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SENSOR

SENSOR KNEE by ORTHO EUROPE

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NOW AVAILABLE IN FOUR COLOURS

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SENSOR KNEE TECHNICAL DATA

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- Hydraulic control of stance and swing phase
- Choice of proximal adaptors
- Accepts 30mm distal pylon
- Total weight 1141g
- Maximum patient weight 125kg
- Maximum flexion angle 120 degrees
- Warranty 2 years

6PC508

2SR500

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SENSOR KNEE KEY FEATURES

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- Naturally moving
- Lightweight/robust
- Weight activated hydraulics
- First steps to longer distances
- Intuitive stance control
- Uneven ground & high activity
    - Mountain biking
    - Snowboarding
    - Gym workout

SENSOR KNEE KEY FEATURES

- Can be adjusted to suit the amputee during early stages of rehabilitation right through to optimum mobility and high activity use
- Stance lock and adjustable stance yield mode within the same unit
  (yield = controlled knee flexion)
- Yield mode allows natural, controlled, safe walking down slopes and stairs ‘leg over leg’
- Smooth controlled movement through the gait cycle by responding instantly to changing pace allowing the amputee to walk with variable speeds

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SENSOR KNEE ADJUSTMENT

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WEIGHT ACTIVATED MANAGEMENT

Sensitivity Screw
Adjusted to suit patient load

(Hydraulically Operated ON/OFF Switch)

WEIGHT ACTIVATED MANAGEMENT

STANCE LOCK

Switch in **DOWN** position

STANCE LOCK

WEIGHT ACTIVATED MANAGEMENT

STANCE YIELD

Switch in **UP** position

STANCE YIELD

WEIGHT ACTIVATED MANAGEMENT

STANCE YIELD SCREW

Adjust for a
smooth/controlled
descent

WEIGHT ACTIVATED MANAGEMENT

NO Extension Assistance/Resistance
but instead TERMINAL IMPACT DAMPENING Hydraulically provides a gentle end to swing phase and gives proprioceptive feedback.

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SENSOR KNEE ALIGNMENT

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- Weight line from Trocanter through midline of socket with appropriate patient flexion
- Weight line through centre of knee
- Weight line at foot following the appropriate point of manufacturers recommendations

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SENSOR KNEE PATIENT TRAINING GUIDE

SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

1. Ensure knee lock/yield switch is down – locked position

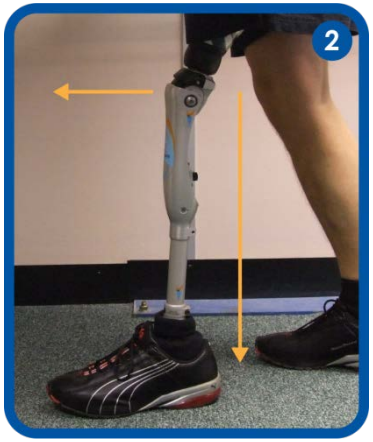
2. With patient standing between bars and with hands on rails, for balance only, ask the patient to take a small step forwards. The patient should then apply his/her body weight through the back of the knee and down through the heel. Whilst maintaining this force ask the patient to try to bend the knee (Pic 1). If the 'Sensitivity Screw' is set correctly, the knee should remain locked until the weight is removed

SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

1. Ensure knee lock/yield switch is the ‘up’ – yield position

2. With patient standing between bars and with hands on rails, for balance only, ask the patient to take a small step forwards. The patient should then apply his/her body weight through the back of the knee and down through the heel. Whilst maintaining this force ask the patient to try to bend the knee (Pic 2). The knee should bend with resistance. If no resistance is felt turn the BLACK YIELD SCREW clockwise to increase the force. If too stiff, turn BLACK YIELD SCREW anti-clockwise to decrease the force

3. Once yield resistance is set to the prosthetist/physiotherapist & patients satisfaction move the patient to a set of steps



SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

1. YIELD EXERCISE – Check YIELD switch is in the UP position

2. With patient standing on the first step, place the foot so that the edge of the stair is positioned between the heel and sole of the foot (Pic 3)

3. The next three stages need to be completed in order, and on no account should be rushed. Ensure patient uses handrails for balance only

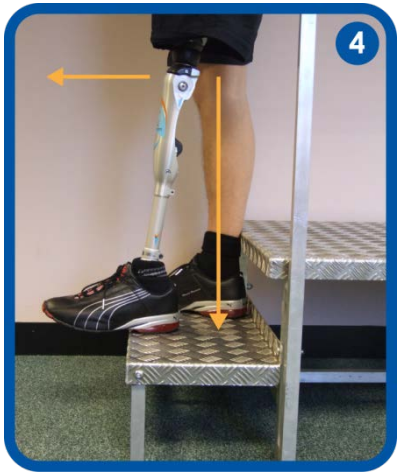
SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

1. Apply weight through back of knee and heel of the foot (Pic 4)

2. Whilst maintaining this force begin to bend the knee (Pic 5)

3. Once the patient feels the yield function giving him/her resistance step down to the floor with his/her sound foot (Pic 6)

4. REPEAT STEPS 7, 8 &9 UNTIL THE PATIENT IS CONFIDENT WITH YIELD SENSATION.



SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

TARGETING EXERCISE

1. The patient should be able to position his/her foot onto the edge of the stair, with the knee in hyperextension. The foot should neither be too far back (the foot will not roll around the stair pic 7), or too far forward risking the foot slipping off the edge of the stair (pic 8). The foot perfectly positioned as shown in picture 9

REPEAT TARGETING EXERCISE UNTIL ALL ARE CONFIDENT THAT A GOOD FOOT POSITION CAN BE ACHIEVED EVERY TIME.

SENSOR AND SENSOR PROFILE PATIENT TRAINING GUIDE

1. When the prosthetist/physiotherapist and patient are confident with the YIELD & TARGETING EXERCISES put the stages together to complete a step. Repeat as many times as required and as confidence builds add extra steps until a full flight of stairs can be negotiated safely and with confidence

2. SLOPES – Use the same exercises as with stairs but be aware of the following differences.
   - The probable absence of handrails, which can affect confidence
   - Foot position is not critical, but a positive heel strike is essential

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SUMMARY

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What is the Sensor knee

An easy to use, reliable, adaptable weight activated hydraulic knee, with unique ability to switch easily between stance lock and stance yield

When is the Sensor knee the appropriate prescription choice

New patients whose activity is predicted to develop, medium to high activity patients

Why should we prescribe the Sensor Knee

Responsive to variable walking speeds, choice to switch between stance lock and stance yield, natural stairs and slope descent, low maintenance, choice of proximal adaptor