

Guide for

Calculating the life of ball bearings when used in contact with fire resistant hydraulic fluids

UDC 621.822.7 "401.76":621 – 822:621.22.011

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Cooperating organizations

The Mechanical Engineering Standards Committee, under whose direction this Published Document was prepared, consists of representatives from the following Governments and scientific and industrial organizations:

Associated Offices Technical Committee	Department of Trade (Marine Division)
Association of Consulting Engineers	Electricity Supply Industry in England and Wales*
Association of Hydraulic Equipment Manufacturers*	Engineering Equipment Users' Association*
Association of Mining Electrical and Mechanical Engineers	Federation of Manufacturers of Construction Equipment and Cranes*
British Compressed Air Society*	Health and Safety Executive*
British Electrical and Allied Manufacturers Association (BEAMA)	Institution of Gas Engineers
British Gas Corporation	Institution of Mechanical Engineers*
British Gear Manufacturers' Association	Institution of Plant Engineers
British Internal Combustion Engine Manufacturers' Association	Institution of Production Engineers
British Pump Manufacturers' Association	London Transport Executive
British Steel Corporation	Machine Tool Trades Association*
British Steel Industry	Ministry of Defence*
Chartered Institution of Building Services	National Coal Board*
Crown Agents for Oversea Governments and Administrations	Oil Companies Materials Association
Department of Industry, Mechanical Engineering	Process Plant Association
Department of Industry, National Engineering Laboratory*	Railway Industry Association of Great Britain
Department of the Environment	Society of Motor Manufacturers and Traders Limited*
	Telecommunication Engineering and Manufacturing Association (TEMA)
	Water-tube Boilermakers' Association

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this document:

Ball and Roller Bearing Manufacturers' Association	Fire Offices Committee
British Hydromechanics Research Association	Hydraulic Association of Great Britain
British Railways Board	Institute of Petroleum
British Rubber Manufacturers' Association	Post Office
Council of Underground Machinery Manufacturers	Society of British Aerospace Companies limited

This Published Document, having been prepared under the direction of the Mechanical Engineering Standards Committee, was published under the authority of the Executive Board on 31 January 1979

© BSI 09-1999

The following BSI references relate to the work on this document:
Committee reference MEE/186/6
Draft for approval 78/74531

ISBN 0 580 10515 6

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Cooperating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 References	1
3 Definitions and symbols	1
4 Test methods	1
5 Fire resistant hydraulic fluids	1
6 Test results	1
7 Examples of calculations	2
8 Cautionary recommendations	2
Appendix A Derivation of data	3
Appendix B Bibliography	3
Table 1 — Fluid type and composition	1
Table 2 — Coefficients n and K and factor F	2
Table 3 — Summary of test data	3
Publications referred to	Inside back cover