

S10 Series

S A F E W A Y H Y D R A U L I C S

Document No. 7910 rev. 002



Rugged,
International
Standard
ISO 7241-1
Series B
Interchange

Versatile, Dependable Quick Couplings in Hardened Steel, Brass and 303 Stainless

SafeWay's S10 Series is a general purpose, ball locking, double shut-off fluid transfer quick coupling designed for use with most industrial fluids. Our rugged design meets or exceeds all specifications set forth in International Standard ISO 7241-1 Series B, and is interchangeable half-for-half with other brands conforming to the dimensional requirements of this interchange including the Aeroquip FD45 Series and the Parker 60 Series.

This series is available in body sizes from 1/8" through 1" in a variety of thread sizes and styles. The basic materials are hardened carbon steel, brass and 303 stainless steel. Buna-N o-ring seals are standard, with a wide variety of optional seal materials available. Steel parts are zinc plated with yellow chromate finish for corrosion resistance. All S10 Series quick couplings are 100% bubble leak tested during the assembly process.

Some basic applications include construction equipment, mining equipment, forestry equipment, chemical transfer lines, steam lines, the transfer of some gases, and vacuum applications. Use this quick coupling series when a smooth and reliable connection and disconnection of a fluid transfer line is needed, and when international interchangeability with other brands is required.

Obtaining the proper product for your application should be your prime concern. Please review this document, our current catalog at our website, or contact the factory for additional information regarding your particular requirement.

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PERFORMANCE DATA

Complete Coupler No.	Body Size (Inches)	Thread Size and Description	Max. Operating Pressure psi (BAR)	NFPA Rated Flow gpm (Lpm)	Max. Spillage cc
S10-1	1/8	1/8" Female NPT	5,000 (345)	0.8 (3)	.30
S10-1-4	1/8	7/16"-20 Female ORB	5,000 (345)	0.8 (3)	.30
S10-2	1/4	1/4" Female NPT	5,000 (345)	3 (12)	.50
S10-2-6	1/4	9/16"-18 Female ORB	5,000 (345)	3 (12)	.50
S10-3	3/8	3/8" Female NPT	4,000 (276)	6 (23)	1.3
S10-3-8	3/8	3/4"-16 Female ORB	4,000 (276)	6 (23)	1.3
S10-4	1/2	1/2" Female NPT	4,000 (276)	12 (46)	2.8
S10-4-10	1/2	7/8"-14 Female ORB	4,000 (276)	12 (46)	2.8
S10-6	3/4	3/4" Female NPT	3,500 (241)	28 (106)	8.2
S10-6-12	3/4	1-1/16"-12 Female ORB	3,500 (241)	28 (106)	8.2
S10-8	1	1" Female NPT	3,000 (207)	50 (189)	16.0
S10-8-16	1	1-5/16"-12 Female ORB	3,000 (207)	50 (189)	16.0

Temperature Range: Standard Seals (Buna-N) -40° to +250° F. Viton® Option: -15° to +450° F. Other Seals Available.

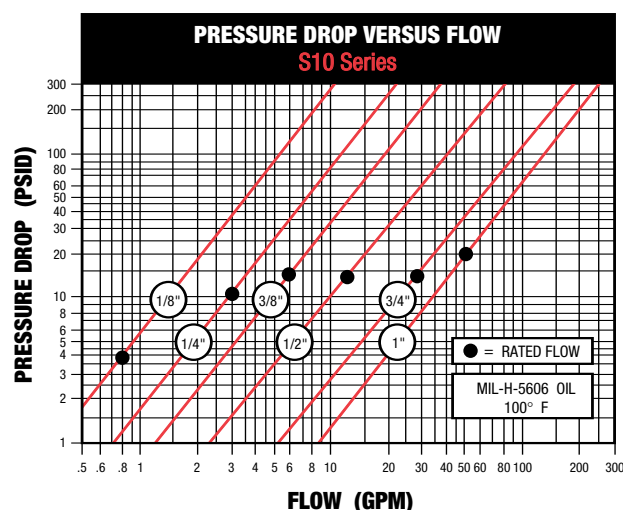
Vacuum Data: 27.4 inches Hg. both connected and disconnected — all sizes.

Pressure rating (Max. Operating Pressure) is based on Non-Pulsating, Low Cycle applications with essentially steady pressure during the operating cycle. Please consult factory regarding other applications.

FEATURES

- Meets the dimensional requirements of ISO 7241-1 Series B.
- As with all SafeWay products, the S10 Series is engineered, manufactured, and assembled in the USA.
- Standard metals are steel, 303 stainless steel, and brass.
- Interchangeable half-for-half with numerous other brands.
- Brass and stainless steel S10 Series couplers are supplied with hardened stainless steel locking detent balls. All springs and retainer rings are stainless steel for increased corrosion resistance.
- Less pressure drop and higher burst pressures than most brands within this popular interchange.
- Available in body sizes from 1/8" to 1" with pipe thread and SAE O-Ring Boss (ORB) standard.
- The S10 Series uses high quality carbon steel in its valving and retainers; no powdered metal parts.
- All S10 Series quick couplings are 100% bubble leak tested before leaving the factory.
- Our unique poppet/seat design allows no extrusion gap, minimizing seal degradation under extreme pressures. Stainless steel valve springs and retainer rings are standard.
- Heat treated surfaces resist wear.
- Sleeve lock option, to minimize accidental disconnect, is available upon request.
- Nitrile seals are standard. Other materials are available.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, Hydraulic fluid power - Quick action couplings - Test methods.

Viton® is a registered trademark of DuPont Dow Elastomers.



INTERCHANGE DISCLAIMER

The interchange chart on the following page lists those products that interconnect due to dimensional compatibility within this accepted interchange; it does not take into account substantial differences in product performance between brands, or specific features unique to a given brand. Product part numbers and specifications change frequently. Please consult our website or our Customer Service Department if you have any questions regarding interchangeability and technical information.



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I N T E R C H A N G E D A T A

Nominal Body Size (Inches)	Thread Size and Description	SafeWay Part Number	Aeroquip Part Number	Faster Part Number	Hansen Part Number
1/8	1/8" F NPT - Body (Coupler)	S105-1	FD45-1003-02-02	HNV-18-NPT-F	1-H11
1/8	1/8" F NPT - Tip (Nipple)	S101-1	FD45-1002-02-02	HNV-18-NPT-M	1-K11
1/8	7/16"-20 F ORB - Body (Coupler)	S105-1-4	—	—	1-H4
1/8	7/16"-20 F ORB - Tip (Nipple)	S101-1-4	—	—	1-K4
1/4	1/4" F NPT - Body (Coupler)	S105-2	FD45-1003-04-04	HNV-14-NPT-F	2-H16
1/4	1/4" F NPT - Tip (Nipple)	S101-2	FD45-1002-04-04	HNV-14-NPT-M	2-K16
1/4	9/16"-18 F ORB - Body (Coupler)	S105-2-6	—	HNV-14-38SAE-F	2-H6
1/4	9/16"-18 F ORB - Tip (Nipple)	S101-2-6	—	HNV-14-38SAE-M	2-K6
3/8	3/8" F NPT - Body (Coupler)	S105-3	FD45-1003-06-06	HNV-38-NPT-F	3-H21
3/8	3/8" F NPT - Tip (Nipple)	S101-3	FD45-1002-06-06	HNV-38-NPT-M	3-K21
3/8	3/4"-16 F ORB - Body (Coupler)	S105-3-8	—	—	3-H8
3/8	3/4"-16 F ORB - Tip (Nipple)	S101-3-8	—	—	3-K8
1/2	1/2" F NPT - Body (Coupler)	S105-4	FD45-1003-08-10	HNV-12-NPT-F	4-H26
1/2	1/2" F NPT - Tip (Nipple)	S101-4	FD45-1002-08-10	HNV-12-NPT-M	4-K26
1/2	7/8"-14 F ORB - Body (Coupler)	S105-4-10	—	HNV-12-58SAE-F	4-H10
1/2	7/8"-14 F ORB - Tip (Nipple)	S101-4-10	—	HNV-12-58SAE-M	4-K10
3/4	3/4" F NPT - Body (Coupler)	S105-6	FD45-1003-12-12	HNV-34-NPT-F	6-H31
3/4	3/4" F NPT - Tip (Nipple)	S101-6	FD45-1002-12-12	HNV-34-NPT-M	6-K31
3/4	1-1/16"-12 F ORB - Body (Coupler)	S105-6-12	—	HNV-34-34SAE-F	6-H12
3/4	1-1/16"-12 F ORB - Tip (Nipple)	S101-6-12	—	HNV-34-34SAE-M	6-K12
1	1" F NPT - Body (Coupler)	S105-8	FD45-1003-16-16	HNV-1-NPT-F	8-H36
1	1" F NPT - Tip (Nipple)	S101-8	FD45-1002-16-16	HNV-1-NPT-M	8-K36
1	1-5/16"-12 F ORB - Body (Coupler)	S105-8-16	—	HNV-1-1SAE-F	8-H16
1	1-5/16"-12 F ORB - Tip (Nipple)	S101-8-16	—	HNV-1-1SAE-M	8-K16

Nominal Body Size (Inches)	Thread Size and Description	SafeWay Part Number	Parker Part Number	Snap-tite Part Number	TOMCO Part Number
1/8	1/8" F NPT - Body (Coupler)	S105-1	H1-62	—	TH1-11
1/8	1/8" F NPT - Tip (Nipple)	S101-1	H1-63	—	TK1-11
1/8	7/16"-20 F ORB - Body (Coupler)	S105-1-4	H1-62-T4	—	—
1/8	7/16"-20 F ORB - Tip (Nipple)	S101-1-4	H1-63-T4	—	—
1/4	1/4" F NPT - Body (Coupler)	S105-2	H2-62	72C4-4F	TH2-16
1/4	1/4" F NPT - Tip (Nipple)	S101-2	H2-63	72N4-4F	TK2-16
1/4	9/16"-18 F ORB - Body (Coupler)	S105-2-6	H2-62-T6	—	—
1/4	9/16"-18 F ORB - Tip (Nipple)	S101-2-6	H2-63-T6	—	—
3/8	3/8" F NPT - Body (Coupler)	S105-3	H3-62	72C6-6F	TH3-21
3/8	3/8" F NPT - Tip (Nipple)	S101-3	H3-63	72N6-6F	TK3-21
3/8	3/4"-16 F ORB - Body (Coupler)	S105-3-8	H3-62-T8	—	—
3/8	3/4"-16 F ORB - Tip (Nipple)	S101-3-8	H3-63-T8	—	—
1/2	1/2" F NPT - Body (Coupler)	S105-4	H4-62	72C8-8F	TH4-26
1/2	1/2" F NPT - Tip (Nipple)	S101-4	H4-63	72N8-8F	TK4-26
1/2	7/8"-14 F ORB - Body (Coupler)	S105-4-10	H4-62-T10	—	—
1/2	7/8"-14 F ORB - Tip (Nipple)	S101-4-10	H4-63-T10	—	—
3/4	3/4" F NPT - Body (Coupler)	S105-6	H6-62	72C12-12F	TH6-31
3/4	3/4" F NPT - Tip (Nipple)	S101-6	H6-63	72N12-12F	TK6-31
3/4	1-1/16"-12 F ORB - Body (Coupler)	S105-6-12	H6-62-T12	—	—
3/4	1-1/16"-12 F ORB - Tip (Nipple)	S101-5-12	H2-63-T12	—	—
1	1" F NPT - Body (Coupler)	S105-8	H8-62	72C16-16F	TH8-36
1	1" F NPT - Tip (Nipple)	S101-8	H8-63	72N16-16F	TK8-36
1	1-5/16"-12 F ORB - Body (Coupler)	S105-8-16	H8-62-T16	—	—
1	1-5/16"-12 F ORB - Tip (Nipple)	S101-8-16	H8-63-T16	—	—

Due to space limitations we have included only steel products within this series. For interchange information regarding stainless steel (SS) and brass (BS) products please refer to our Hydraulic Quick Coupling Product Interchange Booklet, our website, or our Customer Service Department.

SafeWay Hydraulics, Inc.

WARNING STATEMENT



FAILURE, IMPROPER USE OR IMPROPER SELECTION OF THE SYSTEMS AND/OR COMPONENTS DESCRIBED HEREIN MAY CAUSE DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE.

This document, as well as all other catalogs, price lists and information provided by SafeWay Hydraulics, Inc., its subsidiaries or authorized distributors, is intended to provide product information and/or system options for further consideration by users having substantial technical expertise. It is imperative that all aspects of any intended use be analyzed and all pertinent information reviewed concerning the component or system in a current product catalog. Due to the variety of operating conditions and applications for these components and systems, the user, through its own analysis, testing and evaluation, is solely responsible for making the final selection of the products and systems and ensuring that all safety, warning and performance requirements of the application or use are met.

The components described herein, including without limitation, all component features, specifications, designs, pricing and availability, are subject to change at any time at the sole discretion of SafeWay Hydraulics, Inc. and its subsidiaries at any time without notice.

SAFETY GUIDE — QUICK ACTION COUPLINGS

1. QUICK COUPLINGS CAN FAIL WITHOUT WARNING FOR A VARIETY OF REASONS. ALL EQUIPMENT AND SYSTEMS SHOULD BE OF A FAIL-SAFE DESIGN TO AVOID ENDANGERING PERSONS AND PROPERTY.
2. ANY PERSON RESPONSIBLE FOR SELECTING OR USING QUICK COUPLINGS SHOULD READ AND UNDERSTAND THIS SAFETY GUIDE AND HAVE A GOOD UNDERSTANDING OF FLUID SYSTEM DESIGN AND MAINTENANCE.
3. SAFEWAY, ITS REPRESENTATIVES AND DISTRIBUTORS DO NOT REPRESENT OR WARRANT THAT ANY QUICK COUPLING IS SUITABLE FOR ANY SPECIFIC USE. THE USER, THROUGH ITS OWN TESTING AND EVALUATION, IS SOLELY RESPONSIBLE FOR FINAL SELECTION OF THE PRODUCTS AND SYSTEMS AND ENSURING THAT ALL SAFETY, WARNING AND PERFORMANCE REQUIREMENTS OF THE APPLICATION OR USE ARE MET.

Coupler Installation

Quick couplings should be located so as not to expose the operator to moving parts, hot parts, the potential of falling, slipping, or other hazardous conditions. Precautions should be taken to not over tighten mating threaded parts during installation.

Locking Mechanism

Ball locking quick couplings can unintentionally disconnect if they are dragged over obstructions while on the end of a hose, or if the sleeve is bumped or moved enough to cause disconnect. Sleeves designed with flanges, to provide better gripping for gloved hands, are especially susceptible to accidental disconnect and should not be used where these conditions exist. THE SLEEVE LOCK OPTION SHOULD BE CONSIDERED WHERE THERE IS A POTENTIAL FOR UNINTENDED UNCOUPLING.

Coupler Size

Transmission of power by means of pressurized fluid varies with the system pressure and flow rate. The body size of the coupler must be adequate to keep pressure loss to a minimum to avoid damage due to heat generation or excessive fluid velocity.

Mechanical Loads

Excessive axial and side forces or vibration can reduce coupler life or cause failure.

Pressure

When selecting your quick coupling, make sure its maximum operating pressure is equal to, or greater than, the maximum possible system pressure. DO NOT EXCEED THE LIMITS OF THE COUPLER. Pressure impulse can shorten the life of a coupler.

Hose Whip

A short length of hose between the tool and the coupler half should be used instead of a rigid mount. This reduces the potential for coupler damage and provides some isolation from mechanical vibration which could cause accidental uncoupling. Never try to connect or disconnect the coupler when there is pressure in the system unless you are using a quick coupling designed for that purpose.

Environment

Environmental conditions including, but not limited to, moisture, water, chemicals, ozone, ultraviolet radiation and air pollutants can cause degradation of coupling components and premature quick coupling failure. Choose the proper body material for use in the environment in which the system is placed.

Vacuum

Not all quick couplings are suitable or recommended for vacuum service. Quick couplings used in vacuum applications must be selected to ensure that the quick coupling will withstand the vacuum and pressure of the system.

Fluid and Temperature

Quick coupling body and seal materials must be compatible with the media and ambient temperature, both steady and transient. DO NOT EXCEED THE LIMITS OF THE COUPLER.

Fluid Leaks

DO NOT GO NEAR FLUID LEAKS. High pressure leaks of fluid such as oil easily puncture skin and can cause serious injury, gangrene or death. Relieve pressure before loosening fittings. Do not use fingers or skin to check for leaks. If injured, seek emergency medical help. Immediate surgery is required to remove oil.