

Plain bearings

with collar



Material:

Base material, steel.
Intermediate layer sintered bronze.
Bearing surface PTFE.

Version:

Steel electro zinc-plated.

Sample order:

nIm 23731-00400505

Note:

Maintenance-free rolled composite steel plain bearings particularly suitable for dry running. Also highly suitable for lubricated applications (oil lubrication). Very low wear and friction, no stick-slip effect. Suitable for rotary and oscillating movements, high chemical resistance, low water absorption.

Assembly:

The use of a suitable press mandrel is recommended to avoid damaging the bearing surface. The butt joint must be opposite the load zone. The bearing has an interference fit after installation. Gluing is possible but not required.

Tolerances:

Housing:

Recommended tolerance H7.

Surface finish Ra 0.8 to 1.6.

Chamfer (press-in side 0.8 to 1.2 x 15°).

Shaft:

Recommended tolerance h8 to f7. For applications at a low speed and small loads drawn shafts with h9 can also be used.

Shaft surface Ra 0.4 to 0.8 (preferably ground shafts) for drawn shafts Ra 1.6 to 3.2.

Technical data:

Static load: max. 250 N/mm²

Dynamic load: max. 140 N/mm²

Friction coefficient, dry: 0.03 to 0.20

Sliding speed, dry: max. 2 m/s

Sliding speed, oil lubricated: max. 5 m/s

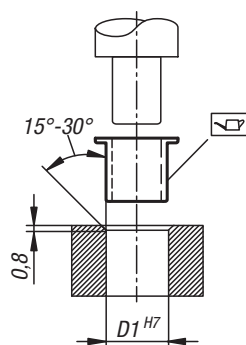
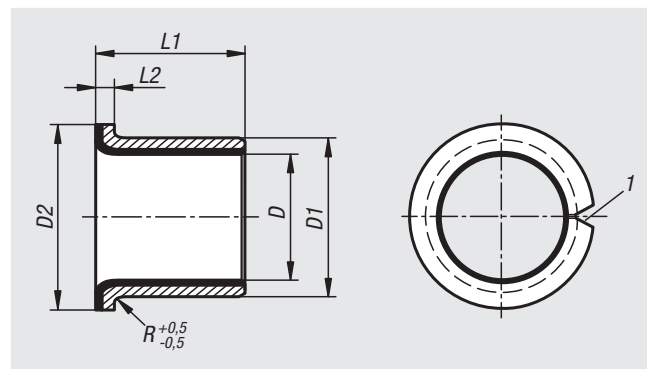
Thermal conductivity: 42 W/(m*K)-1

Thermal expansion coefficient: 11*10⁻⁶ K⁻¹

Temperature range: -195°C to +280°C

Drawing reference:

1) Butt joint



Order No.	D	D1	D2	L1	L2	R
23731-00400505	4	5,5	9	5,6	1	0,5
23731-00600807	6	8	12	7	1	1
23731-00801005	8	10	15	5,5	1	1
23731-00801009	8	10	15	9,5	1	1
23731-01001209	10	12	18	9	1	1
23731-01001212	10	12	18	12	1	1
23731-01201417	12	14	20	17	1	1
23731-01401617	14	16	22	17	1	1
23731-01501712	15	17	23	12	1	1
23731-01501717	15	17	23	17	1	1
23731-01601817	16	18	24	17	1	1
23731-01802012	18	20	26	12	1	1
23731-02002311	20	23	30	11,5	1,5	1,5
23731-02202521	22	25	32	21,5	1,5	1,5
23731-02502826	25	28	35	26,5	1,5	1,5
23731-03003430	30	34	42	30	2	2
23731-03503926	35	39	47	26	2	2
23731-04004426	40	44	53	26	2	2
23731-05005522	50	55	65	22	2,5	2