



- Certified Management System
- EN ISO 9001
- EN ISO 13485

ascor
MEDICAL EQUIPMENT

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Single-Syringe Pump **AP14** and Double-Syringe Pump **AP24+**

Simple, safe & reliable

Designed to meet the needs of modern I.V. therapy in neonatal/pediatric/adult ICU, CCU, anesthesia, cardiology and oncology.



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Key features:

- user friendly software simplifies set-up and operation
- large & easily reachable LCD display
- wide range of infusion rate
- over 55 types of compatible syringes (5 - 60 ml)
- drug dose calculation
- automatic & manual bolus capability
- automatic reduction of residual bolus after occlusion release
- easy modification of infusion parameters in running course
- comprehensive system of audible and visual alarms & warnings
- drug library with user selectable drug names
- RS 232C interface
- long battery life
- data lock with a software-controlled passkey system
- event log (up to 2000 events recorded in real time): on-screen display or as XML file
- 4 modes of operation: flow rate, flow rate and volume, flow rate and time, volume over time

Please visit our web-site: www.ascor-med.com.pl to get a detailed information about our whole product range.

Single-Syringe Pump AP14 and Double-Syringe Pump AP24+

Performances:

Flow rate range: in 0,1 ml/h steps	0,1 ÷ 2000 ml/h for 50/60 ml syringe 0,1 ÷ 1200 ml/h for 30 ml syringe 0,1 ÷ 1000 ml/h for 20 ml syringe 0,1 ÷ 600 ml/h for 10 ml syringe 0,1 ÷ 400 ml/h for 5 ml syringe
Volume to be infused:	0,1 ÷ 999,9 ml, programmable in 0,1 ml steps
Maximum bolus rate:	to 2000 ml/h for 50/60 ml syringe to 1200 ml/h for 30 ml syringe to 1000 ml/h for 20 ml syringe to 600 ml/h for 10 ml syringe to 400 ml/h for 5 ml syringe
Bolus dose / Induction dose:	limited to syringe size
Infusion time:	up to 99 h 59 min 59 sec
KVO rate:	0 ÷ 5 ml/h, programmable co 0,1 ml/h steps
Flow rate accuracy:	± 2 % (complies with EN 60601-2-24)
Occlusion pressure limit:	9 - levels user selectable: 40 ÷ 120 kPa (300 ÷ 900 mmHg), programmable in 10 kPa (75 mmHg) steps
Compatible syringes:	5/6, 10, 20, 30, 50/60 ml
Syringe brands:	B.BRAUN, BD, MONOJECT, CODAN, TERUMO, IVAC, INJECTOMAT, PENTAFERTE and other (see operating manual)
Extended system of alarms and warnings (both audible and visual):	Alarms: no syringe, wrong syringe, empty syringe, end of infusion, occlusion, no mains, discharged battery, internal malfunction. Prealarms: 5 minutes left to the end of infusion or till the syringe gets empty, low battery
Mass units programming:	µg/h, mg/h, µg/kg/h, mg/kg/h, µg/kg/min, mg/kg/min
Drug concentration:	0,01 µg/ml ÷ 9999 mg/ml
Patient weight:	up to 300 kg, programmable in 0,01 kg steps

Technical specifications:

Power supply:	100 - 240 V AC, 50/60 Hz or from a built in rechargeable battery, optional 12 - 15 V DC for transport applications
Power consumption:	AP 14 - max. 10 VA; AP 24+ - max. 15 VA
Built-in battery:	rechargeable, NiMH 1300 mAh
Battery life:	24 h at flow rate of 5 ml/h 4 h at flow rate of 100 ml/h
Battery charging time:	24 h
Classification:	Class I, type CF, defibrillation proof, IP42
Conformity standards:	EN 60601-1, EN 60601-1-2 (EMC), EN 60601-2-24, MDD 93/42/EEC: IIb
Pump mass:	AP 14 - 2,5 kg; AP 24+ - 4,2 kg
Dimensions (W x H x D):	AP 14 - 320 x 150 x 180 mm; AP 24+ - 323 x 160 x 282 mm
Operating conditions:	+5° to +40° C, relative humidity: 20% ÷ 90%

Other functions:

External alarm socket:	24 V, 1 A
Other functions:	anti-bolus system (ABS) automatic syringe size recognition battery life indicator multiphase infusion (PROFILE mode) user adjustable drug library event log (2000 events) programmable name of ward infusion pressure monitoring infusion parameters protected by a password priming STAND-BY extended menu of user tests and service tests

Note: Specifications and design are subject to change for improvement without notice

version AP14_AP24+/2/2015/EN