

# 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

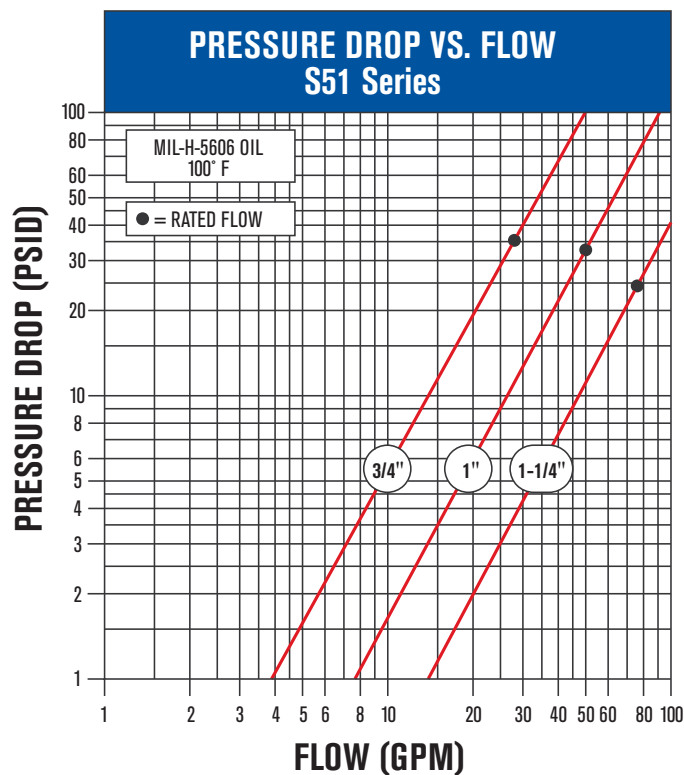
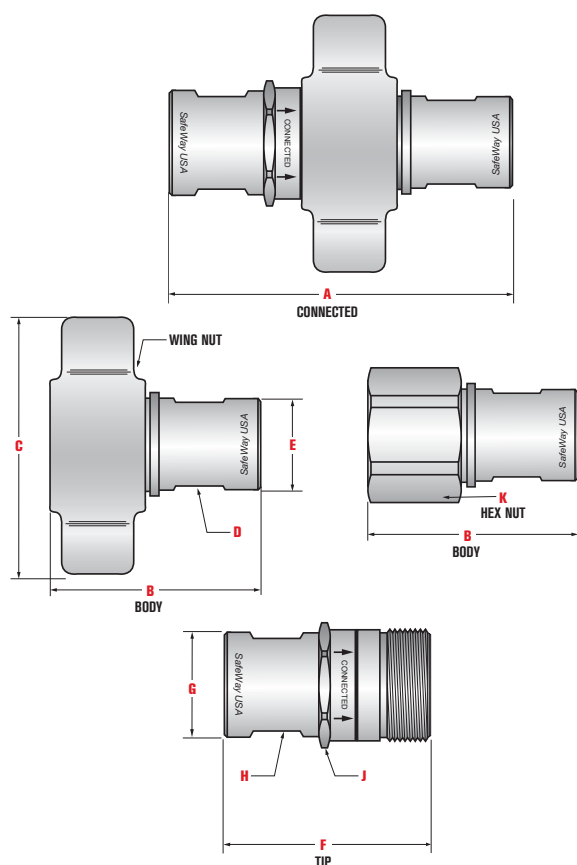
PART NUMBERS			DESCRIPTION			OPERATING PRESSURE		NFPA RATED FLOW	
Complete Coupler	Female Body Half	Male Tip Half	Body Size	Locking Style	Thread Size and Description	Maximum		GPM	(LPM)
						PSI	(BAR)		
S51W-6-1/2	S515W-6-1/2	S511-6-1/2	3/4"	Wing	1/2" Female Pipe	3,000	(207)	28	(106)
S51H-6-1/2	S515H-6-1/2	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 A	Body Length B	Wing Nut Length C	Wrench Flat D	Diameter E	Tip Length F	Diameter G	Wrench Flat H	Hex J	Hex 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.