Doc No.: PGD 36 (24563)
IS 13535 : 2024
ISO 16889 : 2022

भारतीय मानक मसौदा

द्रवचालित तरल शक्ति — फिल्टर — फ़िल्टर तत्व के निस्पंदन प्रदर्शन का मूल्यांकन करने के लिए मल्टी-पास विधि

(*तीसरा पुनरीक्षण*)

Draft Indian Standard

Hydraulic Fluid Power — Filters — Filter Multi-pass Method for Evaluating Filtration Performance of Filter Element

(*Third Revision*)

ICS 23.100.01

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Fluid Power Systems Sectional Committee, PGD 36

NATIONAL FOREWORD

This Indian Standard (Part 2) (Third Revision) which is identical with ISO 16889 : 2022 'Hydraulic Fluid Power — Filters — Filter Multi-pass method for evaluating filtration performance of filter element' issued by the International Organization for Standardization (ISO) will be adopted by the Bureau of Indian Standards on the recommendation of the Fluid Power Systems Sectional Committee and approval of the Production and General Engineering Division Council.

This standard was originally published in 1994 and subsequently revised in 2005 and 2017. The third revision of this standard has been undertaken to align it with the latest version of ISO 16889. The major changes in this revision are as follows:

a) Table 4 (previous references to Table 4 have been replaced by references to ISO 11943 : 2021, Table C.2) has been deleted; and
b) Conductivity levels have been harmonized with ISO 23369.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
ISO 1219-1 Fluid power systems and components — Graphical symbols and circuit diagrams — Part 1: Graphical symbols for conventional use and data-processing applications	IS 7513 (Part 1) : 2019/ISO 1219-1: 2012 Fluid power systems and components ― Graphical symbols and circuit diagrams: Part 1 Graphical symbols for conventional use and data-processing applications	Identical
ISO 2942 Hydraulic fluid power — Filter elements — Verification of fabrication integrity and determination of the first bubble point	IS 8383 : 2023/ISO 2942 : 2018 Hydraulic fluid power — Filter elements — Verification of fabrication integrity and determination of the first bubble point (*third revision*)	Identical
ISO 3722 Hydraulic fluid power — Fluid sample containers — Qualifying and controlling cleaning methods	IS 13569 : 1993/ISO 3722 : 1976 Hydraulic fluid power — Fluid sample containers — Qualifying and controlling cleaning methods	Identical
ISO 3968 Hydraulic fluid power — Filters — Evaluation of differential pressure versus flow	IS 9269 : 2023/ISO 3968 : 2017 Hydraulic fluid power — Filters — Evaluation of differential pressure versus flow	Identical
ISO 4021 Hydraulic fluid power — Particulate contamination analysis — Extraction of fluid samples from lines of an operating system	IS 13570 : 2000/ISO 4021 : 1992 Hydraulic fluid power — Particulate contamination analysis-extraction of fluid samples from lines of an operating system (*first revision*)	Identical
ISO 5598 Fluid power systems and components — Vocabulary	IS 10416 : 2024/ISO 5598 : 2020 Fluid power systems and components ― Vocabulary (*third revision*)	Identical

ISO 11171 Hydraulic fluid power — Calibration of automatic particle counters for liquids	IS 13571 : 2020/ISO 11171 : 2016 Hydraulic fluid power — Calibration of automatic particle counters for liquids (*first revision*)	Identical

The technical committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard

International Standard	*Title*
ISO 4405	Hydraulic fluid power — Fluid contamination — Determination of particulate contamination by the gravimetric method
ISO 11943:2021	Hydraulic fluid power — Online automatic particle-counting systems for liquids — Methods of calibration and validation
ISO 12103-1:2016	Road vehicles — Test contaminants for filter evaluation — Part 1: Arizona test dust

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTE: The technical content of draft standard is not available on website. For details, please refer to ISO 16889 : 2022 or contact:

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