1. Record Nr. UNINA9910659488703321

Autore	Hansen Anders Hedegaard
Titolo	Fluid Power Systems : A Lecture Note in Modelling, Analysis and Control / / Anders Hedegaard Hansen
Pubbl/distr/stampa	Cham, Switzerland : , : Springer Nature Switzerland AG, , [2023] ©2023
ISBN	9783031150890 9783031150883
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (261 pages)
Collana	Fluid Mechanics and Its Applications Series ; ; Volume 129
Disciplina	621.2
Soggetti	Fluid power technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Physics of Fluid -- Fluid Power Components -- Fluid Power Systems -- Control of Fluid Power Systems -- Exercises and Solutions. .
Sommario/riassunto	This book covers some of the fundamental topics in fluid power technology, presenting detailed derivations of formulas that form the basis of the theory. It shows the reader how to properly (i) design basic fluid power systems, (ii) construct lumped parameter models of simple fluid power systems, (iii) perform frequency analysis of fluid power components and systems, and (iv) develop controllers for fluid power systems. The book mainly focusses on mathematical modelling and analysis of fluid power components and systems i.e. practical issues such as working principles and construction of components are not covered in depth. The text is organized in four main parts: I Physics of Fluid, II Fluid Power Components, III Fluid Power Systems and IV Learning by Doing. .