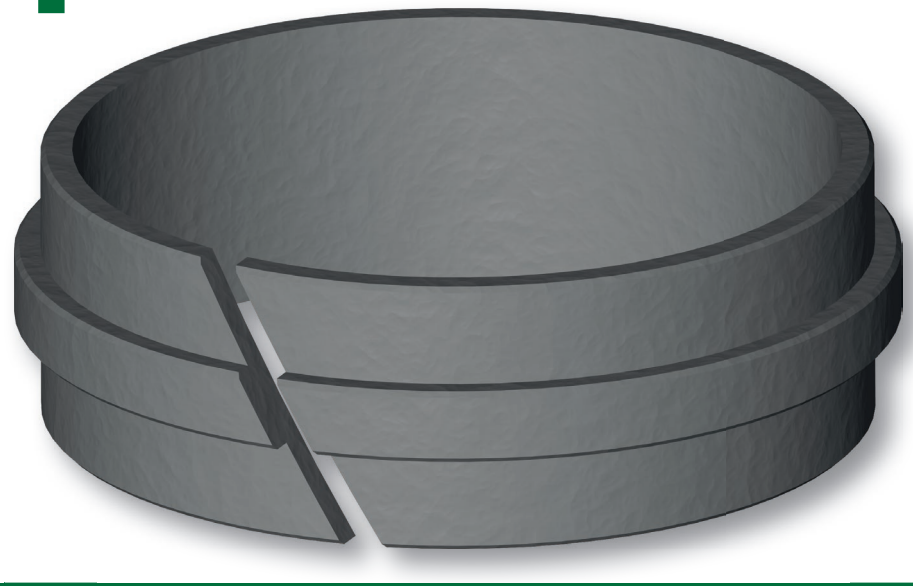
FIT



The Aston Seals 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

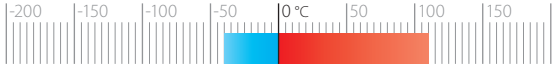
MATERIAL

Type	Acetal resin with glass fibre
Designation	BEARITE

FIELD OF APPLICATION

Speed
≤ 1 m/s

Temperature
–40°C ÷ +110°C



Fluids
Hydraulic oils (mineral oil based)
For other fluids contact our technical department

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:

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

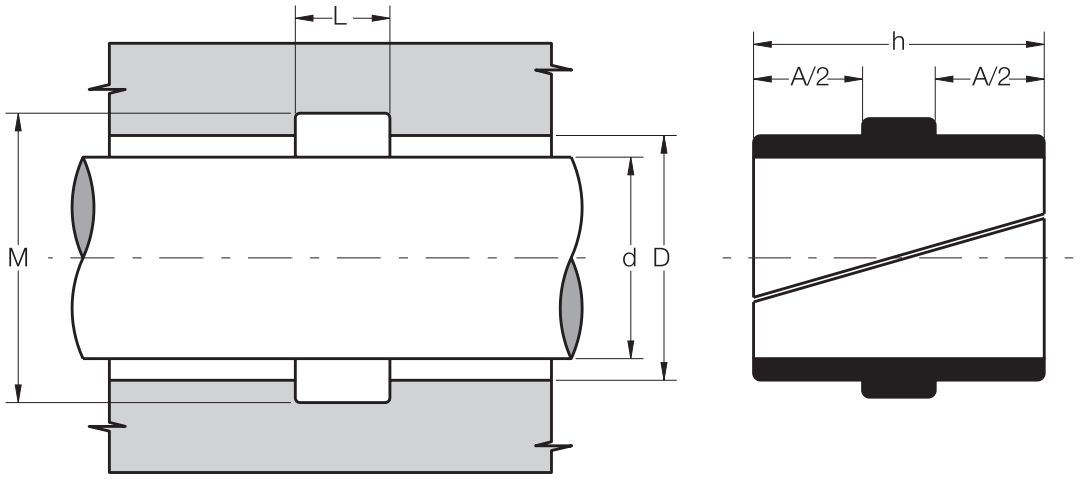
where

- h_{mm} • Guide ring width in mm
- F_N • Radial load in N
- k • Safety factor (generally 2)
- d_{mm} • Rod diameter in mm
- $p_{N/mm2}$ • Surface pressure N/mm2
  40 a 20 °C
  30 a 70 °C

Before assembly good cleanliness and lubrication are recommended.

The above data are maximum values, they may be maintained for short periods and can not be used at the same time simultaneously.

FIT



Part.	d f7	D +0.05	M +0.2	L +0.2	h	A
FIT 30 34 10	30	34	37	4.0	10	6
FIT 38 42 12.5	38	42	44	4.5	12.5	8
FIT 40 45 16	40	45	49	8.0	16	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 45 50 16	45	50	54	8.0	16	8
FIT 45 50 20	45	50	54	7.0	20	13
FIT 50 51.8 8.8	50	51.8	54.8	2.5	8.8	6.3
FIT 50 54 20	50	54	58	7.0	20	13
FIT 50 55 16	50	55	59	6.0	16	10
FIT 50 55 16/A	50	55	59	8.0	16	8
FIT 50 55 20	50	55	59	7.0	20	13
FIT 55 60 16	55	60	64.5	8.0	16	8
FIT 55 61 27	55	61	65	6.0	27	21
FIT 60 61.8 8.8	60	61.8	64.8	3.0	8.8	5.8
FIT 60 65 20	60	65	69	7.0	20	13
FIT 61 65 10	61	65	69	4.0	10	6
FIT 65 66.8 8.8	65	66.8	69.8	3.0	8.8	5.8
FIT 65 70 16	65	70	74	8.0	16	8
FIT 65 71 16	65	71	75	8.0	16	8
FIT 70 74 20	70	74	78	7.0	20	13
FIT 72 79 31	72	79	82	8.0	31	23

Part.	d f7	D +0.05	M +0.2	L +0.2	h	A
FIT 75 76.8 13.2	75	76.8	79.8	3.5	13.2	9.7
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 80 83 13.2	80	83	86	4.5	13.2	8.7
FIT 80 85 16	80	85	89	8.0	16	8
FIT 80 86 16	80	86	90	8.0	16	8
FIT 85 90 27	85	90	95	8.0	27	19
FIT 85 91 27	85	91	95	6.0	27	21
FIT 88 92 15	88	92	97	6.0	15	9
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 90.3 95.5 30	90.3	95.5	100	8.0	30	22
FIT 91 95 15	91	95	100	6.0	15	9
FIT 95 100 16	95	100	104.5	8.0	16	8
FIT 95 100 16/A	95	100	104	8.0	16	8
FIT 95 101 16	95	101	105	8.0	16	8
FIT 97 103 30	97	103	107.5	10.0	30	20
FIT 100 105 16	100	105	109	8.0	16	8
FIT 105 111 31	105	111	115	8.0	31	23
FIT 105.3 110.5 30	105.3	110.5	115	8.0	30	22
FIT 107 112 16	107	112	117	6.0	16	10

Part.	d f7	D +0.05	M +0.2	L +0.2	h	A
FIT 108.5 112.5 20	108.5	112.5	116.5	7.0	20	13
FIT 110 115 16	110	115	119	8.0	16	8
FIT 110 116 16	110	116	120	8.0	16	8
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 16	125	130	134	8.0	16	8
FIT 125 130 29	125	130	134	8.0	29	21
FIT 125 131 16	125	131	135	8.0	16	8
FIT 126 131 18	126	131	136	7.0	18	11
FIT 128.5 132.5 20	128.5	132.5	136.5	7.0	20	13
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