

# C-Brace.

## Step into the future.

Ottobock has fundamentally changed orthotics with the C-Brace. The world's first mechatronic stance and swing phase control orthosis (SSCO®) system, which controls both the stance and swing phase hydraulically with microprocessor sensor technology.

### Key features for users:

- The first of its kind microprocessor-controlled hydraulic stance and swing phase system (SSCO®)
- Entire gait cycle is controlled dynamically and in real-time
- System responds quickly to any situation
- Flexion during weight-bearing is now possible for the first time - for example, when sitting down, walking downstairs, step-over-step, and walking down inclines
- Controlled and stable gait characteristics on uneven terrain
- Individual operating modes can be set by the orthotist and selected by the user according to the situation, e.g. cycling
- More physiologic gait pattern helps reduce contra-lateral physical strain and resulting conditions
- Potential for reducing energy expenditure, especially when compared to locked systems
- Enhanced quality of life with the new-found mobility and a greater feeling of safety
- The Cockpit app allows users to make minor adjustments all from their smart phone or tablet: tailoring joint stiffness, changing modes, adjusting pitch and volume, and turning on/off certain features
- The freeze feature can be turned on by the user to lock the joint at any angle in both the flexion and extension directions

### Key features for professionals:

- Low-profile: the C-Brace can be worn under clothing
- The C-Brace microprocessor sensor technology is more intuitive to use, and the hydraulically controlled motion sequences are more dynamic and sensitive
- Orthotists have the option to fabricate the C-Brace themselves using wet lamination
- Easy adjustments with the Setup app
- External mounting makes it easier to switch out the C-Brace joint unit

ottobock.



# C-Brace. Walk with confidence.

**1 Integrated Bluetooth® technology**

Enables intuitive communication with the joint and can be easily deactivated

**2 Multiple activity modes**

- User defined mode - can be programmed for specific activities
- Basic mode
- Training mode

**3 First SSCO® system**

Controlled knee flexion under weight bearing, makes the C-Brace the first of its kind SSCO® system

**4 Mimics movement**

Mimics eccentric contractions of the quadriceps or hamstrings depending on the user's needs

**5 Provides knee flexion**

Uses input from user to allow appropriate knee flexion during gait

**6 Knee angle sensor**

Measures flexion angle and angular velocity



**7 Microprocessor controlled hydraulic joint unit**

Joint unit analyzes gait 100 times per second, allowing users to feel more mobile and safer than ever

**8 Charging receptacle**

Easily accessed at the front of the joint

**9 Inertial motion unit (IMU)**

Gyroscope and accelerometers track spatial positioning and acceleration, enabling control based on motion analysis and additional force determination

**10 Lithium ion battery**

Should be charged overnight when used on a daily basis

**Intuitive**

**11 Intuitive stance function reduces standing fatigue**

**Improved gait**

**12 Reduces sound side overcompensation by improving physiological gait characteristics**

**Technical data**

Max. body weight	275 lbs
Weight	2.3 lbs
Frame material	Aluminum
Hydraulic mounting	Spherical joints
Medial follower	17KF100
Battery	Lithium Ion
Programming	Setup and Cockpit apps