

ICS 23.100.40
CCS J20



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/Z 44071-2024

**Connections for hydraulic fluid power - Practices for hydraulic
hose assemblies**

液压传动连接 软管总成操作规程

Issued on: June 29, 2024

Implemented on: June 29, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Security
 - 4.1 General
 - 4.2 To
- 5 Selection and arrangement of hose assemblies
- 6 Manufacturing of hose assemblies
- 7 Installation and replacement of hose assembly
- 8 Maintenance and Inspection
- 9 Storage
- 15 Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is equivalent to ISO /T S17165-2.2018 "Hydraulic fluid transmission hose assemblies Part

2. Hydraulic hose assembly operation The document type was adjusted from ISO technical specification to my country's national standardization guiding technical document. The following minimal editorial changes were made to this document.

--- Change the name of the standard to "Operational Specifications for Hydraulic Transmission Hose Assembly". Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Hydraulic and Pneumatic Standardization Technical Committee (SAC/TC3). This document was drafted by: Sany Automobile Manufacturing Co., Ltd., Hefei Hean Machinery Manufacturing Co., Ltd., Ningbo Jiurong Hydraulic Equipment Co., Ltd. Company, Jiangyin Hongteng Machinery Co., Ltd., Xiamen Kunjin Electronic Technology Co., Ltd., Foshan Yongheng Hydraulic Machinery Co., Ltd., Shenzhen Bona Tesi Automation Technology Co., Ltd., China Machinery Engineering Institute Group Haixi (Fujian) Branch Co., Ltd., Tangshan Xinyad Bellows Technology Co., Ltd. Co., Ltd., Hebei Youlu Fluid Technology Co., Ltd.,

Hebei Zhongmei Special Rubber Co., Ltd., Tianjin Engineering Machinery Research Institute Co., Ltd., Beijing Machinery Industrial Automation Research Institute Ltd. The main drafters of this document are. He Dian, Huang Yunming, Lu Zhixue, Peng Gaofeng, Qi Yunxin, Chen Wanyong, Huang Shufu, Xie Jianhua, Yuan Wei, Liu Wenzhi, Yu Jiang, Li Zengyi, Li Yang, Zhang Bo, Feng Guoxun, Cao Qiaohui. Hydraulic transmission connecting hose assembly operating procedures

1 Scope

GB/Z 44071-2024 covers hydraulic hose assemblies in practice, which is where most hydraulic failures occur. A hose is the one flexible element in a system operating at hundreds of bar, and it fails from causes that are all avoidable and all invisible on a specification sheet: routed with too tight a bend radius, or twisted during installation, which costs most of its fatigue life immediately; rubbing against a neighbouring hose or a machine member; left in service past the age at which its rubber has hardened; or assembled with a fitting from a different manufacturer's system that appeared to match. The consequence is not only downtime - a pinhole leak at working pressure injects fluid through skin, which is a surgical emergency that looks trivial at first. This document provides guidance on the selection, routing, fabrication, installation, replacement, maintenance and storage of hoses and hose assemblies for hydraulic fluid power systems. As a GB/Z it is a guiding technical document. Under ICS 23.100.40 and CCS J20, it is written for machine builders, hydraulic distributors who make up assemblies, and the maintenance departments that replace them.

This document provides guidance for the selection, arrangement, manufacture, installation, replacement, maintenance, and storage of hoses and hose assemblies for hydraulic power systems. This document applies to hoses conforming to ISO 1436, ISO 3862, ISO 3949, ISO 4079 and ISO 11237, as well as hoses conforming to Hose assemblies made with hose fittings to ISO 12151 (all parts). NOTE

1 Most of the procedures in this document are also applicable to other types of hoses and systems. Note

2. Appendix A gives examples of hydraulic hoses and hose assemblies that may fail due to improper use.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 17446-2024 Fluid power systems and components vocabulary (ISO 5598.2020,

MOD)

GB/T 7939.3-2023 Test methods for hydraulic hose assemblies (

ISO 6605.2017, IDT) Vocabulary

GB/T 7528-2019 Terminology of rubber and plastic hoses and hose assemblies (ISO 8330.2014, IDT)

ISO 8331 Rubber and plastics hoses and hose assemblies - Guide for selection, storage, use and maintenance

GB/T 9576-2019 Guide to the selection, storage, use and maintenance of rubber and plastic hoses and hose assemblies (ISO 8331.2016, IDT)

GB/T 44072.1-2024 Hydraulic transmission connecting hose assembly Part

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in ISO 5598 and ISO 8330 and the following apply. ISO and IEC maintain terminology databases used for standardization at the following addresses.

3.1 The date the hose and hose fittings were assembled into a hose assembly.

4.2 To

4.8 describe potential situations that may result in personal injury or property damage, but are not limited to these.