



10I/GTP-HT

Phenolic resin/aramid fabric guide ring for rods



10I/GTP-HT

Example of item code

10I/GTP-HT - 25 150 - 1050 - A

Sealtech code | L (mm x 10) | Type of cut

E (mm x 10) | d (mm x 10)

Type of cut

A	S	Z	B
standard	on demand	on demand	according to drawing on demand

Machining of housings: see pages 45-49

The cutting angle of 10I/GTP-HT is 30°.

The diameter **M** is only valid in the area of the guide ring and not in the extrusion area of the seal.
The diameter **MS** in the seal area must be calculated with the **e** value of the seal used.

see pages 50-53

E (mm)	M (mm)
E ≤ 2	d + 1
2 < E < 4	d + 1,8
E ≥ 4	d + 3

10I/GTP-HT guide rings are made of aramid fabric reinforced phenolic resin. They prevent metallic contact of the machine parts and absorb the transverse force that occurs.

Hard fabric material guide rings are primarily used in mobile hydraulics and heavy hydraulics, as they are very well-suited for **higher surface pressures**.

An increased sliding ability which results in an improvement of the stick-slip effect is achieved by **inclusion of graphite** in the compound.

Guide rings are **easier to install** than guide strips and are, therefore, recommended by us.

The 10I/GTP-HT guide rings are used for applications at **high temperatures** (up to 200°C).

Operating conditions

Compressive strength DIN 53454 380 N/mm²
Max. permissible radial load at 25°C: ≤ 120 N/mm²
60°C: ≤ 60 N/mm²

Temperature -40°C to 200°C

Speed ≤ 1 m/s

Fluids

Materials

Guide ring aramid fabric reinforced high temperature phenolic resin + graphite

Colour grey

Assembly

Install in the groove

Advantages

- Simple groove, easy fitting
- Very high load capacity
- Reduced friction (graphite)
- For high temperature applications
- No water absorption
- High wear capacity

Please contact us for applications approaching maximum values.

Calculation of the permissible radial force

$$F = (p \times d \times L \times n) / s$$

F = maximum radial force (N)

p = maximum permissible loading for material (N/mm²)

d × L = diameter x width of the ring (mm²)

n = number of rings

s = safety factor

d	D	L	ISO 1076	Reference
---	---	---	----------	-----------

20 25 5,6 10I/GTP-HT-25056-0200-A

85 90 9,7 10I/GTP-HT-25097-0850-A
90 90 15 10I/GTP-HT-25150-0850-A

25 30 5,6 • 10I/GTP-HT-25056-0250-A

90 95 9,7 • 10I/GTP-HT-25097-0900-A
95 95 15 • 10I/GTP-HT-25150-0900-A

30 35 5,6 10I/GTP-HT-25056-0300-A

95 100 9,7 10I/GTP-HT-25097-0950-A
100 100 15 10I/GTP-HT-25150-0950-A

35 40 5,6 10I/GTP-HT-25056-0350-A

100 105 15 • 10I/GTP-HT-25150-1000-A

40 45 9,7 • 10I/GTP-HT-25097-0400-A

105 110 15 10I/GTP-HT-25150-1050-A

45 50 9,7 • 10I/GTP-HT-25097-0450-A

110 115 15 • 10I/GTP-HT-25150-1100-A

50 55 9,7 • 10I/GTP-HT-25097-0500-A

115 120 15 10I/GTP-HT-25150-1150-A

55 60 9,7 10I/GTP-HT-25097-0550-A

120 125 15 10I/GTP-HT-25150-1200-A

58 63 9,7 10I/GTP-HT-25097-0580-A

125 130 15 • 10I/GTP-HT-25150-1250-A

60 65 9,7 10I/GTP-HT-25097-0600-A

135 140 15 10I/GTP-HT-25150-1350-A
140 140 25 10I/GTP-HT-25250-1350-A

65 70 9,7 10I/GTP-HT-25097-0650-A

140 145 15 • 10I/GTP-HT-25150-1400-A
145 145 25 10I/GTP-HT-25250-1400-A

70 75 9,7 • 10I/GTP-HT-25097-0700-A

150 160 15 10I/GTP-HT-25150-1500-A
160 160 25 10I/GTP-HT-25250-1500-A

75 80 9,7 10I/GTP-HT-25097-0750-A

160 165 25 • 10I/GTP-HT-25250-1600-A

80 85 9,7 10I/GTP-HT-25150-0750-A

175 180 25 10I/GTP-HT-25250-1750-A