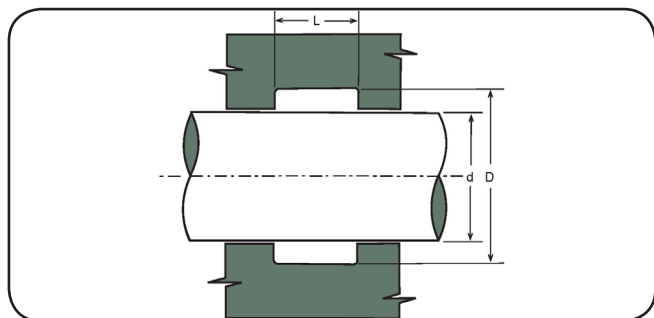




PISTON ROD GUIDE RING

**MAIN FEATURES**

The GIR type guide ring is developed to replace the traditional bronze guide in the hydraulic cylinder. The rod and piston guide prevents metallic contact with the cylinder head, there being a radial force that ensures the perpendicular direction to the motion. The material used in this guide is medium viscosity acetal resin loaded with glass fibre, characterised by high resistance, stiffness, hardness and high or low temperature stability.

- ° Long operating life
- ° Excellent extrusion and wear resistance
- ° Simple coupling in the housing design
- ° Low burst and good friction coefficient (between 0.05 and 0.1 on steel, when lubricated)
- ° Good mechanical stability at high temperature
- ° The bevelled profile edges prevent edge pinching on the radii of the mounting gap edges

GIR

DESCRIPTION

Cut rod guide ring.

DYNAMIC SURFACE MATERIAL

Acetal resin with glass fibre.

OPERATING CONDITIONS

Speed: < 1 m/seg.

Temperature: - 40 a + 110°C

Permissible Loads: < 40 N/mm² at 20 °C

< 30 N/mm² at 100 °C

Fluid: Hydraulic oil

(mineral based)

Hydraulic oil HL, HLP

Pressure fluids

HFA, HBF, HFC, HFD

•Radial load: Under normal lubrication conditions and speed is up to 30 m/min.

The maximum radial load can be calculated by the formula: $P = D \times E \times PS$

P (Kg) maximum radial load

D (cm) diameter of the guide subject to motion

E (cm) guide width

PS (Bar) 370 Bar (ASTM D.695)

maximum permissible load for the material

RECOMMENDED TOLERANCES

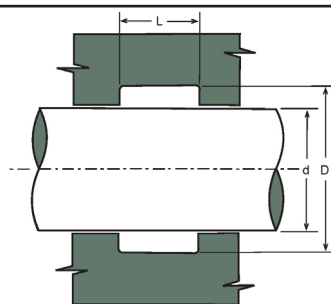
d	D	L
h11	0.05+	0.25+

SURFACE ROUGHNESS

Dynamic surface Ra < 0.3 µm Rt < 2.5 µm

Static surface Ra < 2 µm Rt < 10 µm

GIR



Measure	d h 11	D + 0.05	L + 0.25	Measure	d h 11	D + 0.05	L + 0.25	Measure	d h 11	D + 0.05	L + 0.25
GIR 12	12.00	16.00	9.60	GIR 55	55.00	61.00	9.60	GIR 143	143.00	149.00	12.80
GIR 14	14.00	18.00	9.60	GIR 55A	55.00	61.00	12.80	GIR 145	145.00	151.00	12.80
GIR 15	15.00	19.00	9.60	GIR 56	56.00	62.00	12.80	GIR 150	150.00	156.00	12.80
GIR 16	16.00	20.00	9.60	GIR 60	60.00	66.00	12.80	GIR 150A	150.00	156.00	19.20
GIR 18	18.00	22.00	9.60	GIR 63	63.00	69.00	12.80	GIR 154	154.00	160.00	19.20
GIR 20	20.00	24.00	9.60	GIR 65	65.00	71.00	12.80	GIR 155	155.00	161.00	19.20
GIR 22	22.00	26.00	9.60	GIR 66	66.00	72.00	12.80	GIR 160	160.00	166.00	19.20
GIR 25	25.00	29.00	9.60	GIR 70	70.00	79.00	12.80	GIR 165	165.00	171.00	19.20
GIR 25A	25.00	31.00	9.60	GIR 72	72.00	78.00	12.80	GIR 170	170.00	176.00	19.20
GIR 26	26.00	30.00	9.60	GIR 73	73.00	79.00	12.80	GIR 175	175.00	181.00	19.20
GIR 28	28.00	32.00	9.60	GIR 75	75.00	81.00	12.80	GIR 180	180.00	186.00	19.20
GIR 30	30.00	34.00	9.60	GIR 76	76.00	82.00	12.80	GIR 185	185.00	191.00	19.20
GIR 30A	30.00	36.00	9.60	GIR 76.2A	76.20	82.55	12.80	GIR 190	190.00	196.00	19.20
GIR 32	32.00	36.00	9.60	GIR 78	78.00	84.00	12.80	GIR 195	195.00	201.00	19.20
GIR 32A	32.00	38.00	10.00	GIR 80	80.00	86.00	12.80	GIR 200	200.00	206.00	19.20
GIR 34	34.00	38.00	9.60	GIR 80A	80.00	86.00	19.20	GIR 205	205.00	211.00	19.20
GIR 35	35.00	39.00	9.60	GIR 85	85.00	91.00	12.80	GIR 210	210.00	216.00	19.20
GIR 35A	35.00	39.00	12.80	GIR 86	86.00	92.00	12.80	GIR 215	215.00	221.00	19.20
GIR 35B	35.00	41.00	9.60	GIR 90	90.00	96.00	12.80	GIR 220	220.00	226.00	19.20
GIR 36	36.00	40.00	9.60	GIR 90A	90.00	96.00	19.20	GIR 225	225.00	231.00	19.20
GIR 36A	36.00	42.00	9.60	GIR 95	95.00	101.00	12.80	GIR 230	230.00	236.00	19.20
GIR 38	38.00	42.00	9.60	GIR 100	100.00	106.00	12.80	GIR 235	235.00	241.00	19.20
GIR 40	40.00	44.00	9.60	GIR 105	105.00	111.00	12.80	GIR 240	240.00	246.00	19.20
GIR 40A	40.00	46.00	9.60	GIR 110	110.00	116.00	12.80	GIR 245	245.00	251.00	19.20
GIR 42	42.00	46.00	9.60	GIR 115	115.00	121.00	12.80	GIR 250	250.00	256.00	19.20
GIR 45	45.00	51.00	9.60	GIR 120	120.00	126.00	12.80	GIR 260	260.00	266.00	19.20
GIR 45A	45.00	51.00	12.80	GIR 120A	120.00	126.00	19.20	GIR 270	270.00	276.00	19.20
GIR 46	46.00	52.00	9.60	GIR 120B	120.00	126.00	25.40	GIR 275	275.00	281.00	19.20
GIR 48	48.00	54.00	9.60	GIR 125	125.00	131.00	12.80	GIR 280	280.00	286.00	19.20
GIR 50	50.00	56.00	9.60	GIR 130	130.00	136.00	12.80	GIR 290	290.00	296.00	19.20
GIR 50A	50.00	56.00	12.80	GIR 130A	130.00	136.00	25.40				
GIR 52	52.00	58.00	9.60	GIR 135	135.00	141.00	12.80				
GIR 53	53.00	59.00	9.60	GIR 140	140.00	146.00	12.80				