

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*.

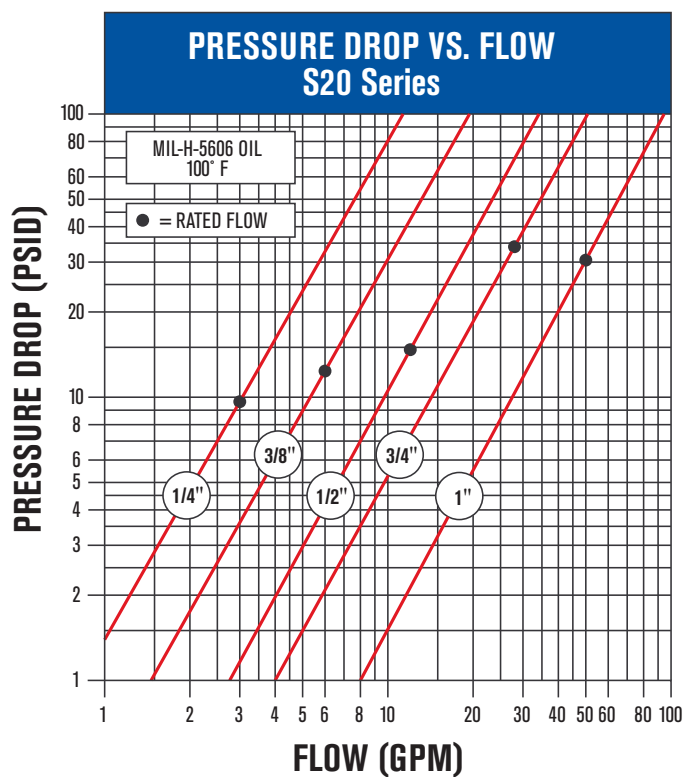
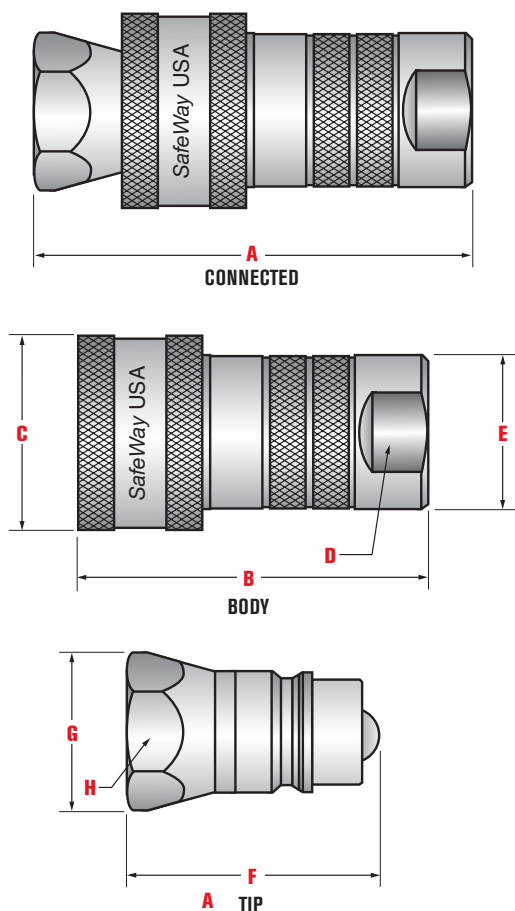
PERFORMANCE DATA

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*.

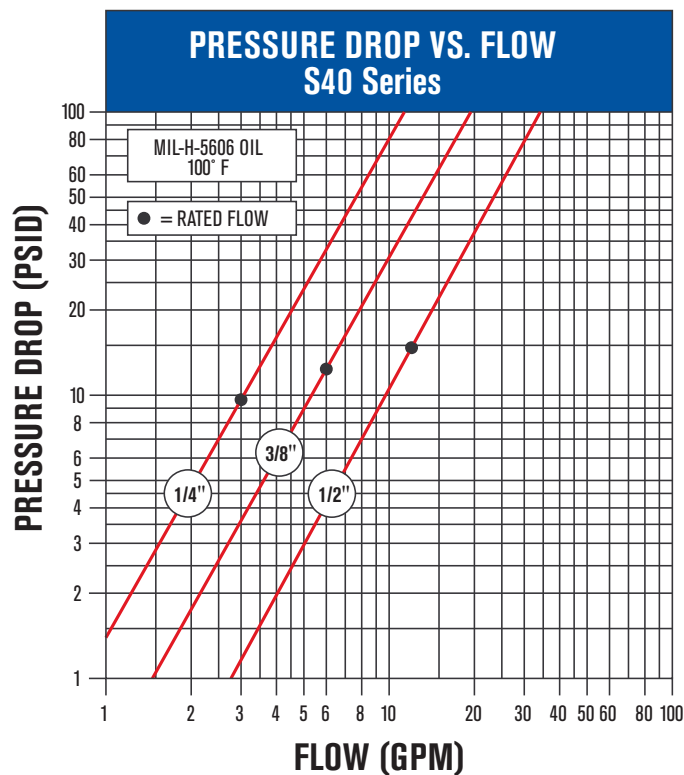
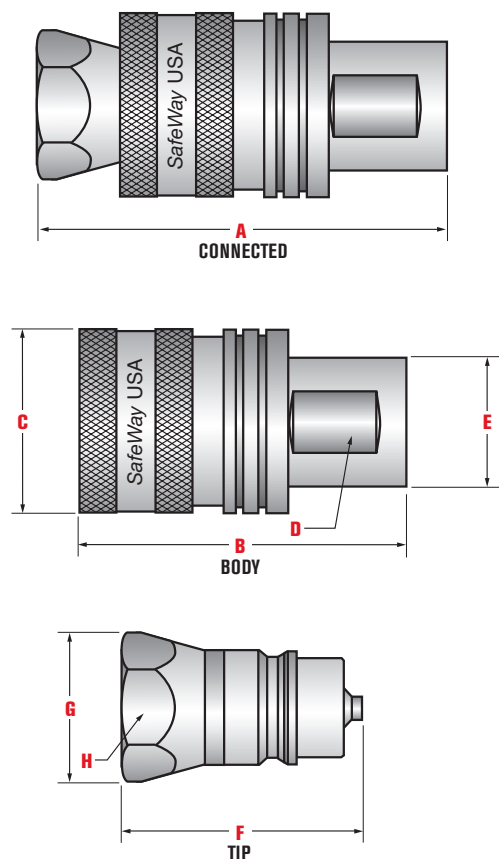
PERFORMANCE DATA

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.



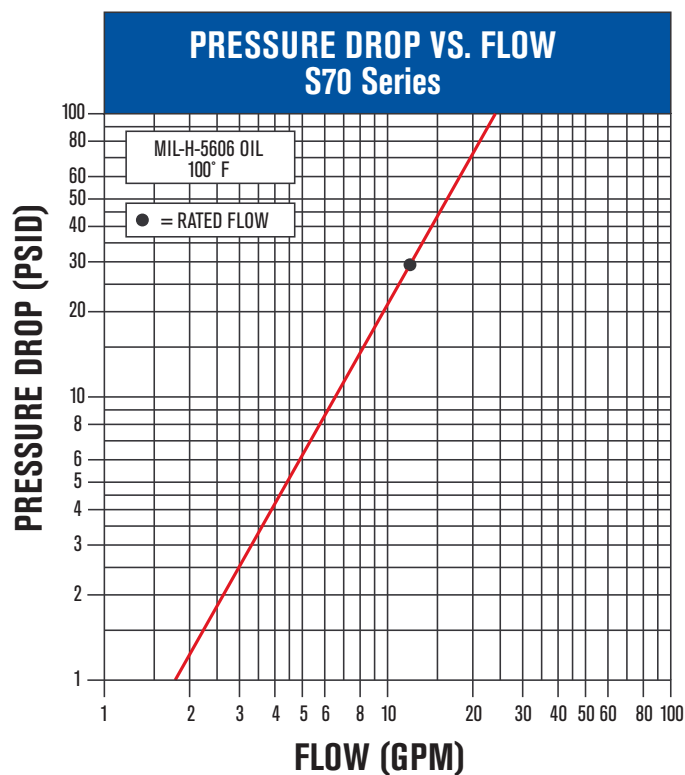
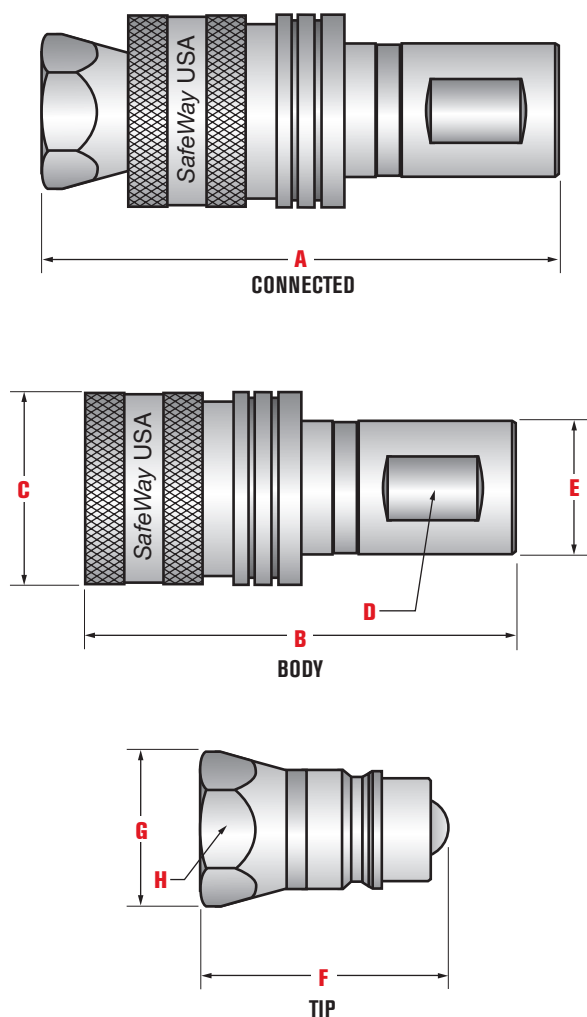
- Two-way sleeve design allows one-hand connection and break-away when clamp or bulkhead mounted. Clamp and snap-rings available.
- Interchangeable half-for-half with the Parker/Pioneer 8200 Series.
- Dust plugs and dust caps available.
- May be used with either an open center or closed center hydraulic 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.