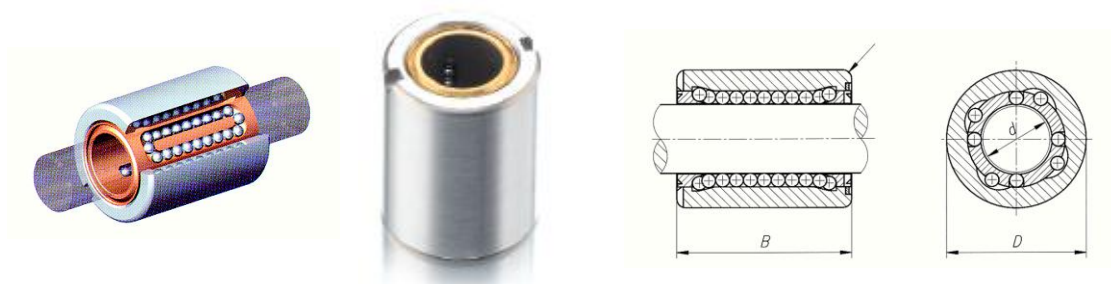


Miniature precision linear bearings and ball screws (microlinea)



Series « L » - stainless steel :

Standard product line - microlinea

Miniature high precision linear bearings.
L – series with stainless steel housing and brass retainer.

On request

- All stainless steel execution
- With reduced bore tolerance

Reference	d (mm)	D (mm)	B (mm)	r min (mm)	Ø balls (mm)	Load ratings ISO 14728 (N)	
						stat. (C ₀)	dyn. (C ₁₀₀₆)
L 204X	2	4	5	0.02	0.500	8.4	9.0
L 306X	3	6	7	0.13	0.600	31	26
L 307X	3	7	10	0.20	0.794	73	56
L 408X	4	8	10	0.24	0.794	66	53
L 510X	5	10	14	0.24	1.250	131	118
L 612X	6	12	18	0.39	1.588	250	220

Materials

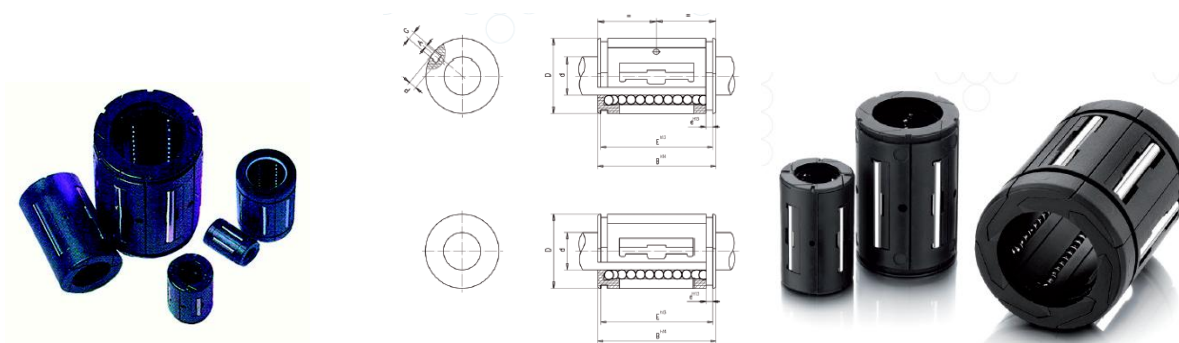
Housing: stainless steel AISI 440C
Cage: brass or stainless steel AISI 303
Shields: stainless steel AISI 302 or AISI 303
Balls: stainless steel AISI 440C
Lubrication: standard: Winsor Lube L245X (other oils on request)
Temperature: -40°C to +80°C or more with the appropriate lubricant
Bearings tolerances: bore diameter d +8/0 [µm]
outside diameter D 0/-8 [µm]

Example of part number definition

L 204X-L23ar miniature precision linear bearing
L 204X-L23ar bore diameter = 2 mm
L 204X-L23ar outer diameter = 4 mm
L 204X-L23ar stainless steel
L 204X-L23ar lubricant: L = oil; G = grease
L 204X-L23ar type of lubricant
L 204X-L23ar rust protection, dipped in oil

Recommended tolerances for shaft: 0/-6 µm
Recommended hardness for shaft: min. 58 HRC
Max. press fit between the outer ring and housing: 1 to 3 µm

Miniature precision linear bearings and ball screws (microlinea)



Series micro « DBL » - polyamide :

Standard product line - microlinea

Miniature high precision linear bearings.

DBL – series with plastic body (POM) with stainless steel balls and needles.

Reference	d (mm)	D (mm)	B (mm)	e (mm)	E (mm)	Ø balls (mm)	A (mm)	P (mm)	G (mm)	Load ratings		
										stat. (Co)	dyn. (C)	no. of ball rows
DBL 307X	3	7	10	-	-	1.0	0.0	0.75	1.0	27	26	3
DBL 408X	4	8	12	-	-	1.0	0.0	0.9	1.0	50	44	4
DBL 510X	5	10	15	-	-	1.2	0.1	1.0	1.2	84	72	4
DBL 612X	6	12	19	-	-	1.0	0.0	1.0	1.0	132	114	4
DBL 815X	8	15	24	1.1	23	1.5	0.85	1.0	1.5	204	167	5
DBL 1017X	10	17	26	1.1	25	1.5	0.85	1.2	1.5	234	186	5
DBL 1219X	12	19	28	1.3	26.4	1.5	1.25	1.2	1.5	257	202	6
Bearings have wipers on both sides												
DBL 1222X-JR	12	22	32	1.3	22.60	2.0	-	-	-	352	310	6
DBL 1626X-JR	16	26	36	1.3	24.60	2.0	-	-	-	440	372	7
DBL 2032X-JR	20	32	45	1.6	31.20	2.5	-	-	-	689	591	7
DBL 2540X-JR	25	40	58	1.85	43.70	3.5	-	-	-	1332	1162	7

Materials

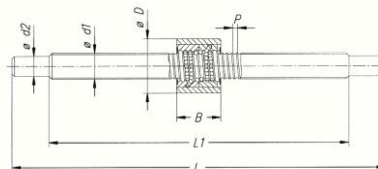
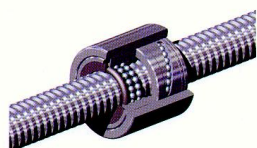
Housing: polyamide
 Balls and needles: stainless steel
 Temperature: -40°C to +60°C
 Lubrication: standard: Winsor Lube L245X
 (other oils on request)

Example of part number definition

DBL 307X precision linear bearing
 DBL 307X bore diameter = 3 mm
 DBL 307X outer diameter = 7 mm
 DBL 307X stainless steel

Miniature precision linear bearings and ball screws (microlinea)

Series ball screws :



Standard product line - microlinea

The mps ball screws are entirely made out of stainless steel and all components are ground. They are fitted with a double nut to adjust the play. The manufacturing process guarantees a pitch variation of less than 5 μm over the full length.

On request

- Lubricants : grease, oil, dry lubrication
- Machined ends
- Higher static load
- Multiple nuts
- Left hand thread
- Length
- Axial play (down to zero backlash)
- Special surface treatments
- Flang nut, anchor nut

Reference	Nut		Screw						Axial load rating ISO3408-5 (N)			
	D (mm)	B (mm)	\emptyset balls (mm)	d1 (mm)	P (mm)	d ₂ (mm)	L (mm)	L ₁ (mm)	Standard profile		High load profile	
									dyn. (Cam)	stat. (Coa)	dyn. (Cam)	stat. (Coa)
ED 410X / V404X	10	10	0.794	4.25	1.0	3	70	50	229	179	426	422
ED 513X / V501X	13	12	1.000	5.8	1.25	4	100	75	356	302	660	709
ED 616X / V601X	16	14	1.191	7.4	1.5	6	140	110	519	475	958	1114
ED 822X / V801X	22	18	1.588	10.5	2.0	8	190	150	890	887	1646	2085
ED 1028X / V1001X	28	22	2.000	13.6	2.5	10	260	210	1345	1409	2497	3313

Materials

Housing: stainless steel AISI 440C
 Ball nuts ED/ES: stainless steel AISI 440C
 Shields: stainless steel AISI 302 or AISI 303
 Balls: stainless steel AISI 440C
 Lubrication: standard: Winsor Lube L245X (rust protection; i.e. dipped in oil)

Example of part number definition

ED 513X/V501X double nut
 EDD 513X/V501X two double nuts
 ED 513X/V501X 4 x lead of nut thread
 ED 513X/V501X outer diameter of nut
 ED 513X/V501X nut in stainless steel
 ED 513X/V501X ground precision screw
 ED 513X/V501X 4 x lead of screw thread
 ED 513X/V501X screw drawing number
 ED 513X/V501X screw in stainless steel