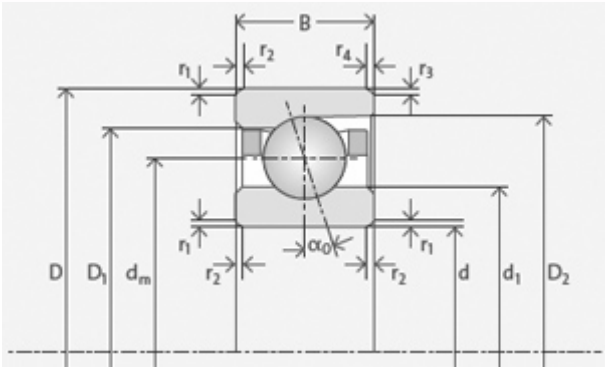
GMN

Data Sheet
High Precision Ball Bearing

Spindle Ball Bearing
S 6000 C TXM P4

GMN Globus
Date: 30.10.2026

BALL BEARING DATA



Designation	[-]:	S 6000 C TXM P4
Bearing design	[-]:	S
bearing type / size	[-]:	6000
Ball material	[-]:	Steel
Cage	[-]:	TXM
Seal	[-]:	-
Precision	[-]:	P4 (HG;UP;P2 on request)

GEOMETRICAL DATA

d	[mm]:	10	Bore diameter
D	[mm]:	26	Outer diameter
B	[mm]:	8	Width of single bearing
Dw	[mm]:	4,762	Ball diameter
Z	[pcs]:	10	Number of balls
r 1,2	[mm]:	0,3	Chamfer (min)
r 3,4	[mm]:	0,3	Chamfer; open side (min)
d1	[mm]:	14,65	Outer diameter of inner ring
d2	[mm]:	-	Outer diameter of inner ring (open side)
dk	[mm]:	16,525	Cage inner diameter
dm	[mm]:	18	Pitch circle diameter
D1	[mm]:	21,4	Inner diameter of outer ring
ra max	[mm]:	0,3	Undercut of associated component
rb max	[mm]:	0,1	Undercut of associated component (open side)
da, db min	[mm]:	12,5	Abutment diameter inner ring
Da, Db max	[mm]:	23	Abutment diameter outer ring
D2	[mm]:	22,7	Inner diameter of outer ring (open side)
m	[kg]:	0,018	Bearing weight
Alpha 0	[°]:	15	Contact angle

LOAD DATA

C	[N]:	5450	Dynamic load rating
Co	[N]:	2600	Static load rating
ng	[1/min]:	95000	Limit speed (Ball material: Steel | Lubricant: Oil | Rotating outer ring)
Fv	[N]:	25	Light preload
Famax	[N]:	71,25	Lift off force light
Cax	[N/µm]:	17	Axial rigidity low (bearing pair)
Fv	[N]:	80	Medium preload
Famax	[N]:	228	Lift off force medium
Cax	[N/µm]:	30	Axial rigidity medium (bearing pair)
Fv	[N]:	160	Heavy preload
Famax	[N]:	456	Lift off force heavy
Cax	[N/µm]:	43	Axial rigidity heavy (bearing pair)
Ff	[N]:	140	Minimum spring preload at max. speed

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