

4R180 Harmony® P4

4R181 Harmony® P4 HD

Direct connection to socket eliminates need for external tubing

Torsion and vertical shock are integrated into the pump



Dual vacuum chambers help achieve vacuum with fewer steps

Smaller than any Ottobock mechanical pump

Harmony's proven clinical benefits

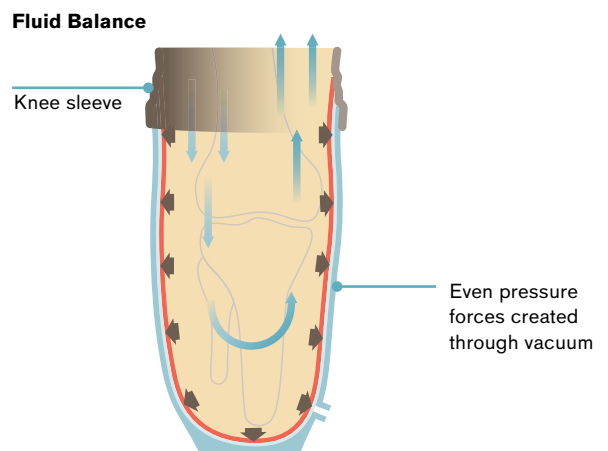
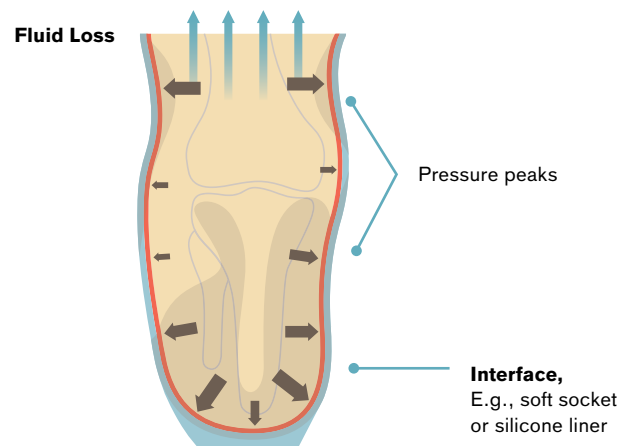
- Limb volume management¹, which can reduce the need to add socks
- Reduces pistoning between the limb and socket²
- Improves residual limb health³
- Helps improve balance, reduce risk of falls and improve walking⁴

Limb volume management

Conventional sockets are specific weight-bearing sockets that influence the fluid balance in the tissue of the residual limb. During the stance phase, these sockets carry or “press” tissue fluid out of the residual limb. The volume of the residual limb is furthermore decreased by the basic biomechanical function of the gait cycle.

Each residual limb is subject to volume fluctuations. The extent of the fluctuations depends on different factors such as the condition of the connective tissue, age of the patient, vascular diseases and, of course, the kind and fit of the socket.

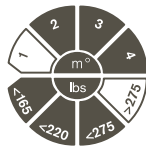
To compensate for volume loss, amputees often add an additional sock over their residual limb or liner in the afternoon. However, this measure only provides short-term relief from the symptoms and does not eliminate the cause. In the long term, the measure even causes partial pressure build-up because the fluid in the residual limb tissue is not drawn out evenly.



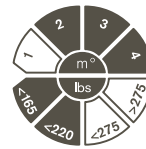
1 Kahle et al. 2014, Sanders et al. 2011, Street et al. 2006, Goswami et al. 2003, Board et al. 2001.
 2 Darter et al. 2016, Kahle et al. 2014, Kahle et al. 2013, Beil et al. 2002.
 3 Kahle et al. 2014, Hoskins et al. 2014, Trallesi et al. 2012, Brunelli et al. 2009.
 4 Samitier et al. 2014, Kahle et al. 2014, Kahle et al. 2013, Ferraro et al. 2011.



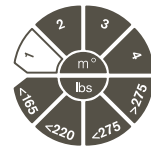
Harmony P2



Harmony P3



Harmony P4



Harmony P4 HD

	Harmony P2	Harmony P3	Harmony P4	Harmony P4 HD
Article number	4R144	4R147	4R180	4R181
Mobility grade	K2 - K4	K2 - K4	K2 - K4	K2 - K4
Material	Aluminum	Aluminum / Titanium	Aluminum	Aluminum/Titanium
Weight limit	110 - 220 lbs (50 - 100 kg)	88 - 275 lbs (40 - 125 kg)	110 - 220 lbs (50 - 100 kg)	110 - 330 lbs (50 - 150 kg)
Clearance height	5 5/8 in (144 mm)*	5 1/2 in (139 mm)*	4 1/2 in (114 mm)	4 1/2 in (114 mm)
Part weight	18.3 oz (520 g)	15 oz (425 g)	16.4 oz (465 g)	20.8 oz (590 g)

*Clearance height of Harmony P2 and Harmony P3 include distal pylon adapters.

Harmony P4 combines superb vacuum suspension with torsion and vertical shock into a compact package. That gives patients with longer residual limbs access to the outstanding suspension of Harmony vacuum while enjoying the benefits of rotation and shock absorption.

No external tubing is required for the Harmony P4 so there is no risk of tubing getting tangled in the patient's clothing or prostheses. The amount of vertical compression can be dialed in for specific patient weight and gait pattern.

The pump's dual chambers help reach higher levels of vacuum with fewer steps.

	Vacuum at 20 steps	Vacuum at 100 steps
Harmony P4	16.7 inHg	23.4 inHg
Harmony P3	8 inHg	18 inHg

According to internal testing data.

Benefits

- Improved design helps reach vacuum with fewer steps
- Incorporates vertical shock and rotation for more functionality
- No external tubing to get tangled in clothing or components
- Compact design provides more space for other components