

A knee with arthrosis is a severely compromised knee. Arthrosis is not just atypical "wear" of the cartilage, but when the balance of cells has actually been altered and by the time the knee is painful these cells have been irreversibly compromised. Rather than being caused by cartilage (as it does not have receptors), the pain stems from subchondral bone, inflamed synovial membranes, and damage to the periosteum.

The unloading mechanism of the knee

#### NICOMPARTMENTAL GONARTHROSIS

**MEDIAL TIBIOFEMORAL GONARTHROSIS**, associated with varus, is the most common type of gonarthrosis. Although the pain is medial it more often spreads throughout the entire joint and even across the front of the leg.

Radiographic findings include joint space narrowing, increased bone density, and possibly even "bone spurs", which are small bony projections produced by bone in an attempt to cope with excessive localised strain.

LATERAL TIBIOFEMORAL GONARTHROSIS, which accounts for 16% of cases, presents with valgus and causes pain in the front and side of the knee.

Surgery is the treatment of choice. But pain management is required before surgery so in addition to pharmaceutical treatment it is very important for the patient to have a brace that can provide relief from the symptoms and restore quality of life to as near to normal as is possible.

# KOA

Knee brace for gonarthrosis

ľ		M. 20014 right/left				
	Size	XS	S	М	L	XL
I	Circumference: middle of the knee cm	30/33	33/36	36/39	39/43	43/48
I	Height cm	40	40	40	40	40
l	Colour	grey				

**XXL** 48/54 40

**RIGHT** = for medial gonarthrosis of the right knee (varus right knee) or for lateral gonarthrosis of the left knee (valgus left knee).

**LEFT** = for medial gonarthrosis of the left knee (varus left knee) or for lateral gonarthrosis of the right knee (valgus right knee).

- Moderate or severe unicompartmental gonarthrosis
- Postoperative care of cartilage or menisci

Currentl y no known







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## Knee brace for gonarthrosis





# When pain dampens your enthusiasm

Gonarthrosis is the most common type of arthrosis and definitely the most incapacitating.

The incidence of this disease is directly proportional to the ageing process, and slightly more prevalent in women going through the menopause. But many studies have shown that certain factors can contribute to the onset of gonarthrosis, such as genetics, previous injuries to the knee joint (for example the damage to cruciate ligaments commonly experienced by sportspeople), professions that involve excessive burdens on the knees, and obesity.

The disease presents with acute pain which results in limited function of the knee. The pain is even worse when standing and walking, yet subsides while sitting when the two epiphyses "separate" and the natural space between them is momentarily restored.

This clinical observation led to the creation of KOA. which is:

- in stand-by when the patient is seated
- tensioned when the patient is walking





#### THERMOPLASTIC CUFFS

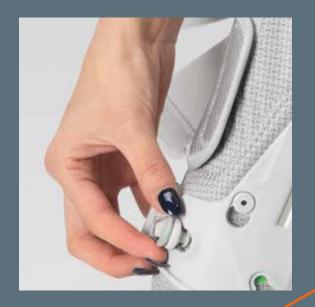
The thigh and calf cuffs containing the housings for the buckles are made from lightweight thermoplastic and adapt to fit the different circumferences around the leg.



## MINIMAGNET, MAGNETIC PULL TAB ATTACHMENT

Once secured, the **MiniMagnet** pull tab is "attracted" to a tiny magnet that attaches it firmly in its housing to prevent it from swinging around annoyingly when walking.









## THIGH AND CALF STRAPS WITH ELASTICATED INSERTS

The thigh and calf straps feature an elasticated insert that moves with the muscle to prevent the straps from feeling too tight and help the patient feel more comfortable when walking.

They also have padding that can be positioned with Velcro<sup>®</sup>.

#### DESIGNED WITH STRETCHY PLUSCOMFORT FABRIC

The brace is made with **PlusComfort**, a special double-face fabric featuring a hypoallergenic, breathable, soft cotton facing and a printed face fabric made with technical fibre.

This guarantees a design with maximum efficacy and absolute comfort against the skin.

#### TENSIONING WITH A WINCH SYSTEM

The system of straps offers a quick and easy way to achieve exactly the right degree of tension by working like a winch to optimise the amount of traction.



#### REAR "SAFETY" STRAP

The rear strap helps to hold the brace securely in position and is woven from non-stretch polymeric yarns, like the seatbelts.

#### PRESSURE PAD CONDYLAR WITH TECHNOGEL PADDING

The condylar pressure pad is made with Technogel padding, which is used in medical devices for pressure sore prevention, and optimises the transfer of pressure by distributing it so that the epidermis and dermis are not damaged.

#### CUSTOM-FIT PATENTED FIVE-STRAP SYSTEM

The secret to this brace is the five-strap system: while the thigh and calf straps hold the brace in place, the two diagonal front straps and the rear strap form an "X" to exert pressure on the condyle with a three-point pressure system that lightens the load on the knee to prevent pain.

All the straps can be cut to size and a practical Y-Velcro® fastener can be repositioned for a custom fit.



Relieves pain by automatically switching from stand-by to active tension when needed

### BUCKLES WITH BUILT-IN PULL TAB

The straps attach to the shells with buckles. The creation of MiniMagnet, an elasticated pull tab which also has a magnet, made it even easier to tension the straps and attach the buckle.

## LIGHTWEIGHT ALUMINIUM ALLOY MONOLATERAL STAY

The stay with a smart adjustable hinge slides out and can be repositioned, making it possible to limit the degree of extension to 0°, 10°, 20°, 30° or 40° and flexion to 45°, 60°, 75° or 90°.

