

**Product title:**

# DISC SPRING DIN 2093 M12LE4951

**Product image:****Product price:****€288.00****Product short description:**

DISC SPRING DIN 2093 M12LE4951

**Product features:**

WIDTH (t): 19  
OUTSIDE DIAMETER (De): 400  
INSIDE DIAMETER (Di): 202  
ESPEJOR (t1): 17.9  
UNLOADED LENGTH (Lo): 30  
INNER HEIGHT-MAX. STROKE (ho): 11  
STROKE (s) 0.25ho: 2.75  
LOAD IN NEWTONS (F) 0.25ho: 198900  
STROKE (s) 0.5ho: 5.5  
LOAD IN NEWTONS (F) 0.5ho: 357700  
STROKE (s) 0.75ho: 8.25  
LOAD IN NEWTONS (F) 0.75ho: 488200  
STROKE (s) ho: 12.1  
LOAD IN NEWTONS (F) ho: 645800

**Product description:**

Disk springs for static and dynamic loading are particularly suitable for use in applications that require high force but have limited space.

By combining the springs in various ways, it is possible to obtain different forces and characteristics.

See opposite figures.

The disc springs we have in stock are of the highest quality and have a special feature, which keeps the internal diameter unchanged when the spring is compressed.

As a result, these springs produce very little friction, exhibit little pressure drop, and have a considerably longer life span.

Disk springs are divided into three groups:

- Group 1: springs with a thickness (t) LESS THAN 1.25 mm Without chamfering on internal or external diameters.
- Group 2: springs with a thickness (t) OF 1.25 to 6.0 mm are chamfered in inner and outer diameter

- Group 3: springs with a thickness (t) GREATER THAN 6.0 mm have been chamfered throughout their geometry and the contact surfaces are flattened.

**Material:**

- Group 1: CK 67 / 51CrV4
- Group 2: 51CrV4
- Group 3: 51CrV4

Surface finish: shot blasted, phosphated, blackened and oiled.