



EITZENBERGER
Luftlagertechnik GmbH

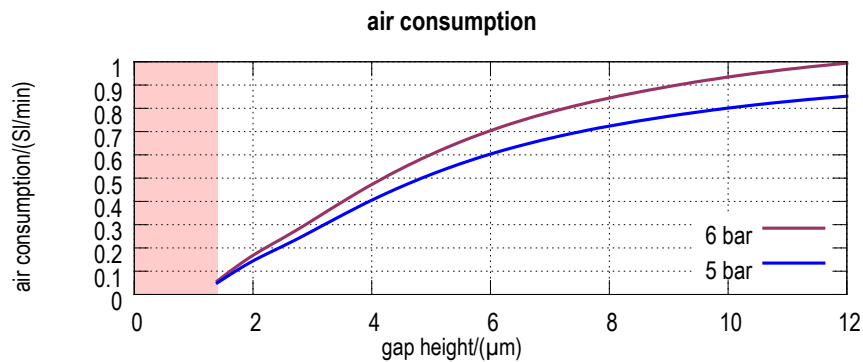
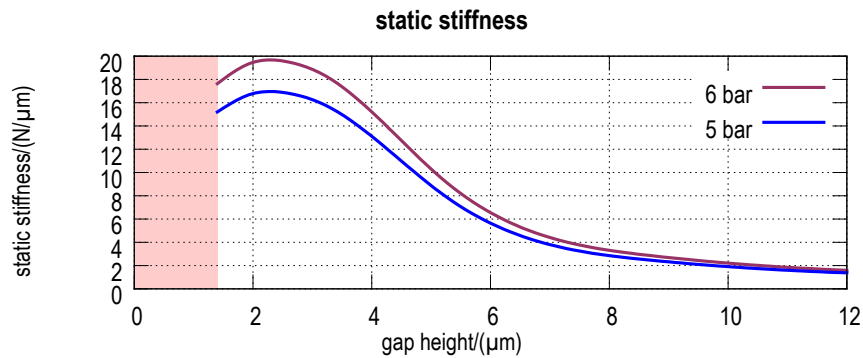
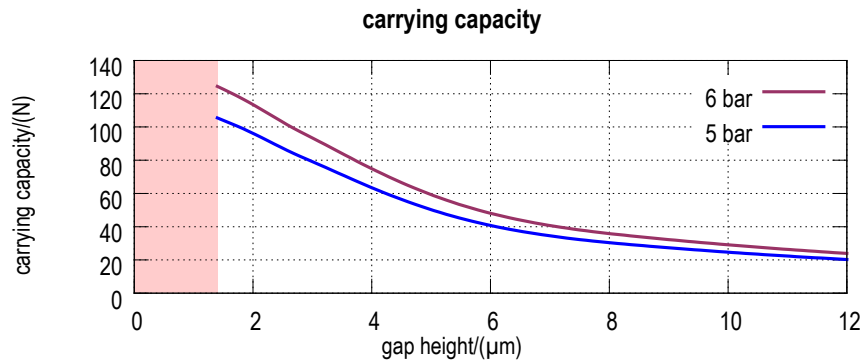
KINEMATIK MIT LUFT

PRODUCTS
AIR BEARING PADS

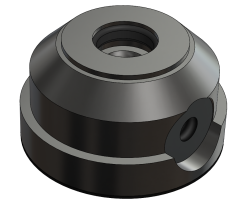
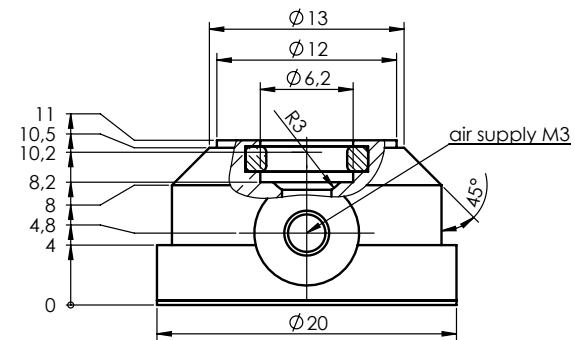


EITZENBERGER develops, manufactures and assembles air bearings and air bearing systems with accuracy down to nanometers. We provide standard air bearing products like spindles, turn tables, linear axes and air bearing pads. Additionally we offer innovative individual development and solutions down to one part. Eitzenberger air bearings provide high load capacity, stiffness and good damping. They exhibit precise smooth and wear free running. EITZENBERGER air bearings are equipped with a robust dry running coating.

EZ-0053-020 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	105	124
Nominal carrying capacity / (N)	78	92
Gap height ^{3*} / (µm)	3.1	3.1
Static stiffness ^{3*} / (N/µm)	16	19
Air consumption ^{3*} / (l/min)	0.29	0.33
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	7	
Air supply thread	M3	
Adapted with centre screw	EZ-0149/EZ-0150 M10x1-R3	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

^{3*} at nominal carrying capacity

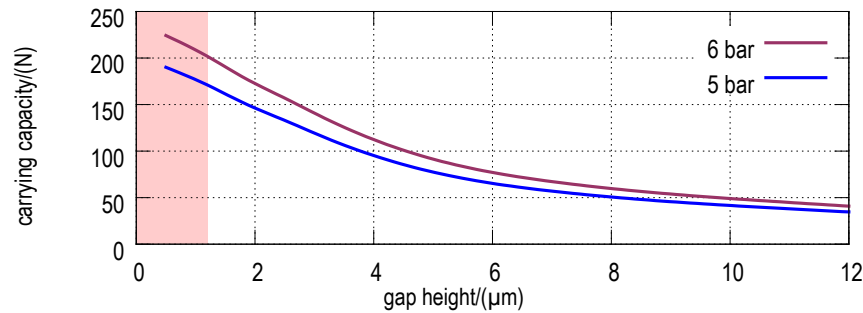
For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

General information about design and function of our air bearings is available on our [website](#).

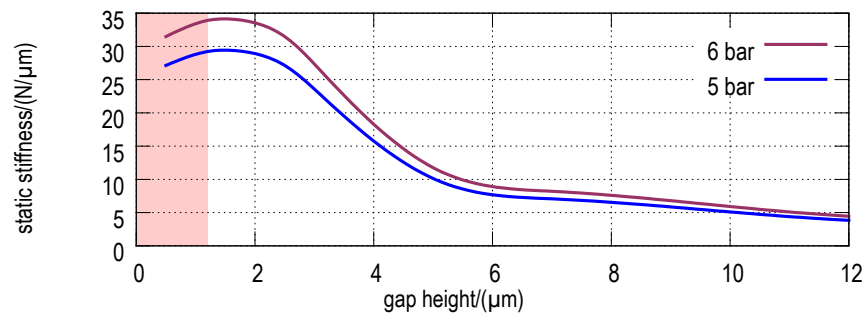
Status 08/2016

EZ-0053-025 Round Air Bearing

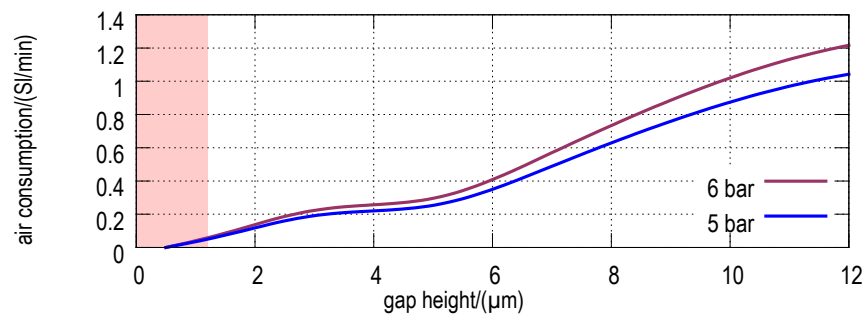
carrying capacity



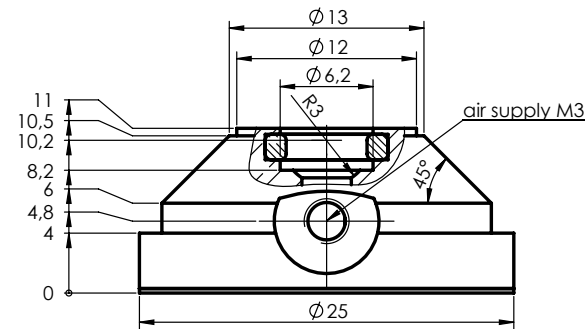
static stiffness



air consumption



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	171	202
Nominal carrying capacity / (N)	126	149
Gap height ^{3*} / (µm)	2.8	2.8
Static stiffness ^{3*} / (N/µm)	25	29
Air consumption ^{3*} / (Sl/min)	0.17	0.20
Maximum velocity ^{3*} / (m/s)	5	6

Bearing weight (aluminium) / (g)	11
Air supply thread	M3
Adapted with centre screw	EZ-0149/EZ-0150 M10x1-R3

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

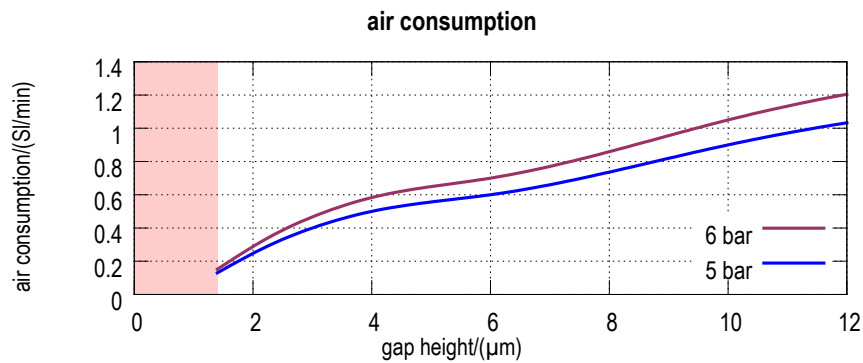
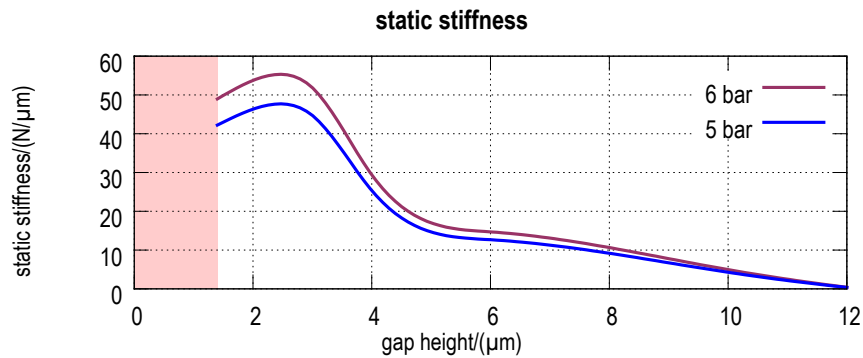
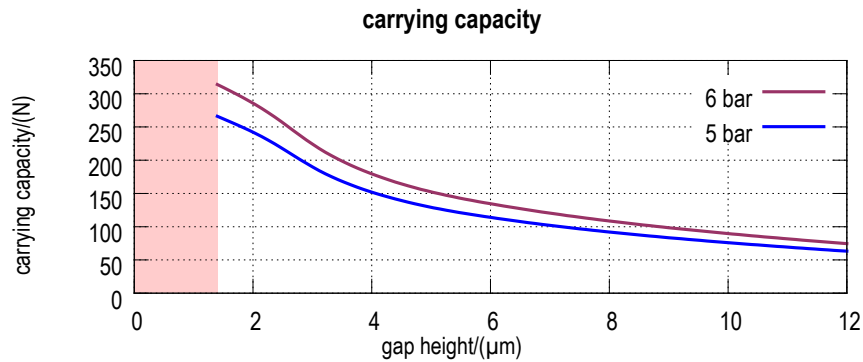
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

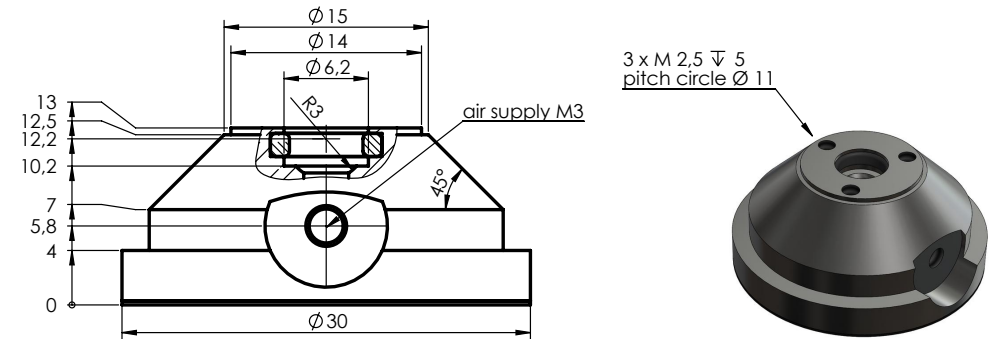
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EZ-0053-030 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	266	314
Nominal carrying capacity / (N)	196	231
Gap height ^{3*} / (µm)	2.9	2.9
Static stiffness ^{3*} / (N/µm)	45	52
Air consumption ^{3*} / (l/min)	0.38	0.45
Maximum velocity ^{3*} / (m/s)	5	6

Bearing weight (aluminium) / (g)	17
Air supply thread	M3
Adapted with centre screw	EZ-0149/EZ-0150 M10x1-R3

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

^{3*} at nominal carrying capacity

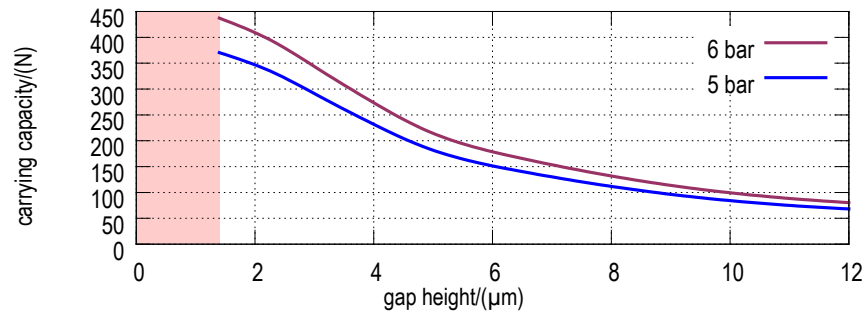
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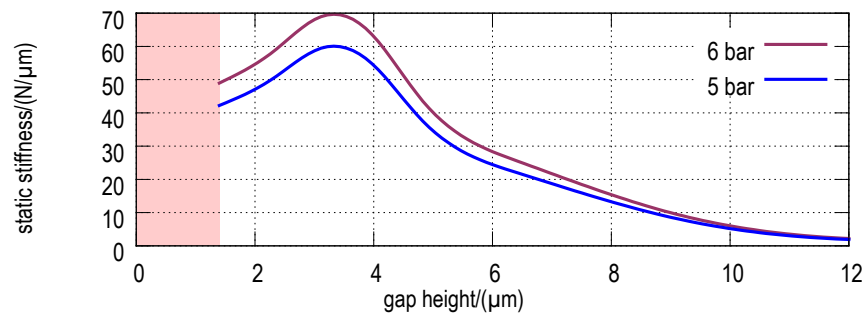
Status 08/2016

EZ-0053-035 Round Air Bearing

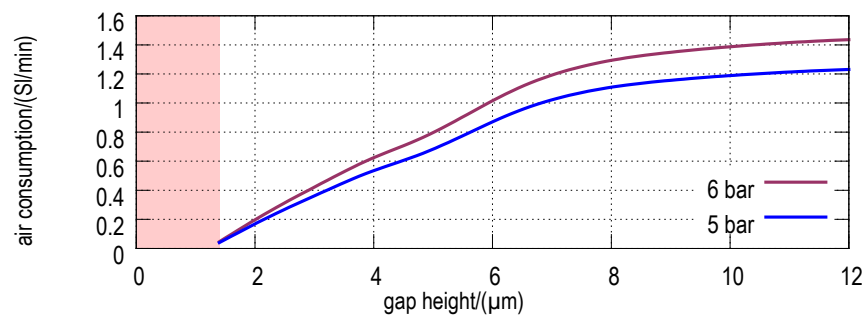
carrying capacity



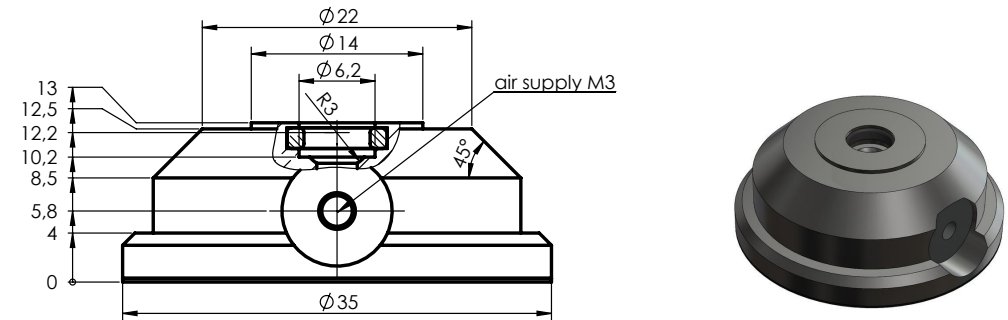
static stiffness



air consumption



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	371	437
Nominal carrying capacity / (N)	273	322
Gap height ^{3*} / (µm)	3.3	3.3
Static stiffness ^{3*} / (N/µm)	58	68
Air consumption ^{3*} / (l/min)	0.42	0.48
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	25	
Air supply thread	M3	
Adapted with centre screw	EZ-0149/EZ-0150 M10x1-R3	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

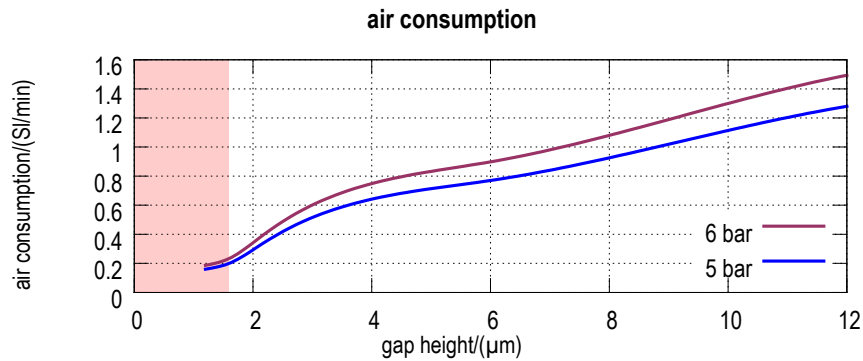
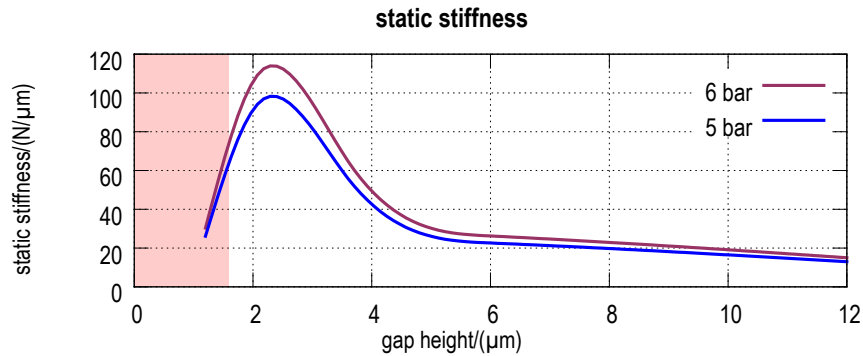
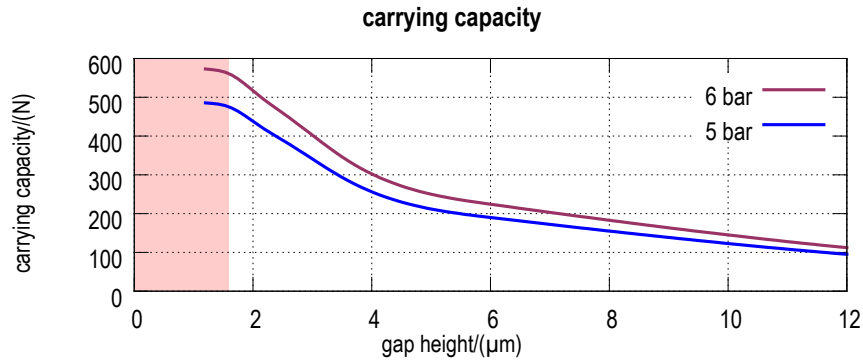
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

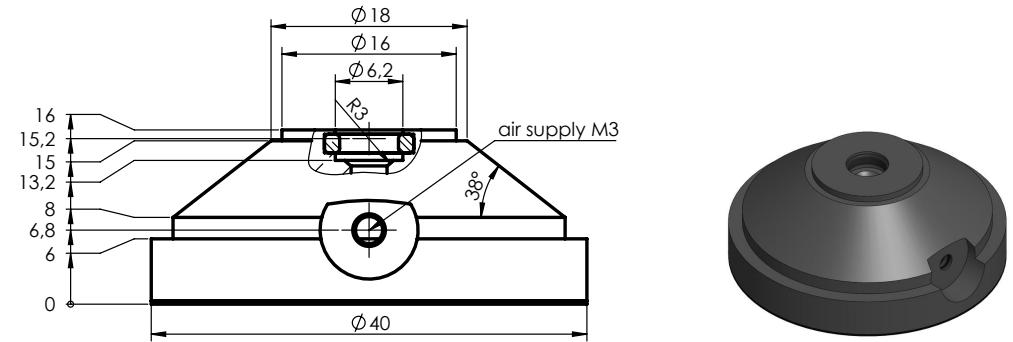
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Status 08/2016

EZ-0053-040 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	475	561
Nominal carrying capacity / (N)	350	413
Gap height ^{3*} / (µm)	2.9	2.9
Static stiffness ^{3*} / (N/µm)	83	96
Air consumption ^{3*} / (l/min)	0.49	0.57
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	39	
Air supply thread	M3	
Adapted with centre screw	EZ-0149/EZ-0150 M10x1-R3	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

^{3*} at nominal carrying capacity

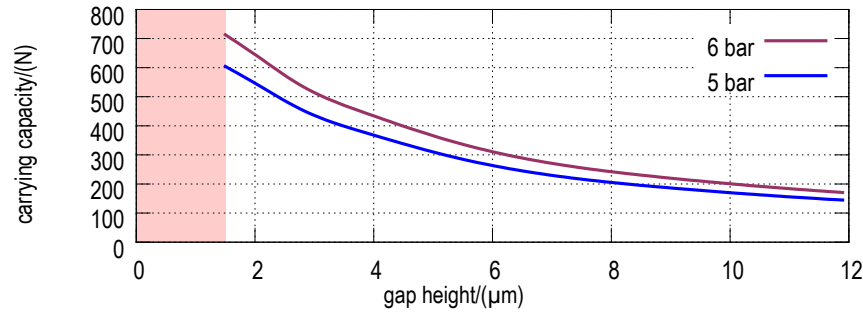
For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

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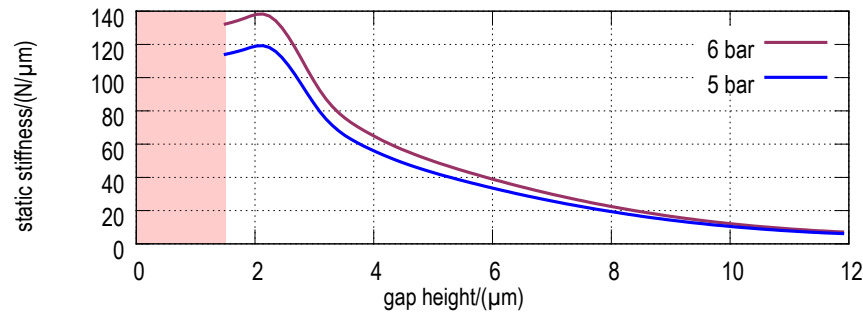
Status 08/2016

EZ-0053-045 Round Air Bearing

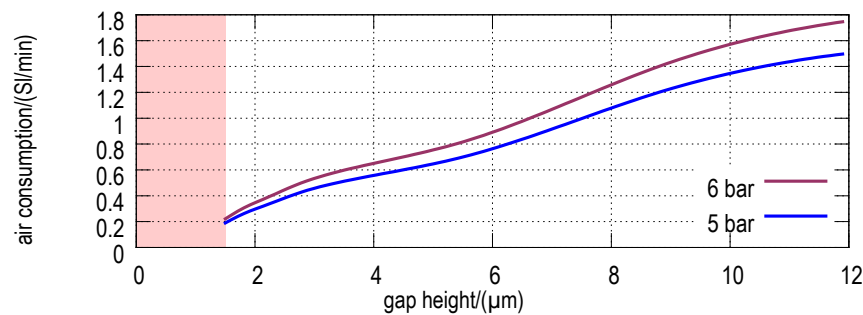
carrying capacity



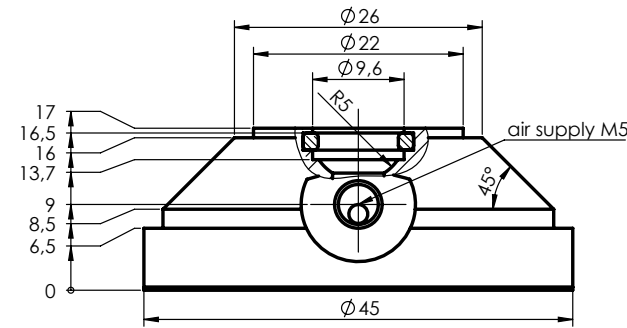
static stiffness



air consumption



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	604	713
Nominal carrying capacity / (N)	445	525
Gap height ^{3*} / (µm)	2.9	2.9
Static stiffness ^{3*} / (N/µm)	89	103
Air consumption ^{3*} / (l/min)	0.44	0.52
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	55	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M12x1-R5	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

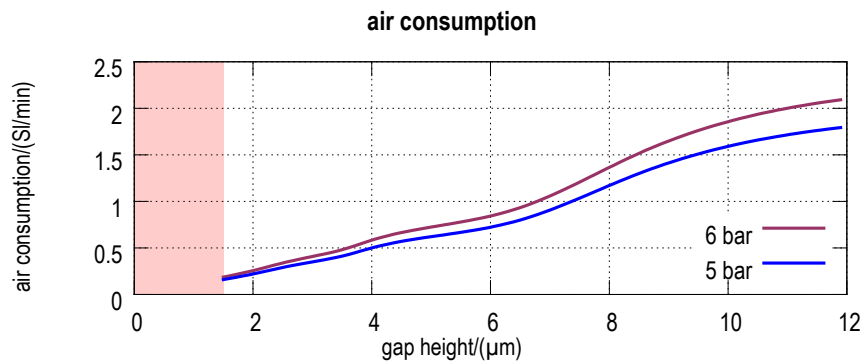
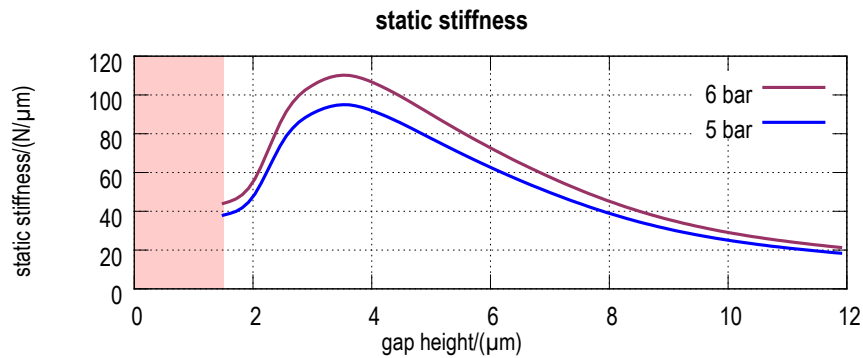
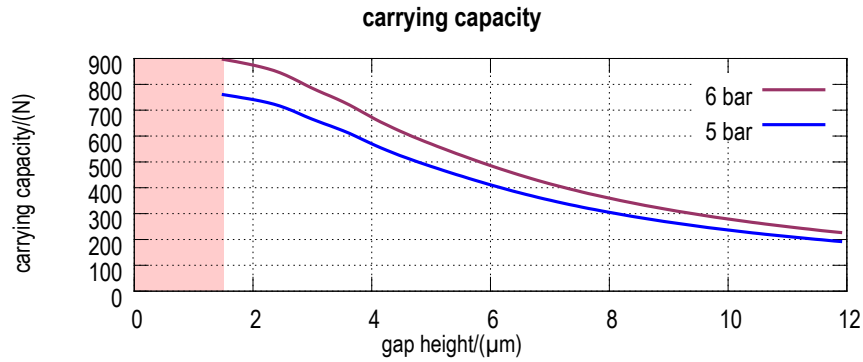
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

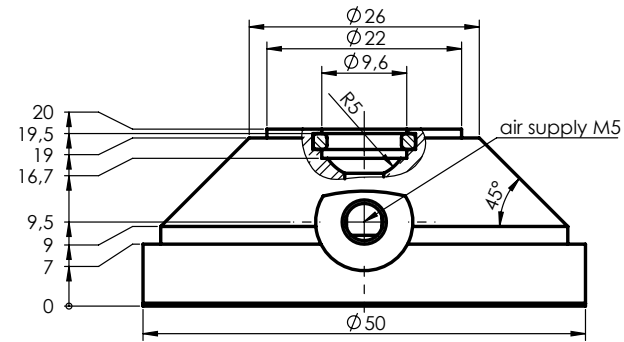
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Status 08/2016

EZ-0053-050 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	760	897
Nominal carrying capacity / (N)	560	661
Gap height ^{3*} / (µm)	4.1	4.1
Static stiffness ^{3*} / (N/µm)	90	105
Air consumption ^{3*} / (l/min)	0.51	0.60
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	77	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M12x1-R5	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

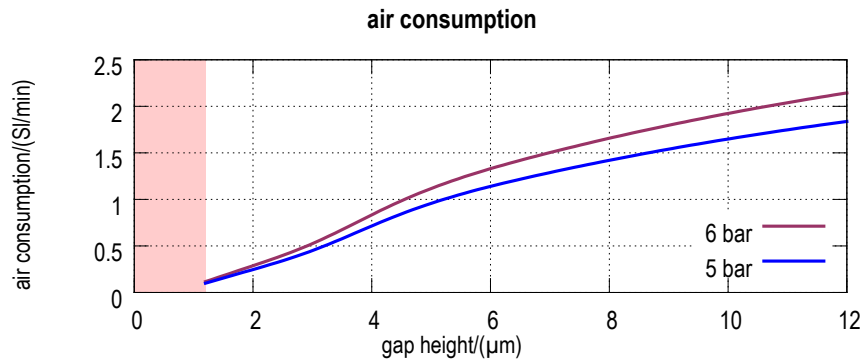
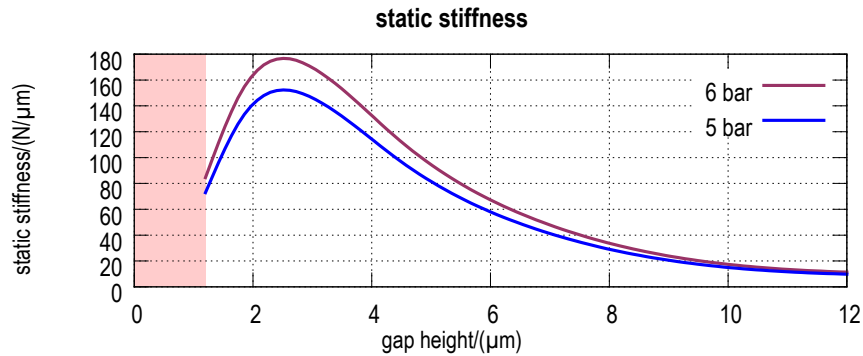
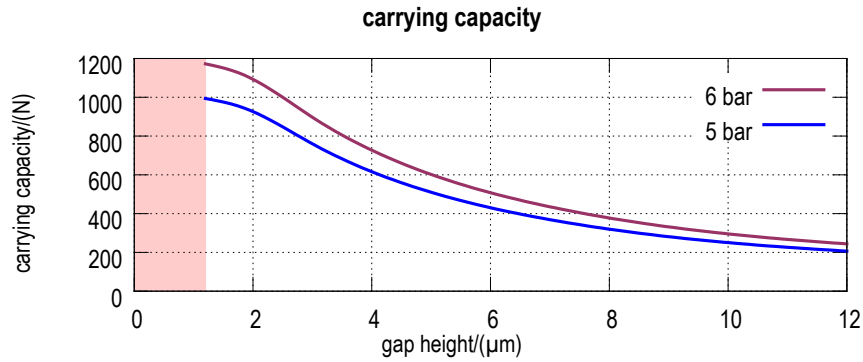
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

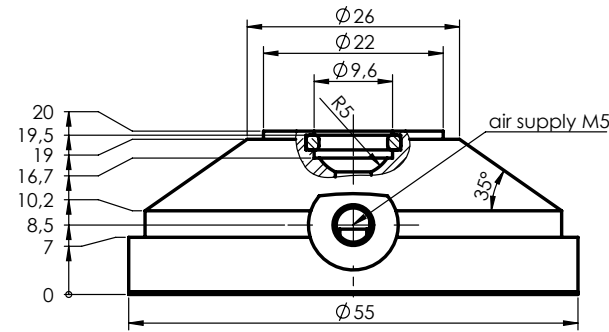
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EZ-0053-055 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	994	1173
Nominal carrying capacity / (N)	732	864
Gap height ^{3*} / (µm)	3.2	3.2
Static stiffness ^{3*} / (N/µm)	139	162
Air consumption ^{3*} / (l/min)	0.50	0.59
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	95	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M12x1-R5	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

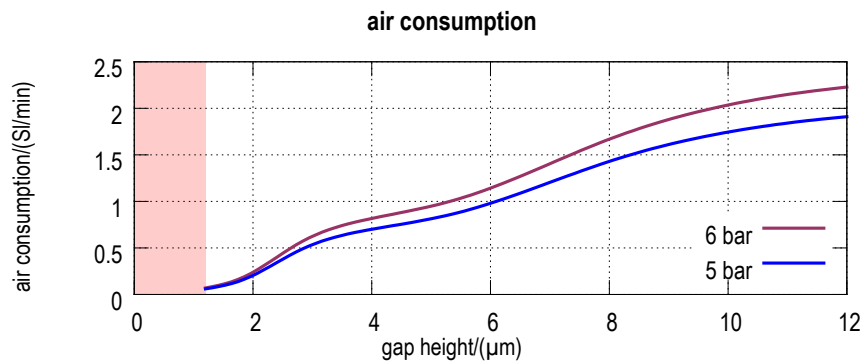
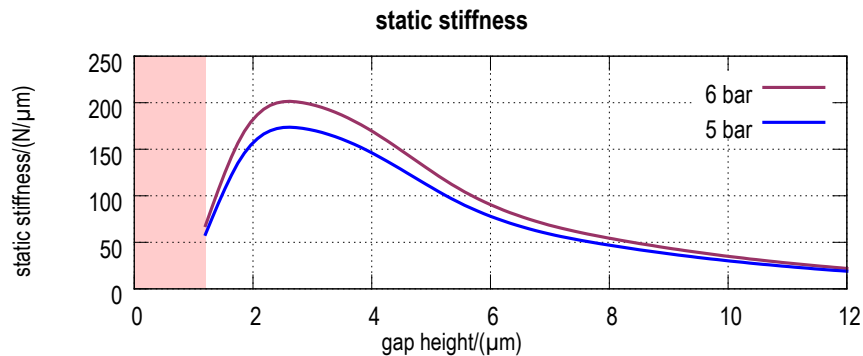
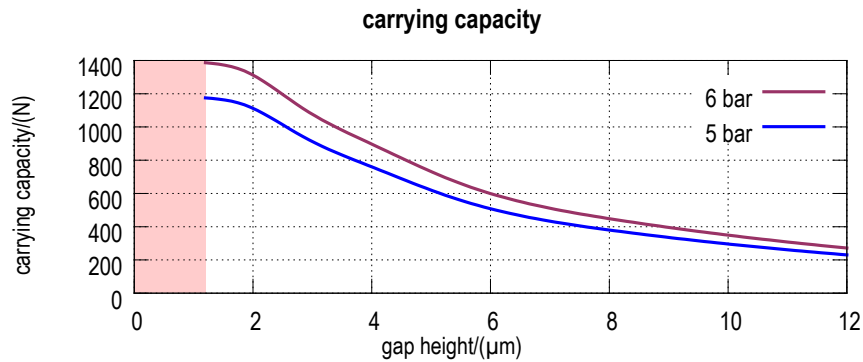
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

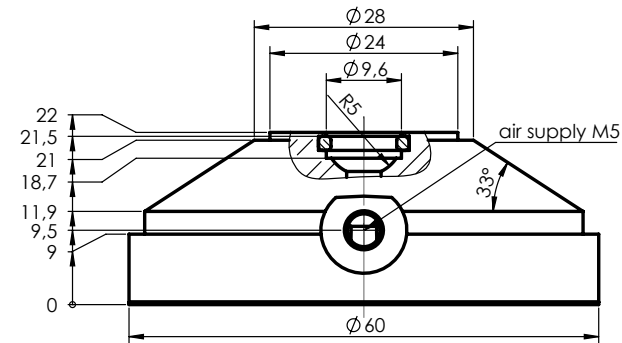
General information about design and function of our air bearings is available on our [website](#).

Status 08/2016

EZ-0053-060 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	1175	1387
Nominal carrying capacity / (N)	866	1022
Gap height ^{3*} / (µm)	3.3	3.3
Static stiffness ^{3*} / (N/µm)	161	187
Air consumption ^{3*} / (l/min)	0.58	0.67
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	129	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M12x1-R5	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

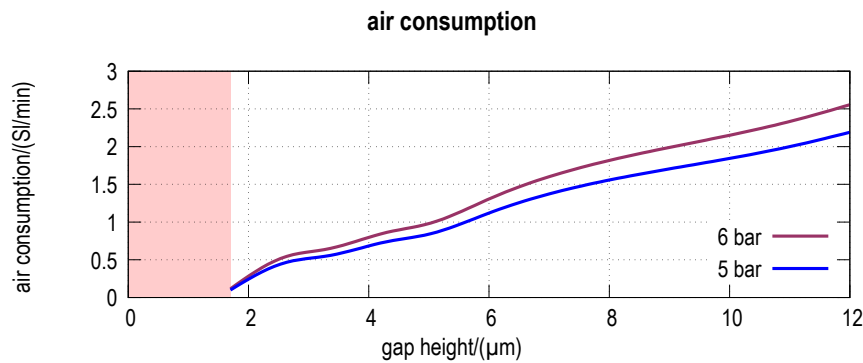
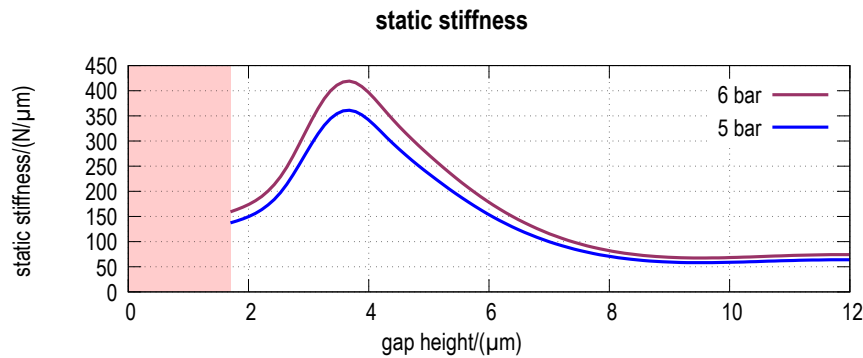
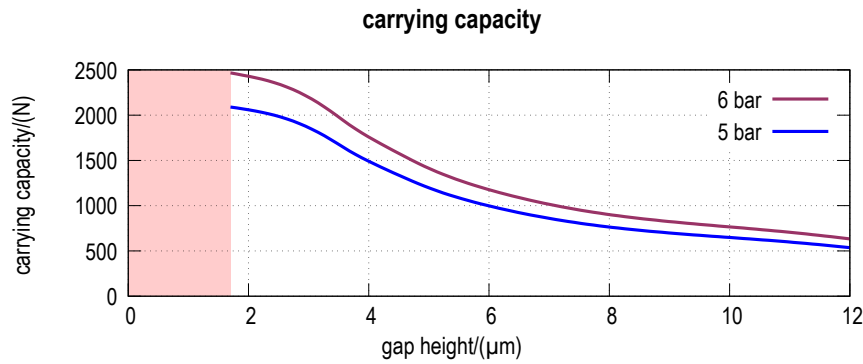
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

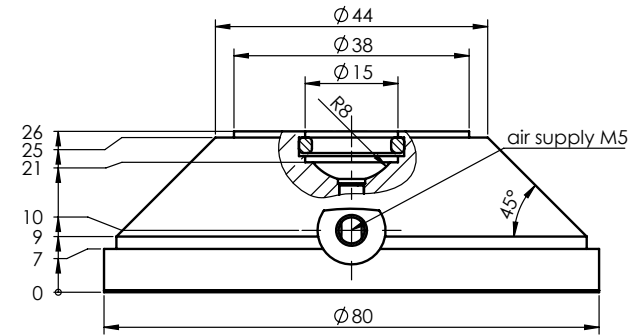
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Status 08/2016

EZ-0053-080 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	2090	2466
Nominal carrying capacity / (N)	1540	1817
Gap height ^{3*} / (µm)	3.9	3.9
Static stiffness ^{3*} / (N/µm)	346	401
Air consumption ^{3*} / (Sl/min)	0.65	0.76
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	240	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M16x1-R8	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

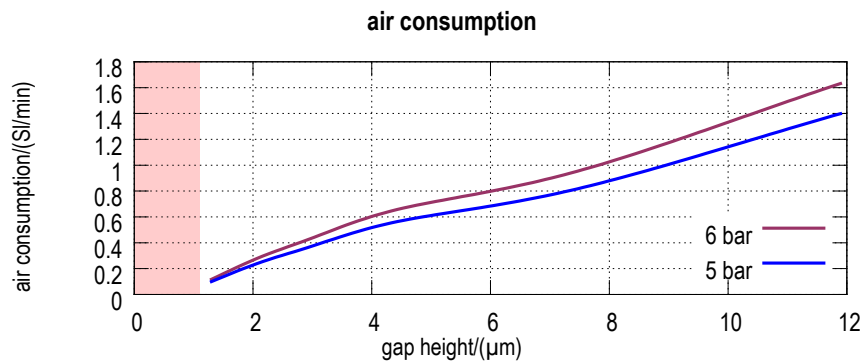
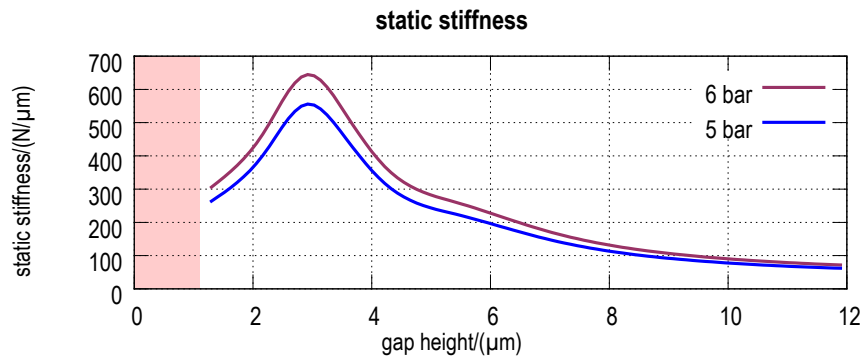
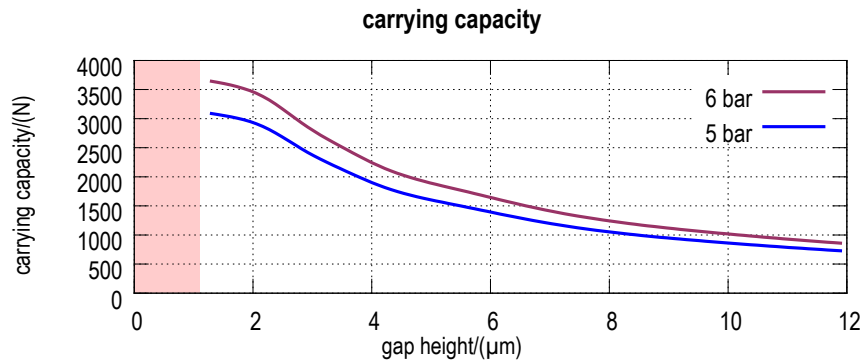
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

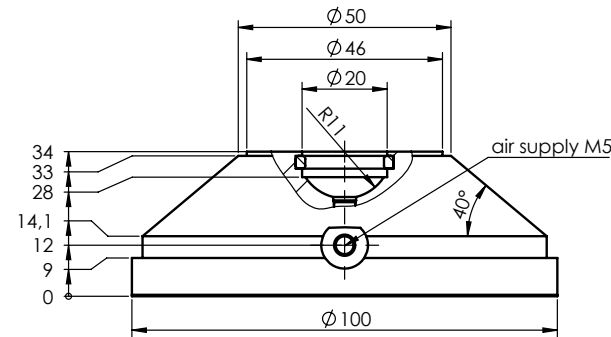
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Status 08/2016

EZ-0053-100 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	3130	3694
Nominal carrying capacity / (N)	2307	2722
Gap height ^{3*} / (µm)	3.1	3.1
Static stiffness ^{3*} / (N/µm)	519	602
Air consumption ^{3*} / (l/min)	0.40	0.46
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	528	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M24x1.5-R11	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

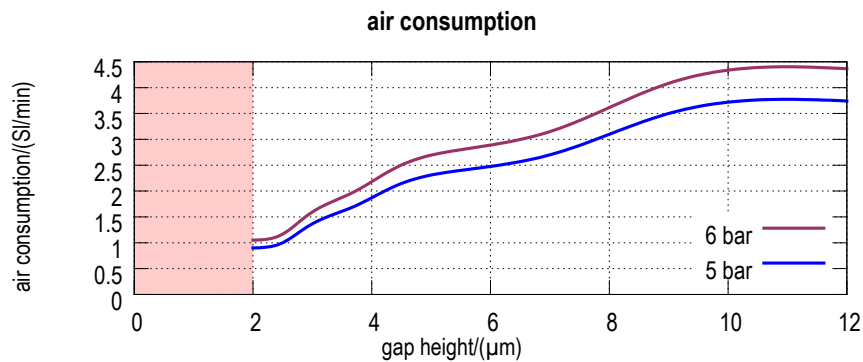
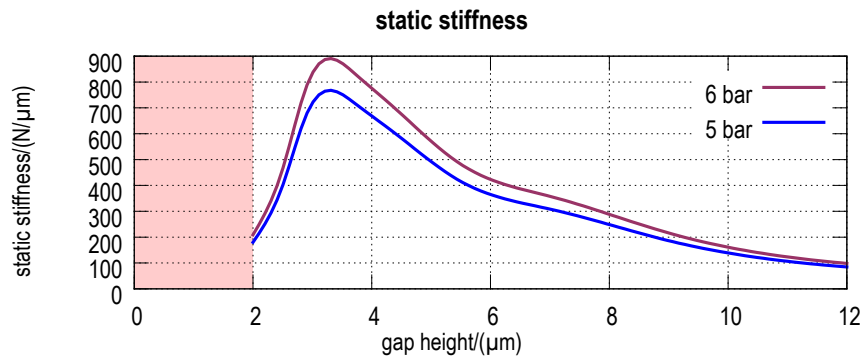
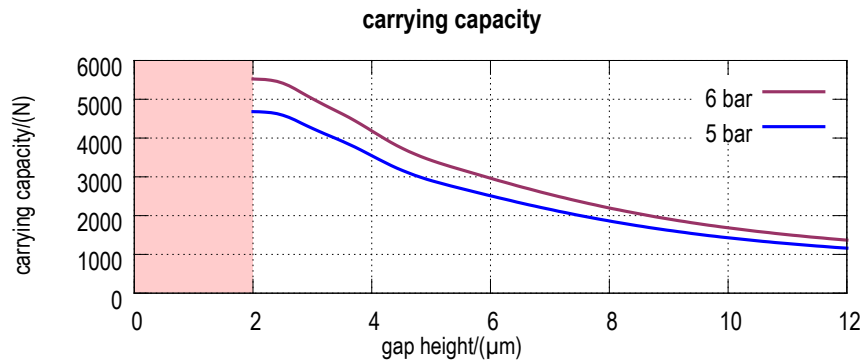
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

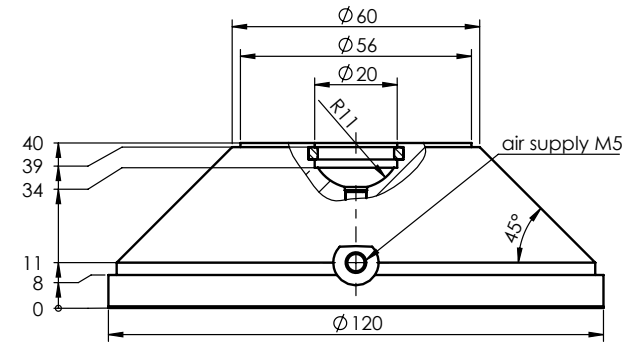
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Status 08/2016

EZ-0053-120 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	4680	5522
Nominal carrying capacity / (N)	3448	4069
Gap height ^{3*} / (µm)	4.1	4.1
Static stiffness ^{3*} / (N/µm)	646	750
Air consumption ^{3*} / (l/min)	1.95	2.27
Maximum velocity ^{3*} / (m/s)	5	6

Bearing weight (aluminium) / (g)	849
Air supply thread	M5
Adapted with centre screw	EZ-0149/EZ-0150 M24x1.5-R11

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

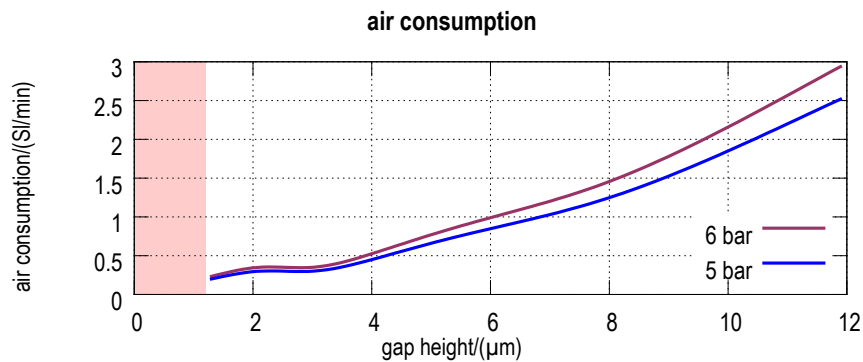
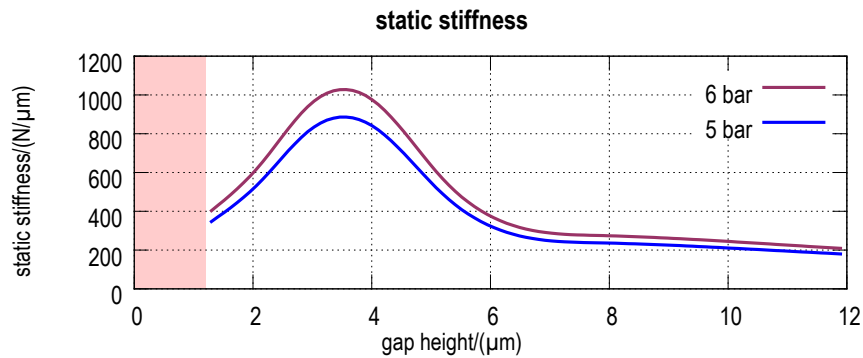
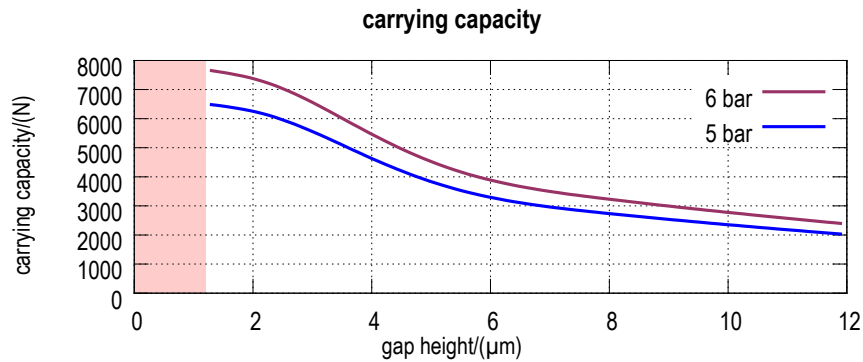
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

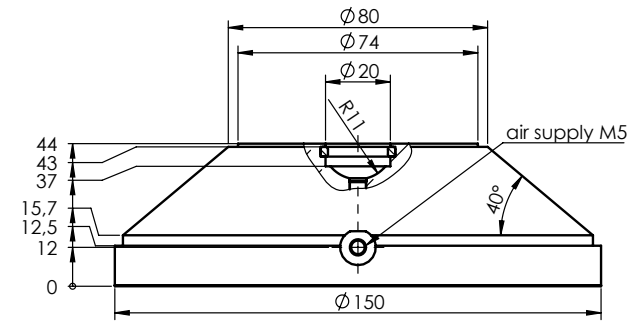
General information about design and function of our air bearings is available on our [website](#).

Status 08/2016

EZ-0053-150 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	7410	8744
Nominal carrying capacity / (N)	5460	6443
Gap height ^{3*} / (µm)	3.1	3.1
Static stiffness ^{3*} / (N/µm)	830	963
Air consumption ^{3*} / (l/min)	0.32	0.37
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	1520	
Air supply thread	M5	
Adapted with centre screw	EZ-0149/EZ-0150 M24x1.5-R11	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

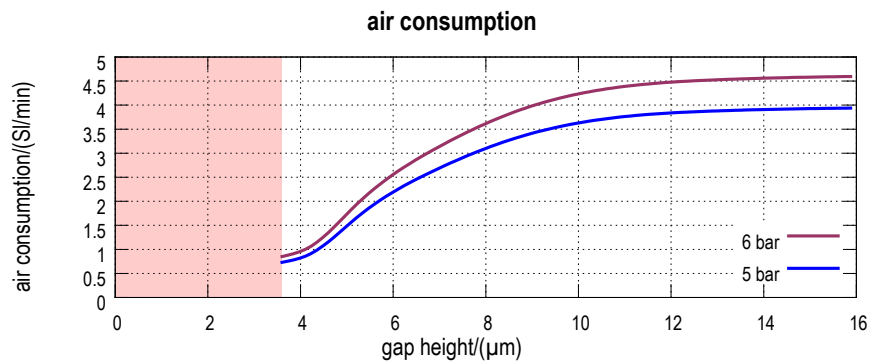
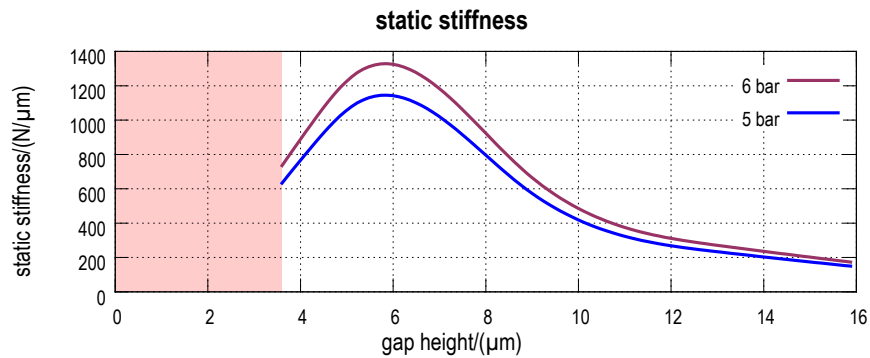
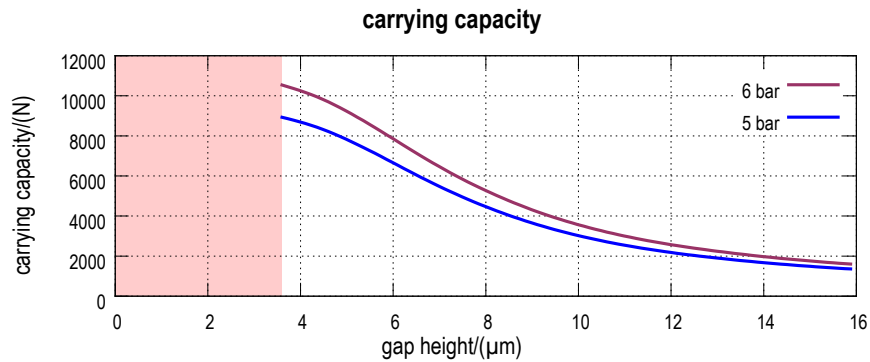
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

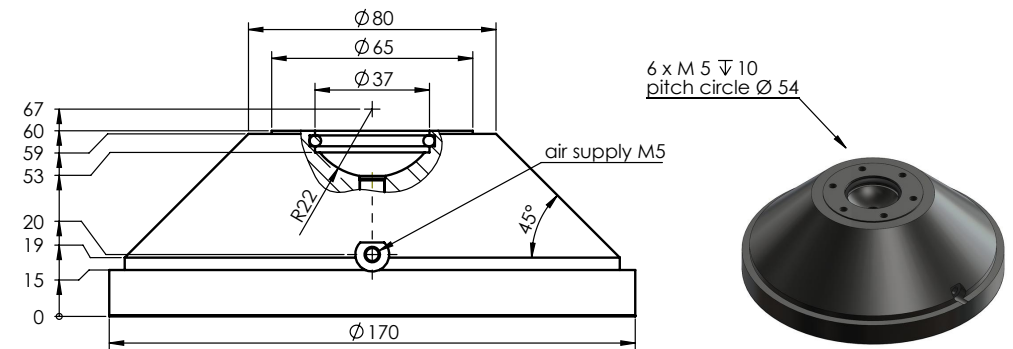
General information about design and function of our air bearings is available on our [website](#).

Status 08/2016

EZ-0053-170 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	9025	10650
Nominal carrying capacity / (N)	6650	7847
Gap height ^{3*} / (µm)	6.0	6.0
Static stiffness ^{3*} / (N/µm)	1076	1248
Air consumption ^{3*} / (l/min)	2.13	2.48
Maximum velocity ^{3*} / (m/s)	5	6

Bearing weight (aluminium) / (g)	2405
Air supply thread	M5
Adapted with centre screw	EZ-0149 M36x1.5-R22

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

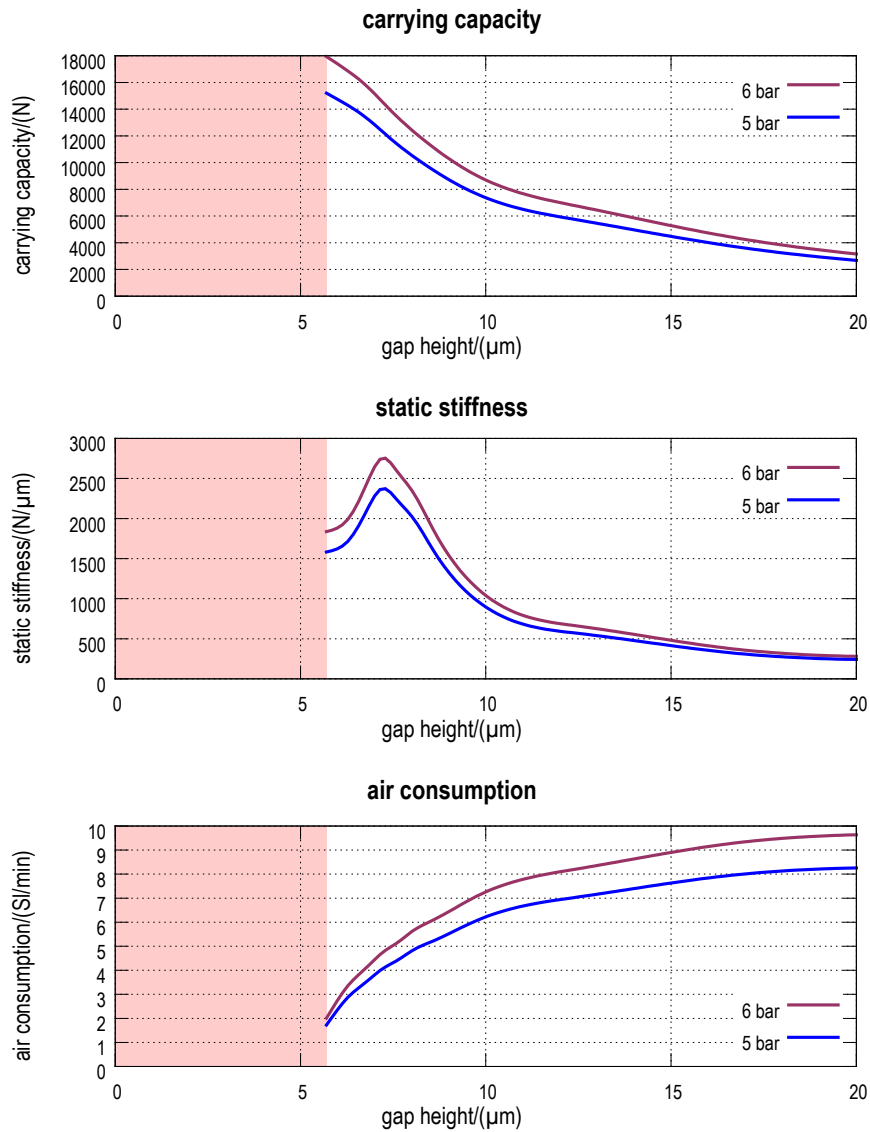
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

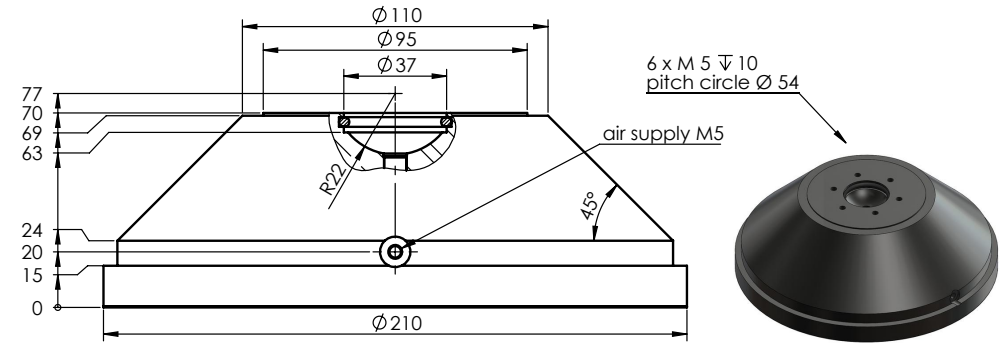
General information about design and function of our air bearings is available on our [website](#).

Status 07/2016

EZ-0053-210 Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	15200	17936
Nominal carrying capacity / (N)	11200	13216
Gap height ^{3*} / (μm)	7.7	7.7
Static stiffness ^{3*} / (N/μm)	2186	2535
Air consumption ^{3*} / (l/min)	4.49	5.24
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	4566	
Air supply thread	M5	
Adapted with centre screw	EZ-0149 M36x1.5-R22	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

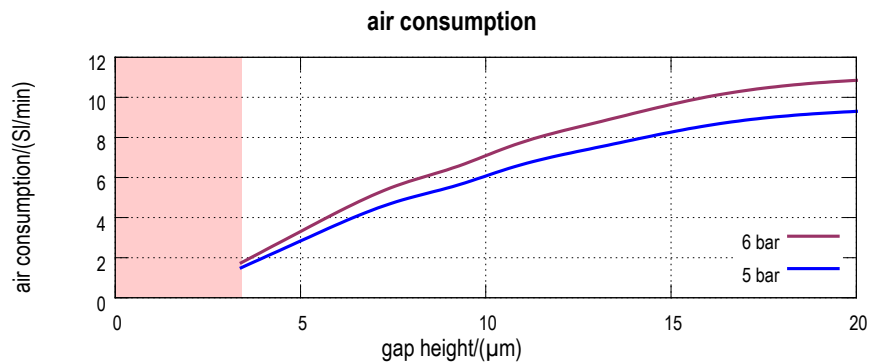
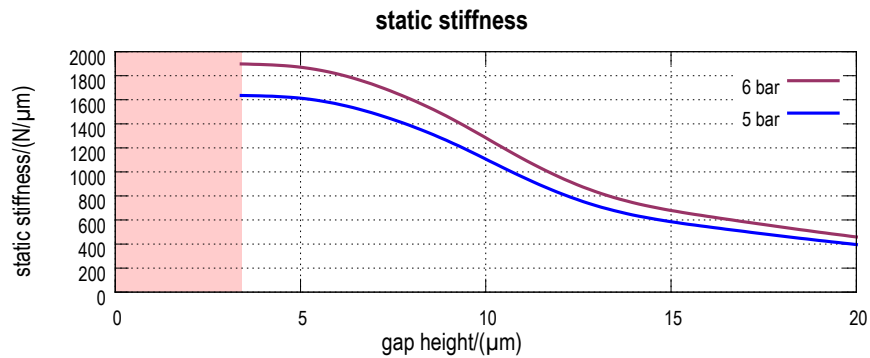
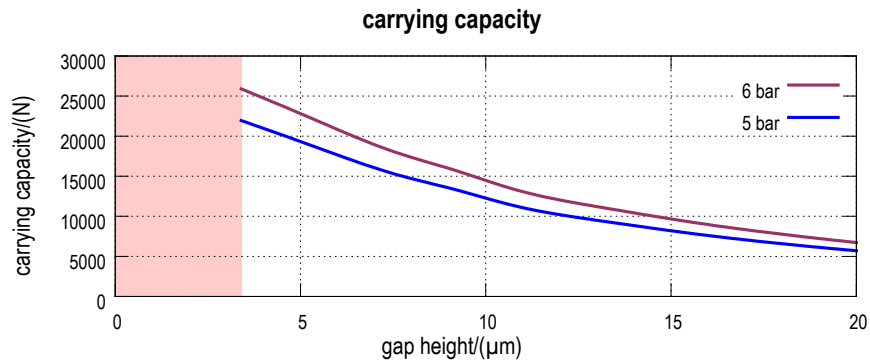
^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

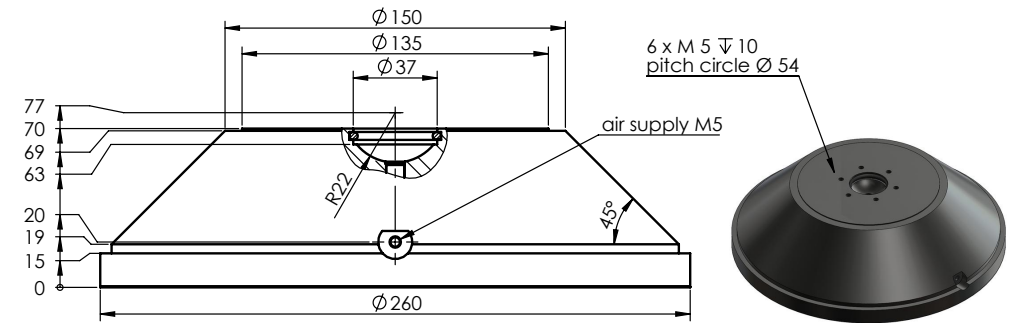
General information about design and function of our air bearings is available on our [website](#).

Status 07/2016

EZ-0053-260 flach Round Air Bearing



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	21945	25895
Nominal carrying capacity / (N)	16170	19081
Gap height ^{3*} / (µm)	7.0	7.0
Static stiffness ^{3*} / (N/µm)	1471	1707
Air consumption ^{3*} / (l/min)	4,34	5,06
Maximum velocity ^{3*} / (m/s)	5	6

Bearing weight (aluminium) / (g)	7107
Air supply thread	M5
Adapted with centre screw	EZ-0149 M36x1.5-R22

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

^{3*} at nominal carrying capacity

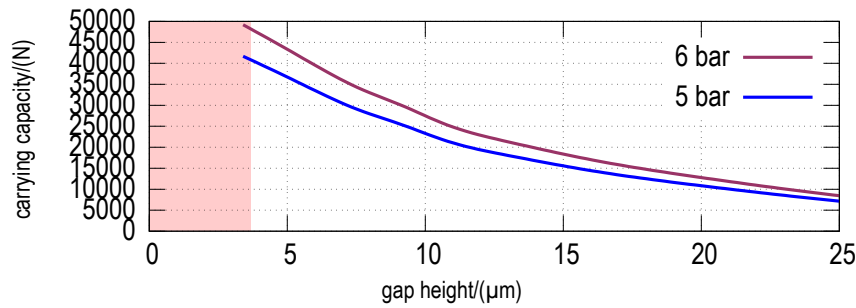
For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

General information about design and function of our air bearings is available on our [website](#).

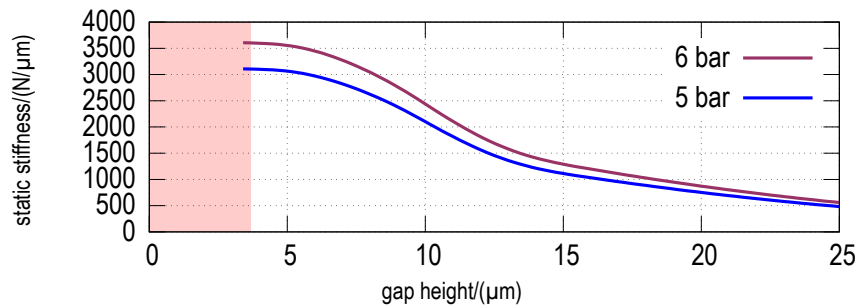
Status 07/2016

EZ-0053-360 Round Air Bearing

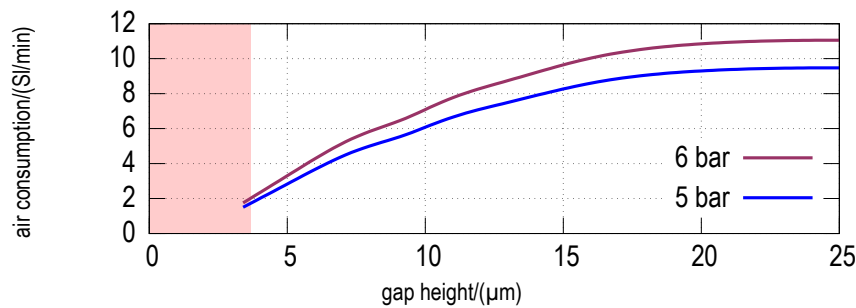
carrying capacity



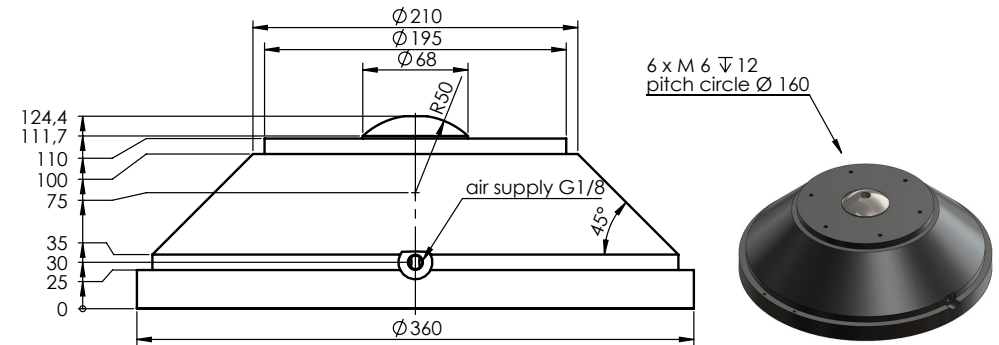
static stiffness



air consumption



■ = Mixed friction range



Thermodynamically optimised air cushion by micro groove system.^{1*}
Bearing surface with dry running coating.

Air supply pressure ^{2*} / (bar _{rel})	5	6
Maximum carrying capacity / (N)	40850	48203
Nominal carrying capacity / (N)	30100	35518
Gap height ^{3*} / (µm)	7.2	7.2
Static stiffness ^{3*} / (N/µm)	2766	3208
Air consumption ^{3*} / (l/min)	4.50	5.25
Maximum velocity ^{3*} / (m/s)	5	6
Bearing weight (aluminium) / (g)	21240	
Air supply thread	G1/8"	
Adapted with centre screw	EZ-0249 M7x2-R50	

^{1*} Patents: US 6,164,827, DE 199 18 564 A1

^{2*} Different supply pressure on request

^{3*} at nominal carrying capacity

For specifications of guide surface, air quality requirements and gap definition see last pages of the [catalogue](#).

General information about design and function of our air bearings is available on our [website](#).

Status 07/2021



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