

DESCRIPTION

"T" shape split rod guide ring

MATERIAL

Type: Acetal resin with glass fibre

Designation: BEARITE

MAIN FEATURES

The FIT type guide rings have been developed to substitute traditional bronze guides in hydraulic cylinders. They guide the rod and prevent metallic contact with the cylinder head when radial forces act perpendicular to the direction of movement.

Chamfered edges prevent splintering of the material during assembly and make the installation into the groove easier.

The compound used for these guides is a medium viscosity glass fibre reinforced acetal resin characterized by high strength, rigidity, hardness, impact resistance, resilience and excellent stability to high and low temperature.

- Extended service life
- Excellent wear-resistance
- Simple design of groove and assembly
- Reduce vibrations
- Low friction
- Good resistance to loads
- Good mechanical stability at high temperature
- Easy installation without expensive auxiliaries

FIELD OF APPLICATION

Speed	≤ 1 m/s
Temperature	-40°C ÷ +110°C
Fluids	Hydraulic oils (mineral oil based). <i>For other fluids contact our technical department</i>

SURFACE ROUGHNESS

Dynamic surface	Ra ≤ 0.3 µm	Rt ≤ 2.5 µm
Static surface	Ra ≤ 2 µm	Rt ≤ 10 µm

CHOICE OF GUIDE RING WIDTH

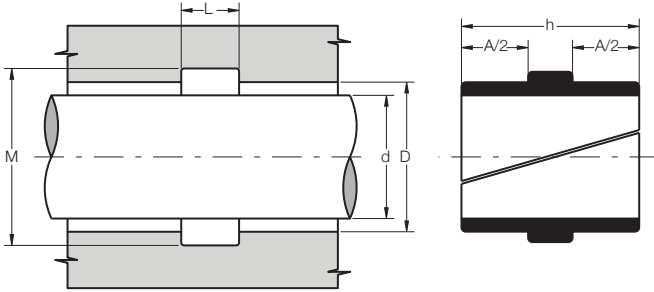
A rough estimate of guide width can be calculated with the following formula:

$$h_{mm} \geq \frac{F_N \times k}{p_{N/mm^2} \times d_{mm}}$$

where

A_{mm}	• usable guide ring width in mm
F_N	• radial load in N
k	• safety factor (<i>generally 2</i>)
d_{mm}	• rod diameter in mm
p_{N/mm^2}	• surface pressure N/mm ²
	40 a 20 °C
	30 a 70 °C

- Before assembly good cleanliness and guide lubrication are recommended.



Part.	d ^{f7}	D ^{+0.05}	M ^{+0.2}	L ^{+0.2}	h	A
FIT 38 42 12.5	38	42	44	4.5	12.5	8
FIT 45 46.8 8.8	45	46.8	49.8	2.5	8.8	6.3
FIT 45 49 10	45	49	53	4.0	10	6
FIT 50 54 20	50	54	58	7.0	20	13
FIT 55 60 16	55	60	64.5	8.0	16	8
FIT 60 61.8 8.8	60	61.8	64.8	3.0	8.8	5.8
FIT 61 65 10	61	65	69	4.0	10	6
FIT 70 74 20	70	74	78	7.0	20	13
FIT 72 79 31	72	79	82	8.0	31	23
FIT 75 80 16	75	80	84.5	8.0	16	8
FIT 75.3 80.5 30	75.3	80.5	85	8.1	30	21.9
FIT 76 80 12	76	80	84	5.0	12	7
FIT 85 90 27	85	90	95	8.0	27	19
FIT 85 91 27	85	91	95	6.0	27	21
FIT 88.5 92.5 20	88.5	92.5	96.5	7.0	20	13
FIT 90 96 26	90	96	100	7.0	26	19
FIT 91 95 15	91	95	100	6.0	15	9
FIT 95 100 16	95	100	104.5	8.0	16	8
FIT 97 103 30	97	103	107.5	10.0	30	20
FIT 105 111 31	105	111	115	8.0	31	23
FIT 108.5 112.5 20	108.5	112.5	116.5	7.0	20	13
FIT 110 116 26	110	116	120	7.0	26	19
FIT 115 120 16	115	120	124.5	8.0	16	8
FIT 118 124 30	118	124	128.5	10.0	30	20
FIT 125 130 29	125	130	134	8.0	29	21
FIT 128.5 132.5 20	128.5	132.5	136.5	7.0	20	13

Part.	d ^{f7}	D ^{+0.05}	M ^{+0.2}	L ^{+0.2}	h	A
FIT 132 138 26	132	138	142	7.0	26	19
FIT 135 140 16	135	140	144.5	8.0	16	8
FIT 140 146 30	140	146	150.5	10.0	30	20
FIT 148.5 152.5 20	148.5	152.5	156.5	7.0	20	13
FIT 152 158 26	152	158	162	7.0	26	19
FIT 171.5 175.5 20	171.5	175.5	179.5	7.0	20	13
FIT 172 178 26	172	178	182	7.0	26	19
FIT 194 200 26	194	200	204	7.0	26	19
FIT 194.5 198.5 20	194.5	198.5	202.5	7.0	20	13