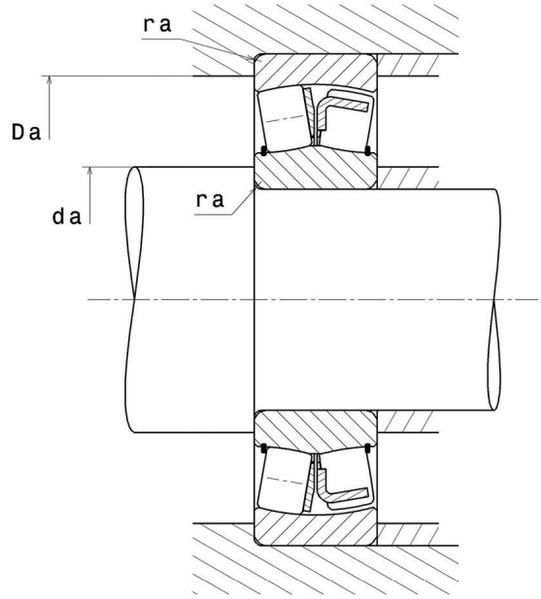
Technical data

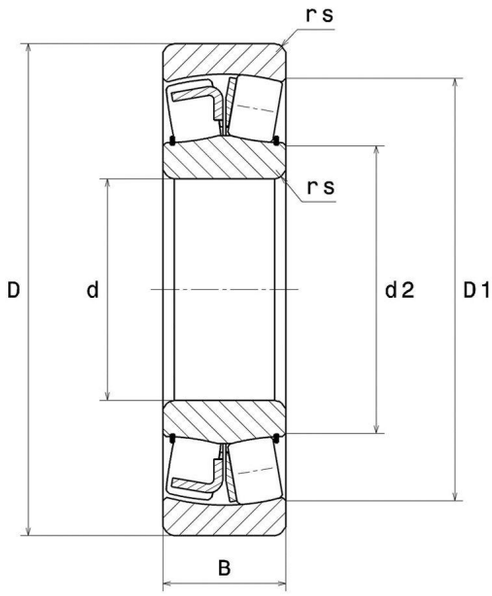
21316V

Spherical roller bearings

Spherical roller bearing, pressed steel cage

VISUAL (S)





21316V
Spherical roller bearings

PRODUCT DIMENSIONS	
Internal diameter d	80 mm
External diameter D	170 mm
Bearing/Inner ring width(B)	39 mm
External diameter inner ring d2	104,3 mm
Inner diameter outer ring D1	144,6 mm
Min fillet radius rs	2,1 mm
Number of lubrication holes	0
Groove width (b)	0 mm
Hole diameter (k)	0 mm
Coef e	0.23
Lower axial load coef (Y1)	2.95
Upper axial load coef (Y2)	4.39
Static axial load coef (Y0)	2.89
Radial clearance class	CN
Mass	4,26 kg
Brand	SNR

PRODUCT PERFORMANCE	
Dynamic load, C	300 kN
Static load, C0	296 kN
Fatigue limit load, Cu	33,6 kN
Reference thermal speed (Nref)	3800 tr/min
Mechanical Limit Speed Nlim	4900 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.418 Hz
Characteristic rolling element frequency, BSF	5.871 Hz
Characteristic outer ring frequency, BPF0	6.271 Hz
Characteristic inner ring frequency, BPFI	8.729 Hz

ABUTMENT	
Max shoulder diameter IR da max	0 mm
Min shoulder diameter IR da min	92 mm

ABUTMENT	
Max shoulder diameter OR Da max	158 mm
Max shaft & housing fillet radius ra max	2 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

Fa / Fr ≤ e		Fa / Fr > e	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$Po = Xo.Fr + Yo.Fa$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .