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| Autore                  | Ding Ruqi   |
| Titolo                  | Independent Metering Electro-Hydraulic Control System [[electronic resource] /] / by Ruqi Ding, Min Cheng   |
| Pubbl/distr/stampa      | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024  |
| ISBN                    | 981-9963-72-9   |
| Edizione                | [1st ed. 2024.]   |
| Descrizione fisica      | 1 online resource (159 pages)   |
| Altri autori (Persone)  | ChengMin  |
| Disciplina              | 620.1064  |
| Soggetti                | Fluid mechanics<br>Hydraulic engineering<br>Control engineering<br>Engineering Fluid Dynamics<br>Hydraulic Engineering<br>Control and Systems Theory  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di contenuto       | Chapter 1. Introduction -- Chapter 2. Hardware layout of independent metering control -- Chapter 3. Multi-mode load control -- Chapter 4. Multi-variable valve control -- Chapter 5. Pump-valve coordination control -- Chapter 6. Safety evaluation and fault-tolerant control -- Chapter 7. Independent metering control valve.   |
| Sommario/riassunto      | This book shows an independent metering electro-hydraulic control system involving its flexible hardware layouts, complex software control, representative products and applications. The book includes one chapter introducing the background and motivation of the independent metering electro-hydraulic control system. It also includes one chapter to summarize various hardware layouts involving the utilized hydraulic components and circuits, as well as analyze their advantages and disadvantages. It emphatically consists of four chapters demonstrating the detailed multivariable control strategies from three levels: load, valve and pump, together with fault-tolerant control under the fault condition. It includes a last chapter, in which products of independent metering control valve and their applications in some typical heavy-duty mobile machinery are collective works of reviews |

illustrative of recent advances. This book is interesting and useful to a wide readership in the various fields of fluid power transmission and control.

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