

CRONO PAR 30

REF: PS3VL



Ambulatory infusion pump

INTENDED PURPOSE

CRONO PAR 30 is an ambulatory pump for subcutaneous infusions of apomorphine in the treatment of Parkinson's disease.

PUMP DESCRIPTION

CRONO PAR 30 is a medical device.

CRONO PAR 30 is an union of high technology and innovative design. Its compact size and light weight make it ideal for home use.

CRONO PAR 30 uses 30 ml dedicated reservoirs.

The main features of the pump are:

- the possibility of selecting two different operation modes: the **FrEE** mode, with base-level functions, and the **Auto** mode, with advanced functions for patients with greater therapeutic demands;
- a clock allowing administration of different flow rates over a 24-hour period;
- twin microcontrollers making the device safer and more reliable.

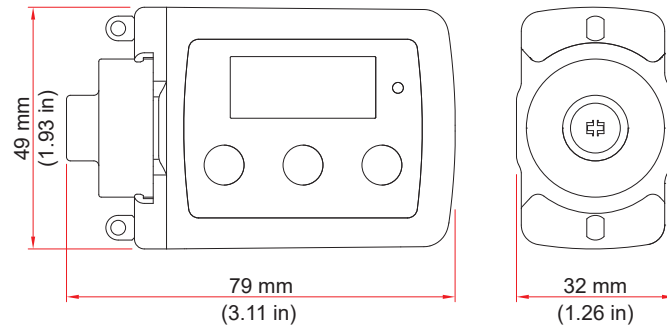
The pump is equipped with a settings lock to prevent incorrect or unauthorised administration.

The pusher mechanism, which operates directly on the rubber piston of the reservoir, enables the pump to combine high delivery pressure with excellent precision while administering the drugs.

CRONO PAR 30 is provided with a liquid crystal display (LCD) which shows practical information to the doctor and patient about the settings, operations and diagnostics of the pump.

TECHNICAL FEATURES

Pump dimensions



Pump weight	127 g (4.48 oz.), including battery
Battery	Lithium CR123A 3V (battery life about 90 infusions)
Single-use reservoir	Dedicated with a 30 ml capacity and a Luer-Lock universal security attachment
Administrable volumes	Programmable, from 1 to 30 ml in increments of 1 ml
Prime function	Only available at the start of the infusion. The maximum deliverable volume is 1.5 ml
Flow rates in FrEE mode (F1, F2, F3)	<p>Programmable from:</p> <ul style="list-style-type: none"> • 0.05 ml/h to 1.00 ml/h in increments of 0.01 ml/h • 1.00 ml/h to 3.00 ml/h in increments of 0.02 ml/h • 3.00 ml/h to 5.00 ml/h in increments of 0.05 ml/h <p>F2 and F3 may also be programmed to 0.00 ml/h or to OFF (flow rate display disabled)</p>
Selectable flow rates in FrEE mode	3, all programmable
Flow rates in Auto mode (F0, F1, F2, F3)	<p>F1, F2, F3 programmable from:</p> <ul style="list-style-type: none"> • 0.05 ml/h to 1.00 ml/h in increments of 0.01 ml/h • 1.00 ml/h to 3.00 ml/h in increments of 0.02 ml/h • 3.00 ml/h to 5.00 ml/h in increments of 0.05 ml/h <p>F0 is fixed to 0.00 ml/h</p>
Selectable flow rates in Auto mode	4, 3 of which are programmable and 1 is fixed to 0.00 ml/h (F0)
Bolus dose	Programmable from 0.00 to 2.00 ml in increments of 0.033 ml
Interval between boluses	<p>Programmable from:</p> <ul style="list-style-type: none"> • 5 min to 1 h in increments of 5 min • 1 h to 24 h in increments of 15 min <p>This function can be disabled by setting no,Lt</p>
Shot volume	33 µl (minimum quantity administered at each motor rotation)
Flow rate precision	+/- 2 %
Occlusion pressure	2.2 bar +/- 1 (PL1) ; 3.2 bar +/- 1.5 (PL2) ; 4.2 bar +/- 1.5 (PL3)
Post-occlusion bolus	About 0.6 ml (PL1), 0.8 ml (PL2), 1.0 ml (PL3)
Settings memory	All settings are automatically stored in a flash memory which is retained even if the device is left without a battery
Display	Liquid crystal display (LCD) (dimensions 11 x 28 mm; 0.43 x 1.1 in)
Motor	Coreless DC motor, the rotation of which is controlled by an infrared system
Settings lock	Two configurable levels
Electronic circuits with twin microcontrollers	Ensures a more reliable and safer infusion system
Safety circuits	These check that the device is functioning correctly, intervening in the event of any anomaly with sounds and messages on the display
Ingress protection rating	IP 42
Buzzer sound pressure level	53 dBA +/- 5 dBA
Warranty	2 years from the date of purchase against any material or manufacturing defects
Standard equipment	CRONO PAR 30 ambulatory pump, Carry-case, Elastic belt, Fabric case, Collar strap, 2 Batteries (1 of which in the pump), Battery-cover opening tool, Instructions for use
Environmental conditions for use	+5°C / +40°C 15% / 90% RH (non-condensing, water vapour partial pressure max 50 hPa) 700 hPa / 1060 hPa
Environmental conditions for storage and transport	-25°C / +70°C 15% / 90% RH

