

Durable and Lightweight Plastic Urinals

For construction sites, roadworks, outdoor events,
portable toilet manufacturers, and dry composting
toilets

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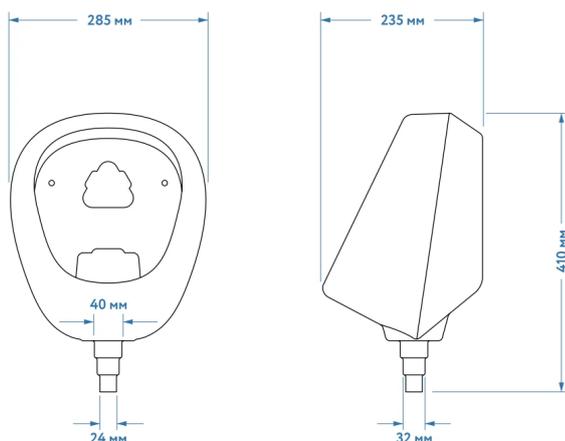
Urinals



Pi-Pi Standard

Portable toilet urinal with closed-top waterless design. Clog protection for site cabins and welfare units. Easy maintenance.

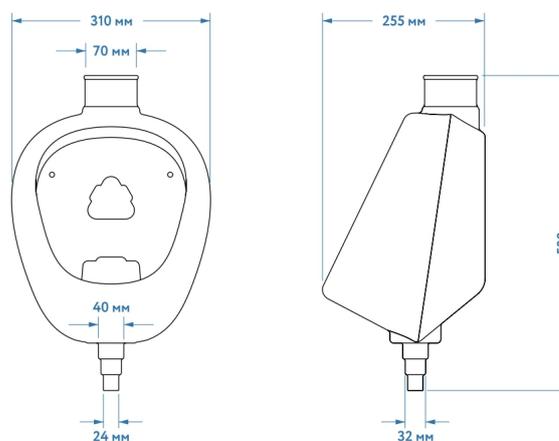
Width	285 mm
Height	410 mm
Depth	235 mm
Outlet, Ø	24 / 32 / 40 mm
Top Inlet, Ø	none
Weight	1.4 kg



Pi-Pi Standard+

Portable toilet urinal with top connection for ventilation or water supply. Bestseller for site cabins, welfare units, and OEM manufacturers.

Width	310 mm
Height	500 mm
Depth	255 mm
Outlet, Ø	24 / 32 / 40 mm
Top Inlet, Ø	70 mm
Weight	1.5 kg



Compatibility with Portable Toilets and Urine Diversion Systems

Pi-Pi Standard+ connects via a stepped drain Ø24/32/40 mm to a standard PVC pipe, and the ventilation channel through the top opening Ø70 mm. The drainage is directed to a holding tank, composting reservoir, or sewer. Compatible with separating toilets – Separrett, Biolan, Green Toilet, and other systems accepting liquid fraction through standard drainage connection. Seamless replacement of other urinals: stepped outlet Ø24/32/40 mm connects to the existing pipe without changes, top opening Ø70 mm connects to the existing ventilation channel without changes.

What is LLDPE and Why is it Used in This Application

LLDPE is linear low-density polyethylene with short-chain branching. Unlike regular LDPE and rigid HDPE, it combines high impact strength with flexibility over a wide temperature range. Our material density is 0.935–0.940 g/cm³, melt flow index 4–8 g/10 min (190°C / 2.16 kg). This is the standard grade for rotational molding of industrial containers and sanitary equipment operating in harsh conditions.

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Service Life

7–10 years

With proper use and the presence of UV stabilizers in open site conditions.

Temperature Range

-30°C ... +60°C

Maintains impact strength in frost. Does not soften or deform in summer heat at an open site.

Wall Thickness

4–5 mm

Seamless wall without joints and mold parting lines. Uniform thickness across the entire surface, including corners and necks.

Product Weight

1.4–1.5 kg

One installer sets up without tools in 2–3 minutes. Critical for sites with frequent equipment relocation.

Carbon Black Content

2.5%

Carbon black is distributed throughout the wall thickness, not just applied on top. Blocks UV radiation and prevents photodegradation of the polymer chain.

ESCR (ASTM D1693)

>1000 h

According to ASTM D1693 (Condition C, 100°C, 10% Igepal): F50 > 1000 h. Relevant for contact with concentrated disinfectants and surfactants.

Comparison of LLDPE and PP Materials: Advantages and Disadvantages

	LLDPE (Pi-Pi)	PP
Impact Strength in Frost	High – the material retains elasticity, does not break upon impact	Low – PP homopolymer (standard for rotomolding) is brittle below 0°C, breaks upon impact or fall
UV Resistance	High – 2.5% carbon black protects the entire wall thickness, not just the surface	Lower than LLDPE – due to tertiary hydrogen in the PP chain, it degrades faster at the same stabilization level. Typical outdoor lifespan – 2–4 years
Suitability for Rotomolding	Optimal – wide processing window, uniform melting, seamless monolithic wall	Used, but requires precise temperature control. Narrower processing window increases the risk of surface defects
Chemical Inertness	Complete – neutral to ammonia, uric acid, and chlorine-containing disinfectants	Good – prolonged contact with concentrated chlorines may cause surface degradation
Behavior Under Impact or Vandalism	Deforms without breaking – bends and returns to shape	Brittle fracture – cracks without prior deformation
Lifespan in Rental Fleet	7–10 years with proper usage conditions	3–5 years at open sites without guaranteed UV protection

Why choose the manufacturer Pi-Pi?

Direct Manufacturer, EU

We operate from a warehouse in Estonia, ensuring quick dispatch and delivery within the European Union without customs delays. This means short delivery times and predictable logistics for our clients across Europe.

15 Years in Manufacturing

We have been in operation since 2011, starting with the production of ATV boxes using rotational molding. Over 15 years, we have gained significant experience working with linear low-density polyethylene (LLDPE) and today specialize in sanitary equipment for professional use.

Batch Quality Control

Each batch undergoes geometry checks, wall thickness measurements, and destructive testing of samples. A 12-month warranty covers manufacturing defects.

Order from 1 Unit

Minimum order is 1 unit. Volume pricing starts from 10 units and is available to all without prior framework agreement.

Private Label from 100 Units

Customer logo is integrated during molding—not a sticker, but part of the product. Available from 100 units per batch. OEM configuration support available.

Sample Deducted from Order

We provide product samples. The sample cost is credited towards your first order, allowing you to assess quality before making a large purchase.



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