Before unpacking the machine, you must be sure that the area where the machine will be placed has been prepared properly. The **countertop** should be level and firm enough to carry the weight of the machine (up to 45 kg, 100 lbs), even when force is applied to it (to lock in the filter holders, tamp the coffee bed, etc.).

For the **feed through of the water hoses and electrical cables** drill a hole of 42 mm (1¾”) diameter in the counter. This 42 mm diameter will fit the mains plug, once the mains plug is fed through, the pump plug and other feeds will fit through the same hole. The centre of the hole should be approximately in the middle of the machine and between 200 and 250 mm (8” and 10”) from the back of the machine. Ensure that this hole is not above the knock-box when it is planned as a “drawer” under the countertop!

Smallest diameter hole that will fit:
- Mains power cable plug: 42 mm  (this will fit all other hoses and cables as well)
- Mains power cable: 12 mm
- Pump cable plug: 35 mm
- Pump cable: 9 mm
- Drain hose: 20 mm
- Water supply hose connector: 24 mm
- Water supply hose: 12 mm

Two options for feed through (red circles) in countertop. Left: all feeds will fit through a single 42 mm hole. Right: two holes. The left is for power mains, water supply and pump cable, the right is for water discharge.
A third option is a hole in an upright behind the machine. The height of the machine is 310 mm (top cup-rail), the top of the valves measure 370 mm.

⚠️ Caution!
Installation of and maintenance on the Speedster should be done by a qualified technician. Parts of the machine can reach a temperature of close to 140 °C (284 °F). The steam/hot water boiler contains water and pressurised steam of 135 °C at 2.2 Bar overpressure (275 °F at 32 PSI), temperature and pressure in the coffee system reaches up to 96 °C at 12 Bar overpressure (205 °F at 175 PSI).

☠️ Danger
We cannot be held responsible for damage and/or injuries resulting from actions performed on our machines by non-qualified personnel.

Water supply from a water treatment system must be nearby (max. 1.5 meter, 5 ft) to the machine. The water supply hose that comes with the machine has a half ball at the end and a 3/8" nut connector. Discharge may not be further away than 1.5 meters, have an internal diameter of at least 23 mm (1") and should be fitted out with a syphon.

There must be space nearby to locate the water pump with its electric motor (DxWxH: 30x20x25 cm; 12x8x10") and a water treatment system (dimensions depend on system).

A wall socket or power mains outlet box must be no more than 1.5 meter (5 ft) away. The machine is built to work with 220-240 VAC (RMS system voltage).
In the HiLo and 110-120VAC versions power to one of the two heating spirals of the steam boiler heating element is disrupted as soon as the coffee boiler heating element is switched on thus reducing the maximum power consumption.

All power mains must have an earth connection and should be able to safely deliver the maximum power consumption shown in the table below.

<table>
<thead>
<tr>
<th>Maximum power consumption</th>
<th>220-240VAC standard version</th>
<th>220-240VAC HiLo version</th>
<th>110-120VAC version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts</td>
<td>3100</td>
<td>2200</td>
<td>2050</td>
</tr>
<tr>
<td>Amps</td>
<td>13.5</td>
<td>9.6</td>
<td>17.8</td>
</tr>
</tbody>
</table>

The Speedster 220-240VAC version may be equipped with a CEE 7/7 (also called “Schuko”) plug. The 110-120VAC version comes without plug. If the machine comes without a plug fitted, please ensure that you have a suitable plug to match the wall socket, or have the machine directly installed in the wall installation box.
CEE 7/7 plug fits both sockets shown.

**Notes!**

1. Make sure that the mains and pump cables “bend-upwards” in the cabinet below the machine to prevent the possibility that water dripping along these feeds reaches the wall socket or pump-motor.

2. Be aware of the location and functioning of the knock-box when planning the design of the connections to your machine.

3. Ensure that all the preparatory work is carried out before the machine is delivered; check power outlets, water supply (line pressure 2-5 bar) and drain beforehand.

4. Make sure to install an appropriate water treatment system. As water quality can change drastically from location to location no single system is suited everywhere. Contact a local water expert for guidance.

**General tips**

- When you install a knock-box in “drawer-style” locate it centred underneath the espresso machine or near the grinder(s) in the back of the bar. This will result in a favourable routing of the filter holder (knock empty, fill, tamp, lock into group).
- Have your cabinet-maker fit the knock-box “drawer-style” prior to installing the espresso machine. Whoever installs the machine may not be able or equipped to do so.
- Have approximately 10 cm of free countertop space at the barista’s side of the machine. This is useful working space for cups and saucers.
- Have a fridge installed as close to the espresso machine as possible. Cold milk is essential for the proper preparation of cappuccino.