PRODUCT SPECIFICATION

CE 0051

Product PN	**GIS001A01S GIS001B01S GIS001C01S GIS001D01S GIS002A01S GIS002B01S GIS002C01S GIS002D01S**	**Mod. 984e-ext**
Description	**HI-FLO IV Set Adult 0.2/1.2 µm Easydrop/Eurodrop® single/double scale**	**Rev. 07**

HI-FLO IV Set Adult with 0.2/1.2 µm Filter, Regulator and Roller

PRODUCT DESCRIPTION	Infusion set infusion for intravascular applications. The device is sterile and is for gravity feed infusion only. The set has a vented IV drip chamber (20 drops/ml) and a male luer lock outlet with cap, compliant with ISO 80369-7. The set is provided with a vented Speedflow® Adult filter, with an hydrophilic PES membrane with 0.2/1.2 µm pore size for particles retention and a hydrophobic PTFE membrane with 0,03 µm pore size. The set also includes a roller and a flow regulator Easydrop/Eurodrop® single/double scale, to approximately regulate the flow rate. The set is provided with a y-injection site, for administration of additional drugs by means of a syringe using the same infusion line, and with a clamp. The approximate total length of the set is 2171 mm. The set includes the following components: ▪ Drip Chamber (20 drops/ml); ▪ Roller; ▪ Flow regulator Easydrop®/Eurodrop® single/double scale; ▪ Y-Injection point; ▪ Speedflow® Adult 0.2/1.2 µm IV Filter; ▪ Clamp; ▪ Male luer lock outlet with cap.
CONFIGURATIONS	**GIS001A01S** 0.2 µm with Easydrop® single scale **GIS001B01S** 0.2 µm with Easydrop® double scale **GIS001C01S** 0.2 µm with Eurodrop ® single scale **GIS001D01S** 0.2 µm with Eurodrop ® double scale **GIS002A01S** 1.2 µm with Easydrop® single scale **GIS002B01S** 1.2 µm with Easydrop® double scale **GIS002C01S** 1.2 µm with Eurodrop ® single scale **GIS002D01S** 1.2 µm with Eurodrop ® double scale
MANUFACTURER NAME	**GVS S.p.A.** Via Roma, 50 – 40069 Zola Predosa (BO) – Italy Phone : +39.051.6176311 – Fax: +39.051.6176200 email: gvs@gvs.it – website: www.gvs.com
INTENDED USE / APPLICATION	Infusion of Drugs (including chemotherapy), Anesthetics, Nutritional Solutions and Saline Solutions for intravascular applications. The set can be connected via Luer Locks to all commercially available infusion administration sets compliant with ISO 80369-7. The set is for gravity feed infusion. The set with 0.2 µm filter is intended specifically to eliminate air bubbles and to retain particles and bacteria, while the set with 1.2 µm filter is intended specifically to eliminate air bubbles and to retain fungi and microorganisms. The set is a single-use device that can be used applications that last: ▪ Devices with 0.2 µm filter: up to 96 hours; ▪ Devices with 1.2 µm filter: up to 24 hours. The set has to be disposed after each therapy. Sets with 0.2 µm filter cannot be used for infusion of hyper alimentation liquids, lipids, blood and/or blood derivatives. Sets with 1.2 µm filter cannot be used for infusion of blood and/or blood derivatives. The device should only be supervised and used by qualified healthcare personnel.
CLASS OF THE PRODUCT	Class IIa – sterile – single use Rule 2 and 3 Annex VIII 2017/472/UE

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EMDN

A03010102 INFUSION CONTROLLERS WITH FILTER (ALSO TRANSFUSION CONTROLLERS)

MATERIALS

Filter media: PES Hydrophilic membrane / PTFE Hydrophobic membrane
Filter housing: MBS
Tubes: PVC (DEHP Free)
Flow Regulator: SEBS / ABS / Alkyl Polysiloxane
Roller: HDPE
Drip Chamber: ABS / PVC (DEHP Free) / LDPE / HDPE / PA6.6 / NY
Y-injection: SEBS / MABS
Clamp: PP / LDPE
Luer Lock: MABS
Caps: HDPE / PE

Regulatory Compliance:

- Biocompatibility according to ISO 10993-1
- Rohs, directive 2011/65/EU
- DEHP plasticizer Free
- Latex free
- Reach 1907/2006/CE (hazardous substances regulation)
- Reg. 1272/2008/CE (classification, labelling and packaging of substances and mixtures)

PRODUCT CHARACTERISTICS

Physical/Mechanical:

Approximate total length:	2171 mm
Total internal volume of the set:	32.0 ml
Weight (approx.):	47 g
Input/output connectors:	Male luer lock outlet with cap compliant with ISO 80369-7
Operating temperature Range:	From 5 °C to 40 °C
Storage temperature Range:	From 0 °C to 40 °C

Biological:

Biocompatibility:	Compliant with ISO 10993-1

Features:

Type of administration:	gravity
Duration of the application:	0.2 µm up to 96 hours 1.2 µm up to 24 hours
Filter:	Speedflow Adult 0.2/1.2 µm vented
Filter pore size:	0.2/1.2 µm
Filter internal volume:	< 2.4 ml
Filter media:	hydrophilic PES membrane and hydrophobic PTFE membrane
Flow Regulator:	Easydrop®/Eurodrop® single/double scale
Drip Chamber:	Yes – 20 drops / ml
Roller:	Yes
Y-injection site:	Yes
Clamp:	Yes
Tubing:	PVC tube – inner Ø 3.0 mm / outer Ø 4.1 mm

PRODUCT SHELF LIFE

5 years

STERILIZATION

Sterile:	Yes – EtO
Suitable for Sterilization/Re-sterilization:	No

APPLICABLE STANDARDS AND REGULATIONS

Product Certification:
CE mark

Applicable Standards and Technical Regulations:

EN 556-1	Sterilization of medical devices — Requirements for medical devices to be designated "STERILE" — Part 1: Requirements for terminally sterilized medical devices
EN ISO 8536-4	Infusion equipment for medical use — Part 4: Infusion sets for single use, gravity feed
EN ISO 8536-11	Infusion equipment for medical use — Part 11: Infusion filters for single use with pressure infusion equipment

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	EN ISO 8536-13	Infusion equipment for medical use — Part 13: Graduated flow regulators for single use with fluid contact
	EN ISO 8536-14	Infusion equipment for medical use — Part 14: Clamps and flow regulators for transfusion and infusion equipment without fluid contact
	EN ISO 10993-1	Biological evaluation of medical devices — Part 1: Evaluation and testing within a risk management process
	EN ISO 10993-4	Biological evaluation of medical devices — Part 4: Selection of tests for interactions with blood
	EN ISO 10993-5	Biological evaluation of medical devices — Part 5: Tests for in vitro cytotoxicity
	EN ISO 10993-7	Biological evaluation of medical devices — Part 7: Ethylene oxide sterilization residuals
	EN ISO 10993-10	Biological evaluation of medical devices — Part 10: Tests for irritation and skin sensitization
	EN ISO 10993-11	Biological evaluation of medical devices — Part 11: Tests for systemic toxicity
	EN ISO 10993-18	Biological evaluation of medical devices — Part 18: Chemical characterization of materials
	EN ISO 10993-23	Biological evaluation of medical devices — Part 23: Tests for irritation
	EN ISO 11135	Sterilization of health-care products — Ethylene oxide — Requirements for the development, validation and routine control of a sterilization process for medical devices
	EN ISO 11607-1	Packaging for terminally sterilized medical devices — Part 1: Requirements for materials, sterile barrier systems and packaging systems
	EN ISO 11607-2	Packaging for terminally sterilized medical devices — Part 2: Validation requirements for forming, sealing and assembly processes
	EN ISO 13485	Medical devices — Quality management systems — Requirements for regulatory purposes
	EN ISO 14971	Medical devices — Application of risk management to medical devices
	EN ISO 15223-1	Medical devices — Symbols to be used with medical device labels, labelling and information to be supplied — Part 1: General requirements
	EN ISO 20417	Medical devices — Information to be supplied by the manufacturer
	IEC 62366-1	Medical devices — Part 1: Application of usability engineering to medical devices
	EN ISO 80369-1	Small-bore connectors for liquids and gases in healthcare applications — Part 1: General requirements
	EN ISO 80369-7	Small-bore connectors for liquids and gases in healthcare applications — Part 7: Connectors for intravascular or hypodermic applications
	EN ISO 80369-20	Small-bore connectors for liquids and gases in healthcare applications — Part 20: Common test methods

INSTRUCTIONS FOR USE	**A**vailable languages: English / Italian / German / French / Spanish
PACKAGING	**Primary Packaging:** Devices are individually packed and label in medical paper bags. Bag Size: 150 X 250 mm **Secondary Packaging:** Bags are placed inside a microperforated sack. **Tertiary Packaging:** Carton Box. Box Size: 60 x 40 x 20 cm Box Weight: 4.5 kg Devices per box: 70
CERTIFICATIONS	**ISO 9001:2015** **ISO 13485:2016** **CE Certificate (2017/745/UE)**

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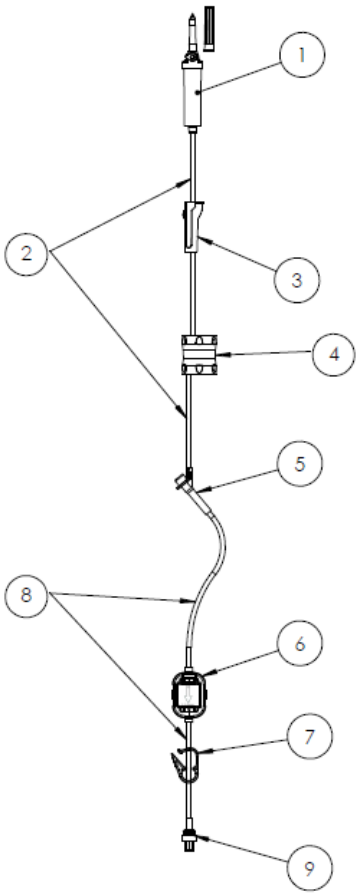
DRAWING



ID	Description
1	Drip Chamber 20 drops/ml
2	Tube 75 cm – inner Ø 3.0 mm / outer Ø 4.1 mm
3	Roller
4	'A' model: Flow Regulator Easydrop® single scale 'B' model: Flow Regulator Easydrop® double scale 'C' model: Flow Regulator Eurodrop® single scale ''D model: Flow Regulator Eurodrop® double scale
5	Y-Injection site
6	'1' model: Speedflow Adult 0.2 µm IV filter '2' model: Speedflow Adult 1.2 µm IV filter
7	Clamp
8	Tube 15 cm – inner Ø 3.0 mm / outer Ø 4.1 mm
9	Male Luer Lock with cap

REVISIONS AND APPROVALS:

DATE	REV.	REASON FOR CHANGE	ISSUED BY: (name/function/signature)	VERIFIED BY: (name/function/signature)	APPROVED BY: (name/function/signature)
26/02/2023	00	First issue	Barbara Palmieri RA Specialist	Barbara Finessi QA Manage	Luca Zanini VP Healthcare and Lifesience