



SURFACE VEHICLE STANDARD

J1754™/2**SEP2020**

Issued 1996-06
Revised 2015-10
Reaffirmed 2020-09

Superseding J1754/2 OCT2015

Hose Assemblies, Rubber, Hydraulic, Steel Wire Reinforced - Part 2: Ordering Information

RATIONALE

SAE J1754/2 has been reaffirmed to comply with the SAE Five-Year Review policy.

1. SCOPE

This SAE Standard covers ordering information for steel wire reinforced rubber hose assemblies using connectors specified in SAE Standard J516 or all parts of ISO 12151 for use in hydraulic systems using petroleum based hydraulic fluids with maximum working pressures of 1.7 to 42 MPa. See SAE J1754-2, Table 8 for hose operating temperature ranges and identification codes.

NOTE: Working pressure is defined as maximum system pressure.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J516 Hydraulic Hose Fittings

SAE J517 Hydraulic Hose

SAE J846 Coding Systems for Identification of Fluid Conductors and Connectors

SAE J1754-1 Hose Assemblies, Rubber, Hydraulic, Steel Wire Reinforced—Part 1: Procurement Document

SAE J1754-3 Hose Assemblies, Hydraulic, J517 100R Series—Part 3: Procurement and Ordering Information

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Full document details: [SAE J1754_2_202009](http://www.sae.org/standards/content/J1754_2_202009)

For more information on this standard, visit
https://www.sae.org/standards/content/J1754/2_202009

Documents

Document Sharing Hub

2.1.2 ISO Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

- ISO 12151-1 Connections for hydraulic fluid power and general use—Hose fittings—Part 1: Hose fittings with ISO 8434-3 O-ring face seal ends
- ISO 12151-2 Connections for hydraulic fluid power and general use—Hose fittings—Part 2: Hose fittings with ISO 8434-1 24° cone ends
- ISO 12151-3 Connections for hydraulic fluid power and general use—Hose fittings—Part 3: Hose fittings with ISO 6162 flange ends
- ISO 12151-4 Connections for hydraulic fluid power and general use—Hose fittings—Part 4: Hose fittings with ISO 6149 metric stud ends
- ISO 12151-5 Connections for hydraulic fluid power and general use—Hose fittings—Part 5: Hose fittings with ISO 8434-2 37° flare ends
- ISO 12151-6 Connections for hydraulic fluid power and general use—Hose fittings—Part 6: Hose fittings with ISO 8434-6 60° cone ends

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

- SAE J343 Test and Test Procedures for SAE 100R Series Hydraulic Hose and Hose Assemblies
- SAE J1176 External Leakage Classifications for Hydraulic Systems
- SAE J1273 Recommended Practices for Hydraulic Hose Assemblies
- SAE J1405 Optional Test Procedures for Hydraulic Hose Assemblies

2.2.2 ISO Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ISO 3448 Industrial liquid lubricants - ISO viscosity classification

ISO 4397 Fluid power systems and components - Connectors and associated components - Nominal outside diameters of tubes and nominal inside diameters of hoses

ISO 4406 Hydraulic fluid power - Fluids - Method of coding level of contamination by solid particles

3. REQUIREMENTS

3.1 Hose Assembly identification

Hose assemblies shall be identified using Tables 1 to 7 and either Appendix A or Appendix B.

3.2 Construction and Performance

Hose assemblies shall be qualified in accordance with the requirements in SAE J1754 Part 1. Users of this standard are advised to control source approval, as required.

Table 1 - Maximum operating pressure range and hose o.d. rating codes

TABLES(1)	1	2	3	4	5	6	7	8	9	10	---
PRESSURE RATING - MPa ⁽¹⁾	1.7	2.8	7	14	17.5	21	24.5	28	35	42	--- ⁽²⁾
LETTER DESIGNATION	C	D	E	F	G	H	J	K	M	N	X ⁽²⁾

1. See Part 1 – Tables 1 thru 10 for maximum outside diameter, proof pressure, burst pressure and minimum bend radius.

2. See drawing for operating pressure rating or hose outside diameter requirements.

Table 2 - Hose cover type codes

Standard Synthetic Rubber Cover	Intermediate (Medium Abrasion) Cover	High Abrasion Cover
1 ⁽¹⁾	2 ⁽¹⁾	3 ⁽¹⁾

1. Hose cover type material per purchasers approved material specification.