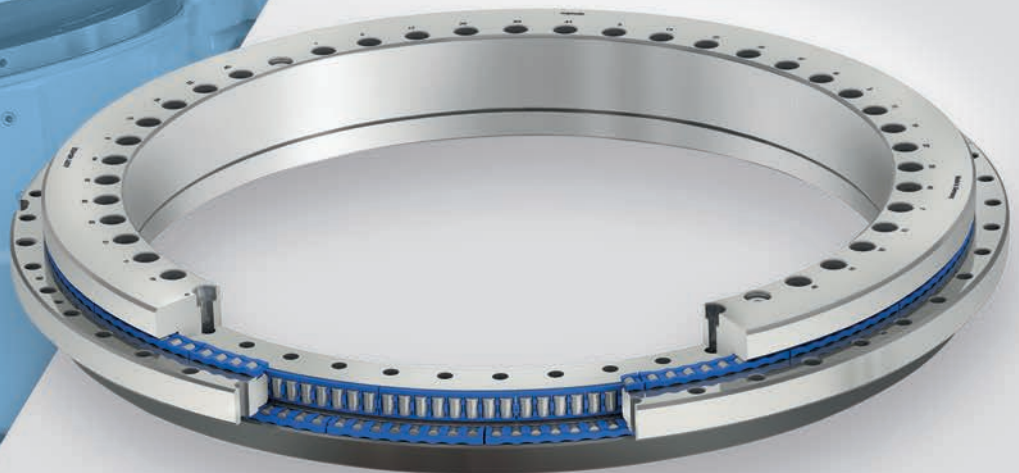


Bearings for Precision Rotary Axes



Ultra Precision Made by myonic

Our Series

AXRY

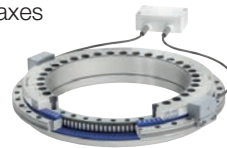
Axial / radial bearings

NGX Series maximum rigidity for swiveling and slowly rotating axes

NGS Series maximum speed for high speed rotating axes

Optionally available:

- incremental and absolute measuring systems

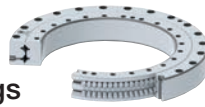


AXDR

Angular contact roller bearings

VX Series high rigidity for swiveling and slowly rotating axes

The design has been optimized across all series – profit from maximum running accuracy, highly accurate connection dimensions and constant smooth running.



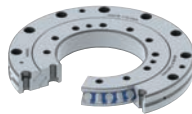
AXCR

Cross roller bearings

U Series Standard version with single-piece rings

S Series Standard version with single-piece rings and constant overall height

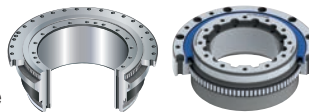
M Series customer-specific version with single-piece rings



Cross roller bearings offer high axial and radial rigidity along with tilting rigidity in a very compact design.

Special bearings

Special bearings are possible for series and are custom made to your individual technical requirements.



Examples:

- Counter-bearings as clearance free, preloaded floating bearings
- Integration of functional and surrounding components in ready-to-install kits
- Custom overall heights / hole patterns etc.

The Next Generation

The **AXRY-NGX series** has been systematically developed for **maximum rigidity**. In fact, getting greater rigidity from the available space just isn't possible!

An optimized ring geometry of the NGX minimizes influences of surrounding design and reduces variety of bearings.

The proven grease reservoirs from the EX series have been incorporated.

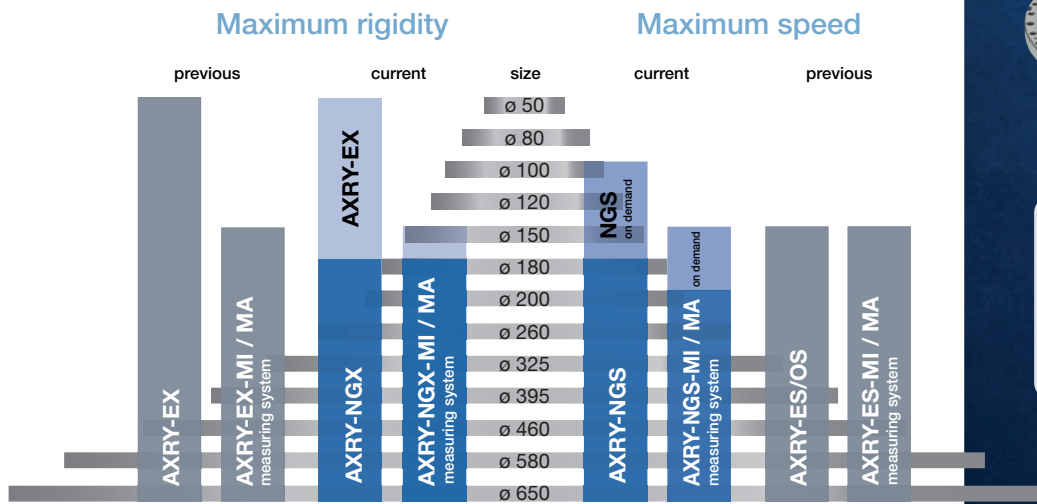
Our new **AXRY-NGS series** was developed for **maximum speed** combined with high rigidity. This makes the bearing ideally suited to milling/turning applications and innovative machine concepts.

This enables frictional torque and temperatures to be reduced to a minimum.

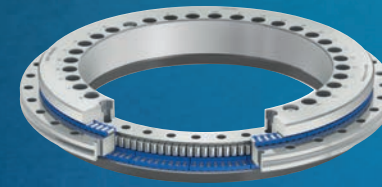
Sensors can be placed directly below the raceway to monitor the bearing condition.

Of course, all next generation bearings are compatible to the previous series.

Available Series



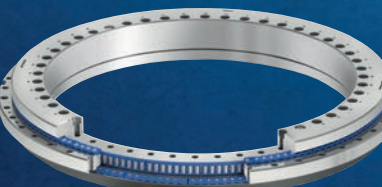
NGX Next Generation maximum rigidity



Maximum rigidity

- rigidity increased by up to 25%
- stronger bearing rings
- less ring deformation
- longer life time

NGS Next Generation maximum speed



Maximum speed

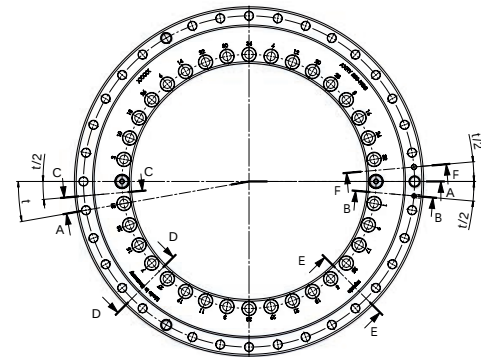
- optimized kinematics
- longer duty cycle
- small temperature difference between inner and outer ring
- constant low frictional torque



myonic bearings are manufactured exclusively in Germany. Only ultra-precision machine tools are used in our fully air-conditioned production facilities. Roller bearings of the highest quality are produced daily in combination with modern processes.

Our development engineers, test rigs and production are located in house to ensure an optimal know-how-transfer.

Short distances increase flexibility and the speed required to quickly realize perfect solutions for our customers.



4)

A diagram of a circular arch bridge. The arch is shown in cross-section, with a dashed line indicating the path of a vehicle. The vehicle is represented by a series of circles, each with a cross inside, positioned along the dashed line. The arch is supported by a central pier and two side piers. The diagram illustrates the structural components and the path of a vehicle crossing the bridge.

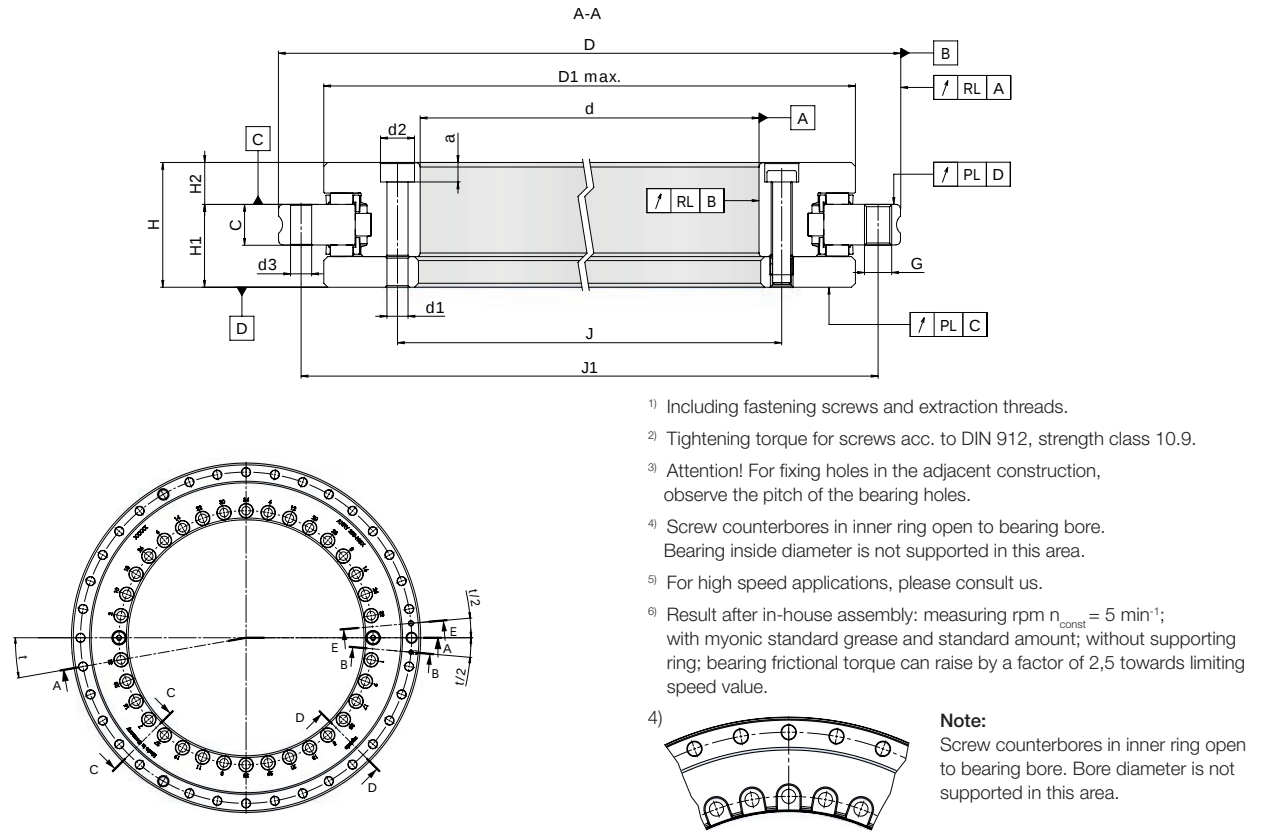
Technical drawings illustrating various bore configurations for the SBI design:

- B-B*** (1x lubrication bore): Shows a cross-section with dimensions J1 and M4. A note indicates "(without screw plug)".
- C-C** (1x sensor bore): Shows a cross-section with dimensions J2 and d_{SB}.
- F-F** (1x positioning bore): Shows a cross-section with dimensions J1, t_{FB}, and d_{FB}.
- Available option design - SBI ordering code - SBI**: A central text label.
- B-B** (1x lubrication bore): Shows a cross-section with dimensions H/2, J_{SB}, and d_{SB}.
- C-C** (1x sensor bore): Shows a cross-section with dimensions H/2, J_{SB}, and d_{SB}.
- D-D** (2x 180° lubrication bore): Shows a cross-section with two 180° bores.
- E-E** (2x 180° lubrication bore): Shows a cross-section with two 180° bores.

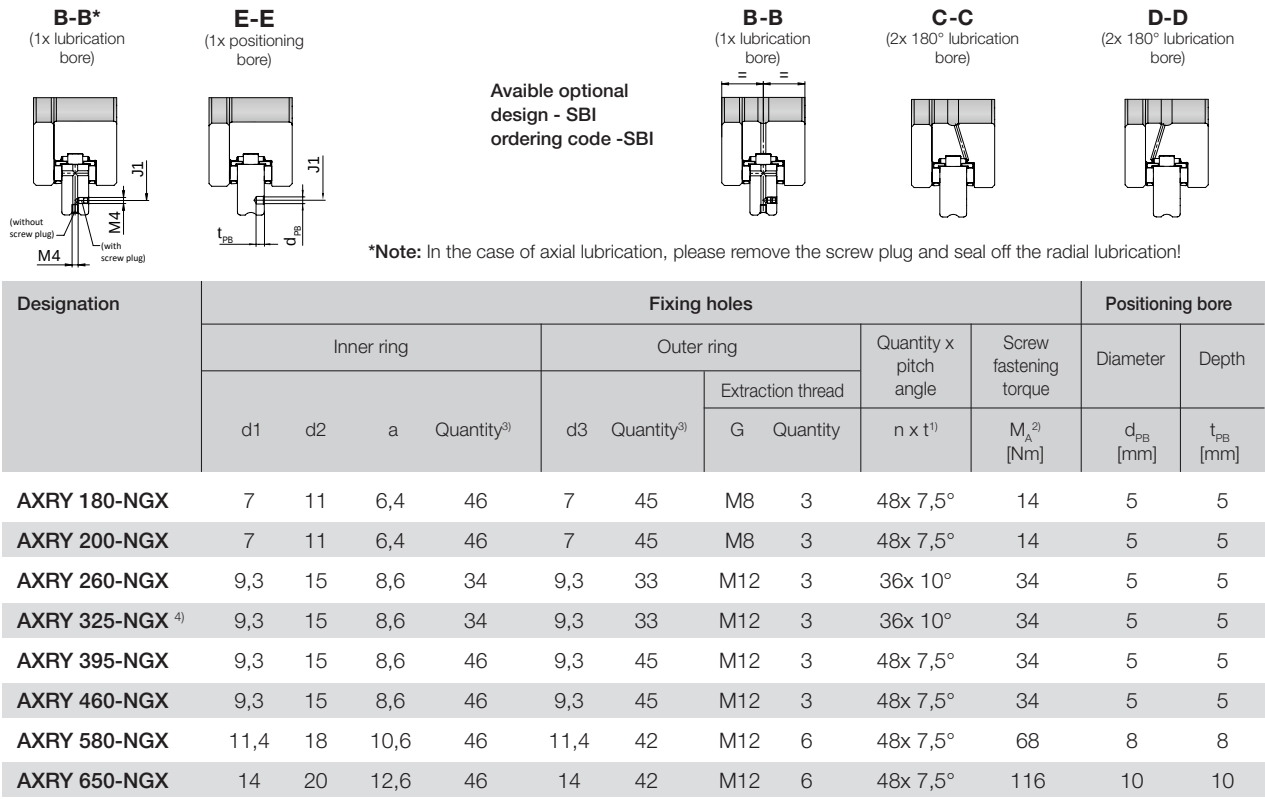
Designation	Fixing holes										Positioning bore		Sensor bore		
	Inner ring				Outer ring				Quantity x pitch	Screw fastening torque	Diameter	Depth	Pitch circle diameter	Diameter	Depth
			Extraction thread												
	d1	d2		a	Quantity ³⁾	d3	Quantity ³⁾	G	Quantity	n x t ¹⁾	M _A ²⁾ [Nm]	d _{PB} [mm]	t _{PB} [mm]	J _{SB} [mm]	d _{SB} [mm]
AXRY 120-NGS	7	11	6,4	22	7	21	M8	3	24x 15°	14	5	5	140,8	3,2	21
AXRY 180-NGS	7	11	6,4	46	7	45	M8	3	48x 7,5°	14	5	5	204,5	3,2	24,7
AXRY 200-NGS	7	11	6,4	46	7	45	M8	3	48x 7,5°	14	5	5	228	3,2	21,4
AXRY 260-NGS	9,3	15	8,6	34	9,3	33	M12	3	36x 10°	34	5	5	290,8	6,2	29
AXRY 325-NGS ⁴⁾	9,3	15	8,6	34	9,3	33	M12	3	36x 10°	34	5	5	360,8	6,2	26,6
AXRY 395-NGS	9,3	15	8,6	46	9,3	45	M12	3	48x 7,5°	34	5	5	431,2	6,2	28,8
AXRY 460-NGS	9,3	15	8,6	46	9,3	45	M12	3	48x 7,5°	34	5	5	503,8	6,2	29,1
AXRY 580-NGS	11,4	18	10,6	46	11,4	42	M12	6	48x 7,5°	68	8	8	628,6	6,2	39,7
AXRY 650-NGS	14	20	12,6	46	14	42	M12	6	48x 7,5°	116	10	10	706,2	6,2	56,9

Designation	Load ratings				Rigidity of bearing position			Limiting speed ⁹⁾	Axial & Radial runout		Mass moment of inertia	
	Axial		Radial		Axial	Radial	Tilting		standard	restricted	rotating outer ring	rotating inner ring
	dyn. C _a [kN]	stat. C _{0a} [kN]	dyn. C _r [kN]	stat. C _{0r} [kN]	C _{al} [kN/μm]	C _{rl} [kN/μm]	C _{kl} [kNm/mrad]	n _G [min ⁻¹]	PL & RL [μm]	PL & RL [μm]	M _{MA} [kg * cm ²]	M _{MI} [kg * cm ²]
AXRY 120-NGS	100,4	484,7	40,1	82,8	4,1	1,9	14,2	2150	3	1,5	93	115
AXRY 180-NGS	142,6	751,5	88,0	200,3	6,0	3,2	38,8	1750	4	2	431	308
AXRY 200-NGS	159,2	901,8	93,5	226,2	6,6	3,5	53,1	1600	4	2	444	602
AXRY 260-NGS	178,7	1127,3	110,1	303,5	8,8	4,6	114,8	1200	6	3	1646	1787
AXRY 325-NGS ⁴⁾	188	1277,6	115,6	345,4	10,3	5,2	193,4	1000	6	3	2787	4035
AXRY 395-NGS	212,5	1578,2	154,1	529,8	12,9	7,2	337,5	800	6	3	4786	7470
AXRY 460-NGS	190,9	1427,9	177,1	605,6	12,9	7,5	455,1	700	6	3	8130	14695
AXRY 580-NGS	484,7	3492,7	251,6	867,2	16,9	8,8	917,2	500	10	5	28467	42140
AXRY 650-NGS	816,3	5829,1	406,6	1317,1	20,3	9,8	1451,2	400	10	5	68641	97690

Dimensions table AXRY-NGX



Designation	Mass	Dimensions [mm]														
		d	tol. d	D	tol. D	H	H1	tol. H1	tol. H1	H2	tol. H2	tol. H2	C	D1	J	J1
		[kg]						standard	restricted		standard	restricted		max		
AXRY 180-NGX	7,1	180	-0,013	280	-0,018	43	29	± 0,03	-	14	± 0,025	-	15	244	194	260
AXRY 200-NGX	9,1	200	-0,015	300	-0,018	45	30	±0,03	-	15	± 0,025	-	15	274	215	285
AXRY 260-NGX	17,5	260	-0,018	385	-0,020	55	36,5	± 0,04	-	18,5	± 0,025	-	18	345	280	365
AXRY 325-NGX ⁴⁾	24,5	325	-0,023	450	-0,023	60	40	± 0,05	-	20	± 0,025	-	20	415	342	430
AXRY 395-NGX	32,2	395	-0,023	525	-0,028	65	42,5	± 0,05	-	22,5	± 0,025	-	20	486	415	505
AXRY 460-NGX	44,8	460	-0,023	600	-0,028	70	46	± 0,06	-	24	± 0,03	-	22	560	482	580
AXRY 580-NGX	86,0	580	-0,025	750	-0,035	90	60	±0,25	± 0,075	30	± 0,25	± 0,03	30	700	610	720
AXRY 650-NGX	165,2	650	-0,038	870	-0,050	122	78	±0,25	± 0,1	44	± 0,25	± 0,03	34	800	680	830



Designation	Load ratings				Rigidity of bearing position			Limiting speed ⁹⁾	Bearing frictional torque ⁹⁾	Axial & Radial runout	
	Axial		Radial		Axial	Radial	Tilting			standard	restricted
	dyn. C _a [kN]	stat. C _{0a} [kN]	dyn. C _r [kN]	stat. C _{0r} [kN]	C _{ai} [kN/μm]	C _{ri} [kN/μm]	C _{ki} [kNm/mrad]			PL & RL [μm]	PL & RL [μm]
AXRY 180-NGX	139,3	755,0	99,4	200,3	8,1	3,3	51,1	600	5	4	2
AXRY 200-NGX	151,0	871,2	122,1	273,9	8,0	4,1	62,6	450	6	4	2
AXRY 260-NGX	220,1	1520,6	138,3	349,0	12,2	5,1	153,5	300	9	6	3
AXRY 325-NGX ⁴⁾	249,3	1900,8	181,7	531,4	15,2	7,2	272,1	200	13	6	3
AXRY 395-NGX	275,7	2281,0	199,2	633,8	18,3	8,4	459,4	175	19	6	3
AXRY 460-NGX	299,5	2661,1	232,5	739,0	21,9	8,6	736,9	150	25	6	3
AXRY 580-NGX	584,6	4457,4	284,5	867,2	22,9	8,8	1207,0	80	60	10	5
AXRY 650-NGX	1010,7	7682,4	459,6	1317,1	27,1	9,7	1880,1	70	70	10	5



myonic is at the customer's disposal right from the early developmental stage with a highly qualified engineering team and state-of-the-art equipment – from the laboratory to production and on through to assembly.

First-class and highly flexible prototype production enables development times to be kept short. The components responsible for constantly high quality are manufactured internally by **myonic**. A stock of bearing components provides for maximum flexibility and very short delivery times.

myonic is constantly evolving as a company thanks to strategic partnerships with other leading firms, making it the partner for both innovations and system solutions at the limits of what is technologically possible – in line with the motto:

myonic – more than a bearing

myonic GmbH, Steinbeisstr. 4,
88299 Leutkirch, Deutschland

Tel. +49 7561 978 0

info@myonic.com

www.myonic.com



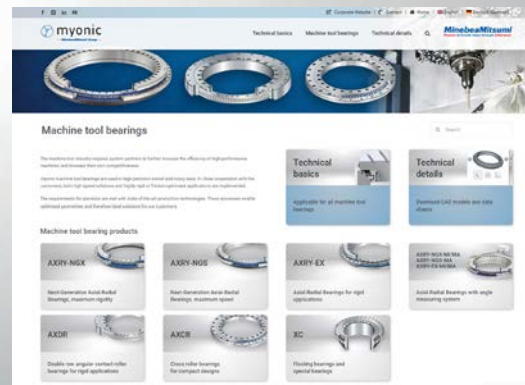
MinebeaMitsumi
Passion to Create Value through Difference

www.product-myonic.com

myonic Product Website



You will find all important data online in our new product database.

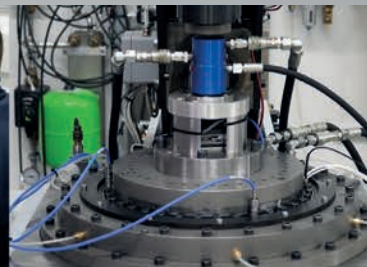


Component production



Assembly

Inspection and measuring instruments



Test rig