



A-A

REFERENCE DESIGN DATA

Bearing Size:	400 mm dia x 200 mm long
Bearing type:	Offset halved bearing
Nominal radial bearing bore	400 mm
Bearing length	200 mm
L/D ratio	0.5
Bearing diametral clearance	0.4 ÷ 0.556 mm
Shaft diameter	399.600 ÷ 399.564 mm
Bearing housing bore	Ø425 H6
Radial bearing static load	18,000 N
Specific load	0.2 MPa
Radial bearing dynamic load	18,000 N
Radial load direction	see DRWG
Shaft speed	2,500 rev/min
Sliding speed	52.4 m/s

Lubricant grade	ISO VG 150
Lubricant inlet temperature	40 °C
Lubricant inlet pressure	1.5 bar
Power loss	76.61 ÷ 69.09 kW
Lubricant flow	1.22 ÷ 1.29 l/s
Lubricant outlet temperature	73.1 ÷ 68.5 °C
Film Stiffness	
[Kxx.	6.460e8 ÷ 2.860e8 N/m
[Kxy	4.800e8 ÷ 2.650e8 N/m
[Kyx.	-1.160e9 ÷ -6.000e8 N/m
[Kyy	3.200e8 ÷ 1.360e8 N/m
Film Damping	
[Bxx	5.120e6 ÷ 2.580e6 N s/m
[Bxy	-2.490e6 ÷ -1.210e6 N s/m
[Byx	-2.480e6 ÷ -1.210e6 N s/m
[Byy	7.570e6 ÷ 4.090e6 N s/m

Mass (Kg)
25,4

Title
CUSCINETTO IDRODINAMICO IN DUE META'
HYDRODYNAMIC BEARING

DANIELI drw number
0.910204.H

Scale
Format
Revision
Nr. of sheets
Sheet