



running machine: **pulsar® 3p**
 manufacturer: h/p/cosmos sports & medical gmbh / Germany
 order number: cos30004va04
 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: 190 cm (6ft 2.8") B: 65 cm (2ft 1.6")
 special sizes available at extra charge
 access height: 23 cm (9.06")
 - shock load reduction for the joints
 - running belt with slip resistant surface
 - reinforced running belt with profiled surface, 5 mm thick
 - max. permissible load: 200 kg (440 lbs)
 - optional 300 kg (660 lbs) at extra charge
 speed range: 0...40.0 km/h (0...11.1 m/s) (0...24.8 mph)
 special speed available at extra charge:
 0...10 km/h (0...6.2 mph)
 0...45 km/h (0...27.8 mph)
 acceleration: 7 acceleration / deceleration levels
 between 131 s and 3 s from 0 to max. or from max. to 0;
 equals 0.084... 3.70 m/s²
 programmable via para control PC software
 elevation: -25.0 %...+25.0 % (-14.0°...014.0°) motorized adjustment,
 (up to -25 % when using reverse belt rotation)
 running direction: switch for reversing running belt direction as standard,
 max. permissible reverse speed 5 km/h (3.1 mph) if no
 safety-harness with fall-stop prevention system is used.
 motor system: 4.3 kW (5.8 PS) 3-phase AC motor, maintenance free and
 brushless; 20 years warranty on main drive motor.
 power transmission: frequency inverter, poly-V-belt, very quiet operation
 safety systems: CE0123; medical device directive 93/42/EEC +
 2007/47/EC; MDD; machinery directive 2006/42/EC;
 IEC 60601-1; EN 60601-1-2 (EMC approved);
 EN 60601-1-6; EN 62304; EN 62353; ISO 20957-1;
 EN 957-6; EN 14971; EN ISO 13485;
 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 20
 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: +10...+40 °C (-30...+50 °C on request)
 humidity: 30...70 % (up to 100 % on request)
 air pressure: 700...1060 hPa; 3,000 m (~10,000 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)
 heart rate monitoring: POLAR W.I.N.D: coded, wireless transmitter;
 ECG-accurate measurement;
 automatic control of speed and elevation according to
 programmed target heart rate ("cardio mode")
 digital interface: 2 x RS 232 com1 & com2 with 9600 bps: incl. PC-protocol,
 h/p/cosmos coscom® & printer protocol serial.
 option extra charge: USB-RS232-converter;
 com3 with 115200 bps;
 programs: 42 programs / profiles

- 6 exercise profiles (scalable, more than 100 variations)
- 28 test profiles (UKK 2 km Walktest, Bruce, Graded test, Naughton, Ellestad, Gardner, Conconi, Ramp, etc.)
- 8 free definable programs with 40 program steps each

PC software (incl.): h/p/cosmos para control® for display & remote control;
h/p/cosmos para graphics® for recording & visualization;
including 2 x RS232 interface cable
(1 x 5 m (16 ft 4.85")), 1 x 10 m (32 ft 9.70")).

PC software:
(extra charge) h/p/cosmos para analysis® & para motion®.

accessory (incl.): PC software for monitoring, recording & motion analysis.
user manual, drinking bottle holder with 2 h/p/cosmos 0.5 l
bottles, service box, special oil, 5 m (16ft 4.85") PE
potential equalization cable

colour of frame: pure white RAL 9010 (powder coated)

handrails: steel tube handrails Ø 60 mm on both sides,
over 1/3 of treadmill length with front-handrail crossbar
other handrail designs at extra charge

voltage supply: 400 Volt AC 3~/N/PE 50/60 Hz 15-16A fuse;
dedicated circuit, line and protection;

size of frame: L: 250 cm (8ft 2.4") B: 105 cm (3ft 5.3")
H: 145 cm (4ft 9.1")

net weight: device approx. 384 kg (847 lbs)

gross weight: device approx. 590...640 kg (1300...1410 lbs)

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.