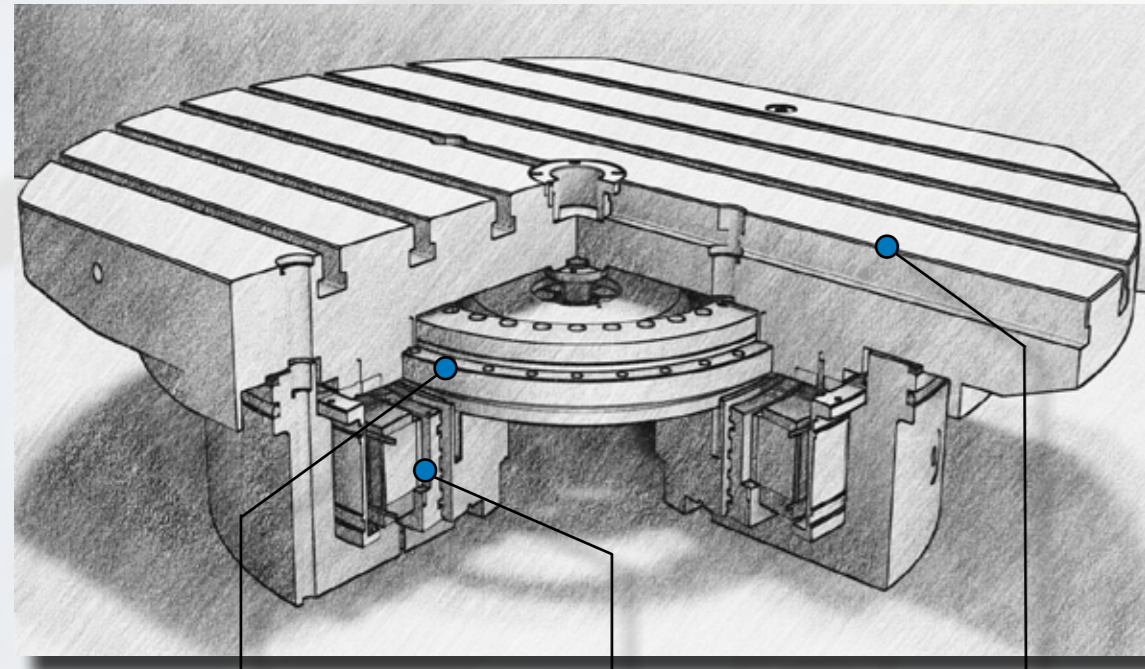


• in action



- CyRT bearings**
- runout < 3μ
 - standard series diameters 80 - 580 mm
 - other sizes on request
 - lapped surfaces
 - adjusted preload

- Torque motor**
- high dynamic
 - maintenance free
 - highest clamping forces
 - free of play
 - optimised for positioning
 - modular series
 - tandem motors (option)

- NC rotary tables**
- NC clock tables
 - NC grinding tables
 - NC satellite tables
 - NC rotary tilt tables
 - NC pallet change tables
 - Hydrostatic tables

- Highest accuracy by means of in-house developed CyRT bearings, designed for applications in rotary tables and milling heads
- Precise adjustment to the customer demands
- Years of experience in this area
- Virtually no wear
- Maintenance free by means of direct drives (no gear backlash)
- Integrated media transmission through rotary union (option)
- Special flat constructional design
- Pallet zero-point exchange system
- Very short cycle times guarantee high dynamic
- Individual position programming by means of absolute or incremental measuring system
- High stability and rigidity against axial forces

MaximumPower meets HighSpeed

NC Milling heads



- From the high speed finishing to rough machining
- Series S8, M21, G30, K50
- Spindle power : 10 - 100 kW
- All CyTec NC milling heads swivel 360°/s

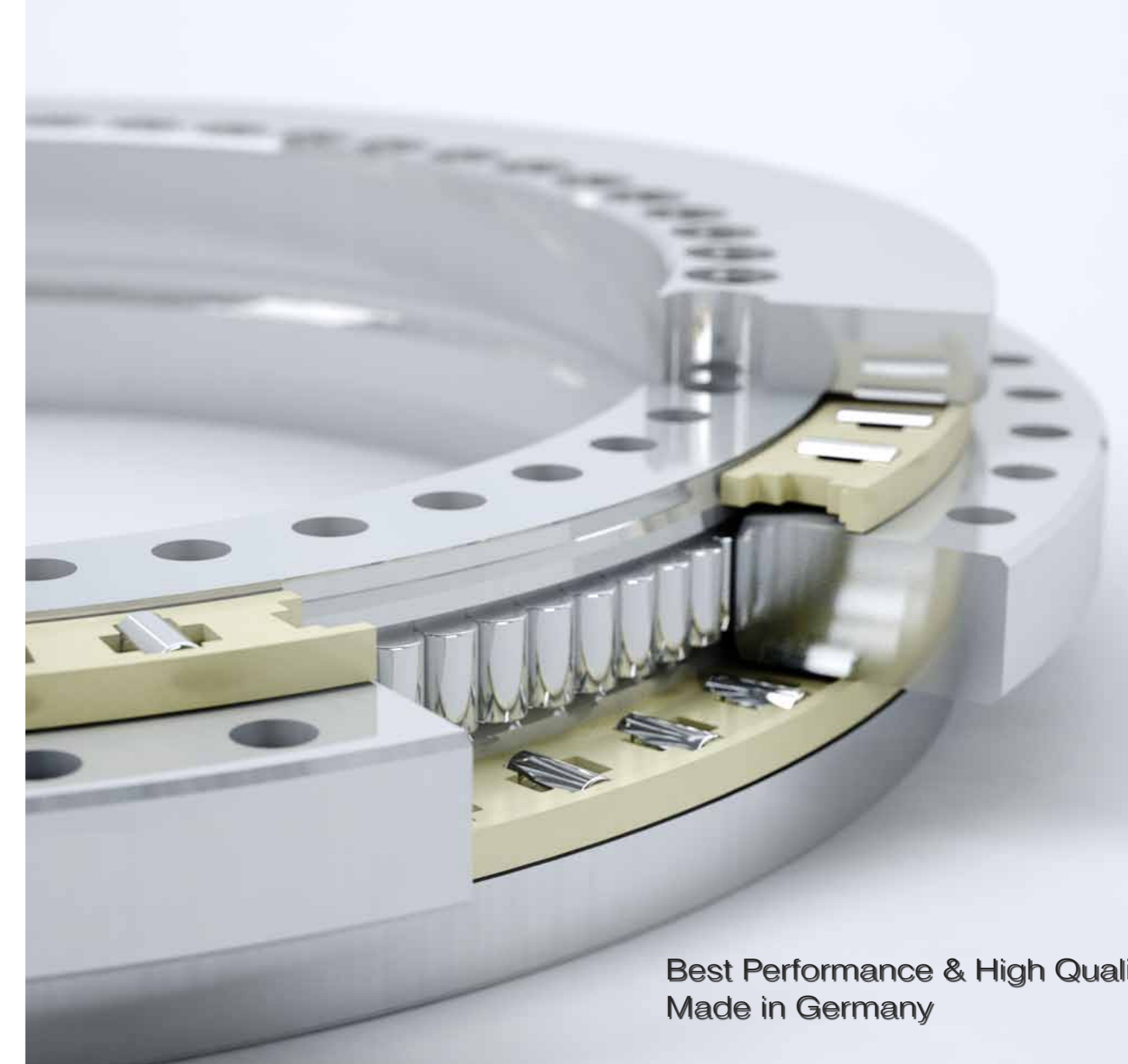
By means of *DirectDrive* technology wear, maintenance and backlash are eliminated.

NC Rotary tables



- NC clock tables
- NC grinding tables
- NC satellite tables
- NC rotary tilt tables
- NC pallet change tables
- Hydrostatic tables

CyTec offers a wide range of rotary tables of 200 - Ø 2500 mm diameter. Each rotary table is equipped with the maintenance free direct drive technology.



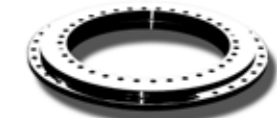
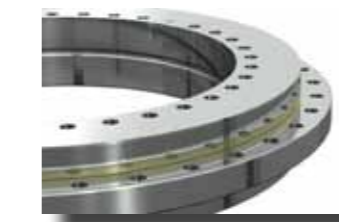
Best Performance & High Quality - Made in Germany



Find further CyTec products on www.cytec.de

- Cylinders
- Clamping systems
- Hydraulic couplers
- Torque motors
- NC - axes
- Motor spindles
- NC rotary tables
- NC milling heads
- Bearings

CyTec Zylindertechnik GmbH
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 Edition 07/2012



CyRT-Ball Bearings

PRECISION MACHINE COMPONENTS

CyRT-Bearings

Optional with measuring system

High dynamic precision axial/-radial bearings for high loads and rigidity

NC rotary tables



NC milling heads



Automation



Special machine tools



For years the company CyTec Systems has a leading market position in the area of mechanical engineering, i. e. production of NC rotary tables and milling heads, CyRT radial/axial bearings, motor spindles and clamping systems. We guarantee quality, know-how and intrinsic value of our products, always with the effort to achieve the optimum customer solution.

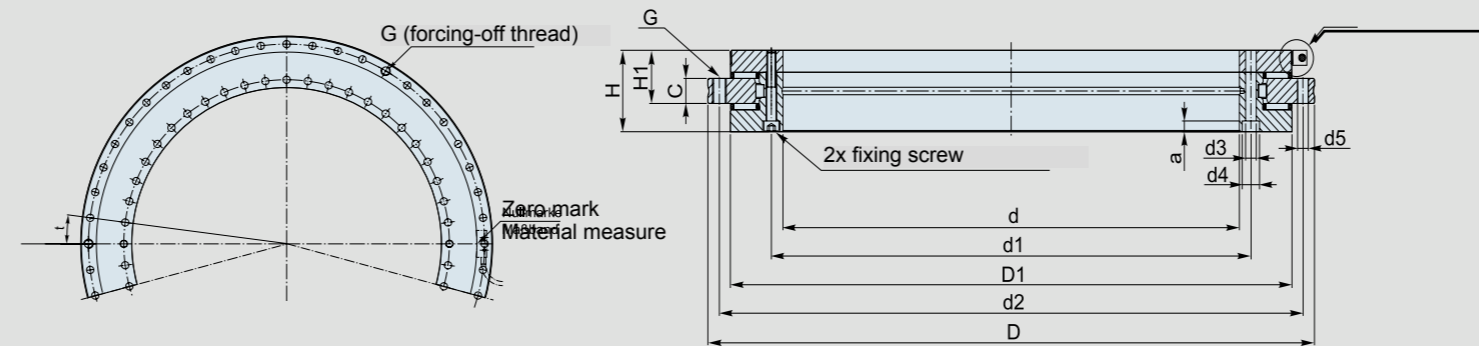
CyTec uses its years of experience as a valuable advantage for manufacturing its high quality products. We have high standards especially on our bearings.

They are characterised by higher axial and radial accuracy (0,003 mm) than our competitor manufacturers. Additionally all surfaces are lapped which has a positive effect on the running characteristics.

The outer diameters/dimensions of our bearings are similar / identical to the ones of other relevant manufacturers / producers, but the quality class of them are significantly higher.

On choice we offer the bearings with or without measuring systems. Depending on the application, absolute or incremental measuring systems are available, i. e. either RCN series (manufacturer Heidenhain) or AMO series with one measuring head (standard) or two measuring heads (option, for extended resolution and accuracy). For detailed information, please refer to the technical data or contact us.

CyRT-radial-axial bearings are offered either with or without integrated angular measuring systems to be found in rotary tables, swivel axes or spindle heads in tool machines. The bearing units are ready for installation with adjusted preload, low friction moment, high load ratings and rigidity. They are manufactured of high grade antifriction-bearing steel with lapped axial bearing surfaces. So they meet highest quality demands and are especially suited for direct drives.

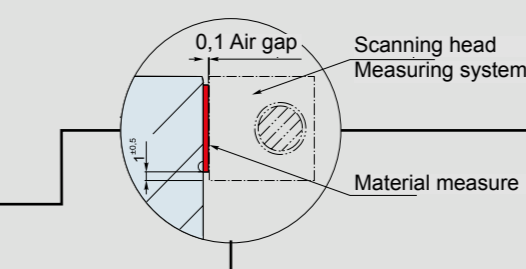


The system has following characteristics:

- easy to mount
- easy integration into common control systems
- very high accuracy and resolution
- protected against dirt and magnetic interferences
- non contact, free of wear position indication
- material measure directly mounted to the bearing ring
- inductive signal monitoring
- integrated reference pulse, also distance encoded
- option: double-head scanning for maximum accuracy



Output signals	1Vpp or TTL, resolution is adjustable
Input frequency	Single head scan: 100 kHz Double head scan: 10 kHz
Ambient temperature	Scanning head: -10°C up to +100°C Evaluation electronic: -10°C up to +85°C
Store temperature	-20°C up to +85°C
Protection class	Scanning head: IP67 Evaluation electronic: IP66



Technical Data

Series	d (mm)	D (mm)	D1 (mm)	d1 (mm)	d2 (mm)	d3 (mm)	d4 (mm)	d5 (mm)	H (mm)	H1 (mm)	C (mm)	G (number x thread)	a (mm)	t ³⁾ (number)	Limit speed (U/min)	Measuring system (only Series CyRT/M)				Screw torque (Nm)	Load rating (kN)				Radial/axial runout tolerance (µm)		
																Accuracy		Line count	possible distance encoding		radial		axial				
																1 Scanning head	2 Scanning heads				dyn. C	stat. C ₀	dyn. C	stat. C ₀			
CyRT/ARZ/80	80	146	130	92	138	5,6	10	5,6	35	23,35	12	-	4	12 x 30°	350	-	-	-	-	8,5	42	94	35	151	3/3		
CyRT/M/ARZ/100	100	185	160	112	170	5,6	10	5,6	38 ¹⁾	39 ²⁾	25 ¹⁾	26 ²⁾	12	3 x M5	5	18 x 20°	280	± 7,8"	± 3,9"	1000	36°	8,5	52	105	72	366	3/3
CyRT/M/ARZ/120	120	210	184	135	195	7	11	7	40 ¹⁾	41 ²⁾	26 ¹⁾	27 ²⁾	12	3 x M8	6,2	24 x 15°	230	± 6,8"	± 3,4"	1152	30°	14	70	144	80	452	3/3
CyRT/M/ARZ/150	150	240	214	165	225	7	11	7	40 ¹⁾	41 ²⁾	26 ¹⁾	27 ²⁾	12	3 x M8	7	36 x 10°	210	± 5,8"	± 2,9"	1344	30°	14	77	172	83	503	3/3
CyRT/M/ARZ/180	180	280	244	194	260	7	11	7	43 ¹⁾	44 ²⁾	29 ¹⁾	30 ²⁾	15	3 x M8	7	48 x 7,5°	190	± 4,6"	± 2,3"	1700	36°	14	82	207	90	577	3/3
CyRT/M/ARZ/200	200	300	274	215	285	7	11	7	45	30	15	3 x M8	7	48 x 7,5°	170	± 4,4"	± 2,2"	880	36°	14	89	235	95	644	3/3		
CyRT/M/ARZ/260	260	385	345	280	365	9,3	15	9,3	55	36,5	18	3 x M12	8,6	36 x 10°	130	± 3,6"	± <2"	1080	30°	34	101	307	106	803	3/3		
CyRT/M/ARZ/325	325	450	415	342	430	9,3	15	9,3	60	40	20	3 x M12	8,6	36 x 10°	110	± 3"	± <2"	1296	30°	34	132	411	184	1692	3/3		
CyRT/M/ARZ/395	395	525	486	415	505	9,3	15	9,3	65	42,5	20	3 x M12	8,6	48 x 7,5°	90	± 2,6"	± <2"	1520	36°	34	130	433	199	2002	3/3		
CyRT/M/ARZ/460	460	600	560	482	580	9,3	15	9,3	70	46	22	6 x M12	9	48 x 7,5°	80	± 2,2"	± <2"	1740	36°	34	182	644	214	2287	6/6		
CyRT/M/ARZ/580	580	750	700	610	720	11,4	18	11,4	90	60	30	6 x M12	11	48 x 7,5°	60	± <2"	± <2"	2196	40°	68	206	814	387	3591	6/6		
CyRT/M/ARZ/650	650	870	800	680	830	14	20	14	122	78	34	6 x M12	13	48 x 7,5°	55	on request				116	399	1472	479	5006	6/6 ⁴⁾		
CyRT/M/ARZ/950	950	1200	1130	990	1160	18	26	18	132	86	40	6 x M16	17	60 x 6°	40	on request				284	599	2446	1014	10214	8/8 ⁴⁾		

Other sizes on request

¹⁾CyRT/ARZ... (without measuring system) ²⁾CyRT/M/ARZ... (with measuring system)

³⁾incl. fixing screws and forcing-off threads

⁴⁾for rotating outer ring