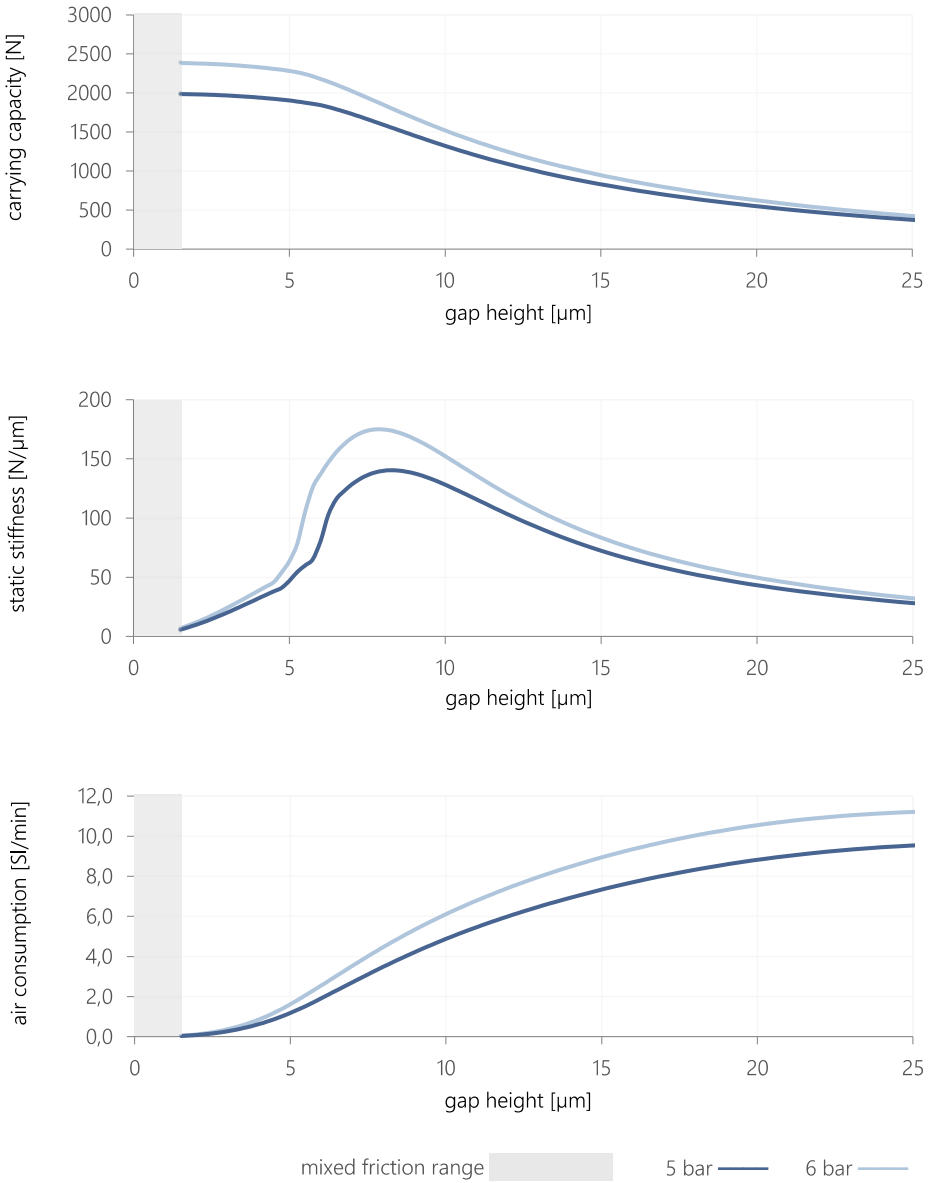
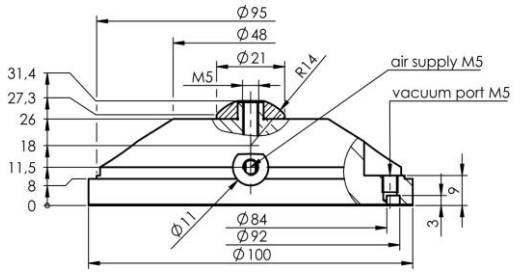
EZ-0300 Clean Room Air Bearings

EITZENBERGER
KINEMATIK MIT LUFT

Designation	Diameter	Nominal load capacity	Static stiffness	Air consumption	Ident No.	Center screw
EZ-0300-100	100 mm	1100 N	105 N/µm	5.8 Sl/min	0019819	EZ-0249 M24x1.5 R14
EZ-0300-120	120 mm	1800 N	170 N/µm	6.7 Sl/min	0019802	EZ-0249 M24x1.5-R14
EZ-0300-150	150 mm	3000 N	275 N/µm	6.9 Sl/min	0019607	EZ-0249 M36x1.5-R22
EZ-0300-170	170 mm	3950 N	360 N/µm	7.0 Sl/min	0019622	EZ-0249 M36x1.5-R22
EZ-0300-210	210 mm	7000 N	590 N/µm	9.9 Sl/min	0019565	EZ-0249 M36x1.5-R22
EZ-0300-260	260 mm	10500 N	900 N/µm	10.0 Sl/min	0019593	EZ-0249 M48x1.5-R30
EZ-0300-310	310 mm	16000 N	1250 N/µm	12.1 Sl/min	0019652	EZ-0249 M72x2.0-R50
EZ-0300-360	360 mm	22000 N	1700 N/µm	12.3 Sl/min	0019681	EZ-0249 M72x2.0-R50
EZ-0300-420	420 mm	30000 N	2300 N/µm	15.0 Sl/min	0019780	EZ-0249 M72x2.0-R50
EZ-0300-450	450 mm	34500 N	2550 N/µm	14.9 Sl/min	0019776	EZ-0249 M72x2.0-R50

Clean Room Bearing EZ-0300-100





Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

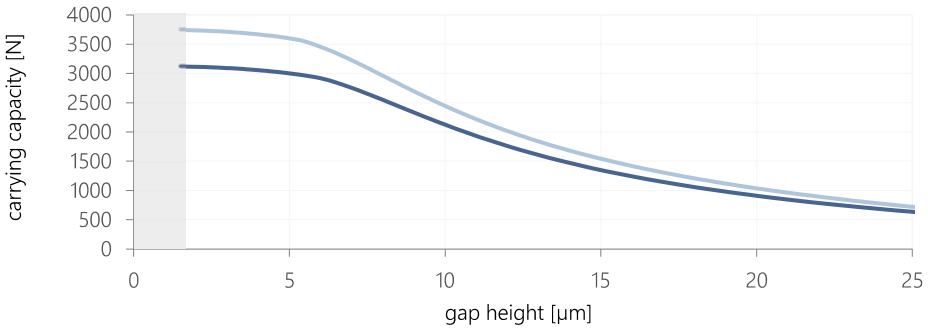
Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	N	1950	2350
Nominal carrying capacity	N	1100	1300
Gap height [3]	µm	11.5	11.5
Static stiffness [3]	N/µm	105	125
Air consumption [3]	Sl/min	5.8	7.1
Maximum velocity [3]	m/s	5	6
Weight	g	410	410
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M24x1.5-R14

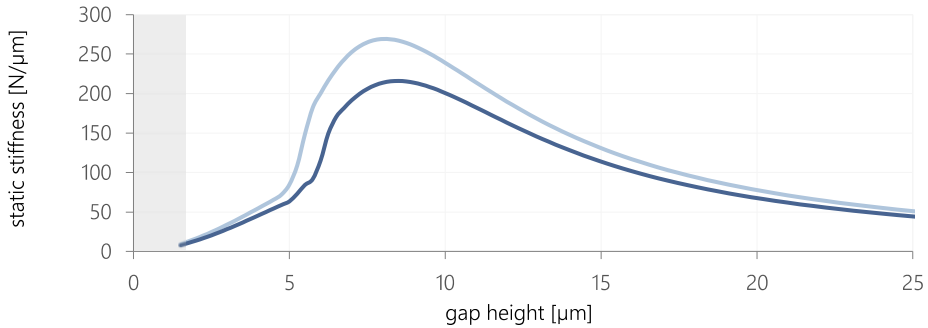
[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

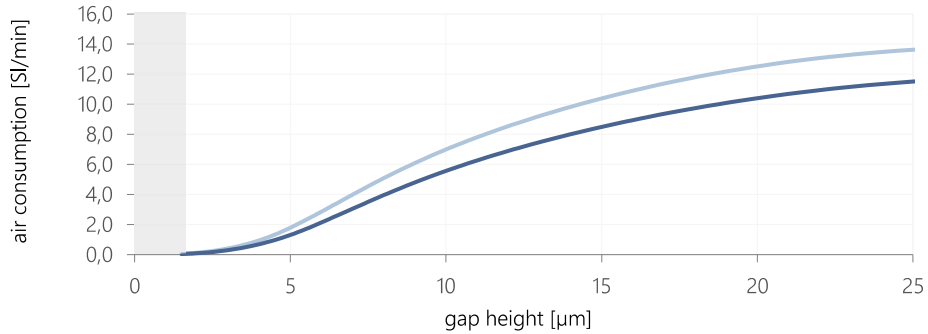
Visit our website for information on bearing design and function, counterface and air quality requirements, and the definition of gap height.

Subject to technical modifications and typographical errrors.

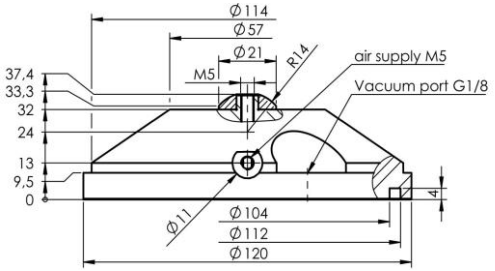
Clean Room Bearing EZ-0300-120







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	N	3100	3700
Nominal carrying capacity	N	1800	2050
Gap height [3]	µm	11.6	11.6
Static stiffness [3]	N/µm	170	195
Air consumption [3]	Sl/min	6.7	8.3
Maximum velocity [3]	m/s	5	6
Weight	g	710	710
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M24x1.5-R14

[1] Patents: US 6,164,827, DE 199 18 564 A1
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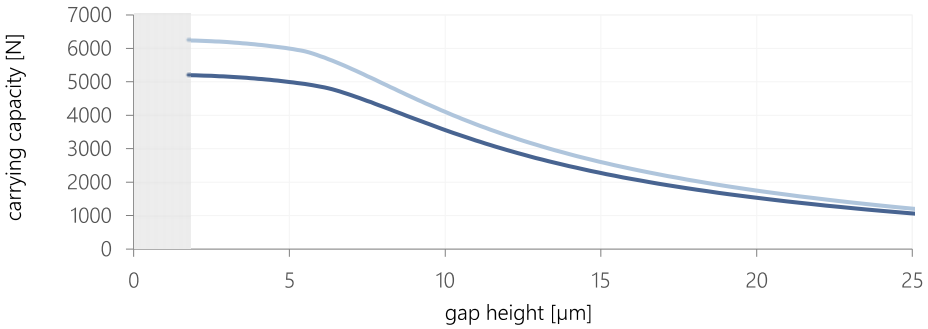
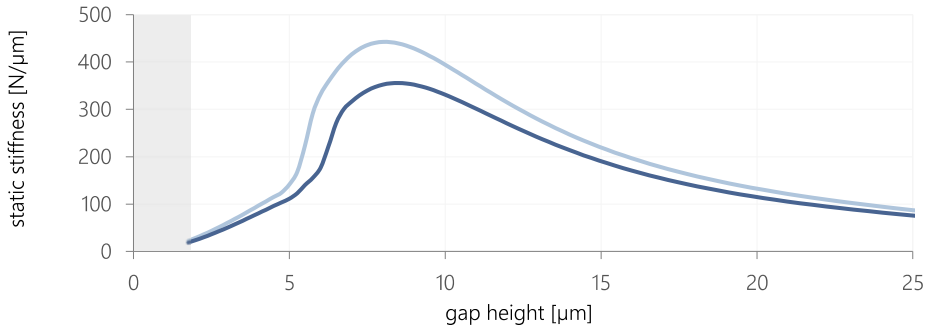
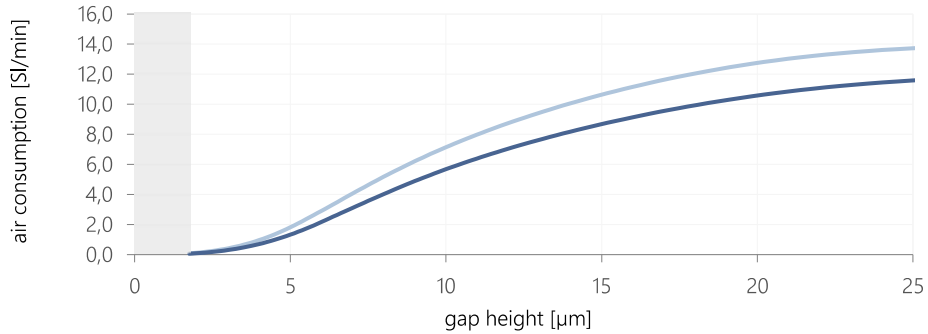
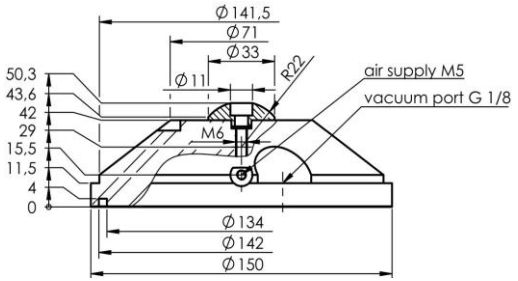
Clean Room Bearing EZ-0300-150







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	N	5100	6200
Nominal carrying capacity	N	3000	3450
Gap height [3]	µm	11.8	11.8
Static stiffness [3]	N/µm	275	320
Air consumption [3]	Sl/min	6.9	8.6
Maximum velocity [3]	m/s	5	6
Weight	kg	1.4	1.4
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M36x1.5-R22

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
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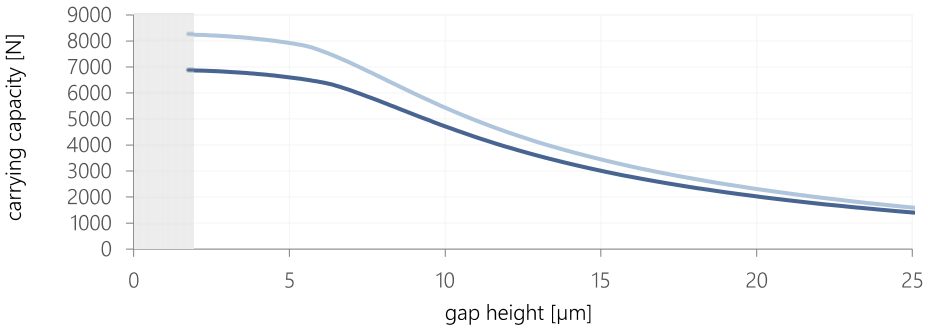
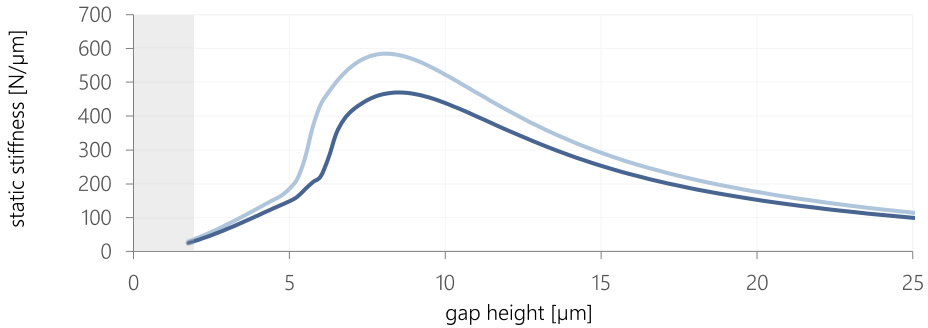
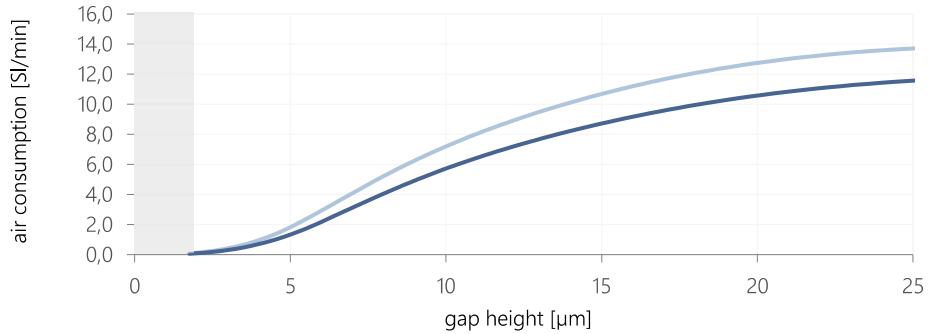
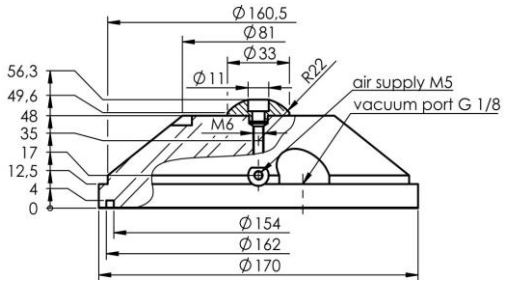
Clean Room Bearing EZ-0300-170







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	N	6800	8200
Nominal carrying capacity	N	3950	4500
Gap height [3]	µm	11.9	11.9
Static stiffness [3]	N/µm	360	420
Air consumption [3]	Sl/min	7	8.7
Maximum velocity [3]	m/s	5	6
Weight	kg	2.1	2.1
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M36x1.5-R22

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

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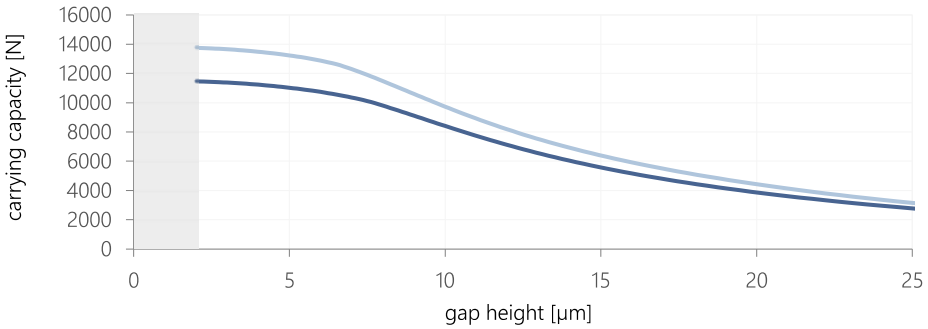
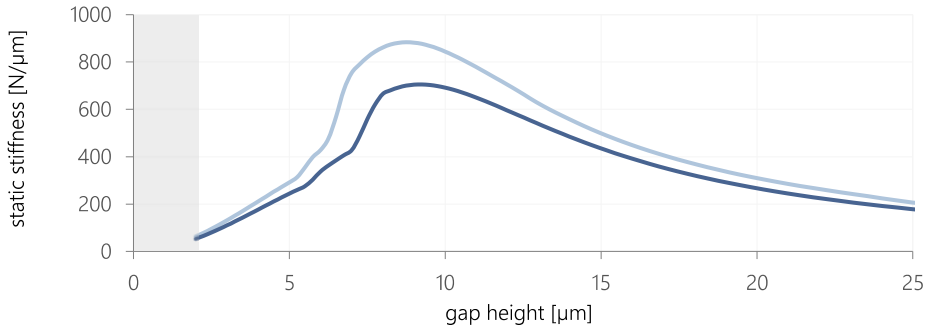
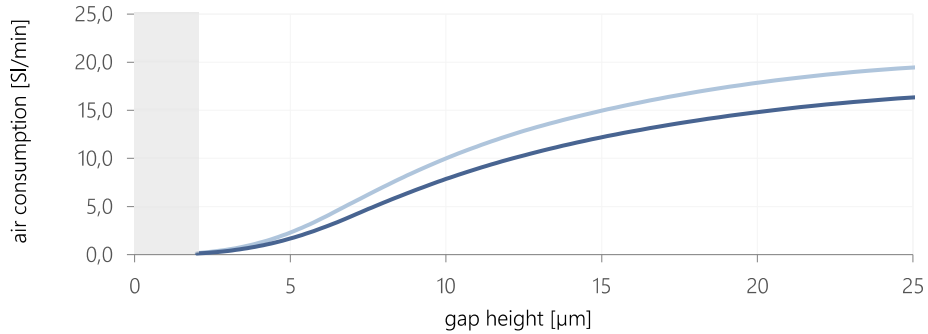
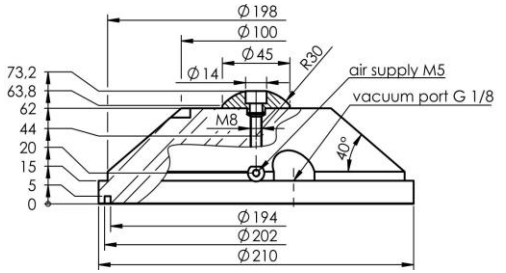
Clean Room Bearing EZ-0300-210







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	11	13,5
Nominal carrying capacity	kN	7.0	8.0
Gap height [3]	µm	12.1	12.1
Static stiffness [3]	N/µm	590	690
Air consumption [3]	Sl/min	9.9	12.4
Maximum velocity [3]	m/s	5	6
Weight	kg	4.1	4.1
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M48x1.5-R30

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
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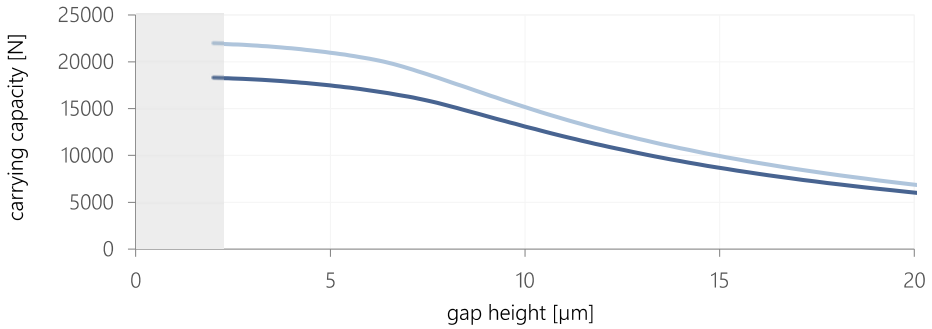
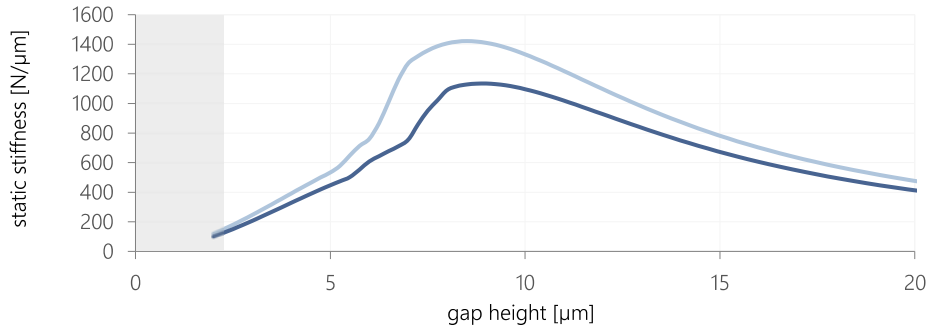
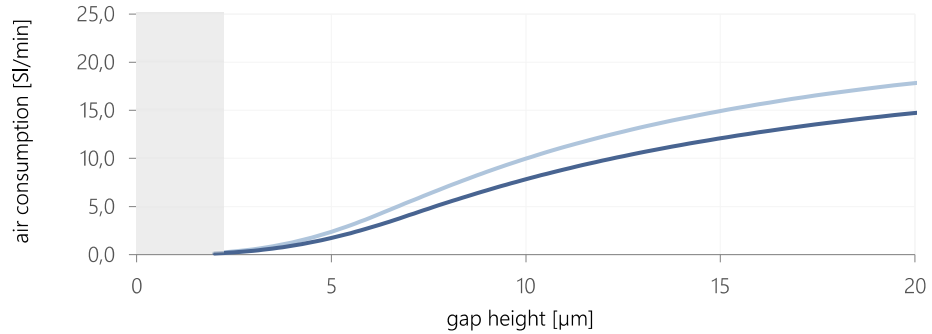
Subject to technical modifications and typographical errrors.

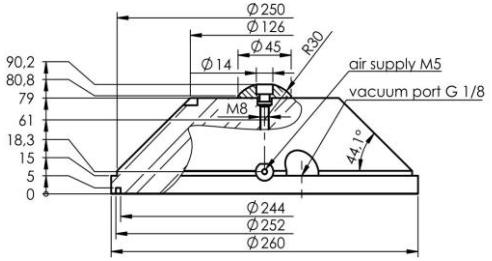
Clean Room Bearing EZ-0300-260







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	18	21,5
Nominal carrying capacity	kN	10.5	12.0
Gap height [3]	µm	12.3	12.3
Static stiffness [3]	N/µm	900	1050
Air consumption [3]	Sl/min	10	12.5
Maximum velocity [3]	m/s	5	6
Weight	kg	7.8	7.8
Air supply thread		M5	
Adapted with pressure screw		EZ-0249	M48x1.5-R30

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

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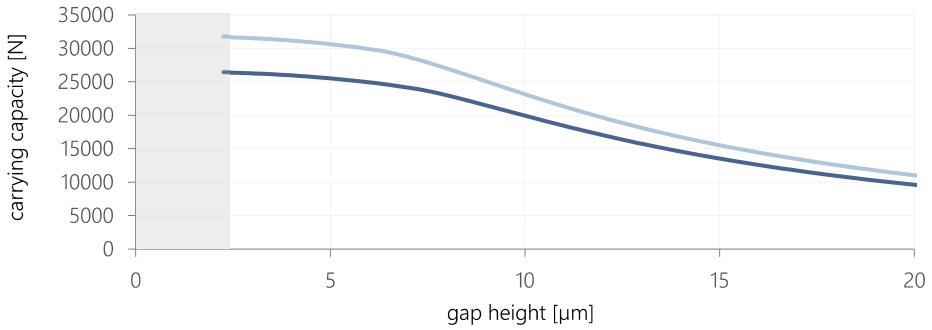
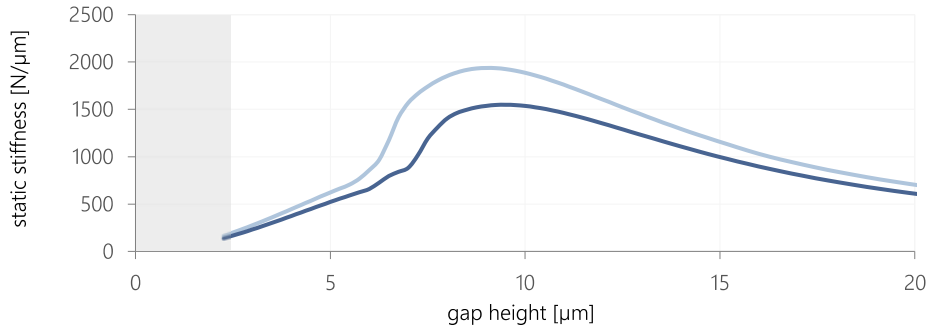
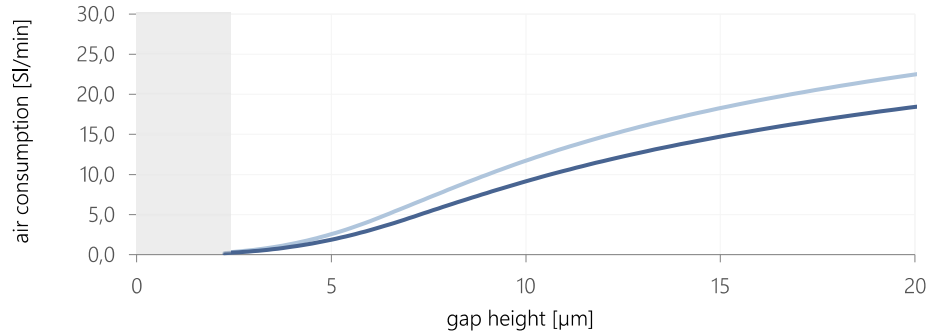
Subject to technical modifications and typographical errrors.

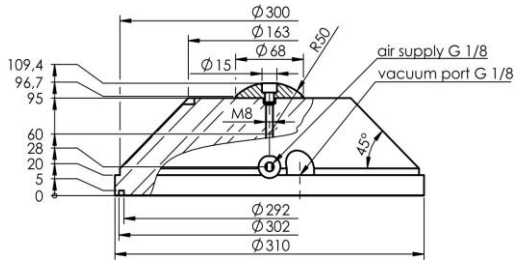
Clean Room Bearing EZ-0300-310







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	26	31,5
Nominal carrying capacity	kN	16.0	19.0
Gap height [3]	µm	12.4	12.4
Static stiffness [3]	N/µm	1250	1500
Air consumption [3]	Sl/min	12.1	15.3
Maximum velocity [3]	m/s	5	6
Weight	kg	14.2	14.2
Air supply thread		G1/8"	
Adapted with pressure screw		EZ-0249 M72x2.0-R50	

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
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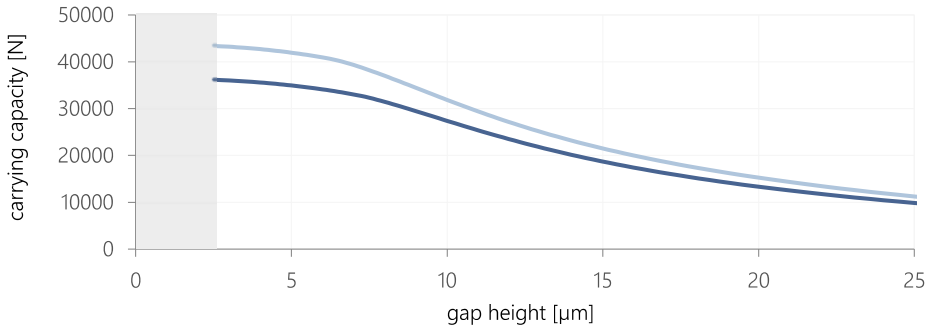
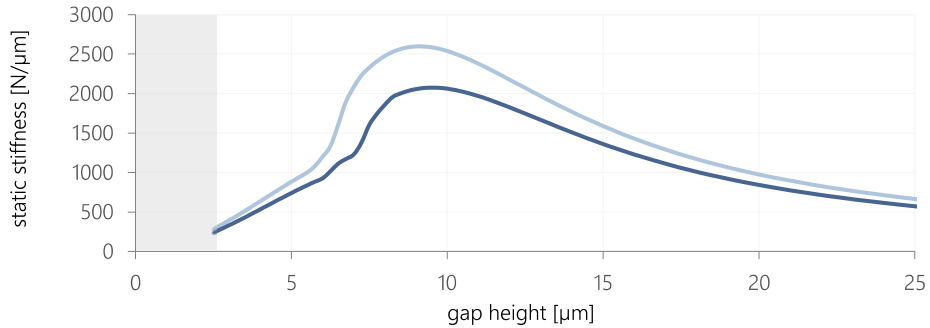
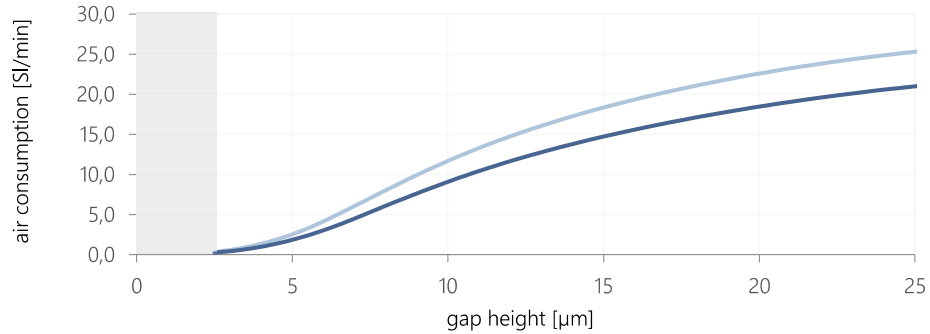
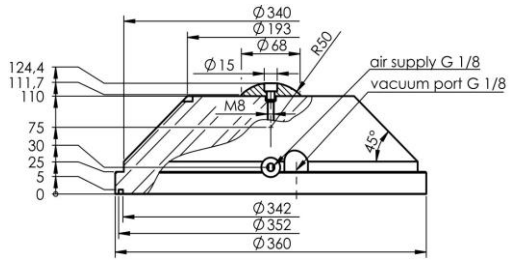
Clean Room Bearing EZ-0300-360







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating.
Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	36	43
Nominal carrying capacity	kN	22.0	25.5
Gap height [3]	µm	12.6	12.6
Static stiffness [3]	N/µm	1700	2050
Air consumption [3]	Sl/min	12.3	15.5
Maximum velocity [3]	m/s	5	6
Weight	kg	22.3	22.3
Air supply thread		G1/8"	
Adapted with pressure screw		EZ-0249 M72x2-R50	

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

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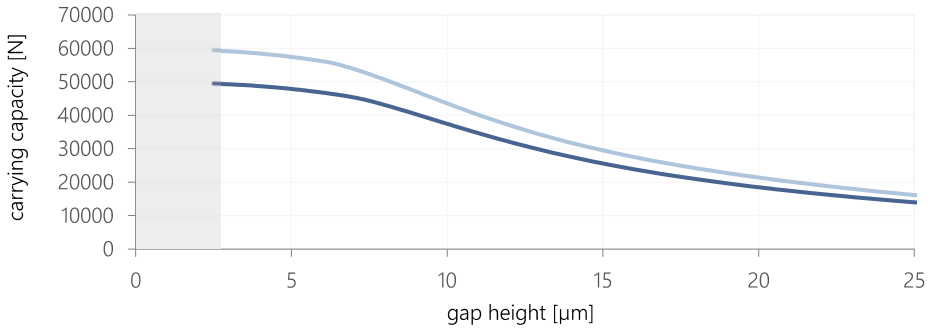
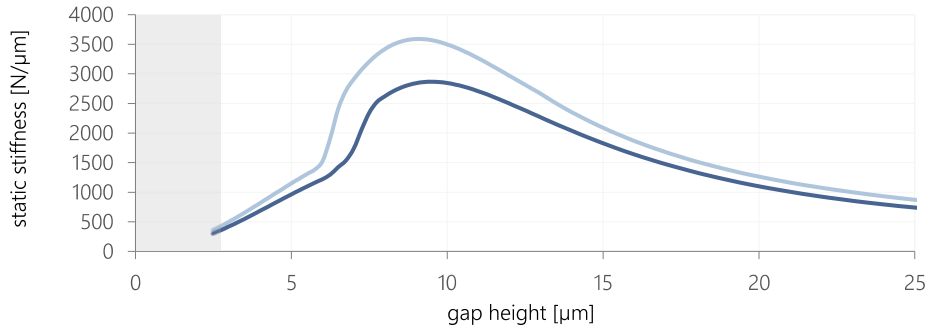
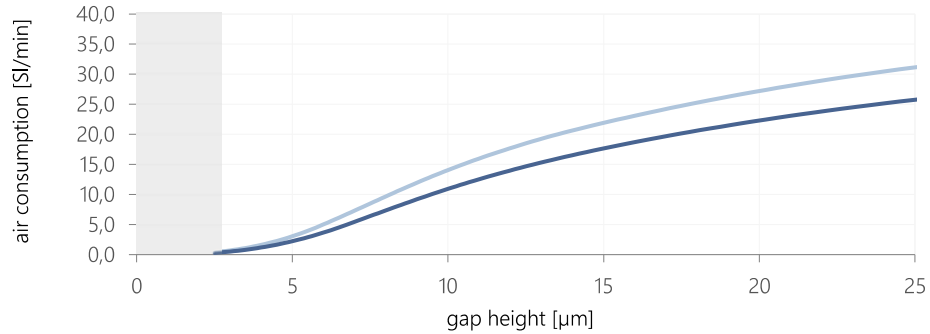
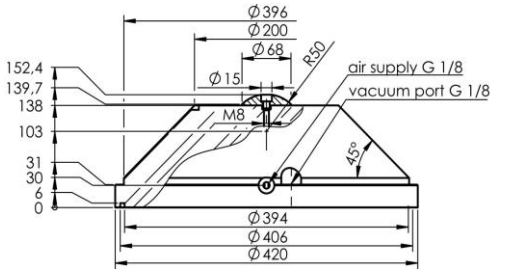
Clean Room Bearing EZ-0300-420







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	49	59
Nominal carrying capacity	kN	30.0	35.0
Gap height [3]	µm	12.7	12.7
Static stiffness [3]	N/µm	2300	2700
Air consumption [3]	Sl/min	15	18.8
Maximum velocity [3]	m/s	5	6
Weight	kg	35.6	35.6
Air supply thread		G1/8"	
Adapted with pressure screw		EZ-0249 M72x2-R50	

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

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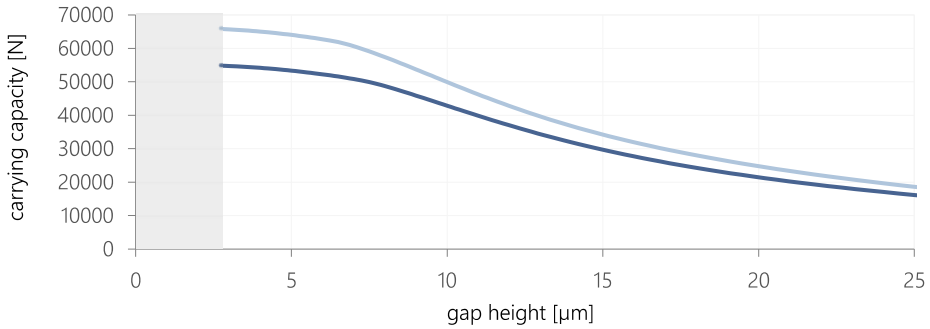
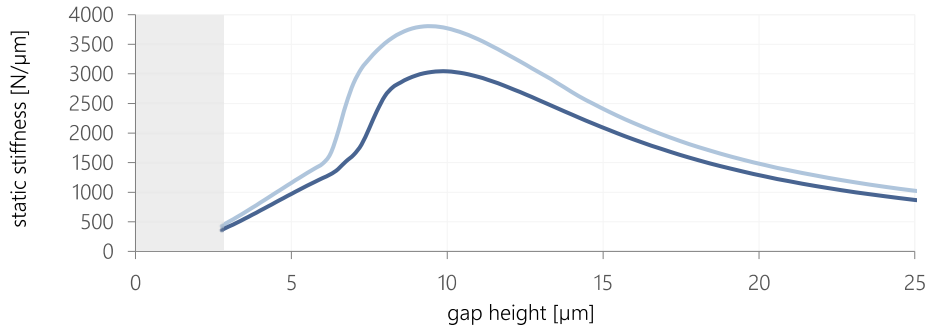
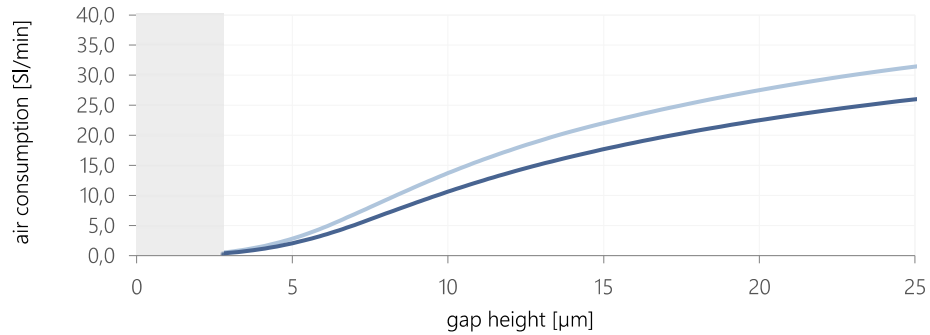
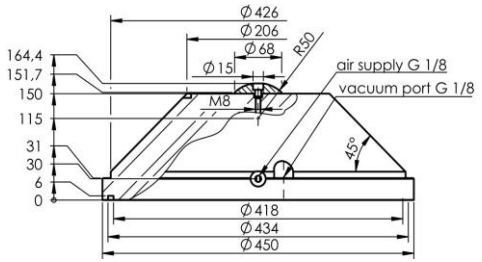
Clean Room Bearing EZ-0300-450







mixed friction range 5 bar 6 bar



Thermodynamically optimized air cushion due to micro groove system.[1] Bearing surface with dry running coating. Clean room bearing with additional air-extraction system.

Air supply pressure [2]	bar_{rel}	5	6
Maximum carrying capacity	kN	54	65
Nominal carrying capacity	kN	34.5	40.0
Gap height [3]	µm	12.8	12.8
Static stiffness [3]	N/µm	2550	3050
Air consumption [3]	Sl/min	14.9	18.9
Maximum velocity [3]	m/s	5	6
Weight	kg	35.6	35.6
Air supply thread		G1/8"	
Adapted with pressure screw		EZ-0249 M72x2-R50	

[1] Patents: US 6,164,827, DE 199 18 564 A1
[2] deviating supply pressures on request
[3] at nominal carrying capacity

Visit our website for information on bearing design and function, counterface and air quality requirements, and the definition of gap height.

Subject to technical modifications and typographical errrors.