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AN INDUSTRY STANDARD FOR FLUID POWER

Fluid power systems – Quick-action couplings – Glossary

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This Foreword is not part of NFPA Recommended Standard Fluid power systems - Quick-action couplings - Glossary, NFPA/T3.20.1 R1-1989.

NFPA/T3.20.1, Glossary of Terms for Fluid Power Quick Disconnect Couplings, was issued as a NFPA Recommended Standard in 1973.

NFPA/T3.20.1 was subsequently merged into ANSI/B93.2-1971, American National Standard Glossary of Terms for Fluid Power.

At its meeting of 12 June 1981 the Quick-Action Coupling Section initiated a project to update NFPA/T3.20.1 for subsequent inclusion in NFPA T2.1.1 R1, NFPA Recommended Standard Fluid power systems and products - Glossary.

At its meeting of 15 March, 1983 the Quick-Action Coupling Section reached consensus on four terms to be included in the revision. Those terms were: plug, socket, dust cap, and dust plug.

Draft number one was submitted at the 2 October 1984 meeting of Section T3.20. Revisions made at the meeting included dropping plug and socket in favor of male half and female half, defining interface, expanding the definition of interchange, and adding latching type couplings.

Draft number two, incorporating the above changes was submitted at the 18 March 1986 meeting of Section T3.20. The committee reviewed the draft and recommended it be sent out for General Review.

Headquarters Technical Staff prepared the General Review Draft on 11 July 1986. A number of comments were received on the General Review Draft. Revisions were made to the Draft at the 30 September 1986 T3.20 Section meeting and it was recommended that after all commentators had withdrawn their objections, the document be submitted to the Technical Board for approval to ballot. All the comments were resolved and the Technical Board granted approval to ballot on 12 May 1988.

The NFPA Technical Staff prepared the document for ballot on 4 November 1988.

The ballot draft closed with two negatives which were resolved when Project Chairman Herzan made editorial changes to the document. The Quick-Action Coupling Section met on 15 August 1989 and recommended that the document be submitted to the Technical Board for final approval. On 14 September 1989 the Technical Board concurred with T3.20 and granted final approval to T3.20.1 R1.

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Fluid power systems — Quick-action couplings — Glossary

0 Introduction

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within an enclosed circuit. Quick-action couplings are used to quickly join or separate fluid lines without the use of tools or special devices.

1 Scope and field of application

1.1 This document applies to complete couplings and to coupling halves.

1.2 Couplings with and without fluid sealing means, when uncoupled, are included.

This document is intended to:

1.3 Promote the understanding and use of quick-action couplings.

1.4 Promote accurate communications.

2 References

ANSI/B93.2, *Fluid power systems and products - Glossary.*

ISO 5598, *Fluid power systems and components - Vocabulary.*

3 Terms and definitions

For definitions of other terms, see ANSI/B93.2

NOTE — The terms set forth herein are presented in format for direct insertion in Section 55 of ANSI/B93.2 at its next revision.

GROUP 55 - QUICK-ACTION COUPLINGS

Section 01 - General
Section 02 - Types of Quick — Action Couplings

SECTION 01 - GENERAL

55.01.040 air inclusion: The ambient atmosphere forced or trapped into the system during connection of the quick-action coupling halves.

55.01.050 break-away: Automatic separation of a mounted quick-action coupling when a force is applied axially to the unmounted coupling half.

55.01.060 connect under pressure: Ability to connect coupling halves with internal pressure applied to either or both coupling halves.

55.01.070 dust cap: A removable device to protect the male coupling half and exclude contamination when disconnected.

55.01.090 dust plug: A removable device to protect the coupling female coupling half and exclude contamination when disconnected.

55.01.110 female half: The receptacle portion of a quick-action coupling which normally includes the mechanism to lock the two quick-action coupling halves together.

55.01.120 interchange: The ability of a quick-action coupling half from one manufacturer to fit and function with a mating half from another manufacturer without assurance of equal performance.

55.01.130 interface: That portion of a coupling half that establishes and controls interchangeability.

55.01.140 male half: The probe portion of a quick-action coupling which fits and locks into the female half.