

SafeWay®

CUSTOM FLUID TRANSFER



MADE IN THE USA

AGRICULTURAL • CONSTRUCTION
INDUSTRIAL • AUTOMATION



UNIQUE OEM DESIGNS, REPLACEMENT PARTS
& CUSTOM FLUID TRANSFER SOLUTIONS

SafeWayHyd.com

THE SPECIALTY MFG. CO.
Custom Is Our Specialty

WE TURN IDEAS INTO REALITY

A LEGACY OF INNOVATION

From founder William Boss' first patented grass catcher invention in 1879—to the egg scales, seed sorters and hose reels of the last century—and now the vast array of fluid management and fluid transfer products offered today, the Specialty Mfg. Co. has thrived as a problem solver. In that tradition, we continue with a promise to do what our competitors simply can't or won't do. And, through our SafeWay Hydraulics division, it is ideas around the innovation of fluid transfer that set us apart.

UNIQUE FLUID TRANSFER NEEDS CALL FOR CUSTOM SOLUTIONS

It's not unusual for our customers to ask us for help when unique fluid transfer challenges require creative quick connection problem solving. Every day the engineers dedicated to the SafeWay brand collaborate with OEM designers to improve fluid transfer system function and manufacturability. This expertise is what you should expect from a Quick Action fluid transfer partner.

VERTICALLY INTEGRATED MANUFACTURING

SafeWay's quick disconnect couplings system combines design innovation and problem-solving expertise with fast, reliable delivery. We bring value-added engineering, precision metal machining, plastic injection molding, stamping and grinding, and assembly operations all under one roof.

PROUDLY MADE IN THE USA

At Specialty Mfg. Co.—the parent company of SafeWay—applying American ingenuity and problem solving is routine. For well over 100 years we have refined engineering and vertically integrated manufacturing processes to set the standard for quality and service for quick connect fluid transfer systems around the world.



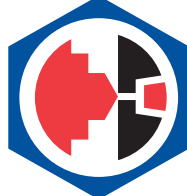
ENGINEERING

Turning ideas into efficient solutions is the result of collaboration and partnership with our customers. We specialize in adding value to fluid transfer system designs to optimize function and manufacturability. Three examples are presented on the facing page.



METAL MACHINING

We have the right machines and experience to economically produce parts to precise specifications—from simple to complex in low volume to large production runs. Multi-Axis CNC, Swiss CNC, Multi Spindle Acme, Hydromat Rotary Transfer, Makino and Haas Vertical Mills.



INJECTION MOLDING

As a full-service injection and insert injection molding partner, we offer the shortest lead times in the business. Full range of precision injection molding with equipment from 2oz/80-ton to 80oz/500-ton capacity.



GRINDING

We produce custom cutting blades for the tape, paper and plastics industries. Proprietary crush grinding techniques yield one of the longest edge sharpness durations in the industry.



STAMPING

Specialties include medium/high volume precision stampings with a press capability from 10 tons (for Miniature Stampings) to 110 tons. and parts from .003" up to .130" thick.



ASSEMBLY

We streamline supply chain management by producing fully assembled, ready to install components that meet your specifications. Using the latest equipment and methods, we often coordinate a variety of outside services that, when combined with machined, stamped and molded components, define the scope of our capabilities.

CUSTOM FLUID TRANSFER IS OUR SPECIALTY

The Specialty Mfg. Co and SafeWay are proud of our engineering and manufacturing know-how. We are willing to work with our customers to explore and execute unique solutions that leverage our expertise with plastic and metal materials, hardening, annealing, finishing and coatings. Here are three unique examples from recent projects.

CUSTOM ZERK FOR TRACK TENSIONING SYSTEM

Simplifies Lubrication, and Maintenance

Time is money when managing routine maintenance and lubrication of drive tracks on excavating equipment. A leading excavation machinery manufacturer designed a single zerk hydraulic system to deliver and bleed grease used to set/adjust track tension on their equipment. The system required a reliable and durable mechanism to inject lubricant, and then reverse pressure to allow the used lubricant to be flushed from the system and then recharged.

To make this work, the manufacturer turned to SafeWay. After close review and testing, SafeWay engineers identified and recommended two ways to improve durability and ensure leak-free performance: 1) Implement design and control features to minimize leak potential, and 2) Implement a dual hardening process to assure reliable performance of the zerk system's body.

The excavating machinery manufacturer implemented our recommendations, which led to the system's successful production and use. To this day, the single zerk hydraulic system continues to exceed expectations for performance, durability and cost.



COLOR CODED ANODIZING SIMPLIFIES MULTI-LINE CONNECTION SYSTEMS

Eliminates Errors and Streamlines Changeover

When a leading manufacturer of high-performance lubricants needed to be certain workers could quickly and easily distinguish among their fluid lines' many standard quick disconnects, the production workers sometimes made connection errors that cross contaminated fluids.

The lubricant manufacturer turned to Specialty Manufacturing Co.'s engineers in its SafeWay Hydraulics division for a solution to their error-prone fluid-transfer process. The engineers created a new,

color-coded (anodized) quick disconnect system that allowed production workers to separate fluids based on color. The system also helped prevent future fluid-transfer mistakes by incorporating male and female components that wouldn't physically connect the wrong fluid lines.

The custom quick disconnect fluid-transfer solution made it possible for the manufacturer to eliminate costly product waste and time-consuming rework. Production workers now benefit, too, from a more comprehensive process for transferring fluid.

MODULAR ELECTRONICS COOLING

Reliable, Quick and Easy Modular Design

When a new customer came to us in need of a fluid transfer coupling solution for electronics cooling within electronics enclosures, we met the challenge head on. In this unique case, off-the-shelf couplers were too large and heavy for the confined space of their products. SafeWay engineers recommended reducing the coupler size and using aluminum for the body. With this approach, we were able to provide a smaller and lighter coupler that operates closer to 300 psi, versus the 3,000 psi of typical couplers.

We also color-coded the two sets of dripless connectors for easy end-user identification when installing the system. By working closely with the customer, we were able to deliver a high value solution, which was exactly what was needed. They saved money and solved a major challenge to keeping electronics cool in a confined space.

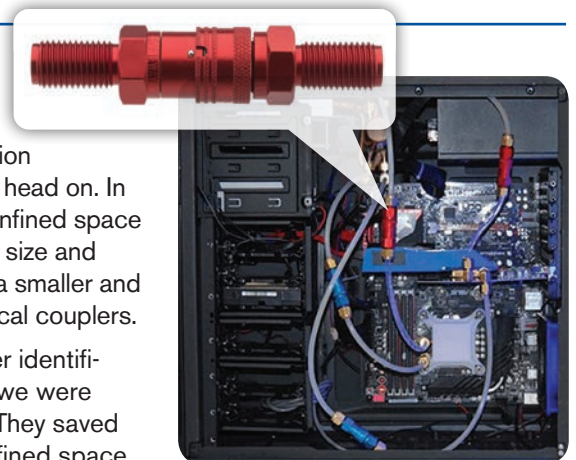

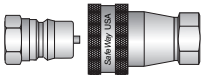


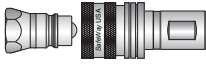

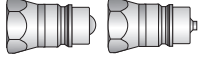
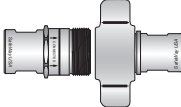
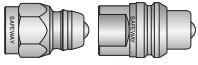


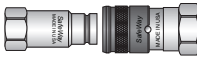
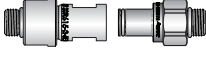

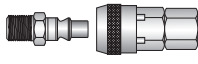
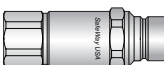




Photo courtesy of QuantaCool Corporation
©Quanta Cool Corporation • QuantaCool.com

TABLE OF CONTENTS

QUICK DISCONNECT COUPLINGS, ADAPTERS & ACCESSORIES

| PRODUCT | PAGE(S) | PRODUCT | PAGE(S) |
|--|---------|--|---------|
| Custom Capabilities | 2-3 |  S20 Series | 24-25 |
| Product Overview | 5 | General Purpose Agriculture O.E.M. Couplings (Steel) | |
|  S10 Series | 6-9 |  S40 Series | 26-27 |
| General Purpose Industrial Interchange (Steel, Brass, 303 Stainless) | | One-Hand Operation, Agriculture O.E.M. Couplings (Steel) | |
|  SH20 Series | 10-11 |  S70 Series | 28-29 |
| General Purpose Bruning SM Series Interchange (Steel) | | Flowmaster® Connect-Under-Pressure, Agriculture O.E.M. Couplings (Steel) | |
|  S30 Series | 12-13 |  ISO Agriculture Tips | 30 |
| Screw Together, High Pressure for Portable Hydraulic Rams (Steel) | | Ball Valve and Poppet Valve Models (Steel) | |
|  S51 Series | 14-15 |  Agriculture O.E.M. | 30 |
| Screw Together, Maximum Flow with Minimum Spillage (Brass & Steel) | | Previous Designs (Steel) | |
|  S56 Series | 16-17 |  Coupler Adapters | 31 |
| Compact Design, High Flow, High Working Pressure (Steel) | | Interconnect Non-Compatible | |
|  FF49 Series | 18-19 |  SSR60 Series | 32 |
| High Pressure & High Flow Without Spillage (Steel & 303 Stainless) | | Special Purpose Stab Application (303 Stainless) | |
|  FFE49 Series | 20-21 |  S80 & S82 Series | 33 |
| Flush Face, Non-Spill (Steel) | | Pneumatic Interchange | |
|  FFEC49 Series | 22 |  Accessories | 34-36 |
| Flush Face, Non-Spill, Connect-Under-Pressure (Steel) | | Dust Caps & Dust Plugs, Break-Away Clamps, Replacement Seals, Repair Kits, Reducer Bushings | |
|  FDB49 Series | 23 | Glossary of Terms | 37 |
| Flush Face, Non-Spill, Hansen DB Series Interchange (316 Stainless) | | Warning Statement | 38 |
| | | Ordering Information | 39 |
| | | ALL NEW Online Product Interchange Part Finder | 39 |

PRODUCT OVERVIEW

| FEATURES | | PRODUCTS | | | | | | | | | | | | | |
|--|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|-------|
| SERIES | | S10 | S20 | SH20 | S30 | S40 | S51 | S56 | S70 | FF49 | SF49 | FFE49 | FFEC49 | FDB49 | SSR60 |
| PAGE NUMBERS | | 6-9 | 24-25 | 10 -11 | 12-13 | 26-27 | 14-15 | 16-17 | 28-29 | 18-19 | 18-19 | 20-21 | 22 | 23 | 32 |
| CONSTRUCTION | | | | | | | | | | | | | | | |
| Plated Steel | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ (2) | ✓ | ✓ | ✓ | | ✓ | ✓ | | |
| Stainless Steel | | ✓ | | | | | | | | | ✓ | | | ✓ | ✓ |
| Brass | | ✓ | | | | | ✓ (2) | | | | | | | | |
| Standard Buna-N Seals (-40° to +250° F) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | |
| Viton® (F) Seals (-15° to +450° F) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | ✓ | (Option) | (Option) | (1) | |
| EPR (E) Seals (-70° to +300° F) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | | ✓ |
| Other Seal Options | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | (Option) | ✓ | ✓ | ✓ | ✓ | | |
| Flush-Face Design | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Poppet Valve | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | | | |
| Ball Valve | | | ✓ | ✓ | | ✓ | | | ✓ | | | | | | |
| Screw-Together (Thread to Connect) | | | | | ✓ | | ✓ | | | | | | | | |
| Wing Nut or Hex Nut Sleeve | | | | | | | ✓ | | | | | | | | |
| Two-Way Sleeve (Push-Pull) | | | | | | ✓ | | | ✓ | | | | | | |
| Sleeve Lock (SL) | (Option) | | | | | | | (Option) | | ✓ | ✓ | (Option) | | | |
| Minimum Spill | | | | | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Connect-Under-Pressure | | | | | | | | | ✓ | | | | ✓ | ✓ | |
| Push-to-Connect | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| ISO 7241-1 Series A | | | | | | | | ✓ | | | | | | | |
| ISO 7241-1 Series B | ✓ | | | | | | | | | | | | | | |
| ISO 16028 | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | | |
| ISO 5675 (1/2" Body Size) | | | | | | | | | ✓ | | | | | | |
| HTMA | | | | | | | | | | ✓ | | | | | |
| Interchangeable with Other Brands | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| THREAD TYPE | | | | | | | | | | | | | | | |
| AVAILABLE BODY SIZE | STD. THREADS | | | | | | | | | | | | | | |
| 1/8" | Pipe Thread (3) | ✓ | | | | | | | | | | | | | |
| | O-ring Boss (3) | | | | | | | | | | | | | | |
| 1/4" | Pipe Thread (3) | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | | | |
| | O-ring Boss (3) | ✓ | | ✓ | | | | | | | | | | | ✓ |
| 3/8" | Pipe Thread (3) | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | | |
| | O-ring Boss (3) | ✓ | | | | | | ✓ | | ✓ | | | | | |
| 1/2" | Pipe Thread (3) | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | ✓ | ✓ | | |
| | O-ring Boss (3) | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | ✓ | | | |
| 3/4" | Pipe Thread (3) | ✓ | ✓ | | | | ✓ | ✓ | | ✓ | | ✓ | | | |
| | O-ring Boss (3) | ✓ | | | | | | ✓ | | ✓ | | ✓ | | | |
| 1" | Pipe Thread (3) | ✓ | ✓ | | | | ✓ | ✓ | | | | ✓ | | ✓ | |
| | O-ring Boss (3) | ✓ | | | | | | ✓ | | | | ✓ | | | |
| 1-1/4" | Pipe Thread (3) | | | | | | ✓ | | | | | | | | |
| | O-ring Boss (3) | | | | | | | | | | | | | | |
| PERFORMANCE (Consult Specifications for Details) NOTE: K = 1,000 PSI | | | | | | | | | | | | | | | |
| Maximum Operating Pressure (PSI) | Steel | 3K-5K | 3K-4K | 6K | 10K | 3K-4K | 2K-5K | 4K-5K | 3K | 6K-10K | | 3K-5K | 4K | | |
| | Stainless Steel | 2K-5K | | | | | | | | | 3K | | | 1.4K | 100 |
| | Brass | 1.6K-4K | | | | | 2K-5K | | | | | | | | |
| NFPA Rated Flow (GPM) (4) | | 0.8-50 | 3-50 | 3 | 3-6 | 3-12 | 12-76 | 3-50 | 12 | 10-12 | 10 | 3-50 | 12 | 50 | 3 |

- NOTES:**
- (1) Special low temperature Viton® seals are standard (-40° to +482° F).
 - (2) S51 Series is available in brass or electroless nickel plated steel (-STL). Both include brass valving & ductile cast iron wing nut or steel hex nut.
 - (3) Consult catalog or SafeWay website for available Pipe Thread, O-ring Boss (ORB), BSPP and Metric sizes.
 - (4) Varies by body size – consult catalog, SafeWay's website or factory regarding specific applications.

Disclaimer: Interchange information is based on SafeWay products that interconnect due to dimensional compatibility. It does not take into account substantial differences in maximum operating psi and performance between brands or specific features unique to a given brand. Product part numbers and specifications change frequently. Please consult SafeWay's website (www.SafeWayHyd.com) or Customer Service regarding interchangeability and technical information.

Viton® is a registered trademark of DuPont Dow Elastomers.

Check out our online **Product Interchange Part Finder**

Competitor Part Number:

☐ Show Partial Matches

www.SafeWayHyd.com

S10 SERIES

QUICK COUPLERS IN HARDENED STEEL

SafeWay's S10 Series is a general purpose, double shut-off quick coupling capable of containing a wide variety of fluids. Primarily used for the transfer of hydraulic fluid, they can also be used with chemicals and some gases. Widely used in both stationary and mobile industrial applications.

- Meets dimensional requirements of ISO 7241-1 Series B, the most widely used Industrial Interchange.
- Available in body sizes from 1/8" to 1" with pipe thread and SAE O-ring Boss (ORB) standard.
- Standard material is steel.
- Interchangeable half-for-half with Eaton HK Series, Parker/Pioneer 60 Series, Faster HNV series as well as others conforming to this interchange.
- Double shut-off poppet style valving with captive poppet seal provides a durable, guaranteed leak-free seal.
- Full-flow design for optimum system performance.
- All S10 Series quick couplings are 100% leak tested.
- Seals for most fluids available upon request.
- Heavy-duty detent ball latch design for a reliable connection time after time.



- Only rugged, high quality carbon steel valving and retainers; no powdered metal parts.
- Sleeve lock, one-way shut-off, and straight-thru designs are available.
- Heavy-duty steel dust caps and dust plugs are available for the male tip halves and female body halves.
- Field repair kits are available for 3/4" and 1" couplers in all materials and O-ring compounds.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S10-1 | S105-1 | S101-1 | 1/8" | 1/8" Female Pipe | 5,000 | (345) | 0.8 | (3) |
| S10-2 | S105-2 | S101-2 | 1/4" | 1/4" Female Pipe | 5,000 | (345) | 3 | (12) |
| S10-2-6 | S105-2-6 | S101-2-6 | 1/4" | 9/16"-18 Female ORB | 5,000 | (345) | 3 | (12) |
| S10-3 | S105-3 | S101-3 | 3/8" | 3/8" Female Pipe | 4,000 | (276) | 6 | (23) |
| S10-3-8 | S105-3-8 | S101-3-8 | 3/8" | 3/4"-16 Female ORB | 4,000 | (276) | 6 | (23) |
| S10-4 | S105-4 | S101-4 | 1/2" | 1/2" Female Pipe | 4,000 | (276) | 12 | (45) |
| S10-4-10 | S105-4-10 | S101-4-10 | 1/2" | 7/8"-14 Female ORB | 4,000 | (276) | 12 | (45) |
| S10-6 | S105-6 | S101-6 | 3/4" | 3/4" Female Pipe | 3,500 | (241) | 28 | (106) |
| S10-6-12 | S105-6-12 | S101-6-12 | 3/4" | 1-1/16"-12 Female ORB | 3,500 | (241) | 28 | (106) |
| S10-8 | S105-8 | S101-8 | 1" | 1" Female Pipe | 3,000 | (207) | 50 | (189) |
| S10-8-16 | S105-8-16 | S101-8-16 | 1" | 1-5/16"-12 Female ORB | 3,000 | (207) | 50 | (189) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® Option -15° to +450° F Other Seals Available.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.

QUICK COUPLERS IN 360 BRASS

SafeWay's BS10 Series is a general purpose, double shut-off quick coupling capable of containing a wide variety of fluids. Brass construction lends itself to use in applications where steel is unsuitable, including use with certain chemicals and gases. Widely used in both stationary and mobile industrial applications.

- Meets dimensional requirements of ISO 7241-1 Series B, the most widely used Industrial Interchange.
- Available in body sizes from 1/8" to 1" with pipe thread.
- Standard material is brass.
- Interchangeable half-for-half with Eaton HK series, Parker/Pioneer 60 series, Faster HNV series as well as others conforming to this interchange.
- Double shut-off poppet style valving with captive poppet seal provides a durable, guaranteed leak-free seal.
- Full-flow design for optimum system performance.
- All BS10 Series quick couplings are 100% leak tested.
- Seals for most fluids available upon request.
- Heavy-duty detent ball latch design for a reliable connection time after time.



- Brass couplers are supplied with brass valve, hardened stainless steel locking detent balls, springs and retaining rings for increased corrosion resistance.
- Heavy-duty steel dust caps and dust plugs are available for the male tip halves and female body halves.
- Field repair kits are available for 3/4" and 1" couplers in all materials and O-ring compounds.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

DIMENSIONAL DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| BS10-1 | BS105-1 | BS101-1 | 1/8" | 1/8" Female Pipe | 3,000 | (207) | 0.8 | (3) |
| BS10-2 | BS105-2 | BS101-2 | 1/4" | 1/4" Female Pipe | 4,000 | (276) | 3 | (12) |
| BS10-3 | BS105-3 | BS101-3 | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 6 | (23) |
| BS10-4 | BS105-4 | BS101-4 | 1/2" | 1/2" Female Pipe | 3,500 | (241) | 12 | (45) |
| BS10-6 | BS105-6 | BS101-6 | 3/4" | 3/4" Female Pipe | 2,300 | (159) | 28 | (106) |
| BS10-8 | BS105-8 | BS101-8 | 1" | 1" Female Pipe | 1,600 | (110) | 50 | (189) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® Option -15° to +450° F

Other Seals Available.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.

SS10 SERIES

QUICK COUPLERS IN 303 STAINLESS STEEL

SafeWay's SS10 Series is a general purpose, double shut-off quick coupling capable of containing a wide variety of fluids. Primarily used for the transfer of hydraulic fluid, they can also be used with water, steam, chemicals and some gases. Widely used in both stationary and mobile industrial applications.

- Meets dimensional requirements of ISO 7241-1 Series B, the most widely used Industrial Interchange.
- Available in body sizes from 1/8" to 1" with pipe thread.
- Standard material is 303 stainless steel.
- Interchangeable half-for-half with Eaton HK Series, Parker/Pioneer 60 Series, Faster HNV Series as well as others conforming to this interchange.
- Double shut-off poppet style valving with captive poppet seal provides a durable, guaranteed leak-free seal.
- Full-flow design for optimum system performance.
- All SS10 Series quick couplings are 100% leak tested.
- Heavy-duty detent ball latch design for a reliable connection time after time.
- Seals for most fluids available upon request.



- Stainless steel SS10 Series couplers are supplied with hardened stainless steel locking detent balls, poppet valve springs and retaining rings for increased corrosion resistance.
- Sleeve lock, one-way shut-off, and straight-thru designs are available.
- Heavy-duty steel dust caps and dust plugs are available for the male tip halves and female body halves.
- Field repair kits are available for 3/4" and 1" couplers in all materials and O-ring compounds.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

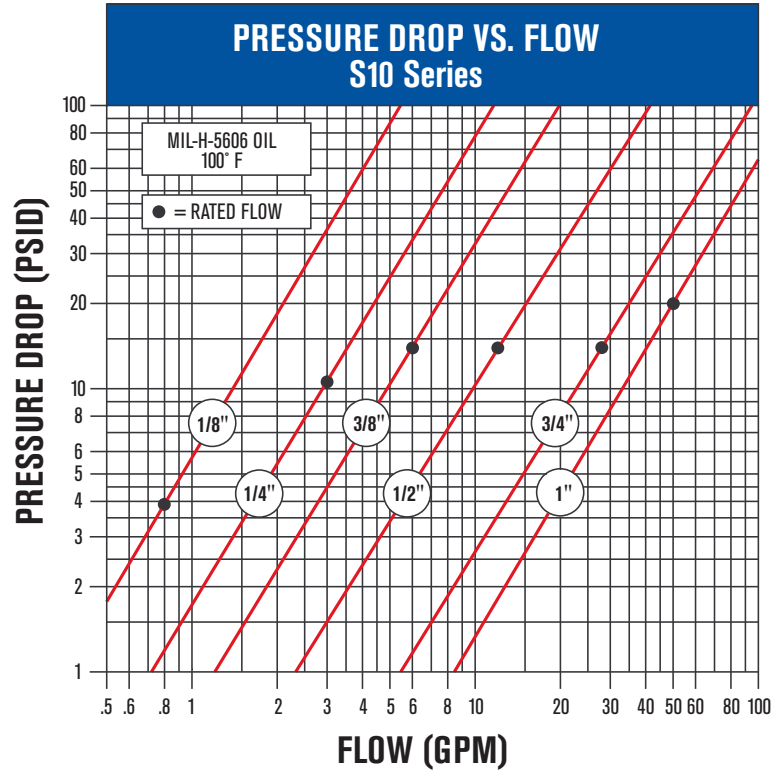
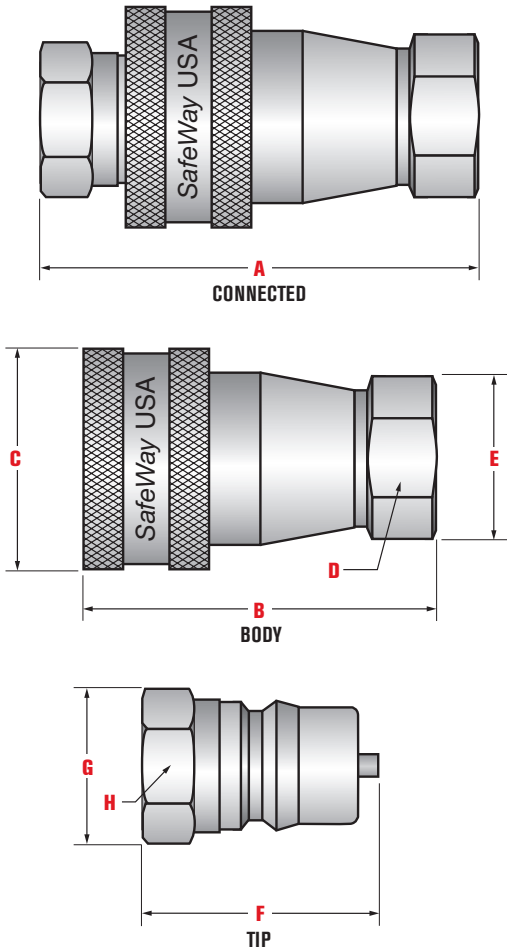
| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| SS10-1 | SS105-1 | SS101-1 | 1/8" | 1/8" Female Pipe | 5,000 | (345) | 0.8 | (3) |
| SS10-2 | SS105-2 | SS101-2 | 1/4" | 1/4" Female Pipe | 5,000 | (345) | 3 | (12) |
| SS10-3 | SS105-3 | SS101-3 | 3/8" | 3/8" Female Pipe | 5,000 | (345) | 6 | (23) |
| SS10-4 | SS105-4 | SS101-4 | 1/2" | 1/2" Female Pipe | 5,000 | (345) | 12 | (45) |
| SS10-6 | SS105-6 | SS101-6 | 3/4" | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| SS10-8 | SS105-8 | SS101-8 | 1" | 1" Female Pipe | 2,000 | (138) | 50 | (189) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg, both connected and disconnected.

Viton® Option -15° to +450° F Other Seals Available.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|------------------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Wrench Flat D | Diameter E | Tip Length F | Diameter G | Hex H |
| S10-1 | 2.32 | 1.89 | .93 | .56 | .66 | 1.25 | .65 | .56 |
| S10-2 | 2.78 | 2.23 | 1.14 | .75 | .88 | 1.52 | .86 | .75 |
| S10-2-6 | 2.90 | 2.29 | 1.14 | .87 | .97 | 1.58 | 1.01 | .88 |
| S10-3 | 3.03 | 2.48 | 1.39 | .87 | 1.00 | 1.68 | 1.01 | .88 |
| S10-3-8 | 3.43 | 2.68 | 1.39 | 1.00 | 1.22 | 1.88 | 1.15 | 1.00 |
| S10-4 | 3.47 | 2.80 | 1.76 | 1.12 | 1.29 | 1.88 | 1.23 | 1.06 |
| S10-4-10 | 3.67 | 2.90 | 1.76 | 1.12 | 1.29 | 1.98 | 1.44 | 1.25 |
| S10-6 | 4.00 | 3.37 | 2.13 | 1.31 | 1.63 | 2.26 | 1.52 | 1.31 |
| S10-6-12 | 4.20 | 3.47 | 2.13 | 1.37 | 1.67 | 2.36 | 1.59 | 1.38 |
| S10-8 | 4.73 | 3.94 | 2.51 | 1.62 | 1.88 | 2.69 | 1.88 | 1.63 |
| S10-8-16 | 4.93 | 4.04 | 2.51 | 1.75 | 1.98 | 2.79 | 1.88 | 1.63 |

All dimensions listed above pertain to Brass and Stainless Steel couplers as well.
See pages 34-36 for accessories to the S10 Series.

SH20 SERIES

GENERAL PURPOSE HYDRAULIC & FLUID TRANSFER COUPLINGS

The SH20 Series is a general purpose, double shut-off quick coupling capable of containing a wide variety of fluids. This series can be found anywhere a dependable connection and disconnection of a fluid transfer line is required. Through the years, this interchange has been widely used on both mobile and industrial applications. They can be found on garden tractors, self-propelled combines, skid steer loaders, wire pullers, and hydraulic presses.

- Leak-free poppet valve or rugged ball style valve available.
- Rated at 6,000 psi maximum operating pressure.
- Compact design with smooth, reliable ball latch connection.
- Interchangeable half-for-half with the Parker/Pioneer SM Series and Eaton FD48 Series.
- Poppet valve models are 100% leak tested.
- Heavy-duty double shut-off valve design available with either soft seat poppet style valving or ball valve.
- Poppet valve models feature our high flow poppet design with fully captured poppet seal to eliminate seal washout and leakage.
- Available in 1/4" body size with female threads. Both pipe and SAE O-ring Boss (ORB) threads are available in a variety of sizes.



- Poppet valve models are 100% leak tested.
- Critical parts are hardened for long service life.
- Machined from solid steel barstock.
- Dust plugs and dust caps 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*.

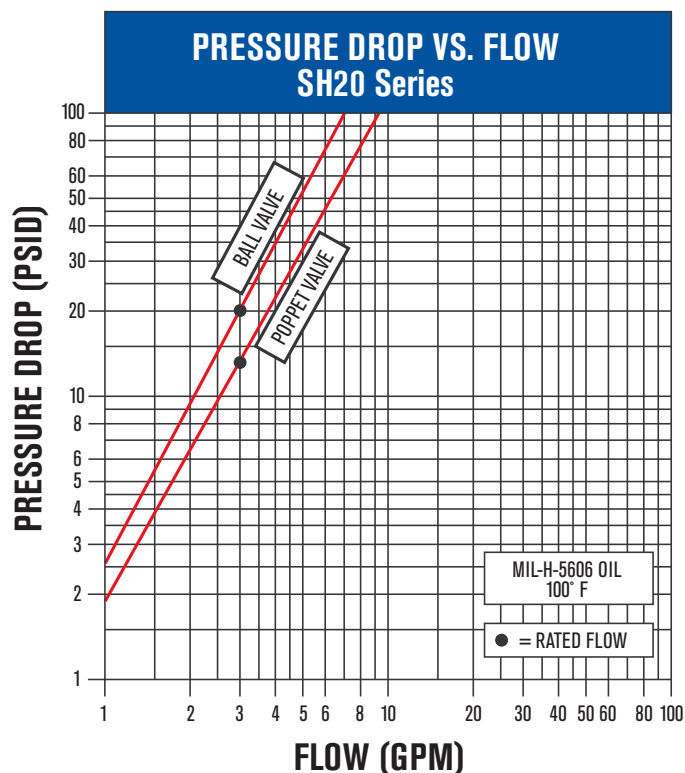
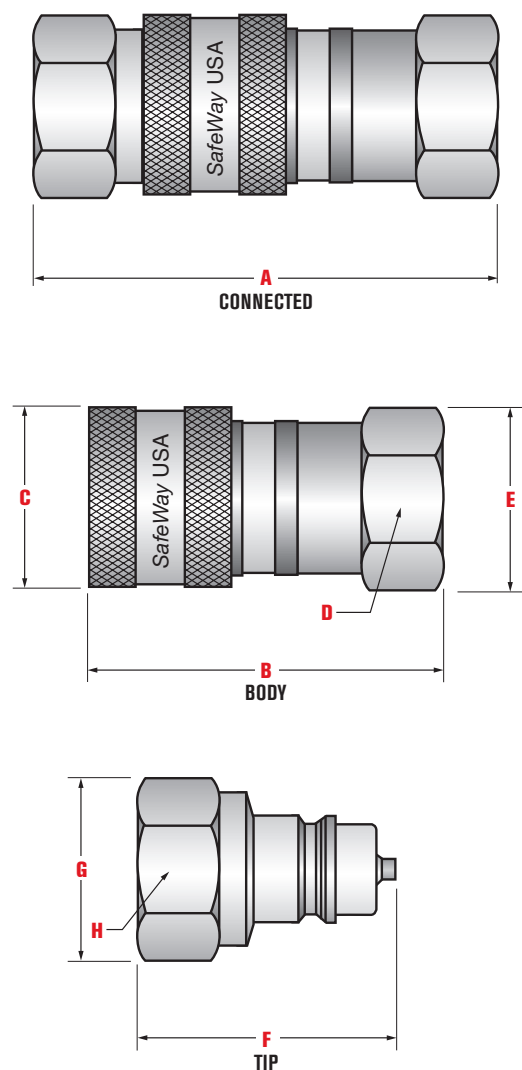
PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| SH20-2 | SH25-2 | SH21-2 | 1/4" | 1/4" Female Pipe | 6,000 | (414) | 3 | (12) |
| SH20-2P | SH25-2P | SH21-2P | 1/4" | 1/4" Female Pipe | 6,000 | (414) | 3 | (12) |
| SH20-14 | SH25-14 | SH21-14 | 1/4" | 9/16"-18 Female ORB | 6,000 | (414) | 3 | (12) |
| SH20-14P | SH25-14P | SH21-14P | 1/4" | 9/16"-18 Female ORB | 6,000 | (414) | 3 | (12) |
| SH20-2-3P | SH25-2-3P | SH21-2-3P | 1/4" | 3/8" Female Pipe | 6,000 | (414) | 3 | (12) |

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 – Poppet valved models in all sizes (P suffix).

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|----------------------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Hex Wrench Flat D | Diameter E | Tip Length F | Diameter G | Hex H |
| SH20-2 | 2.52 | 1.94 | 1.09 | .75 | .88 | 1.32 | .86 | .75 |
| SH20-2P | 2.52 | 1.94 | 1.09 | .75 | .88 | 1.35 | .86 | .75 |
| SH20-14 | 2.52 | 1.94 | 1.09 | .75 | .88 | 1.32 | .86 | .75 |
| SH20-14P | 2.52 | 1.94 | 1.09 | .75 | .88 | 1.35 | .86 | .75 |
| SH20-2-3P | 2.92 | 2.14 | 1.09 | .94 | 1.06 | 1.57 | 1.08 | .94 |

See pages 34-36 for accessories to the SH20 Series.

S30 SERIES

DEPENDABLE HIGH PRESSURE & HIGH FLOW WORKHORSE

The S30 Series is a special purpose, double shut-off fluid transfer quick coupling that provides significantly less pressure drop than couplings of the same type produced by other manufacturers. A threaded sleeve locking mechanism mates the coupling halves and allows connection-under-pressure up to a maximum of 1,000 psi. Our heavy-duty poppet valving, while fully interchangeable with ball check models (including older SafeWay products), eliminates low pressure leakage. The S30 Series is designed for extreme high pressure applications, including portable hydraulic rams, wire pullers, and frame straightening equipment.



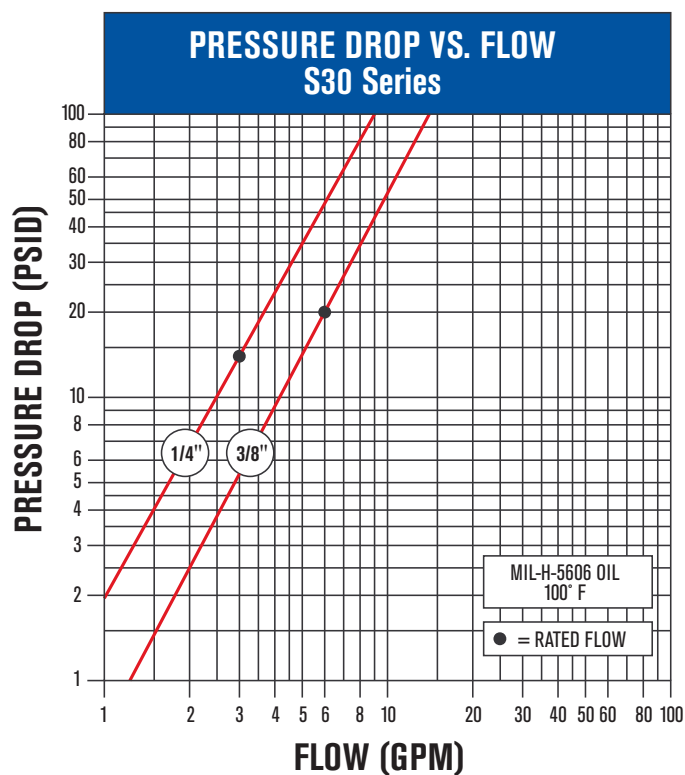
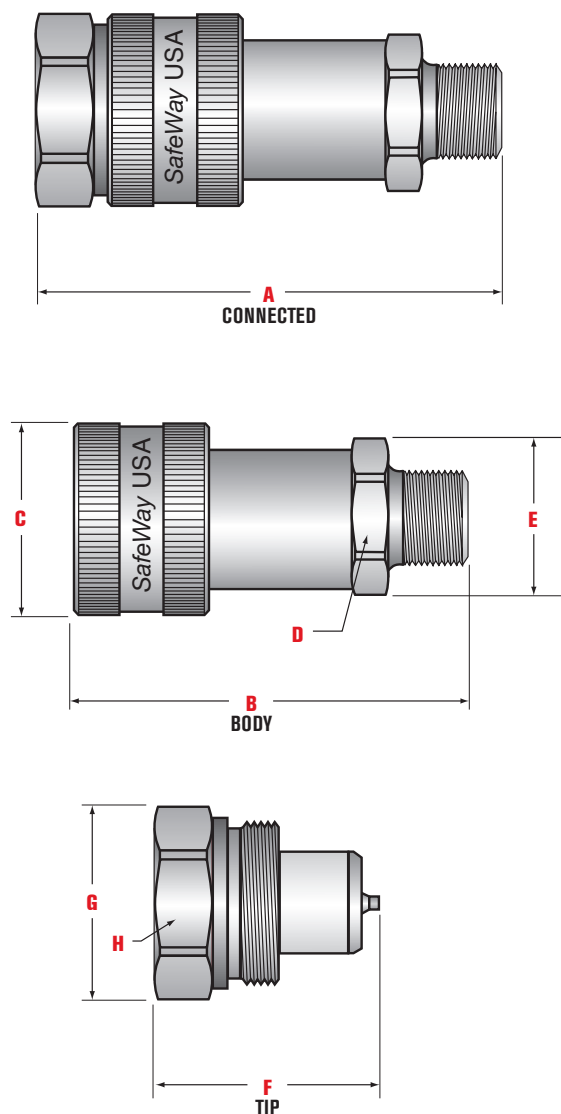
- SafeWay's S30 Series outperforms other brands by 100%!
- Full-flow design provides less than half the pressure loss of other brands, allowing for quicker ram response.
- Meets dimensional requirements of this accepted interchange.
- Interchangeable half-for-half with the Parker/Pioneer 3000 Series, Enerpac C-604, Eaton W56 Series, Faster PVVM and PVSM and Power Team 9795.
- Available in 1/4" and 3/8" body size with pipe thread standard.
- Poppet style valving with double shut-off. Captive poppet seal provides a durable, guaranteed leak-free seal.
- All S30 Series quick couplings are 100% leak tested.
- Fully interchangeable, half-for-half, with ball valve designs.
- Machined from solid steel barstock.
- Designed for extreme high pressure applications such as portable hydraulic rams, wire pullers, etc.
- Rated working pressure of 10,000 psi in all sizes. Threaded sleeve locking mechanism mates coupling halves. Couplings can be connected under pressure up to 1,000 psi.
- Heavy-duty steel dust caps and dust plugs 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*.

PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S30-2P | S35-2P | S31-2P | 1/4" | 1/4" Female/Male Pipe | 10,000 | (690) | 3 | (12) |
| S30-2P-6W | S35-2P-6W | S31-2P-6W | 1/4" | 9/16"-18 Female ORB | 10,000 | (690) | 3 | (12) |
| S30-3P | S35-3P | S31-3P | 3/8" | 3/8" Female Male Pipe | 10,000 | (690) | 6 | (23) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Polyurethane Option -40° to +212° 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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|----------|---------------|-----------------|---------------|----------------------|
| | Overall Length A | Body Length B | Diameter C | Hex D | Diameter E | Tip Length F | Diameter G | Wrench Hex Flat H |
| S30-2P | 2.78 | 2.27 | 1.19 | .81 | .93 | 1.36 | 1.06 | .87 |
| S30-2P-6W | 2.92 | 2.27 | 1.12 | .81 | .96 | 1.50 | 1.30 | 1.12 |
| S30-3P | 3.35 | 2.82 | 1.38 | 1.00 | 1.12 | 1.65 | 1.40 | 1.25 |

See pages 34-36 for accessories to the S30 Series.

S51 SERIES

HEAVY-DUTY, DOUBLE SHUT-OFF QUICK COUPLING

SafeWay's S51 Series is a minimum spill, thread-to-connect, fluid transfer quick coupling designed for use with most industrial fluids. It can be connected under full system pressure by rotating the female threaded heavy-duty ductile cast iron wing nut or steel hex nut onto the mating male threaded tip (nipple).

- Applications include "wet-line-kits" used widely on dump trailers, mobile drilling rigs, mining equipment, large mobile equipment, salt spreaders, and chemical transfer units.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable half-for-half with the Parker/Pioneer 6100 Series, Eaton FD51 (5100) Series, and Snap-Tite 78 Series.
- Brass body, tip and poppet, combined with a rugged steel valve, provide corrosion resistance and durability.
- Optional electroless nickel plated steel (-STL) tip and body shell is combined with standard internal parts and locking mechanism to provide a rugged, less costly alternative that is well suited for most applications.
- All S51 Series quick couplings are 100% leak tested.
- Connection-under-pressure can be accomplished due to our heavy-duty poppet assembly with bonded valve seals.



- A rugged, high quality machined carbon steel valve; no powdered metal parts.
- Available with either a ductile cast iron wing nut or heavy duty steel hex nut to make a threaded connection.
- SafeWay's Ductile Cast Iron Wing Nut is specifically built to withstand hammer blows associated with connection and disconnection-under-pressure.
- Available heavy-duty flange provides a simple and reliable method of bulkhead mounting the quick coupling.
- Completely field serviceable with seal repair kits.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

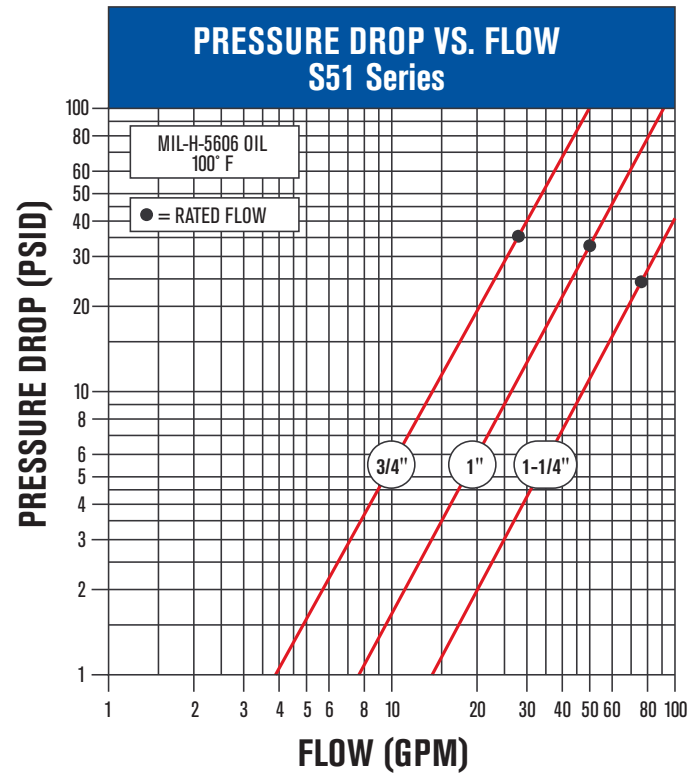
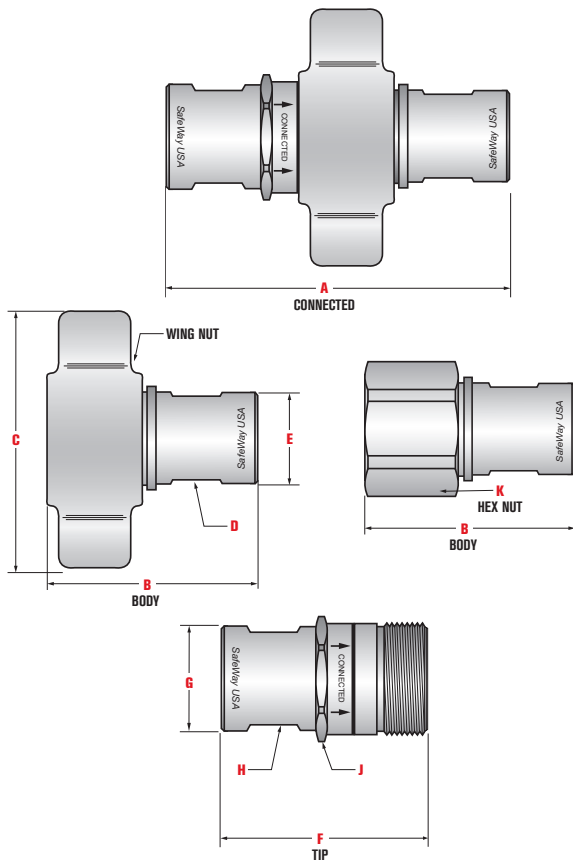
| PART NUMBERS | | | DESCRIPTION | | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|---------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Locking Style | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | | PSI | (BAR) | | |
| S51W-6-1/2 | S515W-6-1/2 | S511-6-1/2 | 3/4" | Wing | 1/2" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51H-6-1/2 | S515H-6-1/2 | S511-6-1/2 | 3/4" | Hex Nut | 1/2" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51W-6 | S515W-6 | S511-6 | 3/4" | Wing | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51H-6 | S515H-6 | S511-6 | 3/4" | Hex Nut | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51W-6-STL | S515W-6-STL | S511-6-STL | 3/4" | Wing | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51H-6-STL | S515H-6-STL | S511-6-STL | 3/4" | Hex Nut | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| S51W-8 | S515W-8 | S511-8 | 1" | Wing | 1" Female Pipe | 3,000 | (207) | 50 | (189) |
| S51H-8 | S515H-8 | S511-8 | 1" | Hex Nut | 1" Female Pipe | 3,000 | (207) | 50 | (189) |
| S51W-8-STL | S515W-8-STL | S511-8-STL | 1" | Wing | 1" Female Pipe | 3,000 | (207) | 50 | (189) |
| S51H-8-STL | S515H-8-STL | S511-8-STL | 1" | Hex Nut | 1" Female Pipe | 3,000 | (207) | 50 | (189) |
| S51W-10 | S515W-10 | S511-10 | 1-1/4" | Wing | 1-1/4" Female Pipe | 2,500 | (172) | 76 | (288) |
| S51H-10 | S515H-10 | S511-10 | 1-1/4" | Hex Nut | 1-1/4" Female Pipe | 2,500 | (172) | 76 | (288) |
| S51W-10-STL | S515W-10-STL | S511-10-STL | 1-1/4" | Wing | 1-1/4" Female Pipe | 2,500 | (172) | 76 | (288) |
| S51H-10-STL | S515H-10-STL | S511-10-STL | 1-1/4" | Hex Nut | 1-1/4" Female Pipe | 2,500 | (172) | 76 | (288) |

-STL has an electroless nickel plated steel body and tip shell with standard internal parts.

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Viton® Option -15° to +450° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | | | |
|-------------------------|---------------------|-------------|-----------------|-------------|----------|------------|----------|-------------|------|------|
| | Overall Length | Body Length | Wing Nut Length | Wrench Flat | Diameter | Tip Length | Diameter | Wrench Flat | Hex | Hex |
| | A | B | C | D | E | F | G | H | J | K |
| S51W-6-1/2 | 4.75 | 2.72 | 4.06 | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | — |
| S51H-6-1/2 | 4.75 | 2.72 | — | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | 1.75 |
| S51W-6 | 4.75 | 2.72 | 4.06 | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | — |
| S51H-6 | 4.75 | 2.72 | — | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | 1.75 |
| S51W-6-STL | 4.75 | 2.72 | 4.06 | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | — |
| S51H-6-STL | 4.75 | 2.72 | — | 1.16 | 1.25 | 3.05 | 1.36 | 1.16 | 1.62 | 1.75 |
| S51W-8 | 5.40 | 3.32 | 4.38 | 1.43 | 1.56 | 3.30 | 1.74 | 1.56 | 1.88 | — |
| S51H-8 | 5.40 | 3.32 | — | 1.43 | 1.56 | 3.30 | 1.74 | 1.56 | 1.88 | 2.12 |
| S51W-8-STL | 5.40 | 3.32 | 4.38 | 1.43 | 1.56 | 3.30 | 1.74 | 1.56 | 1.88 | — |
| S51H-8-STL | 5.40 | 3.32 | — | 1.43 | 1.56 | 3.30 | 1.74 | 1.56 | 1.88 | 2.12 |
| S51W-10 | 5.69 | 3.66 | 5.20 | 1.77 | 1.89 | 3.42 | 2.08 | 1.88 | 2.12 | — |
| S51H-10 | 5.69 | 3.66 | — | 1.77 | 1.89 | 3.42 | 2.08 | 1.88 | 2.12 | 2.50 |
| S51W-10-STL | 5.69 | 3.66 | 5.20 | 1.77 | 1.89 | 3.42 | 2.08 | 1.88 | 2.12 | — |
| S51H-10-STL | 5.69 | 3.66 | — | 1.77 | 1.89 | 3.42 | 2.08 | 1.88 | 2.12 | 2.50 |

-STL has an electroless nickel plated steel body and tip shell with standard internal parts.

See pages 34-36 for accessories to the S51 Series.

S56 SERIES

VERSATILE HYDRAULIC & FLUID TRANSFER COUPLINGS

SafeWay's S56 Series is a general purpose, double shut-off quick coupling capable of containing a wide variety of fluids. This series can be found anywhere a dependable connection and disconnection of a fluid transfer line is required. Rugged construction and low pressure drop make this series ideal for a variety of applications including plant maintenance equipment, skid steer loaders, snow plows, mining, dump trucks, gooseneck trailers and chemical transfer lines.

- Meets dimensional requirements of ISO 7241-1 Series A.
- A general purpose, fluid transfer quick coupling that provides higher burst pressure and superior flow to that of Eaton FD56 (5600) series and Parker 6600 series, while providing half-for-half interchangeability.
- Due to SafeWay's unique poppet style valving, the S56 Series has a shorter overall length and less weight than other brands they replace.
- Manufactured from solid steel barstock.
- Available in body sizes from 1/4" to 1" with pipe thread and SAE O-ring Boss (ORB) standard.
- All S56 Series quick couplings are 100% leak tested.
- Ideal for minimal space applications.
- Heavy-duty dust plugs and dust caps available.
- Heavy-duty detent ball latch design for reliable connection time after time.



S56-6



S561-6



S565-6

- The S56 Series uses solid steel barstock in its valving and retainers; no powdered metal parts. A higher number of detent (locking) balls and a specially hardened male tip (nipple) add to the overall integrity of the product and its higher rated working pressure.
- Unique poppet/seat design allows no extrusion gap, minimizing seal degradation under extreme pressures. Stainless steel valve springs and retainer rings are standard.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

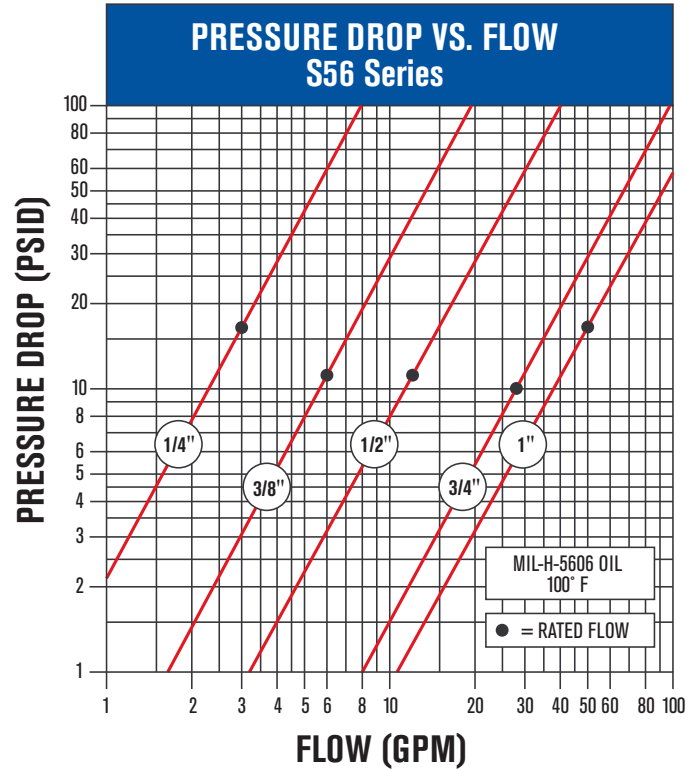
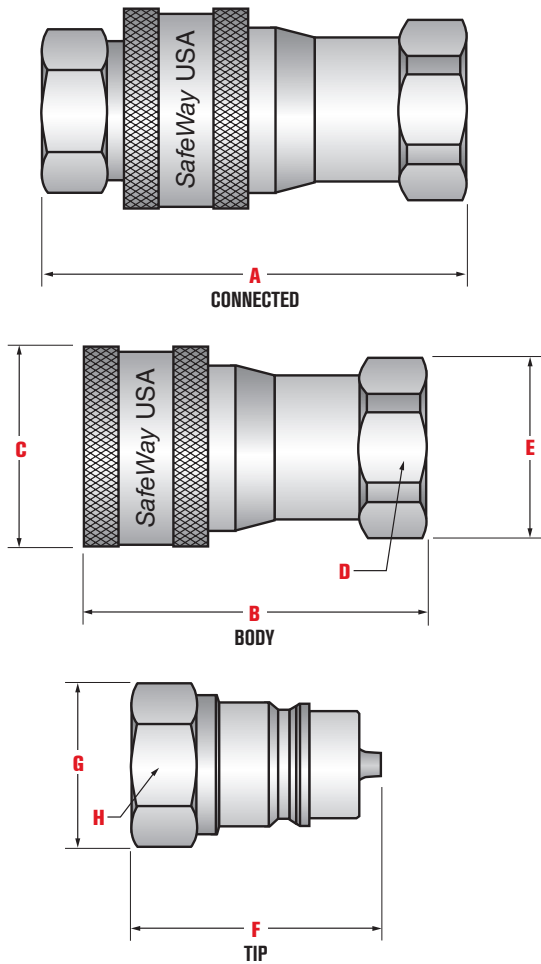
| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S56-2 | S565-2 | S561-2 | 1/4" | 1/4" Female Pipe | 5,000 | (345) | 3 | (12) |
| S56-3 | S565-3 | S561-3 | 3/8" | 3/8" Female Pipe | 4,500 | (310) | 6 | (23) |
| S56-3-6 | S565-3-6 | S561-3-6 | 3/8" | 9/16"-18 Female ORB | 4,500 | (310) | 6 | (23) |
| S56-4 | S565-4 | S561-4 | 1/2" | 1/2" Female Pipe | 4,000 | (276) | 12 | (45) |
| S56-4-8 | S565-4-8 | S561-4-8 | 1/2" | 3/4"-16 Female ORB | 4,000 | (276) | 12 | (45) |
| S56-4-10 | S565-4-10 | S561-4-10 | 1/2" | 7/8"-14 Female ORB | 4,000 | (276) | 12 | (45) |
| S56-6 | S565-6 | S561-6 | 3/4" | 3/4" Female Pipe | 4,000 | (276) | 28 | (106) |
| S56-6-12 | S565-6-12 | S561-6-12 | 3/4" | 1-1/16"-12 Female ORB | 4,000 | (276) | 28 | (106) |
| S56-8 | S565-8 | S561-8 | 1" | 1" Female Pipe | 4,000 | (276) | 50 | (189) |
| S56-8-16 | S565-8-16 | S561-8-16 | 1" | 1-5/16"-12 Female ORB | 4,000 | (276) | 50 | (189) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® Option -15° to +450° F Other Seals Available.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|----------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Hex D | Diameter E | Tip Length F | Diameter G | Hex H |
| S56-2 | 2.48 | 1.79 | 1.07 | .88 | .96 | 1.31 | .86 | .75 |
| S56-3 | 3.02 | 2.20 | 1.26 | 1.06 | 1.18 | 1.65 | 1.01 | .88 |
| S56-3-6 | 3.22 | 2.30 | 1.26 | 1.06 | 1.18 | 1.75 | 1.01 | .88 |
| S56-4 | 3.46 | 2.56 | 1.50 | 1.25 | 1.35 | 1.88 | 1.23 | 1.06 |
| S56-4-8 | 3.56 | 2.61 | 1.50 | 1.25 | 1.35 | 1.93 | 1.23 | 1.06 |
| S56-4-10 | 3.76 | 2.71 | 1.50 | 1.25 | 1.35 | 2.03 | 1.23 | 1.06 |
| S56-6 | 3.98 | 3.04 | 1.89 | 1.38 | 1.58 | 2.26 | 1.58 | 1.38 |
| S56-6-12 | 4.42 | 3.26 | 1.89 | 1.38 | 1.58 | 2.36 | 1.58 | 1.38 |
| S56-8 | 4.73 | 3.66 | 2.13 | 1.63 | 1.87 | 2.69 | 1.87 | 1.63 |
| S56-8-16 | 4.93 | 3.76 | 2.13 | 1.63 | 1.87 | 2.79 | 1.87 | 1.63 |

See pages 34-36 for accessories to the S56 Series.

FF49 SERIES

FLUSH FACE, HEAVY DUTY, NON-SPILL QUICK COUPLINGS

The FF49 Series quick couplings provide rugged-flush-face valving for non-spill dry breaks, and allow one-hand push-to-connect with safety sleeve-lock standard. The 3/8" size meets HTMA dimensional standards while providing significantly higher pressure containment than other brands (10,000 operating psi). The FF49-6 and FF49-6-12 are rated at 6,000 operating psi and have a significantly smaller footprint than other brands. Ideally suited for use in hydraulic hand tools, overhead bucket hoists, skid steer loaders, and wherever spillage can constitute a safety or environmental hazard.



- Interchangeable with quick couplings meeting ISO 16028 dimensional requirements while exceeding performance requirements.
- Interchangeable with SafeWay's FFE49, with higher maximum operating pressure.
- 3/8" size is available in 303 stainless steel (SF49-3).
- Available in 3/8" and 1/2" body size in a wide variety of thread sizes and types (pipe and ORB standard).
- 3/8" size meets HTMA dimensional requirements. A black sleeve and "10,000 PSI MAX" stamping identify this size as the high pressure model within this interchange.
- Provides significantly higher working pressure than couplers we replace, with equal or better flow.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Rugged flush face valving allows easy cleaning to minimize system contamination.
- Nitrile seals are standard. Seals made of Viton® are standard in the SF49-3.
- The FF49 Series includes unique double seals behind the coupler sleeve to prevent contamination from reaching critical toleranced parts.
- Smooth push-to-connect operation will allow connections against a maximum of 250 psi trapped pressure in the 3/8" body size; a maximum of 400 psi in the 1/2" body size.
- Standard sleeve lock feature prevents unintended disconnection.
- Additional detent (locking) balls greatly improve durability and increase pressure containment.
- Excellent for use anywhere spillage can result in a safety or environmental hazard.
- Heavy-duty steel dust plugs and dust caps are currently available for 3/8" body size male and female halves.
- All FF49 Series quick couplings are 100% leak tested.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

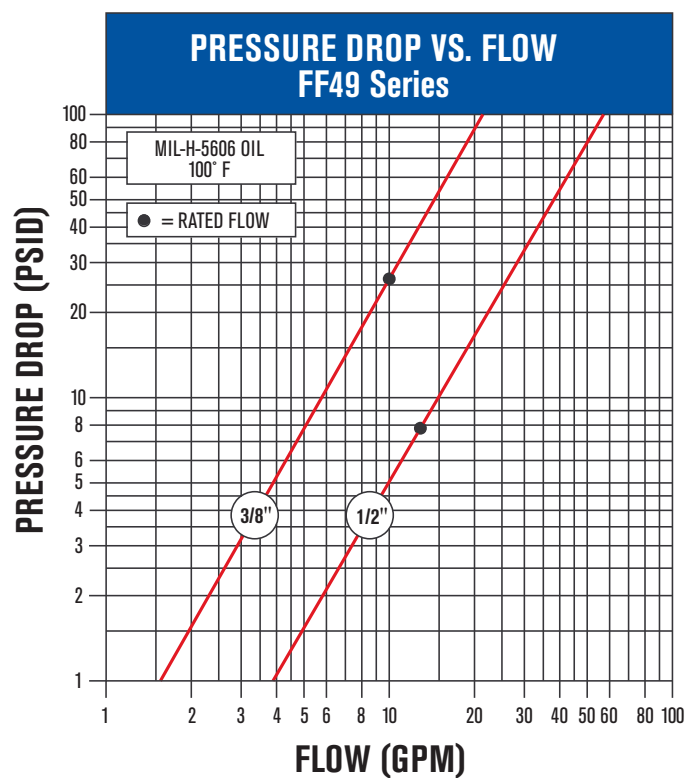
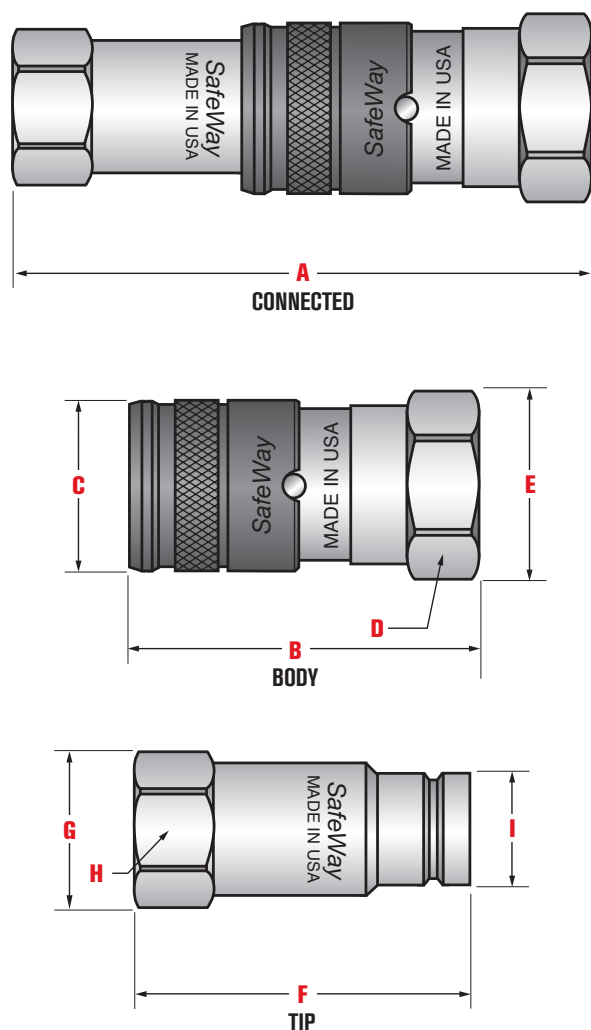
PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | RATED FLOW | | MAX. SPILLAGE |
|-------------------------|------------------|---------------|---------------|-----------------------------|--------------------|-------|------------|------|------------------|
| Complete Coupler | Female Body Half | Male Tip Half | ISO Body Size | Thread Size and Description | Maximum | | GPM | LPM | (per disconnect) |
| | | | | | PSI | (BAR) | | | CC |
| SF49-3 | SF495-3 | SF491-3 | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 10 | (38) | .02 |
| FF49-3 | FF495-3 | FF491-3 | 3/8" | 3/8" Female Pipe | 10,000 | (690) | 10 | (38) | .02 |
| FF49-3M | FF495-3M | FF491-3 | 3/8" | 3/8" Female/Male Pipe | 10,000 | (690) | 10 | (38) | .02 |
| FF49-3-8 | FF495-3-8 | FF491-3-8 | 3/8" | 3/4"-16 Female ORB | 10,000 | (690) | 10 | (38) | .02 |
| FF49-3-1/2 (was FF49-4) | FF495-3-1/2 | FF491-3-1/2 | 3/8" | 1/2" Female Pipe | 10,000 | (690) | 10 | (38) | .02 |
| FF49-6 | FF495-6 | FF491-6 | 1/2" | 3/4" Female Pipe | 6,000 | (414) | 12 | (45) | .04 |
| FF49-6-12 | FF495-6-12 | FF491-6-12 | 1/2" | 1-1/16"-12 Female ORB | 6,000 | (414) | 12 | (45) | .04 |

The SF49-3 is produced in 303 series stainless steel with Viton® seals standard. Dimensional data is identical to the FF49-3.

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Viton® Option (std. in SF49-3) -15° to +450° F Other Seals Available. Viton® is a registered trademark of DuPont Dow Elastomers.
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | | |
|-------------------------|---------------------|------------------|---------------|----------|---------------|-----------------|---------------|----------|-------------------|
| | Overall Length A | Body Length B | Diameter C | Hex D | Diameter E | Tip Length F | Diameter G | Hex H | Tip Diameter I |
| SF49-3 | 4.19 | 2.47 | 1.19 | 1.12 | 1.24 | 2.35 | 1.04 | .94 | .78 |
| FF49-3 | 4.19 | 2.47 | 1.19 | 1.12 | 1.24 | 2.35 | 1.04 | .94 | .78 |
| FF49-3M | 4.47 | 2.75 | 1.19 | 1.12 | 1.24 | 2.35 | 1.04 | .94 | .78 |
| FF49-3-8 | 4.56 | 2.67 | 1.19 | 1.12 | 1.24 | 2.52 | 1.18 | 1.06 | .78 |
| FF49-3-1/2 (was FF49-4) | 4.54 | 2.67 | 1.19 | 1.12 | 1.24 | 2.50 | 1.18 | 1.06 | .78 |
| FF49-6 | 5.20 | 3.06 | 1.50 | 1.38 | 1.57 | 2.81 | 1.55 | 1.38 | .96 |
| FF49-6-12 | 5.60 | 3.29 | 1.50 | 1.38 | 1.57 | 2.98 | 1.55 | 1.38 | .96 |

See pages 34-36 for accessories to the FF49 Series.

FFE49 SERIES

FLUSH FACE, HEAVY DUTY, NON-SPILL QUICK COUPLINGS

SafeWay's FFE49 Series is a non-spill, push-to-connect, fluid transfer quick coupling designed for use with most industrial fluids. This series is interchangeable with quick couplings meeting Industry Standard ISO 16028 dimensional requirements, and our field proven, heavy-duty FF49 Series. Some basic applications include skid steer loaders, power utility equipment, construction equipment, agricultural equipment, and hydraulic hand tools. Use this quick coupling series whenever spillage can result in a safety or environmental hazard, when air inclusion during connection to a hydraulic system cannot be tolerated, and when international interchangeability with other brands is required.

- Smooth, one hand, push-to-connect locking mechanism.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable half-for-half with Parker/Pioneer FEM Series, Eaton FF Series, Holmbury HQ Series, Faster 2FFI Series, and others conforming to ISO 16028 dimensional requirements.
- Rugged flush face valving allows easy cleaning to minimize system contamination.
- Maximum flow for quick system response.
- Available in ISO 1/4" through ISO 1" body size in a variety of thread sizes and styles.
- If you require a 3/8" size please use the FF49 Series, which meets the interchange requirements of ISO 16028 while providing higher operating psi.



- Anti-blowout Buna and Teflon® tip half seals reduce the likelihood of premature failure due to connection under residual system pressure. Maximum residual system pressure is 250 psi.
- All FFE49 Series quick couplings are 100% leak tested before leaving the factory.
- Heat treated surfaces resist wear.
- Sleeve lock option, to minimize accidental disconnect, is available upon request.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | | MAX. SPILLAGE |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|------------------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) | (per disconnect) |
| | | | | | PSI | (BAR) | | | |
| FFE49-2 | FFE495-2 | FFE491-2 | 1/4" | 1/4" Female NPT | 5,000 | (345) | 3 | (12) | .01 |
| FFE49-4 | FFE495-4 | FFE491-4 | 1/2" | 1/2" Female NPT | 4,000 | (276) | 12 | (45) | .04 |
| FFE49-4-3/4 | FFE495-4-3/4 | FFE491-4-3/4 | 1/2" | 3/4" Female NPT | 4,000 | (276) | 12 | (45) | .04 |
| FFE49-4-10 | FFE495-4-10 | FFE491-4-10 | 1/2" | 7/8"-14 Female ORB | 4,000 | (276) | 12 | (45) | .04 |
| FFE49-4-12 | FFE495-4-12 | FFE491-4-12 | 1/2" | 1-1/16"-12 Female ORB | 4,000 | (276) | 12 | (45) | .04 |
| FFE49-6 | FFE495-6 | FFE491-6 | 3/4" | 3/4" Female NPT | 4,000 | (276) | 26 | (100) | .10 |
| FFE49-6-1 | FFE495-6-1 | FFE491-6-1 | 3/4" | 1" Female NPT | 4,000 | (276) | 26 | (100) | .10 |
| FFE49-6-16 | FFE495-6-16 | FFE491-6-16 | 3/4" | 1-5/16"-12 Female ORB | 4,000 | (276) | 26 | (100) | .10 |
| FFE49-8 | FFE495-8 | FFE491-8 | 1" | 1" Female NPT | 3,000 | (207) | 50 | (189) | .20 |
| FFE49-8-114 | FFE495-8-114 | FFE491-8-114 | 1" | 1-1/4" Female NPT | 3,000 | (207) | 50 | (189) | .20 |
| FFE49-8-20 | FFE495-8-20 | FFE491-8-20 | 1" | 1-5/8"-12 Female ORB | 3,000 | (207) | 50 | (189) | .20 |

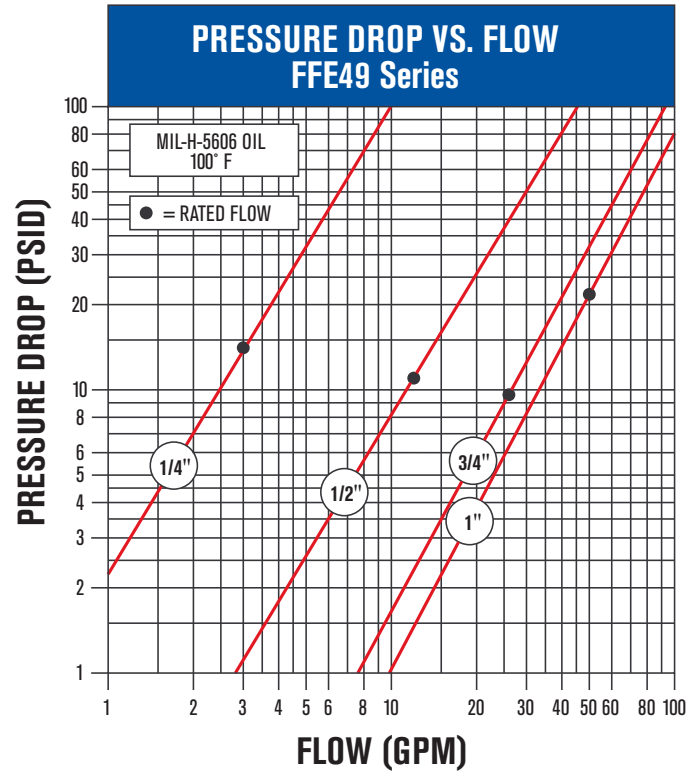
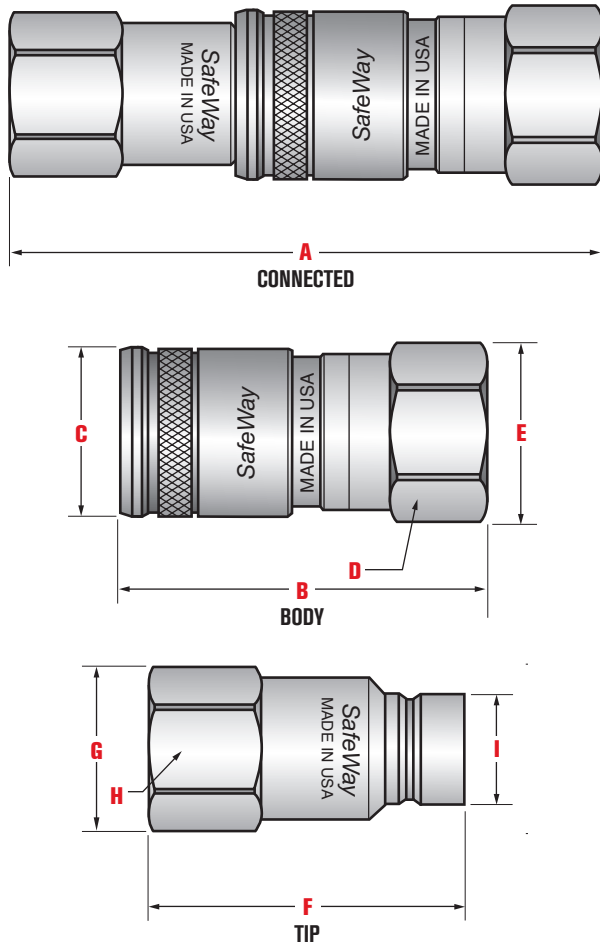
Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® Option -15° to +450° F

Other Seals Available.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| DIMENSIONS (inches) | | | | | | | | | |
|-------------------------|---------------------|------------------|---------------|----------|---------------|-----------------|---------------|----------|-------------------|
| Complete Coupler Number | Overall Length A | Body Length B | Diameter C | Hex D | Diameter E | Tip Length F | Diameter G | Hex H | Tip Diameter I |
| FFE49-2 | 3.60 | 2.21 | 1.06 | .88 | .95 | 1.82 | .95 | .88 | .64 |
| FFE49-4 | 5.18 | 3.06 | 1.50 | 1.38 | 1.57 | 2.77 | 1.42 | 1.25 | .96 |
| FFE49-4-3/4 | 5.20 | 3.06 | 1.50 | 1.38 | 1.57 | 2.81 | 1.55 | 1.38 | .96 |
| FFE49-4-10 | 5.33 | 3.19 | 1.50 | 1.38 | 1.57 | 2.94 | 1.42 | 1.25 | .96 |
| FFE49-4-12 | 5.60 | 3.29 | 1.50 | 1.38 | 1.57 | 2.98 | 1.55 | 1.38 | .96 |
| FFE49-6 | 6.07 | 3.77 | 1.82 | 1.62 | 1.82 | 3.17 | 1.82 | 1.62 | 1.18 |
| FFE49-6-1 | 6.29 | 3.88 | 1.82 | 1.62 | 1.82 | 3.28 | 1.82 | 1.62 | 1.18 |
| FFE49-6-16 | 6.49 | 3.98 | 1.82 | 1.62 | 1.82 | 3.38 | 1.82 | 1.62 | 1.18 |
| FFE49-8 | 6.76 | 4.25 | 2.25 | 2.00 | 2.24 | 3.44 | 2.24 | 2.00 | 1.42 |
| FFE49-8-114 | 6.76 | 4.25 | 2.25 | 2.00 | 2.24 | 3.44 | 2.24 | 2.00 | 1.42 |
| FFE49-8-20 | 6.76 | 4.25 | 2.25 | 2.00 | 2.24 | 3.44 | 2.24 | 2.00 | 1.42 |

See pages 34-36 for accessories to the FFE49 Series.

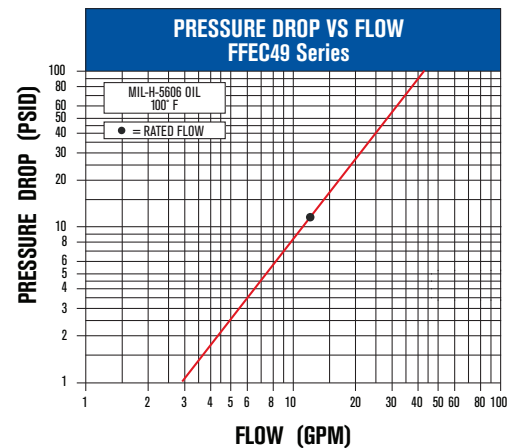
FLUSH FACE, NON-SPILL, CONNECT-UNDER-PRESSURE QUICK COUPLINGS

SafeWay's FFEC49 Series allows one-hand connection with trapped residual pressure in the nipple. It works with Industry Standard ISO 16028 female couplers in 1/2" body sizes from SafeWay and other manufacturers. SafeWay's FFEC49 Series products are widely used in the mobile equipment and construction markets on hydraulic attachments for skid steer loaders and hydraulic tools. Ideal for use in environments where thermal expansion of trapped fluid from temperature change or exposure to sun makes connection of the mating half difficult.



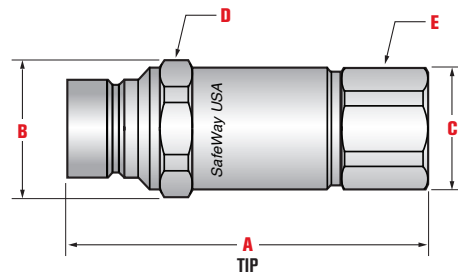
FFEC491-4

- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable with Parker FEC-502-8FP.
- Bi-directional flow.
- Nipple connects under residual pressure by hand.
- Hardened locking surface.
- All FFEC49 Series couplings are 100% leak tested.
- Dimensionally interchangeable with all ISO 16028 compliant 1/2" male tips.
- Heavy duty steel construction.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.



PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | CONNECT-UNDER-PRESSURE | | OPERATING PRESSURE | | NFPA RATED FLOW | | MAX. SPILLAGE |
|--------------|-----------|-----------------------------|-------------|-------|------------------------|-------|--------------------|-------|-----------------|-------|------------------|
| Male Tip | Body Size | Thread Size and Description | Maximum | | Maximum | | Maximum | | | | (per disconnect) |
| | | | PSI | (BAR) | PSI | (BAR) | PSI | (BAR) | GPM | (LPM) | CC |
| FFEC491-4 | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 4,000 | (276) | 12 | (45) | | | .04 |



DIMENSIONAL DATA

| DIMENSIONS (inches) | | | | | |
|-------------------------|----------------|----------|----------|------|------|
| Complete Coupler Number | Overall Length | Diameter | Diameter | Hex | Hex |
| | A | B | C | D | E |
| FFEC491-4 | 3.56 | 1.35 | 1.20 | 1.25 | 1.12 |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® Option -15° to +450° F

Other Seals Available.

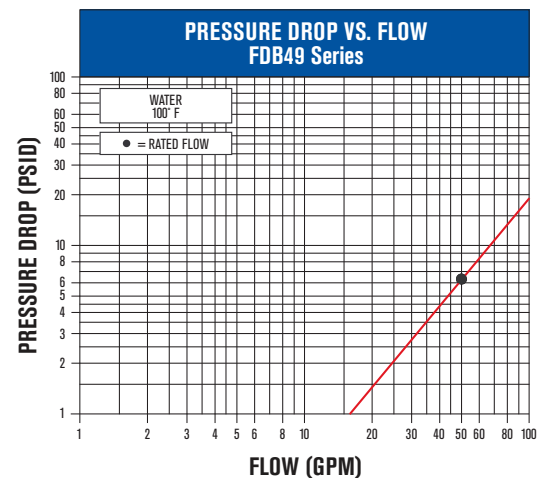
Viton® is a registered trademark of DuPont Dow Elastomers.

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.

FLUSH FACE, NON-SPILL, 316L STAINLESS STEEL QUICK COUPLINGS

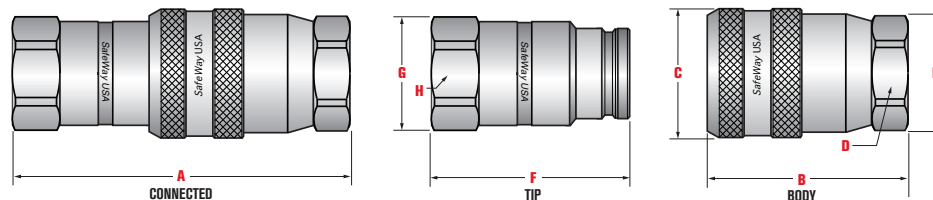
The FDB49 Series 316L Stainless Steel quick couplings provide rugged flush face valving for dry breaks, and allow one-hand push-to-connect. This high flow capacity product is a direct interchange with the Tuthill (Hansen) DB series coupler. Some basic applications include aerospace, food and beverage, oil and gas, chemical transfer and various military applications.

- Smooth, one hand, push-to-connect locking mechanism.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Interchangeable half-for-half with Tuthill (Hansen) DB series dimensional requirements. (Not ISO 16028).
- Rugged flush face valving allows for easy cleaning to minimize system contamination.
- Low temperature Viton® seals are standard.
- Designed for maximum flow for quick system response.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.



PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | | MAX. SPILLAGE |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|------------------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | | | (per disconnect) |
| | | | | | PSI | (BAR) | GPM | (LPM) | CC |
| FDB49-8-316F | FDB495-8-316F | FDB491-8-316F | 1" | 1" Female Pipe | 1,450 | (100) | 50 | (189) | .04 |



DIMENSIONAL DATA

| DIMENSIONS (inches) | | | | | | | | |
|-------------------------|----------------|-------------|----------|------|----------|------------|----------|------|
| Complete Coupler Number | Overall Length | Body Length | Diameter | Hex | Diameter | Tip Length | Diameter | Hex |
| | A | B | C | D | E | F | G | H |
| FDB49-8-316F | 6.07 | 3.50 | 2.25 | 1.81 | 2.00 | 3.50 | 2.00 | 1.81 |

Temperature Range: Standard Seals Low Temp Viton® -40° to +482° F
Vacuum Data: 27.4 inches Hg. both connected and disconnected.

Viton® is a registered trademark of DuPont Dow Elastomers.

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.

S20 SERIES

RELIABLE, ECONOMICAL, GENERAL PURPOSE COUPLINGS

SafeWay's S20 Series is a general purpose, double shut-off, fluid transfer quick coupling available with either a rugged ball valve or leak-free, high flow poppet valve. The S20 Series is used primarily on agricultural equipment and is recognized as an economical and reliable quick coupling. This series is original equipment on snow plows, garden tractors, full size tractors, front-end loaders, skid steer loaders, earth moving, and mining equipment.



- 1/2" body size meets dimensional requirements of ISO 5675.
- Available in body sizes from 1/4" through 1", in a variety of thread sizes and styles.
- Double shut-off design available with either a rugged ball valve or leak-free, high flow poppet valve.
- All poppet valve models are 100% leak tested before leaving the factory.
- Reliable and durable ball locking mechanism provides smooth operation time after time.
- Critical parts are hardened for long service life.
- One-way sleeve design allows implement break-away when the coupling is clamp mounted.
- Interchangeable half-for-half with the Parker/Pioneer 4000 Series.
- Referred to as "old reliable" by hands-on users.
- Dust plugs and dust caps available.
- Heavy-duty double break-away clamp available.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

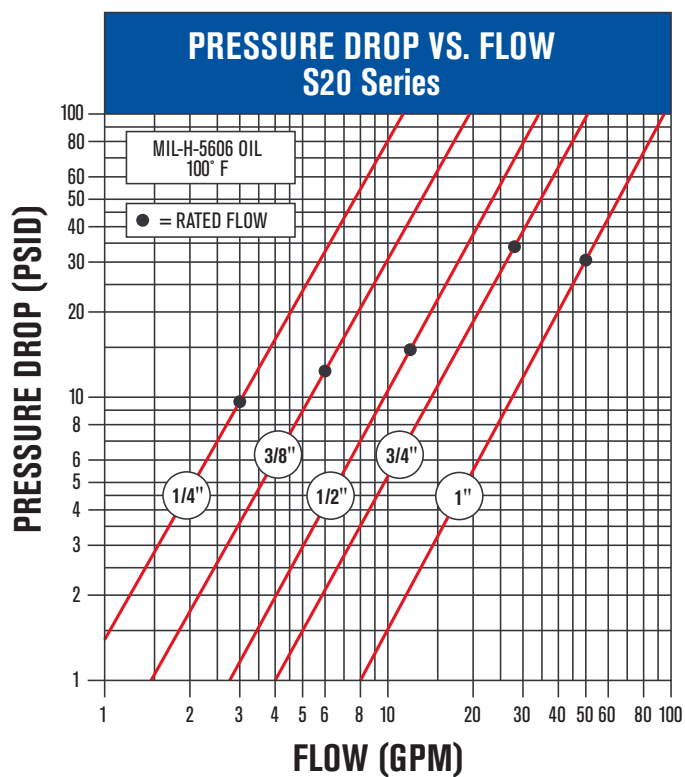
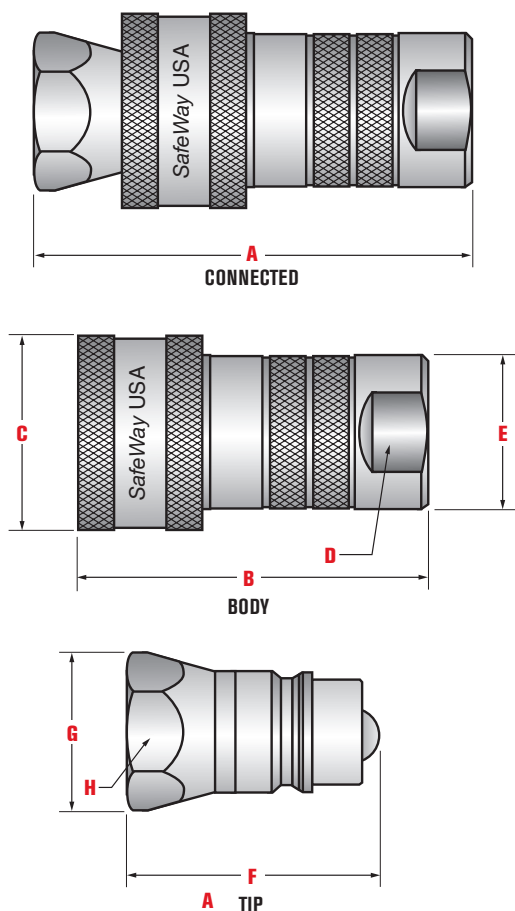
PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S20A-2 | S25A-2 | S41-2 | 1/4" | 1/4" Female Pipe | 3,000 | (207) | 3 | (12) |
| S20A-2P | S25A-2P | S41-2P | 1/4" | 1/4" Female Pipe | 3,000 | (207) | 3 | (12) |
| S20-3 | S25-3 | S41-3 | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 6 | (23) |
| S20-3P | S25-3P | S41-3P | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 6 | (23) |
| S20-4 | S25-4 | S71-4 | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S20-4P | S25-4P | S71-4P | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S20-15 | S25-15 | S71-15 | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S20-15P | S25-15P | S71-15P | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S20-16 | S25-16 | S71-16 | 1/2" | 7/8"-14 Female ORB | 3,000 | (207) | 12 | (45) |
| S20-16P | S25-16P | S71-16P | 1/2" | 7/8"-14 Female ORB | 3,000 | (207) | 12 | (45) |
| S20F-6 | S25F-6 | S21F-6 | 3/4" | 3/4" Female Pipe | 3,000 | (207) | 28 | (106) |
| S20-8P | S25-8P | S21-8P | 1" | 1" Female Pipe | 3,000 | (207) | 50 | (189) |

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 – Poppet valved models in all sizes (P suffix).

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|------------------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Wrench Flat D | Diameter E | Tip Length F | Diameter G | Hex H |
| S20A-2 | 2.52 | 1.94 | 1.06 | .87 | .88 | 1.32 | .86 | .75 |
| S20A-2P | 2.52 | 1.94 | 1.06 | .87 | .88 | 1.37 | .86 | .75 |
| S20-3 | 3.03 | 2.31 | 1.32 | .87 | 1.00 | 1.58 | 1.08 | .94 |
| S20-3P | 3.03 | 2.31 | 1.32 | .87 | 1.00 | 1.67 | 1.08 | .94 |
| S20-4 | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.94 | 1.22 | 1.06 |
| S20-4P | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.96 | 1.22 | 1.06 |
| S20-15 | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.94 | 1.22 | 1.06 |
| S20-15P | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.96 | 1.22 | 1.06 |
| S20-16 | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.94 | 1.22 | 1.06 |
| S20-16P | 3.66 | 2.68 | 1.50 | 1.00 | 1.17 | 1.96 | 1.22 | 1.06 |
| S20F-6 | 4.02 | 3.02 | 1.88 | 1.31 | 1.49 | 2.15 | 1.52 | 1.38 |
| S20-8P | 4.52 | 3.43 | 2.07 | 1.62 | 1.86 | 2.49 | 1.88 | 1.62 |

See pages 34-36 for accessories to the S20 Series.

S40 SERIES

ONE-HAND OPERATION, GENERAL PURPOSE COUPLINGS

SafeWay's S40 Series is a general purpose, double shut-off fluid transfer quick coupling available with either a rugged ball valve or leak-free, high flow poppet valve. The S40 Series was the first two-way (double acting) sleeve quick coupling, introduced by SafeWay in 1969 as our first product. The S40 Series is widely used wherever the ease and convenience of one-hand connection or disconnection is desired. It is original equipment on a wide variety of agricultural and mobile equipment.

- 1/2" body size meets dimensional requirements of ISO 5675.
- Two-way (double acting) sleeve of the S40 Series allows one-hand connect or disconnect when the coupling is clamp or bulkhead mounted.
- Available in body sizes from 1/4" to 1/2", in a variety of thread sizes and styles.
- Double shut-off design available with either a rugged ball valve or leak-free, high flow poppet valve.
- All poppet valve models are 100% leak tested before leaving the factory.
- Reliable and durable ball locking mechanism provides smooth operation time after time.
- Critical parts are hardened for long service life.
- Two-way sleeve design allows implement break-away when the coupling is clamp or bulkhead mounted.



- Interchangeable half-for-half with Parker/Pioneer 4200 Series.
- Referred to as "old reliable" by hands-on users.
- Dust plugs and dust caps available.
- Heavy-duty double break-away clamp available.
- Heavy-duty snap-rings for bulkhead mounting available.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

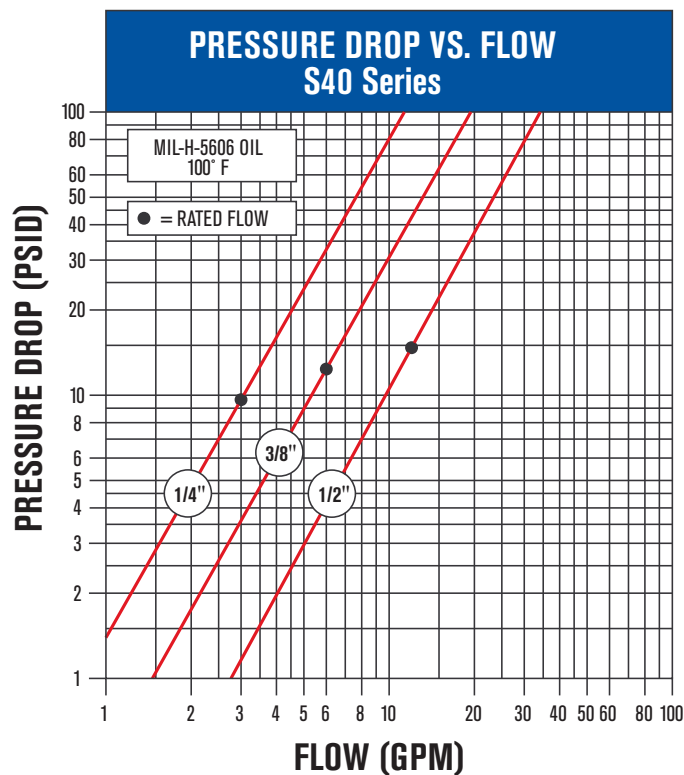
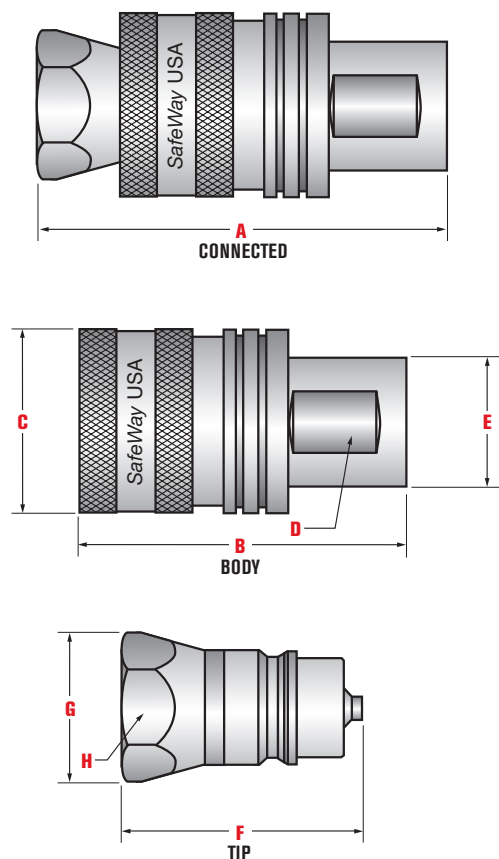
PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S40-2 | S45-2 | S41-2 | 1/4" | 1/4" Female Pipe | 3,000 | (207) | 3 | (12) |
| S40-2P | S45-2P | S41-2P | 1/4" | 1/4" Female Pipe | 3,000 | (207) | 3 | (12) |
| S40-3 | S45-3 | S41-3 | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 6 | (23) |
| S40-3P | S45-3P | S41-3P | 3/8" | 3/8" Female Pipe | 3,000 | (207) | 6 | (23) |
| S40-4 | S45-4 | S71-4 | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S40-4P | S45-4P | S71-4P | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S40-15 | S45-15 | S71-15 | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S40-15P | S45-15P | S71-15P | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S40-6 | S45-6 | S71-6 | 1/2" | 3/4" Female Pipe | 3,000 | (207) | 12 | (45) |
| S40-6P | S45-6P | S71-6P | 1/2" | 3/4" Female Pipe | 3,000 | (207) | 12 | (45) |

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 – Poppet valved models in all sizes (P suffix).

Viton® is a registered trademark of DuPont Dow Elastomers.

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|------------------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Wrench Flat D | Diameter E | Tip Length F | Diameter G | Hex H |
| S40-2 | 2.52 | 1.94 | 1.07 | .75 | .84 | 1.32 | .86 | .75 |
| S40-2P | 2.52 | 1.94 | 1.07 | .75 | .84 | 1.37 | .86 | .75 |
| S40-3 | 3.03 | 2.31 | 1.32 | .87 | 1.06 | 1.58 | 1.08 | .94 |
| S40-3P | 3.03 | 2.31 | 1.32 | .87 | 1.06 | 1.67 | 1.08 | .94 |
| S40-4 | 3.66 | 2.68 | 1.50 | .93 | 1.06 | 1.94 | 1.22 | 1.06 |
| S40-4P | 3.66 | 2.68 | 1.50 | .93 | 1.06 | 1.96 | 1.22 | 1.06 |
| S40-15 | 3.66 | 2.68 | 1.50 | .93 | 1.06 | 1.94 | 1.22 | 1.06 |
| S40-15P | 3.66 | 2.68 | 1.50 | .93 | 1.06 | 1.96 | 1.22 | 1.06 |
| S40-6 | 4.07 | 2.90 | 1.50 | 1.25 | 1.43 | 2.16 | 1.43 | 1.25 |
| S40-6P | 4.07 | 2.90 | 1.50 | 1.25 | 1.43 | 2.18 | 1.43 | 1.25 |

See pages 34-36 for accessories to the S40 Series.

S70 SERIES

ONE-HAND CONNECTION UNDER FULL SYSTEM PRESSURE

SafeWay's S70 Series offers unique internal valving, combined with SafeWay's two-way sleeve feature, allowing one-hand connection under full system pressure. The body (coupling) half can be mated to either a ball valve or poppet valve ISO male tip (nipple). The S70 Series is used primarily with agricultural equipment. It is original equipment on full size tractors and front-end loaders. Use when connection and disconnection-under-pressure, without the use of tools, is desirable.

- 1/2" body size couplers and male tips meet ISO 5675 interchangeability and performance requirements.
- After connection, the hydraulic circuit automatically opens when the hydraulic system is operated.
- Available in 1/2" body size, in a variety of thread sizes and styles.
- All poppet valve models are 100% leak tested before leaving the factory.
- Easy one-hand connection to a clamp or bulkhead mounted coupler while male tip and female body half are both—or either—under pressure.
- Heavy-duty double break-away clamp available.
- Critical parts are hardened for long service life.



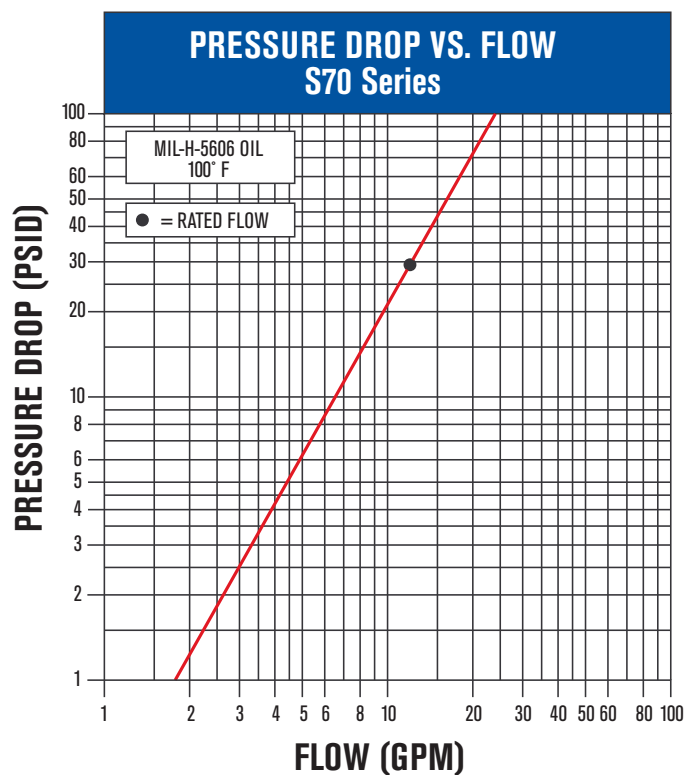
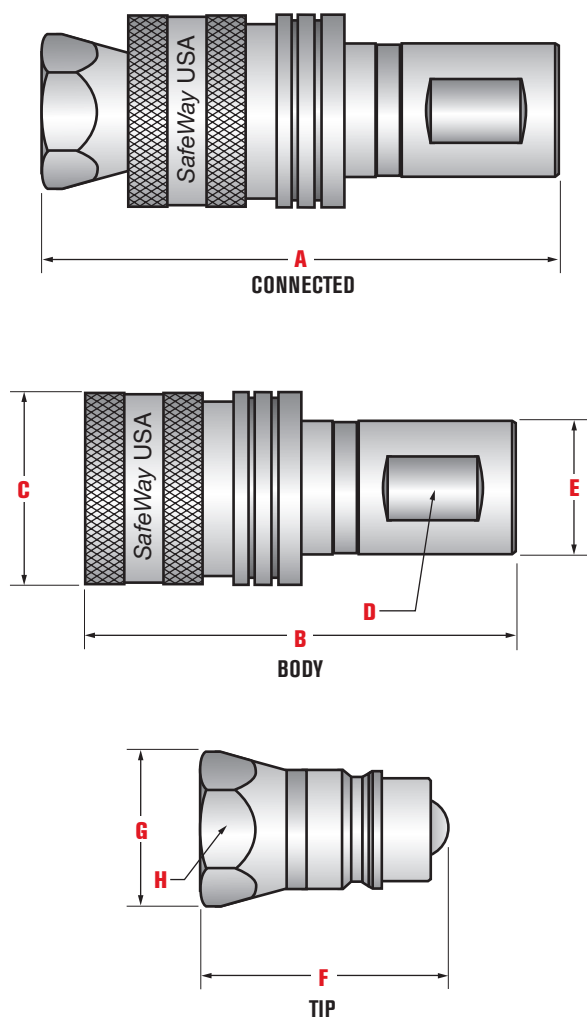
- Two-way sleeve design allows one-hand connection and break-away when clamp or bulkhead mounted. Clamp and snap-rings available.
- Interchangeable half-for-half with the Parker/Pioneer 8200 Series.
- Dust plugs and dust caps available.
- May be used with either an open center or closed center hydraulic system that has a control valve.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.

PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | GPM | (LPM) |
| | | | | | PSI | (BAR) | | |
| S70-4 | S75-4 | S71-4 | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S70-4P | S75-4 | S71-4P | 1/2" | 1/2" Female Pipe | 3,000 | (207) | 12 | (45) |
| S70-15 | S75-15 | S71-15 | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S70-15P | S75-15 | S71-15P | 1/2" | 3/4"-16 Female ORB | 3,000 | (207) | 12 | (45) |
| S70-16 | S75-16 | S71-16 | 1/2" | 7/8"-14 Female ORB | 3,000 | (207) | 12 | (45) |
| S70-16P | S75-16 | S71-16P | 1/2" | 7/8"-14 Female ORB | 3,000 | (207) | 12 | (45) |

Temperature Range: Standard Seals (Buna-N) -40° to +250° F Standard Body Poppet Seal (Polyurethane) -30° to +230° F Other Seals Available.
 Vacuum Data: 27.4 inches Hg. both connected and disconnected – Poppet valved models in all sizes (P suffix).

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.



DIMENSIONAL DATA

| Complete Coupler Number | DIMENSIONS (inches) | | | | | | | |
|-------------------------|---------------------|------------------|---------------|------------------|---------------|-----------------|---------------|----------|
| | Overall Length A | Body Length B | Diameter C | Wrench Flat D | Diameter E | Tip Length F | Diameter G | Hex H |
| S70-4 | 4.34 | 3.39 | 1.50 | .93 | 1.06 | 1.94 | 1.22 | 1.06 |
| S70-4P | 4.34 | 3.39 | 1.50 | .93 | 1.06 | 1.96 | 1.22 | 1.06 |
| S70-15 | 4.34 | 3.39 | 1.50 | .93 | 1.06 | 1.94 | 1.22 | 1.06 |
| S70-15P | 4.34 | 3.39 | 1.50 | .93 | 1.06 | 1.96 | 1.22 | 1.06 |
| S70-16 | 4.34 | 3.39 | 1.50 | 1.00 | 1.06 | 1.94 | 1.22 | 1.06 |
| S70-16P | 4.34 | 3.39 | 1.50 | 1.00 | 1.06 | 1.96 | 1.22 | 1.06 |

See pages 34-36 for accessories to the S70 Series.

ISO AGRICULTURAL TIPS

BALL VALVE AND POPPET VALVE MODELS

The International Standards Organization (ISO) has adopted standardization requirements for interchangeability and performance of 1/2" agricultural male tips. SafeWay's S71 Series male tips, with either ball valve or poppet valve, meet or exceed these requirements. To date, all tractor manufacturers have accepted ISO 5675 as the "standard" for their equipment. SafeWay's 1/2" S20 Series, S40 Series and S70 Series female couplers accept all ISO 5675 male tips.



S71-4 ISO male tip with 1/2" female pipe thread. A ball type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.



S71-4P ISO male tip with 1/2" female pipe thread. A poppet type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.

S71-15 ISO male tip with 3/4"-16 O-ring Boss thread. A ball type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.

S71-15P ISO male tip with 3/4"-16 O-ring Boss thread. A poppet type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.

S71-16 ISO male tip with 7/8"-14 O-ring Boss thread. A ball type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.

S71-16P ISO male tip with 7/8"-14 O-ring Boss thread. A poppet type valve that incorporates a shielded retainer to eliminate flow-checking when used with connect-under-pressure type couplers.

ISO AGRICULTURAL TIPS

INTERCHANGE COUPLERS AND TIPS—PREVIOUS DESIGNS



S25-4-20



S11-4



S25-4-21P



S12-4



S13-4

JOHN DEERE

S25-4-20 female body interchanges with the John Deere AR47331 female body and connects with the SafeWay S11-4 and John Deere AR30210 male tips. Rugged ball style valving. The one-way sleeve allows implement break-away when mounted in a clamp. Provided with a female 1/2" pipe thread.

S25-15-20 female body also interchanges with the John Deere AR47331, but has female 3/4"-16 ORB thread. Connects with the SafeWay S11-15 and John Deere AR3010 male tips.

S11-4 and S11-15 male tips connect with the old style John Deere casting as well as the female bodies listed above. Rugged ball style valving. The S11-4 has 1/2" pipe thread and the S11-15 has 3/4"-16 ORB thread. Plated and hardened for durability.

INTERNATIONAL HARVESTER

S25-4-21P female body is an interchange for the I-H 544788R1 female body and connects with the SafeWay S12-4 and I-H 1272770 male tips. Drip free, high flow poppet style valving. The one-way sleeve allows implement break-away when mounted in a clamp. Provided with a female 1/2" pipe thread.

S25-16-21P female body also interchanges with the I-H 544788R1, but has female 7/8"-14 ORB thread. Connects with the SafeWay S12-16 and I-H 544787R91 male tips.

S12-4 and S12-16 male tips connect with the old style I-H casting as well as the female bodies listed above. Rugged ball style valving. The S12-4 has 1/2" pipe thread and the S12-16 has 7/8"-14 ORB thread. Plated and hardened for durability.

J.I. CASE

S13-4 male tip is a direct interchange for the J.I. Case old style male tip A160884. It connects with the old style J.I. Case female body 28542. Rugged ball style valving, 1/2" pipe thread. Plated and hardened for durability.

COUPLER ADAPTERS

INTERCONNECT NON-COMPATIBLE TIPS & BODIES



FAE49-56-4

Allows connection of a SafeWay FF491-6 or FFE491-4 or other 1/2" ISO 16028 Male Tip to a SafeWay S56, S20, S40 Series or other 1/2" ISO 5675 Female Body.



S25-4-4

Allows connection of a John Deere Cone (Old Style) Male Tip to an International Harvester (Old Style) Female Body.



FAE56-49-4

Allows connection of a Safeway S56 or S70 Series or other 1/2" ISO 5675 Male Tip to a FF495-6 or FFE495-4 or 1/2" ISO 16028 Female Body.



S25-4-5

Allows connection of an International Harvester (Old Style) Male Tip to a John Deere Cone (Old Style) Female Body.



S25-4-1

Allows connection of a SafeWay S70 Series or other 1/2" ISO 5675 Male Tip to a John Deere (Old Style) Female Body.



S25-4-6

Allows connection of a SafeWay S70 Series or other 1/2" ISO 5675 Male Tip to a J.I. Case (Old Style) Female Body.



S25-4-2

Allows connection of a SafeWay S70 Series or other 1/2" ISO 5675 Male Tip to an International Harvester (Old Style) Female Body.



S25-4-7

Allows connection of an International Harvester (Old Style) Male Tip to a SafeWay S20, S40, S70 Series or other 1/2" ISO 5675 Female Body.



S25-4-3

Allows connection of a John Deere Cone (Old Style) Male Tip to a Safeway S20, S40 Series or other 1/2" ISO 5675 Female Body.



S25-4-7D

Allows connection of an International Harvester (Old Style) Male Tip to a Safeway S20, S40 S70 Series or other 1/2" ISO 5675 Female Body.



S25-4-3D

Allows connection of a John Deere Cone (Old Style) Male Tip to a (New Style) John Deere ISO Casting or ISO 5675.



S25-4-9

Allows connection of a John Deere Cone (Old Style) Male Tip to a J.I. Case (Old Style) Female Body.

STAB APPLICATION, STAINLESS STEEL QUICK COUPLINGS

The SSR60 Series is a special purpose, 303 Stainless Steel "Stab Application" coupling, meaning the mating halves are mechanically retained in the application. This is a proprietary interchange. Special seals are used for both media compatibility and extreme external temperatures. This coupler is suitable for low pressure applications.

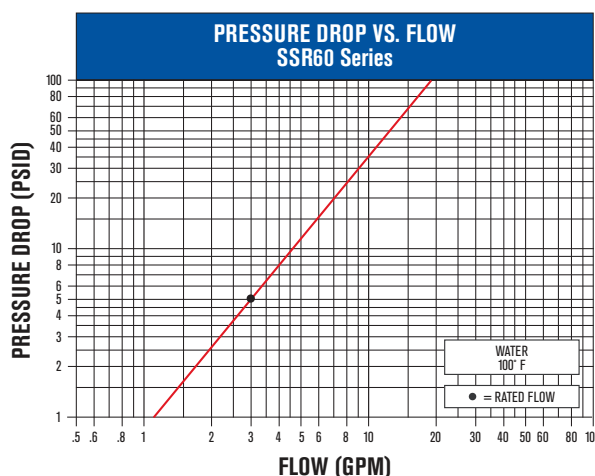
- SSR60 series comes standard with external O-ring boss threads. Consult factory for an optional face seal port.
- Minimum air inclusion during connection and minimum fluid spillage during disconnection.
- Standard seal suitable for use with Ethylene Glycol or Propylene Glycol solutions.
- All SSR60 series couplings are 100% leak tested before leaving factory.
- Thread protectors installed to protect threads and to retain O-rings on parts prior to installation.
- Alignment issues in stab applications minimized due to SafeWay's self-aligning feature.
- Method of obtaining and presenting performance data conforms to ANSI (NFPA) T3.20.2.R2, *Hydraulic fluid power - Quick action couplings - Test methods*.



SSR601-2-6E

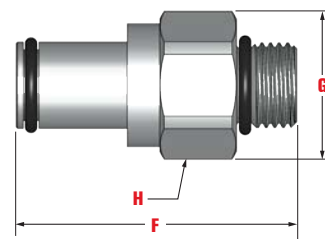
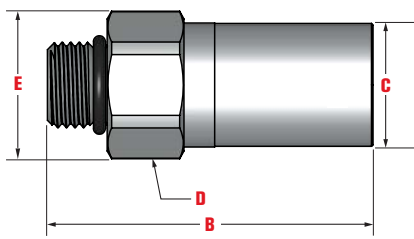
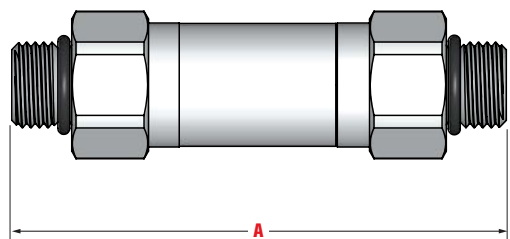


SSR605-2-6E



PERFORMANCE DATA

| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | NFPA RATED FLOW | |
|------------------|------------------|---------------|-------------|-----------------------------|--------------------|-------|-----------------|-------|
| Complete Coupler | Female Body Half | Male Tip Half | Body Size | Thread Size and Description | Maximum | | | |
| | | | | | PSI | (BAR) | GPM | (LPM) |
| SSR60-2-6E | SSR605-2-6 | SSR601-2-6E | 1/4" | 9/16"-18 Male | 100 | (7) | 3 | (12) |



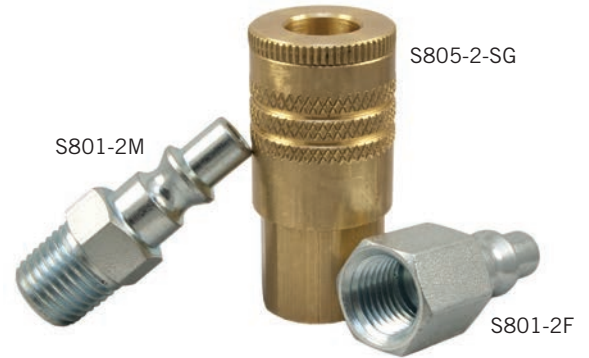
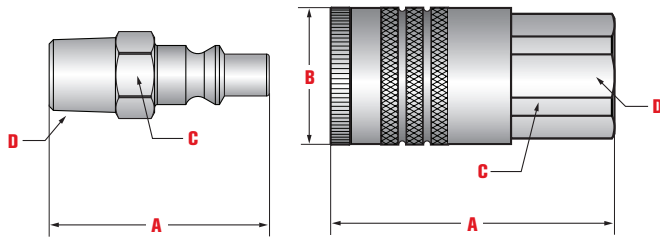
DIMENSIONAL DATA

| Overall Length | Body Length | Diameter | Hex | Diameter | Tip Length | Diameter | Hex |
|----------------|-------------|----------|-----|----------|------------|----------|-----|
| A | B | C | D | E | F | G | H |
| 3.22 | 2.12 | .80 | .88 | .96 | 1.82 | .96 | .88 |

S80 SERIES

S80

PNEUMATIC ARO-210 INTERCHANGE

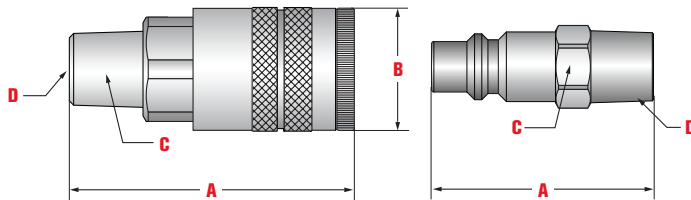


| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | DIMENSIONS (inches) | | | THREAD SIZE NPT |
|--------------|-----------|-----------|-------------|-------|--------------------|---------------|---------------------|---|--|-----------------|
| Coupler | Part Name | Body Size | Maximum | | Length A | Diameter B | Wrench Hex C | D | | |
| | | | PSI | (BAR) | | | | | | |
| S801-2M | Tip | 1/4" | 300 | (20) | 1.62 | – | .56 | | | 1/4" Male |
| S801-2F | Tip | 1/4" | 300 | (20) | 1.50 | – | .62 | | | 1/4" Female |
| S805-2-SG | Body | 1/4" | 300 | (20) | 1.83 | 1.02 | .75 | | | 1/4" Female |

S82 SERIES

S82

PNEUMATIC ARO-210 INTERCHANGE



| PART NUMBERS | | | DESCRIPTION | | OPERATING PRESSURE | | DIMENSIONS (inches) | | | THREAD SIZE NPT |
|--------------|-----------|-----------|-------------|-------|--------------------|---------------|---------------------|---|--|-----------------|
| Coupler | Part Name | Body Size | Maximum | | Length A | Diameter B | Wrench Hex C | D | | |
| | | | PSI | (BAR) | | | | | | |
| S821-2M | Tip | 1/4" | 300 | (20) | 1.70 | – | .56 | | | 1/4" Male |
| S821-2F | Tip | 1/4" | 300 | (20) | 1.49 | – | .62 | | | 1/4" Female |
| S821-3M | Tip | 3/8" | 300 | (20) | 1.91 | – | .69 | | | 3/8" Male |
| S821-3F | Tip | 3/8" | 300 | (20) | 1.68 | – | .81 | | | 3/8" Female |
| S821-3-2M | Tip | 3/8" | 300 | (20) | 1.88 | – | .68 | | | 1/4" Male |
| S821-3-2F | Tip | 3/8" | 300 | (20) | 1.62 | – | .62 | | | 1/4" Female |
| S825-2M | Body | 1/4" | 300 | (20) | 2.17 | .95 | .69 | | | 1/4" Male |
| S825-2 | Body | 1/4" | 300 | (20) | 2.14 | .95 | .69 | | | 1/4" Female |
| S825-3M | Body | 3/8" | 300 | (20) | 2.41 | 1.19 | .94 | | | 3/8" Male |
| S825-3 | Body | 3/8" | 300 | (20) | 2.43 | 1.19 | .94 | | | 3/8" Female |

ACCESSORIES



DUST CAPS & DUST PLUGS

Protective dust caps and dust plugs are available in molded rubber or metal in a variety of sizes. They should be used whenever possible to help reduce contamination of the hydraulic system and improve service life of the body half (coupling) and the mating tip half (nipple). A molded combination cap/plug is now available.

| PART NUMBERS | | | | |
|--------------|-------------------------|----------|---------------------------|----------|
| Coupler | Dust Cap (Protects Tip) | | Dust Plug (Protects Body) | |
| | Steel | Molded | Steel | Molded |
| S10-2 | S19-2 | S19-2MR | S14-2 | S14-2MR |
| S10-3 | S19-3 | S19-3MR | S14-3 | S14-3MR |
| S10-4 | S19-4 | S19-4MR | S14-4 | S14-4MR |
| S10-6 | S19-6 | S19-6MR | S14-6 | S14-6MR |
| S10-8 | S19-8 | S19-8MR | S14-8 | S14-8MR |
| S56-2 | S59-2 | S59-2MR | S54-2 | S54-2MR |
| S56-3 | S59-3 | S59-3MR | S54-3 | S54-3MR |
| S56-4 | S59-4 | S449-4M* | S54-4 | S449-4M* |
| S56-6 | S59-6 | S59-6MR | S54-6 | S54-6MR |
| S56-8 | S59-8 | S59-8MR | S54-8 | S54-8MR |
| SF49-3 | FF499-3 | | FF494-3 | |
| FF49-3 | FF499-3 | | FF494-3 | |
| FF49-3M | FF499-3 | | FF494-3 | |
| FF49-3-8 | FF499-3 | | FF494-3 | |
| FF49-3-1/2 | FF499-3 | | FF494-3 | |
| SH20-2(P) | S49-2 | S449-2M* | S44-2 | S449-2M* |
| SH20-14(P) | S49-2 | S449-2M* | S44-2 | S449-2M* |
| SH20-2-3P | S49-2 | S449-2M* | S44-2 | S449-2M* |



| PART NUMBERS | | | | |
|--------------|-------------------------|----------|---------------------------|----------|
| Coupler | Dust Cap (Protects Tip) | | Dust Plug (Protects Body) | |
| | Rubber & Steel | Molded | Rubber & Steel | Molded |
| S30-2P | S39-2 | | S34-2 | |
| S30-3P | S39-3 | S349-3M* | S34-3 | S349-3M* |
| S20A-2(P) | S49-2 | S449-2M* | S44-2 | S449-2M* |
| S20-3(P) | S49-3 | S449-3M* | S44-3 | S449-3M* |
| S20-4(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S20-15(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S20-16(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S40-2(P) | S49-2 | S449-2M* | S44-2 | S449-2M* |
| S40-3(P) | S49-3 | S449-3M* | S44-3 | S449-3M* |
| S40-4(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S40-15(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S40-6(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S70-4(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S70-15(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |
| S70-16(P) | S49-4 | S449-4M* | S44-4 | S449-4M* |

*Molded Cap and Plug Color Designation:

M = Molded Black
 MB = Molded Blue
 MG = Molded Green
 MR = Molded Red

BREAK-AWAY CLAMPS

SafeWay's heavy-duty double break-away clamps allow one-hand connection when used with two-way sleeve style agricultural quick couplings. They also allow implement break-away when used with either one-way or two-way sleeve agricultural designs. Double break-away clamps are available for 3/8" and 1/2" body size agricultural quick couplings. Bulkhead mounting rings provide for bulkhead mounting (up to 1/8" thick) of our S40 Series and S70 Series female couplers.



S42-4



S42-3



S512-8

| PART NUMBERS | | | |
|------------------|----------------------------------|--------------|------------------------|
| Complete Coupler | Assembled Clamp with No Couplers | | Bulkhead Mounting Ring |
| | Cast Clamp | Formed Clamp | |
| S25-4(P) | S42-4 | | |
| S25-15(P) | S42-4 | | |
| S25-16(P) | S42-4 | | |
| S45-3(P) | | S42-3 | S43-3 |
| S45-4(P) | S42-4 | | S43-4 |
| S45-15(P) | S42-4 | | S43-4 |
| S45-6(P) | S42-4 | | S43-4 |
| S75-4(P) | S42-4 | | S43-4 |
| S75-15(P) | S42-4 | | S43-4 |
| S75-16(P) | S42-4 | | S43-4 |
| | | S77-4(P) | |
| | | S77-15(P) | |

BULKHEAD MOUNT

SafeWay's S51 Series tips can be bulkhead mounted by using a Bulkhead Flange Mount Kit.

| PART NUMBERS | |
|--------------|-----------------------|
| Coupler | Bulkhead Flange Mount |
| S511-8 | S512-8 |
| S511-8-STL | S512-8 |
| S511-10 | S512-10 |
| S511-10-STL | S512-10 |

REPLACEMENT SEALS & REPAIR KITS

Both replacement seal kits and individual O-rings and back-up rings are available. Leakage between the female body half (coupling) and the male tip half (nipple) is an indication that the body O-ring needs replacement.

Field repair kits that include the body seal, a new poppet assembly and installation instructions are available for various couplings.



| PART NUMBERS | | | |
|-------------------|----------|--------------|------------------|
| Complete Coupler | O-ring | Back-up Ring | Field Repair Kit |
| S101-1 | | | |
| S105-1 | S1060B-1 | S1061T-1 | |
| S101-2 | | | |
| S101-2-6 | | | |
| S105-2 | S1060B-2 | S1061T-2 | |
| S105-2-6 | S1060B-2 | S1061T-2 | |
| S101-3 | | | |
| S101-3-8 | | | |
| S105-3 | S1060B-3 | S1061T-3 | |
| S105-3-8 | S1060B-3 | S1061T-3 | |
| S101-4 | | | |
| S101-4-10 | | | |
| S105-4 | S1060B-4 | S1061T-4 | |
| S105-4-10 | S1060B-4 | S1061T-4 | |
| S101-6 | | | S106-6RK |
| S101-6-12 | | | S106-6RK |
| S105-6 | S1060B-6 | S1061T-6 | S106-6RK |
| S105-6-12 | S1060B-6 | S1061T-6 | S106-6RK |
| S101-8 | | | S106-8RK |
| S101-8-16 | | | S106-8RK |
| S105-8 | S1060B-8 | S1061T-8 | S106-8RK |
| S105-8-16 | S1060B-8 | S1061T-8 | S106-8RK |
| SH25-2(P) | S460-2 | | |
| SH25-14(P) | S460-2 | | |
| SH25-2-3P | S460-2 | | |
| S35-2P | S360-2 | S361-2 | |
| S35-3P | S360-3 | S361-3 | |
| S511-6-1/2(-STL) | | | S511-6RK |
| S515W-6-1/2(-STL) | | | S515-6RK |
| S515H-6-1/2(-STL) | | | S515-6RK |
| S511-6(-STL) | | | S511-6RK |
| S515W-6(-STL) | | | S515-6RK |
| S515H-6(-STL) | | | S515-6RK |
| S511-8(-STL) | | | S511-8RK |
| S515W-8(-STL) | | | S515-8RK |
| S515H-8(-STL) | | | S515-8RK |
| S511-10(-STL) | | | S511-10RK |
| S515W-10(-STL) | | | S515-10RK |
| S515H-10 (-STL) | | | S515-10RK |
| S561-2 | | | |
| S565-2 | S5660B-2 | S5661T-2 | |
| S561-3 | | | |
| S561-3-6 | | | |
| S565-3 | S5660B-3 | S5661T-3 | |
| S565-3-6 | S5660B-3 | S5661T-3 | |
| S561-4 | | | |
| S561-4-8 | | | |
| S561-4-10 | | | |

| PART NUMBERS | | | |
|------------------|----------|--------------|------------------|
| Complete Coupler | O-ring | Back-up Ring | Field Repair Kit |
| S565-4 | S5660B-4 | S5661T-4 | |
| S565-4-8 | S5660B-4 | S5661T-4 | |
| S565-4-10 | S5660B-4 | S5661T-4 | |
| S561-6 | | | S566-6RK |
| S561-6-12 | | | S566-6RK |
| S565-6 | S5660B-6 | S5661T-6 | S566-6RK |
| S565-6-12 | S5660B-6 | S5661T-6 | S566-6RK |
| S561-8 | | | S566-8RK |
| S561-8-16 | | | S566-8RK |
| S565-8 | S5660B-8 | S5661T-8 | S566-8RK |
| S565-8-16 | S5660B-8 | S5661T-8 | S566-8RK |
| SF491-3 | | | SF491-3RK |
| FF491-3 | | | FF491-3RK |
| FF491-3-8 | | | FF491-3RK |
| FF491-3-1/2 | | | FF491-3RK |
| FF491-6 | | | FF491-6RK |
| FF491-6-12 | | | FF491-6RK |
| FFE491-4 | | | FF491-6RK |
| FFE491-4-3/4 | | | FF491-6RK |
| FFE491-4-10 | | | FF491-6RK |
| FFE491-4-12 | | | FF491-6RK |
| FFE491-6 | | | FFE491-6RK |
| FFE491-6-1 | | | FFE491-6RK |
| FFE491-6-16 | | | FFE491-6RK |
| FFE491-8 | | | FFE491-8RK |
| FFE491-8-20 | | | FFE491-8RK |
| FFE491-8-114 | | | FFE491-8RK |
| S25A-2(P) | S460-2 | | |
| S25-3(P) | S460-3 | | |
| S25-4(P) | S460-4 | | |
| S25-15(P) | S460-4 | | |
| S25-16(P) | S460-4 | | |
| S25F-6 | S260-6 | | |
| S25-8P | S260-8 | | S206-8RK |
| S45-2(P) | S460-2 | | |
| S45-3(P) | S460-3 | | |
| S45-4(P) | S460-4 | | |
| S45-15(P) | S460-4 | | |
| S45-6(P) | S460-4 | | |
| S75-4 | S760-4 | | |
| S75-15 | S760-4 | | |
| S75-16 | S760-4 | | |
| S25-4-20 | S170-4 | | |
| S25-15-20 | S170-4 | | |
| S25-4-21P | S160-4 | | |
| S25-16-21P | S160-4 | | |

Complete Coupler Numbers shown with a parenthesis indicate alternative part configurations

GLOSSARY OF TERMS

AIR INCLUSION The ambient atmosphere forced or trapped into the system during connection of the quick disconnect coupling halves.

BALL VALVE Provides a rugged and reliable sealing surface.

BODY HALF Other nomenclature "female half", "coupler", "socket". The receptacle portion of a quick disconnect coupling which normally includes the mechanism to lock the two quick disconnect coupling halves together.

BREAK-AWAY Automatic separation of a quick disconnect coupling when an axial separation force is applied.

BREAK-AWAY CLAMP A clamping device that holds the quick disconnect coupling sleeve, allowing the body to move forward upon disconnect within either a single-acting or double-acting sleeve or backward upon connection within a double-acting sleeve.

BRINELLING Indentation marks (dimples) or grooves worn into the shoulder of the quick disconnect coupling male half by the locking (detent) balls in the female half.

BURST PRESSURE The pressure at which a device fails, losing its ability to contain pressure.

COMPLETE COUPLING Other nomenclature "coupling", "quick disconnect coupling". The two separate quick disconnect coupling halves connected together.

CONNECT UNDER PRESSURE Ability to connect coupling halves with internal pressure applied to either or both coupling halves.

COUPLING, FEMALE HALF Other nomenclature "body half", "coupler", "socket".

COUPLING, MALE HALF Other nomenclature "male tip", "nipple", "plug".

DOUBLE-ACTING SLEEVE Other nomenclature "two-way sleeve". Allows one hand push-to-connect or pull-to-disconnect convenience when the quick disconnect coupling female half is clamp or bulkhead mounted and connected to a hose.

DUST CAP A removable device that protects the male tip half when disconnected from the female coupling half. Excludes contamination.

DUST PLUG A removable device that protects the female body half when disconnected from the male tip half. Excludes contamination.

FLOW CHECKING Other nomenclature "ball checking", "lock-up", "check-off". Occurs when the male tip half valve closes during high flow conditions, such as when quickly lowering a heavy loader.

INTERCHANGE The ability of a quick disconnect coupling half from one manufacturer to fit and function with a mating half from another manufacturer without assurance of equal pressure containment rating or performance.

INTERFACE That portion of the male tip (nipple) half that establishes and controls interchangeability.

LOCKING BALLS Other nomenclature "detent balls". Normally found in the female half of the quick disconnect coupling, they align with the shoulder groove on the mating male half providing a durable locking mechanism while allowing both coupling halves to swivel and align easily.

OPERATING PRESSURE The maximum pressure at which a system is operated.

POPPET VALVE Machined, self-aligning valve that incorporates an elastomer to provide a positive seal upon disconnection, no low pressure leakage, and generally provides higher flow than a ball valve.

QUICK DISCONNECT COUPLING A device to join or separate fluid lines without the use of tools or special devices.

RATED PRESSURE The maximum pressure at which a device is designed to operate.

SHIELDED RETAINER Other nomenclature "valve shield". Protects valving from high velocity flow, preventing flow checking. Used primarily on agricultural interchange quick disconnect couplings.

SINGLE-ACTING SLEEVE Other nomenclature "one-way sleeve". Making a connection requires manually pushing the sleeve backward or pulling the body forward when mounted in a breakaway clamp, inserting the male tip, then allowing the sleeve to return to its original position. Allows pull-to-disconnect convenience when the coupling is mounted in a breakaway clamp. Sleeve Lock Prevents accidental disconnection. An arrangement which provides an additional lock which must be actuated prior to the retraction of the locking sleeve.

SPILLAGE Occurs upon disconnection of the quick disconnect coupling. This is the fluid trapped between the mating seal and the valve seal of the mating halves.

SURGE PRESSURE The pressure existing from surge conditions.

SURGE FLOW A rapid increase in fluid flow.

THERMAL BUILD-UP Hydraulic pressure caused by expansion of the fluid due to heat from an external source such as sunlight.

TIP HALF Other nomenclature "male tip", "nipple", "plug", "male half".

TRAPPED PRESSURE Pressurized fluid trapped behind closed valving in one of the quick disconnect coupling mating halves.

VALVE RETAINER Provides the valve stop. Its precise location allows maximum flow when mating quick disconnect halves are connected.

VALVE SEAT That area of the quick disconnect coupling that comes in contact with either the ball or poppet valve, allowing a positive sealing surface. Shape and surface varies with valve style.

Types of Quick Disconnect Couplings

DOUBLE SHUT-OFF A quick disconnect coupling with shut-off valves in both mating halves.

SINGLE SHUT-OFF A quick disconnect coupling with a shut-off valve in one half only.

NON-VALVED Other nomenclature "straight-thru". A quick disconnect coupling without shut-off valves in either half.

BALL LOCKING TYPE A quick disconnect coupling which is connected and disconnected by applying an axial force to move an external sleeve. This sleeve motion allows detent balls in the female half to engage or disengage into a groove in the mating male tip (nipple) half.

THREADED TYPE A quick disconnect coupling that has threads on both mating halves and is connected or disconnected by the rotation of the sleeve on the body half with respect to the male tip.



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 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 at any time without notice.

Safety Guide — Quick Disconnect 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 hydraulic 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 prevent over tightening of 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.**

Thread connection must be fully connected prior to pressurization. Pressure ratings must apply to fully connected or fully disconnected quick couplings. **If using a connect-under-pressure style threaded connection quick coupling, adhere to the specified maximum pressure rating for connection-under-pressure** (usually less than 10% of the maximum operating pressure).

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 lowest rated 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.

PARTS INTERCHANGE & ORDERING INFORMATION

INTERCHANGE COUPLINGS

Many SafeWay Quick Disconnect Couplers and Tips conform to ISO Specifications for interchangeability with other manufactures couplings. It is easy to look up the interchangeable part numbers.

Simply navigate to: www.SafewayHyd.com/exchange/search.php and enter the part number you need an interchange for and the “search” takes you to the right part and product specification details.



| | | |
|---|----------------------|---------------------------------------|
| Competitor Part Number: | <input type="text"/> | <input type="button" value="Search"/> |
| <input type="checkbox"/> Show Partial Matches | | |

Through the years, **SafeWay** has accumulated the information found within this on-line interchange. Although we are reasonably confident that the information contained herein is accurate, we cannot accept any liability for errors.

This on-line interchange lists those products that interconnect due to dimensional integrity within an accepted interchange; it does not take into account substantial differences in product performance between brands, or specific features unique to a given brand. Please contact our Customer Service Department if you have any questions regarding interchangeability and technical information. Customer Service can be reached at 800-222-1169.

We strongly suggest that for the best possible performance and reliability, both coupling halves be **SafeWay**.

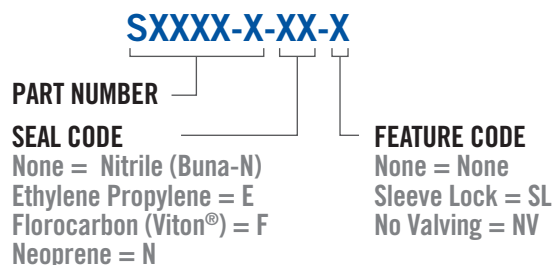
Copyright ©2018 SafeWay Hydraulics All rights reserved.

ORDERING INFORMATION

WHEN ORDERING SAFEWAY PRODUCTS PLEASE NOTE THE FOLLOWING:

1. **Catalog Number.** Nearly all SafeWay quick couplers can be ordered as a complete coupling (male tip half and female body half connected) or as a separate male tip half and female body half. Part numbers are listed in this catalog and in the SafeWay price list.
2. **Note Options or Special Requirements.** Many of SafeWay's products are available with off-the-shelf options, such as special o-ring compounds for media compatibility and sleeve-lock to prevent accidental disconnection. Please provide the option number and description when placing your order. Do not hesitate to consult with your SafeWay Distributor or the factory about standard and special order options. They will be happy to assist you.
3. **Actual Quantity.** When placing your order please provide individual part number quantity, not number of boxes, packages or master cartons.

EXAMPLE OF HOW TO SPECIFY SPECIAL FEATURES AND SEAL CODES:



4. Ask about packaging option availability.



CUSTOM FLUID TRANSFER

SafeWayHyd.com



Headquarters—St Paul, MN

Satellite locations: Granite Falls, MN and New Ulm, MN

THE SPECIALTY MFG. CO.
Custom Is Our Specialty

MANUFACTURER OF

QUICK DISCONNECT COUPLINGS

CHECK VALVES • BALL VALVES • NEEDLE VALVES

MINIATURE VALVES • DENTAL VALVES

STRAINERS AND FILTERS • PRESSURE CONTROLS

COMMERCIAL POOL CHEMISTRY AUTOMATION

CONTRACT FABRICATION

5858 Centerville Road | St. Paul, MN 55127 | 800.222.1169
SpecialtyMfg.com