMENSIONS IN mm
REV. No. A B C D

PARTS LIST METER J3040C DN40 PN25

0801-2242-4



SPARE PARTS KIT METER	J5050/J1050 No.	DRAWING No.	J5080/J1080 No.	DRAWING No.	J5100/J1100 No.	DRAWING No.	ITEM No. 5	8	11	13	14
(STANDARD VANES)	0390-0781	0801-1296-4	0390-0873	0801-1314-4	0390-0875	0801-1306-4	1x	2x	--	2x	1x
2 YEARS + VITON O-RINGS	0390-0938	0801-1330-4	0390-0963	0801-1314-4	0390-0877	0801-1306-4	1x	2x	--	2x	1x
2 YEARS + V/PFA O-RINGS	0390-0782	----------	0390-0874	----------	0390-0876	----------	1x	2x	2x	4x	2x
5 YEARS + VITON O-RINGS + STANDARD BEARINGS											

FOR ASSEMBLY CALIBRATION ADAPTER SEE DRAWING 0803-1229-3

PARTS LIST	PRESSURE	METER	CAL. ADAPTER
J5050B	20bar	0801-2253-4	0803-2202-4
J1050B	20bar	0801-2251-4	0803-2202-4
J5080A/B	10.5/20bar	0801-2263-4	0803-2203-4
J1080B	20bar	0801-2261-4	0803-2203-4
J5100A/B	10.5/20bar	0801-2273-4	0803-2204-4
J1100B	20bar	0801-2271-4	0803-2204-4

DIMENSIONAL DRAWING METER WITH	J2050	J2080	J2100
CALIBRATION ADAPTER	0801-1124-3	0801-1125-3	0801-1126-3
RESETTABLE TOTALISER	0801-1131-3	0801-1065-3	0801-1090-3
LARGE RESETTABLE COUNTER	0801-1138-3	----------	----------
MECH. PRESET COUNTER FLOW LEFT TO RIGHT	0801-1134-3	----------	----------
MECH. PRESET COUNTER FLOW RIGHT TO LEFT	0801-3101-3	----------	----------
ELECTRONIC COUNTER TYPE: FLOWCOUNT E200	0801-1083-3	0801-1084-3	0801-1085-3
PULSE TRANSMITTER BOX	0801-1186-3	0801-1187-3	----------

No.	DESCRIPTION	DATE	PAR
B	PRESSURE ADDED	03-10-03	MM
A	REDRAWN IN CAD	03-07-01	MM

REVISIONS

DATE :05-10-1987
DRAWN :M.MOM
CHECKED : BV
MATERIAL :
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands
DIMENSIONS IN mm
REV. No. A B

ASSEMBLY DRAWING METER J1050/080/100 J5050/080/100

PART OF 0801-1269-3

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME		MATERIAL
15	0799-0079	1	EYE-BOLT, M8,	DIN 580	STEEL
16	0705-0612	4	PIN, DOWEL, ø6m6 x 12 mm	DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 12/M8 x 0.75 mm		STEEL
	0404-0081		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=52 mm		
	0404-0374		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=52 mm		
	0404-0342		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=50.5mm		
	0404-0378		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=50.5mm		
18		4	MOUNTING PART		
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6 x 20 mm,	DIN 933	STEEL 8.8
			FLOWCOUNT E200:		
	0728-0612		SCREW, HEX. SOCKET HEAD CAP, M6 x 12mm,	DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: SPRING WASHER, M6,	DIN 127	SPRING STEEL
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm		SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm		SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm		SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm		SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm,	DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,		AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm		
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm		

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0781	0801-1296-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0938	0801-1330-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS 0390-0782	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	PN25 AND	20-08-03	MM
B	0404-0343/0379 DELETED		
B	0728-0612 (ST. 8.8) WAS		
B	2728-0612 (ST. 12.9)		
A	REDRAWN IN CAD	03-07-97	BV
A	WHOLE CHANGED		

REVISIONS

DATE :07-12-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :DUCTILE IRON
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER J5050B DN50 PN20

0801-2253-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME		MATERIAL
1		1	HOLDER, MAGNET CAP		
	0408-0083		TEMP. < 120°C, ø132 x 53 mm		DUCTILE IRON
	0408-0087		TEMP. > 120°C, ø132 x 50 mm		DUCTILE IRON
	0408-0148		FLOWCOUNT E200, TEMP. -15/+75°C, ø135 x 14mm		STEEL
2		1	ASSY, MAGNET		
	0313-0076		STANDARD, ø55 x 20 mm		AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm		FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm		AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm		AISI 316
4	0733-0835	6	SCREW, HEX. HEAD, M8 x 35 mm,	DIN 933	STEEL 8.8
4A	0718-0800	6	SPRING WASHER, M8,	DIN 127	SPRING STEEL
5		1	O-RING,		
	0630-3147		ID 67.95 x ø2.62 mm		VITON
	0630-4901		ID 71.20 x ø2.62 mm		VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm		KALREZ
6	0402-0105	1	COVER, FRONT, ø166 x 20 mm		DUCTILE IRON
7		1	HOUSING, INCLUDING ITEM No. 16		DUCTILE IRON
	0401-0393		FLANGE, DIN PN10/16/25/40		
	0401-0394		FLANGE, ANSI CLASS 150RF		
	0401-0395		FLANGE, ANSI CLASS 300RF		
	0401-0482		FLANGE, JIS 5K		
	0401-0481		FLANGE, JIS 10K		
	0401-0607		FLANGE, JIS 16/20K		
8		2	O-RING,		
	0630-3248		ID 120.24 x ø3.53 mm		VITON
	0630-4911		ID 121.80 x ø3.53 mm		VITON/PFA
	0630-9248		ID 120.24 x ø3.53 mm		KALREZ
9	0402-0106	1	COVER, BACK, ø166 x 20 mm		DUCTILE IRON
10	0733-0835	6	SCREW, HEX. HEAD, M8 x 35 mm,	DIN 933	STEEL 8.8
10A	0718-0800	6	SPRING WASHER, M8,	DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 32 x ID 15 x 9 mm,		
	2601-6002		STANDARD WITH 2 GUARD PLATES		STEEL
	0601-6002		OVERSIZED		STEEL
	1601-6002		STAINLESS STEEL		STAINLESS STEEL
	4601-6002		SYNTHETIC CAGE		STEEL
12		1	ROTOR, OD 86/15 x 99/122 mm		DUCTILE IRON
	0403-0139		STANDARD		
	0403-0002		OVERSIZED		
13		4	VANE, 99 x 30 x 10 mm		CARBON
	0405-0030		STANDARD		
	0405-0042		OVERSIZED		
	0405-0183		LOW TEMPERATURE -35°C		
14	0404-0127	2	ROD, VANE ø 6 x 39 mm		AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN 25 AND	20-08-03	MM
B	0402-0119/0120 DELETED		
A	REDRAWN IN CAD	03-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :07-12-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :DUCTILE IRON
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B

PARTS LIST METER J5050B DN50 PN20

0801-2253-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0079	1	EYE-BOLT, M8, DIN 580	STEEL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 12/M8 x 0.75 mm	STEEL
	0404-0081		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=52mm	
	0404-0374		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=52mm	
	0404-0343		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=52.5mm	
	0404-0379		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=52.5mm	
18		4	MOUNTING PART	
	0733-0620		STANDARD: SCREW, HEX. HEAD, M6 x 20 mm, DIN 933	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0612		SCREW, HEX. SOCKET HEAD CAP, M6 x 12mm, DIN 912	STEEL 8.8
18A	0718-0600	4	STANDARD: SPRING WASHER, M6, DIN 127	SPRING STEEL
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0781	0801-1296-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0938	0801-1330-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS 0390-0782	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3 SHEET 2 OF 2

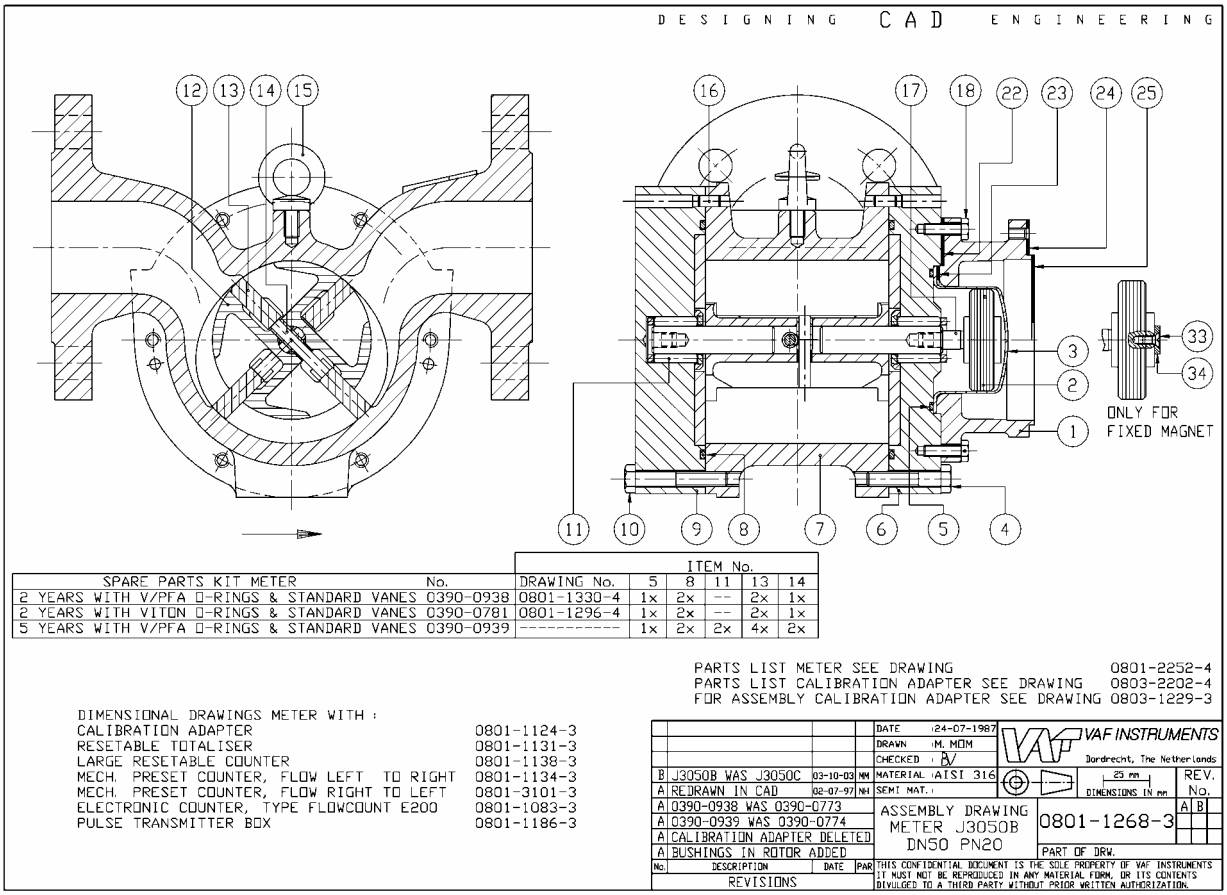
				DATE :25-01-1990	VAF INSTRUMENTS Dordrecht, The Netherlands
				DRAWN :M.MOM	
				CHECKED : BV	
C	0411-0268 ADDED	01-12-03	BV	MATERIAL :STEEL	DIMENSIONS IN mm
B	PN20 WAS PN25	20-08-03	MM	SEMI MAT. :	REV. No. A B C
B	0728-0612 (ST. 8.8) WAS			PARTS LIST METER J1050B DN50 PN20	0801-2251-4
B	2728-0612 (ST. 12.9)				
A	REDRAWN IN CAD	03-07-97	BV		
A	WHOLE CHANGED				
No.	DESCRIPTION	DATE	PAR	THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.	
REVISIONS					

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0084		TEMP. < 120°C, ø132 x 53 mm	AISI 316
	0408-0093		TEMP. > 120°C, ø132 x 50 mm	AISI 316
	0408-0148		FLOWCOUNT E200, TEMP. -15/+75°C, ø135 x 14mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	0733-0835	6	SCREW, HEX. HEAD, M8 x 35 mm, DIN 933	STEEL 8.8
4A	0718-0800	6	SPRING WASHER M8, DIN 127	SPRING STEEL
5		1	O-RING,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6	0402-0119	1	COVER, FRONT, ø166 x 22 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0453		FLANGE, DIN PN10/16/25/40	
	0401-0476		FLANGE, ANSI CLASS 150RF	
	0401-0477		FLANGE, ANSI CLASS 300RF	
	0401-0753		FLANGE, JIS 5K	
	0401-0478		FLANGE, JIS 10K	
	0401-0479		FLANGE, JIS 16/20K	
	0401-0513		FLANGE, DIN PN10/16/25/40 WITH GROOVE DIN 2512N	
8		2	O-RING,	
	0630-3248		ID 120.24 x ø3.53 mm	VITON
	0630-4911		ID 121.80 x ø3.53 mm	VITON/PFA
	0630-9248		ID 120.24 x ø3.53 mm	KALREZ
9	0402-0120	1	COVER, BACK, ø166 x 22 mm	STEEL
10	0733-0835	6	SCREW, HEX. HEAD, M8 x 35 mm, DIN 933	STEEL 8.8
10A	0718-0800	6	SPRING WASHER M8, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 32 x ID 15 x 9 mm	
	2601-6002		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6002		OVERSIZED	STEEL
	1601-6002		STAINLESS STEEL	STAINLESS STEEL
	4601-6002		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 86/15 x 99/122 mm	DUCTILE IRON
	0403-0139		STANDARD	
	0403-0002		OVERSIZED	
13		4	VANE, 99 x 30 x 10 mm	CARBON
	0405-0030		STANDARD	
	0405-0042		OVERSIZED	
	0405-0183		LOW TEMPERATURE -35°C	
14	0404-0127	2	ROD, VANE, ø 6 x 39 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3 SHEET 1 OF 2

				DATE :25-01-1990	VAF INSTRUMENTS Dordrecht, The Netherlands
				DRAWN :M.MOM	
				CHECKED : BV	
				MATERIAL :STEEL	DIMENSIONS IN mm
				SEMI MAT. :	REV. No. A B
B	0401-0753 ADDED	20-08-03	MM	PARTS LIST METER J1050B DN50 PN20	0801-2251-4
B	PN 20 WAS PN25				
A	REDRAWN IN CAD	03-07-97	NH		
A	WHOLE CHANGED				
No.	DESCRIPTION	DATE	PAR	THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.	
REVISIONS					



SPARE PARTS KIT METER	No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0938	0801-1330-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0781	0801-1296-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0939	----------	1x	2x	2x	4x	2x

PARTS LIST METER SEE DRAWING 0801-2252-4
PARTS LIST CALIBRATION ADAPTER SEE DRAWING 0803-2202-4
FOR ASSEMBLY CALIBRATION ADAPTER SEE DRAWING 0803-1229-3

DIMENSIONAL DRAWINGS METER WITH :

CALIBRATION ADAPTER	0801-1124-3
RESETABLE TOTALISER	0801-1131-3
LARGE RESETABLE COUNTER	0801-1138-3
MECH. PRESET COUNTER, FLOW LEFT TO RIGHT	0801-1134-3
MECH. PRESET COUNTER, FLOW RIGHT TO LEFT	0801-3101-3
ELECTRONIC COUNTER, TYPE FLOWCOUNT E200	0801-1083-3
PULSE TRANSMITTER BOX	0801-1186-3

No.	DESCRIPTION	DATE	PAR
B	J3050B WAS J3050C	03-10-03	NM
A	REDRAWN IN CAD	02-07-97	NH
A	0390-0938 WAS 0390-0773		
A	0390-0939 WAS 0390-0774		
A	CALIBRATION ADAPTER DELETED		
A	BUSHINGS IN ROTOR ADDED		

REVISIONS

DATE :24-07-1987
DRAWN :M. MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands
25 mm
DIMENSIONS IN mm
REV. No. A B

ASSEMBLY DRAWING METER J3050B DN50 PN20
0801-1268-3
PART OF DRW.

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0084		TEMP. < 120°C, ø132 x 53 mm	
	0408-0093		TEMP. > 120°C, ø132 x 50 mm	
	0408-0185		FLOWCOUNT E200, TEMP.-15/+75°C, ø135x14 mm	
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/ FERROXDURE
	0313-0077		OVERSIZED, ø53 x 20 mm	
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	5733-0840	6	SCREW, HEX. HEAD, M8 x 40 mm, DIN 933	AISI 316 A4-80
5		1	O-RING ,	
	0630-3147		ID 67.95 x ø2.62 mm	VITON
	0630-4901		ID 71.20 x ø2.62 mm	VITON/PFA
	0630-9147		ID 67.95 x ø2.62 mm	KALREZ
6		1	ASSY COVER, FRONT, ø166 x 28 mm	AISI 316/CARBON
	0302-0003		STANDARD	
	0302-0014		WITH SCAVENGING PORT	
	0302-0155		LOOSE CARBON PLATE AND LOW TEMPERATURE -35°C	
7		1	HOUSING,	AISI 316 A4-80
	0401-0453		FLANGE, DIN PN10/16/25/40	
	0401-0476		FLANGE, ANSI CLASS 150RF	
	0401-0477		FLANGE, ANSI CLASS 300RF	
	0401-0753		FLANGE, JIS 5K	
	0401-0478		FLANGE, JIS 10K	
	0401-0479		FLANGE, JIS 16/20K	
	0401-0513		FLANGE, DIN PN10/16/25/40, WITH GROOVE, DIN 2512N	
8		2	O-RING,	
	0630-3248		ID 120.24 x ø3.53 mm	VITON
	0630-4911		ID 121.8 x ø3.53 mm	VITON/PFA
	0630-9248		ID 120.24 x ø3.53 mm	KALREZ
9		1	COVER, BACK, ø166 x 38 mm	AISI 316/CARBON
	0302-0004		STANDARD	
	0302-0013		WITH SCAVENGING PORT	
	0302-0156		LOOSE CARBON PLATE AND LOW TEMPERATURE -35°C	
10	5733-0850	6	SCREW, HEX. HEAD, M8 x 50 mm, DIN 933	AISI 316 A4-80
11	0329-0036PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY, ROTOR, OD 86/15 x 99/157 mm	AISI 316/RULON
	0303-0002		STANDARD	
	0303-0007		OVERSIZED	
	0303-0027		POCKETLESS	
	0303-0139		POCKETLESS, OVERSIZED	
13		4	VANE, 99 x 30 x 10 mm	CARBON
	0405-0030		STANDARD	
	0405-0042		OVERSIZED	
	0405-0183		LOW TEMPERATURE -35°C	
14	0404-0127	2	ROD, VANE, ø6 x 39 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1268-3 SHEET 1 OF 2

B	PN20 WAS PN25	20-08-03	MM
B	A4-80 ADDED		
B	5733-0840 WAS 1733-0840		
B	5733-0850 WAS 1733-0850		
A	REDRAWN IN CAD	03-07-97	NH
A	ITEM 5 0630-4901 WAS 0630-7147		
A	ITEM 8 0630-4911 WAS 0630-7248		

No.	DESCRIPTION	DATE	PAR
REVISIONS			

DATE :25-05-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands
DIMENSIONS IN mm
REV. No. A B

PARTS LIST
METER J3050B DN50 PN20
0801-2252-4

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0079	1	EYE-BOLT, M8, DIN 580	STEEL
16	0499-0432	4	PIN, DOWEL, ø6 x 12 mm	AISI 303, HRD.
17		1	SHAFT MAGNET, OD 12 / M8 x 0.75 mm	AISI 316
	0404-0122		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=43 mm	
	0404-0375		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=43 mm	
	0404-0344		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=41 mm	
	0404-0380		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=41 mm	
18		4	MOUNTING PART,	AISI 316
	5733-0620		STANDARD: SCREW, HEX. HEAD, M6 x 20 mm DIN 933	A4-80
			FLOWCOUNT E200:	
	5728-0612		SCREW, HEX. SOCKET HEAD CAP, M6 x 12 mm DIN 912	
22	0411-0090	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4 x 8mm DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0938	0801-1330-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0781	0801-1296-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0939	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1268-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	PN20 WAS PN25	20-08-03	MM
B	A4-80 ADDED		
B	5733-0620 WAS 1733-0620		
B	5728-0612 WAS 1728-0612		
A	REDRAWN IN CAD	03-07-97	BV
A	0390-0938 WAS 0390-0773		
A	0390-0939 WAS 0390-0774		
A	ITEM No. 22...25,33 AND 34 ADDED		

REVISIONS

DATE :25-01-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

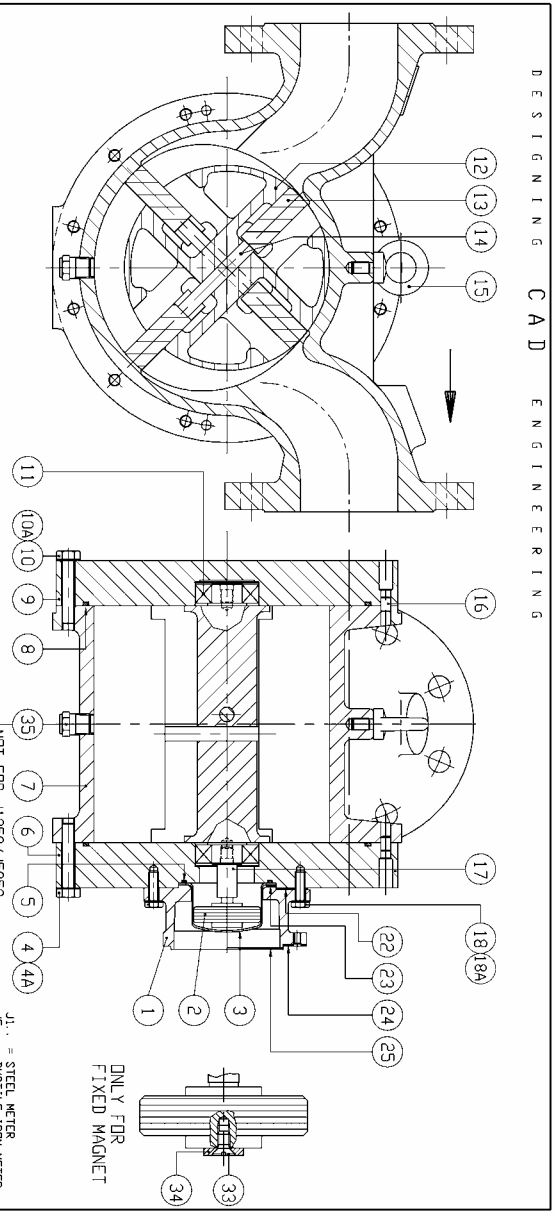
DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER J3050B DN50 PN20

0801-2252-4

DESIGNING CAD ENGINEERING



FOR ASSEMBLY CALIBRATION ADAPTER SEE DRAWING 0803-1229-3

SPARE PARTS KIT METER	J5050/J1050 No.	DRAWING No.	J5080/J1080 No.	DRAWING No.	J5100/J1100 No.	DRAWING No.	ITEM No. 5	8	11	13	14
(STANDARD VANES)	0390-0781	0801-1296-4	0390-0873	0801-1314-4	0390-0875	0801-1305-4	1x	2x	--	2x	1x
2 YEARS + VITON O-RINGS	0390-0938	0801-1330-4	0390-0863	0801-1314-4	0390-0877	0801-1306-4	1x	2x	--	2x	1x
2 YEARS + V/PFA O-RINGS	0390-0782	----------	0390-0874	----------	0390-0876	----------	1x	2x	2x	4x	2x
5 YEARS + VITON O-RINGS + STANDARD BEARINGS											

DIMENSIONAL DRAWING METER WITH	J2050	J2080	J2100
CALIBRATION ADAPTER	0801-1124-3	0801-1125-3	0801-1126-3
RESETTABLE TOTALISER	0801-1137-3	0801-1138-3	0801-1139-3
LARGE RESETTABLE TOTALISER	0801-1193-3	0801-1163-3	0801-1090-3
MECH. PRESET COUNTER FLOW LEFT TO RIGHT	0801-1194-3	----------	----------
MECH. PRESET COUNTER FLOW RIGHT TO LEFT	0801-3101-3	----------	----------
ELECTRONIC COUNTER TYPE: FLOWCOUNT E200	0801-1093-3	0801-1094-3	0801-1095-3
PULSE TRANSMITTER BOX	0801-1186-3	0801-1187-3	----------

No.	DESCRIPTION	DATE	PAR
B	PRESSURE ADDED	03-10-03	MM
A	REDRAWN IN CAD	03-07-97	BV
A	CALIBRATION ADAPTER ADDED	09-10-1987	

REVISIONS

DATE :09-10-1987
DRAWN :M. MOM
CHECKED : BV
MATERIAL :
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

ASSEMBLY DRAWING METER J1050/080/100 J5050/080/100

0801-1269-3

REV. No. A B

PART OF

PARTS LIST METER	PRESSURE	METER CAL.	ADAPTER
J5050B	20bar	0801-2253-4	0803-2202-4
J1050B	20bar	0801-2251-4	0803-2202-4
J5080A/B	10.5/20bar	0801-2263-4	0803-2203-4
J1080B	20bar	0801-2261-4	0803-2203-4
J5100A/B	10.5/20bar	0801-2273-4	0803-2204-4
J1100B	20bar	0801-2271-4	0803-2204-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0080	1	EYE-BOLT, M10, DIN 580	STEEL
16	0705-0820	4	PIN, DOWEL, ø8m6 x 20 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 16 / M10x0.75 mm	STEEL
	0404-0087		PN10.5 STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 56 mm	
	0404-0381		PN10.5 STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 56 mm	
	0404-0345		PN10.5 FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 54 mm	
	0404-0387		PN10.5 FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 54 mm	
	0404-0095		PN20 STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 64 mm	
	0404-0382		PN20 STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 64 mm	
	0404-0346		PN20 FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 63 mm	
	0404-0388		PN20 FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 63 mm	
18		4	MOUNTING PART,	
			STANDARD :	
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	STEEL 8.8
			FLOWCOUNT E200 :	
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD : SPRING WASHER M8, DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	STEEL
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0873	0801-1314-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0863	0801-1314-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS 0390-0874	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3 SHEET 2 OF 2

D	0411-0268 ADDED	01-12-03	BV	
C	PN20 WAS PN25	26-08-03	MM	
C	0728-0825 WAS 0733-0620			
C	0728-0816 WAS 2728-0612			
C	0741-0800 WAS 0718-0600			
C	0411-0249 WAS 0411-0090			
B	REDRAWN IN CAD	17-07-97	BV	
B	WHOLE CHANGED			
No.	DESCRIPTION	DATE	PAR	

REVISIONS

DATE : 29-01-1990
DRAWN : M.MOM
CHECKED : BV
MATERIAL : DUCTILE IRON
SEMI MAT. :
DIMENSIONS IN mm

VAF INSTRUMENTS
Dordrecht, The Netherlands

REV. No. A B C D

PARTS LIST METER
J5080A DN80 PN10.5
J5080B DN80 PN20

0801-2263-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41mm	AISI 316
4		12	SCREW, HEX. HEAD, M10, DIN 933	STEEL 8.8
	0733-1045		PN10.5 L= 45 mm	
	0733-1055		PN20 L= 55 mm	
4A	0718-1000	12	SPRING WASHER M10, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x Ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	COVER, FRONT,	
	0402-0111		PN 10.5 ø280 x 28 mm	DUCTILE IRON
	0402-0127		PN 20 ø280 x 37 mm	STEEL
	0402-0438		PN 20 WITH SCAVENGING PORT, ø280 x 37 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	DUCTILE IRON
	0401-0397		FLANGE, DIN PN10/16/25/40	
	0401-0398		FLANGE, ANSI CLASS 150RF	
	0401-0399		FLANGE, ANSI CLASS 300RF	
	0401-0580		FLANGE, JIS 5K	
	0401-0681		FLANGE, JIS 10K	
	0401-0680		FLANGE, JIS 16/20K	
	0401-0652		FLANGE, DIN PN10/16/25/40 WITH GROOVE DIN2512N	
8		2	O-RING, ID 228.19 x ø3.53 mm	
	0630-3270			VITON
	0630-4270			VITON/PFA
	0630-9270			KALREZ
9		1	COVER, BACK,	
	0402-0112		PN 10.5 ø280 x 28 mm	DUCTILE IRON
	0402-0128		PN 20 ø280 x 37 mm	STEEL
	0402-0439		PN 20 WITH SCAVENGING PORT, ø280 x 37 mm	STEEL
10		12	SCREW, HEX. HEAD, M10, DIN 933	STEEL 8.8
	0733-1045		PN10.5 L= 45 mm	
	0733-1055		PN20 L= 55 mm	
10A	0718-1000	12	SPRING WASHER M10, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 52 x ID 25 x 15 mm	
	2601-6205		STANDARD, WITH 2 GUARD PLATES	STEEL
	0601-6205		OVERSIZED	STEEL
	1601-6205		STAINLESS STEEL	STAINLESS STEEL
	4601-6205		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 168/25 x 194/230 mm	CAST IRON
	0403-0140		STANDARD	
	0403-0004		OVERSIZED	
13		4	VANE, 194 x 58 x 20 mm	CARBON
	0405-0035		STANDARD	
	0405-0043		OVERSIZED	
	0405-0190		LOW TEMPERATURE -35°C	
14	0404-0141	2	ROD, VANE ø 12 x 77 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3 SHEET 1 OF 2

C	PN20 WAS PN25	26-08-03	MM	
C	0408-0232 WAS 0408-0083			
C	0408-0233 WAS 0408-0087			
C	0408-0234 WAS 0408-0148			
B	REDRAWN IN CAD	17-07-97	NH	
B	WHOLE CHANGED			
No.	DESCRIPTION	DATE	PAR	

REVISIONS

DATE : 29-01-1990
DRAWN : M.MOM
CHECKED : BV
MATERIAL : DUCTILE IRON
SEMI MAT. :
DIMENSIONS IN mm

VAF INSTRUMENTS
Dordrecht, The Netherlands

REV. No. A B C

PARTS LIST METER
J5080A DN80 PN10.5
J5080B DN80 PN20

0801-2263-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0080	1	EYE-BOLT, M10, DIN 580	STEEL
16	0499-0447	4	PIN, DOWEL, ø8 x 16 mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 16 / M10x0.75 mm	STEEL
	0404-0095		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=64mm	
	0404-0382		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=64mm	
	0404-0346		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=63mm	
	0404-0388		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=63mm	
18		4	MOUNTING PART	
			STANDARD:	
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER, M8, DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8"NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0873	0801-1314-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0863	0801-1314-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS 0390-0874	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	PN20 WAS PN25	20-08-03	MM
B	0728-0825 WAS		
B	0733-0620		
B	0728-0816 WAS 2728-0612		
B	0741-0800 WAS 0718-0600		
B	0411-0249 WAS -0090		
A	REDRAWN IN CAD	17-07-97	BV
A	WHOLE CHANGED		

REVISIONS

DATE :26-01-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :STEEL
SEMI MAT. :
DIMENSIONS IN mm

VAF INSTRUMENTS
Dordrecht, The Netherlands

REV. No. A B C

PARTS LIST METER J1080B DN80 PN20

0801-2261-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0128		TEMP. < 120°C, ø136 x 53 mm	AISI 316
	0408-0189		TEMP. > 120°C, ø136 x 50 mm	AISI 316
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139 x 14mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	0733-1055	12	SCREW, HEX. HEAD, M10 x 55 mm, DIN 933	STEEL 8.8
4A	0718-1000	12	SPRING WASHER M10, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	COVER, FRONT, ø280 x 37 mm,	STEEL
	0402-0127		STANDARD	
	0402-0438		WITH SCAVENGING PORT	
7		1	HOUSING,	AISI 316
	0401-0527		FLANGE, DIN PN10/16/25/40	
	0401-0528		FLANGE, ANSI CLASS 150RF	
	0401-0529		FLANGE, ANSI CLASS 300RF	
	0401-0674		FLANGE, JIS 16/20K	
	0401-0597		FLANGE, DIN PN10/16/25/40 WITH GROOVE DIN 2512N	
8		2	O-RING, ID 228.19 x ø3.53 mm	
	0630-3270			VITON
	0630-4270			VITON/PFA
	0630-9270			KALREZ
9		1	COVER, BACK, ø280 x 37 mm,	STEEL
	0402-0128		STANDARD	
	0402-0439		WITH SCAVENGING PORT	
10	0733-1055	12	SCREW, HEX. HEAD, M10 x 55 mm, DIN 933	STEEL 8.8
10A	0718-1000	12	SPRING WASHER M10, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 52 x ID 25 x 15 mm	
	2601-6205		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6205		OVERSIZED	STEEL
	1601-6205		STAINLESS STEEL	STAINLESS STEEL
	4601-6205		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 168/25 x 194/230 mm	CAST IRON
	0403-0140		STANDARD	
	0403-0004		OVERSIZED	
13		4	VANE, 194 x 58 x 20 mm	CARBON
	0405-0035		STANDARD	
	0405-0043		OVERSIZED	
	0405-0190		LOW TEMPERATURE -35°C	
14	0404-0141	2	ROD, VANE, ø12 x 77 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN20 WAS PN25	20-08-03	MM
B	0408-0128 WAS -0084		
B	0408-0189 WAS -0093		
B	0408-0234 WAS -0148		
A	REDRAWN IN CAD	21-04-97	NH
A	WHOLE CHANGED		

REVISIONS

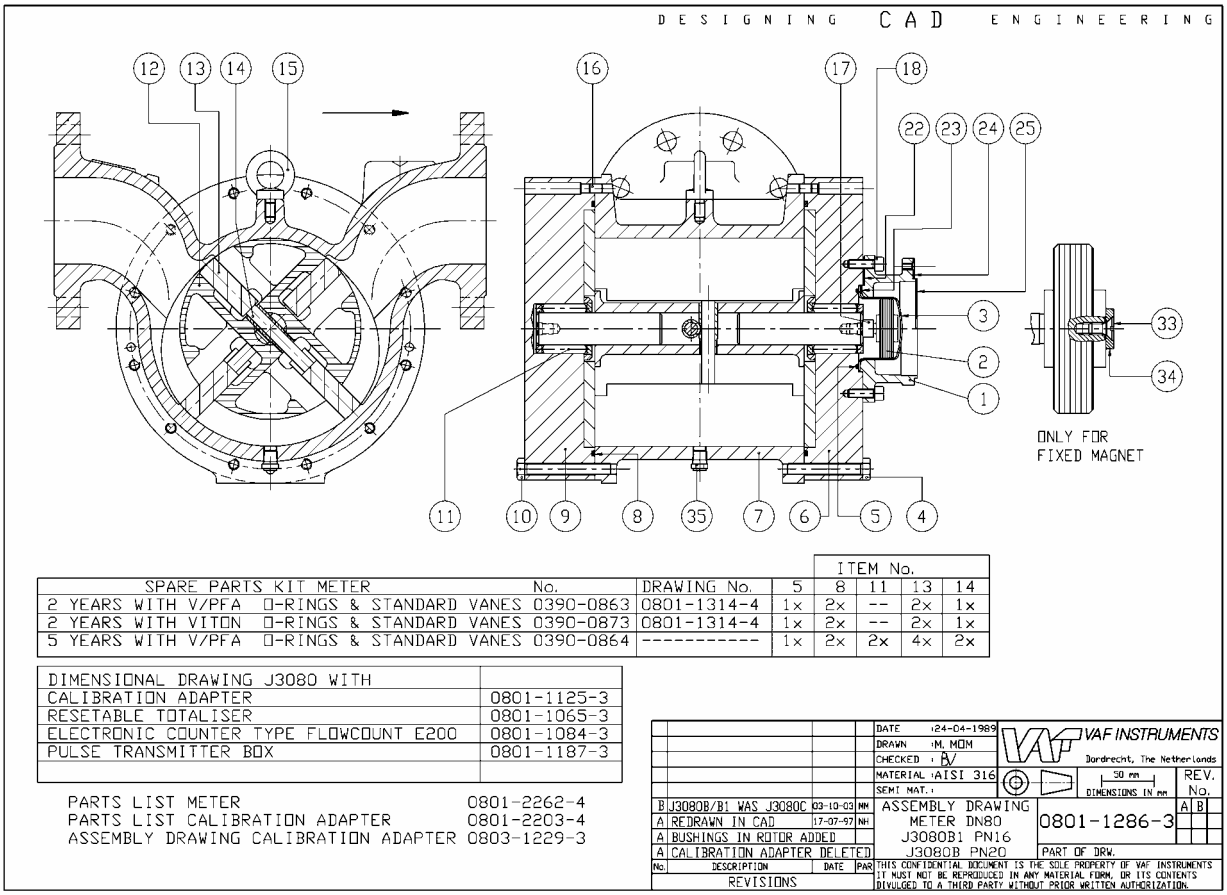
DATE :26-01-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :STEEL
SEMI MAT. :
DIMENSIONS IN mm

VAF INSTRUMENTS
Dordrecht, The Netherlands

REV. No. A B

PARTS LIST METER J1080B DN80 PN20

0801-2261-4



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0863	0801-1314-4	1×	2×	--	2×	1×
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0873	0801-1314-4	1×	2×	--	2×	1×
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0864	----------	1×	2×	2×	4×	2×

DIMENSIONAL DRAWING J3080 WITH	
CALIBRATION ADAPTER	0801-1125-3
RESETABLE TOTALISER	0801-1065-3
ELECTRONIC COUNTER TYPE FLOWCOUNT E200	0801-1084-3
PULSE TRANSMITTER BOX	0801-1187-3

PARTS LIST METER 0801-2262-4
PARTS LIST CALIBRATION ADAPTER 0801-2203-4
ASSEMBLY DRAWING CALIBRATION ADAPTER 0803-1229-3

No.	DESCRIPTION	DATE	PAR
B	J3080B/B1 WAS J3080C	03-10-03	NH
A	REDRAWN IN CAD	17-07-97	NH
A	BUSHINGS IN ROTOR ADDED		
A	CALIBRATION ADAPTER DELETED		

REVISIONS

DATE :24-04-1989
DRAWN :M. MOM
CHECKED :BV
MATERIAL :AISI 316
SEMI MAT.:

VAF INSTRUMENTS
Dordrecht, The Netherlands
50 mm DIMENSIONS IN mm
REV. No. A B

ASSEMBLY DRAWING
METER DN80
J3080B1 PN16
J3080B PN20
0801-1286-3
PART OF DRW.

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0128		TEMP. < 120°C ø136x53 mm	
	0408-0189		TEMP. > 120°C ø136x50 mm	
	0408-0235		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	
2		1	ASSY, MAGNET,	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4		12	MOUNTING PART	
	5732-1070		PN16, M10 x 70 mm, BOLT, HEX. HEAD DIN 931	AISI 316 A4-80
	0733-1070		PN20, M10 x 70 mm, SCREW, HEX. HEAD DIN 933	STEEL 8.8
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	ASSY, COVER, FRONT, ø280 x 54 mm	AISI 316/CARBON
	0302-0028		STANDARD	
	0302-0178		LOOSE CARBON PLATE AND LOW TEMPERATURE -35°C	
7		1	HOUSING,	AISI 316
	0401-0527		FLANGE, DIN PN10/16/25/40	
	0401-0528		FLANGE, ANSI CLASS 150RF	
	0401-0529		FLANGE, ANSI CLASS 300RF	
	0401-0674		FLANGE, JIS 16/20K	
	0401-0597		FLANGE, DIN PN10/16/25/40WITH GROOVE DIN2512N	
8		2	O-RING ID 228.19 x ø3.53 mm	
	0630-3270			VITON
	0630-4270			VITON/PFA
	0630-9270			KALREZ
9		1	ASSY, COVER, BACK, ø280 x 65 mm	AISI 316/CARBON
	0302-0029		STANDARD	
	0302-0179		LOOSE CARBON PLATE	
10		12	MOUNTING PART	
	5732-1080		PN16, M10 x 80 mm, BOLT, HEX. HEAD DIN 931	AISI 316 A4-80
	0733-1080		PN20, M10 x 80 mm, SCREW, HEX. HEAD DIN 933	STEEL 8.8
11	0329-0037PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY, ROTOR, OD 168/30 x 194/302 mm	AISI 316/RULON
	0303-0028		STANDARD	
	0303-0035		OVERSIZED	
13		4	VANE, 194 x 58 x 20 mm	CARBON
	0405-0035		STANDARD	
	0405-0043		OVERSIZED	
	0405-0190		LOW TEMPERATURE -35°C	
14	0404-0141	2	ROD, VANE, ø12 x 77 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1286-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN16/20 WAS PN25	26-08-03	MM
B	A4-80 ADDED		
B	5732-/0733-1070 WAS 1733-1070		
B	5732-/0733-1080 WAS 1733-1080		
B	0408-0128 WAS -0084		
B	0408-0189 WAS -0093		
B	0408-0235 WAS -0185		
A	REDRAWN IN CAD	17-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :26-05-1989
DRAWN :M.MOM
CHECKED :BV
MATERIAL :AISI 316
SEMI MAT.:

VAF INSTRUMENTS
Dordrecht, The Netherlands
DIMENSIONS IN mm
REV. No. A B

PARTS LIST METER
J3080B1 DN80 PN16
J3080B DN80 PN20
0801-2262-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0080	1	EYE-BOLT, M10, DIN 580	STEEL
16	0499-0447	4	PIN, DOWEL, ø8 x 16mm	AISI 303, HRD.
17		1	SHAFT, MAGNET, OD 16 / M10x0.75 mm	AISI 316
	0404-0155		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=46mm	
	0404-0383		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=46mm	
	0404-0347		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=44mm	
	0404-0389		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=44mm	
18		4	MOUNTING PART	AISI 316 A4-80
			STANDARD :	
	5728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	
			FLOWCOUNT E200 :	
	5728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0863	0801-1314-4	1x	2x	--	2x	1x
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0873	0801-1314-4	1x	2x	--	2x	1x
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0864	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1286-3

SHEET 2 OF 2

C	0411-0268 ADDED	01-12-03	BV	
B	PN16/20 WAS PN25	26-08-03	MM	
B	0411-0249 WAS 0411-0090			
B	A4-80 ADDED			
B	5728-0825 WAS 1733-0620			
B	5728-0816 WAS 1728-0612			
A	REDRAWN IN CAD	17-07-97	BV	
A	WHOLE CHANGED			
No.	DESCRIPTION	DATE	PAR	

REVISIONS

DATE :26-05-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

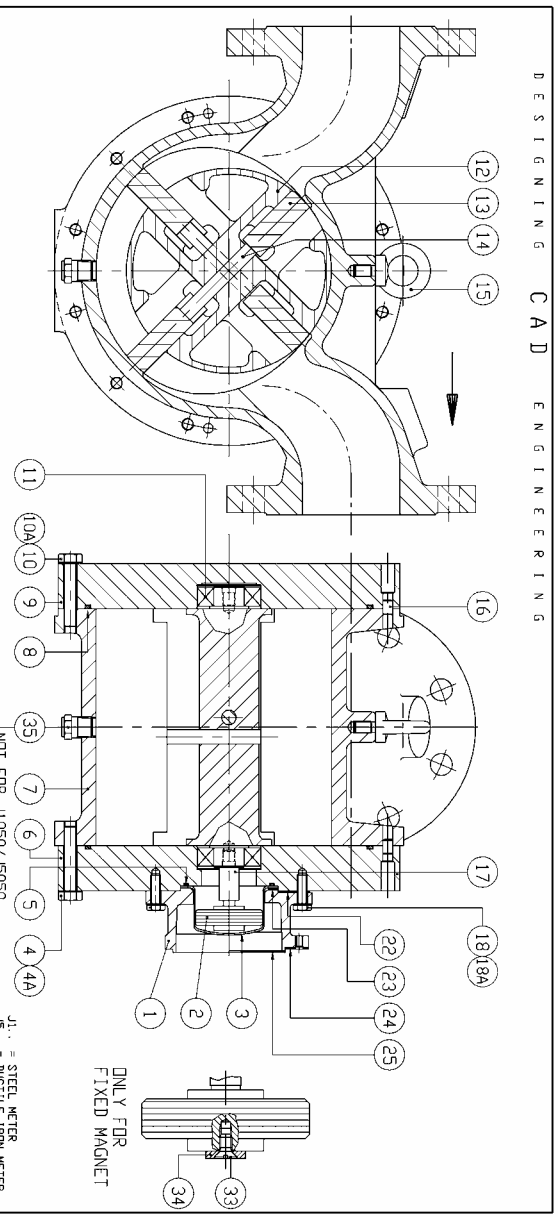
DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER
J3080B1 DN80 PN16
J3080B DN80 PN20

0801-2262-4

D E S I G N I N G C A D E N G I N E E R I N G



SPARE PARTS KIT METER (STANDARD VANES)	J5050/J1050 No.	DRAWING No.	J5080/J1080 No.	DRAWING No.	J5100/J1100 No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS + VITON O-RINGS	0390-0781	0801-1296-4	0390-0873	0801-1314-4	0390-0875	0801-1305-4	1x	2x	--	2x	1x
2 YEARS + V/PFA O-RINGS	0390-0938	0801-1330-4	0390-0863	0801-1314-4	0390-0877	0801-1306-4	1x	2x	--	2x	1x
5 YEARS + VITON O-RINGS + STANDARD BEARINGS	0390-0782	----------	0390-0874	----------	0390-0876	----------	1x	2x	2x	4x	2x

DIMENSIONAL DRAWING METER WITH	J2050	J2080	J2100
CALIBRATION ADAPTER	0801-1124-3	0801-1125-3	0801-1126-3
RESETTABLE TOTALISER	0801-1131-3	0801-1065-3	0801-1090-3
LARGE RESETTABLE COUNTER	0801-1138-3	----------	----------
MECH. PRESET COUNTER FLOW LEFT TO RIGHT	0801-1134-3	----------	----------
MECH. PRESET COUNTER FLOW RIGHT TO LEFT	0801-3101-3	----------	----------
ELECTRONIC COUNTER TYPE "FLOWCOUNT E200	0801-1083-3	0801-1084-3	0801-1085-3
PULSE TRANSMITTER BOX	0801-1186-3	0801-1187-3	----------

FOR ASSEMBLY CALIBRATION ADAPTER SEE DRAWING 0803-1229-3

PARTS LIST METER	PRESSURE	METER	CAL. ADAPTER
J5050B	20bar	0801-2253-4	0803-2202-4
J1050B	20bar	0801-2251-4	0803-2202-4
J5080A/B	10.5/20bar	0801-2263-4	0803-2203-4
J1080B	20bar	0801-2261-4	0803-2203-4
J5100A/B	10.5/20bar	0801-2273-4	0803-2204-4
J1100B	20bar	0801-2271-4	0803-2204-4

No.	DESCRIPTION	DATE	PAR
B	PRESSURE ADDED	03-10-03	MM
A	REDRAWN IN CAD	03-07-97	BV
A	CALIBRATION ADAPTER ADDED		

REVISIONS

DATE :09-10-1987
DRAWN :M. MOM
CHECKED : BV
MATERIAL :
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B

ASSEMBLY DRAWING METER J1050/080/100 J5050/080/100

0801-1269-3

PART OF

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41mm	AISI 316
4		12	SCREW, HEX. HEAD, DIN 933	STEEL 8.8
	0733-1255		PN10.5 M12 x 55mm	
	0733-1260		PN20 M12 x 60mm	
4A	0718-1200	12	SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	COVER, FRONT,	
	0402-0113		PN 10.5 ø334 x 32 mm	DUCTILE IRON
	0402-0129		PN 20 ø334 x 41 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	DUCTILE IRON
	0401-0400		FLANGE, DIN PN10/16	
	0401-0401		FLANGE, ANSI CLASS 150RF	
	0401-0637		FLANGE, JIS 5K	
	0401-0622		FLANGE, JIS10K	
8		2	O-RING, ID 278.99 x ø3.53 mm	
	0630-3276			VITON
	0630-4276			VITON/PFA
	0630-9276			KALREZ
9		1	COVER, BACK,	
	0402-0114		PN 10.5 ø334 x 32 mm	DUCTILE IRON
	0402-0130		PN 20 ø334 x 41 mm	STEEL
10		12	SCREW, HEX. HEAD, DIN 933	STEEL 8.8
	0733-1255		PN10.5 M12 x 55mm	
	0733-1260		PN20 M12 x 60mm	
10A	0718-1200	12	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 62 x ID 30 x 16 mm	
	2601-6206		STANDARD, WITH 2 GUARD PLATES	STEEL
	0601-6206		OVERSIZED	STEEL
	1601-6206		STAINLESS STEEL	STAINLESS STEEL
	4601-6206		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 204/30 x 235/279 mm	CAST IRON
	0403-0141		STANDARD	
	0403-0005		OVERSIZED	
13		4	VANE, 235 x 70 x 24 mm	CARBON
	0405-0036		STANDARD	
	0405-0044		OVERSIZED	
	0405-0187		BI-DIRECTIONAL	
	0405-0191		LOW TEMPERATURE -35°C	
14	0404-0142	2	ROD, VANE, ø15 x 94.4 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN 20 WAS PN 25	26-08-03	MM
B	0408-0232 WAS-0408-0083		
B	0408-0233 WAS 0408-0087		
B	0408-0234 WAS 0408-0148		
A	REDRAWN IN CAD	17-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :30-01-1990
DRAWN :M.MOM
CHECKED : BV

VAF INSTRUMENTS
Dordrecht, The Netherlands

MATERIAL :DUCTILE IRON
SEMI MAT. :

DIMENSIONS IN mm

REV. No. A B

PARTS LIST METER
J5100A DN100 PN 10.5
J5100B DN100 PN20

0801-2273-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41mm	AISI 316
4		12	SCREW, HEX. HEAD, DIN 933	STEEL 8.8
	0733-1255		PN10.5 M12 x 55mm	
	0733-1260		PN20 M12 x 60mm	
4A	0718-1200	12	SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	COVER, FRONT,	
	0402-0113		PN 10.5 ø334 x 32 mm	DUCTILE IRON
	0402-0129		PN 20 ø334 x 41 mm	STEEL
7		1	HOUSING, INCLUDING ITEM No. 16	DUCTILE IRON
	0401-0400		FLANGE, DIN PN10/16	
	0401-0401		FLANGE, ANSI CLASS 150RF	
	0401-0637		FLANGE, JIS 5K	
	0401-0622		FLANGE, JIS10K	
8		2	O-RING, ID 278.99 x ø3.53 mm	
	0630-3276			VITON
	0630-4276			VITON/PFA
	0630-9276			KALREZ
9		1	COVER, BACK,	
	0402-0114		PN 10.5 ø334 x 32 mm	DUCTILE IRON
	0402-0130		PN 20 ø334 x 41 mm	STEEL
10		12	SCREW, HEX. HEAD, DIN 933	STEEL 8.8
	0733-1255		PN10.5 M12 x 55mm	
	0733-1260		PN20 M12 x 60mm	
10A	0718-1200	12	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 62 x ID 30 x 16 mm	
	2601-6206		STANDARD, WITH 2 GUARD PLATES	STEEL
	0601-6206		OVERSIZED	STEEL
	1601-6206		STAINLESS STEEL	STAINLESS STEEL
	4601-6206		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 204/30 x 235/279 mm	CAST IRON
	0403-0141		STANDARD	
	0403-0005		OVERSIZED	
13		4	VANE, 235 x 70 x 24 mm	CARBON
	0405-0036		STANDARD	
	0405-0044		OVERSIZED	
	0405-0187		BI-DIRECTIONAL	
	0405-0191		LOW TEMPERATURE -35°C	
14	0404-0142	2	ROD, VANE, ø15 x 94.4 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN 20 WAS PN 25	26-08-03	MM
B	0408-0232 WAS-0408-0083		
B	0408-0233 WAS 0408-0087		
B	0408-0234 WAS 0408-0148		
A	REDRAWN IN CAD	17-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :30-01-1990
DRAWN :M.MOM
CHECKED : BV

VAF INSTRUMENTS
Dordrecht, The Netherlands

MATERIAL :DUCTILE IRON
SEMI MAT. :

DIMENSIONS IN mm

REV. No. A B

PARTS LIST METER
J5100A DN100 PN 10.5
J5100B DN100 PN20

0801-2273-4

THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME		MATERIAL
1		1	HOLDER, MAGNET CAP		
	0408-0128		TEMP. < 120°C, ø136 x 53 mm		AISI 316
	0408-0189		TEMP. > 120°C, ø136 x 50 mm		AISI 316
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139 x 14mm		STEEL
2		1	ASSY, MAGNET		
	0313-0076		STANDARD, ø55 x 20 mm		AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm		FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm		AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm		AISI 316
4	0733-1260	12	SCREW, HEX. HEAD, M12 x 60 mm,	DIN 933	STEEL 8.8
4A	0718-1200	12	SPRING WASHER M12,	DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm		
	0630-3147				VITON
	0630-4147				VITON/PFA
	0630-9147				KALREZ
6	0402-0129	1	COVER, FRONT, ø334 x 41 mm		STEEL
7		1	HOUSING,		AISI 316
	0401-0561		FLANGE, DIN PN10/16		
	0401-0562		FLANGE, DIN PN25		
	0401-0563		FLANGE, ANSI CLASS 150RF		
	0401-0564		FLANGE, ANSI CLASS 300RF		
	0401-0677		FLANGE, JIS 16/20K		
8		2	O-RING, ID 278.99 x ø3.53 mm		
	0630-3276				VITON
	0630-4276				VITON/PFA
	0630-9276				KALREZ
9	0402-0130	1	COVER, BACK, ø334 x 41 mm		STEEL
10	0733-1260	12	SCREW, HEX. HEAD, M12 x 60 mm,	DIN 933	STEEL 8.8
10A	0718-1200	12	SPRING WASHER M12,	DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 62 x ID 30 x 16 mm		
	2601-6206		STANDARD WITH 2 GUARD PLATES		STEEL
	0601-6206		OVERSIZED		STEEL
	1601-6206		STAINLESS STEEL		STAINLESS STEEL
	4601-6206		SYNTHETIC CAGE		STEEL
12		1	ROTOR, OD 204/30 x 235/279 mm		CAST IRON
	0403-0141		STANDARD		
	0403-0005		OVERSIZED		
13		4	VANE, 235 x 70 x 24 mm		CARBON
	0405-0036		STANDARD		
	0405-0044		OVERSIZED		
	0405-0187		BI-DIRECTIONAL		
	0405-0191		LOW TEMPERATURE -35°C		
14	0404-0142	2	ROD, VANE, ø15 x 94.4 mm		AISI 316, HRD.

ASSEMBLY DRAWING 0801-1269-3

SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN 20 WAS PN 25	26-08-03	MM
B	0408-0128 WAS-0408-0084		
B	0408-0189 WAS 0408-0093		
B	0408-0234 WAS 0408-0148		
A	REDRAWN IN CAD	17-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :30-01-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :STEEL
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B

PARTS LIST METER J1100B DN100 PN20

0801-2271-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME		MATERIAL
15	0799-0081	1	EYE-BOLT, M12,	DIN 580	STEEL
16	0705-0820	4	PIN, DOWEL, ø8m6 x 20 mm,	DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 16 / M10x0.75 mm		STEEL
	0404-0087		PN10.5 STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 56 mm		
	0404-0381		PN10.5 STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 56 mm		
	0404-0345		PN10.5 FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 54 mm		
	0404-0387		PN10.5 FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 54 mm		
	0404-0095		PN20 STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 64 mm		
	0404-0382		PN20 STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 64 mm		
	0404-0346		PN20 FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 63 mm		
	0404-0388		PN20 FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 63 mm		
18		4	SCREW, HEX. SOCKET HEAD CAP,		
	0728-0825		STANDARD: M8x25 mm,	DIN 912	STEEL 8.8
	0728-0816		FLOWCOUNT E200: M8 x 16mm,	DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER, M8,	DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm		SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm		SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm		SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm		SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm,	DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,		AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm		
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm		
35	0799-0063	1	PLUG, HEX., 3/8"NPT MALE		AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0875	0801-1306-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0877	0801-1306-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS 0390-0876	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	PN20 WAS PN25	26-08-03	MM
B	0728-0825 WAS 0733-0620		
B	0728-0816 WAS 2728-0612		
B	0741-0800 WAS 0718-0600		
B	0411-0249 WAS 0411-0090		
A	REDRAWN IN CAD	03-07-97	BV
A	WHOLE CHANGED		

REVISIONS

DATE :30-01-1990
DRAWN :M.MOM
CHECKED :
MATERIAL :DUCTILE IRON
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER J5100A DN100 PN10.5 J5100B DN100 PN20

0801-2273-4

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0081	1	EYE-BOLT, M12, DIN 580	STEEL
16	0499-0447	4	PIN, DOWEL, ø8 x 16 mm	AISI 303, HRD.
17	0404-0095	1	SHAFT, MAGNET, OD 16/M10 x 0.75 mm STANDARD, FLOW DIRECTION LEFT TO RIGHT L=64mm	STEEL
	0404-0382		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=64mm	
	0404-0346		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=63mm	
	0404-0388		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=63mm	
18	0728-0825	4	SCREW, HEX. SOCKET HEAD CAP, STANDARD: M8x25 mm, DIN 912 FLOWCOUNT E200:	STEEL 8.8
	0728-0816		M8 x 16mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER, M8, DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0875	0801-1306-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0877	0801-1306-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0876	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1269-3

SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	PN20 WAS PN25	26-08-03	MM
B	0728-0825 WAS 0733-0620		
B	0728-0816 WAS 2728-0612		
B	0741-0800 WAS 0718-0600		
B	0411-0249 WAS 0411-0090		
A	REDRAWN IN CAD	03-07-97	BV
A	WHOLE CHANGED		

REVISIONS

VAF INSTRUMENTS
Dordrecht, The Netherlands

DATE :30-01-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :STEEL
SEMI MAT.:

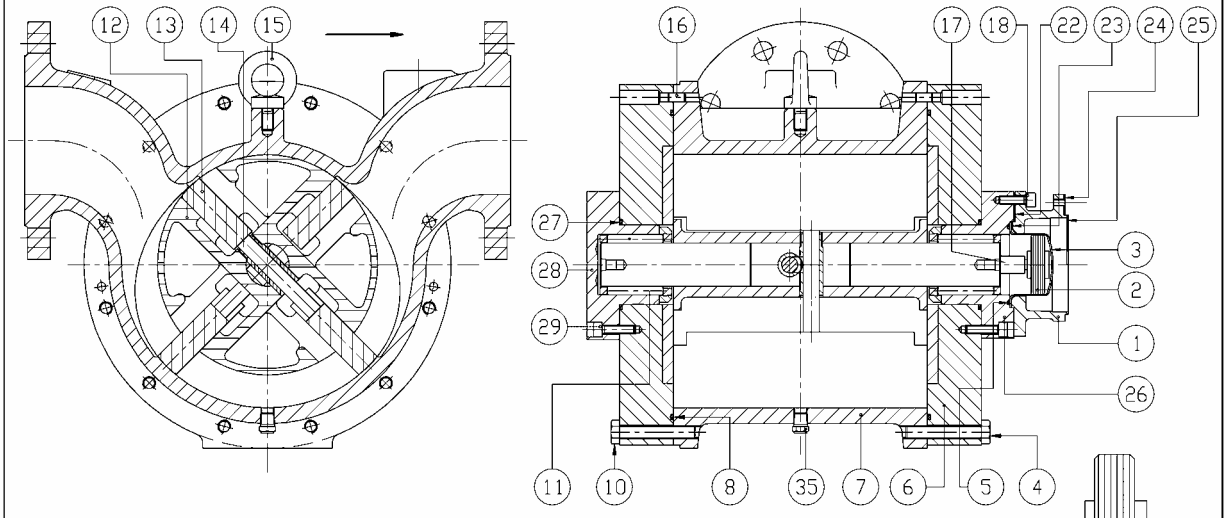
DIMENSIONS IN mm

REV. No. A B C

PARTS LIST
METER J1100B
DN100 PN20

0801-2271-4

DESIGNING CAD ENGINEERING



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	27
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0877	0801-1306-4	1x	2x	--	2x	1x	--
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0875	0801-1306-4	1x	2x	--	2x	1x	--
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0878	----------	1x	2x	2x	4x	2x	2x

ONLY FOR FIXED MAGNET

DIMENSIONAL DRAWING J3100B WITH	
CALIBRATION ADAPTER	0801-1126-3
RESETABLE TOTALISER	0801-1090-3
ELECTRONIC COUNTER, TYPE FLOWCOUNT E200	0801-1085-3

PARTS LIST METER 0801-2272-4
PARTS LIST CALIBRATION ADAPTER 0803-2204-4
ASSEMBLY DRAWING CALIBRATION ADAPTER 0803-1229-3

No.	DESCRIPTION	DATE	PAR
C	J3100B WAS J3100C	03-10-03	NM
B	BUSHINGS IN ROTOR AND	18-07-97	NM
B	ITEM 22, 23, 24 AND 25 ADDED		
A	REDRAWN IN CAD A3 WAS A1	12-12-90	GK
A	VOOR J3150 ZIE TEK. 0801-1304-3		

REVISIONS

DATE :19-06-1989
DRAWN :M. MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT.:

VAF INSTRUMENTS
Dordrecht, The Netherlands

50 mm
DIMENSIONS IN mm

REV. No. A B C

ASSEMBLY DRAWING
METER J3100B
DN100 PN20

0801-1297-3

PART OF DRW.

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0081	1	EYE-BOLT, M12, DIN-580	STEEL
16	0499-0447	4	PIN, DOWEL, ø8 x 16 mm	AISI 303
17		1	SHAFT MAGNET, OD 16 / M10x0.75mm	AISI 316
	0404-0163		STANDARD, FLOW DIR. LEFT TO RIGHT L=59mm	
	0404-0390		STANDARD, FLOW DIR RIGHT TO LEFT L=59mm	
	0404-0348		FIXED MAGN. FLOW DIR. LEFT TO RIGHT L=56mm	
	0404-0391		FIXED MAGN. FLOW DIR. RIGHT TO LEFT L=56mm	
18		4	SCREW	AISI 316
			STANDARD:	A4-80
	5728-0825		HEX. SOCKET HEAD CAP, M8x25mm, DIN 912	
			FLOWCOUNT E200:	
	5728-0816		HEX. SOCKET HEAD CAP, M8x16mm, DIN 912	
22	0411-0249	1	RING ø132 x ø80 x 1.5mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5mm	SYNTHETIC
26	0408-0236	1	HOLDER, FRONT, BEARING CAGE ø139x67	AISI 316
27		2	O-RING ID 75.79 x ø3.53 mm	
	0630-3234			VITON
	0630-4234			VITON/PFA
	0630-9234			KALREZ
28	0408-0237	1	HOLDER, BACK, BEARING CAGE ø139x67	AISI 316
29	5728-0830	8	SCREW FOR HOLDERS	AISI 316
			HEX. SOCKET HEAD CAP, M6x30mm, DIN 912	A4-80
33	1736-0408	1	SCREW FOR FIXED MAGNET	AISI 316
			SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMPERATURE > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER WITH STANDARD VANES	KIT NUMBER	DRAWING NUMBER	ITEM NUMBER 5	8	11	13	14	27
2 YEARS WITH V/PFA O-RINGS	0390-0877	0801-1306-4	1x	2x	--	2x	1x	--
2 YEARS WITH VITON O-RINGS	0390-0875	0801-1306-4	1x	2x	--	2x	1x	--
5 YEARS WITH V/PFA O-RINGS	0390-0878	-------	1x	2x	2x	4x	2x	2x

ASSEMBLY DRAWING 0801-1297-3 SHEET 2 OF 2

E	0411-0268 ADDED	01-12-03	BV	
D	0411-0249 WAS -0090	26-08-03	BV	
D	5728-0825 WAS 1733-0620			
D	5728-0816 WAS 1728-0612			
D	0408-0236 WAS 0408-0110			
D	0408-0237 WAS 0408-0111			
D	5728-0830 WAS 1728-0630			
D	A4-80 ADDED			

No. DESCRIPTION DATE PAR — REVISIONS

DATE : 20-06-1989
DRAWN : J.Vollebregt
CHECKED : BV
MATERIAL : AISI 316

VAF INSTRUMENTS Dordrecht, The Netherlands

PARTS LIST METER J3100B DN100 PN20

0801-2272-4

REV. No. A B C D E

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0128		TEMP. < 120°C, ø136 x 53 mm	
	0408-0189		TEMP. > 120°C, ø136 x 50 mm	
	0408-0235		FLOWCOUNT E200, ø139x14mm	
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø53 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	5733-1270	12	SCREW, HEX. HEAD, M12x70 mm, DIN 933	AISI 316 A4-80
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		2	ASSY, COVER, ø334 x 50 mm	AISI 316/
	0302-0031		STANDARD	CARBON
	0302-0180		LOOSE CARBON PLATE	
7		1	HOUSING, INCLUDING ITEM No. 16	AISI 316
	0401-0561		FLANGE, DIN PN10/16	
	0401-0562		FLANGE, DIN PN25	
	0401-0563		FLANGE, ANSI CLASS 150RF	
	0401-0564		FLANGE, ANSI CLASS 300RF	
	0401-0677		FLANGE, JIS 16/20K	
8		2	O-RING ID 278.99 x ø3.53 mm	
	0630-3276			VITON
	0630-4276			VITON/PFA
	0630-9276			KALREZ
10	5733-1270	12	SCREW, HEX. HEAD, M12x70 mm, DIN 933	AISI 316 A4-80
11	0329-0030	2	ASSY, BEARING, NEEDLE	AISI 316
12		1	ROTOR, OD 204/40 x 235/371 mm	AISI 316
	0303-0037		STANDARD	
	0303-0141		OVERSIZED	
13		4	VANE, 235 x 70 x 24 mm	CARBON
	0405-0036		STANDARD	
	0405-0044		OVERSIZED	
	0405-0187		BI-DIRECTIONAL	
	0405-0191		LOW TEMPERATURE -35°C	
14	0404-0142	2	ROD, VANE, ø15 x 94.4 mm	AISI 316

ASSEMBLY DRAWING 0801-1297-3 SHEET 1 OF 2

D	PN20 WAS PN25	26-08-03	MM	
D	0408-0128 WAS 0408-0084			
D	0408-0189 WAS 0408-0093			
D	0408-0235 WAS 0408-0185			
D	5733-1270 WAS 1733-1270			
D	A4-80 ADDED			
C	REDRAWN IN AUTOCAD	17-05-01	JV	
B	WHOLE CHANGED	18-07-97	NH	

No. DESCRIPTION DATE PAR — REVISIONS

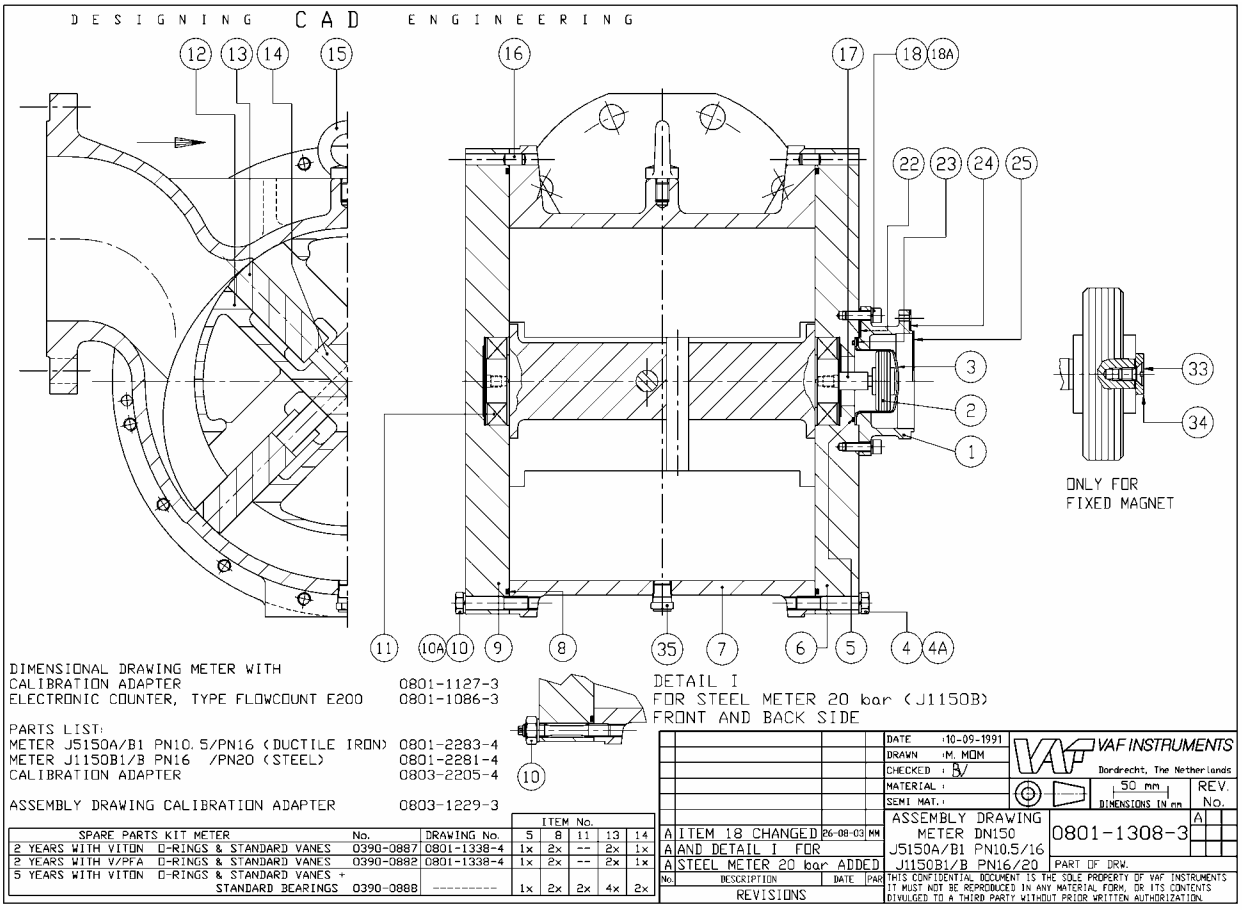
DATE : 20-06-1989
DRAWN : J.Vollebregt
CHECKED : BV
MATERIAL : AISI 316

VAF INSTRUMENTS Dordrecht, The Netherlands

PARTS LIST METER J3100B DN100 PN20

0801-2272-4

REV. No. A B C D



DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C, ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C, ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY. MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø53 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4		16	MOUNTING PART, HEX. HEAD, M12,	STEEL 8.8
	0732-1260		PN 10.5, BOLT, M12x60mm, DIN 931	
	0733-1270	4	PN 16, SCREW, M12x70mm, DIN 933	
4A	0718-1200		SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6		1	COVER, FRONT,	
	0402-0121		PN 10.5, ø425 x 40 mm	DUCTILE IRON
	0402-0446		PN 16, ø425 x 50 mm	STEEL
7	0401-0096	1	HOUSING WITH FLANGE DIN PN10/16, ANSI CLASS 150RF OR JIS 10/16K	DUCTILE IRON
8		2	O-RING, ID 380.59 x ø3.53 mm	
	0630-3281			VITON
	0630-4281			VITON/PFA
	0630-9281			KALREZ
9		1	COVER, BACK,	
	0402-0122		PN 10.5, ø425 x 40 mm	DUCTILE IRON
	0402-0447		PN 16, ø425 x 50 mm	STEEL
10		16	MOUNTING PART, HEX. HEAD,	STEEL 8.8
	0732-1260		PN 10.5, BOLT, M12x60 mm, DIN 931	
	0733-1270		PN 16, SCREW, M12x70 mm, DIN 933	
10A	0718-1200	16	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 80 x ID 40 x 18 mm	STEEL
	2601-6208		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6208		OVERSIZED	STEEL
	1601-6208		STAINLESS STEEL	STAINLESS STEEL
	4601-6208		SYNTHETIC CAGE	STEEL
12		1	ROTOR, ø279/40, L = 280/324 mm	CAST IRON
	0403-0007		STANDARD	
	0403-0025		OVERSIZED	
13		4	VANE, 280 x 100 x 32 mm	CARBON
	0405-0037		STANDARD	
	0405-0045		OVERSIZED	
	0405-0188		OVERSIZED AND BI-DIRECTIONAL	
14	0404-0143	2	ROD, VANE, ø19.8, L = 122 mm	AISI 316, HRD.

ASSEMBLY DRAWING: 0801-1308-3 SHEET 1 OF 2

VAF INSTRUMENTS Dordrecht, The Netherlands

DATE :23-07-1997
DRAWN :J.Vollebregt
CHECKED : BV
MATERIAL : DUCTILE IRON

PARTS LIST METER J5150A DN150 PN10.5 J5150B1 DN150 PN16

0801-2283-4 REV. No. A B

No.	DESCRIPTION	DATE	PAR
B	PN16 WAS PN25	26-08-03	MM
B	0408-0232 WAS 0408-0083		
B	0408-0233 WAS 0408-0087		
B	0408-0234 WAS 0408-0148		
A	REDRAWN IN CAD	03-11-00	JV
A	WHOLE CHANGED		

REVISIONS

THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0128		TEMP. < 120°C, ø136 x 53 mm	AISI 316
	0408-0189		TEMP. > 120°C, ø136 x 50 mm	AISI 316
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD , ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4		16	MOUNTING PART:	
	0733-1270		PN16: SCREW, HEX. HEAD, M12x70mm, DIN 933	STEEL 8.8
	0799-0115		PN20: DOUBLE END STUD M12x80,1x NUT, DIN2510L/NF	STEEL 8.8
4A	0718-1200	16	ONLY PN16: SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0402-0446	1	COVER, FRONT, ø425 x 50 mm	STEEL
7		1	HOUSING,	
	0401-0578		FLANGE, DIN PN10/16, ANSI CLASS 150RF, JIS 10K	STEEL
	0401-0643		FLANGE, ANSI CLASS 300RF	AISI 316
8		2	O-RING, ID 380.59 x ø3.53 mm	
	0630-3281			VITON
	0630-4281			VITON/PFA
	0630-9281			KALREZ
9	0402-0447	1	COVER, BACK, ø425 x 50 mm	STEEL
10		16	MOUNTING PART:	
	0733-1270		PN16: SCREW, HEX. HEAD, M12x70mm, DIN 933	STEEL 8.8
	0799-0115		PN20: DOUBLE END STUD M12x80,1x NUT, DIN2510L/NF	STEEL 8.8
10A	0718-1200	16	ONLY PN16: SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 80 x ID 40 x 18 mm	
	2601-6208		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6208		OVERSIZED	STEEL
	1601-6208		STAINLESS STEEL	STAINLESS STEEL
	4601-6208		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 280/40 x 280/324 mm	CAST IRON
	0403-0007		STANDARD	
	0403-0025		OVERSIZED	
13		4	VANE, 280 x 100 x 32 mm	CARBON
	0405-0037		STANDARD	
	0405-0045		OVERSIZED	
14	0404-0143	2	ROD, VANE, ø19.8 x 122 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1308-3 SHEET 1 OF 2

			DATE	02-02-1990
			DRAWN	M.MOM
B	PN 16/20 WAS PN 25	26-08-03 MM	CHECKED	BV
B	0408-0128 WAS 0408-0084		MATERIAL	STEEL
B	0408-0189 WAS 0408-0093		SEMI MAT.	
B	0408-0234 WAS 0408-0148			
B	FOR PN20 0799-0115 ADDED			
A	REDRAWN IN CAD	25-07-97 NH		
A	WHOLE CHANGED			

No. DESCRIPTION DATE PAR — REVISIONS

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

PARTS LIST METER
J1150B1 DN150 PN16
J1150B DN150 PN20

0801-2281-4

REV. No. A B

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0081	1	EYE-BOLT, M12 DIN 580	STEEL
16	0705-1020	4	PIN, DOWEL, ø10, L = 20 mm DIN6325	STEEL HRD.
17		1	SHAFT, MAGNET, OD 16/M10 x 0.75 mm	STEEL
	0404-0095		STANDARD, PN 10.5, FLOW DIRECTION LEFT TO RIGHT L=64mm	
	0404-0382		STANDARD, PN 10.5, FLOW DIRECTION RIGHT TO LEFT L=64mm	
	0404-0169		STANDARD, PN 16, FLOW DIRECTION LEFT TO RIGHT L=74mm	
	0404-0392		STANDARD, PN 16, FLOW DIRECTION RIGHT TO LEFT L=74mm	
	0404-0355		FIXED MAGNET, PN 10.5, FLOW DIRECTION LEFT TO RIGHT L=62mm	
	0404-0394		FIXED MAGNET, PN 10.5, FLOW DIRECTION RIGHT TO LEFT L=62mm	
	0404-0349		FIXED MAGNET, PN 16, FLOW DIRECTION LEFT TO RIGHT L=72mm	
	0404-0393		FIXED MAGNET, PN 16, FLOW DIRECTION RIGHT TO LEFT L=72mm	
18		4	MOUNTING PART	
	0728-0825		STANDARD: BOLT, HEX. SOCKET HEAD CAP, M8x25mm, DIN 912	STEEL 8.8
	0728-0816		FLOW-COUNT : SCREW, HEX. SOCKET HEAD CAP, M8x16mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER, M8, DIN7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø 80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8 mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, 3/8" NPT MALE	AISI 316

ITEM No. 22. 23. 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0887	0801-1338-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0882	0801-1338-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES & STANDARD BEARINGS	0390-0888	----------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING: 0801-1308-3 SHEET 2 OF 2

C	0411-0268 ADDED	01-12-03 BV	DATE	23-07-1997
B	PN16 WAS PN25	26-08-03 MM	DRAWN	J.Vollebregt
B	0728-0825 WAS 0733-0620		CHECKED	BV
B	0728-0816 WAS 2728-0612		MATERIAL	DUCTILE IRON
B	0741-0800 WAS 0718-0600			
B	0411-0249 WAS 0411-0090			
A	REDRAWN IN CAD	03-11-00 JV		
A	WHOLE CHANGED			

No. DESCRIPTION DATE PAR — REVISIONS

VAF INSTRUMENTS
Dordrecht, The Netherlands

PARTS LIST METER
J5150A DN150 PN10.5
J5150B1 DN150 PN16

0801-2283-4

REV. No. A B C

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0081	1	EYE-BOLT, M12, DIN 580	STEEL
16	0705-1020	4	PIN, DOWEL, ø10m6 x 20 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 16 / M10x0.75 mm	STEEL
	0404-0169		STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 74 mm	
	0404-0392		STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 74 mm	
	0404-0349		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 72 mm	
	0404-0393		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 72 mm	
18		4	MOUNTING PART	
			STANDARD:	
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER M8, DIN7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	STEEL 5.8
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0887	0801-1338-4	1x	2x	--	2x	1x
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0882	0801-1338-4	1x	2x	--	2x	1x
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0888	---------	1x	2x	2x	4x	2x

ASSEMBLY DRAWING 0801-1308-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV
B	0411-0249 WAS 0411-0090		
B	0718-0825 WAS 0733-0620		
B	0728-0816 WAS 2728-0612		
B	0741-0800 WAS 0718-0600		
A	REDRAWN IN CAD	25-07-97	NH
A	WHOLE CHANGED		

REVISIONS

DATE :02-12-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :STEEL
SEMI MAT. :

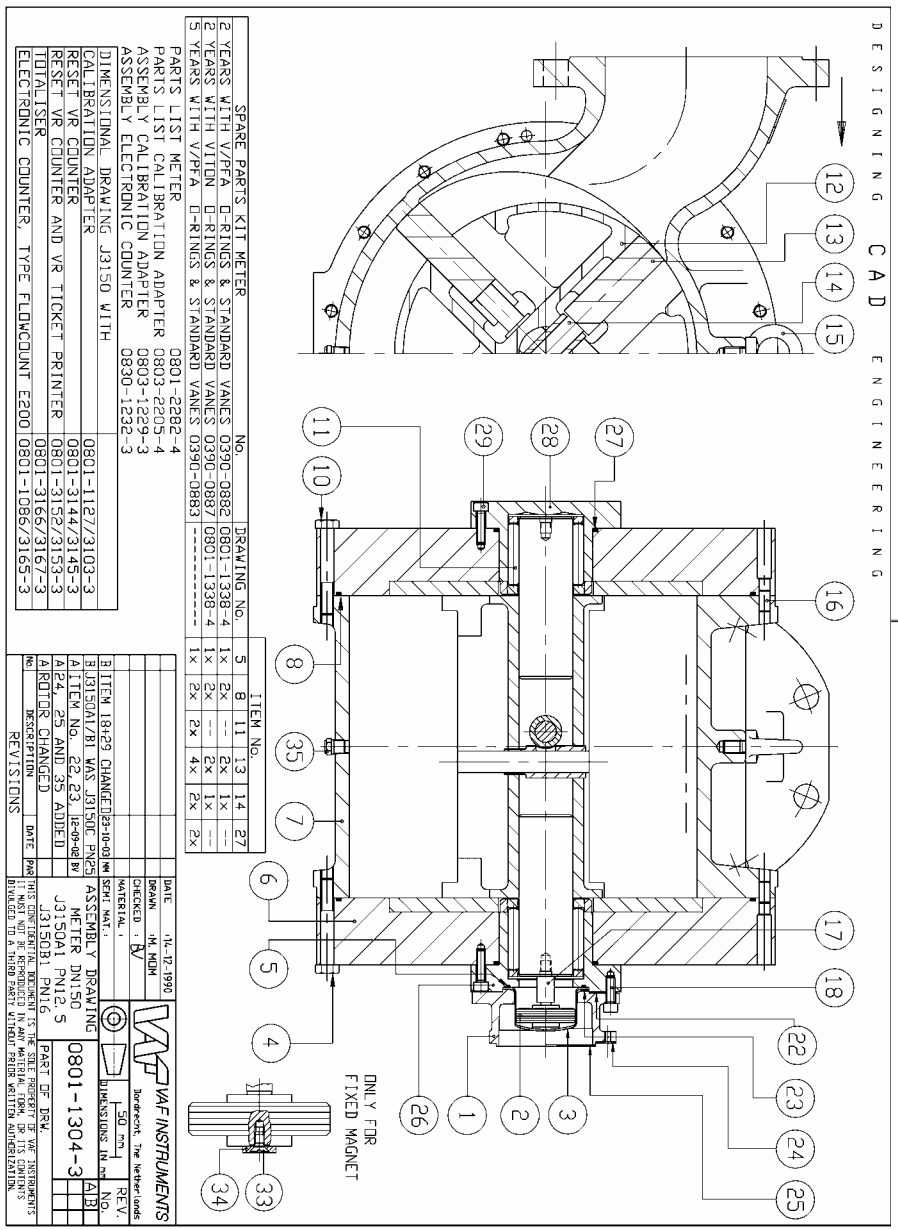
VAF INSTRUMENTS
Bordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER
J1150B1 DN150 PN16
J1150B DN150 PN20

0801-2281-4



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	27
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0882	0801-1338-4	1x	2x	--	2x	1x	--
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0887	0801-1338-4	1x	2x	--	2x	1x	--
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0883	----------	1x	2x	2x	4x	2x	2x

PARTS LIST METER	0801-2282-4
PARTS LIST CALIBRATION ADAPTER	0803-2205-4
ASSEMBLY CALIBRATION ADAPTER	0803-1229-3
ASSEMBLY ELECTRONIC COUNTER	0830-1232-3
DIMENSIONAL DRAWING J3150 WITH	
CALIBRATION ADAPTER	0801-1127/3103-3
RESET VR COUNTER	0801-3144/3145-3
RESET VR COUNTER AND VR TICKET PRINTER	0801-3152/3153-3
TOTALISER	0801-3166/3167-3
ELECTRONIC COUNTER, TYPE FLOWCOUNT E200	0801-1086/3165-3

No.	DESCRIPTION	DATE	PAR
B	ITEM 18+29 CHANGED	23-10-03	MM
B	J3150A1/B1 WAS J3150C PN25	12-09-02	BV
A	ITEM No. 22, 23, 24 AND 35 ADDED		
A	ROTOR CHANGED		

REVISIONS

DATE :14-12-1990
DRAWN :M.MOM
CHECKED : BV
MATERIAL :
SEMI MAT. :

VAF INSTRUMENTS
Bordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B

ASSEMBLY DRAWING
METER DN150
J3150A1 PN12.5
J3150B1 PN16

0801-1304-3

PART OF DRW.

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0081	1	EYE-BOLT, M12, DIN 580	STEEL
16	0499-0459	4	PIN, DOWEL, ø10 x 20 mm	AISI 303, HRD.
17		1	SHAFT MAGNET, OD 16 / M10x0.75 mm	AISI 316
	0404-0163		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=59 mm	
	0404-0390		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=59 mm	
	0404-0350		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=58 mm	
	0404-0395		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=58 mm	
18		4	MOUNTING PART	
			STANDARD:	
	5728-0825		SCREW, HEX. SOCKET HEAD CAP, M8x25 mm, DIN 912	AISI 316 A4-80
			FLOWCOUNT E200:	
	5728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	AISI 316 A4-80
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92x 1.5mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
26	0408-0238	1	HOLDER, FRONT, BEARING CAGE, ø139 x 74 mm	AISI 316
27		2	O-RING, ID 88.49 x ø3.53 mm	
	0630-3238			VITON
	0630-4238			VITON/PFA
	0630-9238			KALREZ
28	0408-0239	1	HOLDER, BACK, BEARING CAGE, ø139 x 74 mm	AISI 316
29	5728-0830	8	SCREW, SOCKET HEAD CAP, M8 x 30 mm, DIN 912	AISI 316 A4-80
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG , HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14	27
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0882	0801-1338-4	1x	2x	--	2x	1x	--
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0887	0801-1338-4	1x	2x	--	2x	1x	--
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0883	----------	1x	2x	2x	4x	2x	2x

ASSEMBLY DRAWING 0801-1304-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
D	0411-0268 ADDED	01-12-03	BV
C	PN12.5/16 WAS PN25	26-08-03	MM
C	0411-0249 WAS 0411-0090		
C	0408-0238 WAS 0408-0115		
C	0408-0239 WAS 0408-0116		
C	A4-80 ADDED		
C	5728-0816 WAS 1728-0612		
C	5728-0825 WAS 1733-0620		
C	5728-0830 WAS 1728-0625		

REVISIONS

DATE :10-10-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C D

PARTS LIST METER
J3150A1 DN150 PN12.5
J3150B1 DN150 PN16

0801-2282-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	AISI 316
	0408-0128		TEMP. < 120°C ø136 x 53 mm	
	0408-0189		TEMP. > 120°C ø136 x 50 mm	
	0408-0235		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4		16	BOLT, HEX. HEAD, DIN 931	
	5732-1280		PN12.5 M12 x 80mm	AISI 316 A4-80
	0732-1280		PN16 M12 x 80mm	STEEL 8.8
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0302-0038	2	ASSY, COVER, ø425 x 62 mm	AISI 316/CARBON
7		1	HOUSING, FLANGE,	AISI 316
	0401-0573		DIN PN10/16, ANSI CLASS 150RF, JIS 10K	
	0401-0643		ANSI CLASS 300RF	
8		2	O-RING, ID 380.59 x ø3.53 mm	
	0630-3281			VITON
	0630-4281			VITON/PFA
	0630-9281			KALREZ
10		16	BOLT, HEX. HEAD, DIN 931	
	5732-1280		PN12.5 M12 x 80mm	AISI 316 A4-80
	0732-1280		PN16 M12 x 80mm	STEEL 8.8
11	0329-0039PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY, ROTOR, OD 280/50 x 280/426 mm	AISI 316/RULON
	0303-0038		STANDARD	
	0303-0138		OVERSIZED	
13		4	VANE, 280 x 100 x 32 mm	CARBON
	0405-0037		STANDARD	
	0405-0045		OVERSIZED	
14	0404-0143	2	ROD, VANE, ø19.8 x 122 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1304-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
C	PN12.5/16 WAS PN25	26-08-03	MM
C	A4-80 ADDED		
C	5732-1280 WAS 1733-1280		
C	0732-1280 WAS 1733-1280		
C	0408-0128 WAS 0408-0084		
C	0408-0189 WAS 0408-0093		
C	0408-0235 WAS 0408-0185		
B	REDRAWN IN CAD	25-07-97	NH
B	WHOLE CHANGED		

REVISIONS

DATE :10-10-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :

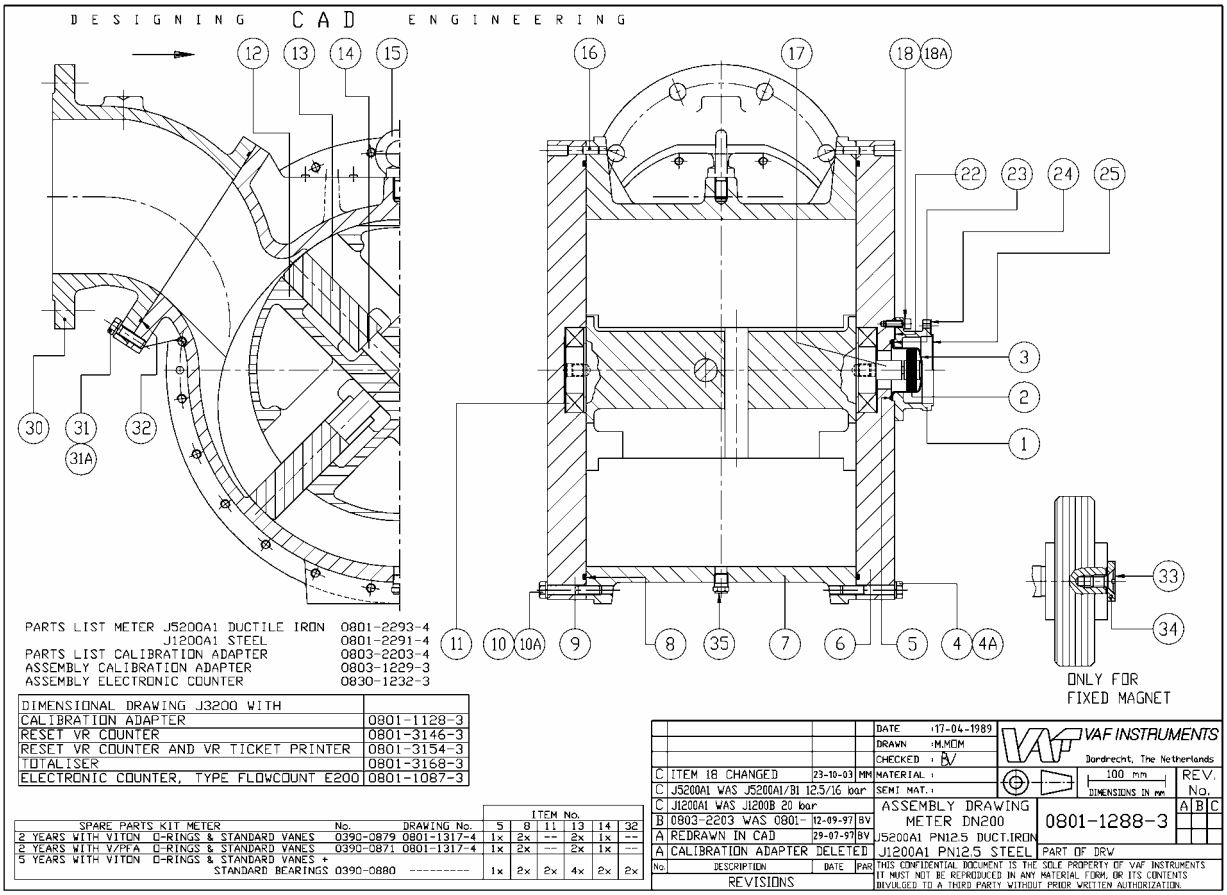
VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER
J3150A1 DN150 PN12.5
J3150B1 DN150 PN16

0801-2282-4



DIMENSIONAL DRAWING J3200 WITH	
CALIBRATION ADAPTER	0801-1128-3
RESET VR COUNTER	0801-3146-3
RESET VR COUNTER AND VR TICKET PRINTER	0801-3154-3
TOTALISER	0801-3168-3
ELECTRONIC COUNTER, TYPE FLOWCOUNT E200	0801-1087-3

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	32
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0879	0801-1317-4	1x	2x	---	2x	1x	---
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0871	0801-1317-4	1x	2x	---	2x	1x	---
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0880	---------	1x	2x	2x	4x	2x	2x

No.	DESCRIPTION	DATE	PAR
C	ITEM 18 CHANGED	23-10-03	MM
C	J5200A1 WAS J5200A1/B1 12.5/16 bar		
C	J1200A1 WAS J1200B 20 bar		
B	0803-2203 WAS 0801-	12-09-97	BV
A	REDRAWN IN CAD	29-07-97	BV
A	CALIBRATION ADAPTER DELETED		

REVISIONS

DATE :17-04-1989 | DRAWN :M.MOM | CHECKED : BV | MATERIAL : | SEMI MAT. :

100 mm DIMENSIONS IN mm | REV. No. A B C

THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.

DESIGNING CAD ENGINEERING

ASSEMBLY DRAWING 0801-1288-3 SHEET 1 OF 2

VAF INSTRUMENTS Dordrecht, The Netherlands

DATE :02-02-1990 | DRAWN :M.MOM | CHECKED : BV | MATERIAL : DUCTILE IRON | SEMI MAT. :

PARTS LIST METER J5200A1 DN200 PN12.5

0801-2293-4

DIMENSIONS IN mm | REV. No. A B

THIS CONFIDENTIAL DOCUMENT IS THE SOLE PROPERTY OF VAF INSTRUMENTS IT MUST NOT BE REPRODUCED IN ANY MATERIAL FORM, OR ITS CONTENTS DIVULGED TO A THIRD PARTY WITHOUT PRIOR WRITTEN AUTHORIZATION.

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C, ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C, ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD , ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	0733-1270	24	SCREW, HEX. HEAD, M12 x 70mm, DIN 933	STEEL 8.8
4A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0402-0123	1	COVER, FRONT, ø595 x 50 mm	DUCTILE IRON
7	0401-0360	1	HOUSING	DUCTILE IRON
8		2	O-RING, ID 532.21 x ø5.33 mm	
	0630-3390			VITON
	0630-4390			VITON/PFA
	0630-9390			KALREZ
9	0402-0124	1	COVER, BACK, ø595 x 50 mm	DUCTILE IRON
10	0733-1270	24	SCREW, HEX. HEAD, M12 x 70mm, DIN 933	STEEL 8.8
10A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 110 x ID 60 x 22 mm	
	2601-6212		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6212		OVERSIZED	STEEL
	1601-6212		STAINLESS STEEL	STAINLESS STEEL
	4601-6212		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 390.6/60 x 350/402 mm	CAST IRON
	0403-0008		STANDARD	
	0403-0024		OVERSIZED	
13		4	VANE, 350 x 140 x 45 mm	CARBON
	0405-0038		STANDARD	
	0405-0046		OVERSIZED	
14	0404-0144	2	ROD, VANE, ø29.8 x 170 mm	AISI 316, HRD.

No.	DESCRIPTION	DATE	PAR
B	PN16, 0732-1280,	26-08-03	MM
B	0402-0464 AND 0402-0465		
B	DELETED		
B	0408-0232 WAS-0408-0083		
B	0408-0233 WAS 0408-0087		
B	0408-0234 WAS 0408-0148		
A	REDRAWN IN CAD	25-07-97	NH
A	WHOLE CHANGED		

REVISIONS

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0128		TEMP. < 120°C, ø136 x 53 mm	AISI 316
	0408-0189		TEMP. > 120°C, ø136 x 50 mm	AISI 316
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD , ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	0732-1280	24	BOLT, HEX. HEAD, M12 x 80 mm, DIN 931	STEEL 8.8
4A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0402-0464	1	COVER, FRONT, ø595 x 60 mm	STEEL
7	0401-0536	1	HOUSING	STEEL
8		2	O-RING, ID 532.21 x ø5.33 mm	
	0630-3390			VITON
	0630-4390			VITON/PFA
	0630-9390			KALREZ
9	0402-0465	1	COVER, BACK, ø595 x 60 mm	STEEL
10	0732-1280	24	BOLT, HEX. HEAD, M12 x 80 mm, DIN 931	STEEL 8.8
10A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 110 x ID 60 x 22 mm	
	2601-6212		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6212		OVERSIZED	STEEL
	1601-6212		STAINLESS STEEL	STAINLESS STEEL
	4601-6212		SYNTHETIC CAGE	STEEL
12		1	ROTOR, OD 390.6/60 x 350/402 mm	CAST IRON
	0403-0008		STANDARD	
	0403-0024		OVERSIZED	
13		4	VANE, 350 x 140 x 45 mm	CARBON
	0405-0038		STANDARD	
	0405-0046		OVERSIZED	
14	0404-0144	2	ROD, VANE, ø29.8 x 170 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1288-3

SHEET 1 OF 2

				DATE :25-07-1997	VAF INSTRUMENTS
				DRAWN :M.MOM	Dordrecht, The Netherlands
				CHECKED : BV	
				MATERIAL :STEEL	DIMENSIONS IN mm
				SEMI MAT. :	REV. No.
A	PN12.5 WAS PN20	26-08-03	MM	PARTS LIST METER J1200A1 DN200 PN12.5	0801-2291-4 A
A	0408-0128 WAS-0408-0084				
A	0408-0189 WAS 0408-0093				
A	0408-0234 WAS 0408-0148				

No.	DESCRIPTION	DATE	PAR
REVISIONS			

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0082	1	EYE-BOLT, M16, DIN 580	STEEL
16	0705-1020	4	PIN, DOWEL, ø10m6 x 20 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 25 / M16x1.5 mm	STEEL
	0404-0098		STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 76 mm	
	0404-0397		STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 76 mm	
	0404-0351		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 74 mm	
	0404-0399		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 74 mm	
18		4	MOUNTING PART	
			STANDARD:	
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER M8, DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
30		2	FLANGE,	DUCTILE IRON
	0414-0025		DIN PN10	
	0414-0026		DIN PN16	
	0414-0027		ANSI CLASS 150RF	
	0414-0090		JIS 10K	
31	0733-1240	16	SCREW, HEX. HEAD, M12 x 40 mm, DIN 933	STEEL 8.8
31A	0718-1200	16	SPRING WASHER M12, DIN 127	SPRING STEEL
32		2	O-RING, ID 253.59 x ø3.53 mm	
	0630-3274			VITON
	0630-4274			VITON/PFA
	0630-9274			KALREZ
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	STEEL
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	32
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0879	0801-1317-4	1x	2x	--	2x	1x	--
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0871	0801-1317-4	1x	2x	--	2x	1x	--
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0880	---------	1x	2x	2x	4x	2x	2x

ASSEMBLY DRAWING 0801-1288-3

SHEET 2 OF 2

C	0411-0268 ADDED	01-12-03	BV	DATE :02-02-1990	VAF INSTRUMENTS
B	PN 16, 0404-0426,	26-08-03	MM	DRAWN :M.MOM	Dordrecht, The Netherlands
B	0404-0396, 0404-0352 AND			CHECKED : BV	
B	0404-0400 DELETED			MATERIAL :DUCTILE IRON	DIMENSIONS IN mm
B	0741-0800 WAS 0718-0600			SEMI MAT. :	REV. No.
B	0728-0825 WAS 0733-0620			PARTS LIST METER J5200A1 DN200 PN12.5	0801-2293-4 A B C
B	0728-0816 WAS 2728-0612				
B	0411-0249 WAS 0411-0090				

No.	DESCRIPTION	DATE	PAR
REVISIONS			

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME		MATERIAL
15	0799-0082	1	EYE-BOLT, M16,	DIN 580	STEEL
16	0705-1020	4	PIN, DOWEL, ø10m6 x 20 mm,	DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 25 / M16x1.5 mm		STEEL
	0404-0426		STANDARD, FLOW DIRECTION LEFT TO RIGHT	L= 86 mm	
	0404-0396		STANDARD, FLOW DIRECTION RIGHT TO LEFT	L= 86 mm	
	0404-0352		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT	L= 84 mm	
	0404-0400		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT	L= 84 mm	
18		4	MOUNTING PART		
			STANDARD:		
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8x25 mm,	DIN 912	STEEL 8.8
			FLOWCOUNT E200:		
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm,	DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER M8,	DIN 7980	SPRING STEEL
22	0411-0249	1	RING ø132 x ø80 x 1.5 mm		SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5 mm		SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm		SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5 mm		SYNTHETIC
30		2	FLANGE,		STEEL
	0414-0097		DIN PN16		
	0414-0096		DIN PN25		
31	0733-1240	16	SCREW, HEX. HEAD, M12 x 40 mm,	DIN 933	STEEL 8.8
31A	0718-1200	16	SPRING WASHER M12,	DIN 127	SPRING STEEL
32		2	O-RING, ID 253.59 x ø3.53 mm		
	0630-3274				VITON
	0630-4274				VITON/PFA
	0630-9274				KALREZ
33	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm,	DIN 963	STEEL
34		1	RING, FIXED MAGNETS,		AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm		
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm		
35	0799-0063	1	PLUG, HEX., 3/8" NPT MALE		AISI 316

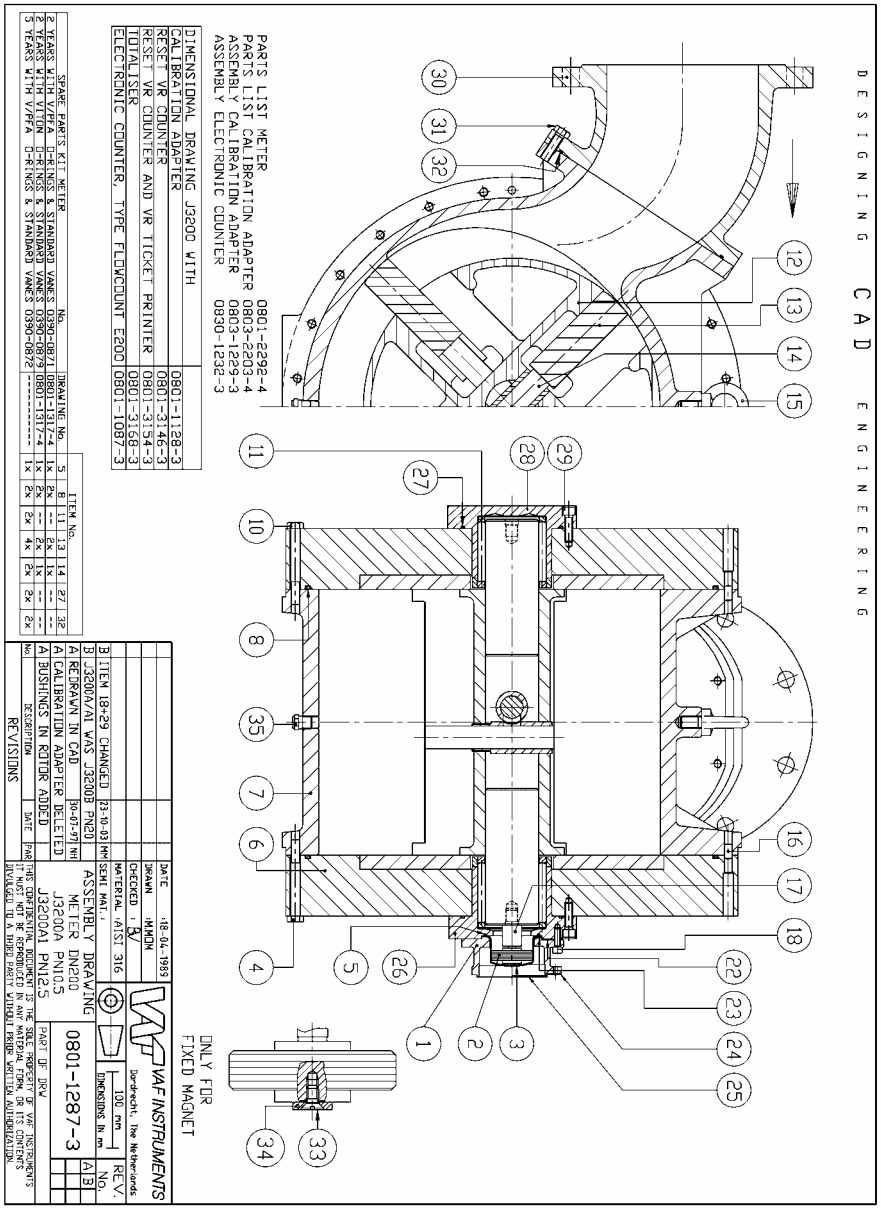
ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C

ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	32
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0879	0801-1317-4	1x	2x	--	2x	1x	--
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0871	0801-1317-4	1x	2x	--	2x	1x	--
5 YEARS WITH VITON O-RINGS & STANDARD VANES + STANDARD BEARINGS	0390-0880	---------	1x	2x	2x	4x	2x	2x

ASSEMBLY DRAWING 0801-1288-3 SHEET 2 OF 2

REVISIONS					
No.	DESCRIPTION	DATE	PAR		
B	0411-0268 ADDED	01-12-03	BV	DATE : 25-07-1997	VAF INSTRUMENTS Bordrecht, The Netherlands
A	PN12.5 WAS PN20	26-08-03	MM	DRAWN : M.MOM	
A	0728-0825 WAS 0733-0620			CHECKED : BV	
A	0728-0816 WAS 2728-0612			MATERIAL : STEEL	DIMENSIONS IN mm
A	0741-0800 WAS 0718-0600			SEMI MAT. :	REV. No. A B
A	0411-0249 WAS 0411-0090			PARTS LIST METER J1200A1 DN200 PN12.5	0801-2291-4



SPARE PARTS KIT METER	No.	DRAWING No.	ITEM No. 5	8	11	13	14	27	32
2 YEARS WITH VITON O-RINGS & STANDARD VANES	0390-0879	0801-1317-4	1x	2x	--	2x	1x	--	--
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0871	0801-1317-4	1x	2x	--	2x	1x	--	--
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES	0390-0872	---------	1x	2x	2x	4x	2x	2x	2x

DIMENSIONAL DRAWING J3200 WITH	0801-1128-3
CALIBRATION ADAPTER	
RESET VR COUNTER	0801-3146-3
RESET VR COUNTER AND VR TICKET PRINTER	0801-3154-3
TOTALISER	0801-3156-3
ELECTRONIC COUNTER, TYPE FLOWCOUNT E200	0801-1087-3

REVISIONS					
No.	DESCRIPTION	DATE	PAR		
B	ITEM 18+29 CHANGED	23-10-03	MM	SEMI MAT. :	VAF INSTRUMENTS Bordrecht, The Netherlands
A	REDRAWN IN CAD J3200A/A1 WAS J3200B PN20	30-07-99	NH	DRAWN : M.MOM	
A	CALIBRATION ADAPTER DELETED			CHECKED : BV	
A	BUSHINGS IN ROTOR ADDED			MATERIAL : AISI 316	DIMENSIONS IN mm 100 mm
		DATE	PAR	ASSEMBLY DRAWING METER DN200 J3200A PN10.5 J3200A1 PN12.5	0801-1287-3 REV. No. A B

PART OF DRW.

DATE : 18-04-1995

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
15	0799-0082	1	EYE-BOLT, M16, DIN 580	STEEL
16	0499-0459	4	PIN, DOWEL, ø10 x 20 mm	AISI 303, HRD.
17		1	SHAFT MAGNET, OD25/ M16 x 1.5 mm	AISI 316
	0404-0157		STANDARD, FLOW DIRECTION LEFT TO RIGHT L=70 mm	
	0404-0398		STANDARD, FLOW DIRECTION RIGHT TO LEFT L=70 mm	
	0404-0353		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L=68 mm	
	0404-0401		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L=68 mm	
18		4	MOUNTING PART	AISI 316 A4-80
			STANDARD:	
	5728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 912	
			FLOWCOUNT E200:	
	5728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	
22	0411-0249	1	RING ø132 x ø80 x 1.5mm	SYNTHETIC
23	0411-0091	1	RING ø80 x ø65 x 1.5mm	SYNTHETIC
24	0411-0092	1	RING 105 x 105 x ø92 x 1.5mm	SYNTHETIC
25	0411-0093	1	RING ø92 x ø20 x 1.5mm	SYNTHETIC
26	0408-0240	1	HOLDER, FRONT, BEARING CAGE, OD 169.5 x 95 mm	AISI 316
27		2	O-RING, ID 126.59 x ø3.53 mm	
	0630-3250			VITON
	0630-4250			VITON/PFA
	0630-9250			KALREZ
28	0408-0241	1	HOLDER, BACK, BEARING CAGE, ø169.5 x 95 mm	AISI 316
29	5728-1035	8	SCREW,HEX. SOCKET HEAD CAP, M10 x 35 mm, DIN 912	AISI 316 A4-80
30		2	FLANGE,	AISI 316
	0414-0082		DIN PN10	
	0414-0083		DIN PN16	
	0414-0084		ANSI CLASS 150RF	
31	5733-1240	16	SCREW, HEX. HEAD, M12 x 40 mm, DIN 933	AISI 316 A4-80
32		2	O-RING, ID 253.59 x ø3.53 mm	
	0630-3274			VITON
	0630-4274			VITON/PFA
	0630-9274			KALREZ
33	1736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	AISI 316
34		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
35	0799-0063	1	PLUG, HEX., 3/8"NPT MALE	AISI 316

ITEM No. 22, 23, 24 AND 25 ONLY FOR TEMP. > 120°C
ITEM No. 33 AND 34 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No	ITEM No. 5	8	11	13	14	27	32
2 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0871	0801-1317-4	1x	2x	--	2x	1x	--	--
2 YEARS WITH VITON O-RINGS & STANDARD VANES 0390-0879	0801-1317-4	1x	2x	--	2x	1x	--	--
5 YEARS WITH V/PFA O-RINGS & STANDARD VANES 0390-0872	----------	1x	2x	2x	4x	2x	2x	2x

ASSEMBLY DRAWING 0801-1287-3 SHEET 2 OF 2

No.	DESCRIPTION	DATE	PAR
C	0411-0268 ADDED	01-12-03	BV

REVISIONS

DATE :18-04-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :
DIMENSIONS IN mm
REV. No. A B C

VAF INSTRUMENTS
Bordrecht, The Netherlands

PARTS LIST METER
J3200A DN200 PN10.5
J3200A1 DN200 PN12.5

0801-2292-4

D E S I G N I N G C A D E N G I N E E R I N G

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP,	AISI 316
	0408-0128		TEMP. < 120°C, ø136 x 53 mm	
	0408-0189		TEMP. > 120°C, ø136 x 50 mm	
	0408-0235		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	
2		1	ASSY, MAGNET,	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4		24	BOLT, HEX. HEAD, DIN 931	
	5732-1210		PN10.5, M12 x 100 mm,	AISI 316 A4-80
	0732-1210		PN12.5, M12 x 100 mm,	STEEL 8.8
5		1	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0302-0030	2	ASSY, COVER, ø595 x 80 mm	AISI 316/CARBON
7	0401-0537	1	HOUSING	AISI 316
8		2	O-RING, ID 532.21 x ø5.33 mm	
	0630-3390			VITON
	0630-4390			VITON/PFA
	0630-9390			KALREZ
10		24	BOLT, HEX. HEAD, DIN 931	
	5732-1210		PN10.5, M12 x 100 mm,	AISI 316 A4-80
	0732-1210		PN12.5, M12 x 100 mm,	STEEL 8.8
11	0329-0038PH	2	ASSY, BEARING, NEEDLE	AISI 316/RULON
12		1	ASSY ROTOR, OD 390.6/70 x 350/534 mm	AISI 316/RULON
	0303-0033		STANDARD	
	0303-0034		OVERSIZED	
13		4	VANE, 350 x 140 x 45 mm	CARBON
	0405-0038		STANDARD	
	0405-0046		OVERSIZED	
14	0404-0144	2	ROD, VANE, ø29.8 x 170 mm	AISI 316, HRD.

ASSEMBLY DRAWING 0801-1287-3 SHEET 1 OF 2

No.	DESCRIPTION	DATE	PAR
B	PN 10.5/12.5 WAS PN20	26-08-03	MM
B	A4-80 ADDED		
B	5732-1210 WAS 1732-1210		
B	0732-1210 WAS 1732-1210		
B	0408-0128 WAS 0408-0084		
B	0408-0189 WAS 0408-0093		
B	0408-0235 WAS 0408-0185		

REVISIONS

DATE :18-04-1989
DRAWN :M.MOM
CHECKED : BV
MATERIAL :AISI 316
SEMI MAT. :
DIMENSIONS IN mm
REV. No. A B

VAF INSTRUMENTS
Bordrecht, The Netherlands

PARTS LIST METER
J3200A DN200 PN10.5
J3200A1 DN200 PN12.5

0801-2292-4

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
18		4	MOUNTING PART	
			STANDARD:	
	0728-0825		SCREW, HEX. SOCKET HEAD CAP, M8 x 25 mm, DIN 933	STEEL 8.8
			FLOWCOUNT E200:	
	0728-0816		SCREW, HEX. SOCKET HEAD CAP, M8 x 16 mm, DIN 912	STEEL 8.8
18A	0741-0800	4	STANDARD: SPRING WASHER, M8, DIN 7980	SPRING STEEL
24	0402-0496	1	COVER, FRONT/HOLDER, OD 178 x 22 mm	STEEL
25	0733-0830	4	SCREW, HEX. HEAD, M8 x 30 mm, DIN 933	STEEL 8.8
25A	0718-0800	4	SPRING WASHER M8, DIN 127	SPRING STEEL
30		2	FLANGE,	DUCTILE IRON
	0414-0112		DN250 DIN PN16	
	0414-0109		DN250 ANSI CLASS 150RF	
	0414-0100		DN250 JIS 5K	
	0414-0114		DN300 DIN PN16	
31	0799-0122	32	THIN HEAD CAP SCREW, M12 x 40 mm, DIN 7984	STEEL 10.9.8
31A	0741-1200	32	SPRING WASHER M12 DIN 7980	SPR-STEEL
32		4	O-RING, ID 253.59 x ø3.53 mm	
	0630-3274			VITON
	0630-4274			VITON/PFA
	0630-9274			KALREZ
33	0411-0077	8	RING, VANE, THIN, ø35 x ø10 x 4 mm	AISI 430
34	0417-0024	16	NUT, VANE, M16 x 1.5, H=12 mm	AISI 303
35	0417-0025	8	NUT, ROTOR, M42 x 1.5, H=25 mm	AISI 430
36	0406-0078	8	BUSHING, ROTOR, ø30 x ø16 x 16 mm	RULON
37	0411-0075	8	RING, ROTOR, ø40 x ø19 x 5 mm	AISI 430
38	1758-2520	16	SPLIT PIN, ø2.5 x 20 mm DIN 94	AISI 304
39	0407-0025	16	SPRING, VANE, ID 10.5 x L=32 mm	AISI 316
40	0411-0076	8	RING, VANE, THICK, ø35 x ø10 x 6 mm	AISI 430F
41	0411-0249	1	RING ø132 x ø80 x 1.5 mm	SYNTHETIC
42	0411-0091	1	RING ø80 x ø65 x 1.5 mm	SYNTHETIC
43	0411-0092	1	RING 105 x 105 x ø92 x 1.5 mm	SYNTHETIC
44	0411-0093	1	RING ø92 x ø20 x 1.5 mm	SYNTHETIC
45	0736-0408	1	SCREW, SLOTTED COUNTERSUNK HEAD, M4x8mm, DIN 963	STEEL
46		1	RING, FIXED MAGNETS,	AISI 316
	0411-0078		STANDARD/OVERSIZED, OD 13 x ID 4.5 x 2.5 mm	
	0411-0268		CLOSED, OD 13 x ID 4.5 x 4.1 mm	
47	0799-0063	1	PLUG, HEX., 3/8" NPT MALE	AISI 316

ITEM No. 40, 41, 42 AND 43 ONLY FOR TEMP. > 120°C
ITEM No. 45 AND 46 ONLY FOR FIXED MAGNET

SPARE PARTS KIT METER No.	DRAWING No.	ITEM No. 5	8	11	13	14	32	33	34	35	36	37	38	39	40
2 YEARS WITH VITON O-RINGS & 0390-1127 STANDARD VANES	0801-1342-4	2x	2x	--	2x	1x	4x	--	2x	--	--	--	2x	2x	--
5 YEARS WITH VITON O-RINGS & 0390-1128 STANDARD VANES + STANDARD BEARINGS	----------	2x	2x	2x	4x	4x	4x	4x	8x	4x	4x	4x	8x	8x	4x

ASSEMBLY DRAWING 0801-1309-3 SHEET 2 OF 2

				DATE	11-03-1994
				DRAWN	M.MOM
				CHECKED	BV
				MATERIAL	DUCTILE IRON
				SEMI MAT.	
E	ITEM 31 EN 31A GEWIJZ'D	22-11-06	WR		
D	0411-0268 ADDED	01-12-03	BV		
No.	DESCRIPTION	DATE	PAR		

REVISIONS

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C D E

PARTS LIST METER
J5250A1 DN250 PN12.5
J5300A1 DN250 PN12.5

0801-2303-4

DESIGNING CAD ENGINEERING

ITEM No.	PART NUMBER	QTY	PART NAME	MATERIAL
1		1	HOLDER, MAGNET CAP	
	0408-0232		TEMP. < 120°C, ø136 x 53 mm	DUCTILE IRON
	0408-0233		TEMP. > 120°C, ø136 x 50 mm	DUCTILE IRON
	0408-0234		FLOWCOUNT E200, TEMP. -15/+75°C, ø139x14 mm	STEEL
2		1	ASSY, MAGNET	
	0313-0076		STANDARD, ø55 x 20 mm	AISI 316/
	0313-0077		OVERSIZED, ø53 x 20 mm	FERROXDURE
	0313-0036		CLOSED, ø55 x 18.5 mm	AISI 316
3	0409-0091	1	CAP, MAGNET, OD 57.5/80 x 41 mm	AISI 316
4	0733-1270	24	SCREW, HEX. HEAD, M12 x 70mm, DIN 933	STEEL 8.8
4A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
5		2	O-RING, ID 67.95 x ø2.62 mm	
	0630-3147			VITON
	0630-4147			VITON/PFA
	0630-9147			KALREZ
6	0402-0494	1	COVER, FRONT, ø595 x 50 mm	DUCTILE IRON
7	0301-0255	1	ASSY, HOUSING+VITON O-RING, INCLUDING ITEM 15	DUCTILE IRON
8		2	O-RING, ID 532.21 x ø5.33 mm	
	0630-3390			VITON
	0630-4390			VITON/PFA
	0630-9390			KALREZ
9	0402-0495	1	COVER, BACK, ø595 x 50 mm	DUCTILE IRON
10	0733-1270	24	SCREW, HEX. HEAD, M12 x 70mm, DIN 933	STEEL 8.8
10A	0718-1200	24	SPRING WASHER M12, DIN 127	SPRING STEEL
11		2	BEARING, BALL, OD 130 x ID 60 x 31 mm	
	2601-6312		STANDARD WITH 2 GUARD PLATES	STEEL
	0601-6312		OVERSIZED	STEEL
12		1	ASSY, ROTOR, OD 391/60 x 700/764 mm	CAST IRON
	0303-0140		STANDARD	
	0303-0204		OVERSIZED	
13		8	VANE, 350 x 105 x 45 mm	CARBON
	0405-0020		STANDARD	
	0405-0040		OVERSIZED	
14	0404-0097	8	ROD, VANE, OD 16/10 x 418 mm	AISI 430
15	0799-0082	2	EYE-BOLT, M16, DIN 580	STEEL
16	0705-1020	4	PIN, DOWEL, ø10m6 x 20 mm, DIN 6325	STEEL, HRD.
17		1	SHAFT, MAGNET, OD 25 / M16x1.5 mm	STEEL
	0404-0426		STANDARD, FLOW DIRECTION LEFT TO RIGHT L= 86 mm	
	0404-0396		STANDARD, FLOW DIRECTION RIGHT TO LEFT L= 86 mm	
	0404-0354		FIXED MAGNET, FLOW DIRECTION LEFT TO RIGHT L= 86 mm	
	0404-0402		FIXED MAGNET, FLOW DIRECTION RIGHT TO LEFT L= 86 mm	

ASSEMBLY DRAWING 0801-1309-3 SHEET 1 OF 2

				DATE	11-03-1994
C	PN16, 0732-1280,	26-08-03	MM	DRAWN	M.MOM
C	0402-0560, 0402-0561,			CHECKED	BV
C	0404-0420, 0404-0421,			MATERIAL	DUCTILE IRON
C	0404-0422 AND 0404-0423			SEMI MAT.	
C	DELETED				
C	0408-0232 WAS 0408-0083				
C	0408-0233 WAS 0408-0087				
C	0408-0234 WAS 0408-0148				
No.	DESCRIPTION	DATE	PAR		

REVISIONS

VAF INSTRUMENTS
Dordrecht, The Netherlands

DIMENSIONS IN mm

REV. No. A B C

PARTS LIST METER
J5250A1 DN250 PN12.5
J5300A1 DN300 PN12.5

0801-2303-4

18. ABBREVIATIONS

PT100	Temperature sensor
PED	Pressure Equipment Directive
CE	

19. SPARE PARTS

Contact VAF Instruments or local agent for spare parts for flowmeter type MidFlow® and HiFlow®.

20. WARRANTY CONDITIONS

1. Without prejudice to the restrictions stated hereinafter, the contractor guarantees both the soundness of the product delivered by him and the quality of the material used and/or delivered for it, insofar as this concerns faults in the product delivered which do not become apparent during inspection or transfer test, which the principal shall demonstrate to have arisen within 12 months from delivery in accordance with subarticle 1A exclusively or predominantly as a direct consequence of unsoundness of the construction used by the contractor or as a consequence of faulty finishing or the use of poor materials.

   1A. The product shall be deemed to have been delivered when it is ready for inspection (if inspection at the premises of the contractor has been agreed) and otherwise when it is ready for shipment.

2. Articles 1 and 1a shall equally apply to faults which do not become apparent during inspection or transfer test which are caused exclusively or predominantly by unsound assembly/installation by the contractor. If assembly/installation is carried out by the contractor, the guarantee period intended in article 1 shall last 12 months from the day on which assembly/installation is completed by the contractor, with the understanding that in this case the guarantee period shall end not later than 18 months after delivery in accordance with the terms of subarticle 1A.

3. Defects covered by the guarantee intended under articles 1, 1a and 2 shall be remedied by the contractor by repair or replacement of the faulty component either on or off the premises of the contractor, or by shipment of a replacement component, this remaining at the discretion of the contractor. Subarticle 3A shall equally apply if repair or replacement takes place at the site where the product has been assembled/installed. All costs accruing above the single obligation described in the first sentence, such as are not restricted to shipment costs, travelling and accommodation costs or disassembly or assembly costs insofar as they are not covered by the agreement, shall be paid by the principal.

   3A. If repair or replacement takes place at the site where the product has been assembled/installed, the principal shall ensure, at his own expense and risk, that:

   a. the employees of the contractor shall be able to commence their work as soon as they have arrived at the erection site and continue to do so during normal working hours, and moreover, if the contractor deems it necessary, outside the normal working hours, with the proviso that the contractor informs the principal of this in good time;

   b. suitable accommodation and/or all facilities required in accordance with government regulations, the agreement and common usage, shall be available for the employees of the contractor;

   c. the access roads to the erection site shall be suitable for the transport required;

   d. the allocated site shall be suitable for storage and assembly;

   e. the necessary lockable storage sites for materials, tools and other goods shall be available;

   f. the necessary and usual auxiliary workmen, auxiliary machines, auxiliary tools, materials and working materials (including process liquids, oils and greases, cleaning and other minor materials, gas, water, electricity, steam, compressed air, heating, lighting, etc.) and the measurement and testing equipment usual for in the business operations of the principal, shall be available at the correct place and at the disposal of the contractor at the correct time and without charge;

g. all necessary safety and precautionary measures shall have been taken and adhered to, and all measures shall have been taken and adhered to necessary to observe the applicable government regulations in the context of assembly/installation;

h. the products shipped shall be available at the correct site at the commencement of and during assembly.

4. Defects not covered by the guarantee are those which occur partially or wholly as a result of:

   A. non-observance of the operation and maintenance instructions or other than foreseeable normal usage;

   B. normal wear and tear;

   C. assembly/installation by third parties, including the principal;

   D. the application of any government regulation regarding the nature or quality of the material used;

   E. materials or goods used in consultation with the principal;

   F. materials or goods provided by the principal to the contractor for processing;

   G. materials, goods, working methods and constructions insofar as are applied at the express instruction of the principal, and materials or goods supplied by or on behalf of the principal.

   H. components obtained from third parties by the contractor insofar as that party has given no guarantee to the contractor.

5. If the principal fails to fulfil any obligation properly or on time ensuing from the agreement concluded between the principal and the contractor or any agreement connected to it, the contractor shall not be bound by any of these agreements to any guarantee regardless of how it is referred to. If, without previous written approval from the contractor, the principal commences disassembly, repair or other work on the product or allows it to be commenced, then every agreement with regard to guarantee shall be void

6. Claims regarding defects must be submitted in writing as quickly as possible and not later than 14 days after the discovery of such. All claims against the contractor regarding faults shall be void if this term is exceeded. Claims pertaining to the guarantee must be submitted within one year of the valid complaint on penalty of invalidity.

7. If the contractor replaces components/products under the terms of his guarantee obligations, the replaced components/products shall become the property of the contractor.

8. Unless otherwise agreed, a guarantee on repair or overhaul work carried out by the contractor or other services shall only be given on the correctness of the manner in which the commissioned work is carried out, this for a period of 6 months. This guarantee only covers the single obligation of the contractor to carry out the work concerned once again in the event of unsound work. In this case, subarticle 3A shall apply equally.

9. No guarantee shall be given regarded the inspection conducted, advice given and similar matters.

10. Alleged failure to comply with his guarantee commitments on the part of the contractor shall not absolve the principal from his obligations ensuing from any agreement concluded with the contractor.

11. No guarantee shall be given on products which form a part of, or on work and services on, goods older than 8 years.

Revision 1106:
Drawing 0801-2303 renewed

Revision 0608:
Recommendation added in chapter 8.1.

VAF INSTRUMENTS

for quality and innovation

ISO 9001 REGISTERED
DNV Certification B.V., The Netherlands
MGMT. SYS. RvA C 024

Specifications subject to change without notice.
Agents and distributors in more than 50 countries

VAF Instruments B.V.
Vierlinghstraat 24, NL-3316 EL Dordrecht
P.O.Box 40, NL-3300 AA Dordrecht
The Netherlands
Telephone: +31 78 618 3100
Fax: +31 78 617 7068
Internet: www.vaf.nl or www.vaf.eu
E-mail: sales@vaf.nl

Represented by: