

running machine: **pluto® It med**

manufacturer: h/p/cosmos® sports & medical gmbh / Germany
order number: cos30027va02
applications: endurance training walking and running,
stress device for performance testing,
gait analysis and gait training

control: via UserTerminal MCU5 with keyboard and display,
integrated interface or via optional remote control

running surface: L: 150 cm (4ft 11.06") W: 50 cm (1ft 7.69")
special sizes available at extra charge
access height: 23 cm (9.06")
running belt with slip resistant surface
max. permissible load: 250 kg (551 lbs)

speed range: 0.0...18.0 km/h (0.0...5.0 m/s) (0.0...11.2 mph)
available at extra charge:
0.0...22.0 km/h (0.0...6.1 m/s) (0.0...13.6 mph)

acceleration: 7 acceleration / deceleration levels
between 131 s and 3 s from 0 to max. or from max. to 0;
equals 0.038... 1.66 m/s²
levels 1 to 4 enabled, levels 5 to 7 on request
programmable via para control PC software

elevation: 0.0...20.0 % (0.0...11.31°) motorized adjustment
available at extra charge:
0.0...25.0 % (0.0...14.03°)

running direction: switch for reversing belt direction at extra charge.
Max. permissible reverse speed 5 km/h (3.1 mph) if
no safety-harness with fall-stop prevention system is used.

motor system: 2.2 kW (3 PS) 3-phase AC motor, maintenance free and
brushless. For high-performance applications we
recommend models with a 3-phase 3x400 volt power supply
and a running surface min. 190/65 cm.

power transmission: frequency inverter, poly-V-belt, very quiet operation

safety systems: CE0123; medical device directive 93/42/EEC
machinery directive 2006/42/EC;
ISO 20957-1;EN 957-6; EN 14971; EN ISO 13485;
IEC60601-1; EN 60601-1-2 (EMC approved); IEC 62304
emergency-off safety stop switch (mushroom push button
for drive system power-off); emergency stop switch
(safety lanyard with actuator, pull cord and clip);
potential equalization bolt;
transformer for potential-isolation from the mains.

degree of protection: appliance class I (Ⓛ) / type B (⚡) / IP 00

classification: medical device risk class IIb according to MDD,
active therapeutic medical device and
active diagnostic medical device

usage class: S, I according to ISO 20957-1

accuracy class: A (high accuracy) according to EN 957-6

earth leakage current < 0.2 mA

ambient condition: temperature: 0...+40 °C
humidity: 20...90 %
air pressure: 700...1060 hPa;
3,000 m (~10500 ft) max.altitude without pressurization

display (resolutions): 6 LCD displays, 4 LEDs for operation modes,
20 LEDs for display of units & profile no, steps, etc.
speed (0.1 km/h or m/s or m/min or mph), time (00:00) in
hours, minutes & seconds, elevation (0.1 % or degrees)
distance (1 m...999.9 km or miles), METS (1 MET)
program step/number, energy (1 kJ/kcal), fitness index (1)
power (1 Watt), heart rate (1 bpm / beat per minute) optional

heart rate monitoring: optional, wireless with chest belt

digital interface: 1 x RS 232 com1 with 9600 bps: incl. PC-protocol,
h/p/cosmos coscom® & printer protocol serial.
option extra charge: USB-RS232-converter;
com2; com3 with 115200 bps; com4.

profiles / programs: -6 exercise profiles (scalable, more than 100 variations)
-11 test profiles (UKK 2 km Walktest, Bruce, Graded test,
Naughton, Ellestad, Gardner, Conconi, Ramp, etc.)

PC software (incl.):	-8 free definable programs with 40 program steps each h/p/cosmos para control® for display & remote control including 1 x RS232 interface cable 5 m (16ft 4.85").
PC software: (extra charge)	h/p/cosmos para graphics®, para analysis® & para motion®. PC software for control, monitoring, recording & analysis.
accessory (incl.):	instruction for use, lubrication oil, allen-key
colour of frame:	pure white RAL 9010 (powder coated)
handrails:	steel tube handrails \varnothing 60 mm on both sides; length: 620 mm; square cross-tube between pillars; UserTerminal between pillars. steel tube handrails are easy removable and can be replaced by special handrails. front-crossbar \varnothing 30 mm at extra charge.
voltage supply:	200...240 volt AC 1~N/PE 50/60 Hz 15-16A fuse; dedicated circuit, line and protection;
device dimensions:	L: 209 (+/-1) cm (6ft 10" +/- 1/2") B: 86 (+/-1) cm (2ft 9.9" +/- 1/2") H: 131 (+/1) cm (4ft 3.6" +/- 1/2")
net weight:	device approx. 230 kg (507 lbs)
gross weight:	device approx. 320...350 kg (704...770 lbs)
weight and dimensions may differ depending on accessories.	

Optionally available at extra charge are special frame colours, other handrail designs, special voltage supply and other options and accessories. Weight and package specifications can deviate according to options, accessories packing and way of transport. E&OE. Subject to alterations without prior notice. Please consider the natural and physical performance limitations of the single phase 230 volt power supply. The single phase 230 volt power supply is sufficient up to normal fitness or therapy applications. For all special high performance applications (speed running, controlled jump-ons, sidesteps, heavy subjects at higher speed, extreme elevations, etc.), we recommended models with a 3-phase, 3x400 volt power supply (for example model h/p/cosmos quasar med 3p, pulsar 3p, venus or saturn).

Warning! Installation, commissioning, instruction, maintenance and repair work only to be conducted by h/p/cosmos trained and authorized personnel. For treadmills with oversized deck (width >65cm), for children, special applications, without sufficient safety space behind the treadmill, for subjects and / or patients with health or other limitations (e.g. visual impairment, etc.), for running at high speed and / or for all individuals, where a fall triggers a dangerous risk of injury or death (e.g. newly operated hip patients, invasive probes, etc.), a fall prevention system is obligatory (e.g. safety arch with chest belt and harness or a weight support system). For more information see the instructions for use. Safety space behind the treadmill: min. L: 2 m (6ft 6.74") x treadmill width. Children are only allowed to be on the treadmill, if under permanent supervision and secured by a fall prevention system.