
**Gas cylinders — Compilation of
national and international valve stem/
gas cylinder neck threads and their
identification and marking system**

*Bouteilles à gaz — Compilation des filetages nationaux et
internationaux des queues de robinets/goulots de
bouteilles et leurs systèmes d'identification et de marquage*

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 58, *Gas cylinders*.

This second edition cancels and replaces the first edition (ISO/TR 11364:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- [Tables 1](#) to [17](#) have been corrected;
- Tables for Denmark threads, Indian threads and USA threads have been introduced.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

There is a huge variety of valve to gas cylinder neck thread connections worldwide and cylinders are free to be equipped with any thread according to a recognized thread standard. ISO standards for cylinders and valves require the marking of an identification of the thread on valve and cylinder but there is presently no harmonized marking system.

The purpose of this document is to list all known cylinder/valve threads currently used and also threads used in the past and to specify a harmonized identification code and marking system for both cylinders and valves. The aim is to reduce the risk of mismatches when valves are fitted to gas cylinders and avoid related safety incidents.

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Gas cylinders — Compilation of national and international valve stem/gas cylinder neck threads and their identification and marking system

1 Scope

This document lists the different valve stem to gas cylinder connection threads currently and historically existing worldwide and provides official coded designations for them. These coded designations will then be available for identification and marking purposes.

It also gives guidance concerning which threads are dimensionally identical and which are interchangeable.

Furthermore, this document provides guidance for valving procedures when fitting valves to gas cylinders.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Interchangeability of valve/cylinder threads

Threads of recognized standards which are dimensionally identical but have historically been named differently are fully interchangeable.

Experience has shown that the following combination of threads can be safely used in service: 25E valve with T8, T23 and T26 cylinder threads. However, for small steel (less than 5 l water capacity) and aluminium alloy cylinders, users should examine the suitability of the resulting combination for each application in order for them to be interchangeable.

5 List of threads

5.1 General

The lists of taper and parallel threads are given in [Table 1](#). The columns in the tables have the following meaning:

Column 1 — Ref. No.

Reference number of the thread starting with a “T” for taper threads and “P” for parallel threads; followed by a consecutive number in the order as they are listed.

Column 2 — Origin

Country or region of origin of the thread.

Column 3 — Nominal designation of thread

Nominal dimensional identification or designation of the thread given in its originating standard or specification.

Column 4 — Specification or standard

Specification or standard from which the thread originated and last version (see also the bibliography).

Column 5 — Identification and marking

This column indicates an identification code for the relevant thread assigned under this document which will in future be used for marking purposes.

NOTE This simplified marking code covers for parallel threads the thread size only and not the geometry of the sealing area or surface.

Column 6 — Note

This column indicates specific equivalency or interchangeability with other threads listed.

Column 7 — Recommended valving procedure

This column indicates the recommendations for fitting valves to gas cylinders, in particular the recommended torque values to be used, which normally follow the requirements of ISO 13341.

5.2 List of threads

See [Table 1](#).

Table 1 — List of national and international valve/gas cylinder threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------------|---|---------------------------|----------------------------|--|---|
| T1 | International | 17E | ISO 11363-1 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | See ISO 13341 |
| T2 | EU | E17 con | EN 144-1 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T3 | Germany | W19,8 × 1/14 keg 6°52' (3:25) taper | DIN 477-1 | — | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T4 | International | 25E | ISO 11363-1 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads While the 25E and V2 threads are similar, they are not identical, and should not be used interchangeably | See ISO 13341 |
| T5 | Germany | W28,8 × 1/14 keg | DIN 477-1 | — | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T6 | UK | W1,000" × 1,814 mm 3:25 incl. taper | BS 341-1:1991 | 25T | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T7 | Australia | Special taper stem thread, 1,0 inch Nominal, 14 threads per inch, 1 in 8 taper on diameter | AS2473.2-2015 | 25AU | T7, T8 and T8a are fully interchangeable threads | AS 2337.1-2004 |
| T8 | UK | 1 inch Nominal, 14 threads per inch, 1 in 8 taper on diameter | BS 341-1:1962 | 1 inch | Cylinders with this thread can accept valves with T4, T5, T6, T7 and T38 | ISO 13341 may be used for guidance (torque values as for 25E) |
| T8a | India | Type 4, size 2 | IS 3224 | 25AU | T7, T8 and T8a are fully interchangeable threads | |
| T9 | Germany | W31,3 × 1/14 keg 6°52' (3:25) taper | DIN 477-1 | 28E | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | ISO 13341 may be used for guidance |
| T10 | Denmark | W31,3 × 1/14" (3:25) taper | DS 729 | 28E | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | |
| T11 | Italy | W28,3 × 1/14" | UNI 11144 | — | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | |
| T12 | France | 28,3 × 1/14" taper angle 6°52' | NF E 29-676 | 28E | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|------------|---|---|----------------------------|--|---|
| T13 | UK | W0,6" x 14 threads per inch 1:5,625 taper | BS 341-2:1963 | 15T | T13 and T14 are fully interchangeable threads | ISO 13341 may be used for guidance (torque values as for 17E) |
| T14 | Australia | 06-15AU (T14") | AS 2473.2-2015 | 15AU | T13 and T14 are fully interchangeable threads | AS 2337.1-2015 |
| T15 | UK | W0,635" x 1,411 mm 8° incl. taper | BS 341-1:1962 | 16T | | ISO 13341 may be used for guidance (torque values as for 17E) |
| T16 | UK | SI 0,694" x 1,814 mm 6° incl. taper | UK LPG Industry Information Sheet 36 – Cylinder Valve 17T Thread Requirements | 17T | For propane | |
| T17 | UK Ireland | W0,715" x 1,814 mm 1:8 incl. taper | BS 341-1:1991 | 18T | T17, T18 and T19 are fully interchangeable threads | ISO 13341 may be used for guidance (torque values as for 17E) |
| T18 | Australia | Special taper stem thread, 0,715 inch nominal, 14 threads per inch, 1 in 8 taper on diameter | AS 2473.2-2015 | 18AU | T17, T18 and T19 are fully interchangeable threads | AS 2337.1-2004 |
| T19 | India | Type 4 size 1 | IS 3224 | 18AU | T17, T18 and T19 are fully interchangeable threads | |
| T20 | UK | W0,735" x 1,814 mm 1:8 incl. taper | BS 341-1:1991 | 19T | | ISO 13341 may be used for guidance (torque values as for 17E) |
| T21 | UK | W1,025" x 1,814 mm 10 degrees incl. taper angle | BS 341-1:1991 | 26T | | ISO 13341 may be used for guidance (torque values as for 25E) |
| T22 | UK | W1,250" x 2,309 mm 1:8 incl. taper | BS 341-1:1991 | 32T | T22 and T22a are fully interchangeable threads | ISO 13341 may be used for guidance |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--|---|---------------------------|----------------------------|--|---|
| T22a | India | Type 4 size 3 | IS 3224 | 32T | T22 and T22a are fully interchangeable threads | |
| T23 | Sweden | W28, taper 3:24,5 | SMS2235:1968 | 25S | Cylinders with this thread can accept valves with T4, T5, T6 and T38 | ISO 13341 may be used for guidance (torque values as for 25E) |
| T24 | Has been changed in P54 but the following T numbers have not yet changed | | | — | | |
| T25 | France | 16,4 × 1/14" taper angle 8°40' | NF E 29-678 | 16F | | |
| T26 | France | 25,8 × 1/14" taper angle 6°38' | NF E 29 680 | 25F | Cylinders with this thread can accept valves with T4, T5, T6, T38, T59 and T61 | ISO 13341 may be used for guidance (torque values as for 25E) |
| T27 | France | 34 × 2 mm taper angle 5° | NF E 29-682 | 34F | T27 and T28 are fully interchangeable threads | |
| T28 | Italy | M34 × 2 | UNI 11144 | 34F | T27 and T28 are fully interchangeable threads | |
| T29 | France | 26 × 1/14" taper angle 3°34' (1:16) | NF E 29-684:2015 | 26F3 | Thread similar to T42 (3/4" NGT) but not equivalent | |
| T30 | France | RC1H" 11TPI taper 3°34' (1:16) | NF E 03-004 | — | Not used | |
| T31 | Japan | W39-12TPI, taper 3:26, profile-to-surface | JIS B 8244 | 39J | For acetylene | |
| T32 | Japan | W20-14TPI, taper 3:26, profile-to-axis | JIS B 8245 V1 | JV1A | For LPG | |
| T33 | Japan | W20-14TPI taper 3:26, profile-to-surface | JIS B 8246 V1 | V1 | | |
| T34 | Japan | W28-14TPI taper 3:26, profile-to-axis | JIS B 8245 V2 | JV2A | For LPG | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|--|---------------------------|----------------------------|--|-------------------------------|
| T35 | Japan | W28-14TPI taper 3:26, profile-to-surface | JIS B 8246 V2 | V2 | While the 25E and V2 threads are similar, they are not identical, and should not be used interchangeably | |
| T36 | Japan | W28-14TPI taper 3:26, profile-to-surface | JIS B 8246 V3 | V3 | Short length | |
| T37 | China | W39-12TPI taper 3:25, profile-to-surface | GB 8335-1998 | 39C | | |
| T38 | China | W27,8-14TPI taper 3:25, profile-to-surface | GB 8335-1998 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | See ISO 13341 |
| T39 | China | W19,2-14TPI taper 3:25, profile-to-surface | GB 8335-1998 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | See ISO 13341 |
| T40 | USA | 3/8—18NGT | ANSI/CGA V-1 | 06N | | See CGA V-1 |
| T41 | USA | 1/2—14NGT | ANSI/CGA V-1 | 08N | | See CGA V-1 |
| T42 | USA | 3/4—14NGT | ANSI/CGA V-1 | 12N | | See CGA V-1 |
| T43 | USA | 1-11 1/2-NGT | ANSI/CGA V-1 | 16N | | See CGA V-1 |
| T44 | USA | 1-1/4-11 1/2-NGT | ANSI/CGA V-1 | 20N | | See CGA V-1 |
| T44a | USA | 1-1/2-11 1/2-NGT | ANSI/CGA V-1 | 24N | | See CGA V-1 |
| T45 | USA | 3/4-14SGT | ANSI/CGA V-1 | 12S | | See CGA V-1 |
| T46 | France | Ø19,3 × 1,814 10, 5 % ± 0,5 % | | 19F(P) | For LPG | |
| T47 | France | Ø23,2 or 23,7 × 2,00, 10 % ± 0,5 % | | 23F(P) | For LPG | |
| T48 | France | Ø28,8 × 1,814 11, 2 % ± 0,5 % | | 29F(P) | For LPG | |
| T49 | Korea | W20-14 taper 3/26 | KS B 6212 V1 | — | | |
| T50 | Korea | W28-14 taper 3/26 | KS B 6212 V2 | — | | |
| T51 | Korea | W28-14 taper 3/26 | KS B 6212 V1 | — | | |
| T52 | Korea | W28-14 taper 3/26 | KS B 6212 V2 | — | | |
| T53 | Korea | W28-14 taper 3/26 | KS B 6212 V3 | — | | |
| T54 | Korea | W39-12 taper 3/26 | KS B 6215 | — | For acetylene only | |
| T55 | Korea | W38-12 taper 3/26 | KS B 6219 N3-S | — | Profile perpendicular to surface | |
| T56 | Korea | W38-12 taper 3/26 | KS B 6219 N3-A | — | Profile perpendicular to axis | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------------|-------------------------------|---------------------------|----------------------------|---|-------------------------------|
| T57 | Austria | E17 con (W19,8) | EN 144-1:1992 | 17E | Breathing apparatus T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T58 | Austria | E17 con (W19,8) | EN 144-1:2005 | 17E | Breathing apparatus T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T59 | Austria | 25E (W28,8) | EN 629-1:1996 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T60 | Austria | W19,8 × 1/14 keg | ÖNORM M 7390-2:1985 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T61 | Austria | W28,8 × 1/14 keg | ÖNORM M 7390-2:1985 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T62 | Austria | W31,3 × 1/14 keg | ÖNORM M 7390-2:1985 | 28E | Acetylene only T9, T11, T12, T62 and T63 are fully interchangeable threads | |
| T63 | Austria | W31,3 × 1/14 keg (28E) | ÖNORM M 7390-7:2009 | 28E | Acetylene only T9, T11, T12, T62 and T63 are fully interchangeable threads | |
| T64 | Austria | 17E (W19,8) | ISO 11116-1:1999 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| P1 | International | M18 × 1,5 | ISO 15245-1:2001 | 18P | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | See ISO 13341 |
| P2 | EU | M18 × 1,5 | EN 144-1:2005 | M18 | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P3 | International | M25 × 2 | ISO 15245-1:2001 | 25P | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | See ISO 13341 |
| P4 | EU | M25 × 2 | EN 144-1:2005 | M25 | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P5 | Germany | M25 × 2 | DIN 477-6 | M25 | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P6 | International | M30 × 2 | ISO 15245-1:2001 | 30P | P6, P44 and P51 have fully interchangeable thread size | See ISO 13341 |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|--|----------------------------|---|-------------------------------|
| P7 | Japan | 1/2-20UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | U8 | P7 and P8 have fully interchangeable thread size | |
| P8 | USA | 1/2-20UNF | ANSI/ASME B1.1 | U8 | P7 and P8 have fully interchangeable thread size | |
| P9 | Japan | 5/8-18UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | U10 | P9, P10 and P11 have fully interchangeable thread size | |
| P10 | USA | 5/8-18UNF | ANSI/ASME B1.1 | U10 | P9, P10 and P11 have fully interchangeable thread size | |
| P11 | UK | 5/8-18UNF | BS 1580:1962 | — | P9, P10 and P11 have fully interchangeable thread size | |
| P12 | Japan | 3/4-16UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF12 | P12, P13 and P14 have fully interchangeable thread size | |
| P13 | UK | 3/4-16UNF | BS 1580:1962 | — | P12, P13 and P14 have fully interchangeable thread size | |
| P14 | USA | 3/4-16UNF | ANSI/ASME B1.1 | U12 | P12, P13 and P14 have fully interchangeable thread size | |
| P15 | Japan | 7/8-14UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF14 | P15 and P16 have fully interchangeable thread size | |
| P16 | USA | 7/8-14UNF | ANSI/ASME B1.1 | 0 | P15 and P16 have fully interchangeable thread size | |
| P17 | Japan | 1 1/8-12UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF18 | P17 and P18 have fully interchangeable thread size | |
| P18 | USA | 1 1/8-12UNF | ANSI/ASME B1.1 | 0 | P17 and P18 have fully interchangeable thread size | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------------------|-------------------------------|--------------------------------|-------------------------------|--|-------------------------------|
| P19 | Japan | 3/4-14NPSM | JIS B8246 (ANSI B1.20.1) | SP12 | P19 and P20 have fully interchangeable thread size | |
| P20 | USA | 3/4-14NPSM | ANSI/ASME B1.20.1 | SP12 | P19 and P20 have fully interchangeable thread size | |
| P21 | UK | 1/4" BSP | BS 2779:1986 | BSP04 | | |
| P22 | UK | M14 x 1,5 ISO | BS 3643:1981 | M14 | | |
| P23 | UK | 1 7/8"-12 UNS 2B | BS 1580:1962 | UNS30 | | |
| P24 | UK | 1 5/8"-12 UNS | BS 1580:1962 | UNS26 | | |
| P25 | USA | 2-12UN-2B | ANSI/ASME B1.1 | UN32 | | |
| P26 | USA | 3-12UN-2B | ANSI/ASME B1.1 | UN48 | | |
| P27 | USA | 3 1/2"-12UN-2B | ANSI/ASME B1.1 | UN56 | | |
| P28 | Special Application | G3/4" | ISO 228 (external or internal) | G ³ / ₄ | | |
| P29 | Special Application | G1" | ISO 228 (external or internal) | G1 | | |
| P30 | Special Application | G1 1/4" | ISO 228 (external or internal) | G200 | | |
| P31 | Special Application | G1 1/2" | ISO 228 (external or internal) | G24 | | |
| P32 | Special Application | G2" | ISO 228 (external or internal) | G32 | | |
| P33 | Special Application | 1 5/8"-12UNJ-3B | ISO 3161 | UNJ26 | | |
| P34 | Special Application | 2 1/2-12UN-2A (or 2B) | ANSI/ASME B1.1 | UN40 | | |
| P35 | Special Application | M50 x 2 ext. | DIN 13 | M50 | Thread size fully interchangeable to P39 | |
| P36 | Special Application | 3 1/4" x 8UN-2B | BS 1580 | UN52 | | |
| P37 | Special Application | 4 1/2" x 8UN-2B | BS 1580 | UN72 | | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------------------|-------------------------------|---------------------------|----------------------------|--|-------------------------------|
| P38 | Special Application | 1 1/2" x 8UN-2B | BS 1580 | UN104 | | |
| P39 | Special Application | M50 x 2 | ISO 965 | M50 | Thread size fully interchangeable to P35 | |
| P40 | Special Application | M86 x 3 | ISO 965 | M86 | | |
| P41 | Special Application | M68 x 2 | ISO 965 | M68 | | |
| P42 | UK | M18 x 1,5-6H | BS 341:1991 | 18P | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P43 | UK | M25 x 2,0-6H | BS 341-1:1991 | 25P | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P44 | UK | M30 x 2,0-6H | BS 341-1:1991 | 30P | P6, P44 and P51 have fully interchangeable thread size | |
| P45 | Austria | M18 x 1,5 | EN 144-1:1992 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P46 | Austria | M25 x 2 | EN 144-1:1992 | 25P | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P47 | Austria | M18 x 1,5 | EN 144-1:2005 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P48 | Austria | M25 x 2 | EN 144-1:2005 | M25 | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P49 | Austria | M18 x 1,5 | ISO 15245-1:2001 | 18P | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P50 | Austria | M25 x 2 | ISO 15245-1:2001 | 25P | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P51 | Austria | M30 x 2 | ISO 15245-1:2001 | 30P | P6, P44 and P51 have fully interchangeable thread size | |

Table 1 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|-----------|---|---------------------------|----------------------------|--|-------------------------------|
| P52 | Austria | M18 × 1,5 | ÖNORM M 7390-5:1987 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P53 | Austria | M25 × 2 | ÖNORM M 7390-5:1987 | 25P | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P54 | Australia | Special parallel stem thread, Nominal thread size 3/4" NGS | AS 2473.2-2015 | ¾ NGS | | AS 2337-1-2004 |

5.3 Tables of threads listed by country

See [Tables 2](#) to [17](#)

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Table 2 — Australian threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--|--|---------------------------|----------------------------|--|-------------------------------|
| T7 | Australia | Special taper stem thread, 1,0 inch Nominal, 14 threads per inch, 1 in 8 taper on diameter | AS 2473.2-2015 | 25AU | T7, T8 and T8a are fully interchangeable threads | AS 2337.1-2004 |
| T14 | Australia | 06-15AU (1/14) (1:5,625) | AS 2473.2-2015 | 15AU | T13 and T14 are fully interchangeable threads | AS 2337.1-2004 |
| T18 | Australia | Special taper stem thread, 0,715 inch Nominal, 14 threads per inch, 1 in 8 taper on diameter | AS 2473.2-2015 | 18AU | T17, T18 and T19 are fully interchangeable threads | AS 2337.1-2004 |
| T24 | Has been changed in P54 but the following T numbers have not yet changed | | | — | | |
| P54 | Australia | Special parallel stem thread, Nominal thread size 3/4" NGS | AS 2473.2-2015 | 3/4" NGS | | AS 2337-1-2004 |

Table 3 — Austrian threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------|-------------------------------|---------------------------|----------------------------|--|-------------------------------|
| T57 | Austria | E17 con (W19,8) | EN 144-1:1992 | 17E | Breathing apparatus T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T58 | Austria | E17 con (W19,8) | EN 144-1:2005 | 17E | Breathing apparatus T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T59 | Austria | 25E (W28,8) | EN 629-1:1996 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T60 | Austria | W19,8 × 1/14 keg. | ÖNORM M 7390-2:1985 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T61 | Austria | W28,8 × 1/14 keg. | ÖNORM M 7390-2:1985 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T62 | Austria | W31,3 × 1/14 keg. | ÖNORM M 7390-2:1985 | 28E | Acetylene only T9, T11, T12, T62 and T63 are fully interchangeable threads | |
| T63 | Austria | W31,3 × 1/14 keg. (28E) | ÖNORM M 7390-7:2009 | 28E | Acetylene only T9, T11, T12, T62 and T63 are fully interchangeable threads | |
| T64 | Austria | 17E (W19,8) | ISO 11116-1:1999 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| P45 | Austria | M18 × 1,5 | EN 144-1:1992 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P46 | Austria | M25 × 2 | EN 144-1:1992 | 25P | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P47 | Austria | M18 × 1,5 | EN 144-1:2005 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |

Table 3 (continued)

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------|-------------------------------|---------------------------|----------------------------|--|-------------------------------|
| P48 | Austria | M25 × 2 | EN 144-1:2005 | M25 | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P49 | Austria | M18 × 1,5 | ISO 15245-1:2001 | 18P | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P50 | Austria | M25 × 2 | ISO 15245-1:2001 | 25P | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |
| P51 | Austria | M30 × 2 | ISO 15245-1:2001 | 30P | P6, P44 and P51 have fully interchangeable thread size | |
| P52 | Austria | M18 × 1,5 | ÖNORM M 7390-5:1987 | 18P | Breathing apparatus P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P53 | Austria | M25 × 2 | ÖNORM M 7390-5:1987 | 25P | Breathing apparatus P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |

Table 4 — Chinese threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|--|---------------------------|----------------------------|--|-------------------------------|
| T37 | China | W39,12TPI taper 3:25, profile-to-surface | GB 8335-1998 | 39C | | |
| T38 | China | W27,8-14TPI taper 3:25, profile-to-surface | GB 8335-1998 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | See ISO 13341 |
| T39 | China | W19,2-14TPI taper 3:25, profile-to-surface | GB 8335-1998 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | See ISO 13341 |

Table 5 — Denmark threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------|-------------------------------|---------------------------|----------------------------|---|-------------------------------|
| T10 | Denmark | W313 x 1/14 (3:25) taper | DS 729 | 28E | T9, T10 T11, T12, T62 and T63 are fully interchangeable threads | |

Table 6 — European threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|---------------------------|----------------------------|---|-------------------------------|
| T2 | EU | E17 con | EN 144-1 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| P2 | EU | M18 x 1,5 | EN 144-1:2005 | M18 | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | |
| P4 | EU | M25 x 2 | EN 144-1:2005 | M25 | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |

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Table 7 — French threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|--|---------------------------|----------------------------|--|---|
| T12 | France | 28,3 × 1/14" taper angle 6°52' | NF E 29-676 | 28E | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | |
| T25 | France | 16,4 × 1/14" taper angle 8°40' | NF E 29-678 | 16F | | |
| T26 | France | 25,8 × 1/14" taper angle 6°38' | NF E 29-680 | 25F | Cylinders with this thread can accept valves with T4, T5, T6, T38, T59 and T61 | ISO 13341 may be used for guidance (torque values as for 25E) |
| T27 | France | 34 × 2 taper angle 5° | NF E 29-682 | 34F | T27 and T28 are fully interchangeable threads | |
| T29 | France | 26 × 1/14" taper angle 3°34' (1:16) | NF E 29-684/2015 | 26F3 | Thread similar to T42 (3/4"NGT) but not equivalent. | |
| T30 | France | RC1H" 11TPI, taper 3°34' (1:16) | NF E 03-004 | — | Not used | |
| T46 | France | Ø19,3 × 1,814 10, 5 % ± 0,5 % | | 19F(P) | For LPG | |
| T47 | France | Ø23,2 or 23,7 × 2,00, 10 % ± 0,5 % | | 23F(P) | For LPG | |
| T48 | France | Ø28,8 × 1,814 11, 2 % ± 0,5 % | | 29F(P) | For LPG | |

Table 8 — German threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------|------------------------------------|---------------------------|----------------------------|---|------------------------------------|
| T3 | Germany | W19,8 × 1/14 6°52' (3:25) taper | DIN 477-1 | — | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | |
| T5 | Germany | W28,8 × 1/14 | DIN 477-1 | — | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | |
| T9 | Germany | W31,3 × 1/14 6°52' (3:25) taper | DIN 477-1 | 28E | T9, T10, T11, T12, T62 and T63 are fully interchangeable threads | ISO 13341 may be used for guidance |
| P5 | Germany | M25 × 2 | DIN 477-6 | M25 | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | |

Table 9 — Indian threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|---------------------------|----------------------------|--|-------------------------------|
| T8a | India | Type 4, size 2 | IS 3224 | 25AU | T7, T8 and T8a are fully interchangeable threads | |
| T19 | India | Type 4 size 1 | IS 3224 | 18AU | T17, T18 and T19 are fully interchangeable threads | |
| T22a | India | Type 4 size 3 | IS 3224 | 32T | T22 and T22a are fully interchangeable | |

Table 10 — International threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|---------------|-------------------------------|---------------------------|----------------------------|---|-------------------------------|
| T1 | International | 17E | ISO 11363-1 | 17E | T1, T2, T3, T39, T57, T58, T60 and T64 are fully interchangeable threads | See ISO 13341 |
| T4 | International | 25E | ISO 11363-1 | 25E | T4, T5, T6, T38, T59 and T61 are fully interchangeable threads | See ISO 13341 |
| P1 | International | M18 × 1,5 | ISO 15245-1:2001 | 18P | P1, P2, P42, P45, P47, P49 and P52 have fully interchangeable thread size | See ISO 13341 |
| P3 | International | M25 × 2 | ISO 15245-1:2001 | 25P | P3, P4, P5, P43, P46, P48, P50 and P53 have fully interchangeable thread size | See ISO 13341 |
| P6 | International | M30 × 2 | ISO 15245-1:2001 | 30P | P6, P44 and P51 have fully interchangeable thread size | See ISO 13341 |

Table 11 — Italian threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|---------------------------|----------------------------|---|-------------------------------|
| T11 | Italy | W28,3 x 1/14" | UNI 11144 | — | T9, T10 T11, T12, T62 and T63 are fully interchangeable threads | |
| T28 | Italy | M34 x 2 | UNI 11144 | 34F | T27 and T28 are fully interchangeable threads | |

Table 12 — Japanese threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|---|--|----------------------------|---|-------------------------------|
| T31 | Japan | W39-12TPI, taper 3:26, profile-to-surface | JIS B 8244 | 39J | For acetylene | |
| T32 | Japan | W20-14TPI, taper 3:26, profile-to-axis | JIS B 8245 V1 | JV1A | For LPG | |
| T33 | Japan | W20-14TPI taper 3:26, profile-to-surface | JIS B 8246 V1 | V1 | | |
| T34 | Japan | W28-14TPI taper 3:26, profile-to-axis | JIS B 8245 V2 | JV2A | For LPG | |
| T35 | Japan | W28-14TPI taper 3:26, profile-to-surface | JIS B 8246 V2 | V2 | | |
| T36 | Japan | W28-14TPI taper 3:26, profile-to-surface | JIS B 8246 V3 | V3 | Short length | |
| P7 | Japan | 1/2"-20UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | U8 | P7 and P8 have fully interchangeable thread size | |
| P9 | Japan | 5/8"-18UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | U10 | P9, P10 and P11 have fully interchangeable thread size | |
| P12 | Japan | 3/4"-16UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF12 | P12, P13 and P14 have fully interchangeable thread size | |
| P15 | Japan | 7/8"-14UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF14 | P15 and P16 have fully interchangeable thread size | |
| P17 | Japan | 1 1/8"-12UNF | JIS B8246 (JIS B0208, ISO 263, ANSI B1.1) | UNF18 | P17 and P18 have fully interchangeable thread size | |
| P19 | Japan | 3/4"-14NPSM | JIS B8246 (ANSI B1.20.1) | SP12 | P19 and P20 have fully interchangeable thread size | |

Table 13 — Korean threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|---------------------------|----------------------------|----------------------------------|-------------------------------|
| T49 | Korea | W20-14 taper 3/26 | KS B 6212 V1 | — | | |
| T50 | Korea | W28-14 taper 3/26 | KS B 6212 V2 | — | | |
| T51 | Korea | W28-14 taper 3/26 | KS B 6214 V2 | — | | |
| T52 | Korea | W28-14 taper 3/26 | KS B 6214 V3 | — | | |
| T53 | Korea | W28-14 taper 3/26 | KS B 6212 V3 | — | | |
| T54 | Korea | W39-12 taper 3/26 | KS B 6215 | — | For acetylene only | |
| T55 | Korea | W38-12 taper 3/26 | KS B 6219 N3-S | — | Profile perpendicular to surface | |
| T56 | Korea | W38-12 taper 3/26 | KS B 6219 N3-A | — | Profile perpendicular to axis | |

Table 14 — Swedish threads

| Ref. no. | Origin | Nominal designation of thread | Specification or standard | Identification and marking | Note | Recommended valving procedure |
|----------|--------|-------------------------------|---------------------------|----------------------------|--|---|
| T23 | Sweden | W28 taper 3:24,5 | SMS 2235:1968 | 25S | Cylinders with this thread can accept valves with T4, T5, T6 and T38 | ISO 13341 may be used for guidance (torque values as for 25E) |

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