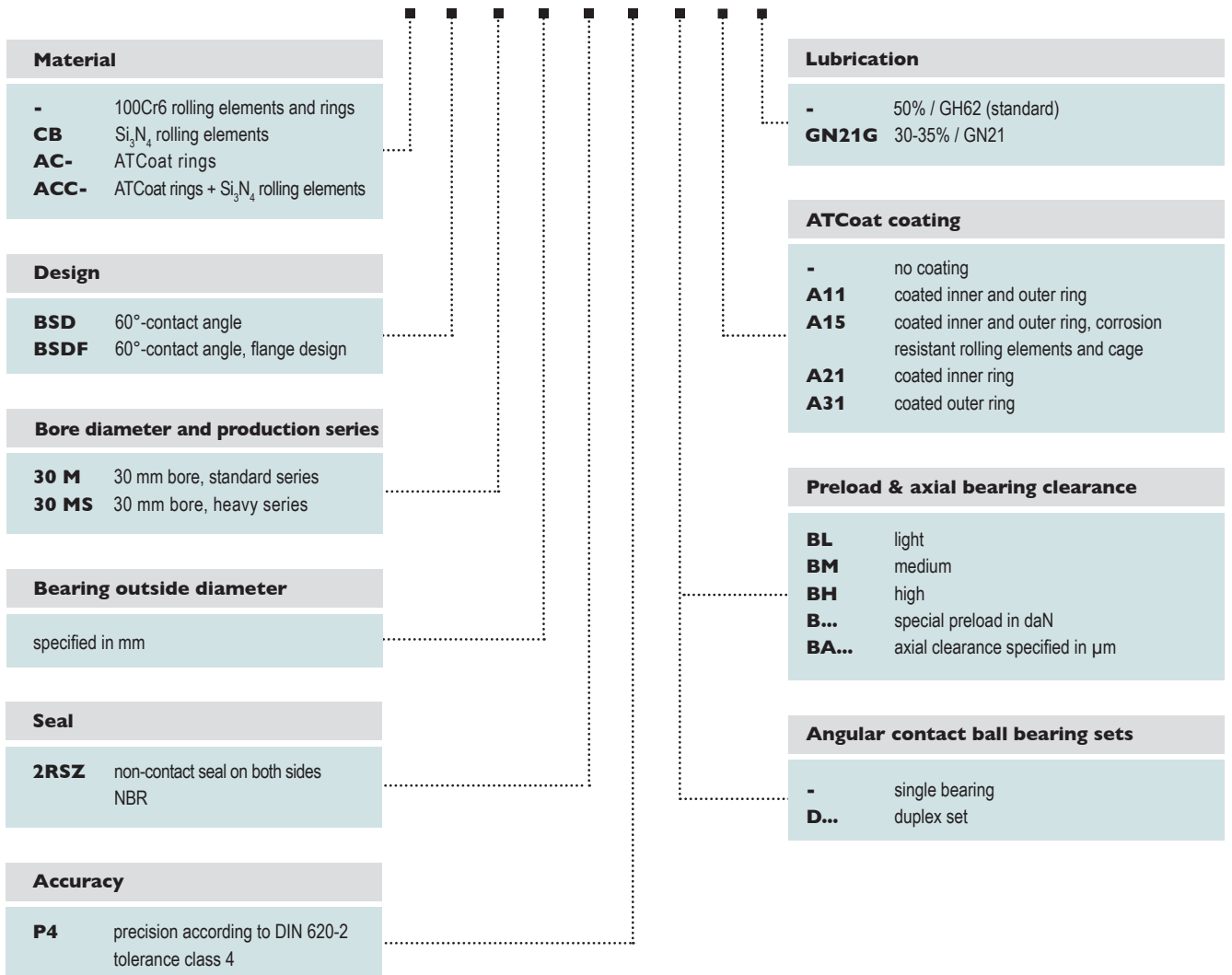


# 8. IBC Double Row Precision 60° Ball Screw Support Bearings

## Designation system



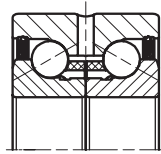
**Examples:**    CB BSD 30 M 62 .2RSZ .P4 .BM  
                   BSD 30 MS 72 .2RSZ .P4 .BM  
                   BSDF 30 M 80 .2RSZ .P4 .DBM .A11  
                   BSDF 30 MS 100 .2RSZ .P4 .DBM .GN21G



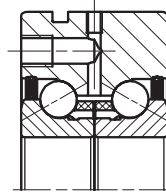
# IBC Double Row Precision 60° Ball Screw Support Bearings

## Manufacturing overview

BSD...  
BSDF...



BSD...



BSDF...

x53-002

Production series						
d mm	BSD...M...			BSDF...M...		
	Standard series	D mm	B	Standard series	D mm	B
10	BSD 10M34	34	20			
12	BSD 12M42	42	25	BSDF 12M55	55	25
15	BSD 15M45	45	25	BSDF 15M60	60	25
17	BSD 17M47	47	25	BSDF 17M62	62	25
20	BSD 20M52	52	28	BSDF 20M68	68	28
25	BSD 25M57	57	28	BSDF 25M75	75	28
30	BSD 30M62	62	28	BSDF 30M80	80	28
35	BSD 35M72	72	34	BSDF 35M90	90	34
40	BSD 40M75	75	34	BSDF 40M100	100	34
50	BSD 50M90	90	34	BSDF 50M115	115	34

d mm	Heavy series			Heavy series		
	Heavy series	D mm	B	Heavy series	D mm	B
30	BSD 30MS72	72	38	BSDF 30MS100	100	38
40	BSD 40MS90	90	46	BSDF 40MS115	115	46
50	BSD 50MS110	110	54	BSDF 50MS140	140	54

Ball screws used in machine tools help to feed work pieces and machine parts quickly, efficiently and accurately. The BSD and BSDF bearing series have been designed for straightforward and easy mounting to ball screws.

A double row 60° ball screw support bearing enables the user to mount the ball screw spindle with high precision (P4), high load carrying capacity, low friction and great stiffness. The bearing is easy to install and requires little maintenance, thereby providing cost-effective use. The result is that the user is able to benefit from an optimised overall machine tool system.

The double row ball screw support bearing is available in a standard version and a heavy series. The heavy series has the same shaft diameter but a larger reference circle than the standard series; and because the rolling elements are bigger in

the heavy series, it enables greater load ratings to be achieved. As they come with a contact angle of 60°, both series accommodate loads made up mainly of axial forces. The bearing rings are matched so as to achieve a defined preload for the mounted bearing with the aid of a precision locknut. The double row 60° ball screw support bearing in BSDF design is suitable for mounting the bearing by screws directly on to the adjacent construction or into a radial locating bore, without the need of further housing parts. In addition, a circumferential extraction groove makes disassembly from a locating bore easier. The bearing also features re-lubrication channels that are sealed with detachable threaded pins.

As standard, both bearing series come sealed on both sides and ready-lubricated with high-performance grease whose lubricity in most cases will last for the entire service life of the bearing.