

Peristaltic Industrial Hose Pump

ATEX Instruction Manual



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ATEX Instruction Manual Dura 05-80





The information in this document is essential for the safe operation and maintenance of Verderflex[®] industrial range of pumps in ATEX environment. This document must be read and understood thoroughly prior to installation of unit, electrical connection and commissioning.

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1 About this Document

This manual is a guideline for qualified users for the safe operation and maintenance of Verderflex[®] pumps working in ATEX environments. This is a supplementary document to the operating manual. The operating manual must be read and understood both by the installing personnel and the responsible trained personnel / operators prior to following additional guidelines in this ATEX instruction manual.

Instructions in this manual should be read in conjunction with instructions and guidelines in motor and gearbox operating manuals and ATEX guidelines.

1.1 Target Groups

Target Groups	Duty	
Operating Company	* *	Keep this manual available at the operating site of the pump. Ensure that personnel read and follow the instructions in this manual and any other applicable documents, especially all safety instructions and warnings. Observe any additional rules and regulations referring to the system.
Qualified personnel, fitter		Read, observe and follow this manual and the other applicable documents, especially all safety instructions and warnings.

Table 1 Target Groups

1.2 Warnings and Symbols Used in the Manual

Warning	Risk Level	Consequences of disregard
	Immediate risk	Death, serious bodily harm
	Potential acute risk	Death, serious bodily harm
	Potential hazardous situation	Potential damage to the pump
Note	For information	Possible incorrect use/maintenance of pump

Table 2 Warnings Used in the Manual

Symbol	Meaning
\wedge	Safety warning sign in accordance with DIN 4844 - W9
	Take note of all information highlighted by the safety warning sign and follow the instructions to avoid injury or death.
	Instruction
1., 2.,	Multiple-step instructions
	Checklist
\rightarrow	Cross-reference
Ĩ	Information

Table 3 Symbols Used in the Manual



2 Safety

The manufacturer does not accept any liability for damage resulting from disregard of this documentation.

2.1 Intended Use

- Only use the pump to handle compatible fluids as recommended by the manufacturer (→ 5 Limitations for use in ATEX Environment.
- Adhere to the operating limits.
- Consult the manufacturer regarding any other use of the pump.
- Pumps delivered without a motor must be fitted with a motor in accordance with the provisions of EC Machinery Directive 2006/42/EC.

Prevention of obvious misuse (examples)

- Note the operating limits of the pump with regard to temperature, pressure, flow rate and motor speed (→ 5 Limitations for use in ATEX Environment.
- Do not operate the pump with any inlet/outlet valves closed
- Only install the pump as recommended in this manual. For example, the following are not allowed:
 - Installing the pump without proper support.
 - Installation in the immediate vicinity of extreme hot or cold sources.

2.2 General Safety Instructions

Observe the following regulations before carrying out any work.

2.2.1 Product Safety

These operating instructions contain fundamental information which must be complied with during installation, operation and maintenance. Therefore this operating manual must be read and understood both by the installing personnel and the responsible trained personnel / operators prior to installation and commissioning, and it must always be kept easily accessible within the operating premises of the machine.

Not only must the general safety instructions laid down in this chapter on "Safety" be complied with, but also the safety instructions outlined under specific headings.

- Operate the pump only if it and all associated systems are in good functional condition.
- Only use the pump as intended, fully aware of safety and risk factors involved and the instructions in this manual.
- Keep this manual and all other applicable documents complete, legible and accessible to personnel at all times.
- Refrain from any procedure or action that would pose a risk to personnel or third parties.
- In the event of any safety-relevant faults, shut down the pump immediately and have the malfunction corrected by qualified personnel.
- The installation of the pump must comply with the requirements of installation given in this manual and any local, national or regional health and safety regulations.

2.2.2 Obligation of the Operating Company

Safety-conscious operation

- Ensure that the following safety aspects are observed and monitored:
 - Adherence to intended use
 - Statutory or other safety and accident-prevention regulations
 - Safety regulations governing the handling of hazardous substances if applicable
 - Applicable standards and guidelines in the country where the pump is operated
- Make personal protective equipment available pertinent to operation of the pump.

Qualified personnel

- Ensure that all personnel tasked with work on the pump have read and understood this manual and all other applicable documents, including the safety, maintenance and repair information, prior to use or installation of the pump.
- Organize responsibilities, areas of competence and the supervision of personnel.
- Have all work carried out by specialist technicians only.
- Ensure that trainee personnel are under the supervision of specialist technicians at all times when working with the pump.

Safety equipment

Provide the following safety equipment and verify its functionality:

- For hot, cold and moving parts: safety guarding should be provided by the operating company.
- For potential build up of electrostatic charge: ensure appropriate grounding if and when required.

Warranty

The warranty is void if the customer fails to follow any Instruction, Warning or Caution in this document. Verder has made every effort to illustrate and describe the product in this document. Such illustrations and descriptions are however, for the sole purpose of identification and <u>do</u> not express or imply a warranty that the products are merchantable or fit for a particular purpose, or that the products will necessarily conform to the illustration or descriptions.

Obtain the manufacturer's approval prior to carrying out any modifications, repairs or alterations during the warranty period. Only use genuine parts or parts that have been approved by the manufacturer.

For further details regarding warranty, refer to terms and conditions.



2.2.3 Obligation of Personnel

It is imperative that the instructions contained in this manual are complied with by the operating personnel at all times.

- Pump and associated components:
 - <u>Do not</u> lean or step on them or use as climbing aid
 - <u>Do not</u> use them to support boards, ramps or beams
 - <u>Do not</u> use them as a fixing point for winches or supports
 - <u>Do not</u> de-ice using gas burners or similar tools
- Do not remove the safety guarding for hot, cold or moving parts during operation.
- Reinstall the safety equipment on the pump as required by regulations after any repair / maintenance work on the pump.

2.3 Specific Hazards

2.3.1 Hazardous Pumped Liquids

Follow the statutory safety regulations when handling hazardous pumped liquids (e.g. hot, flammable, poisonous or potentially harmful).

Use appropriate Personal Protective Equipment when carrying out any work on the pump.

2.3.2 Lubricants

Ensure that the lubricant and pumped liquid are compatible with each other. This is a precautionary measure in case of accidental hose burst whereby the pumped liquid comes in contact with the lubricant. (\rightarrow Refer datasheet for lubricant to ensure compatibility and also refer section 5.10 for specific lubricant limitations)

2.3.3 Sharp Edges

Pump parts, such as the shims and impellers, can be sharp

 Use protective gloves when carrying out any work on the pump

2.3.4 ATEX Environment

Failure to implement the necessary safety procedures and failure to disclose the intended use of a pump within an explosive atmosphere as laid down in latest EC Atex Directive 2014/34/EU will void all warranty for the product. (Refer warranty terms and conditions for more details).

Verder shall not be liable for any injuries, losses or damages including, but not limited to any personal injuries, anticipated or lost profits, incidental damages, consequential damages, costs, time charges, or other damages or losses, in connection with the instrument, its use or any replacement parts if the customer fails to follow any Instruction, Warning or Caution in this document.



3 ATEX Introduction

ATEX assessment for the Dura 05-80 pumps are based on Equipment group II category 2, Ref BS EN 60079-36:2016 and in compliance with EU ATEX Directive 2014/34/EU, commonly referred to as the ATEX ("Atmosphères explosibles") "product" directive, applicable from 20 April 2016, which replaces the previous Directive 94/9/EC.

Verder strongly recommends the user to ensure the ATEX rated equipment is installed and operated in accordance with ATEX "workplace" Directive 1999/92/EC. Any associated equipment installed or used within an Explosive environment should be rated to appropriate ATEX standard.

3.1 ATEX Name Plate

Dura 05-35	1. 2. 4. 3. VERDERFLEX® FILE REF: 18-0155. & 17-0061. Manufacturer: - VERDER Ltd., Castleford, WF10 5QH, UK
Dura 45-55 Dura 60 Dura 65	Model: Serial No: YR. /C. II 2 G Ex h IIB T4 Gb for T ambient -5° C to +40° C
Dura 80	Authorised Representative Established in EU: - Verder Liquids B.V, 3451 GC Utrecht, Netherlands U: - www.verder flex.com 5. 6. 7. 8. 9.

Figure 1 ATEX Name Plate

- 1. Pump Type
- 2. Serial Number
- 3. Year of Manufacture
- 4. Technical File Reference Number
- 5. Ignition Protection

- 6. Gas Group
- 7. Temperature Class
- ATEX Category: 'G' for Gas
 - 'D' for Dust
- 9. Ambient Temperature Range

4 ATEX Specification

- 1. The ATEX code consists of the group, category, ignition protection marking and temperature class.
- 2. ATEX rating of Verderflex Dura pumps is to the following standard which is explained below:

Item	Example	Explanation	
Ignition Pro- tection	h	Non-Electrical Equipment meeting the requirements of EN ISO 80079-36:2016 is marked with "h".	
Gas Group	IIB	Gas Group II - Ethylene	
Temperature Class	T4	Maximum surface tempera- ture < 135 °C	
ATEX Category	Gb/Db	Equipment Protection level: Gb: Gas zone 1 Db: Dust zone 21	
Ambient Temperature Range *	for T ambient -5°C to 40°C	Maximum ambient tempera- ture for operating the pump -5°C to 40°C	

EX h IIB T4 Gb / Db for T ambient -5°C to 40°C

Table 4 ATEX Classification

*The ambient temperature range depends on the pump type. (→ refer to 3.1 ATEX Name Plate)

4.1 Gas Group

Gases are classified according to type of hazardous environment and ignitability of the gas/air mixture as defined in EN/IEC 60079-21-1.

	I	Mines
Gas Group	II	Surface above ground with gas hazard
	111	Surface above ground with dust hazard
Gas Sub Group	А	Less easily ignited gases e.g. propane
	В	Easily ignited gases e.g ethylene
	С	Most easily ignited e.g. hydrogen or acetylene

Table 5 Gas Group Classification

4.2 ATEX Category

Zones are decided by the site based on a risk assessment of the likelihood of a potentially explosive atmosphere being present.

Gas Zone	ATEX Category		
Zone 0	Ga	Explosive atmosphere pre- sent continuously or for long periods, frequently	
Zone 1	Gb	Explosive atmosphere is likely to occur under normal conditions, occasionally	
Zone 2	Gc	Explosive atmosphere is unlikely to occur under nor- mal conditions, short periods	

Table 6 ATEX Category - Gas Zone

Dust Zone	ATEX Category		
Zone 20	Da	Explosive atmosphere pre- sent continuously or for long periods, frequently	
Zone 21	Db	Explosive atmosphere is likely to occur under normal conditions, occasionally	
Zone 22	Dc	Explosive atmosphere is un- likely to occur under normal conditions, short periods	

Table 7 ATEX Category - Dust Zone

4.3 Temperature Class

The Temperature Class rating of T1, T2, T3, T4, T5 or T6 for gases, indicates the classification for the maximum surface temperature for the device and therefore the the distance to the potential ignition temperature for a particular gas.

T Class	Maximum Surface Temperature
T1	450°C
Т2	300°C
ТЗ	200°C
T4	135°C
Т5	100°C
Т6	85°C

Table 8 Temperature Classification

4.4 Ignition Protection (h)

In environments with an explosive atmosphere, ignition protection categories serve to prevent ignition by not reaching high temperatures. The ignition protection categories are distinguished according to the type and function of the equipment and the probability an explosive atmosphere will occur.

The ignition hazard assessment identifies sources of ignition and these can then be dealt with in turn, through compliance with EN ISO 80079, (\rightarrow refer to "Ignition Hazard Assessment" document provided as part of the ATEX pack for full details of compliance).

Ignition Hazard		Measures Applied to Prevent the Ignition Source Becoming Effec- tive			
Potential Ignition Source	Description / Basic Cause (which causes originate which ignition hazard)	Reason for Assessment	Description of the Measure Applied	Basis Citation of Standard Technical Rules	
Hot Surface	 Losses dissipate into heat. 	The pump has a maximum temperature during normal operational conditions.	 Maximum temperature achieved during testing. HP rotor and maximum rated pressure applied. Test results recorded . Limitations on medium tem- perature and Maximum permit- ted pump speed. 	EN 80079-36:2016 6.2 EN 80079-36:2016 8.2 EN 80079-36:2016 10	
	 Over speed Excess pressure - discharge Operating outside of specified environmental conditions 	Exceeding oper- ating tempera- ture.	 Comply with specifications. 	EN 80079-36:2016 10 EN 80079-37:2016 5	
	 Bearing wear 	Exceeding oper- ating tempera- ture.	 Bearing life far in excess of the design parameters. Maintenance procedure to check. 	EN 80079-36:2016 10 EN 80079-37:2016 5	
	 Excess pressure - suction 				
	 Low/ poor lubricant Seal failure leading to bear- ing wear from lubricant loss 	Exceeding oper- ating temperature. Premature hose failure.	 Maintenance and installation instructions. Requirement to use motor overload relay. Motor supplied with PTCs. Factor of safety on surface temperature limit allows for substantial temperature rise. 	EN 80079-36:2016 10 EN 80079-37:2016 5 EN 80079-37:2016 6	
	 Swelling of hose in the pres- ence of particular solvents 	May cause over temperature	 The manufacture's instructions list of solvents which are known to be compatible. Requirement to use motor protection relay. Motors supplied with PTCs. 	EN 80079-36:2016 10	
Mechanical Sparks	 External impact, mechanical failure 	Potential impact from other source, falling object, been struck by mov- ing object.	 Material of manufacture is cast iron having less than 125J impact energy 	EN 80079-36:2016 6.4.2.2	
Flames, Hot Gases			 No flaming parts 		

Table 9 Ignition Protection (continued)



Ignition Hazard		Measures Applied to Prevent the Ignition Source Becoming Effective		
Potential Ignition Source	Description / Basic Cause (which causes originate which ignition hazard)	Reason for Assessment	Description of the Measure Applied	Basis Citation of Standard Technical Rules
Electrical Equipment	 Electric motor inside the assembly 	Electrical equip- ment is a pos- sible ignition source	 Only electrical equipment with certification of conformity is used 	IEC 60079 series
Stray Electrical, Currents and Cathodic Cor- rosion Protection			 No stray currents or cathodic corrosion 	
	 Static build up generat- ing spark 	Hose	 Static dissipative 	
Static Electricity	 Static build up generat- ing spark 	Plastic window, potential risk during cleaning a static build up may occur. No charging during normal opera- tion.	 Apply Cat 3 restrictions, if Cat 2 needed then change mate- rial of the window. EN13463-1:2009, 6.7.3 	EN 80079-36:2016 6.7.5
Lightning	 Lightning strike 		 End user to assess and pro- tect equipment accordingly 	EN 80079-36:2016 10
Electromag- netic Waves			 Not relevant 	
Ionising Radia- tion	 Use in radioactive area 		 Not relevant, not approved for use in radioactive area 	EN 80079-36:2016 10
High Frequency Radiation			 Not relevant 	
Ultrasonics			 Not relevant 	
Adiabatic Compression			 Not relevant 	
Mechanical strength	– Impact	Potential impact from other source, falling object, been struck by mov- ing object.	Main housing cast iron, no aluminium or similar to the external, plastic window front mounted but of a thickness to withstand impacts up to 7Nm see tests	EN 80079-36:2016 8.3.1
	 Hose burst 	Pressure in cas- ing too high. Occluded pump discharge	 Use the Verder recommended ATEX rated hose burst sensor 	EN 80079-36:2016 10 EN 80079-37:2016 5 EN 80079-37:2016 6
	 Housing vent blocked 	Pressure in cas- ing too high.	Clean regularly	EN 80079-36:2016 10
	 Dust collection on horizontal surfaces 	May cause over temperature.	 Unlikely on pump casing because of its geometry Regular maintenance to help ensure all surfaces remain clean 	EN 80079-36:2016 10

Table 9 Ignition Protection (continued)



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iDura 5-80 - Supplementary document ATEX

Ignition Hazard		Measures Applied to Prevent the Ignition Source Becoming Effective		
Potential Ignition Source	Description / Basic Cause (which causes originate which ignition hazard)	Reason for Assessment	Description of the Measure Applied	Basis Citation of Standard Technical Rules
Mechanical strength	 Rotor failure 	Rotor failure causing over temperature in motor	 Requirement to use motor protection relay. Motors supplied with PTCs. 	EN 80079-36:2016 10
Chemical Reaction	 Pump materials incom- patible with pumped media 	Hose burst exposing casing to media	End user/ sales applications engineer to ensure awareness of pump construction and compatibility of hose material with pumped media.	EN 80079-36:2016 10

Table 9 Ignition Protection



5 Limitations for use in ATEX Environment

5.1 **Speed Limitations**

Pump Type	Maximum output RPM	Minimum output RPM
D5, D7, D10, D15, D25 and D35	60 RPM	-
D5, D7, D10, D15 and D35	-	12.5 RPM
D25	-	16.7 RPM
D45	79RPM @ 5 Bar 59RPM @ 10 Bar 38RPM @ 16 Bar	12.5 RPM
D55/60	47RPM @ 5 Bar 38RPM @ 10 Bar 38RPM @ 16 Bar	12.5 RPM
D65	45RPM @ 6 Bar 40RPM @ 10 Bar 18RPM @ 16 Bar	12.5 RPM
D80	32RPM @ 6 Bar 24RPM @ 10 Bar 18RPM @ 16 Bar	12.5 RPM

Table 10 Dura 05-80 - Maximum /Minimum Output

Maximum Pressure 5.2

Pump Type	Maximum Discharge Pressure BAR		
D5 and D7	8 BAR		
D10 and D15	12 BAR		
D25 and D35	16 BAR		
D45, D55, D60, D65 and D80	16 BAR		

Table 11 Dura 05-80 - Maximum Pressure

5.3 **Maximum Temperature**

Pump Type	Maximum Medium Temperature	Maximum Ambient Temperature
D05-80	40°C	40°C

Table 12 Dura 05-80 - Maximum Temperature

5.4 Lightning Strike

- End user to take provision that pump will be protected ິງໃ
- against lightning strikes.

Ionising Radiation 5.5

Pump is not approved for use in radioactive area. ที Standard, background radiation is permissible (< 50,000 Bq) Motor Protection.

5.6 **Motor Protection**

- 1. Motor must have PTCs fitted and correctly installed.
- 2. Motor must be protected by motor overload relays or equivalent.
- 3. Motor must be protected in event of overload condition.
- 4. 'Ex' motors for vertical mounting (shaft down) should be equipped with a Drip Cover (Impact Canopy) over the Fan Cowl.

5.7 **Pumped Media**

The ATEX certification is only valid when pumping media that is approved by Verder. Using the pump with media that is not approved by Verder will make this certification void.

5.8 **Hose Material Limitation**

- The following hoses can be used on ATEX pumps ที (when applicable):
 - □ NBR Nitrile Rubber
 - □ NBR(F) Nitrile Rubber (food grade)
 - □ EPDM Ethylene Propylene Diene Monomer
 - NR Natural Rubber

The following hoses cannot be used on ATEX pumps:

□ CSM - Chlorosulfonated polyethylene □ Verderprene

Limitation for Inserts that can 5.9 be used

- The following inserts are suitable for use in an ATEX ົາໃ environment:
 - Stainless steel

The following inserts cannot be used on ATEX pumps:

□ PP - Polypropylene

PVDF - Polyvinylidene fluoride



5 Limitations for use in ATEX Environment (continued)

5.10 Lubricant Limitation

- The following lubricants are approved for use on Verder ATEX Dura pumps:
 - □ Verderlube blue
 - Verderlube clear

DANGER

Danger of explosion due to incompatible liquids

Verderlube is glycerine based lubricant and therefore cannot be used in applications that involve strong oxidizers.

- It is incompatible with hydrogen peroxide, potassium permanganate, nitric acid + sulfuric acid, perchloric acid + lead oxide, acetic anhydride, aniline + nitrobenzene, Ca(OCI)2, CrO3, F2 + PbO, KMnO4, K2O2, AgCIO4 and NaH.
- It reacts with acetic acid, potassium peroxide, sodium peroxide, hydrochloric acid, (HCIO4 + PbO) and Na2O2. Contact with potassium chlorate may be explosive.

Ensure Verderlube is not used as lubricant in applications that involve the above chemicals to avoid accidental mixture with pumped media in case of accidental hose burst.



Verdersil

6 Installation of Associated Components

Before installing the pump, always check the identification plate of the pump.

The ATEX classification must correspond with the conditions of the working environment.

6.1 Installing the Motor

- 1. Make sure the motor is suitable for use in a potentially explosive environment.
- 2. Make sure that the motor is properly connected to the power supply. Refer to the motor manual for the appropriate instructions.

VARNING

Earth connection

The power supply must include an earth connection.

6.2 Installing the Gearbox

- 1. Make sure the gearbox is suitable for use in a potentially explosive environment.
- Refer to the documentation of the gearbox for specific product information about operating in a potentially explosive environment.

6.3 Hose Burst Detection Kit

It is essential to use ATEX rated hose burst detection sensors to detect a potentially dangerous situation in time.

WARNING

Use similar of higher ATEX rated devices with pump

 Only use sensors that are approved by ATEX standards! The classification should be similar or higher than that of the pump.

6.4 Non-Standard Pump Orientations

There may be cases where the lubricant level cannot be visually monitored through the inspection window such as when the pump is fitted with metal inspection windows.

In these cases the customer should ensure that the pumps are installed with appropriated ATEX rated hose burst detection kit for additional protection (\rightarrow refer to section 6.3).

6.5 Grounding the Pump

The pump should be grounded before operation. This can be done either through motor earth wiring or alternately by grounding through the base frame.





7 Operation and Maintenance

Refer "Operation and maintenance manual" for instructions on use and maintenance of the pump units.

8 Periodic Inspection

- 1. Carry out the periodic inspections as given in the operating manual of the pump
- 2. In case of operating the pump in a potentially explosive environment, periodically inspect pump for:
 - Fluid leakage
 - Lubricant level
 - Hose burst detector
 - Surface temperatures
 - Dust deposits (if any)
 - Bearings

9 Ordering Spare Parts

For trouble-free replacement in the event of faults, we recommend keeping spare parts available on site.

The following information is mandatory when ordering spares for ATEX rated pump:

- If pump is ATEX rated, clearly mention that at the time of ordering
- Indicate the ATEX rating of the unit
- Pump model
- Year of manufacture
- Part number
- Serial number



10 List of Figures and Tables

10.1 List of Figures

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11 EC Declaration of Conformity

EC declaration of conformity according to machinery directive, appendix II A		
We, VERDER Ltd., Unit 3 California Drive, Ca hereby declare that the following machin	astleford le adheres to the relevant EC directives detailed below:	
Designation Vero Exc	derflex [®] Peristaltic Hose Pumps, Model Dura 05-80 cluding Motor and Gearbox	
EC Directives: • Machinery Directive (2006/42/EC) • Equipment intended for use in Potent	tially Explosive Atmospheres (ATEX) 2014/34/EU	
Classification, 😰 II 2 G Ex h IIB T4 Gb f Classification, 😰 II 2 D Ex h IIIB T120°C	for T ambient -5°C to 40°C C Db for T ambient -5°C to 40°C	
Notified Body for Technical File Storage:SGS Fimko Oy (0598)		
Dossier Receipt Number:BASEEFA18ATEX0155DRBASEEFA17ATEX0061DR		
Technical File Number: • 18-0155 • 17-0061		
 Harmonised Standards used: BS EN ISO 80079-36:2016 BS EN ISO 80079-37:2016 		
The pumps to which this declaration refe	ers may only be put into operation after they have been installed in the way pre-	
scribed by the manufacturer, and, as the	case may be, after the complete system of which these pumps form part, has	
been made to fulfil the requirements of D	Directive 2006/42/EC.	
On behalf of Verder, I declare that on t	the date the equipment accompanied by this declaration was sold, the equip-	
ment conforms to all technical and re-	gulatory requirements of the above listed directives.	
Manufacturer	Authorised Representative Established in EU (in accordance with Article 4, Regulation (EU) 2010/10/20)	
VERDER Ltd.		
Unit 3 California Drive	Verder Liquids B.V	
WE10 50H	3451 GG Utrecht	
UK	Netherlands	
Date: 09 / 08 / 2024	Company stamp / signature:	
	A Beliet	
	Anthony Beckwith	
	Head of Development/Construction	

Table 13 EC Declaration of Conformity





12 Declaration of Conformity (UK)

r		
We,		
VERDER Ltd., Unit 3 California Drive, Ca	istleford	
hereby declare that the following machine	e adheres to the relevant EC directives detailed below:	
Designation Verd	erflex [®] Peristaltic Hose Pumps, Model Dura 05-80	
Excl	uding Motor and Gearbox	
EC Directives:		
Supply of Machinery (Safety) Regulat	ions 2008	
 Equipment and Protective Systems In 	tended for use in Potentially Explosive Atmospheres Regulations 2016	
Classification, 🕼 II 2 G Ex h IIB T4 Gb fo	or T ambient -5°C to 40°C	
Classification, (Ex) II 2 G Ex h IIIB T120°C	Db for T ambient -5°C to 40°C	
Notified Body for Technical File Storage:		
SGS Fimko Oy (0598)		
Dessier Respirit Number:		
BASEEFA18ATEX0155DR		
• BASEFATTATEX0001DR		
Technical File Number:		
• 18-0155_UKCA		
• 17-0061_UKCA		
Harmonised Standards used:		
• BS FN ISO 80079-36:2016		
 BS EN ISO 80079-37:2016 		
The pumps to which this declaration refe	rs may only be put into operation after they have been installed in the way pre-	
scribed by the manufacturer, and, as the	case may be, after the complete system of which these pumps form part, has	
been made to fulfil the requirements of The Supply of Machinery (Safety) Regulations 2008.		
On behalf of Verder, I declare that on t	he date the equipment accompanied by this declaration was sold, the equip-	
ment conforms to all technical and reg	julatory requirements of the above listed directives.	
Manufacturer	VERDER Ltd.	
	Unit 3 California Drive	
	WE10 50H	
	UK	
Date: 09 / 08 / 2024	Company stamp / signature:	
Date. 037 007 2024	oompany stamp / signature.	
	A Belut	
	Anthony Beckwith	

Head of Development/Construction

Table 14 Declaration of Conformity (UK)





13 Trademarks

VERDERFLEX[®] is a registered trademark of Verder Liquids B.V. No permission is granted to use any Verder, trademarks or trade names included in this document without the prior written agreement of Verder Liquids B.V.

Tri-clamp® is a registered trademark of Alfa Laval Corporate AB.

Hypalon® is a registered trademark of RSCC Wire & Cable LLC.

Document History

Version	Description	Date	Approved
2.4	Nameplate updated.	09/22	ISH
2.5	D60, D80 added, ATEX classification revised	08/24	AJB